



National Center for Science and
Engineering Statistics

Higher Education Research and Development: Fiscal Year 2022

Data Tables | NSF 24-308 | November 30, 2023

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General Notes

This report provides data from the FY 2022 Higher Education Research and Development (HERD) Survey. The survey is an annual census of institutions that expended at least \$150,000 in separately accounted-for research and development (R&D) in the fiscal year.

The tables present data on R&D expenditures at higher education institutions across all academic disciplines and include R&D expenditures by institution, R&D field, geographic area, source of funds, type of R&D (basic research, applied research, and experimental development), cost categories (salaries, software, equipment, and indirect costs), and trends over time.

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TABLE 1

Higher education R&D expenditures, by source of funds: FYs 1953–2022

(Dollars in millions)

Fiscal year	All R&D expenditures ^a	Source of funds				
		Federal government	State and local government	Institution funds	Business	All other sources ^b
1953 ^c	255	138	37	35	19	26
1954	290	160	42	38	22	28
1955 ^c	312	169	47	41	25	30
1956 ^c	372	213	53	43	29	34
1957 ^c	410	229	60	49	34	38
1958	456	254	68	53	39	42
1959 ^c	526	306	76	58	39	47
1960 ^c	646	405	85	64	40	52
1961 ^c	763	500	95	70	40	58
1962 ^c	904	613	106	79	40	66
1963 ^c	1,081	760	118	89	41	73
1964	1,275	917	132	103	40	83
1965 ^c	1,474	1,073	143	124	41	93
1966	1,715	1,261	156	148	42	108
1967 ^c	1,921	1,409	164	181	48	119
1968	2,149	1,572	172	218	55	132
1969 ^c	2,225	1,600	197	223	60	145
1970	2,335	1,647	219	243	61	165
1971 ^c	2,500	1,724	255	274	70	177
1972	2,630	1,795	270	305	74	187
1973	2,884	1,985	295	318	84	202
1974	3,023	2,032	307	370	96	218
1975	3,409	2,288	332	417	113	259
1976	3,729	2,512	364	446	123	285
1977	4,067	2,726	374	514	139	314
1978 ^d	4,625	3,059	414	623	170	359
1979	5,366	3,598	472	735	193	368
1980	6,063	4,098	491	835	236	403
1981	6,847	4,571	546	1,004	291	435
1982	7,324	4,768	616	1,111	337	491
1983	7,882	4,989	626	1,302	389	576
1984	8,620	5,431	690	1,411	475	613
1985	9,687	6,064	752	1,617	560	694
1986	10,928	6,712	915	1,869	700	732
1987	12,153	7,343	1,023	2,168	790	828
1988	13,463	8,193	1,106	2,356	872	935
1989	14,979	8,993	1,224	2,698	994	1,071
1990	16,290	9,640	1,324	3,006	1,127	1,191
1991	17,589	10,238	1,474	3,367	1,204	1,307
1992	18,821	11,095	1,491	3,548	1,279	1,409
1993	19,954	11,960	1,559	3,589	1,360	1,486
1994	21,035	12,654	1,555	3,828	1,423	1,575
1995	22,179	13,337	1,690	4,048	1,489	1,614
1996	23,055	13,847	1,812	4,172	1,606	1,619
1997	24,380	14,321	1,910	4,699	1,737	1,712
1998	25,867	15,159	1,945	5,004	1,889	1,871
1999	27,544	16,112	2,022	5,382	2,033	1,995
2000	30,084	17,548	2,200	5,925	2,156	2,255

TABLE 1
Higher education R&D expenditures, by source of funds: FYs 1953–2022

(Dollars in millions)

Fiscal year	All R&D expenditures ^a	Source of funds				
		Federal government	State and local government	Institution funds	Business	All other sources ^b
2001	32,801	19,227	2,320	6,614	2,218	2,422
2002	36,383	21,856	2,504	7,133	2,191	2,698
2003 ^e	41,470	25,307	2,645	7,663	2,161	2,856
2004 ^e	44,839	28,304	2,879	7,752	2,129	2,851
2005 ^e	47,535	29,957	2,940	8,265	2,291	3,092
2006 ^e	49,645	30,909	2,966	9,062	2,401	3,198
2007 ^e	51,590	31,241	3,151	9,718	2,675	3,521
2008 ^e	54,114	32,101	3,438	10,378	2,869	3,916
2009 ^e	57,288	33,443	3,647	11,148	3,197	4,294
2010	61,287	37,478	3,887	11,943	3,202	4,777
2011	65,274	40,768	3,851	12,580	3,183	4,892
2012	65,873	40,217	3,744	13,625	3,279	5,007
2013	67,109	39,510	3,706	14,938	3,515	5,440
2014	67,313	38,032	3,916	15,743	3,734	5,889
2015	68,664	37,911	3,864	16,608	4,009	6,273
2016	71,879	38,857	4,053	17,911	4,219	6,839
2017	75,292	40,319	4,187	18,886	4,439	7,462
2018	79,175	41,934	4,326	20,220	4,725	7,969
2019	83,643	44,539	4,520	21,114	5,064	8,407
2020	86,440	46,182	4,603	22,022	5,187	8,446
2021	89,834	49,191	4,751	22,476	5,120	8,296
2022	97,842	54,053	4,918	24,536	5,707	8,628

S&E = science and engineering.

^a Totals for FYs 1953–2002 represent R&D expenditures in S&E fields only. From FY 2003 through FY 2009, some institution totals for all R&D expenditures may be lower-bound estimates because the National Center for Science and Engineering Statistics did not attempt to estimate for nonresponse on the non-S&E R&D expenditures item prior to FY 2010.

^b Prior to FY 2010, R&D expenditures from nonprofit organizations were collected under all other sources. Beginning in FY 2010, these data were collected separately, and FY 2022 data included \$5,990 million in R&D expenditures from nonprofit sources.

^c Data are estimated based on data collected in surrounding years. Between FY 1953 and FY 1971, surveys were conducted only in years FY 1954, FY 1958, FY 1964, FY 1966, FY 1968, and FY 1970.

^d FY 1978 data are estimated based on data collected from doctorate-granting institutions only.

^e Source of fund detail data do not sum to total for FYs 2003–09 because data by source were collected for S&E fields only. Total non-S&E expenditures were collected in a separate item.

Note(s):

Because of rounding, detail may not add to total.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 2

Higher education R&D expenditures, by source of funds and survey form: FYs 2010–22

(Dollars in thousands)

Survey form and fiscal year	All R&D expenditures	Source of funds								
		Federal government	State and local government	Institution funds				Business	Nonprofit organizations	All other sources
				Total	Institutionally financed research	Cost sharing	Unrecovered indirect costs			
All institutions										
2010	61,286,610	37,477,582	3,887,106	11,942,532	6,198,189	1,083,275	4,661,068	3,201,904	3,729,655	1,047,831
2011	65,274,393	40,768,251	3,851,323	12,580,320	6,816,187	1,153,646	4,610,487	3,182,671	3,853,950	1,037,878
2012	65,872,505	40,216,862	3,743,834	13,625,176	7,723,845	1,289,013	4,612,318	3,279,179	4,037,021	970,433
2013	67,109,094	39,510,280	3,705,597	14,938,337	8,906,778	1,325,008	4,706,551	3,514,750	3,902,646	1,537,484
2014	67,313,484	38,031,837	3,915,607	15,743,421	9,636,685	1,342,772	4,763,964	3,733,688	3,977,753	1,911,178
2015	68,664,244	37,910,989	3,864,085	16,607,970	10,445,258	1,322,595	4,840,117	4,008,532	4,235,520	2,037,148
2016	71,879,437	38,856,988	4,053,341	17,911,091	11,446,697	1,426,930	5,037,464	4,219,446	4,634,533	2,204,038
2017	75,292,181	40,319,098	4,186,549	18,886,087	12,131,193	1,561,935	5,192,959	4,438,650	5,159,337	2,302,460
2018	79,174,644	41,933,948	4,326,345	20,220,215	13,195,713	1,519,485	5,505,017	4,724,952	5,458,448	2,510,736
2019	83,643,490	44,538,541	4,520,355	21,114,107	14,010,204	1,566,016	5,537,887	5,063,932	5,704,913	2,701,642
2020	86,440,252	46,182,051	4,603,153	22,022,280	14,645,261	1,635,617	5,741,402	5,187,195	5,757,688	2,687,885
2021	89,833,640	49,190,892	4,750,816	22,476,286	14,970,015	1,627,075	5,879,196	5,119,551	5,607,950	2,688,145
2022	97,842,057	54,052,605	4,917,987	24,536,445	16,649,164	1,708,852	6,178,429	5,706,668	5,990,077	2,638,275
Short form institutions ^a										
2012	143,498	74,639	10,263	37,778	32,515	2,474	2,789	5,207	14,611	1,000
2013	131,528	64,349	9,175	37,529	32,116	2,360	3,053	4,221	14,000	2,254
2014	152,056	70,719	12,584	45,707	40,561	1,720	3,426	5,852	13,826	3,368
2015	144,282	64,187	9,378	45,816	41,178	1,228	3,410	5,695	15,036	4,170
2016	142,766	68,991	9,893	39,967	34,391	2,182	3,394	5,696	14,099	4,120
2017	143,880	71,040	11,413	36,930	32,208	1,890	2,832	4,479	16,088	3,930
2018	150,382	73,579	13,486	41,807	36,360	2,356	3,091	5,235	13,013	3,262
2019	155,370	78,214	9,789	43,144	37,034	1,927	4,183	4,481	13,615	6,127
2020	137,990	75,512	8,834	32,802	27,081	2,255	3,466	4,250	13,242	3,350
2021	138,803	74,859	9,296	33,655	28,309	1,985	3,361	3,347	13,833	3,813
2022	161,529	81,137	10,788	43,782	36,869	2,320	4,593	5,012	15,922	4,888
Standard form institutions										
2010	61,286,610	37,477,582	3,887,106	11,942,532	6,198,189	1,083,275	4,661,068	3,201,904	3,729,655	1,047,831
2011	65,274,393	40,768,251	3,851,323	12,580,320	6,816,187	1,153,646	4,610,487	3,182,671	3,853,950	1,037,878
2012	65,729,007	40,142,223	3,733,571	13,587,398	7,691,330	1,286,539	4,609,529	3,273,972	4,022,410	969,433
2013	66,977,566	39,445,931	3,696,422	14,900,808	8,874,662	1,322,648	4,703,498	3,510,529	3,888,646	1,535,230
2014	67,161,428	37,961,118	3,903,023	15,697,714	9,596,124	1,341,052	4,760,538	3,727,836	3,963,927	1,907,810

TABLE 2

Higher education R&D expenditures, by source of funds and survey form: FYs 2010–22

(Dollars in thousands)

Survey form and fiscal year	All R&D expenditures	Source of funds								
		Federal government	State and local government	Institution funds				Business	Nonprofit organizations	All other sources
				Total	Institutionally financed research	Cost sharing	Unrecovered indirect costs			
2015	68,519,962	37,846,802	3,854,707	16,562,154	10,404,080	1,321,367	4,836,707	4,002,837	4,220,484	2,032,978
2016	71,736,671	38,787,997	4,043,448	17,871,124	11,412,306	1,424,748	5,034,070	4,213,750	4,620,434	2,199,918
2017	75,148,301	40,248,058	4,175,136	18,849,157	12,098,985	1,560,045	5,190,127	4,434,171	5,143,249	2,298,530
2018	79,024,262	41,860,369	4,312,859	20,178,408	13,159,353	1,517,129	5,501,926	4,719,717	5,445,435	2,507,474
2019	83,488,120	44,460,327	4,510,566	21,070,963	13,973,170	1,564,089	5,533,704	5,059,451	5,691,298	2,695,515
2020	86,302,262	46,106,539	4,594,319	21,989,478	14,618,180	1,633,362	5,737,936	5,182,945	5,744,446	2,684,535
2021	89,694,837	49,116,033	4,741,520	22,442,631	14,941,706	1,625,090	5,875,835	5,116,204	5,594,117	2,684,332
2022	97,680,528	53,971,468	4,907,199	24,492,663	16,612,295	1,706,532	6,173,836	5,701,656	5,974,155	2,633,387

^a Beginning with FY 2012, institutions reporting less than \$1 million in total R&D expenditures completed a shorter version of the survey questionnaire. Prior to FY 2012, all institutions completed the standard form survey questionnaire.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 3

Higher education R&D expenditures, by source of funds, R&D field, and survey population: FY 2022

(Dollars in thousands)

Source of funds and R&D field	All institutions	Survey population	
		Short form	Standard form
All R&D expenditures	97,842,057	161,529	97,680,528
Federal government	54,052,605	81,137	53,971,468
State and local government	4,917,987	10,788	4,907,199
Institution funds	24,536,445	43,782	24,492,663
Institutionally financed research	16,649,164	36,869	16,612,295
Cost sharing	1,708,852	2,320	1,706,532
Unrecovered indirect costs	6,178,429	4,593	6,173,836
Business	5,706,668	5,012	5,701,656
Nonprofit organizations	5,990,077	15,922	5,974,155
All other sources	2,638,275	4,888	2,633,387
Science	76,346,853	120,567	76,226,286
Computer and information sciences	3,232,098	7,149	3,224,949
Geosciences, atmospheric sciences, and ocean sciences	3,699,940	9,705	3,690,235
Life sciences	56,555,981	57,774	56,498,207
Mathematics and statistics	882,746	3,220	879,526
Physical sciences	6,189,165	21,582	6,167,583
Psychology	1,447,705	3,811	1,443,894
Social sciences	3,177,966	12,526	3,165,440
Sciences nec	1,161,252	4,800	1,156,452
Engineering	15,604,248	7,614	15,596,634
Non-S&E	5,890,956	33,348	5,857,608

nec = not elsewhere classified. S&E = science and engineering.

Note(s):

Institutions are included in the short form population if they reported less than \$1 million in total R&D expenditures during the previous fiscal year.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 4

Higher education R&D expenditures received from and passed through to other U.S. higher education institutions, by source of funds and survey population: FY 2022

(Dollars in thousands)

Source	All institutions	Survey population	
		Short form	Standard form
All R&D received	4,714,981	21,262	4,693,719
Federally financed	4,293,430	19,170	4,274,260
Nonfederally financed	421,551	2,092	419,459
All R&D passed through	4,684,065	3,321	4,680,744
Federally financed	4,207,693	2,588	4,205,105
Nonfederally financed	476,372	733	475,639

Note(s):

Institutions are included in the short form population if they reported less than \$1 million in total R&D expenditures during the previous fiscal year.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
All institutions	-	97,842,057	54,052,605	4,917,987	24,536,445	5,706,668	5,990,077	2,638,275
Johns Hopkins U. ^a	1	3,420,312	2,971,816	7,785	158,738	120,023	153,334	8,616
U. California, San Francisco	2	1,805,950	780,318	40,658	438,949	128,983	251,612	165,430
U. Pennsylvania	3	1,791,311	873,318	23,189	562,094	204,216	120,832	7,662
U. Michigan, Ann Arbor	4	1,770,708	970,636	1,592	612,187	106,122	71,520	8,651
U. Washington, Seattle	5	1,559,708	1,083,090	19,188	117,096	61,099	231,172	48,063
U. California, Los Angeles	6	1,536,197	848,138	89,554	287,147	87,218	187,416	36,724
U. California, San Diego	7	1,533,357	970,696	58,556	213,400	106,189	111,854	72,662
U. Wisconsin-Madison	8	1,523,513	740,854	109,946	463,759	40,450	127,756	40,748
Duke U.	9	1,390,538	901,807	802	167,200	208,132	92,526	20,071
Stanford U.	10	1,384,555	860,125	20,064	169,346	138,118	189,536	7,366
Ohio State U.	11	1,363,388	636,902	66,409	424,790	141,894	52,073	41,320
U. North Carolina, Chapel Hill	12	1,361,028	827,158	38,681	343,102	49,664	84,942	17,481
Harvard U.	13	1,308,458	628,683	5,379	415,763	62,034	179,073	17,526
Cornell U.	14	1,300,357	636,481	88,200	250,308	55,328	115,788	154,252
New York U.	15	1,276,038	668,381	17,982	296,131	58,776	101,175	133,593
U. Pittsburgh, Pittsburgh	16	1,251,998	814,647	10,753	281,033	36,310	63,172	46,083
Georgia Institute of Technology	17	1,231,485	940,488	117,204	62,025	82,540	25,348	3,880
Columbia U. in the City of New York	18	1,230,924	904,346	6,391	113,189	83,684	121,435	1,879
U. Maryland ^b	19	1,228,550	750,447	49,950	334,100	34,844	52,546	6,663
U. Minnesota, Twin Cities	20	1,202,084	652,384	73,329	345,240	51,926	45,113	34,092
Yale U.	21	1,191,201	689,270	2,364	343,754	76,240	75,151	4,422
U. Texas M. D. Anderson Cancer Center	22	1,182,536	225,659	297,033	231,583	241,850	34,523	151,888
Texas A&M U., College Station and Health Science Center	23	1,152,666	505,355	218,735	315,112	35,535	47,156	30,773
Vanderbilt U. and Vanderbilt U. Medical Center	24	1,086,223	666,282	2,954	301,424	83,213	29,292	3,058
U. Florida	25	1,085,834	467,739	171,655	327,074	39,233	51,825	28,308
Washington U., Saint Louis	26	1,047,098	681,353	638	154,896	121,140	86,700	2,371
U. Southern California	27	1,039,905	601,747	11,421	201,486	91,844	58,895	74,512
Pennsylvania State U., University Park and Hershey Medical Center	28	1,019,940	681,159	47,345	207,630	24,121	30,128	29,557
Northwestern U.	29	1,000,695	618,771	783	262,434	59,850	51,091	7,766
Massachusetts Institute of Technology	30	989,166	531,056	2,523	117,128	165,200	100,640	72,619
U. California, Berkeley	31	981,035	468,542	37,894	210,324	69,062	169,790	25,423
Emory U.	32	958,281	568,149	522	252,545	64,536	70,269	2,260
Icahn School of Medicine at Mount Sinai	33	893,968	610,646	3,652	132,627	81,384	50,251	15,408

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. California, Davis	34	883,807	468,468	71,806	211,277	50,684	42,552	39,020
U. Texas, Austin	35	845,896	536,296	31,721	151,594	76,512	45,893	3,880
Baylor C. of Medicine	36	827,005	420,054	35,155	292,730	28,251	50,815	0
U. Arizona	37	824,340	374,936	30,993	254,878	27,911	28,814	106,808
Arizona State U.	38	797,224	309,094	98,817	282,983	21,980	62,833	21,517
U. Illinois, Urbana-Champaign	39	765,909	420,953	28,024	215,146	49,272	33,693	18,821
Michigan State U.	40	759,229	381,504	42,516	291,592	10,942	17,393	15,282
Purdue U., West Lafayette	41	754,627	352,890	39,511	227,592	69,428	25,281	39,925
Indiana U., Bloomington	42	751,309	360,300	3,951	272,216	34,091	67,315	13,436
Boston U.	43	725,402	413,102	752	187,662	22,525	84,116	17,245
U. Texas Southwestern Medical Center	44	719,002	298,154	85,808	166,635	47,282	54,435	66,688
U. Alabama, Birmingham	45	713,480	421,223	8,816	172,809	73,595	35,196	1,841
Rutgers, State U. New Jersey, New Brunswick	46	712,231	351,660	90,882	149,889	44,250	71,821	3,729
U. Utah	47	670,119	367,040	3,347	221,473	43,073	31,556	3,630
U. Virginia, Charlottesville	48	662,658	332,993	9,520	187,912	32,511	32,320	67,402
U. Cincinnati	49	615,070	350,392	6,044	161,967	45,002	38,204	13,461
U. Colorado Boulder	50	611,380	507,892	5,422	46,096	11,316	17,307	23,347
U. Colorado Anschutz Medical Campus ^c	51	611,358	429,949	24,575	47,955	52,346	43,531	13,002
U. Iowa	52	594,215	314,346	5,957	220,605	32,201	21,085	21
Virginia Polytechnic Institute and State U.	53	591,861	240,305	75,010	225,690	37,005	6,972	6,879
U. Chicago	54	591,805	456,806	322	40,734	46,694	45,554	1,695
North Carolina State U.	55	583,203	250,582	130,707	145,171	52,960	3,451	332
U. Georgia	56	545,631	220,343	55,206	237,894	12,775	12,380	7,033
U. California, Irvine	57	534,947	291,393	15,008	115,832	42,941	33,110	36,663
Scripps Research Institute	58	492,639	242,135	1,424	164,488	35,318	49,274	0
Oregon Health and Science U.	59	479,226	346,724	1,322	45,950	43,965	40,925	340
California Institute of Technology	60	478,142	326,401	5,009	54,587	17,200	52,970	21,975
U. Kentucky	61	476,517	253,852	32,619	137,897	10,715	13,292	28,142
Case Western Reserve U.	62	467,389	380,423	6,503	53,133	4,856	20,142	2,332
Princeton U.	63	461,185	218,390	255	102,851	17,455	73,840	48,394
Colorado State U., Fort Collins	64	456,911	316,727	30,749	65,700	11,888	22,618	9,229
U. Rochester	65	450,805	334,503	2,037	53,315	36,329	18,783	5,838
Carnegie Mellon U.	66	449,707	259,160	4,379	123,903	42,115	13,772	6,378
U. Illinois, Chicago	67	440,573	251,328	6,914	131,574	11,917	30,691	8,149

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
SUNY, U. Buffalo	68	439,709	218,231	33,635	122,816	29,723	26,045	9,259
U. Miami	69	439,300	265,212	18,607	97,990	35,378	21,416	697
U. Missouri, Columbia	70	432,310	182,432	35,573	181,090	17,608	10,296	5,311
SUNY, Polytechnic Institute	71	413,763	32,396	97,519	110,878	169,101	223	3,646
U. Oklahoma, Norman and Health Science Center	72	408,656	210,994	26,614	140,592	15,450	11,616	3,390
Virginia Commonwealth U.	73	405,898	166,726	34,539	173,811	16,124	14,537	161
U. Kansas	74	405,267	200,117	29,376	120,620	29,384	12,073	13,697
U. South Florida ^d	75	405,166	206,552	24,683	146,620	12,463	12,424	2,424
Iowa State U.	76	393,184	187,156	37,071	134,050	18,924	15,284	699
Washington State U.	77	368,396	187,580	54,610	103,067	9,099	13,119	921
U. Delaware	78	368,107	194,775	11,552	142,398	5,839	5,252	8,291
U. Connecticut	79	367,557	230,752	4,242	103,966	11,371	13,166	4,060
Rockefeller U.	80	360,877	94,693	102	225,209	2,292	37,218	1,363
U. Massachusetts, Medical School	81	358,204	258,147	2,878	49,909	20,870	20,992	5,408
Florida State U.	82	355,986	163,744	24,003	152,444	4,914	3,723	7,158
Utah State U.	83	344,851	280,866	22,243	28,019	6,871	578	6,274
Louisiana State U., Baton Rouge	84	344,556	111,886	69,770	138,650	13,449	4,727	6,074
Dartmouth C. and Dartmouth Hitchcock Medical Center	85	344,126	155,445	1,344	156,384	2,383	19,943	8,627
U. Texas Health Science Center, Houston	86	342,633	184,205	46,379	55,120	15,764	28,031	13,134
U. Nebraska, Lincoln	87	340,260	113,248	61,070	134,864	19,767	6,247	5,064
U. New Mexico	88	331,164	232,774	6,491	67,949	4,625	17,427	1,898
U. Tennessee, Knoxville	89	324,435	149,260	15,785	138,287	9,528	7,012	4,563
Thomas Jefferson U.	90	321,644	173,861	14,252	63,739	26,469	24,927	18,396
Medical C. Wisconsin	91	321,506	152,301	586	102,906	35,121	27,050	3,542
Albert Einstein C. of Medicine	92	318,314	220,780	719	73,665	3,820	19,330	0
Georgetown U.	93	313,220	127,213	1,144	81,692	16,111	61,547	25,513
SUNY, Stony Brook U.	94	312,698	184,154	16,238	88,630	9,512	11,750	2,414
Brown U.	95	310,780	215,067	9	56,819	4,247	28,539	6,099
Auburn U., Auburn	96	304,439	104,883	33,555	143,876	8,338	1,912	11,875
Mississippi State U.	97	303,418	138,207	92,113	60,534	3,170	7,928	1,466
Temple U.	98	301,395	143,580	8,109	99,543	26,463	17,459	6,241
Oregon State U.	99	297,934	192,621	50,654	28,792	8,037	2,772	15,058
Medical U. South Carolina	100	284,553	163,395	4,565	76,566	20,932	9,097	9,998
Florida International U.	101	281,665	129,683	20,013	120,737	2,800	7,184	1,248

TABLE 5

Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Notre Dame	102	280,604	124,411	487	94,156	16,225	21,210	24,115
U. California, Santa Barbara	103	278,897	161,241	6,212	57,814	16,324	27,839	9,467
U. Hawaii, Manoa	104	277,323	169,762	17,799	75,287	2,304	11,546	625
Uniformed Services U. of the Health Sciences	105	277,240	194,187	0	75,736	0	7,317	0
George Washington U.	106	275,483	161,867	2,264	67,384	5,048	25,886	13,034
Wake Forest U.	107	269,109	180,754	9,209	26,816	22,212	21,022	9,096
Clemson U.	108	263,158	119,512	25,685	95,211	17,690	4,796	264
Wichita State U.	109	261,519	93,367	18,882	28,618	120,443	170	39
Woods Hole Oceanographic Institution	110	255,017	211,550	398	10,972	3,874	12,807	15,416
U. Massachusetts, Amherst	111	245,158	129,044	12,632	79,588	8,582	8,646	6,666
Wayne State U.	112	242,247	126,814	9,796	78,061	6,556	17,750	3,270
U. Houston	113	240,126	84,295	28,999	107,699	9,709	6,502	2,922
U. Texas Health Science Center, San Antonio	114	238,510	119,071	27,587	57,408	9,276	24,858	310
Northeastern U.	115	231,607	150,093	1,747	55,478	12,107	11,909	273
Tufts U.	116	231,224	150,081	3,780	29,719	12,765	11,331	23,548
George Mason U.	117	230,068	119,406	5,816	55,812	6,969	35,685	6,380
U. Louisville	118	229,582	117,363	11,543	63,606	11,915	8,259	16,896
U. South Carolina, Columbia	119	229,162	106,752	13,021	95,360	4,322	8,292	1,415
Texas Tech U.	120	226,729	45,136	29,861	121,050	13,367	16,426	889
Tulane U.	121	222,605	127,544	4,215	51,561	10,974	13,868	14,443
U. Central Florida	122	221,488	110,131	8,500	82,434	11,278	5,068	4,077
U. Vermont	123	216,307	117,163	1,379	82,412	2,785	7,081	5,487
Rice U.	124	216,202	105,345	5,071	63,401	5,535	31,834	5,016
Georgia State U.	125	215,908	81,641	6,415	112,773	502	13,940	637
West Virginia U.	126	214,081	97,327	9,769	79,689	5,016	3,862	18,418
Kansas State U.	127	212,974	81,820	40,926	72,772	8,259	8,047	1,150
U. Dayton	128	211,494	203,206	756	853	5,620	408	651
U. New Hampshire	129	206,392	129,721	3,938	56,891	9,893	5,107	842
U. Arkansas for Medical Sciences	130	205,493	95,080	15,287	71,431	11,022	6,253	6,420
U. Nebraska, Medical Center	131	205,253	114,754	12,652	39,600	8,591	14,617	15,039
U. Louisiana, Lafayette	132	205,201	77,110	10,541	42,605	74,657	288	0
U. Texas Medical Branch	133	204,518	123,467	8,481	53,371	7,267	11,932	0
U. Alaska, Fairbanks	134	202,516	154,742	1,508	39,501	3,346	1,433	1,986
Montana State U., Bozeman	135	200,820	118,974	18,147	55,164	1,546	3,208	3,781

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. California, Riverside	136	199,135	114,257	8,566	51,532	6,267	8,538	9,975
Oklahoma State U., Stillwater	137	195,041	53,885	21,322	106,925	11,236	1,351	322
U. Arkansas, Fayetteville	138	184,080	64,252	48,654	59,522	4,705	5,742	1,205
U. Nevada, Reno	139	181,782	83,631	7,477	78,594	2,787	2,018	7,275
U. California, Santa Cruz	140	176,760	107,082	7,101	34,599	7,330	13,485	7,163
North Dakota State U.	141	174,904	45,343	50,066	71,056	1,507	864	6,068
U. Maine	142	171,931	84,072	19,449	60,064	3,848	2,568	1,930
U. Alabama, Huntsville	143	169,532	132,060	5,091	30,776	626	496	483
New Jersey Institute of Technology	144	167,135	71,326	14,576	62,576	1,872	7,207	9,578
U. Alabama, Tuscaloosa	145	163,204	67,986	17,040	73,435	2,701	1,631	411
U. Oregon	146	160,500	97,238	1,061	55,247	782	5,795	377
Syracuse U.	147	157,407	33,976	3,890	101,347	8,568	9,378	248
U. Mississippi	148	152,903	84,270	183	61,653	2,696	3,489	612
Drexel U.	149	151,903	99,399	3,418	36,121	2,323	7,882	2,760
U. North Dakota	150	147,717	62,737	26,441	44,072	13,559	727	181
U. Texas, San Antonio	151	147,629	54,384	13,795	64,443	5,765	6,123	3,119
U. Wyoming	152	139,764	68,772	5,592	58,184	4,099	2,167	950
U. Texas, Arlington	153	133,770	56,025	27,482	38,339	2,935	6,948	2,041
U. Texas, Dallas	154	130,914	60,706	13,882	32,378	9,499	14,449	0
SUNY, Binghamton U.	155	130,882	24,888	5,225	94,515	3,458	1,306	1,490
U. Texas, El Paso	156	130,501	60,387	15,999	41,654	1,177	2,151	9,133
SUNY, U. Albany	157	129,796	51,492	1,234	71,042	735	2,963	2,330
U. Rhode Island	158	129,102	93,190	5,508	24,722	1,304	3,470	908
Augusta U.	159	127,313	64,609	95	51,995	3,451	6,725	438
U. Montana, Missoula	160	125,603	73,507	659	48,353	709	2,220	155
San Diego State U.	161	123,856	50,540	4,812	64,484	457	2,489	1,074
Rensselaer Polytechnic Institute	162	121,809	50,605	3,485	47,193	15,282	2,012	3,232
New Mexico State U.	163	121,472	71,718	23,036	16,167	2,451	2,366	5,734
Cold Spring Harbor Laboratory	164	118,034	59,163	134	36,235	3,766	18,736	0
U. Idaho	165	115,603	56,160	35,703	17,659	1,923	766	3,392
U. Tennessee, Health Science Center	166	115,161	60,221	6,205	32,641	3,958	6,232	5,904
Rush U.	167	114,874	79,647	1,548	9,884	15,789	8,006	0
U. Massachusetts, Lowell	168	111,144	62,195	2,599	39,067	4,463	2,112	708
U. Maryland, Baltimore County	169	110,319	65,368	7,264	31,743	1,958	2,611	1,375

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Texas State U.	170	110,102	38,936	3,810	60,338	1,102	5,800	116
Brandeis U.	171	102,378	44,205	1,027	40,627	1,100	11,813	3,606
Colorado School of Mines	172	98,404	66,200	1,446	13,739	9,580	2,329	5,110
U. Nevada, Las Vegas	173	94,967	28,867	2,174	59,398	1,656	809	2,063
U. North Texas, Denton	174	93,538	23,056	5,007	61,728	1,979	1,762	6
Michigan Technological U.	175	91,084	48,766	999	32,247	6,687	591	1,794
New Mexico Institute of Mining and Technology	176	89,900	72,594	10,532	2,895	2,922	269	688
Saint Louis U.	177	82,740	42,170	355	22,991	5,459	11,584	181
Cleveland State U.	178	81,225	53,395	848	18,497	3,481	4,812	192
Van Andel Research Institute	179	78,626	29,424	701	35,812	227	4,633	7,829
William & Mary	180	75,953	33,730	4,124	30,035	966	4,212	2,886
U. Southern Mississippi	181	72,477	48,368	11,944	10,942	555	668	0
San Jose State U.	182	71,695	30,984	7,796	27,661	1,792	2,296	1,166
U. Memphis	183	71,271	24,686	8,365	33,900	1,084	3,045	191
Boston C.	184	68,958	36,560	1,439	13,949	652	15,649	709
American U.	185	67,616	14,752	874	40,650	428	8,424	2,488
Howard U.	186	67,594	37,331	1,197	23,130	2,908	1,816	1,212
Northern Arizona U.	187	66,729	43,453	7,055	14,501	813	768	139
Baylor U.	188	66,014	15,856	2,211	34,144	3,165	7,682	2,956
CUNY, City C.	189	65,569	38,596	11,892	13,103	467	1,311	200
U. Massachusetts, Boston	190	65,215	23,131	8,852	25,606	2,043	4,958	625
Old Dominion U.	191	64,877	27,804	12,866	19,957	820	2,515	915
U. Toledo	192	64,654	36,694	1,211	19,679	3,312	3,509	249
U. Texas Rio Grande Valley	193	64,401	18,317	5,380	32,862	212	7,326	304
Indiana U.-Purdue U., Indianapolis	194	64,162	29,353	413	27,461	1,313	5,475	147
Naval Postgraduate School	195	64,055	44,852	0	18,483	313	66	341
Rochester Institute of Technology	196	62,383	33,373	7,076	16,109	2,789	1,998	1,038
Florida Atlantic U.	197	61,748	28,641	7,443	15,422	2,431	5,831	1,980
South Dakota State U.	198	59,590	22,991	16,267	4,841	1,278	2,537	11,676
Southern Methodist U.	199	57,544	17,680	1,106	33,929	1,918	2,751	160
Worcester Polytechnic Institute	200	56,904	34,004	3,041	14,261	3,308	1,414	876
U. Wisconsin-Milwaukee	201	56,822	24,036	16,504	12,368	1,535	935	1,444
East Carolina U.	202	55,693	29,648	408	19,542	3,991	1,783	321
U. California, Office of the President	203	54,640	158	34,007	20,390	0	0	85

TABLE 5

Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Louisiana State U., Health Sciences Center, New Orleans	204	53,995	33,087	168	13,488	3,193	3,275	784
U. Maryland Center for Environmental Science	205	53,718	15,109	26,071	10,222	223	1,792	301
Stevens Institute of Technology	206	53,563	41,836	2,264	5,895	2,608	539	421
Missouri U. of Science and Technology	207	53,357	28,792	227	15,993	4,559	662	3,124
U. Missouri, Kansas City	208	52,657	31,134	225	17,201	338	969	2,790
Ohio U.	209	52,465	20,587	1,035	26,187	3,634	634	388
Kent State U.	210	52,175	16,195	1,308	32,748	640	1,242	42
Lehigh U.	211	51,769	36,535	2,342	11,162	595	1,060	75
Florida A&M U.	212	50,636	41,943	1,510	6,256	334	593	0
SUNY, Upstate Medical U.	213	50,586	27,737	2,261	10,660	5,883	2,331	1,714
Mercer U.	214	50,222	32,504	46	9,218	4,083	112	4,259
U. California, Merced	215	48,147	23,421	5,992	14,279	768	1,918	1,769
North Carolina A&T State U.	216	47,908	29,094	3,899	14,445	261	195	14
Boise State U.	217	47,617	32,015	2,842	11,230	536	876	118
U. Puerto Rico, Medical Sciences Campus	218	47,578	35,050	1,005	8,295	3,228	0	0
Southern Illinois U., Carbondale	219	46,967	13,582	802	24,670	7,169	744	0
Texas Tech U., Health Sciences Center	220	46,574	14,620	16,937	9,544	508	2,963	2,002
Loyola U., Chicago	221	46,169	26,972	204	9,904	3,527	3,955	1,607
Brigham Young U., Provo	222	45,610	31,636	1,032	6,962	3,577	2,171	232
U. Denver	223	45,561	26,040	4,419	6,953	1,937	5,210	1,002
Air Force Institute of Technology	224	44,391	32,479	0	11,869	43	0	0
U. South Alabama	225	43,491	23,762	998	15,313	1,232	1,383	803
U. North Carolina, Charlotte	226	43,126	26,871	1,158	11,848	2,689	560	0
Morehouse School of Medicine	227	42,489	31,339	440	7,155	0	3,555	0
Portland State U.	228	41,483	30,922	2,635	3,949	636	2,882	459
U. North Carolina, Greensboro	229	41,303	29,822	524	9,054	593	579	731
Marquette U.	230	40,638	15,316	207	16,222	752	2,440	5,701
U. West Florida	231	38,870	17,114	203	20,673	683	197	0
Catholic U. of America	232	38,191	26,285	130	4,211	370	7,195	0
Oakland U.	233	38,061	9,533	2,911	18,539	2,613	2,636	1,829
San Francisco State U.	234	36,617	15,276	2,013	18,257	53	990	28
U.S. Air Force Academy	235	36,506	35,826	0	0	680	0	0
Georgia Southern U.	236	36,362	2,605	322	28,826	4,608	1	0
Texas A&M U.-Corpus Christi	237	36,014	15,229	9,903	5,287	90	2,782	2,723

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
CUNY, Hunter C.	238	35,348	21,142	3,367	8,895	716	1,165	63
Chapman U.	239	34,212	11,098	854	13,710	425	7,989	136
U. Texas Health Science Center, Tyler	240	33,872	14,362	8,127	6,016	858	4,509	0
California Polytechnic State U., San Luis Obispo	241	33,155	15,084	3,155	9,964	2,008	2,890	54
U. Massachusetts, Dartmouth	242	33,136	11,162	1,519	18,713	1,035	440	267
SUNY, C. of Environmental Science and Forestry	243	32,904	7,766	14,020	8,411	795	817	1,095
Montclair State U.	244	32,202	5,189	619	24,540	54	1,683	117
Nova Southeastern U.	245	31,189	9,314	3,571	16,839	417	616	432
Teachers C., Columbia U.	246	30,978	10,177	4,357	NA	1,846	12,335	2,263
SUNY, Downstate Health Sciences U.	247	30,918	25,081	31	3,816	177	1,475	338
U. South Dakota	248	30,322	13,702	1,919	14,176	32	493	0
Rowan U.	249	29,949	18,613	4,720	4,546	1,177	893	0
Illinois Institute of Technology	250	29,791	25,963	2	1,759	948	371	748
Louisiana State U., Health Sciences Center, Shreveport	251	29,502	15,503	21	8,434	1,045	4,499	0
Morgan State U.	252	29,482	24,670	2,835	707	601	344	325
Delaware State U.	253	29,016	24,361	598	3,457	150	440	10
Miami U.	254	28,799	10,277	1,997	13,843	1,375	969	338
Embry-Riddle Aeronautical U.	255	28,650	23,863	358	1,425	1,002	225	1,777
Desert Research Institute	256	28,478	17,341	385	4,377	960	4,381	1,034
Rutgers, State U. New Jersey, Newark	257	28,345	16,099	421	8,531	167	3,041	86
U. Puerto Rico, Rio Piedras	258	28,083	16,905	60	10,458	229	376	55
Western Michigan U. and Homer Stryker M.D. School of Medicine	259	27,768	12,895	1,348	9,489	2,063	473	1,500
Creighton U.	260	27,609	12,022	3,702	8,993	1,289	320	1,283
Wright State U.	261	27,440	20,529	757	5,368	407	343	36
Northern Illinois U.	262	27,068	9,840	774	14,986	634	606	228
Louisiana Tech U.	263	26,591	5,734	2,532	15,621	713	0	1,991
Villanova U.	264	25,955	6,476	1,404	15,309	605	2,140	21
Marshall U.	265	25,692	16,369	1,909	6,479	320	615	0
Illinois State U.	266	25,510	8,673	487	14,540	54	1,752	4
U. Nebraska, central administration	267	25,402	23,872	0	1,498	0	0	32
Central Michigan U.	268	25,105	9,773	1	14,061	157	794	319
U. Nebraska, Omaha	269	24,259	17,301	2,445	4,038	44	387	44
California State U., Sacramento	270	23,795	6,646	10,203	5,694	115	511	626
Texas A&M U.-Kingsville	271	23,451	8,225	6,241	2,812	389	5,647	137

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
East Tennessee State U.	272	23,420	9,715	315	9,214	35	3,881	260
U. Minnesota, Duluth	273	23,362	6,122	5,928	10,794	382	105	31
Middle Tennessee State U.	274	22,631	4,347	509	16,715	261	799	0
Albany Medical C.	275	22,297	13,384	0	3,132	3,606	689	1,486
Eastern Virginia Medical School	276	22,165	17,616	1,186	2,603	148	612	0
Tuskegee U.	277	21,941	14,911	3,206	1,128	0	0	2,696
U. New Orleans	278	21,911	8,270	788	10,393	483	1,067	910
Kennesaw State U.	279	21,705	3,290	529	17,003	205	543	135
Clarkson U.	280	21,703	8,834	2,713	8,116	1,363	508	169
CUNY, Queens C.	281	21,434	14,756	1,362	4,717	83	439	77
U. Alaska, Anchorage	282	21,024	15,249	1,227	3,392	282	493	381
U.S. Military Academy	283	20,841	19,708	0	95	482	280	276
U. Guam	284	20,481	17,066	1,682	1,339	375	19	0
Fordham U.	285	20,432	4,856	0	13,005	27	1,523	1,021
Prairie View A&M U.	286	20,429	11,665	4,037	3,898	327	502	0
U. of the Virgin Islands	287	20,259	19,127	1,010	NA	48	74	0
South Dakota School of Mines and Technology	288	20,061	15,100	1,467	2,488	741	55	210
Tarleton State U.	289	20,056	5,055	3,927	10,533	257	284	0
U. North Carolina, Wilmington	290	20,053	7,178	6,644	3,338	1,166	1,638	89
U. Akron	291	19,943	11,036	160	5,608	2,102	893	144
California State U., Northridge	292	19,638	15,546	984	1,207	181	1,703	17
Bowling Green State U.	293	19,342	7,918	1,649	8,895	122	758	0
New School	294	19,218	1,261	298	3,023	2	11,860	2,774
Southern Illinois U., Edwardsville	295	19,152	3,250	556	14,766	577	3	0
California State U., East Bay	296	19,035	8,997	693	8,232	2	1,036	75
U. North Florida	297	18,394	7,758	746	8,817	107	232	734
Texas Christian U.	298	18,353	5,670	302	9,201	2,028	1,096	56
U. Puerto Rico, Mayaguez	299	18,274	16,223	455	314	1,049	233	0
U. Colorado Denver ^C	300	18,080	12,668	2,422	1,063	453	1,160	314
Tennessee State U.	301	18,012	10,859	567	6,466	4	116	0
Meharry Medical C.	302	17,960	15,048	0	648	25	2,239	0
California State U., Long Beach	303	17,807	11,739	572	2,980	534	837	1,145
Florida Institute of Technology	304	17,706	10,970	1,170	4,740	465	361	0
Jackson State U.	305	17,481	15,045	0	1,427	93	916	0

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Tulsa	306	17,416	5,893	320	4,023	6,130	967	83
Long Island U.	307	17,183	2,652	0	13,962	184	334	51
James Madison U.	308	17,021	2,884	798	12,602	218	518	1
Alcorn State U.	309	16,726 i	9,361 i	4,977 i	2,349 i	7 i	32 i	0 i
California State U., Fullerton	310	16,642	6,136	305	9,664	95	442	0
Idaho State U.	311	16,615	9,080	2,223	4,292	547	249	224
North Carolina Central U.	312	16,600	13,709	954	NA	434	776	727
CUNY, Advanced Science Research Center	313	16,507	12,580	365	2,226	324	888	124
New York Medical C.	314	16,461	9,070	985	813	2,947	1,980	666
CUNY, Graduate School of Public Health and Health Policy	315	16,423	11,880	318	2,189	658	1,340	38
Tennessee Technological U.	316	16,398	8,156	4,256	3,464	117	146	259
CUNY, John Jay C. of Criminal Justice	317	16,233	5,777	3,516	3,492	144	2,171	1,133
California State Polytechnic U., Humboldt	318	15,612	2,421	4,248	4,784	110	2,209	1,840
Loma Linda U.	319	15,517	9,134	630	3,012	1,358	942	441
Western Washington U.	320	15,081	6,347	1,063	5,954	68	1,614	35
Charles R. Drew U. of Medicine and Science	321	14,581	10,656	220	3,098	0	607	0
Texas Tech U., Health Sciences Center, El Paso	322	14,206	2,339	2,856	8,097	475	438	1
Montana Technological U.	323	14,188	5,600	6,085	2,221	282	0	0
Xavier U. Louisiana	324	14,156	11,733	585	1,452	0	386	0
Duquesne U.	325	13,944	6,309	928	4,043	217	2,447	0
Northeast Ohio Medical U.	326	13,465	9,400	47	3,197	0	821	0
U. Missouri, Saint Louis	327	13,247	4,573	61	5,106	81	2,934	492
Rosalind Franklin U. of Medicine and Science	328	12,988	7,292	144	4,239	593	720	0
U. Tennessee, Chattanooga	329	12,808	5,214	1,291	5,510	106	229	458
Loyola Marymount U.	330	12,773	2,824	1,334	7,360	6	1,249	0
U. Hawaii, system office	331	12,646	12,511	0	135	0	0	0
California State U., Fresno	332	12,603	5,928	1,102	3,854	356	1,258	105
Virginia State U.	333	12,326	7,115	2,006	2,544	0	661	0
Texas Southern U.	334	12,120	7,550	1,150	3,362	0	58	0
Sam Houston State U.	335	12,009	4,936	132	6,444	1	382	114
California State U., San Bernardino	336	11,929	6,693	2,445	2,657	3	131	0
Lincoln U., Jefferson City	337	11,500	8,988	2,512	NA	0	0	0
Hampton U.	338	11,462	11,274	0	188	0	0	0
Missouri State U.	339	11,162	10,084	94	754	95	135	0

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Rhode Island C.	340	11,127	5,372	5,301	92	0	362	0
Midwestern U.	341	11,069	1,609	160	8,714	290	296	0
U. of the District of Columbia	342	10,779	9,859	920	0	0	0	0
U.S. Naval Academy	343	10,664	10,147	0	0	0	251	266
Salisbury U.	344	10,614	3,734	3,405	3,415	0	50	10
U. North Texas, Health Science Center	345	10,439	3,172	0	6,615	502	14	136
Winston-Salem State U.	346	10,436	8,903	283	0	0	785	465
Central State U.	347	10,274	5,576	3,039	1,659	0	0	0
U. San Diego	348	10,143	2,911	510	5,842	0	576	304
Wesleyan U.	349	10,101	5,267	0	3,652	93	1,052	37
Fort Valley State U.	350	9,969	7,265	2,704	0	0	0	0
Ball State U.	351	9,932	5,302	257	3,754	247	372	0
Florida Gulf Coast U.	352	9,896	6,482	1,823	214	110	1,211	56
California State U., Los Angeles	353	9,839	8,605	130	943	0	161	0
Alabama A&M U.	354	9,611	9,221	4	0	386	0	0
West Texas A&M U.	355	9,438	2,123	4,302	1,972	966	29	46
Kentucky State U.	356	9,284	4,743	4,357	0	83	101	0
U. Maryland, Eastern Shore	357	9,274	9,062	192	20	0	0	0
California State U., San Marcos	358	9,238	7,986	980	265	0	7	0
Bryn Mawr C.	359	9,123	1,257	0	7,692	0	174	0
Saint Joseph's U.	360	9,041	2,520	1,205	2,609	2,252	455	0
Western U. of Health Sciences	361	9,029	7,131	600	224	351	704	19
California State U., Monterey Bay	362	8,975	5,051	1,404	2,300	50	164	6
Clark U.	363	8,813	2,500	77	4,552	0	1,577	107
Clark Atlanta U.	364	8,791	5,895	0	2,647	198	51	0
Towson U.	365	8,788	2,844	177	5,513	30	217	7
Claremont Graduate U.	366	8,382	1,610	342	1,113	3,384	1,381	552
Oklahoma State U., Center for Health Sciences	367	8,368	3,366	35	4,897	53	17	0
DePaul U.	368	8,362	3,757	169	2,195	260	1,948	33
Arkansas State U., Jonesboro	369	8,214	3,932	3,325	658	271	28	0
U. Washington, Bothell	370	8,197	4,009	259	786	85	3,007	51
U. Michigan, Dearborn	371	8,180	2,537	9	3,259	2,070	223	82
Eastern Michigan U.	372	8,025	2,346	50	5,324	57	248	0
U. Hawaii, Hilo	373	8,001	5,292	66	1,533	131	931	48

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Oklahoma, Tulsa	374	7,945	1,804	1,709	2,892	104	1,120	316
California State Polytechnic U., Pomona	375	7,909	5,407	846	1,441	204	11	0
U. Colorado Colorado Springs	376	7,761	5,345	752	939	595	130	0
Western Kentucky U.	377	7,720	3,127	531	3,961	55	46	0
William Paterson U.	378	7,574	1,896	0	5,401	121	131	25
U. Arkansas, Little Rock	379	7,530	6,675	220	80	170	157	228
U. Arkansas, Pine Bluff	380	7,506	3,306	1,449	2,737	0	14	0
Yeshiva U.	381	7,274	1,695	0	4,765	0	349	465
Appalachian State U.	382	7,189	2,567	103	3,129	617	771	2
Amherst C.	383	7,177	2,862	0	2,130	0	127	2,058
Edward Via C. of Osteopathic Medicine	384	7,121	482	58	6,520	8	53	0
U. Central Oklahoma	385	7,070 i	1,869 i	747 i	4,365 i	85 i	3 i	1 i
Southern U. and A&M C., Agricultural Research and Extension Center	386	7,048	4,261	2,765	22	0	0	0
Hofstra U.	387	6,939	2,118	139	4,485	0	197	0
West Virginia State U.	388	6,703	4,278	1,601	815	0	9	0
Grand Valley State U.	389	6,695	1,819	378	2,986	0	948	564
Philadelphia C. of Osteopathic Medicine	390	6,667	40	57	2,675	2,300	1,595	0
U. New England	391	6,664	3,660	15	2,503	126	360	0
U. Baltimore	392	6,646	4,853	1,445	NA	4	259	85
Langston U.	393	6,481	3,616	0	2,449	416	0	0
Rutgers, State U. New Jersey, Camden	394	6,480	3,349	60	2,003	330	724	14
C. Charleston	395	6,421	4,485	383	1,032	40	465	16
Purdue U., Northwest	396	6,387	3,171	767	1,323	477	128	521
Pennsylvania State U., Behrend	397	6,384	3,262	405	1,345	848	514	10
Gallaudet U.	398	6,360	3,287	1	2,396	0	128	548
Hope C.	399	6,355	3,691	0	1,928	0	625	111
Wellesley C.	400	6,326	2,915	552	NA	89	2,008	762
Indiana U. Pennsylvania	401	6,313	1,797	729	3,303	0	469	15
Abilene Christian U.	402	6,310	1,032	0	231	4,907	140	0
Roseman U. of Health Sciences	403	6,296	30	0	6,158	106	2	0
Southern Connecticut State U.	404	6,286	848	103	4,722	0	362	251
CUNY, Brooklyn C.	405	6,220	4,623	0	1,418	3	160	16
High Tech High Graduate School of Ed.	406	6,203	0	0	0	0	6,203	0
Pacific U.	407	6,128	2,672	498	2,670	45	243	0

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Texas Woman's U.	408	6,029	2,091	2,386	883	135	534	0
U. North Carolina, Asheville	409	5,973	2,600	542	543	54	2,234	0
Reed C.	410	5,922 i	2,139 i	38 i	3,272 i	0 i	342 i	131 i
West Chester U. Pennsylvania	411	5,903	854	20	4,618	32	379	0
Claremont McKenna C.	412	5,893	1,070	56	4,377	0	390	0
Grinnell C.	413	5,867	242	0	5,237	15	208	165
Smith C.	414	5,831	2,403	0	1,740	248	1,440	0
MGH Institute of Health Professions	415	5,805	4,628	0	20	0	1,157	0
Seton Hall U.	416	5,741	2,092	1,737	1,176	150	586	0
Morehouse C.	417	5,664	5,664	0	0	0	0	0
Williams C.	418	5,657 i	1,286 i	0 i	1,894 i	0 i	156 i	2,321 i
Northwest Indian C.	419	5,632	4,298	0	1,334	0	0	0
New York Institute of Technology	420	5,555	2,988	167	2,180	0	220	0
Naval War C.	421	5,529	5,529	0	0	0	0	0
CUNY, Graduate Center	422	5,509	2,535	154	1,080	0	1,208	532
Kean U.	423	5,499	715	180	4,548	15	41	0
U. Southern Maine	424	5,498	2,201	2,893	237	0	126	41
U.S. Army War C.	425	5,496 i	5,496 i	0 i	0 i	0 i	0 i	0 i
U. Washington, Tacoma	426	5,484	4,553	432	207	0	138	154
Des Moines U.	427	5,307	1,589	179	3,455	0	84	0
Lamar U.	428	5,304	1,180	3,639	220	167	98	0
Bucknell U.	429	5,259	2,539	0	1,150	369	236	965
U. Detroit Mercy	430	5,186	4,663	0	494	16	13	0
Oregon Institute of Technology	431	5,086 i	340	4,431 i	NA	109 i	206 i	0
U. Central del Caribe	432	5,053	2,807	356	1,486	0	0	404
Barnard C.	433	4,988	3,758	0	652	39	539	0
Texas A&M U.-Commerce	434	4,955	1,776	222	2,783	4	153	17
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	435	4,954	858	0	3,799	0	91	206
California State U., Bakersfield	436	4,815	2,665	259	1,878	0	13	0
Dakota State U.	437	4,684	3,976	236	382	84	6	0
CUNY, Lehman C.	438	4,656	3,652	10	421	177	273	123
U. Wisconsin-Superior	439	4,615	3,635	135	617	152	76	0
U. New Haven	440	4,548	2,447	504	405	352	807	33
SUNY, C. of Optometry	441	4,497	2,080	0	708	1,642	56	11

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Haverford C.	442	4,487	2,722	0	852	0	381	532
Texas A&M International U.	443	4,486	1,624	917	1,093	73	751	28
Toyota Technological Institute, Chicago	444	4,470	2,199	0	1,568	431	272	0
Franklin and Marshall C.	445	4,440	1,680	266	1,555	339	333	267
Citadel Military C. South Carolina	446	4,374	3,741	270	336	3	20	4
Carleton C.	447	4,358	1,914	18	2,055	0	214	157
Southern U. and A&M C., Baton Rouge	448	4,344	3,595	80	34	635	0	0
Colgate U.	449	4,343	1,570	0	2,625	78	66	4
Western Illinois U.	450	4,311	4,032	0	47	160	0	72
U. of Health Sciences and Pharmacy in St. Louis	451	4,280	2,523	0	977	635	145	0
South Carolina State U.	452	4,270 i	4,270 i	NA	NA	NA	NA	NA
California State U., Dominguez Hills	453	4,230	3,156	23	1,001	0	50	0
Santa Clara U.	454	4,225	2,660	299	NA	518	748	0
Swarthmore C.	454	4,225	1,733	6	2,130	0	356	0
California State U., Chico	456	4,177	2,312	763	422	130	44	506
Youngstown State U.	457	4,157	3,533	260	305	42	17	0
Occidental C.	458	4,139 i	2,622 i	484 i	NA	480 i	553 i	0 i
U. Nebraska, Kearney	459	4,009	1,900	530	1,459	48	0	72
Fisk U.	460	4,000	3,486	93	10	0	411	0
National Defense U.	461	3,920	3,920	0	0	0	0	0
Northern Kentucky U.	462	3,888	2,596	2	890	22	378	0
Pepperdine U.	463	3,775	883	19	885	0	1,988	0
Sonoma State U.	464	3,774	2,889	406	298	40	141	0
Sacred Heart U.	465	3,741	862	30	2,660	104	85	0
U. Wisconsin-Stevens Point	466	3,740	1,235	1,074	829	1	314	287
Coastal Carolina U.	467	3,724	1,130	948	1,580	0	66	0
Chicago State U.	468	3,701	3,699	0	0	0	2	0
U. Central Arkansas	469	3,684	1,731	623	1,186	0	144	0
Trinity U.	470	3,657	1,345	5	1,117	0	1,149	41
Colorado C.	471	3,646	1,371	258	1,090	0	927	0
Norfolk State U.	472	3,593	3,398	89	0	0	106	0
St. John's U., New York	473	3,592	2,456	0	326	195	387	228
U. Texas of the Permian Basin	474	3,577	1,538	685	756	132	466	0
CUNY, C. Staten Island	475	3,545	2,916	93	342	1	133	60

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Milwaukee School of Engineering	475	3,545	969	0	79	2,485	12	0
Pace U.	477	3,524	2,534	0	711	0	279	0
U. North Carolina, general administration	478	3,522	369	3,153	0	0	0	0
U. Northern Iowa	479	3,486	2,132	465	808	0	81	0
Alfred U.	480	3,477	1,008	1,659	517	264	29	0
C. New Jersey	481	3,464	1,984	186	579	0	715	0
Winthrop U.	482	3,424	2,542	196	628	13	45	0
St. Edward's U.	483	3,393	1,940	101	1,150	15	160	27
Azusa Pacific U.	484	3,389	282	266	2,680	0	161	0
California State U., Channel Islands	485	3,377	1,638	746	690	267	36	0
Murray State U.	486	3,371	2,176	23	1,060	112	0	0
Bowie State U.	487	3,351	3,351	0	0	0	0	0
Harvey Mudd C.	488	3,350	1,956	0	1,020	2	138	234
U. Northern Colorado	489	3,308	1,692	100	1,224	143	149	0
Hawaii Pacific U.	490	3,302	2,667	48	4	315	240	28
Biola U.	491	3,260	0	2	0	0	3,088	170
U. Texas, Tyler	492	3,246	1,585	651	821	111	64	14
Hobart and William Smith Colleges	493	3,228	1,264	955	557	0	201	251
Fayetteville State U.	494	3,206	1,667	479	898	116	46	0
Stephen F. Austin State U.	495	3,184	879	1,326	511	22	267	179
Alabama State U.	496	3,178	2,930	0	0	216	1	31
Central Washington U.	497	3,176	2,429	266	350	55	42	34
Calvin U.	498	3,169	931	12	559	24	1,376	267
CUNY, Baruch C.	499	3,156	1,894	23	640	0	505	94
Austin Peay State U.	500	3,149	870	1,186	984	0	89	20
U. Louisiana, Monroe	501	3,128	1,993	748	208	41	138	0
Colorado State U., Pueblo	502	3,117	1,278	1,721	82	0	27	9
Lawrence Technological U.	503	3,050	1,109	1,037	154	192	558	0
U. Wisconsin-La Crosse	504	2,942	968	694	977	227	70	6
Pennsylvania State U., Harrisburg	505	2,927	1,911	491	251	173	101	0
CUNY, system office	506	2,900	798	1,528	223	99	252	0
Pittsburg State U.	507	2,884	1,167	666	NA	1,051	0	0
U. Illinois, Springfield	508	2,881	1,210	646	797	0	228	0
Morehead State U.	509	2,880	2,086	431	15	345	3	0

TABLE 5

Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Saginaw Valley State U.	510	2,862 i	2,341 i	0 i	388 i	5 i	112 i	16 i
Framingham State U.	511	2,830 i	232 i	0 i	0 i	95 i	2,503 i	0 i
Davidson C.	512	2,788	1,370	4	702	31	542	139
Western Carolina U.	513	2,783	1,727	297	519	157	83	0
Fort Lewis C.	514	2,765	2,590	48	51	0	76	0
Christopher Newport U.	515	2,762	1,701	0	855	48	158	0
U. Wisconsin-Green Bay	516	2,713	1,046	752	843	25	47	0
Spelman C.	517	2,686	2,539	0	0	147	0	0
Johnson C. Smith U.	518	2,685	1,868	674	0	12	131	0
U. Richmond	519	2,670	1,624	0	529	0	476	41
U. San Francisco	520	2,657	547	265	1,123	0	717	5
Furman U.	521	2,650	1,280	22	1,069	25	169	85
Bowdoin C.	522	2,648	1,867	46	635	0	91	9
U. Virginia's C. Wise	523	2,628	786	837	965	4	36	0
Middlebury C.	524	2,603	2,281	10	49	0	263	0
U. South Carolina, Aiken	525	2,595	857	0	1,729	0	9	0
Pomona C.	526	2,589	1,217	12	1,238	0	122	0
Vassar C.	527	2,580	1,052	21	1,106	0	378	23
Lewis and Clark C.	528	2,566	746	0	1,522	0	298	0
Touro U., California	529	2,561	964	0	1,354	182	0	61
Franklin W. Olin C. of Engineering	530	2,554	809	0	698	82	882	83
Colby C.	531	2,530	1,466	0	573	0	243	248
Sul Ross State U.	532	2,526 i	623 i	151 i	143 i	30 i	941 i	638 i
Troy U.	533	2,517	2,296	48	135	38	0	0
U. of St. Thomas (MN)	534	2,476	527	407	715	327	437	63
Bates C.	535	2,468	1,785	0	281	0	235	167
Eastern Washington U.	536	2,437	855	1,332	NA	13	149	88
Southeastern Louisiana U.	537	2,407	1,285	266	784	61	11	0
Tougaloo C.	538	2,336 i	2,336 i	0 i	0 i	0 i	0 i	0 i
Pratt Institute	539	2,325	228	995	5	0	1,097	0
Grambling State U.	540	2,306 i	809 i	639 i	858 i	0 i	0 i	0 i
Albany C. of Pharmacy and Health Sciences	541	2,276	1,110	0	769	250	147	0
Dillard U.	542	2,270	1,422	0	848	0	0	0
La Sierra U.	543	2,246	972	0	654	0	620	0

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
St. Cloud State U.	544	2,226	401	235	690	601	299	0
Northeastern Illinois U.	545	2,224	2,224	0	0	0	0	0
Minnesota State U., Mankato	546	2,206	575	110	1,300	0	18	203
Willamette U.	547	2,183	791	0	1,344	0	48	0
SUNY, Buffalo State	548	2,172	1,299	658	189	5	1	20
Roger Williams U.	549	2,156	1,351	165	445	30	165	0
Purdue U., Fort Wayne	550	2,134	313	371	814	140	186	310
Mount Holyoke C.	551	2,112	1,511	0	285	0	316	0
Dine C.	552	2,091	2,091	0	0	0	0	0
SUNY, Geneseo	552	2,091	1,564	8	502	0	17	0
Erikson Institute	554	2,068	815	178	125	0	950	0
U. of the Incarnate Word	555	2,064	1,078	0	886	8	92	0
Lafayette C.	556	2,059	1,300	0	605	32	110	12
Lake Superior State U.	557	2,056	1,184	125	569	83	0	95
Western New England U.	558	2,052	648	869	314	46	175	0
Palmer C. of Chiropractic, Davenport	559	2,050	1,550	0	500	0	0	0
Providence C.	560	2,012	1,649	0	171	0	192	0
U. Wisconsin-Oshkosh	561	1,990	1,336	72	546	36	0	0
Black Hills State U.	562	1,987	1,676	119	192	0	0	0
California State U., Stanislaus	563	1,966	1,056	243	176	464	27	0
CUNY, New York City C. of Technology	564	1,955	1,769	16	120	20	0	30
Monmouth U.	565	1,938	535	505	93	407	397	1
Elizabeth City State U.	566	1,934	1,667	206	NA	61	0	0
Ferris State U.	567	1,929	549	908	240	201	31	0
CUNY, York C.	568	1,912	1,659	0	189	0	64	0
Utah Valley U.	569	1,895	1,280	490	59	0	66	0
Seattle U.	570	1,894	1,143	52	471	3	225	0
Northern Michigan U.	571	1,888	571	90	723	0	291	213
Savannah State U.	571	1,888	1,881	7	0	0	0	0
Hamilton C.	573	1,879	338	0	1,039	0	410	92
Connecticut C.	574	1,875	620	0	1,252	0	0	3
New England C. of Optometry	575	1,868	1,609	52	108	88	11	0
Northwestern State U. Louisiana	576	1,848	742	838	268	0	0	0
U. of the Pacific	577	1,835	1,351	413	NA	18	53	0

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Babson C.	578	1,825	45	0	650	140	281	709
U. Houston-Clear Lake	579	1,800	841	408	91	399	61	0
Elon U.	580	1,797	428	0	1,303	0	47	19
Wheaton C., Wheaton	581	1,784	448	0	641	0	695	0
Virginia Military Institute	582	1,746	1,137	221	378	0	10	0
Liberty U.	583	1,736	897	20	601	168	50	0
Eastern Connecticut State U.	584	1,734	126	3	1,605	0	0	0
Skidmore C.	584	1,734	861	0	337	0	536	0
U. North Georgia	584	1,734	734	138	690	13	159	0
Florida Polytechnic U.	587	1,725	706	144	588	225	62	0
C. Wooster	588	1,717	737	0	797	0	183	0
Butler U.	589	1,691	1,227	0	216	113	135	0
Drake U.	589	1,691	1,211	89	150	177	64	0
Macalester C.	589	1,691	943	51	459	0	238	0
Stockton U.	592	1,657	728	180	720	3	26	0
Manhattan C.	593	1,641	440	316	367	518	0	0
U. Wisconsin-Eau Claire	594	1,628	681	396	278	243	24	6
Trinity C., Hartford	595	1,620	1,049	0	533	4	34	0
Alaska Pacific U.	596	1,607	581	0	0	1,015	0	11
U. Alaska, Southeast	597	1,570	1,392	28	43	24	64	19
Marshall B. Ketchum U.	598	1,559 i	383 i	0 i	779 i	397 i	0 i	0 i
U. Wisconsin-River Falls	599	1,546	318	932	2	231	0	63
St. Olaf C.	600	1,532	726	13	714	0	79	0
SUNY, C. Brockport	601	1,500	751	166	435	23	43	82
Arcadia U.	602	1,488	747	75	0	0	666	0
U. Houston-Downtown	603	1,485	903	57	238	0	287	0
Union C., Schenectady	604	1,479	750	0	596	2	107	24
U. Puerto Rico, Humacao	605	1,448	1,160	0	288	0	0	0
U. Ana G. Mendez, Gurabo	606	1,419	1,407	0	12	0	0	0
East Stroudsburg U. Pennsylvania	607	1,410	598	44	149	0	619	0
Norwich U.	608	1,405	940	60	405	0	0	0
Suffolk U.	609	1,401	340	0	996	0	65	0
U. Puerto Rico, Cayey	610	1,390	757	0	430	0	203	0
U. Puerto Rico, Ponce	611	1,369	1,089	0	280	0	0	0

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Indiana State U.	612	1,354	894	128	210	84	26	12
U. Wisconsin-Platteville	613	1,349 i	435 i	340 i	224 i	305 i	35 i	10 i
New Mexico Highlands U.	614	1,331 i	1,288 i	0 i	0 i	0 i	43 i	0 i
Kenyon C.	615	1,330	1,021	0	162	0	123	24
Lincoln Memorial U.	615	1,330	0	0	1,330	0	0	0
West Virginia School of Osteopathic Medicine	617	1,329	468	11	850	0	0	0
Southern U., New Orleans	618	1,317	345	972	0	0	0	0
Albion C.	619	1,300 i	323 i	0 i	977 i	0 i	0 i	0 i
Marymount U.	620	1,298	178	31	965	66	58	0
Saint John's U.	620	1,298 i	0 i	0 i	1,298 i	0 i	0 i	0 i
Pennsylvania State U., Altoona	622	1,296	222	0	752	104	218	0
Keck Graduate Institute	623	1,282	643	0	153	165	321	0
United Tribes Technical C.	624	1,270	869	143	225	21	12	0
Whitman C.	624	1,270	434	25	617	0	194	0
Northland C.	626	1,265 i	778 i	35 i	192 i	0 i	260 i	0 i
New C. Florida	627	1,252	61	0	397	500	265	29
Lipscomb U.	628	1,251	283	0	879	8	81	0
Texas A&M U.-San Antonio	629	1,242	394	119	570	22	60	77
U. of Mary Washington	630	1,229	501	54	601	6	39	28
C. of Saint Benedict	631	1,228 i	51 i	0 i	1,177 i	0 i	0 i	0 i
SUNY, Cobleskill	632	1,211	379	828	0	4	0	0
SUNY, Oswego	633	1,209	544	36	549	0	74	6
U. Scranton	634	1,207	892	12	213	0	90	0
Nevada State C.	635	1,191	1,167	0	22	0	2	0
Heidelberg U.	636	1,184	262	661	246	0	15	0
Clafin U.	637	1,179	1,179	0	0	0	0	0
U. Maine Farmington	638	1,174 i	862 i	76 i	168 i	21 i	33 i	14 i
Bentley U.	639	1,161	509	0	0	0	652	0
Canisius C.	640	1,160	454	0	0	0	706	0
U. Hawaii, Maui C.	641	1,147	1,087	0	60	0	0	0
Gustavus Adolphus C.	642	1,136	468	16	108	206	54	284
Rhode Island School of Design	643	1,120 i	279 i	48 i	485 i	251 i	57 i	0 i
Hartford International U. for Religion and Peace	644	1,105	0	0	0	0	1,105	0
Fairfield U.	645	1,097	197	0	538	0	362	0

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Hartford	646	1,090	886	17	117	6	64	0
Eastern Kentucky U.	647	1,089	551	97	370	0	70	1
Indiana U., South Bend	648	1,075	297	0	516	0	262	0
Quinnipiac U.	649	1,069 i	530 i	56 i	282 i	44 i	137 i	20 i
St. Mary's C. Maryland	650	1,063	599	77	0	0	387	0
Albany State U.	651	1,059	628	228	0	203	0	0
Benedict C.	651	1,059	1,057	0	0	0	2	0
Radford U.	653	1,056	161	104	608	1	182	0
U. Puget Sound	654	1,051	780	0	174	0	97	0
Ursinus C.	655	1,044	743	109	0	0	164	28
Andrews U.	656	1,043	295	17	499	0	232	0
Hult International Business School	656	1,043 i	506 i	23 i	331 i	36 i	104 i	43 i
SUNY, C. Plattsburgh	656	1,043	584	46	334	0	57	22
U. South Carolina, Beaufort	659	1,041	440	43	462	0	96	0
Oberlin C.	660	1,036	492	0	446	1	97	0
Central Connecticut State U.	661	1,035	511	58	459	0	4	3
Gettysburg C.	662	1,030	333	35	155	0	301	206
U.S. Coast Guard Academy	663	1,019	898	0	4	0	117	0
National U. of Natural Medicine	664	1,013	685	0	155	164	0	9
Merrimack C.	665	1,010	804	0	121	0	85	0
Ithaca C.	666	1,000	703	46	149	0	23	79
Robert Morris U.	666	1,000 i	577 i	13 i	235 i	67 i	81 i	27 i
American Samoa Community C.	668	961 i	961 i	0 i	0 i	0 i	0 i	0 i
Roanoke C.	669	955	3	0	887	0	65	0
Bridgewater State U.	670	954	821	21	111	1	0	0
St. Catherine U.	671	933	300	0	83	30	364	156
U. Michigan, Flint	671	933	138	3	715	11	36	30
Arkansas Tech U.	673	921	737	144	25	15	0	0
La Salle U.	674	917	0	0	917	0	0	0
Loyola U., New Orleans	675	911	29	41	NA	0	841	NA
Dominican U. California	676	901 i	794 i	0 i	0 i	0 i	107 i	0 i
Texas A&M U.-Central Texas	677	894	788	91	10	0	5	0
Saint Mary's U. Minnesota	678	889	638	159	33	0	59	0
Midwestern State U.	679	886	416	55	330	0	85	0

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Tampa	679	886	418	0	426	0	32	10
Loyola U., Maryland	681	866	206	7	92	0	561	0
Aaniiih Nakoda C.	682	864	864	0	0	0	0	0
Southern Utah U.	683	846	603	62	181	0	0	0
Denison U.	684	845	645	0	179	0	21	0
Illinois C. of Optometry	685	831	46	0	295	489	1	0
Western Colorado U.	686	826	516	52	118	45	93	2
U. Puerto Rico, Aguadilla	687	823	617	113	93	0	0	0
Kettering U.	688	816	213	34	294	214	57	4
Augsburg U.	689	815	370	6	246	0	0	193
West Liberty U.	689	815	498	123	179	4	11	0
Salve Regina U.	691	813	813	0	0	0	0	0
Weber State U.	691	813	500	96	4	45	15	153
U. Portland	693	811	133	0	376	0	302	0
U. Minnesota, Morris	694	805	150	116	539	0	0	0
Colorado Mesa U.	695	802	676	18	0	15	93	0
Dickinson C.	696	798	238	58	301	0	143	58
U. Minnesota, Rochester	697	784	93	0	652	0	39	0
Salish Kootenai C.	698	782	782	0	0	0	0	0
Graduate School of the Stowers Institute for Medical Research	699	780	0	0	0	0	780	0
Stonehill C.	700	772	425	0	347	0	0	0
Keene State C.	701	770	770	0	0	0	0	0
Saint Michael's C.	702	754	485	0	269	0	0	0
Regis U.	703	744	494	0	213	29	8	0
Seattle Pacific U.	704	742	639	0	51	0	29	23
St. Norbert C.	705	741	474	0	35	24	33	175
Angelo State U.	706	740	85	470	41	0	144	0
John Carroll U.	707	738	529	0	0	0	0	209
U. Ana G. Mendez, Cupey	708	728	728	0	0	0	0	0
Augustana U.	709	724	724	0	0	0	0	0
Louisiana State U., Shreveport	710	723	568	27	128	0	0	0
Indiana Wesleyan U.	711	722	187	0	286	0	249	0
U. Wisconsin-Whitewater	712	713	445	84	0	89	85	10
Hendrix C.	713	709	629	6	74	0	0	0

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Bethune-Cookman U.	714	707	494	0	213	0	0	0
Auburn U., Montgomery	715	698	464	0	231	0	3	0
Touro U., Nevada	716	697	72	0	625	0	0	0
Kalamazoo C.	717	692 i	251 i	5 i	317 i	0 i	119 i	0 i
C. of the Holy Cross	718	688	653	0	0	0	35	0
Valparaiso U.	718	688	572	1	110	0	5	0
Nicholls State U.	720	687	301	208	18	67	93	0
Montana State U., Billings	721	685	518	0	60	107	0	0
Salus U.	722	680	417	9	39	190	25	0
Dordt U.	723	679	552	0	79	0	48	0
Elmhurst U.	724	676	676	0	NA	0	0	0
Siena C.	725	675	291	6	334	0	44	0
Delta State U.	726	673	661	0	12	0	0	0
Lawrence U.	727	671	286	0	131	0	83	171
Plymouth State U.	728	669	571	0	84	0	0	14
Simmons U.	729	668	383	0	135	0	150	0
Metropolitan State U. of Denver	730	666	261	2	283	0	118	2
San Juan Bautista School of Medicine	731	662	466	0	196	0	0	0
Mercyhurst U.	732	661	82	387	59	108	6	19
Iona C.	733	650	650	0	0	0	0	0
U. North Alabama	733	650	320	0	330	0	0	0
U. Ana G. Mendez, Carolina	735	645	645	0	0	0	0	0
Bluefield State U.	736	642	506	136	0	0	0	0
St. Bonaventure U.	736	642	386	115	1	0	4	136
U. Central Missouri	736	642	399	66	69	0	108	0
Fort Hays State U.	739	641	342	152	108	29	3	7
Gonzaga U.	740	640	226	0	35	44	335	0
California Lutheran U.	741	627	298	0	116	178	35	0
SUNY, Potsdam	742	622	454	10	149	0	3	6
Polytechnic U. Puerto Rico	743	620	620	0	NA	0	0	NA
Coe C.	744	614	401	38	5	2	0	168
SUNY, Farmingdale State C.	745	611	185	0	425	0	1	0
U. West Alabama	746	604	520	20	31	13	20	0
Clayton State U.	747	600	498	5	97	0	0	0

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Widener U., Chester	747	600	474	5	0	18	47	56
Castleton U.	749	598	522	0	76	0	0	0
Eckerd C.	750	596	201	84	160	108	43	0
CUNY, Medgar Evers C.	751	595	380	0	193	0	22	0
U. South Carolina Upstate	752	594	358	3	209	0	24	0
Evergreen State C.	753	586	119	462	0	0	5	0
Lewis-Clark State C.	754	582	550	32	0	0	0	0
Emerson C.	755	581	122	0	193	0	266	0
Stetson U.	756	580	379	3	73	0	0	125
Touro U., New York	757	576	19	0	556	1	0	0
Gannon U.	758	569	150	76	260	38	45	0
Point Loma Nazarene U.	759	565	1	43	20	31	253	217
Pennsylvania State U., Berks	760	564	507	0	49	0	8	0
U. Dallas	760	564	157	0	25	200	166	16
Utica U.	762	562	0	0	562	0	0	0
Eastern Illinois U.	763	553	320	46	87	3	97	0
Sewanee: U. of the South	764	547	6	0	339	0	125	77
Juniata C.	765	545	442	0	66	0	36	1
Berry C.	766	541	453	0	51	0	37	0
Bryant U.	767	534	394	0	119	0	21	0
Saint Francis U.	768	533	221	0	23	0	0	289
Rollins C.	769	532	189	0	243	0	100	0
Southwestern Oklahoma State U.	770	531	303	96	95	0	37	0
SUNY, C. Cortland	771	530	396	27	92	0	14	1
California State U., Maritime Academy	772	526	192	105	10	219	0	0
Indiana U., Southeast	773	523	13	128	337	0	45	0
Sonoran U. Health Sciences	774	520	0	0	20	500	0	0
Southwestern U.	774	520	11	0	128	0	64	317
A. T. Still U. of Health Sciences	776	517	281	36	138	39	23	0
Emporia State U.	777	510	291	4	203	0	0	12
Northwest Nazarene U.	778	509	356	0	152	0	1	0
Wittenberg U.	779	508	331	133	44	0	0	0
Central Wyoming C.	780	504	504	0	0	0	0	0
Doane U.	781	502	430	0	56	0	0	16

TABLE 5

Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds						
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources	
Minnesota State U., Moorhead	781	502 i	246 i	157 i	0 i	0 i	99 i	0 i	
Cooper Union	783	501	202	33	264	0	2	0	
Indiana U., Northwest	784	495	203	0	280	0	12	0	
Pacific Lutheran U.	784	495	170	85	53	0	168	19	
Lake Forest C.	786	493	37	0	385	0	41	30	
Indiana U., Kokomo	787	490	75	4	408	0	3	0	
Keiser U.	788	485 i	0 i	485 i	0 i	0 i	0 i	0 i	
Lake Erie C. of Osteopathic Medicine	789	484	0	0	387	0	97	0	
East Central U.	790	480	447	0	30	2	0	1	
Wabash C.	791	465	304	0	161	0	0	0	
Whitworth U.	791	465 i	102 i	0 i	239 i	0 i	124 i	0 i	
Kutztown U. Pennsylvania	793	450	351	45	54	0	0	0	
Muhlenberg C.	794	447	27	0	364	19	14	23	
Southern Oregon U.	794	447	135	186	15	78	33	0	
Niagara U.	796	440	54	74	180	0	132	0	
Mills C.	797	439	224	0	0	0	189	26	
Agnes Scott C.	798	433	260	0	67	0	106	0	
McNeese State U.	799	432	22	98	236	0	76	0	
Pennsylvania State U., Great Valley School of Graduate Professional Studies	799	432	251	0	178	3	0	0	
SUNY, C. Old Westbury	801	428	243	0	72	0	23	90	
Palo Alto U.	802	426	205	0	109	2	30	80	
Oglala Lakota C.	803	424	424	0	0	0	0	0	
Wilkes U.	804	423	134	0	181	0	10	98	
Life U.	805	419	0	0	217	59	80	63	
Cornell C.	806	409	116	40	188	0	64	1	
Maryland Institute C. of Art	807	407	93	47	75	30	42	120	
Earlham C.	808	405	0	0	139	15	5	246	
Francis Marion U.	809	402	289	0	0	0	0	113	
Western Connecticut State U.	810	399	221	47	131	0	0	0	
Coppin State U.	811	398	275	0	0	0	0	123	
Millersville U. Pennsylvania	812	395	213	21	145	0	15	1	
Moravian U.	813	386	185	0	201	0	0	0	
Adelphi U.	814	377	316	0	61	0	0	0	
Barry U.	815	367	65	0	34	246	22	0	

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Georgia Gwinnett C.	815	367	249	87	31	0	0	0
U. Wisconsin-Stout	815	367	61	210	90	0	3	3
Bloomsburg U. Pennsylvania	818	365	207	23	135	0	0	0
Ramapo C. New Jersey	818	365	319	0	46	0	0	0
Augustana C.	820	353	158	0	137	14	33	11
Rider U.	820	353	200	0	140	0	13	0
Northeastern State U.	822	351	208	80	39	0	24	0
Life Chiropractic C.-West	823	350	0	0	350	0	0	0
Austin C.	824	349	110	0	105	0	134	0
Whittier C.	825	346 i	0 i	0 i	195 i	0 i	151 i	0 i
Mississippi Valley State U.	826	344	330	0	14	0	0	0
Oakwood U.	827	340	329	0	11	0	0	0
Westmont C.	827	340 i	201 i	0 i	0 i	0 i	139 i	0 i
American C. of Financial Services	829	338	0	0	338	0	0	0
Pontifical Catholic U. Puerto Rico, Ponce	830	334	97	0	215	0	22	0
Truckee Meadows Community C.	830	334	334	0	0	0	0	0
Susquehanna U.	832	333	31	0	81	0	221	0
Truman State U.	833	327	73	5	203	0	2	44
Pennsylvania State U., Abington	834	323	184	0	114	0	25	0
Slippery Rock U. Pennsylvania	834	323	11	0	290	0	22	0
Bryn Athyn C.	836	317	0	0	240	0	77	0
Centre C.	837	314	173	0	4	0	137	0
Future Generations U.	838	312 i	0 i	17 i	252 i	40 i	0 i	3 i
Ouachita Baptist U.	839	309	309	0	NA	0	0	0
U. West Georgia	839	309	174	1	59	0	75	0
SUNY, New Paltz	841	308	139	6	114	46	3	0
Northern State U.	842	305	174	46	69	16	0	0
Saint Martin's U.	842	305	203	33	1	49	19	0
C. Southern Nevada	844	303	275	28	0	0	0	0
Eastern New Mexico U., Portales	844	303	270	10	22	0	0	1
Manchester U.	844	303	100	0	90	0	1	112
Arkansas C. of Health Education	847	301	46	0	215	0	40	0
Concordia C., Moorhead	848	291	32	0	258	0	1	0
MCPHS U.	849	290	80	0	210	0	0	0

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. North Carolina, Pembroke	849	290	290	0	0	0	0	0
SUNY, Oneonta	851	288	3	18	228	0	10	29
Pitzer C.	852	287	0	0	287	0	0	0
U. Evansville	853	285	171	0	85	0	0	29
Southern Arkansas U.	854	281	113	0	168	0	0	0
Columbus State U.	855	271	228	0	5	0	38	0
Ohio Wesleyan U.	856	267	97	0	155	9	0	6
Pennsylvania State U., Wilkes-Barre	856	267	267	0	0	0	0	0
Delaware Valley U.	858	265	7	125	46	20	37	30
Antioch U.	859	263	187	32	0	22	22	0
Valdosta State U.	860	262	47	148	63	0	4	0
Shaw U.	861	259	168	15	0	58	18	0
SUNY, Maritime C.	862	258	0	0	37	136	0	85
Bard C.	863	255	69	0	186	0	0	0
Converse U.	864	254	209	0	0	0	0	45
Ohio Northern U.	865	250	197	25	28	0	0	0
Longwood U.	866	249	47	150	45	4	3	0
Washington and Lee U.	866	249	179	0	NA	0	70	0
Southern California U. of Health Sciences	868	246	204	0	0	1	41	0
Bradley U.	869	240	88	27	84	41	0	0
LeTourneau U.	870	239	169	0	54	0	16	0
Northern New Mexico C.	870	239	239	0	0	0	0	0
Alabama C., Osteopathic Medicine	872	236	34	0	202	0	0	0
Northwest Missouri State U.	873	231	100	0	131	0	0	0
Alverno C.	874	228	0	0	162	0	0	66
Southeast Missouri State U.	874	228	61	110	54	0	3	0
Fairleigh Dickinson U.	876	225	222	0	0	0	3	0
U. Charleston	877	217	217	0	0	0	0	0
Georgia C. and State U.	878	216	51	0	57	37	8	63
Montana State U., Northern	879	214	43	167	0	4	0	0
Luther C.	880	212	45	0	136	0	31	0
Eastern Oregon U.	881	206	190	6	9	1	0	0
Taylor U.	882	204	16	0	96	83	0	9
Maine Maritime Academy	883	198	198	0	0	0	0	0

TABLE 5
Higher education R&D expenditures at higher education institutions in both survey populations, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Jacksonville State U.	884	197	113	0	76	8	0	0
Pennsylvania State U., Greater Allegheny	885	189	23	0	15	0	151	0
Minot State U.	886	187	143	14	30	0	0	0
D'Youville C.	887	178	0	0	178	0	0	0
Metropolitan State U.	888	176 i	94 i	12 i	48 i	8 i	9 i	5 i
DePauw U.	889	175	48	0	23	0	0	104
Western Nevada C.	890	171	171	0	0	0	0	0
Concordia U., Wisconsin	891	168	150	0	15	0	3	0
Baldwin Wallace U.	892	167	7	58	82	0	20	0
U. Lynchburg	893	164 i	93 i	2 i	40 i	12 i	13 i	4 i
Hamline U.	894	162	35	0	127	0	0	0
Jacksonville U.	894	162	0	122	0	23	17	0
U. Tennessee, Martin	894	162	61	0	84	0	7	10
U. Maine, Presque Isle	897	161	43	88	26	0	0	4
Linfield U.	898	154	7	0	117	0	30	0
Benedictine U.	899	150	64	0	78	0	0	8
Loras C.	899	150 i	70 i	4 i	50 i	5 i	15 i	6 i

i = imputed. NA = not available; data were not provided by institution.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$2,056,063 thousand in total R&D expenditures in FY 2022.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 6

**Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution:
FY 2022**

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
Alabama	1,434,118
Public	1,411,601
Alabama A&M U.	9,611
Alabama State U.	3,178
Auburn U. System	305,137
Auburn U., Auburn	304,439
Auburn U., Montgomery	698
Jacksonville State U.	197
Troy U.	2,517
U. Alabama System	1,046,216
U. Alabama, Birmingham	713,480
U. Alabama, Huntsville	169,532
U. Alabama, Tuscaloosa	163,204
U. North Alabama	650
U. South Alabama	43,491
U. West Alabama	604
Private	22,517
Alabama C., Osteopathic Medicine	236
Oakwood U.	340
Tuskegee U.	21,941
Alaska	226,717
Public (U. Alaska System)	225,110
U. Alaska, Anchorage	21,024
U. Alaska, Fairbanks	202,516
U. Alaska, Southeast	1,570
Private	1,607
Alaska Pacific U.	1,607
Arizona	1,690,904
Public	1,690,384
Arizona Board of Regents	1,688,293
Arizona State U.	797,224
Northern Arizona U.	66,729
U. Arizona	824,340
Dine C.	2,091
Private	520
Sonoran U. Health Sciences	520
Arkansas	419,028
Public	417,709
Arkansas State U. System	8,214
Arkansas State U., Jonesboro	8,214
Arkansas Tech U.	921
Southern Arkansas U.	281
U. Arkansas System	404,609
U. Arkansas for Medical Sciences	205,493
U. Arkansas, Fayetteville	184,080
U. Arkansas, Little Rock	7,530
U. Arkansas, Pine Bluff	7,506
U. Central Arkansas	3,684
Private	1,319

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
Arkansas C. of Health Education	301
Hendrix C.	709
Ouachita Baptist U.	309
California	12,111,505
Public	8,558,137
California State U. System	461,210
California Polytechnic State U., San Luis Obispo	33,155
California State Polytechnic U., Humboldt	15,612
California State Polytechnic U., Pomona	7,909
California State U., Bakersfield	4,815
California State U., Channel Islands	3,377
California State U., Chico	4,177
California State U., Dominguez Hills	4,230
California State U., East Bay	19,035
California State U., Fresno	12,603
California State U., Fullerton	16,642
California State U., Long Beach	17,807
California State U., Los Angeles	9,839
California State U., Maritime Academy	526
California State U., Monterey Bay	8,975
California State U., Northridge	19,638
California State U., Sacramento	23,795
California State U., San Bernardino	11,929
California State U., San Marcos	9,238
California State U., Stanislaus	1,966
San Diego State U.	123,856
San Francisco State U.	36,617
San Jose State U.	71,695
Sonoma State U.	3,774
Naval Postgraduate School	64,055
U. California System	8,032,872
U. California, Berkeley	981,035
U. California, Davis	883,807
U. California, Irvine	534,947
U. California, Los Angeles	1,536,197
U. California, Merced	48,147
U. California, Office of the President	54,640
U. California, Riverside	199,135
U. California, San Diego	1,533,357
U. California, San Francisco	1,805,950
U. California, Santa Barbara	278,897
U. California, Santa Cruz	176,760
Private	3,553,368
Azusa Pacific U.	3,389
Biola U.	3,260
California Institute of Technology	478,142
California Lutheran U.	627
Chapman U.	34,212
Charles R. Drew U. of Medicine and Science	14,581

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures	
Dominican U. California	901	i
High Tech High Graduate School of Ed.	6,203	
La Sierra U.	2,246	
Life Chiropractic C.-West	350	
Loma Linda U.	15,517	
Loyola Marymount U.	12,773	
Marshall B. Ketchum U.	1,559	i
Mills C.	439	
Occidental C.	4,139	i
Palo Alto U.	426	
Pepperdine U.	3,775	
Point Loma Nazarene U.	565	
Santa Clara U.	4,225	
Scripps Research Institute	492,639	
Southern California U. of Health Sciences	246	
Stanford U.	1,384,555	
The Claremont Colleges	21,783	
Claremont Graduate U.	8,382	
Claremont McKenna C.	5,893	
Harvey Mudd C.	3,350	
Keck Graduate Institute	1,282	
Pitzer C.	287	
Pomona C.	2,589	
Touro C. and U. System ^a	2,561	
Touro U., California	2,561	
U. of the Pacific	1,835	
U. San Diego	10,143	
U. San Francisco	2,657	
U. Southern California	1,039,905	
Western U. of Health Sciences	9,029	
Westmont C.	340	i
Whittier C.	346	i
Colorado	1,901,835	
Public	1,851,884	
Colorado Mesa U.	802	
Colorado School of Mines	98,404	
Colorado State U. System	460,028	
Colorado State U., Fort Collins	456,911	
Colorado State U., Pueblo	3,117	
Fort Lewis C.	2,765	
Metropolitan State U. of Denver	666	
U. Colorado System	1,248,579	
U. Colorado Anschutz Medical Campus ^b	611,358	
U. Colorado Boulder	611,380	
U. Colorado Colorado Springs	7,761	
U. Colorado Denver ^b	18,080	
U. Northern Colorado	3,308	
U.S. Air Force Academy	36,506	
Western Colorado U.	826	

TABLE 6

**Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution:
FY 2022**

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
Private	49,951
Colorado C.	3,646
Regis U.	744
U. Denver	45,561
Connecticut	1,595,477
Public	378,030
Connecticut State U. System	9,454
Central Connecticut State U.	1,035
Eastern Connecticut State U.	1,734
Southern Connecticut State U.	6,286
Western Connecticut State U.	399
U. Connecticut	367,557
U.S. Coast Guard Academy	1,019
Private	1,217,447
Connecticut C.	1,875
Fairfield U.	1,097
Hartford International U. for Religion and Peace	1,105
Quinnipiac U.	1,069
Sacred Heart U.	3,741
Trinity C., Hartford	1,620
U. Hartford	1,090
U. New Haven	4,548
Wesleyan U.	10,101
Yale U.	1,191,201
Delaware	397,123
Public	397,123
Delaware State U.	29,016
U. Delaware	368,107
District of Columbia	783,163
Public	14,699
National Defense U.	3,920
U. of the District of Columbia	10,779
Private	768,464
American U.	67,616
Catholic U. of America	38,191
Gallaudet U.	6,360
George Washington U.	275,483
Georgetown U.	313,220
Howard U.	67,594
Florida	3,053,820
Public (State U. Florida Board of Governors)	2,532,660
Florida A&M U.	50,636
Florida Atlantic U.	61,748
Florida Gulf Coast U.	9,896
Florida International U.	281,665
Florida Polytechnic U.	1,725
Florida State U.	355,986
New C. Florida	1,252
U. Central Florida	221,488

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
U. Florida	1,085,834
U. North Florida	18,394
U. South Florida ^c	405,166
U. West Florida	38,870
Private	521,160
Barry U.	367
Bethune-Cookman U.	707
Eckerd C.	596
Embry-Riddle Aeronautical U.	28,650
Florida Institute of Technology	17,706
Jacksonville U.	162
Keiser U.	485
Nova Southeastern U.	31,189
Rollins C.	532
Stetson U.	580
U. Miami	439,300
U. Tampa	886
Georgia	3,264,605
Public (U. System Georgia Board of Regents)	2,195,079
Albany State U.	1,059
Augusta U.	127,313
Clayton State U.	600
Columbus State U.	271
Fort Valley State U.	9,969
Georgia C. and State U.	216
Georgia Gwinnett C.	367
Georgia Institute of Technology	1,231,485
Georgia Southern U.	36,362
Georgia State U.	215,908
Kennesaw State U.	21,705
Savannah State U.	1,888
U. Georgia	545,631
U. North Georgia	1,734
U. West Georgia	309
Valdosta State U.	262
Private	1,069,526
Agnes Scott C.	433
Berry C.	541
Clark Atlanta U.	8,791
Emory U.	958,281
Life U.	419
Mercer U.	50,222
Morehouse C.	5,664
Morehouse School of Medicine	42,489
Spelman C.	2,686
Hawaii	302,419
Public (U. Hawaii System)	299,117
U. Hawaii, Hilo	8,001
U. Hawaii, Manoa	277,323

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
U. Hawaii, Manoa	1,147
U. Hawaii, Maui C.	12,646
Private	3,302
Hawaii Pacific U.	3,302
Idaho	180,926
Public	180,417
Boise State U.	47,617
Idaho State U.	16,615
Lewis-Clark State C.	582
U. Idaho	115,603
Private	509
Northwest Nazarene U.	509
Illinois	3,165,667
Public	1,338,849
Chicago State U.	3,701
Eastern Illinois U.	553
Illinois State U.	25,510
Northeastern Illinois U.	2,224
Northern Illinois U.	27,068
Southern Illinois U. System	66,119
Southern Illinois U., Carbondale	46,967
Southern Illinois U., Edwardsville	19,152
U. Illinois System	1,209,363
U. Illinois, Chicago	440,573
U. Illinois, Springfield	2,881
U. Illinois, Urbana-Champaign	765,909
Western Illinois U.	4,311
Private	1,826,818
Augustana C.	353
Benedictine U.	150
Bradley U.	240
DePaul U.	8,362
Elmhurst U.	676
Erikson Institute	2,068
Illinois C. of Optometry	831
Illinois Institute of Technology	29,791
Lake Forest C.	493
Loyola U., Chicago	46,169
Midwestern U.	11,069
Northwestern U.	1,000,695
Rosalind Franklin U. of Medicine and Science	12,988
Rush U.	114,874
Toyota Technological Institute, Chicago	4,470
U. Chicago	591,805
Wheaton C., Wheaton	1,784
Indiana	1,878,030
Public	1,592,488
Ball State U.	9,932
Indiana State U.	1,354

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
Indiana U.	818,054
Indiana U., Bloomington	751,309
Indiana U., Kokomo	490
Indiana U., Northwest	495
Indiana U., South Bend	1,075
Indiana U., Southeast	523
Indiana U.-Purdue U., Indianapolis	64,162
Purdue U.	763,148
Purdue U., Fort Wayne	2,134
Purdue U., Northwest	6,387
Purdue U., West Lafayette	754,627
Private	285,542
Butler U.	1,691
DePauw U.	175
Earlham C.	405
Indiana Wesleyan U.	722
Manchester U.	303
Taylor U.	204
U. Evansville	285
U. Notre Dame	280,604
Valparaiso U.	688
Wabash C.	465
Iowa	1,007,864
Public (Iowa Board of Regents)	990,885
Iowa State U.	393,184
U. Iowa	594,215
U. Northern Iowa	3,486
Private	16,979
Coe C.	614
Cornell C.	409
Des Moines U.	5,307
Dordt U.	679
Drake U.	1,691
Grinnell C.	5,867
Loras C.	150
Luther C.	212
Palmer C. of Chiropractic	2,050
Palmer C. of Chiropractic, Davenport	2,050
Kansas	883,795
Public (Kansas Board of Regents)	883,795
Emporia State U.	510
Fort Hays State U.	641
Kansas State U.	212,974
Pittsburg State U.	2,884
U. Kansas	405,267
Wichita State U.	261,519
Kentucky	734,645
Public (Kentucky Council on Postsecondary Education)	734,331
Eastern Kentucky U.	1,089

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
Kentucky State U.	9,284
Morehead State U.	2,880
Murray State U.	3,371
Northern Kentucky U.	3,888
U. Kentucky	476,517
U. Louisville	229,582
Western Kentucky U.	7,720
Private	314
Centre C.	314
Louisiana	945,938
Public (State of Louisiana Board of Regents)	705,996
Louisiana State U. System	428,776
Louisiana State U., Baton Rouge	344,556
Louisiana State U., Health Sciences Center, New Orleans	53,995
Louisiana State U., Health Sciences Center, Shreveport	29,502
Louisiana State U., Shreveport	723
Southern U. System	12,709
Southern U. and A&M C., Agricultural Research and Extension Center	7,048
Southern U. and A&M C., Baton Rouge	4,344
Southern U., New Orleans	1,317
U. Louisiana System	264,511
Grambling State U.	2,306
Louisiana Tech U.	26,591
McNeese State U.	432
Nicholls State U.	687
Northwestern State U. Louisiana	1,848
Southeastern Louisiana U.	2,407
U. Louisiana, Lafayette	205,201
U. Louisiana, Monroe	3,128
U. New Orleans	21,911
Private	239,942
Dillard U.	2,270
Loyola U., New Orleans	911
Tulane U.	222,605
Xavier U. Louisiana	14,156
Maine	193,272
Public	178,962
Maine Maritime Academy	198
U. Maine System	178,764
U. Maine	171,931
U. Maine Farmington	1,174
U. Maine, Presque Isle	161
U. Southern Maine	5,498
Private	14,310
Bates C.	2,468
Bowdoin C.	2,648
Colby C.	2,530
U. New England	6,664
Maryland	5,171,692

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
Public	1,750,107
Morgan State U.	29,482
St. Mary's C. Maryland	1,063
U. System Maryland	1,431,658
Bowie State U.	3,351
Coppin State U.	398
Salisbury U.	10,614
Towson U.	8,788
U. Baltimore	6,646
U. Maryland ^d	1,228,550
U. Maryland Center for Environmental Science	53,718
U. Maryland, Baltimore County	110,319
U. Maryland, Eastern Shore	9,274
U.S. Naval Academy	10,664
Uniformed Services U. of the Health Sciences	277,240
Private	3,421,585
Johns Hopkins U. ^e	3,420,312
Loyola U., Maryland	866
Maryland Institute C. of Art	407
Massachusetts	4,843,389
Public	816,641
Massachusetts System of Public Higher Education	3,784
Bridgewater State U.	954
Framingham State U.	2,830
U. Massachusetts System	812,857
U. Massachusetts, Amherst	245,158
U. Massachusetts, Boston	65,215
U. Massachusetts, Dartmouth	33,136
U. Massachusetts, Lowell	111,144
U. Massachusetts, Medical School	358,204
Private	4,026,748
Amherst C.	7,177
Babson C.	1,825
Bentley U.	1,161
Boston C.	68,958
Boston U.	725,402
Brandeis U.	102,378
C. of the Holy Cross	688
Clark U.	8,813
Emerson C.	581
Franklin W. Olin C. of Engineering	2,554
Harvard U.	1,308,458
Hult International Business School	1,043
Massachusetts Institute of Technology	989,166
MCPHS U.	290
Merrimack C.	1,010
MGH Institute of Health Professions	5,805
Mount Holyoke C.	2,112
New England C. of Optometry	1,868

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
Northeastern U.	231,607
Simmons U.	668
Smith C.	5,831
Stonehill C.	772
Suffolk U.	1,401
Tufts U.	231,224
Wellesley C.	6,326
Western New England U.	2,052
Williams C.	5,657 i
Woods Hole Oceanographic Institution	255,017
Worcester Polytechnic Institute	56,904
Michigan	3,087,007
Public	2,986,770
Central Michigan U.	25,105
Eastern Michigan U.	8,025
Ferris State U.	1,929
Grand Valley State U.	6,695
Lake Superior State U.	2,056
Michigan State U.	759,229
Michigan Technological U.	91,084
Northern Michigan U.	1,888
Oakland U.	38,061
Saginaw Valley State U.	2,862 i
U. Michigan	1,779,821
U. Michigan, Ann Arbor	1,770,708
U. Michigan, Dearborn	8,180
U. Michigan, Flint	933
Wayne State U.	242,247
Western Michigan U. and Homer Stryker M.D. School of Medicine	27,768
Private	100,237
Albion C.	1,300 i
Andrews U.	1,043
Calvin U.	3,169
Hope C.	6,355
Kalamazoo C.	692 i
Kettering U.	816
Lawrence Technological U.	3,050
U. Detroit Mercy	5,186
Van Andel Research Institute	78,626
Minnesota	1,248,954
Public	1,232,145
Minnesota State Colleges and Universities System	5,110
Metropolitan State U.	176 i
Minnesota State U., Mankato	2,206
Minnesota State U., Moorhead	502 i
St. Cloud State U.	2,226
U. Minnesota	1,227,035
U. Minnesota, Duluth	23,362
U. Minnesota, Morris	805

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures	
U. Minnesota, Rochester	784	
U. Minnesota, Twin Cities	1,202,084	
Private	16,809	
Augsburg U.	815	
C. of Saint Benedict	1,228	i
Carleton C.	4,358	
Concordia C., Moorhead	291	
Gustavus Adolphus C.	1,136	
Hamline U.	162	
Macalester C.	1,691	
Saint John's U.	1,298	i
Saint Mary's U. Minnesota	889	
St. Catherine U.	933	
St. Olaf C.	1,532	
U. of St. Thomas (MN)	2,476	
Mississippi	566,358	
Public (Mississippi State Institutions of Higher Learning)	564,022	
Alcorn State U.	16,726	i
Delta State U.	673	
Jackson State U.	17,481	
Mississippi State U.	303,418	
Mississippi Valley State U.	344	
U. Mississippi	152,903	
U. Southern Mississippi	72,477	
Private	2,336	
Tougaloo C.	2,336	i
Missouri	1,711,076	
Public (Missouri Department of Higher Education)	575,661	
Lincoln U., Jefferson City	11,500	
Missouri State U.	11,162	
Northwest Missouri State U.	231	
Southeast Missouri State U.	228	
Truman State U.	327	
U. Central Missouri	642	
U. Missouri System	551,571	
Missouri U. of Science and Technology	53,357	
U. Missouri, Columbia	432,310	
U. Missouri, Kansas City	52,657	
U. Missouri, Saint Louis	13,247	
Private	1,135,415	
A. T. Still U. of Health Sciences	517	
Graduate School of the Stowers Institute for Medical Research	780	
Saint Louis U.	82,740	
U. of Health Sciences and Pharmacy in St. Louis	4,280	
Washington U., Saint Louis	1,047,098	
Montana	343,156	
Public (Montana U. System)	343,156	
Aaniiih Nakoda C.	864	
Montana State U.	201,719	

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
Montana State U., Billings	685
Montana State U., Bozeman	200,820
Montana State U., Northern	214
Salish Kootenai C.	782
U. Montana	139,791
Montana Technological U.	14,188
U. Montana, Missoula	125,603
Nebraska	627,294
Public	599,183
U. Nebraska System	599,183
U. Nebraska, central administration	25,402
U. Nebraska, Kearney	4,009
U. Nebraska, Lincoln	340,260
U. Nebraska, Medical Center	205,253
U. Nebraska, Omaha	24,259
Private	28,111
Creighton U.	27,609
Doane U.	502
Nevada	314,219
Public (Nevada System of Higher Education)	307,226
C. Southern Nevada	303
Desert Research Institute	28,478
Nevada State C.	1,191
Truckee Meadows Community C.	334
U. Nevada, Las Vegas	94,967
U. Nevada, Reno	181,782
Western Nevada C.	171
Private	6,993
Roseman U. of Health Sciences	6,296
Touro C. and U. System	697
Touro U., Nevada	697
New Hampshire	551,957
Public (U. System of New Hampshire)	207,831
Keene State C.	770
Plymouth State U.	669
U. New Hampshire	206,392
Private	344,126
Dartmouth C. and Dartmouth Hitchcock Medical Center	344,126
New Jersey	1,517,906
Public	994,901
C. New Jersey	3,464
Kean U.	5,499
Montclair State U.	32,202
New Jersey Institute of Technology	167,135
Ramapo C. New Jersey	365
Rowan U.	29,949
Rutgers, the State U. of New Jersey	747,056
Rutgers, State U. New Jersey, Camden	6,480
Rutgers, State U. New Jersey, New Brunswick	712,231

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
Rutgers, State U. New Jersey, Newark	28,345
Stockton U.	1,657
William Paterson U.	7,574
Private	523,005
Fairleigh Dickinson U.	225
Monmouth U.	1,938
Princeton U.	461,185
Rider U.	353
Seton Hall U.	5,741
Stevens Institute of Technology	53,563
New Mexico	544,409
Public (New Mexico Higher Education Department)	544,409
Eastern New Mexico U., Portales	303
New Mexico Highlands U.	1,331
New Mexico Institute of Mining and Technology	89,900
New Mexico State U.	121,472
Northern New Mexico C.	239
U. New Mexico	331,164
New York	8,288,819
Public	1,780,827
CUNY System	201,962
CUNY, Advanced Science Research Center	16,507
CUNY, Baruch C.	3,156
CUNY, Brooklyn C.	6,220
CUNY, C. Staten Island	3,545
CUNY, City C.	65,569
CUNY, Graduate Center	5,509
CUNY, Graduate School of Public Health and Health Policy	16,423
CUNY, Hunter C.	35,348
CUNY, John Jay C. of Criminal Justice	16,233
CUNY, Lehman C.	4,656
CUNY, Medgar Evers C.	595
CUNY, New York City C. of Technology	1,955
CUNY, Queens C.	21,434
CUNY, system office	2,900
CUNY, York C.	1,912
SUNY System	1,558,024
SUNY, Binghamton U.	130,882
SUNY, Buffalo State	2,172
SUNY, C. Brockport	1,500
SUNY, C. Cortland	530
SUNY, C. of Environmental Science and Forestry	32,904
SUNY, C. of Optometry	4,497
SUNY, C. Old Westbury	428
SUNY, C. Plattsburgh	1,043
SUNY, Cobleskill	1,211
SUNY, Downstate Health Sciences U.	30,918
SUNY, Farmingdale State C.	611
SUNY, Geneseo	2,091

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
SUNY, Maritime C.	258
SUNY, New Paltz	308
SUNY, Oneonta	288
SUNY, Oswego	1,209
SUNY, Polytechnic Institute	413,763
SUNY, Potsdam	622
SUNY, Stony Brook U.	312,698
SUNY, U. Albany	129,796
SUNY, U. Buffalo	439,709
SUNY, Upstate Medical U.	50,586
U.S. Military Academy	20,841
Private	6,507,992
Adelphi U.	377
Albany C. of Pharmacy and Health Sciences	2,276
Albany Medical C.	22,297
Albert Einstein C. of Medicine	318,314
Alfred U.	3,477
Bard C.	255
Barnard C.	4,988
Canisius C.	1,160
Clarkson U.	21,703
Cold Spring Harbor Laboratory	118,034
Colgate U.	4,343
Columbia U. in the City of New York	1,230,924
Cooper Union	501
Cornell U.	1,300,357
D'Youville C.	178
Fordham U.	20,432
Hamilton C.	1,879
Hobart and William Smith Colleges	3,228
Hofstra U.	6,939
Icahn School of Medicine at Mount Sinai	893,968
Iona C.	650
Ithaca C.	1,000
Long Island U.	17,183
Manhattan C.	1,641
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	4,954
New School	19,218
New York Institute of Technology	5,555
New York U.	1,276,038
Niagara U.	440
Pace U.	3,524
Pratt Institute	2,325
Rensselaer Polytechnic Institute	121,809
Rochester Institute of Technology	62,383
Rockefeller U.	360,877
Siena C.	675
Skidmore C.	1,734
St. Bonaventure U.	642

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
St. John's U., New York	3,592
Syracuse U.	157,407
Teachers C., Columbia U.	30,978
Touro C. and U. System ^a	17,037
New York Medical C.	16,461
Touro U., New York	576
U. Rochester	450,805
Union C., Schenectady	1,479
Utica U.	562
Vassar C.	2,580
Yeshiva U.	7,274
North Carolina	3,871,423
Public (U. North Carolina)	2,204,247
Appalachian State U.	7,189
East Carolina U.	55,693
Elizabeth City State U.	1,934
Fayetteville State U.	3,206
North Carolina A&T State U.	47,908
North Carolina Central U.	16,600
North Carolina State U.	583,203
U. North Carolina, Asheville	5,973
U. North Carolina, Chapel Hill	1,361,028
U. North Carolina, Charlotte	43,126
U. North Carolina, general administration	3,522
U. North Carolina, Greensboro	41,303
U. North Carolina, Pembroke	290
U. North Carolina, Wilmington	20,053
Western Carolina U.	2,783
Winston-Salem State U.	10,436
Private	1,667,176
Davidson C.	2,788
Duke U.	1,390,538
Elon U.	1,797
Johnson C. Smith U.	2,685
Shaw U.	259
Wake Forest U.	269,109
North Dakota	324,078
Public (North Dakota U. System)	322,808
Minot State U.	187
North Dakota State U.	174,904
U. North Dakota	147,717
Private	1,270
United Tribes Technical C.	1,270
Ohio	3,083,976
Public	2,396,788
Air Force Institute of Technology	44,391
U. System Ohio Board of Regents	2,352,397
Bowling Green State U.	19,342
Central State U.	10,274

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
Cleveland State U.	81,225
Kent State U.	52,175
Miami U.	28,799
Northeast Ohio Medical U.	13,465
Ohio State U.	1,363,388
Ohio U.	52,465
U. Akron	19,943
U. Cincinnati	615,070
U. Toledo	64,654
Wright State U.	27,440
Youngstown State U.	4,157
Private	687,188
Antioch U.	263
Baldwin Wallace U.	167
C. Wooster	1,717
Case Western Reserve U.	467,389
Denison U.	845
Heidelberg U.	1,184
John Carroll U.	738
Kenyon C.	1,330
Oberlin C.	1,036
Ohio Northern U.	250
Ohio Wesleyan U.	267
U. Dayton	211,494
Wittenberg U.	508
Oklahoma	652,339
Public (Oklahoma State System of Higher Education)	634,923
Oklahoma Agricultural and Mechanical Colleges	209,890
Langston U.	6,481
Oklahoma State U., Center for Health Sciences	8,368
Oklahoma State U., Stillwater	195,041
Regional University System of Oklahoma	8,432
East Central U.	480
Northeastern State U.	351
Southwestern Oklahoma State U.	531
U. Central Oklahoma	7,070
U. Oklahoma	416,601
U. Oklahoma, Norman and Health Science Center	408,656
U. Oklahoma, Tulsa	7,945
Private	17,416
U. Tulsa	17,416
Oregon	1,003,659
Public	984,882
Eastern Oregon U.	206
Oregon Health and Science U.	479,226
Oregon Institute of Technology	5,086
Oregon State U.	297,934
Portland State U.	41,483
Southern Oregon U.	447

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
U. Oregon	160,500
Private	18,777
Lewis and Clark C.	2,566
Linfield U.	154
National U. of Natural Medicine	1,013
Pacific U.	6,128
Reed C.	5,922 i
U. Portland	811
Willamette U.	2,183
Pennsylvania	5,471,969
Public	2,606,370
Pennsylvania State System of Higher Education	15,159
Bloomsburg U. Pennsylvania	365
East Stroudsburg U. Pennsylvania	1,410
Indiana U. Pennsylvania	6,313
Kutztown U. Pennsylvania	450
Millersville U. Pennsylvania	395
Slippery Rock U. Pennsylvania	323
West Chester U. Pennsylvania	5,903
Pennsylvania State U.	1,032,322
Pennsylvania State U., Abington	323
Pennsylvania State U., Altoona	1,296
Pennsylvania State U., Behrend	6,384
Pennsylvania State U., Berks	564
Pennsylvania State U., Great Valley School of Graduate Professional Studies	432
Pennsylvania State U., Greater Allegheny	189
Pennsylvania State U., Harrisburg	2,927
Pennsylvania State U., University Park and Hershey Medical Center	1,019,940
Pennsylvania State U., Wilkes-Barre	267
Temple U.	301,395
U. Pittsburgh	1,251,998
U. Pittsburgh, Pittsburgh	1,251,998
U.S. Army War C.	5,496 i
Private	2,865,599
American C. of Financial Services	338
Arcadia U.	1,488
Bryn Athyn C.	317
Bryn Mawr C.	9,123
Bucknell U.	5,259
Carnegie Mellon U.	449,707
Delaware Valley U.	265
Dickinson C.	798
Drexel U.	151,903
Duquesne U.	13,944
Franklin and Marshall C.	4,440
Gannon U.	569
Gettysburg C.	1,030
Haverford C.	4,487
Juniata C.	545

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
La Salle U.	917
Lafayette C.	2,059
Lake Erie C. of Osteopathic Medicine	484
Lehigh U.	51,769
Mercyhurst U.	661
Moravian U.	386
Muhlenberg C.	447
Philadelphia C. of Osteopathic Medicine	6,667
Robert Morris U.	1,000 i
Saint Francis U.	533
Saint Joseph's U.	9,041
Salus U.	680
Susquehanna U.	333
Swarthmore C.	4,225
Thomas Jefferson U.	321,644
U. Pennsylvania	1,791,311
U. Scranton	1,207
Ursinus C.	1,044
Villanova U.	25,955
Widener U., Chester	600
Wilkes U.	423
Rhode Island	463,173
Public	145,758
Naval War C.	5,529
Rhode Island Board of Governors for Higher Education	140,229
Rhode Island C.	11,127
U. Rhode Island	129,102
Private	317,415
Brown U.	310,780
Bryant U.	534
Providence C.	2,012
Rhode Island School of Design	1,120 i
Roger Williams U.	2,156
Salve Regina U.	813
South Carolina	808,860
Public	803,718
C. Charleston	6,421
Citadel Military C. South Carolina	4,374
Clemson U.	263,158
Coastal Carolina U.	3,724
Francis Marion U.	402
Medical U. South Carolina	284,553
South Carolina State U.	4,270 i
U. South Carolina	233,392
U. South Carolina Upstate	594
U. South Carolina, Aiken	2,595
U. South Carolina, Beaufort	1,041
U. South Carolina, Columbia	229,162
Winthrop U.	3,424

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
Private	5,142
Benedict C.	1,059
Claflin U.	1,179
Converse U.	254
Furman U.	2,650
South Dakota	118,097
Public	117,373
Oglala Lakota C.	424
South Dakota Board of Regents	116,949
Black Hills State U.	1,987
Dakota State U.	4,684
Northern State U.	305
South Dakota School of Mines and Technology	20,061
South Dakota State U.	59,590
U. South Dakota	30,322
Private	724
Augustana U.	724
Tennessee	1,718,758
Public	607,447
Tennessee Board of Regents System	154,881
Austin Peay State U.	3,149
East Tennessee State U.	23,420
Middle Tennessee State U.	22,631
Tennessee State U.	18,012
Tennessee Technological U.	16,398
U. Memphis	71,271
U. Tennessee System	452,566
U. Tennessee, Chattanooga	12,808
U. Tennessee, Health Science Center	115,161
U. Tennessee, Knoxville	324,435
U. Tennessee, Martin	162
Private	1,111,311
Fisk U.	4,000
Lincoln Memorial U.	1,330
Lipscomb U.	1,251
Meharry Medical C.	17,960
Sewanee: U. of the South	547
Vanderbilt U. and Vanderbilt U. Medical Center	1,086,223
Texas	7,444,647
Public	6,242,433
Stephen F. Austin State U.	3,184
Texas A&M U. System	1,273,631
Prairie View A&M U.	20,429
Tarleton State U.	20,056
Texas A&M International U.	4,486
Texas A&M U., College Station and Health Science Center	1,152,666
Texas A&M U.-Central Texas	894
Texas A&M U.-Commerce	4,955
Texas A&M U.-Corpus Christi	36,014

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
Texas A&M U.-Kingsville	23,451
Texas A&M U.-San Antonio	1,242
West Texas A&M U.	9,438
Texas Southern U.	12,120
Texas State U. System	129,941
Lamar U.	5,304
Sam Houston State U.	12,009
Sul Ross State U.	2,526
Texas State U.	110,102
Texas Tech U. System	289,135
Angelo State U.	740
Midwestern State U.	886
Texas Tech U.	226,729
Texas Tech U., Health Sciences Center	46,574
Texas Tech U., Health Sciences Center, El Paso	14,206
Texas Woman's U.	6,029
U. Houston System	243,411
U. Houston	240,126
U. Houston-Clear Lake	1,800
U. Houston-Downtown	1,485
U. North Texas System	103,977
U. North Texas, Denton	93,538
U. North Texas, Health Science Center	10,439
U. Texas System	4,181,005
U. Texas Health Science Center, Houston	342,633
U. Texas Health Science Center, San Antonio	238,510
U. Texas Health Science Center, Tyler	33,872
U. Texas M. D. Anderson Cancer Center	1,182,536
U. Texas Medical Branch	204,518
U. Texas of the Permian Basin	3,577
U. Texas Rio Grande Valley	64,401
U. Texas Southwestern Medical Center	719,002
U. Texas, Arlington	133,770
U. Texas, Austin	845,896
U. Texas, Dallas	130,914
U. Texas, El Paso	130,501
U. Texas, San Antonio	147,629
U. Texas, Tyler	3,246
Private	1,202,214
Abilene Christian U.	6,310
Austin C.	349
Baylor C. of Medicine	827,005
Baylor U.	66,014
LeTourneau U.	239
Rice U.	216,202
Southern Methodist U.	57,544
Southwestern U.	520
St. Edward's U.	3,393
Texas Christian U.	18,353

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
Trinity U.	3,657
U. Dallas	564
U. of the Incarnate Word	2,064
Utah	1,064,134
Public (Utah System of Higher Education)	1,018,524
Southern Utah U.	846
U. Utah	670,119
Utah State U.	344,851
Utah Valley U.	1,895
Weber State U.	813
Private	45,610
Brigham Young U., Provo	45,610
Vermont	221,667
Public	216,905
U. Vermont	216,307
Vermont State Colleges	598
Castleton U.	598
Private	4,762
Middlebury C.	2,603
Norwich U.	1,405
Saint Michael's C.	754
Virginia	2,121,745
Public	2,096,090
Christopher Newport U.	2,762
Eastern Virginia Medical School	22,165
George Mason U.	230,068
James Madison U.	17,021
Longwood U.	249
Norfolk State U.	3,593
Old Dominion U.	64,877
Radford U.	1,056
U. of Mary Washington	1,229
U. Virginia's C. Wise	2,628
U. Virginia, Charlottesville	662,658
Virginia Commonwealth U.	405,898
Virginia Military Institute	1,746
Virginia Polytechnic Institute and State U.	591,861
Virginia State U.	12,326
William & Mary	75,953
Private	25,655
Edward Via C. of Osteopathic Medicine	7,121
Hampton U.	11,462
Liberty U.	1,736
Marymount U.	1,298
Roanoke C.	955
U. Lynchburg	164
U. Richmond	2,670
Washington and Lee U.	249
Washington	1,975,559

i

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
Public	1,968,697
Central Washington U.	3,176
Eastern Washington U.	2,437
Evergreen State C.	586
Northwest Indian C.	5,632
U. Washington	1,573,389
U. Washington, Bothell	8,197
U. Washington, Seattle	1,559,708
U. Washington, Tacoma	5,484
Washington State U.	368,396
Western Washington U.	15,081
Private	6,862
Gonzaga U.	640
Pacific Lutheran U.	495
Saint Martin's U.	305
Seattle Pacific U.	742
Seattle U.	1,894
U. Puget Sound	1,051
Whitman C.	1,270
Whitworth U.	465 i
West Virginia	249,791
Public (West Virginia Higher Education Policy Commission)	249,262
Bluefield State U.	642
Marshall U.	25,692
West Liberty U.	815
West Virginia School of Osteopathic Medicine	1,329
West Virginia State U.	6,703
West Virginia U.	214,081
Private	529
Future Generations U.	312 i
U. Charleston	217
Wisconsin	1,970,700
Public (U. Wisconsin System)	1,601,938
U. Wisconsin-Eau Claire	1,628
U. Wisconsin-Green Bay	2,713
U. Wisconsin-La Crosse	2,942
U. Wisconsin-Madison	1,523,513
U. Wisconsin-Milwaukee	56,822
U. Wisconsin-Oshkosh	1,990
U. Wisconsin-Platteville	1,349 i
U. Wisconsin-River Falls	1,546
U. Wisconsin-Stevens Point	3,740
U. Wisconsin-Stout	367
U. Wisconsin-Superior	4,615
U. Wisconsin-Whitewater	713
Private	368,762
Alverno C.	228
Concordia U., Wisconsin	168
Lawrence U.	671

TABLE 6

Higher education R&D expenditures at institutions in both survey populations, by state, institutional control, system, and institution: FY 2022

(Dollars in thousands)

State, institutional control, system, and institution	All R&D expenditures
Marquette U.	40,638
Medical C. Wisconsin	321,506
Milwaukee School of Engineering	3,545
Northland C.	1,265 ⁱ
St. Norbert C.	741
Wyoming	140,268
Public (Wyoming Department of Education)	140,268
Central Wyoming C.	504
U. Wyoming	139,764
American Samoa	961
Public	961
American Samoa Community C.	961 ⁱ
Guam	20,481
Public (U. Guam Board of Regents)	20,481
U. Guam	20,481
Puerto Rico	108,426
Public (U. Puerto Rico)	98,965
U. Puerto Rico, Aguadilla	823
U. Puerto Rico, Cayey	1,390
U. Puerto Rico, Humacao	1,448
U. Puerto Rico, Mayaguez	18,274
U. Puerto Rico, Medical Sciences Campus	47,578
U. Puerto Rico, Ponce	1,369
U. Puerto Rico, Rio Piedras	28,083
Private	9,461
Ana G. Mendez U. System	2,792
U. Ana G. Mendez, Carolina	645
U. Ana G. Mendez, Cupey	728
U. Ana G. Mendez, Gurabo	1,419
Polytechnic U. Puerto Rico	620
Pontifical Catholic U. Puerto Rico, Ponce	334
San Juan Bautista School of Medicine	662
U. Central del Caribe	5,053
Virgin Islands	20,259
Public	20,259
U. of the Virgin Islands	20,259

i = imputed.

^a The Touro College and University System is a private higher education institution with campuses in the states of California, Nevada, and New York. FY 2022 research expenditures across all campuses total \$20,295 thousand.

^b The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^c The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^d The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^e Johns Hopkins University includes the Applied Physics Laboratory, with \$2,056,063 thousand in total R&D expenditures in FY 2022.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
All institutions	-	83,643,490	86,440,252	89,833,640	97,842,057	44,538,541	46,182,051	49,190,892	54,052,605
Johns Hopkins U. ^a	1	2,917,436	3,110,494	3,181,385	3,420,312	2,482,130	2,682,410	2,774,643	2,971,816
U. California, San Francisco	2	1,595,098	1,651,073	1,710,036	1,805,950	671,047	676,331	683,179	780,318
U. Pennsylvania	3	1,506,285	1,579,364	1,631,950	1,791,311	717,359	721,308	792,089	873,318
U. Michigan, Ann Arbor	4	1,675,805	1,673,862	1,639,645	1,770,708	886,851	884,880	891,125	970,636
U. Washington, Seattle	5	1,425,601	1,456,902	1,488,645	1,559,708	992,643	1,024,195	1,046,377	1,083,090
U. California, Los Angeles	6	1,306,376	1,392,941	1,454,880	1,536,197	600,714	655,030	721,043	848,138
U. California, San Diego	7	1,353,763	1,403,735	1,425,499	1,533,357	698,925	727,289	801,117	970,696
U. Wisconsin-Madison	8	1,297,331	1,363,931	1,380,075	1,523,513	608,925	632,558	646,764	740,854
Duke U.	9	1,226,517	1,196,638	1,237,686	1,390,538	709,705	707,746	776,632	901,807
Stanford U.	10	1,204,116	1,203,950	1,274,483	1,384,555	738,957	751,414	811,183	860,125
Ohio State U.	11	929,250	968,260	1,236,111	1,363,388	497,651	539,359	559,797	636,902
U. North Carolina, Chapel Hill	12	1,153,773	1,159,725	1,205,883	1,361,028	720,613	706,145	747,895	827,158
Harvard U.	13	1,239,736	1,239,983	1,254,008	1,308,458	618,405	605,603	616,589	628,683
Cornell U.	14	1,144,534	1,190,063	1,183,524	1,300,357	525,182	562,021	592,359	636,481
New York U.	15	934,720	947,293	1,063,704	1,276,038	436,850	448,850	547,027	668,381
U. Pittsburgh, Pittsburgh	16	1,080,951	1,105,532	1,135,416	1,251,998	677,559	689,273	724,993	814,647
Georgia Institute of Technology	17	960,167	1,048,988	1,114,481	1,231,485	716,207	790,518	852,319	940,488
Columbia U. in the City of New York	18	1,003,615	1,032,909	1,098,570	1,230,924	736,536	762,289	831,648	904,346
U. Maryland ^b	19	1,096,600	1,103,062	1,142,264	1,228,550	696,880	689,125	713,283	750,447
U. Minnesota, Twin Cities	20	1,013,112	1,042,382	1,072,961	1,202,084	494,549	514,092	570,946	652,384
Yale U.	21	1,072,309	1,094,135	1,165,148	1,191,201	576,776	585,170	647,656	689,270
U. Texas M. D. Anderson Cancer Center	22	969,496	1,051,297	1,124,971	1,182,536	176,156	186,488	217,073	225,659
Texas A&M U., College Station and Health Science Center	23	952,156	1,130,803	1,147,720	1,152,666	359,609	517,489	528,057	505,355
Vanderbilt U. and Vanderbilt U. Medical Center	24	776,937	824,803	1,019,273	1,086,223	492,808	514,299	586,880	666,282
U. Florida	25	928,639	942,223	959,965	1,085,834	387,906	397,202	423,154	467,739
Washington U., Saint Louis	26	887,088	920,215	989,214	1,047,098	543,508	559,882	606,127	681,353
U. Southern California	27	909,683	941,198	955,565	1,039,905	543,607	562,120	574,185	601,747
Pennsylvania State U., University Park and Hershey Medical Center	28	949,679	991,923	970,544	1,019,940	600,489	638,930	622,532	681,159
Northwestern U.	29	857,069	874,671	913,178	1,000,695	502,300	531,654	572,975	618,771
Massachusetts Institute of Technology	30	1,009,466	987,968	949,076	989,166	489,345	488,741	483,526	531,056
U. California, Berkeley	31	802,931	840,000	846,872	981,035	347,601	349,989	354,478	468,542
Emory U.	32	794,928	808,792	852,922	958,281	424,461	452,636	515,940	568,149
Icahn School of Medicine at Mount Sinai	33	722,241	747,014	820,260	893,968	443,745	480,452	554,582	610,646
U. California, Davis	34	804,282	816,693	817,409	883,807	374,707	380,965	373,719	468,468

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Texas, Austin	35	696,111	797,199	779,348	845,896	407,981	500,409	489,827	536,296
Baylor C. of Medicine	36	651,920	685,641	716,976	827,005	309,354	315,101	365,472	420,054
U. Arizona	37	734,270	760,975	770,031	824,340	327,025	328,807	353,117	374,936
Arizona State U.	38	639,637	673,357	677,303	797,224	267,087	278,150	274,541	309,094
U. Illinois, Urbana-Champaign	39	677,523	689,176	731,268	765,909	382,206	387,853	406,612	420,953
Michigan State U.	40	725,708	713,197	710,178	759,229	331,148	329,748	349,889	381,504
Purdue U., West Lafayette	41	663,927	687,144	679,482	754,627	249,831	270,605	295,278	352,890
Indiana U., Bloomington	42	668,157	710,850	695,258	751,309	308,586	319,039	326,326	360,300
Boston U.	43	534,205	583,267	652,096	725,402	318,511	339,172	402,443	413,102
U. Texas Southwestern Medical Center	44	496,697	595,939	632,134	719,002	203,544	242,679	257,611	298,154
U. Alabama, Birmingham	45	607,863	618,226	644,330	713,480	398,403	400,110	423,290	421,223
Rutgers, State U. New Jersey, New Brunswick	46	657,249	688,077	643,955	712,231	297,609	311,743	339,015	351,660
U. Utah	47	601,133	607,061	624,737	670,119	302,585	314,023	340,434	367,040
U. Virginia, Charlottesville	48	613,938	652,002	611,313	662,658	276,335	300,348	297,273	332,993
U. Cincinnati	49	529,796	530,138	551,826	615,070	252,892	285,899	309,097	350,392
U. Colorado Boulder	50	513,822	525,674	547,724	611,380	412,691	427,869	459,816	507,892
U. Colorado Anschutz Medical Campus ^c	51	na	na	562,855	611,358	na	na	363,999	429,949
U. Iowa	52	508,353	538,583	553,876	594,215	252,563	259,639	283,763	314,346
Virginia Polytechnic Institute and State U.	53	541,969	556,341	542,045	591,861	209,607	210,792	216,733	240,305
U. Chicago	54	459,171	458,891	497,651	591,805	332,776	352,447	394,275	456,806
North Carolina State U.	55	541,100	546,290	547,118	583,203	228,945	232,110	239,115	250,582
U. Georgia	56	477,536	482,786	493,944	545,631	159,948	171,351	188,451	220,343
U. California, Irvine	57	448,967	490,597	523,752	534,947	217,094	241,734	255,010	291,393
Scripps Research Institute	58	427,734	444,964	485,435	492,639	267,122	243,502	272,181	242,135
Oregon Health and Science U.	59	415,629	446,890	452,812	479,226	298,227	321,572	329,016	346,724
California Institute of Technology	60	399,931	449,651	438,624	478,142	287,198	316,519	293,197	326,401
U. Kentucky	61	410,581	417,674	429,241	476,517	192,945	200,664	220,703	253,852
Case Western Reserve U.	62	438,994	439,778	421,868	467,389	357,549	357,589	340,438	380,423
Princeton U.	63	385,739	396,502	404,448	461,185	193,453	203,259	205,000	218,390
Colorado State U., Fort Collins	64	398,477	407,302	447,197	456,911	284,482	287,100	303,901	316,727
U. Rochester	65	393,960	397,211	409,255	450,805	306,551	296,241	309,647	334,503
Carnegie Mellon U.	66	359,720	386,996	402,376	449,707	197,978	217,625	234,993	259,160
U. Illinois, Chicago	67	382,949	412,147	429,585	440,573	208,603	223,030	237,949	251,328
SUNY, U. Buffalo	68	413,817	422,038	425,349	439,709	182,983	200,155	210,257	218,231
U. Miami	69	360,716	381,410	375,841	439,300	212,023	224,184	231,001	265,212

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Missouri, Columbia	70	310,421	332,180	388,779	432,310	139,781	156,190	163,576	182,432
SUNY, Polytechnic Institute	71	352,889	355,651	465,273	413,763	38,245	27,998	25,427	32,396
U. Oklahoma, Norman and Health Science Center	72	302,679	362,209	380,048	408,656	164,855	183,728	193,639	210,994
Virginia Commonwealth U.	73	255,648	283,874	364,096	405,898	142,293	152,751	160,995	166,726
U. Kansas	74	352,643	368,811	385,637	405,267	169,694	185,007	187,249	200,117
U. South Florida ^d	75	391,325	333,344	385,965	405,166	181,882	158,958	185,364	206,552
Iowa State U.	76	358,474	363,107	360,275	393,184	147,866	165,912	169,177	187,156
Washington State U.	77	344,997	335,201	357,648	368,396	158,982	154,623	179,536	187,580
U. Delaware	78	206,270	220,445	231,532	368,107	133,020	144,142	157,725	194,775
U. Connecticut	79	285,764	280,131	302,329	367,557	159,220	164,848	183,362	230,752
Rockefeller U.	80	351,089	356,217	357,543	360,877	84,566	86,280	96,318	94,693
U. Massachusetts, Medical School	81	281,507	279,096	347,337	358,204	197,388	192,938	248,873	258,147
Florida State U.	82	329,205	350,430	328,604	355,986	149,784	162,296	150,108	163,744
Utah State U.	83	283,917	304,256	325,223	344,851	220,504	242,156	264,575	280,866
Louisiana State U., Baton Rouge	84	296,497	286,733	296,673	344,556	88,721	87,895	103,178	111,886
Dartmouth C. and Dartmouth Hitchcock Medical Center	85	323,020	326,349	330,226	344,126	137,965	142,219	152,335	155,445
U. Texas Health Science Center, Houston	86	271,525	273,862	308,823	342,633	132,647	133,624	165,139	184,205
U. Nebraska, Lincoln	87	316,820	320,463	320,758	340,260	109,954	107,299	107,006	113,248
U. New Mexico	88	239,696	243,375	332,566	331,164	159,940	161,627	242,212	232,774
U. Tennessee, Knoxville ^e	89	247,693	320,407	316,273	324,435	123,434	138,402	135,202	149,260
Thomas Jefferson U.	90	170,458	171,377	200,393	321,644	74,816	74,676	109,448	173,861
Medical C. Wisconsin	91	251,300	264,325	276,850	321,506	119,036	128,783	136,385	152,301
Albert Einstein C. of Medicine	92	298,824	288,654	301,715	318,314	202,513	204,635	214,619	220,780
Georgetown U.	93	240,960	258,659	279,932	313,220	94,050	98,682	130,419	127,213
SUNY, Stony Brook U.	94	260,813	263,470	274,516	312,698	144,618	146,478	162,972	184,154
Brown U.	95	256,954	266,127	276,331	310,780	178,460	185,676	198,574	215,067
Auburn U., Auburn	96	231,619	255,281	266,374	304,439	64,333	73,468	91,157	104,883
Mississippi State U.	97	264,526	280,485	275,143	303,418	104,738	120,616	116,713	138,207
Temple U.	98	284,301	299,707	299,778	301,395	161,673	154,600	153,316	143,580
Oregon State U.	99	263,830	268,385	276,955	297,934	168,571	167,494	179,180	192,621
Medical U. South Carolina	100	295,600	272,590	277,761	284,553	153,226	153,802	162,394	163,395
Florida International U.	101	225,864	236,842	246,075	281,665	96,912	103,366	105,309	129,683
U. Notre Dame	102	240,078	227,535	240,324	280,604	106,411	104,030	109,891	124,411
U. California, Santa Barbara	103	243,778	254,434	248,961	278,897	118,517	123,198	122,168	161,241
U. Hawaii, Manoa	104	280,416	275,929	271,768	277,323	167,816	163,694	157,772	169,762

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Uniformed Services U. of the Health Sciences	105	417,300	324,510	384,490	277,240	297,808	235,202	275,573	194,187
George Washington U.	106	269,799	270,369	266,108	275,483	155,697	157,533	161,349	161,867
Wake Forest U.	107	238,933	244,643	264,216	269,109	165,702	166,596	188,887	180,754
Clemson U.	108	218,760	228,597	237,485	263,158	81,080	82,203	89,883	119,512
Wichita State U.	109	128,795	153,816	192,042	261,519	29,634	53,540	77,427	93,367
Woods Hole Oceanographic Institution	110	229,143	227,573	262,048	255,017	184,995	191,186	222,351	211,550
U. Massachusetts, Amherst	111	223,177	219,389	213,824	245,158	117,359	116,170	116,349	129,044
Wayne State U.	112	244,217	243,259	235,519	242,247	118,043	113,137	117,976	126,814
U. Houston	113	195,398	200,428	202,536	240,126	68,523	71,779	77,489	84,295
U. Texas Health Science Center, San Antonio	114	188,483	202,572	219,734	238,510	96,502	102,959	106,824	119,071
Northeastern U.	115	183,998	200,068	211,342	231,607	126,762	136,273	143,421	150,093
Tufts U.	116	213,285	216,241	224,956	231,224	146,630	148,320	166,809	150,081
George Mason U.	117	186,267	218,445	214,207	230,068	96,307	104,070	103,712	119,406
U. Louisville	118	177,862	198,818	200,362	229,582	87,563	88,251	97,179	117,363
U. South Carolina, Columbia	119	205,940	219,734	215,374	229,162	102,992	90,243	88,529	106,752
Texas Tech U.	120	193,923	199,643	197,739	226,729	35,136	31,475	33,938	45,136
Tulane U.	121	196,933	204,430	205,206	222,605	104,219	107,290	113,819	127,544
U. Central Florida	122	225,085	213,757	218,596	221,488	99,310	101,332	109,310	110,131
U. Vermont	123	135,859	191,147	195,320	216,307	90,405	97,981	103,554	117,163
Rice U.	124	182,564	198,681	207,404	216,202	83,584	88,768	95,648	105,345
Georgia State U.	125	195,572	202,451	206,472	215,908	70,185	78,199	79,834	81,641
West Virginia U.	126	187,512	188,452	199,907	214,081	82,353	79,657	89,802	97,327
Kansas State U.	127	218,622	213,900	203,846	212,974	81,269	79,100	77,779	81,820
U. Dayton	128	165,343	163,718	191,228	211,494	153,328	154,101	181,445	203,206
U. New Hampshire	129	148,980	156,901	167,373	206,392	90,241	100,373	99,323	129,721
U. Arkansas for Medical Sciences	130	153,135	174,549	194,709	205,493	63,498	70,508	83,387	95,080
U. Nebraska, Medical Center	131	194,455	202,406	200,974	205,253	102,604	105,158	111,042	114,754
U. Louisiana, Lafayette	132	144,187	164,070	181,400	205,201	34,400	40,044	65,436	77,110
U. Texas Medical Branch	133	175,372	180,595	185,759	204,518	107,806	114,103	117,915	123,467
U. Alaska, Fairbanks	134	144,457	152,299	172,957	202,516	92,964	101,414	128,229	154,742
Montana State U., Bozeman	135	154,811	166,285	193,577	200,820	88,955	93,759	113,257	118,974
U. California, Riverside	136	177,655	184,894	189,600	199,135	81,151	92,503	97,182	114,257
Oklahoma State U., Stillwater	137	184,276	187,060	198,799	195,041	39,880	39,873	47,428	53,885
U. Arkansas, Fayetteville	138	180,225	165,887	164,443	184,080	50,875	47,454	48,534	64,252
U. Nevada, Reno	139	152,128	159,790	175,386	181,782	62,903	64,793	77,246	83,631

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. California, Santa Cruz	140	142,958	150,400	160,615	176,760	74,669	76,468	86,263	107,082
North Dakota State U.	141	152,381	155,645	164,050	174,904	35,322	31,614	42,824	45,343
U. Maine	142	129,913	134,183	146,801	171,931	51,049	54,376	65,249	84,072
U. Alabama, Huntsville	143	109,744	131,648	149,792	169,532	85,211	104,288	116,971	132,060
New Jersey Institute of Technology	144	161,232	163,447	166,587	167,135	89,846	85,746	77,057	71,326
U. Alabama, Tuscaloosa	145	83,317	95,200	129,509	163,204	37,916	43,017	53,880	67,986
U. Oregon	146	110,664	114,259	139,193	160,500	80,083	81,278	82,242	97,238
Syracuse U.	147	154,366	149,652	151,717	157,407	37,803	31,861	34,200	33,976
U. Mississippi	148	158,809	122,960	116,175	152,903	73,865	82,361	76,886	84,270
Drexel U.	149	149,481	143,123	152,752	151,903	85,278	82,576	93,517	99,399
U. North Dakota	150	110,836	111,663	143,506	147,717	49,700	44,153	58,463	62,737
U. Texas, San Antonio	151	84,326	138,586	145,362	147,629	34,588	34,334	42,952	54,384
U. Wyoming	152	80,353	93,061	93,202	139,764	52,082	57,353	54,444	68,772
U. Texas, Arlington	153	123,858	133,793	126,477	133,770	41,764	44,950	46,946	56,025
U. Texas, Dallas	154	126,661	132,192	122,825	130,914	48,466	55,983	58,249	60,706
SUNY, Binghamton U.	155	104,297	117,870	124,565	130,882	24,213	24,564	23,225	24,888
U. Texas, El Paso	156	106,809	108,628	109,410	130,501	41,261	39,126	43,930	60,387
SUNY, U. Albany	157	181,531	138,088	114,501	129,796	92,709	67,039	56,425	51,492
U. Rhode Island	158	115,160	109,967	129,296	129,102	73,080	67,242	78,923	93,190
Augusta U.	159	96,502	103,961	116,480	127,313	47,031	55,797	61,943	64,609
U. Montana, Missoula	160	104,665	110,218	121,571	125,603	55,566	62,067	70,686	73,507
San Diego State U.	161	92,964	97,710	107,681	123,856	39,515	41,117	43,473	50,540
Rensselaer Polytechnic Institute	162	103,739	122,753	119,056	121,809	50,448	52,150	52,465	50,605
New Mexico State U.	163	101,457	107,275	110,580	121,472	58,022	60,971	64,699	71,718
Cold Spring Harbor Laboratory	164	126,773	115,198	114,903	118,034	73,854	62,215	56,907	59,163
U. Idaho	165	113,107	112,810	105,895	115,603	51,529	51,450	51,021	56,160
U. Tennessee, Health Science Center	166	96,979	99,716	109,562	115,161	42,396	48,264	56,021	60,221
Rush U.	167	96,267	94,438	107,398	114,874	68,941	65,343	73,279	79,647
U. Massachusetts, Lowell	168	83,996	92,216	94,708	111,144	35,309	41,304	48,179	62,195
U. Maryland, Baltimore County	169	80,632	83,867	84,418	110,319	56,993	59,391	59,882	65,368
Texas State U.	170	64,554	70,714	72,510	110,102	29,614	26,950	31,116	38,936
Brandeis U.	171	60,825	91,355	95,001	102,378	41,475	41,440	43,471	44,205
Colorado School of Mines	172	70,397	78,517	81,443	98,404	49,603	55,560	61,421	66,200
U. Nevada, Las Vegas	173	99,445	105,872	101,009	94,967	28,381	29,252	27,178	28,867
U. North Texas, Denton	174	78,691	84,239	81,252	93,538	17,345	13,653	18,702	23,056

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Michigan Technological U.	175	80,443	77,927	81,715	91,084	34,709	36,172	41,505	48,766
New Mexico Institute of Mining and Technology	176	24,616	24,591	28,745	89,900	22,864	22,922	24,900	72,594
Saint Louis U.	177	66,103	69,528	79,005	82,740	34,275	34,419	41,411	42,170
Cleveland State U.	178	80,077	78,189	71,451	81,225	51,475	53,756	47,402	53,395
Van Andel Research Institute	179	61,738	58,982	65,789	78,626	18,259	18,538	22,231	29,424
William & Mary	180	64,835	66,763	68,801	75,953	31,983	30,436	29,928	33,730
U. Southern Mississippi	181	76,464	72,322	67,417	72,477	46,924	42,870	44,401	48,368
San Jose State U.	182	44,309	47,301	60,100	71,695	35,143	34,102	30,877	30,984
U. Memphis	183	58,700	69,463	67,092	71,271	18,370	18,063	21,578	24,686
Boston C.	184	61,956	63,063	65,156	68,958	32,475	31,038	34,257	36,560
American U.	185	71,053	71,839	65,912	67,616	15,229	16,123	12,076	14,752
Howard U.	186	44,163	44,933	52,412	67,594	29,978	29,256	35,443	37,331
Northern Arizona U.	187	58,914	64,456	69,129	66,729	35,980	39,387	41,744	43,453
Baylor U.	188	33,304	39,765	48,809	66,014	6,955	8,851	11,025	15,856
CUNY, City C.	189	52,738	45,632	57,361	65,569	33,065	30,106	34,218	38,596
U. Massachusetts, Boston	190	62,018	64,219	63,723	65,215	25,083	27,575	23,673	23,131
Old Dominion U.	191	67,425	65,704	62,332	64,877	31,355	30,330	25,514	27,804
U. Toledo	192	55,006	54,100	53,169	64,654	28,273	27,770	32,601	36,694
U. Texas Rio Grande Valley	193	52,016	56,702	58,187	64,401	13,629	13,093	13,018	18,317
Indiana U.-Purdue U., Indianapolis	194	67,635	70,778	65,330	64,162	27,349	31,862	30,290	29,353
Naval Postgraduate School	195	67,323	62,903	65,101	64,055	54,358	51,870	54,855	44,852
Rochester Institute of Technology	196	58,175	57,777	56,043	62,383	26,359	28,092	31,187	33,373
Florida Atlantic U.	197	51,085	53,845	58,471	61,748	21,667	23,695	28,510	28,641
South Dakota State U.	198	66,794	60,939	51,542	59,590	29,683	22,531	18,607	22,991
Southern Methodist U.	199	42,562	43,081	41,960	57,544	17,869	17,752	17,886	17,680
Worcester Polytechnic Institute	200	39,878	43,092	48,702	56,904	22,964	26,074	30,166	34,004
U. Wisconsin-Milwaukee	201	53,773	61,069	55,664	56,822	23,342	25,354	24,397	24,036
East Carolina U.	202	55,611	57,820	51,662	55,693	17,428	20,168	22,813	29,648
U. California, Office of the President	203	67,702	60,686	50,848	54,640	319	217	653	158
Louisiana State U., Health Sciences Center, New Orleans	204	40,914	43,419	44,370	53,995	31,290	31,381	34,272	33,087
U. Maryland Center for Environmental Science	205	56,033	54,560	51,201	53,718	17,476	15,498	14,072	15,109
Stevens Institute of Technology	206	36,695	44,747	43,386	53,563	28,342	33,461	33,998	41,836
Missouri U. of Science and Technology	207	47,807	47,001	54,437	53,357	22,426	22,860	26,164	28,792
U. Missouri, Kansas City	208	31,956	36,356	33,855	52,657	18,624	22,320	21,203	31,134
Ohio U.	209	53,735	51,914	49,764	52,465	14,802	15,543	19,164	20,587

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Kent State U.	210	47,188	50,307	50,408	52,175	13,350	15,004	15,179	16,195
Lehigh U.	211	38,185	38,064	41,279	51,769	26,554	26,816	29,051	36,535
Florida A&M U.	212	42,470	41,319	47,124	50,636	35,362	33,136	36,761	41,943
SUNY, Upstate Medical U.	213	38,091	41,557	44,870	50,586	22,028	23,940	24,974	27,737
Mercer U.	214	44,128	49,116	51,989	50,222	27,035	31,572	34,413	32,504
U. California, Merced	215	44,890	45,966	45,964	48,147	16,850	20,000	18,621	23,421
North Carolina A&T State U.	216	37,339	36,151	40,751	47,908	23,863	22,338	25,755	29,094
Boise State U.	217	39,824	43,307	46,065	47,617	24,493	26,914	31,357	32,015
U. Puerto Rico, Medical Sciences Campus	218	45,014	37,217	44,111	47,578	34,570	27,033	33,262	35,050
Southern Illinois U., Carbondale	219	41,729	41,617	47,210	46,967	12,625	12,735	12,655	13,582
Texas Tech U., Health Sciences Center	220	44,072	44,135	41,583	46,574	11,345	13,043	12,148	14,620
Loyola U., Chicago	221	39,223	39,365	44,036	46,169	23,562	24,018	26,793	26,972
Brigham Young U., Provo	222	39,582	38,569	43,916	45,610	23,901	24,632	30,439	31,636
U. Denver	223	36,551	41,349	38,751	45,561	22,012	24,753	23,415	26,040
Air Force Institute of Technology	224	34,016	35,584	45,703	44,391	21,856	22,854	27,025	32,479
U. South Alabama	225	52,540	51,102	47,610	43,491	19,947	21,825	23,758	23,762
U. North Carolina, Charlotte	226	47,187	50,050	51,877	43,126	26,199	27,618	27,145	26,871
Morehouse School of Medicine	227	31,289	29,813	32,637	42,489	22,461	22,500	25,181	31,339
Portland State U.	228	50,045	43,667	41,311	41,483	33,055	31,315	29,842	30,922
U. North Carolina, Greensboro	229	26,325	28,966	37,033	41,303	18,923	20,447	24,423	29,822
Marquette U.	230	37,777	37,136	37,087	40,638	12,792	13,187	13,918	15,316
U. West Florida	231	38,555	37,397	36,837	38,870	11,506	12,369	13,313	17,114
Catholic U. of America	232	24,484	25,221	35,548	38,191	21,642	22,503	23,128	26,285
Oakland U.	233	18,002	12,949	20,261	38,061	6,690	5,068	7,426	9,533
San Francisco State U.	234	31,888	33,828	35,768	36,617	15,675	15,834	15,993	15,276
U.S. Air Force Academy	235	43,941	42,197	32,086	36,506	35,294	33,554	31,818	35,826
Georgia Southern U.	236	11,166	12,166	37,201	36,362	1,780	1,790	3,373	2,605
Texas A&M U.-Corpus Christi	237	32,944	32,284	30,500	36,014	14,451	13,349	10,967	15,229
CUNY, Hunter C.	238	37,478	38,345	33,816	35,348	23,485	26,025	23,166	21,142
Chapman U.	239	19,592	26,660	25,820	34,212	5,738	7,850	8,574	11,098
U. Texas Health Science Center, Tyler	240	19,606	21,265	27,928	33,872	7,084	7,732	12,007	14,362
California Polytechnic State U., San Luis Obispo	241	25,249	26,605	25,953	33,155	9,720	10,178	11,163	15,084
U. Massachusetts, Dartmouth	242	28,036	26,836	28,729	33,136	7,353	6,506	8,223	11,162
SUNY, C. of Environmental Science and Forestry	243	29,137	29,296	28,440	32,904	7,743	7,809	6,979	7,766
Montclair State U.	244	15,588	17,636	17,390	32,202	4,164	3,782	4,146	5,189

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Nova Southeastern U.	245	24,567	26,035	24,513	31,189	8,965	10,452	10,386	9,314
Teachers C., Columbia U.	246	24,865	22,630	24,335	30,978	8,054	7,614	8,521	10,177
SUNY, Downstate Health Sciences U.	247	36,015	33,204	34,459	30,918	26,914	26,454	27,620	25,081
U. South Dakota	248	32,028	29,279	27,537	30,322	13,367	13,034	11,664	13,702
Rowan U.	249	22,892	26,018	26,458	29,949	12,064	15,551	17,400	18,613
Illinois Institute of Technology	250	34,334	29,122	29,698	29,791	28,827	24,244	24,762	25,963
Louisiana State U., Health Sciences Center, Shreveport	251	26,262	25,321	24,600	29,502	12,185	11,452	12,359	15,503
Morgan State U.	252	13,253	17,193	20,628	29,482	11,952	14,101	16,319	24,670
Delaware State U.	253	23,017	23,105	23,193	29,016	12,179	14,319	16,460	24,361
Miami U.	254	22,380	24,489	25,138	28,799	9,755	10,473	9,412	10,277
Embry-Riddle Aeronautical U.	255	12,478	17,786	19,830	28,650	8,970	11,542	14,859	23,863
Desert Research Institute	256	26,991	26,428	26,365	28,478	16,745	15,791	16,641	17,341
Rutgers, State U. New Jersey, Newark	257	26,661	28,006	23,854	28,345	15,397	16,196	16,281	16,099
U. Puerto Rico, Rio Piedras	258	24,088	22,895	28,896	28,083	13,943	14,071	15,108	16,905
Western Michigan U. and Homer Stryker M.D. School of Medicine	259	25,071	24,541	25,314	27,768	14,399	13,187	13,944	12,895
Creighton U.	260	24,039	20,339	23,251	27,609	8,265	7,583	8,585	12,022
Wright State U.	261	64,208	49,825	26,259	27,440	41,428	35,321	19,617	20,529
Northern Illinois U.	262	26,570	25,420	25,261	27,068	8,610	8,030	9,080	9,840
Louisiana Tech U.	263	26,143	26,585	27,417	26,591	6,564	7,167	6,428	5,734
Villanova U.	264	22,837	25,505	24,723	25,955	4,085	4,921	5,826	6,476
Marshall U.	265	19,622	22,250	23,620	25,692	9,617	11,078	12,854	16,369
Illinois State U.	266	27,082	31,539	24,152	25,510	9,827	8,719	9,787	8,673
U. Nebraska, central administration	267	18,860	23,672	21,295	25,402	18,523	23,104	20,675	23,872
Central Michigan U.	268	17,102	17,448	21,726	25,105	8,100	7,450	6,919	9,773
U. Nebraska, Omaha	269	14,302	16,134	19,006	24,259	8,807	9,996	13,503	17,301
California State U., Sacramento	270	23,544	24,939	23,699	23,795	5,801	5,693	5,582	6,646
Texas A&M U.-Kingsville	271	22,268	22,745	23,578	23,451	8,419	9,610	9,265	8,225
East Tennessee State U.	272	14,197	13,925	18,449	23,420	7,688	7,329	8,358	9,715
U. Minnesota, Duluth	273	27,530	26,137	23,767	23,362	7,143	6,454	5,325	6,122
Middle Tennessee State U.	274	7,673	8,697	22,531	22,631	2,473	3,062	4,150	4,347
Albany Medical C.	275	23,028	23,510	22,443	22,297	11,827	12,940	13,166	13,384
Eastern Virginia Medical School	276	27,064	20,870	19,415	22,165	19,408	15,748	14,774	17,616
Tuskegee U.	277	20,562	20,973	21,355	21,941	14,825	15,122	15,424	14,911
U. New Orleans	278	15,328	16,594	16,979	21,911	4,353	3,868	3,674	8,270
Kennesaw State U.	279	12,850	17,954	18,880	21,705	2,499	1,983	3,104	3,290

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Clarkson U.	280	17,147	15,104	16,765	21,703	8,551	7,095	7,246	8,834
CUNY, Queens C.	281	18,391	16,470	16,063	21,434	13,457	12,726	12,386	14,756
U. Alaska, Anchorage	282	21,724	22,713	21,332	21,024	14,219	15,290	15,079	15,249
U.S. Military Academy	283	10,765	12,473	19,696	20,841	10,528	8,406	13,708	19,708
U. Guam	284	12,249	13,043	17,666	20,481	9,339	9,722	14,316	17,066
Fordham U.	285	20,287	20,456	16,731	20,432	4,218	3,831	4,076	4,856
Prairie View A&M U.	286	18,018	18,723	17,582	20,429	9,346	9,249	9,566	11,665
U. of the Virgin Islands	287	12,236	13,631	15,231	20,259	10,445	11,787	13,099	19,127
South Dakota School of Mines and Technology	288	12,973	14,490	15,746	20,061	9,283	10,659	11,587	15,100
Tarleton State U.	289	13,171	14,890	17,729	20,056	4,632	4,139	4,620	5,055
U. North Carolina, Wilmington	290	17,515	16,544	16,656	20,053	7,174	6,783	6,852	7,178
U. Akron	291	30,020	23,496	17,340	19,943	11,796	10,574	9,024	11,036
California State U., Northridge	292	21,095	21,228	16,573	19,638	16,939	17,261	13,989	15,546
Bowling Green State U.	293	17,026	18,729	18,619	19,342	5,852	6,397	7,263	7,918
New School	294	13,421	13,186	14,281	19,218	1,819	1,050	1,324	1,261
Southern Illinois U., Edwardsville	295	18,088	18,273	18,044	19,152	3,561	3,467	3,844	3,250
California State U., East Bay	296	8,640	9,072	10,852	19,035	2,651	2,348	3,289	8,997
U. North Florida	297	12,341	13,573	15,782	18,394	4,017	4,568	7,267	7,758
Texas Christian U.	298	6,552	15,326	15,336	18,353	2,866	3,168	4,448	5,670
U. Puerto Rico, Mayaguez	299	26,877	26,553	18,368	18,274	15,653	15,842	13,073	16,223
U. Colorado Denver ^C	300	na	na	18,039	18,080	na	na	11,866	12,668
Tennessee State U.	301	15,236	25,942	21,977	18,012	8,962	19,272	15,066	10,859
Meharry Medical C.	302	18,286	13,870	15,840	17,960	16,443	12,573	13,784	15,048
California State U., Long Beach	303	18,664	16,684	15,134	17,807	13,579	12,014	11,178	11,739
Florida Institute of Technology	304	17,876	18,271	23,195	17,706	10,352	10,999	13,049	10,970
Jackson State U.	305	18,160	15,081	16,157	17,481	16,259	13,662	14,038	15,045
U. Tulsa	306	18,648	18,787	17,187	17,416	4,142	4,697	5,876	5,893
Long Island U.	307	5,113	13,997	15,059	17,183	1,839	1,349	2,686	2,652
James Madison U.	308	8,726	10,247	14,687	17,021	2,717	2,609	2,379	2,884
Alcorn State U.	309	14,435	13,710	14,188	16,726	7,540	7,023	7,593	9,361
California State U., Fullerton	310	7,173	5,929	9,006	16,642	4,340	4,121	4,551	6,136
Idaho State U.	311	14,972	14,478	13,953	16,615	7,547	7,849	7,216	9,080
North Carolina Central U.	312	16,227	15,833	14,105	16,600	13,503	12,787	10,676	13,709
CUNY, Advanced Science Research Center	313	8,310	11,373	15,403	16,507	6,859	9,208	11,840	12,580
New York Medical C.	314	19,398	20,137	18,872	16,461	11,061	12,106	10,739	9,070

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
CUNY, Graduate School of Public Health and Health Policy	315	9,521	12,177	15,035	16,423	5,572	8,722	12,254	11,880
Tennessee Technological U.	316	13,801	14,085	15,387	16,398	6,153	6,471	7,625	8,156
CUNY, John Jay C. of Criminal Justice	317	12,295	13,939	11,791	16,233	4,971	5,297	3,519	5,777
California State Polytechnic U., Humboldt	318	15,076	14,236	14,103	15,612	2,103	2,399	1,975	2,421
Loma Linda U.	319	17,938 i	15,984 i	14,029	15,517	12,654 i	11,385 i	10,116	9,134
Western Washington U.	320	11,983	12,823	13,450	15,081	3,978	3,966	4,290	6,347
Charles R. Drew U. of Medicine and Science	321	13,739	13,682	13,228	14,581	10,427	9,863	9,945	10,656
Texas Tech U., Health Sciences Center, El Paso	322	11,883	10,421	11,360	14,206	2,279	1,703	1,831	2,339
Montana Technological U.	323	12,731	12,987	14,933	14,188	4,926	4,322	6,133	5,600
Xavier U. Louisiana	324	10,152	11,387	12,799	14,156	8,679	9,680	11,213	11,733
Duquesne U.	325	16,947	17,485	10,521	13,944	4,552	4,981	5,020	6,309
Northeast Ohio Medical U.	326	18,016	15,758	13,853	13,465	10,107	10,684	9,999	9,400
U. Missouri, Saint Louis	327	14,432	15,352	14,632	13,247	7,059	6,146	5,812	4,573
Rosalind Franklin U. of Medicine and Science	328	16,126	14,601	13,805	12,988	8,865	8,504	9,357	7,292
U. Tennessee, Chattanooga	329	9,280	10,834	11,192	12,808	2,393	3,915	4,507	5,214
Loyola Marymount U.	330	7,272	7,193	12,819	12,773	1,185	1,105	2,170	2,824
U. Hawaii, system office	331	12,159	13,568	12,918	12,646	12,052	13,367	12,688	12,511
California State U., Fresno	332	8,599	8,856	9,213	12,603	2,900	3,117	4,101	5,928
Virginia State U.	333	11,457	10,014	10,123	12,326	6,636	5,642	4,846	7,115
Texas Southern U.	334	4,893	10,138	9,128	12,120	3,238	6,249	5,562	7,550
Sam Houston State U.	335	9,445	12,437	13,315	12,009	3,723	4,764	5,632	4,936
California State U., San Bernardino	336	16,062	10,819	11,607	11,929	8,651	5,886	5,867	6,693
Lincoln U., Jefferson City	337	4,581	5,777	7,621	11,500	2,700	3,636	5,621	8,988
Hampton U.	338	13,605	11,402	11,669	11,462	13,390	11,278	11,517	11,274
Missouri State U.	339	5,910	13,131	10,014	11,162	5,076	12,310	8,931	10,084
Rhode Island C.	340	9,480	10,094	10,990	11,127	3,332	4,128	4,894	5,372
Midwestern U.	341	10,343	10,479	10,961	11,069	1,045	936	1,506	1,609
U. of the District of Columbia	342	4,800	4,590	8,104	10,779	3,283	2,664	6,851	9,859
U.S. Naval Academy	343	13,621	13,123	10,818	10,664	12,991	12,577	10,247	10,147
Salisbury U.	344	9,368	9,496	10,552	10,614	2,290	2,413	3,271	3,734
U. North Texas, Health Science Center	345	50,124	42,766	50,698	10,439	27,260	25,917	32,464	3,172
Winston-Salem State U.	346	2,011	5,781	8,123	10,436	2,011	4,498	4,841	8,903
Central State U.	347	3,766	6,107	8,751	10,274	2,517	3,097	4,165	5,576
U. San Diego	348	6,036	8,607	7,580	10,143	2,511	2,398	2,554	2,911
Wesleyan U.	349	9,958	8,300	8,009	10,101	4,793	4,305	4,032	5,267

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Fort Valley State U.	350	4,563	4,921	4,842	9,969	4,434	4,806	4,429	7,265
Ball State U.	351	12,145	9,429	8,826	9,932	2,929	2,397	2,469	5,302
Florida Gulf Coast U.	352	5,907	6,671	8,197	9,896	3,773	5,304	4,467	6,482
California State U., Los Angeles	353	12,476	10,590	9,382	9,839	9,288	8,380	7,342	8,605
Alabama A&M U.	354	12,840	8,749	9,180	9,611	8,277	5,643	7,432	9,221
West Texas A&M U.	355	5,437	6,220	9,920	9,438	1,565	1,542	2,195	2,123
Kentucky State U.	356	8,433	7,963	8,756	9,284	4,692	4,456	3,716	4,743
U. Maryland, Eastern Shore	357	7,133	8,092	8,636	9,274	6,983	8,084	8,346	9,062
California State U., San Marcos	358	10,595	13,250	10,213	9,238	9,134	11,547	8,831	7,986
Bryn Mawr C.	359	9,846	11,575	8,987	9,123	1,801	1,531	1,429	1,257
Saint Joseph's U.	360	2,851	3,150	2,922	9,041	373	1,047	1,158	2,520
Western U. of Health Sciences	361	4,951	5,899	6,688	9,029	3,035	4,486	5,620	7,131
California State U., Monterey Bay	362	6,444	5,874	6,882	8,975	3,746	3,889	3,813	5,051
Clark U.	363	10,193	10,277	7,931	8,813	3,495	3,350	2,754	2,500
Clark Atlanta U.	364	9,048	8,452	8,892	8,791	5,689	5,324	5,355	5,895
Towson U.	365	3,423	3,612	3,794	8,788	2,144	2,010	1,758	2,844
Claremont Graduate U.	366	8,715	9,403	7,235	8,382	1,886	809	1,152	1,610
Oklahoma State U., Center for Health Sciences	367	5,408	8,378	7,758	8,368	985	2,618	2,304	3,366
DePaul U.	368	6,144	6,557	6,675	8,362	4,464	5,156	4,518	3,757
Arkansas State U., Jonesboro	369	8,945	8,640	8,422	8,214	4,876	4,712	4,249	3,932
U. Washington, Bothell	370	7,950	7,107	8,311	8,197	3,353	2,815	2,956	4,009
U. Michigan, Dearborn	371	8,813	8,777	7,472	8,180	1,850	2,264	2,366	2,537
Eastern Michigan U.	372	7,175	9,088	7,233	8,025	2,135	2,598	2,237	2,346
U. Hawaii, Hilo	373	6,864	6,992	7,411	8,001	4,924	5,274	5,510	5,292
U. Oklahoma, Tulsa	374	6,373	7,483	7,185	7,945	1,803	1,953	1,267	1,804
California State Polytechnic U., Pomona	375	6,099	7,396	7,011	7,909	3,555	5,514	4,396	5,407
U. Colorado Colorado Springs	376	4,720	5,557	5,338	7,761	3,072	3,508	3,942	5,345
Western Kentucky U.	377	9,281	8,241	6,944	7,720	3,391	3,265	2,348	3,127
William Paterson U.	378	10,122	9,603	7,867	7,574	1,592	1,896	1,893	1,896
U. Arkansas, Little Rock	379	9,975	9,711	7,397	7,530	6,688	7,289	6,939	6,675
U. Arkansas, Pine Bluff	380	9,024	8,540	8,713	7,506	4,299	4,393	3,960	3,306
Yeshiva U.	381	2,420	2,763	5,452	7,274	380	772	1,509	1,695
Appalachian State U.	382	3,268	4,894	4,509	7,189	1,332	1,469	1,694	2,567
Amherst C.	383	6,325	4,906	4,636	7,177	2,118	1,775	1,375	2,862
Edward Via C. of Osteopathic Medicine	384	7,225	7,475	6,629	7,121	749	566	537	482

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Central Oklahoma	385	5,682	5,788	5,997	7,070	1,457	1,444	1,516	1,869
Southern U. and A&M C., Agricultural Research and Extension Center	386	5,448	4,475	6,164	7,048	3,057	2,085	3,588	4,261
Hofstra U.	387	1,744	1,445	5,545	6,939	1,296	997	1,266	2,118
West Virginia State U.	388	5,829	5,775	6,565	6,703	4,592	3,993	4,119	4,278
Grand Valley State U.	389	6,592	6,792	6,809	6,695	1,663	1,831	1,415	1,819
Philadelphia C. of Osteopathic Medicine	390	3,162	3,360	6,186	6,667	346	422	318	40
U. New England	391	7,346	6,886	6,234	6,664	5,269	5,064	3,864	3,660
U. Baltimore	392	12,451	15,054	14,672	6,646	9,103	11,748	11,692	4,853
Langston U.	393	10,719	14,409	6,345	6,481	6,622	9,004	3,089	3,616
Rutgers, State U. New Jersey, Camden	394	3,211	3,950	5,142	6,480	1,096	1,952	2,905	3,349
C. Charleston	395	7,610	5,728	6,361	6,421	4,395	3,087	4,126	4,485
Purdue U., Northwest	396	5,272	5,839	5,647	6,387	2,493	1,996	2,280	3,171
Pennsylvania State U., Behrend	397	3,414	1,743	5,509	6,384	1,427	543	2,286	3,262
Gallaudet U.	398	5,382	4,599	6,126	6,360	2,190	1,841	2,140	3,287
Hope C.	399	2,745	3,822	5,211	6,355	1,361	1,155	1,992	3,691
Wellesley C.	400	8,810	8,088	6,252	6,326	3,602	4,441	3,469	2,915
Indiana U. Pennsylvania	401	8,119	6,531	6,180	6,313	1,810	1,309	1,503	1,797
Abilene Christian U.	402	979	2,631	4,597	6,310	382	999	827	1,032
Roseman U. of Health Sciences	403	4,176	4,380	5,985	6,296	37	56	53	30
Southern Connecticut State U.	404	4,627	5,413	5,750	6,286	803	1,026	713	848
CUNY, Brooklyn C.	405	6,837	7,074	6,318	6,220	4,465	4,651	4,505	4,623
High Tech High Graduate School of Ed.	406	2,223	3,304	5,032	6,203	0	0	0	0
Pacific U.	407	8,753	5,842	4,690	6,128	3,917	2,596	2,072	2,672
Texas Woman's U.	408	4,477	4,135	4,943	6,029	1,864	1,700	1,514	2,091
U. North Carolina, Asheville	409	4,602	4,789	4,844	5,973	1,846	2,405	2,322	2,600
Reed C.	410	3,240	5,155	5,132	5,922	1,423	1,806	1,916	2,139
West Chester U. Pennsylvania	411	6,777	6,414	4,433	5,903	715	724	608	854
Claremont McKenna C.	412	6,214	5,846	4,515	5,893	730	771	637	1,070
Grinnell C.	413	5,500	5,826	4,122	5,867	364	644	344	242
Smith C.	414	6,041	4,685	4,085	5,831	2,892	2,650	2,433	2,403
MGH Institute of Health Professions	415	4,130	3,549	3,037	5,805	3,494	3,014	2,500	4,628
Seton Hall U.	416	7,056	5,718	5,320	5,741	3,982	2,725	2,137	2,092
Morehouse C.	417	4,564	4,825	4,533	5,664	4,494	4,825	4,533	5,664
Williams C.	418	5,188	4,924	4,902	5,657	1,131	1,086	1,152	1,286
Northwest Indian C.	419	2,659	3,650	4,641	5,632	2,520	3,112	3,704	4,298

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
New York Institute of Technology	420	5,820	3,580	4,465	5,555	3,135	1,542	1,988	2,988
Naval War C.	421	5,060	5,944	5,542	5,529	5,060	5,944	5,542	5,529
CUNY, Graduate Center	422	5,399	4,787	4,265	5,509	3,009	2,561	2,496	2,535
Kean U.	423	2,174	2,201	3,538	5,499	1,289	775	362	715
U. Southern Maine	424	6,654	5,635	5,480	5,498	2,551	2,231	2,020	2,201
U.S. Army War C.	425	4,418 i	4,500	4,662 i	5,496 i	4,418 i	4,500	4,662 i	5,496 i
U. Washington, Tacoma	426	3,471	3,504	4,291	5,484	2,808	3,075	3,459	4,553
Des Moines U.	427	1,954	5,021	5,164 i	5,307	845	449	1,019 i	1,589
Lamar U.	428	4,848	4,327	4,734	5,304	2,641	2,146	1,873	1,180
Bucknell U.	429	5,625	5,051 i	4,476	5,259	1,764	1,730 i	1,696	2,539
U. Detroit Mercy	430	5,210	4,786	4,578	5,186	4,936	4,226	3,917	4,663
Oregon Institute of Technology	431	4,793	4,267	4,314	5,086 i	437	326	252	340
U. Central del Caribe	432	3,953	3,931	3,831	5,053	2,705	2,743	2,492	2,807
Barnard C.	433	4,010	3,748	4,632	4,988	2,871	2,800	3,527	3,758
Texas A&M U.-Commerce	434	3,403	4,166	3,827	4,955	836	1,226	1,283	1,776
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	435	3,769	3,737	3,776	4,954	191	342	376	858
California State U., Bakersfield	436	7,591	7,053	6,253	4,815	4,376	4,486	3,827	2,665
Dakota State U.	437	3,710	4,412	3,416	4,684	3,008	3,957	2,603	3,976
CUNY, Lehman C.	438	4,690	4,154	4,181	4,656	3,342	3,197	3,382	3,652
U. Wisconsin-Superior	439	2,250	2,301	2,602	4,615	1,527	1,382	1,843	3,635
U. New Haven	440	5,062	3,843	4,069	4,548	2,786	1,440	2,069	2,447
SUNY, C. of Optometry	441	2,968	3,477	3,460	4,497	1,823	1,688	2,105	2,080
Haverford C.	442	3,752	4,473	3,835	4,487	2,343	2,680	2,455	2,722
Texas A&M International U.	443	6,068	3,067	3,740	4,486	1,847	986	1,243	1,624
Toyota Technological Institute, Chicago	444	3,681	5,887	4,967	4,470	1,934	3,038	3,090	2,199
Franklin and Marshall C.	445	5,041	3,623	3,722	4,440	1,582	1,202	1,363	1,680
Citadel Military C. South Carolina	446	1,120	1,012	2,054	4,374	835	736	1,714	3,741
Carleton C.	447	4,388	3,732	3,800	4,358	1,891	1,236	1,499	1,914
Southern U. and A&M C., Baton Rouge	448	4,492	3,849	4,943	4,344	3,243	2,996	3,770	3,595
Colgate U.	449	3,756	2,913	3,306	4,343	1,202	918	1,440	1,570
Western Illinois U.	450	2,373	2,461	3,532	4,311	1,495	1,801	3,163	4,032
U. of Health Sciences and Pharmacy in St. Louis	451	ne	4,835	5,313	4,280	ne	3,767	4,063	2,523
South Carolina State U.	452	3,659	3,796 i	3,933 i	4,270 i	3,659	3,796 i	3,933 i	4,270 i
California State U., Dominguez Hills	453	1,957	2,065	2,690	4,230	1,261	1,433	2,001	3,156
Santa Clara U.	454	2,319	2,682	3,142	4,225	1,333	1,522	1,930	2,660

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Swarthmore C.	454	4,203	3,544	3,296	4,225	1,539	1,041	1,414	1,733
California State U., Chico	456	3,232	4,305	4,209	4,177	1,864	2,520	2,258	2,312
Youngstown State U.	457	4,447	4,120	2,775	4,157	2,878	3,308	2,198	3,533
Occidental C.	458	2,458	2,657	3,587	4,139	1,614	1,567	2,348	2,622
U. Nebraska, Kearney	459	2,919	2,640	3,201	4,009	1,240	1,259	1,327	1,900
Fisk U.	460	4,748	3,904	4,320	4,000	4,615	3,811	3,940	3,486
National Defense U.	461	4,231	4,583	3,786	3,920	4,231	4,583	3,786	3,920
Northern Kentucky U.	462	2,363	2,693	3,403	3,888	1,316	1,462	2,156	2,596
Pepperdine U.	463	2,170	2,006	2,655	3,775	914	693	835	883
Sonoma State U.	464	1,656	1,545	2,957	3,774	1,166	936	2,212	2,889
Sacred Heart U.	465	563	1,298	972	3,741	134	691	675	862
U. Wisconsin-Stevens Point	466	4,314	4,764	4,401	3,740	1,884	2,193	1,776	1,235
Coastal Carolina U.	467	2,042	1,903	2,245	3,724	1,294	1,211	948	1,130
Chicago State U.	468	898	980	2,414	3,701	898	978	2,414	3,699
U. Central Arkansas	469	3,477	3,455	3,990	3,684	1,462	1,421	1,640	1,731
Trinity U.	470	3,736	3,472	2,905	3,657	924	1,207	1,078	1,345
Colorado C.	471	2,233	2,291	5,467	3,646	324	196	3,725	1,371
Norfolk State U.	472	8,050	7,153	4,316	3,593	8,046	7,148	3,976	3,398
St. John's U., New York	473	2,352	3,282	2,940	3,592	1,666	1,805	1,950	2,456
U. Texas of the Permian Basin	474	1,642	2,105	3,504	3,577	596	757	1,762	1,538
CUNY, C. Staten Island	475	3,986	3,682	2,860	3,545	2,421	2,295	2,234	2,916
Milwaukee School of Engineering	475	4,026	3,190	3,193	3,545	764	613	751	969
Pace U.	477	3,855	4,272	3,649	3,524	2,579	2,997	2,536	2,534
U. North Carolina, general administration	478	4,154	3,942	4,024	3,522	213	572	408	369
U. Northern Iowa	479	3,628	2,970	3,259	3,486	2,343	1,881	1,995	2,132
Alfred U.	480	5,153	2,780	2,660	3,477	1,580	947	939	1,008
C. New Jersey	481	1,199	1,464	1,912	3,464	985	951	1,079	1,984
Winthrop U.	482	2,189	2,217	2,586	3,424	1,438	1,563	1,495	2,542
St. Edward's U.	483	9,650	9,619	9,527	3,393	6,500	7,700	7,600	1,940
Azusa Pacific U.	484	5,598	7,068	5,318	3,389	137	128	212	282
California State U., Channel Islands	485	1,572	1,497	2,341	3,377	500	553	993	1,638
Murray State U.	486	3,710	3,019	3,844	3,371	2,639	1,929	2,721	2,176
Bowie State U.	487	1,911	1,967	1,398	3,351	1,911	1,967	1,398	3,351
Harvey Mudd C.	488	3,353	2,916	2,359	3,350	1,619	1,748	1,443	1,956
U. Northern Colorado	489	4,571	3,738	3,159	3,308	1,966	1,853	1,942	1,692

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Hawaii Pacific U.	490	1,980	1,796	1,849	3,302	1,809	1,699	1,741	2,667
Biola U.	491	2,792	2,868	3,003	3,260	0	0	0	0
U. Texas, Tyler	492	2,063	2,007	2,279	3,246	813	774	929	1,585
Hobart and William Smith Colleges	493	1,919	2,114	1,941	3,228	1,047	1,072	758	1,264
Fayetteville State U.	494	4,695	2,797	3,933	3,206	2,168	1,008	1,988	1,667
Stephen F. Austin State U.	495	3,679	3,672	3,204	3,184	1,332	1,257	1,029	879
Alabama State U.	496	2,577	2,582	2,631	3,178	2,577	2,582	2,338	2,930
Central Washington U.	497	3,223	2,674	2,410	3,176	2,159	1,701	1,778	2,429
Calvin U.	498	1,577	2,107	2,637	3,169	925	927	929	931
CUNY, Baruch C.	499	2,387	2,396	2,521	3,156	1,359	1,470	1,691	1,894
Austin Peay State U.	500	2,285	2,833	2,740	3,149	295	475	597	870
U. Louisiana, Monroe	501	2,364	2,362	2,198	3,128	1,949	2,025	1,465	1,993
Colorado State U., Pueblo	502	3,107	3,104	2,990	3,117	1,282	1,161	1,508	1,278
Lawrence Technological U.	503	1,352	1,521	1,764	3,050	304	405	284	1,109
U. Wisconsin-La Crosse	504	2,692	2,795	3,001	2,942	777	817	895	968
Pennsylvania State U., Harrisburg	505	2,805	1,866	2,938	2,927	80	451	1,616	1,911
CUNY, system office	506	2,619	1,704	1,664	2,900	2,241	884	768	798
Pittsburg State U.	507	2,513	2,173	2,730	2,884	339	477	759	1,167
U. Illinois, Springfield	508	1,876	3,406	2,612	2,881	980	976	1,071	1,210
Morehead State U.	509	2,028	1,883	1,754	2,880	1,651	1,674	1,727	2,086
Saginaw Valley State U.	510	2,818	2,343	2,428	2,862	2,339	1,809	1,899	2,341
Framingham State U.	511	1,540	2,317	2,401	2,830	1,452	179	188	232
Davidson C.	512	1,777	2,263	2,466	2,788	973	1,411	1,151	1,370
Western Carolina U.	513	2,633	2,696	2,847	2,783	1,736	1,707	1,697	1,727
Fort Lewis C.	514	1,460	1,370	1,926	2,765	1,284	1,228	1,746	2,590
Christopher Newport U.	515	1,961	2,608	2,656	2,762	1,285	1,365	1,497	1,701
U. Wisconsin-Green Bay	516	2,083	1,982	1,879	2,713	821	890	876	1,046
Spelman C.	517	2,751	2,750	2,282	2,686	2,004	2,136	1,886	2,539
Johnson C. Smith U.	518	2,148	2,472	2,578	2,685	1,909	2,230	2,049	1,868
U. Richmond	519	2,783	2,469	2,294	2,670	1,575	1,628	1,534	1,624
U. San Francisco	520	2,712	2,161	1,375	2,657	198	148	255	547
Furman U.	521	1,628	2,101	2,431	2,650	1,106	847	1,028	1,280
Bowdoin C.	522	2,991	2,719	2,417	2,648	1,790	1,862	1,836	1,867
U. Virginia's C. Wise	523	ne	2,434	3,310	2,628	ne	952	1,307	786
Middlebury C.	524	1,657	1,720	2,927	2,603	1,558	1,546	2,639	2,281

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. South Carolina, Aiken	525	2,481	2,590	2,042	2,595	2,379	2,328	1,884	857
Pomona C.	526	2,985	2,855	2,146	2,589	863	1,123	930	1,217
Vassar C.	527	1,009	1,568	1,606	2,580	909	1,055	918	1,052
Lewis and Clark C.	528	2,750	3,350	2,281	2,566	931	1,268	702	746
Touro U., California	529	3,543	3,551	3,489	2,561	1,540	1,558	1,377	964
Franklin W. Olin C. of Engineering	530	1,655	1,404	1,627	2,554	162	293	636	809
Colby C.	531	1,852	1,536	1,672	2,530	1,093	809	750	1,466
Sul Ross State U.	532	2,352	2,068	2,143	2,526	339	481	505	623
Troy U.	533	1,507	1,692	1,548	2,517	1,355	1,591	1,488	2,296
U. of St. Thomas (MN)	534	1,870	2,679	5,146	2,476	313	450	1,321	527
Bates C.	535	2,135	2,303	2,620	2,468	1,607	1,885	2,079	1,785
Eastern Washington U.	536	2,024	2,282	1,921	2,437	864	1,153	775	855
Southeastern Louisiana U.	537	1,971	2,258	1,723	2,407	803	884	795	1,285
Tougaloo C.	538	3,380	2,102	2,092	2,336	3,380	2,102	2,092	2,336
Pratt Institute	539	ne	ne	2,547	2,325	ne	ne	294	228
Grambling State U.	540	2,836	2,427	2,124	2,306	1,066	787	731	809
Albany C. of Pharmacy and Health Sciences	541	3,383	3,765	3,687	2,276	1,692	1,938	1,900	1,110
Dillard U.	542	2,772	2,523	2,528	2,270	1,390	1,200	1,257	1,422
La Sierra U.	543	1,581	1,647	1,517	2,246	640	618	812	972
St. Cloud State U.	544	3,275	3,056	2,379	2,226	733	459	577	401
Northeastern Illinois U.	545	2,478	2,018	1,913	2,224	2,478	2,018	1,913	2,224
Minnesota State U., Mankato	546	3,392	2,754	2,170	2,206	708	525	575	575
Willamette U.	547	1,953	1,546	1,817	2,183	549	401	896	791
SUNY, Buffalo State	548	2,124	2,253	1,962	2,172	1,225	1,241	977	1,299
Roger Williams U.	549	1,852	1,531	1,854	2,156	1,135	1,045	1,202	1,351
Purdue U., Fort Wayne	550	2,416	2,264	2,495	2,134	544	589	401	313
Mount Holyoke C.	551	2,979	2,016	2,026	2,112	2,074	1,442	1,539	1,511
Dine C.	552	1,126	347	1,570	2,091	1,126	347	1,570	2,091
SUNY, Geneseo	552	2,139	1,642	2,070	2,091	1,206	950	1,273	1,564
Erikson Institute	554	2,279	1,992	1,723	2,068	753	1,006	772	815
U. of the Incarnate Word	555	1,800	1,469	1,982	2,064	1,075	869	1,076	1,078
Lafayette C.	556	1,554	1,390	1,015	2,059	910	755	508	1,300
Lake Superior State U.	557	830	935	1,226	2,056	190	263	605	1,184
Western New England U.	558	283	505	1,973	2,052	161	201	781	648
Palmer C. of Chiropractic, Davenport	559	1,650	1,900	2,233	2,050	1,100	1,400	1,733	1,550

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Providence C.	560	1,042	1,092	766	2,012	857	913	574	1,649
U. Wisconsin-Oshkosh	561	1,581 i	1,618 i	1,656	1,990	1,099 i	1,092 i	1,083	1,336
Black Hills State U.	562	2,031	1,499	1,280	1,987	1,535	1,287	1,124	1,676
California State U., Stanislaus	563	1,477	1,843	2,085	1,966	964	1,284	1,354	1,056
CUNY, New York City C. of Technology	564	2,711	2,130	1,367	1,955	1,891	1,585	1,197	1,769
Monmouth U.	565	1,294	1,729	1,667	1,938	120	110	174	535
Elizabeth City State U.	566	1,189	1,473	1,717	1,934	1,183	1,455	1,603	1,667
Ferris State U.	567	366	394	853	1,929	93	87	565	549
CUNY, York C.	568	1,621	1,691	1,133	1,912	1,511	1,513	922	1,659
Utah Valley U.	569	151	336	1,154	1,895	122	289	1,028	1,280
Seattle U.	570	2,223	2,060	1,562	1,894	1,307	1,303	1,102	1,143
Northern Michigan U.	571	1,520	1,523	1,364	1,888	311	446	366	571
Savannah State U.	571	1,720	1,804	1,804	1,888	1,709	1,804	1,804	1,881
Hamilton C.	573	2,050	1,869	1,747	1,879	190	144	286	338
Connecticut C.	574	1,894	1,598	1,244	1,875	752	483	439	620
New England C. of Optometry	575	1,223	1,150	1,978	1,868	928	785	1,623	1,609
Northwestern State U. Louisiana	576	2,058	1,940	1,663	1,848	579	598	738	742
U. of the Pacific	577	3,078	1,713	1,371	1,835	2,158	1,375	1,106	1,351
Babson C.	578	1,845	2,352	1,286	1,825	14	14	0	45
U. Houston-Clear Lake	579	1,370	1,363	1,716	1,800	718	632	865	841
Elon U.	580	2,545	1,968	2,032	1,797	284	106	138	428
Wheaton C., Wheaton	581	2,173	1,322	729	1,784	301	324	148	448
Virginia Military Institute	582	727	712	1,351	1,746	234	347	1,075	1,137
Liberty U.	583	1,780	1,894	937	1,736	535	886	120	897
Eastern Connecticut State U.	584	1,659	1,799	1,646	1,734	181	177	108	126
Skidmore C.	584	3,012	2,412	2,335	1,734	2,261	1,827	1,739	861
U. North Georgia	584	2,068	1,905	1,415	1,734	637	542	497	734
Florida Polytechnic U.	587	2,006	1,091	1,269	1,725	338	252	459	706
C. Wooster	588	1,758	1,076	1,396 i	1,717	456	283	510 i	737
Butler U.	589	680	679	1,071	1,691	211	362	741	1,227
Drake U.	589	865	1,201	1,488	1,691	463	730	1,016	1,211
Macalester C.	589	1,808	1,755	1,280	1,691	805	647	617	943
Stockton U.	592	2,634	4,236	1,246	1,657	553	872	486	728
Manhattan C.	593	1,190	1,307	1,864	1,641	245	398	397	440
U. Wisconsin-Eau Claire	594	1,530	1,318	1,852	1,628	748	647	909	681

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Trinity C., Hartford	595	1,858	1,428	1,775	1,620	1,077	1,019	1,348	1,049
Alaska Pacific U.	596	1,774	1,261	1,036	1,607	451	148	189	581
U. Alaska, Southeast	597	1,341	1,264	1,176	1,570	1,235	1,098	1,046	1,392
Marshall B. Ketchum U.	598	1,430 i	1,357 i	1,351 i	1,559 i	336 i	323 i	343 i	383 i
U. Wisconsin-River Falls	599	1,130	1,107	999	1,546	559	488	212	318
St. Olaf C.	600	1,010	1,032	816	1,532	255	230	271	726
SUNY, C. Brockport	601	1,390	1,719	1,114	1,500	638	781	500	751
Arcadia U.	602	522	1,072	889	1,488	341	750	371	747
U. Houston-Downtown	603	2,216	2,299	1,828	1,485	1,437	1,392	1,169	903
Union C., Schenectady	604	1,740	1,062	1,396	1,479	972	462	976	750
U. Puerto Rico, Humacao	605	1,195	1,456	1,321	1,448	828	1,279	1,137	1,160
U. Ana G. Mendez, Gurabo	606	3,945	2,049	1,574	1,419	951	946	926	1,407
East Stroudsburg U. Pennsylvania	607	677	797	1,440	1,410	460	534	538	598
Norwich U.	608	992	749	890	1,405	768	531	588	940
Suffolk U.	609	2,056	2,106	2,043	1,401	905	844	634	340
U. Puerto Rico, Cayey	610	1,870	1,974	1,881	1,390	963	1,210	1,202	757
U. Puerto Rico, Ponce	611	651	616 i	580	1,369	551	489 i	427	1,089
Indiana State U.	612	1,682	1,471	1,042	1,354	1,190	949	582	894
U. Wisconsin-Platteville	613	1,084 i	1,104 i	1,144 i	1,349 i	339 i	336 i	353 i	435 i
New Mexico Highlands U.	614	1,333	1,090	1,129 i	1,331 i	1,128	1,034	1,085 i	1,288 i
Kenyon C.	615	1,092	908	1,500	1,330	776	714	1,022	1,021
Lincoln Memorial U.	615	ne	ne	ne	1,330	ne	ne	ne	0
West Virginia School of Osteopathic Medicine	617	1,951	1,311	1,255	1,329	414	419	423	468
Southern U., New Orleans	618	596	310	297	1,317	401	256	222	345
Albion C.	619	1,040	1,132	1,127 i	1,300 i	180	272	289 i	323 i
Marymount U.	620	ne	ne	2,307	1,298	ne	ne	337	178
Saint John's U.	620	1,191 i	1,130 i	1,125 i	1,298 i	0 i	0 i	0 i	0 i
Pennsylvania State U., Altoona	622	680	714	678	1,296	134	9	225	222
Keck Graduate Institute	623	1,474 i	1,412 i	1,350 i	1,282	769 i	727 i	685 i	643
United Tribes Technical C.	624	379	976	441	1,270	358	929	405	869
Whitman C.	624	1,083	865	1,034	1,270	704	558	481	434
Northland C.	626	ne	1,101	1,096 i	1,265 i	ne	657	697 i	778 i
New C. Florida	627	962	999	960	1,252	199	114	92	61
Lipscomb U.	628	ne	307 i	321	1,251	ne	206 i	222	283
Texas A&M U.-San Antonio	629	308	567	1,311	1,242	31	89	277	394

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. of Mary Washington	630	1,315	1,393	1,123	1,229	577	660	485	501
C. of Saint Benedict	631	1,126 i	1,069 i	1,064 i	1,228 i	45 i	43 i	46 i	51 i
SUNY, Cobleskill	632	ne	625	1,106	1,211	ne	559	243	379
SUNY, Oswego	633	1,781	1,534	1,003	1,209	628	492	415	544
U. Scranton	634	450	595	630	1,207	127	312	394	892
Nevada State C.	635	701	561	1,014	1,191	700	532	1,012	1,167
Heidelberg U.	636	1,237	1,125	1,725	1,184	164	188	308	262
Clafin U.	637	1,746	1,910	1,015	1,179	1,735	1,907	1,005	1,179
U. Maine Farmington	638	526	961	996 i	1,174 i	298 i	666	699 i	862 i
Bentley U.	639	465	777	1,430	1,161	78	246	762	509
Canisius C.	640	950	1,094	1,036	1,160	943	869	597	454
U. Hawaii, Maui C.	641	833	1,033	967	1,147	821	995	951	1,087
Gustavus Adolphus C.	642	808	843	953	1,136	370	365	445	468
Rhode Island School of Design	643	1,027 i	975 i	971 i	1,120 i	246 i	236 i	250 i	279 i
Hartford International U. for Religion and Peace	644	ne	345	512	1,105	ne	0	0	0
Fairfield U.	645	1,279	1,210	849	1,097	594	365	147	197
U. Hartford	646	1,528	1,436	1,252	1,090	1,019	854	766	886
Eastern Kentucky U.	647	1,125	1,010	986	1,089	598	554	530	551
Indiana U., South Bend	648	968	1,249	898	1,075	234	400	337	297
Quinnipiac U.	649	980 i	930 i	926 i	1,069 i	467 i	448 i	475 i	530 i
St. Mary's C. Maryland	650	369	556	349	1,063	255	303	124	599
Albany State U.	651	1,491	1,060	880	1,059	1,065	836	552	628
Benedict C.	651	1,269	649	745	1,059	1,226	635	725	1,057
Radford U.	653	879	774	832	1,056	372	161	253	161
U. Puget Sound	654	1,039	895	1,233	1,051	547	401	591	780
Ursinus C.	655	768	497	835	1,044	565	430	682	743
Andrews U.	656	1,126	1,033	802	1,043	278	263	256	295
Hult International Business School	656	959 i	910 i	953 i	1,043 i	450 i	432 i	466 i	506 i
SUNY, C. Plattsburgh	656	1,729	1,452	1,280	1,043	1,197	950	824	584
U. South Carolina, Beaufort	659	532	599	976	1,041	98	156	464	440
Oberlin C.	660	2,076	1,182	776	1,036	1,576	743	505	492
Central Connecticut State U.	661	1,381	1,572	1,314	1,035	540	901	663	511
Gettysburg C.	662	1,664	913	648	1,030	841	320	268	333
U.S. Coast Guard Academy	663	708	398	155	1,019	565	302	154	898
National U. of Natural Medicine	664	1,245	1,428	850	1,013	760	912	523	685

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Merrimack C.	665	1,097	503	407	1,010	581	306	337	804
Ithaca C.	666	1,678	1,199	1,030	1,000	1,330	981	685	703
Robert Morris U.	666	ne	ne	ne	1,000	ne	ne	ne	577
American Samoa Community C.	668	860	1,536	815	961	860	1,536	815	961
Roanoke C.	669	826	606	738	955	14	18	10	3
Bridgewater State U.	670	331	345	522	954	15	198	363	821
St. Catherine U.	671	267	963	1,157	933	132	204	270	300
U. Michigan, Flint	671	1,448	1,247	752	933	122	276	113	138
Arkansas Tech U.	673	961	856	751	921	472	382	632	737
La Salle U.	674	1,135	818	829	917	45	14	21	0
Loyola U., New Orleans	675	443	338	476	911	140	4	93	29
Dominican U. California	676	828	786	823	901	705	677	731	794
Texas A&M U.-Central Texas	677	428	623	814	894	45	398	653	788
Saint Mary's U. Minnesota	678	603	610	640	889	491	554	538	638
Midwestern State U.	679	1,100	891	882	886	619	599	515	416
U. Tampa	679	489	559	551	886	114	197	124	418
Loyola U., Maryland	681	663	672	628	866	383	326	339	206
Aaniiih Nakoda C.	682	ne	ne	ne	864	ne	ne	ne	864
Southern Utah U.	683	812	955	773	846	673	741	650	603
Denison U.	684	577	727	786	845	240	573	609	645
Illinois C. of Optometry	685	326	478	490	831	98	97	13	46
Western Colorado U.	686	460	571	559	826	318	403	360	516
U. Puerto Rico, Aguadilla	687	465	562	639	823	235	283	425	617
Kettering U.	688	1,765	2,081	1,315	816	402	568	353	213
Augsburg U.	689	991	883	815	815	496	377	408	370
West Liberty U.	689	908	738	738	815	514	365	406	498
Salve Regina U.	691	495	591	624	813	490	578	624	813
Weber State U.	691	1,081	676	822	813	380	424	423	500
U. Portland	693	942	737	718	811	218	94	90	133
U. Minnesota, Morris	694	1,234	1,004	855	805	195	213	162	150
Colorado Mesa U.	695	372	452	823	802	189	228	664	676
Dickinson C.	696	1,037	929	767	798	324	222	305	238
U. Minnesota, Rochester	697	639	733	730	784	34	122	103	93
Salish Kootenai C.	698	1,252	807	596	782	1,251	802	596	782
Graduate School of the Stowers Institute for Medical Research	699	ne	416	555	780	ne	0	0	0

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Stonehill C.	700	1,019	833	695	772	671	674	526	425
Keene State C.	701	1,061	1,063	919	770	1,022	1,043	894	770
Saint Michael's C.	702	1,200	957	876	754	964	775	744	485
Regis U.	703	706	311	476	744	543	156	328	494
Seattle Pacific U.	704	724	643	683	742	647	569	630	639
St. Norbert C.	705	354	304	412	741	0	7	177	474
Angelo State U.	706	815	798	943	740	32	0	20	85
John Carroll U.	707	658	522	374	738	480	437	324	529
U. Ana G. Mendez, Cupey	708	624	818	739	728	608	662	598	728
Augustana U.	709	841	1,038	1,013	724	784	976	1,013	724
Louisiana State U., Shreveport	710	572	494	462	723	366	321	273	568
Indiana Wesleyan U.	711	706	316	878	722	329	54	216	187
U. Wisconsin-Whitewater	712	757	736	760	713	602	525	623	445
Hendrix C.	713	902	649	651	709	805	563	584	629
Bethune-Cookman U.	714	735	636	928	707	735	529	715	494
Auburn U., Montgomery	715	325	312	442	698	222	192	201	464
Touro U., Nevada	716	ne	ne	ne	697	ne	ne	ne	72
Kalamazoo C.	717	635 i	603 i	600 i	692 i	221 i	212 i	225 i	251 i
C. of the Holy Cross	718	477	321	445	688	449	308	425	653
Valparaiso U.	718	763	718	925	688	712	672	805	572
Nicholls State U.	720	738	650	551	687	129	86	182	301
Montana State U., Billings	721	545	399	522	685	435	312	429	518
Salus U.	722	854	650	677	680	696	450	414	417
Dordt U.	723	920	1,106	696	679	768	1,049	594	552
Elmhurst U.	724	224	209	464	676	165	209	459	676
Siena C.	725	944	884	923	675	550	382	265	291
Delta State U.	726	204	592	238	673	199	592	219	661
Lawrence U.	727	508	423	536	671	81	165	248	286
Plymouth State U.	728	880	664	2,318	669	744	558	421	571
Simmons U.	729	472	604	487	668	293	566	466	383
Metropolitan State U. of Denver	730	574	496	416	666	444	304	263	261
San Juan Bautista School of Medicine	731	896	612	598	662	604	202	448	466
Mercyhurst U.	732	1,434 i	1,177 i	920 i	661	489 i	354 i	219 i	82
Iona C.	733	ne	239	411	650	ne	239	411	650
U. North Alabama	733	ne	ne	539	650	ne	ne	331	320

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Ana G. Mendez, Carolina	735	1,099	647	602	645	696	520	489	645
Bluefield State U.	736	595	485	506	642	593	483	501	506
St. Bonaventure U.	736	1,049	585	378	642	243	265	215	386
U. Central Missouri	736	415	401	495	642	219	250	296	399
Fort Hays State U.	739	1,143	1,172	800	641	694	764	482	342
Gonzaga U.	740	187	506	212	640	45	305	107	226
California Lutheran U.	741	1,143	630	1,129	627	256	271	518	298
SUNY, Potsdam	742	235	ne	540	622	135	ne	433	454
Polytechnic U. Puerto Rico	743	2,118	813	821	620	1,884	813	821	620
Coe C.	744	699	561	538	614	353	368	330	401
SUNY, Farmingdale State C.	745	ne	589	606	611	ne	166	180	185
U. West Alabama	746	462	465	239	604	390	401	219	520
Clayton State U.	747	330	346	616	600	298	302	532	498
Widener U., Chester	747	764	586	417	600	342	277	351	474
Castleton U.	749	ne	ne	ne	598	ne	ne	ne	522
Eckerd C.	750	435	406	367	596	162	139	139	201
CUNY, Medgar Evers C.	751	1,397	882	694	595	954	588	470	380
U. South Carolina Upstate	752	257	437	496	594	154	133	216	358
Evergreen State C.	753	563	390	783	586	405	279	256	119
Lewis-Clark State C.	754	599	660	401	582	599	660	349	550
Emerson C.	755	1,145	919	581	581	138	84	198	122
Stetson U.	756	476	670	611	580	372	479	304	379
Touro U., New York	757	470	439	419	576	137	73	77	19
Gannon U.	758	555	351	972	569	18	32	61	150
Point Loma Nazarene U.	759	265	237	505	565	28	162	126	1
Pennsylvania State U., Berks	760	273	372	382	564	261	273	293	507
U. Dallas	760	ne	ne	249	564	ne	ne	5	157
Utica U.	762	598	549	466	562	0	0	0	0
Eastern Illinois U.	763	700	540	529	553	408	256	289	320
Sewanee: U. of the South	764	867	864	668	547	34	35	45	6
Juniata C.	765	560	937	380	545	365	323	229	442
Berry C.	766	553	646	371	541	217	207	332	453
Bryant U.	767	353	302	347	534	234	227	280	394
Saint Francis U.	768	829	878	872	533	25	173	199	221
Rollins C.	769	626	414	533	532	160	165	165	189

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Southwestern Oklahoma State U.	770	504	484	614	531	218	276	419	303
SUNY, C. Cortland	771	527	255	381	530	397	215	340	396
California State U., Maritime Academy	772	2,959	3,202	2,799	526	617	621	548	192
Indiana U., Southeast	773	557	582	591	523	27	15	64	13
Sonoran U. Health Sciences	774	230	ne	ne	520	0	ne	ne	0
Southwestern U.	774	334	261	408	520	4	3	11	11
A. T. Still U. of Health Sciences	776	644	656	448	517	434	462	257	281
Emporia State U.	777	777	594	586	510	611	517	312	291
Northwest Nazarene U.	778	447	408	442	509	268	178	307	356
Wittenberg U.	779	267	297	445	508	122	165	228	331
Central Wyoming C.	780	ne	ne	ne	504	ne	ne	ne	504
Doane U.	781	1,093	896	699	502	928	762	596	430
Minnesota State U., Moorhead	781	209	169	462	502	50	89	222	246
Cooper Union	783	710	501	545	501	213	233	233	202
Indiana U., Northwest	784	509	488	553	495	148	176	273	203
Pacific Lutheran U.	784	342	449	370	495	57	100	147	170
Lake Forest C.	786	416	372	267	493	73	0	0	37
Indiana U., Kokomo	787	393	483	441	490	6	20	27	75
Keiser U.	788	450	423	443	485	0	0	0	0
Lake Erie C. of Osteopathic Medicine	789	565	472	502	484	0	0	0	0
East Central U.	790	310	251	242	480	264	169	216	447
Wabash C.	791	320	ne	ne	465	244	ne	ne	304
Whitworth U.	791	421	660	403	465	103	140	91	102
Kutztown U. Pennsylvania	793	464	472	292	450	337	276	159	351
Muhlenberg C.	794	539	398	288	447	194	115	28	27
Southern Oregon U.	794	424	493	534	447	235	237	312	135
Niagara U.	796	2,057	1,124	509	440	355	24	34	54
Mills C.	797	1,643	1,541	850	439	840	1,341	683	224
Agnes Scott C.	798	229	152	351	433	126	99	152	260
McNeese State U.	799	370	585	664	432	72	54	17	22
Pennsylvania State U., Great Valley School of Graduate Professional Studies	799	419	ne	927	432	90	ne	457	251
SUNY, C. Old Westbury	801	ne	335	347	428	ne	196	206	243
Palo Alto U.	802	290	417	428	426	157	179	207	205
Oglala Lakota C.	803	683	516	473	424	683	506	473	424
Wilkes U.	804	549	968	372	423	104	518	109	134

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Life U.	805	207	429	364	419	0	0	0	0
Cornell C.	806	397 i	370	464	409	232 i	228	264	116
Maryland Institute C. of Art	807	494	618	634	407	96	215	309	93
Earlham C.	808	456	165	287	405	19	11	8	0
Francis Marion U.	809	362	216	207	402	236	75	174	289
Western Connecticut State U.	810	713	539	353	399	539	347	201	221
Coppin State U.	811	243	202	299	398	197	168	212	275
Millersville U. Pennsylvania	812	782	402	931	395	574	246	785	213
Moravian U.	813	273	309	255	386	73	91	90	185
Adelphi U.	814	359	351 i	342	377	292	283 i	274	316
Barry U.	815	295	237	343	367	60	9	40	65
Georgia Gwinnett C.	815	610	478	489	367	377	338	372	249
U. Wisconsin-Stout	815	668	555	406	367	341	175	27	61
Bloomsburg U. Pennsylvania	818	734	735	348	365	218	389	137	207
Ramapo C. New Jersey	818	351	441	408	365	304	379	373	319
Augustana C.	820	237	205	271	353	71	56	116	158
Rider U.	820	228	170	322	353	68	58	126	200
Northeastern State U.	822	432	406	279	351	360	330	179	208
Life Chiropractic C.-West	823	ne	ne	ne	350	ne	ne	ne	0
Austin C.	824	376	342	302	349	100	116	85	110
Whittier C.	825	388	248	300	346 i	75	13	0	0 i
Mississippi Valley State U.	826	986	653	391	344	977	646	379	330
Oakwood U.	827	666	538	474	340	401	375	463	329
Westmont C.	827	376	211	295	340 i	118	174	180	201 i
American C. of Financial Services	829	ne	ne	ne	338	ne	ne	ne	0
Pontifical Catholic U. Puerto Rico, Ponce	830	287	239	350	334	85	125	186	97
Truckee Meadows Community C.	830	ne	ne	ne	334	ne	ne	ne	334
Susquehanna U.	832	368	496	360	333	70	61	20	31
Truman State U.	833	285	296	237	327	61	60	46	73
Pennsylvania State U., Abington	834	ne	ne	369	323	ne	ne	279	184
Slippery Rock U. Pennsylvania	834	213	390	295	323	57	79	50	11
Bryn Athyn C.	836	305	432	316	317	0	0	0	0
Centre C.	837	506	376	265	314	88	58	136	173
Future Generations U.	838	286	271 i	270 i	312 i	0	0 i	0 i	0 i
Ouachita Baptist U.	839	318 i	268 i	217	309	250 i	234 i	217	309

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. West Georgia	839	508	483	396	i 309	236	220	197	i 174
SUNY, New Paltz	841	494	330	329	308	208	149	114	139
Northern State U.	842	225	240	190	305	128	100	173	174
Saint Martin's U.	842	ne	201	299	305	ne	147	222	203
C. Southern Nevada	844	232	194	335	303	198	183	327	275
Eastern New Mexico U., Portales	844	292	358	355	303	237	298	323	270
Manchester U.	844	541	286	266	303	333	117	134	100
Arkansas C. of Health Education	847	ne	900	672	301	ne	350	69	46
Concordia C., Moorhead	848	ne	275	308	291	ne	94	35	32
MCPHS U.	849	606	473	346	290	122	192	85	80
U. North Carolina, Pembroke	849	620	344	243	290	599	344	243	290
SUNY, Oneonta	851	623	214	214	288	428	115	24	3
Pitzer C.	852	468	313	225	287	140	0	0	0
U. Evansville	853	350	245	284	285	180	65	144	171
Southern Arkansas U.	854	329	275	611	281	126	44	422	113
Columbus State U.	855	ne	261	206	271	ne	93	77	228
Ohio Wesleyan U.	856	325	323	404	267	239	120	275	97
Pennsylvania State U., Wilkes-Barre	856	ne	ne	250	267	ne	ne	249	267
Delaware Valley U.	858	ne	ne	182	265	ne	ne	41	7
Antioch U.	859	ne	ne	ne	263	ne	ne	ne	187
Valdosta State U.	860	424	496	423	262	102	60	123	47
Shaw U.	861	ne	ne	ne	259	ne	ne	ne	168
SUNY, Maritime C.	862	ne	ne	ne	258	ne	ne	ne	0
Bard C.	863	235	242	248	255	63	65	67	69
Converse U.	864	317	185	294	254	258	148	241	209
Ohio Northern U.	865	316	348	471	250	195	242	431	197
Longwood U.	866	353	368	544	249	236	312	412	47
Washington and Lee U.	866	241	214	256	249	201	176	163	179
Southern California U. of Health Sciences	868	443	i 420	i 418	246	353	i 339	i 360	204
Bradley U.	869	1,357	851	416	240	515	235	101	88
LeTourneau U.	870	239	271	346	239	58	125	217	169
Northern New Mexico C.	870	581	404	350	239	581	404	350	239
Alabama C., Osteopathic Medicine	872	370	303	184	236	75	41	17	34
Northwest Missouri State U.	873	192	239	190	231	76	107	100	100
Alverno C.	874	216	237	215	228	0	0	0	0

TABLE 7

Total and federally financed higher education R&D expenditures at higher education institutions in both survey populations, ranked by FY 2022 total R&D expenditures: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Southeast Missouri State U.	874	372	232	228	228	233	148	212	61
Fairleigh Dickinson U.	876	791	656	318	225	767	560	248	222
U. Charleston	877	ne	183 i	198 i	217	ne	183 i	198 i	217
Georgia C. and State U.	878	548	270	247	216	440	160	127	51
Montana State U., Northern	879	236	322	372	214	28	125	148	43
Luther C.	880	451	365	289 i	212	186	145	95 i	45
Eastern Oregon U.	881	472	172	162	206	381	150	143	190
Taylor U.	882	225	232	214	204	0	3	9	16
Maine Maritime Academy	883	358	ne	ne	198	282	ne	ne	198
Jacksonville State U.	884	2,429	1,244	275	197	2,312	1,216	245	113
Pennsylvania State U., Greater Allegheny	885	ne	ne	216	189	ne	ne	77	23
Minot State U.	886	251	253	512	187	238	125	439	143
D'Youville C.	887	383	382	306	178	174	174	175	0
Metropolitan State U.	888	150 i	156 i	162 i	176 i	77 i	80 i	85 i	94 i
DePauw U.	889	308	253	304	175	45	39	89	48
Western Nevada C.	890	ne	ne	ne	171	ne	ne	ne	171
Concordia U., Wisconsin	891	248	293	439	168	222	235	170	150
Baldwin Wallace U.	892	221	ne	210	167	10	ne	20	7
U. Lynchburg	893	ne	ne	150 i	164 i	ne	ne	86 i	93 i
Hamline U.	894	ne	ne	493	162	ne	ne	320	35
Jacksonville U.	894	365	459	460	162	0	0	0	0
U. Tennessee, Martin	894	363	305	199	162	88	74	22	61
U. Maine, Presque Isle	897	ne	ne	ne	161	ne	ne	ne	43
Linfield U.	898	464	319	239	154	167	149	67	7
Benedictine U.	899	175	ne	ne	150	26	ne	ne	64
Loras C.	899	ne	ne	ne	150 i	ne	ne	ne	70 i
All other surveyed institutions	-	670,755	615,310	38,084	0	406,305	377,718	24,025	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$2,056,063 thousand in total and \$1,983,078 thousand in federally financed R&D expenditures in FY 2022.^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.^c The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of

the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 8

Total and federally financed higher education R&D expenditures, by type of R&D: FYs 1953–2022

(Dollars in millions)

Fiscal year	Total						Federal					
	All R&D expenditures	Basic research		Applied research and experimental development		All federal R&D expenditures	Basic research		Applied research and experimental development			
		Amount	Percent	Amount	Percent		Amount	Percent	Amount	Percent		
Total, S&E ^a												
1953	255	110	43.1	145	56.9	138	na	na	na	na	na	
1954	290	136	46.9	154	53.1	160	na	na	na	na	na	
1955	312	159	51.0	153	49.0	169	na	na	na	na	na	
1956	372	200	53.8	172	46.2	213	na	na	na	na	na	
1957	410	240	58.5	170	41.5	229	na	na	na	na	na	
1958	456	281	61.6	175	38.4	254	na	na	na	na	na	
1959	526	343	65.2	183	34.8	306	na	na	na	na	na	
1960	646	433	67.0	213	33.0	405	na	na	na	na	na	
1961	763	536	70.2	227	29.8	500	na	na	na	na	na	
1962	904	659	72.9	245	27.1	613	na	na	na	na	na	
1963	1,081	814	75.3	267	24.7	760	na	na	na	na	na	
1964	1,275	1,003	78.7	272	21.3	917	na	na	na	na	na	
1965	1,474	1,138	77.2	336	22.8	1,073	na	na	na	na	na	
1966	1,715	1,303	76.0	412	24.0	1,261	na	na	na	na	na	
1967	1,921	1,457	75.8	464	24.2	1,409	na	na	na	na	na	
1968	2,149	1,650	76.8	499	23.2	1,572	na	na	na	na	na	
1969	2,225	1,711	76.9	514	23.1	1,600	na	na	na	na	na	
1970	2,335	1,796	76.9	539	23.1	1,647	na	na	na	na	na	
1971	2,500	1,914	76.6	586	23.4	1,724	na	na	na	na	na	
1972	2,630	2,022	76.9	608	23.1	1,795	1,420	79.1	375	20.9	20.9	
1973	2,884	2,053	71.2	831	28.8	1,985	1,454	73.2	531	26.8	26.8	
1974	3,023	2,154	71.3	869	28.7	2,032	1,523	74.9	509	25.1	25.1	
1975	3,409	2,410	70.7	999	29.3	2,288	1,695	74.1	593	25.9	25.9	
1976	3,729	2,549	68.4	1,180	31.6	2,512	1,841	73.3	671	26.7	26.7	
1977	4,067	2,800	68.8	1,267	31.2	2,726	2,007	73.6	720	26.4	26.4	
1978 ^b	4,625	na	na	na	na	3,059	na	na	na	na	na	
1979	5,366	3,619	67.4	1,747	32.6	3,598	2,577	71.6	1,022	28.4	28.4	
1980	6,063	4,036	66.6	2,026	33.4	4,098	2,861	69.8	1,237	30.2	30.2	
1981	6,847	4,594	67.1	2,253	32.9	4,571	3,260	71.3	1,311	28.7	28.7	
1982	7,324	4,879	66.6	2,445	33.4	4,768	3,402	71.3	1,367	28.7	28.7	
1983	7,882	5,303	67.3	2,579	32.7	4,989	3,547	71.1	1,442	28.9	28.9	
1984	8,620	5,733	66.5	2,887	33.5	5,431	3,830	70.5	1,601	29.5	29.5	
1985	9,687	6,556	67.7	3,131	32.3	6,064	4,343	71.6	1,722	28.4	28.4	

TABLE 8

Total and federally financed higher education R&D expenditures, by type of R&D: FYs 1953–2022

(Dollars in millions)

Fiscal year	Total					Federal				
	All R&D expenditures	Basic research		Applied research and experimental development		All federal R&D expenditures	Basic research		Applied research and experimental development	
		Amount	Percent	Amount	Percent		Amount	Percent	Amount	Percent
1986	10,928	7,492	68.6	3,435	31.4	6,712	4,868	72.5	1,844	27.5
1987	12,153	8,393	69.1	3,760	30.9	7,343	5,375	73.2	1,968	26.8
1988	13,463	8,894	66.1	4,569	33.9	8,193	5,678	69.3	2,515	30.7
1989	14,979	9,793	65.4	5,186	34.6	8,993	6,195	68.9	2,797	31.1
1990	16,290	10,645	65.3	5,645	34.7	9,640	6,649	69.0	2,991	31.0
1991	17,589	11,607	66.0	5,982	34.0	10,238	7,128	69.6	3,110	30.4
1992	18,821	12,516	66.5	6,305	33.5	11,095	7,718	69.6	3,377	30.4
1993	19,954	13,303	66.7	6,651	33.3	11,960	8,398	70.2	3,562	29.8
1994	21,035	13,989	66.5	7,046	33.5	12,654	8,878	70.2	3,775	29.8
1995	22,179	14,812	66.8	7,367	33.2	13,337	9,399	70.5	3,938	29.5
1996	23,055	15,481	67.1	7,574	32.9	13,847	9,868	71.3	3,978	28.7
1997	24,380	16,602	68.1	7,778	31.9	14,321	10,316	72.0	4,006	28.0
1998	25,867	19,058	73.7	6,810	26.3	15,159	11,862	78.2	3,298	21.8
1999	27,544	20,450	74.2	7,094	25.8	16,112	12,746	79.1	3,365	20.9
2000	30,084	22,547	74.9	7,537	25.1	17,548	13,936	79.4	3,611	20.6
2001	32,801	24,392	74.4	8,409	25.6	19,227	15,038	78.2	4,188	21.8
2002	36,383	27,363	75.2	9,019	24.8	21,856	17,262	79.0	4,593	21.0
2003	40,077	30,105	75.1	9,973	24.9	24,753	19,627	79.3	5,126	20.7
2004	43,238	31,957	73.9	11,281	26.1	27,627	21,353	77.3	6,274	22.7
2005	45,774	34,353	75.0	11,421	25.0	29,187	22,885	78.4	6,302	21.6
2006	47,759	36,082	75.5	11,677	24.5	30,132	23,697	78.6	6,434	21.4
2007	49,495	37,726	76.2	11,769	23.8	30,430	24,001	78.9	6,429	21.1
2008	51,872	39,322	75.8	12,550	24.2	31,272	24,430	78.1	6,842	21.9
2009	54,863	40,913	74.6	13,950	25.4	32,576	25,025	76.8	7,551	23.2
Total, S&E and non-S&E ^a										
2010	61,287	40,949	66.8	20,337	33.2	37,478	25,678	68.5	11,800	31.5
2011	65,274	43,455	66.6	21,819	33.4	40,768	27,675	67.9	13,093	32.1
2012	65,729	43,120	65.6	22,609	34.4	40,142	26,850	66.9	13,292	33.1
2013	66,978	43,976	65.7	23,001	34.3	39,446	26,409	66.9	13,037	33.1
2014	67,161	43,594	64.9	23,567	35.1	37,961	25,210	66.4	12,751	33.6
2015	68,520	44,386	64.8	24,134	35.2	37,847	25,242	66.7	12,605	33.3
2016	71,737	45,697	63.7	26,040	36.3	38,788	25,302	65.2	13,486	34.8
2017	75,148	47,204	62.8	27,944	37.2	40,248	26,022	64.7	14,226	35.3
2018	79,024	49,888	63.1	29,136	36.9	41,860	27,068	64.7	14,792	35.3

TABLE 8

Total and federally financed higher education R&D expenditures, by type of R&D: FYs 1953–2022

(Dollars in millions)

Fiscal year	Total					Federal				
	All R&D expenditures	Basic research		Applied research and experimental development		All federal R&D expenditures	Basic research		Applied research and experimental development	
		Amount	Percent	Amount	Percent		Amount	Percent	Amount	Percent
2019	83,488	52,720	63.1	30,768	36.9	44,460	28,796	64.8	15,664	35.2
2020	86,302	54,372	63.0	31,930	37.0	46,107	29,457	63.9	16,649	36.1
2021	89,695	56,197	62.7	33,498	37.3	49,116	31,292	63.7	17,824	36.3
2022	97,681	61,698	63.2	35,982	36.8	53,971	34,674	64.2	19,298	35.8

na = not applicable; separate data for federally financed basic research, applied research, and experimental development were not collected for these years.

S&E = science and engineering.

^a Totals for FYs 1953–2009 represent R&D expenditures in S&E fields only. Beginning in FY 2010, totals and type of R&D data include R&D expenditures in S&E fields and non-S&E fields.

^b FY 1978 data are estimated based on data collected from doctorate-granting institutions only.

Note(s):

Type of R&D estimation procedure was revised for FY 1998 and later years; hence, these data are not directly comparable to data for FY 1997 and earlier years. Prior to FY 2010, R&D expenditures by type of R&D were based on percentage estimates of basic research provided by universities and colleges. Beginning in FY 2010, institutions were asked for dollar amounts of federally funded and nonfederally funded R&D expenditures for basic research, applied research, and experimental development. Because of rounding, detail may not add to total.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 9

Higher education R&D expenditures, by source of funds and type of R&D: FYs 2010–22

(Dollars in thousands)

Fiscal year	Total				Federal				Nonfederal			
	All R&D expenditures	Basic research	Applied research	Experimental development	All R&D expenditures	Basic research	Applied research	Experimental development	All R&D expenditures	Basic research	Applied research	Experimental development
2010	61,286,610	40,949,184	15,107,127	5,230,299	37,477,582	25,677,713	9,133,503	2,666,366	23,809,028	15,271,471	5,973,624	2,563,933
2011	65,274,393	43,455,207	16,298,883	5,520,303	40,768,251	27,675,430	10,227,797	2,865,024	24,506,142	15,779,777	6,071,086	2,655,279
2012	65,729,007	43,119,743	16,787,565	5,821,699	40,142,223	26,850,432	10,268,318	3,023,473	25,586,784	16,269,311	6,519,247	2,798,226
2013	66,977,566	43,976,241	16,905,628	6,095,697	39,445,931	26,409,024	10,052,792	2,984,115	27,531,635	17,567,217	6,852,836	3,111,582
2014	67,161,428	43,594,083	17,313,106	6,254,239	37,961,118	25,210,261	9,775,786	2,975,071	29,200,310	18,383,822	7,537,320	3,279,168
2015	68,519,962	44,385,516	17,538,719	6,595,727	37,846,802	25,241,977	9,694,550	2,910,275	30,673,160	19,143,539	7,844,169	3,685,452
2016	71,736,671	45,696,888	19,412,183	6,627,600	38,787,997	25,301,874	10,582,251	2,903,872	32,948,674	20,395,014	8,829,932	3,723,728
2017	75,148,301	47,203,811	20,816,604	7,127,886	40,248,058	26,022,463	11,223,090	3,002,505	34,900,243	21,181,348	9,593,514	4,125,381
2018	79,024,262	49,887,855	21,737,284	7,399,123	41,860,369	27,068,451	11,685,671	3,106,247	37,163,893	22,819,404	10,051,613	4,292,876
2019	83,488,120	52,720,322	23,050,139	7,717,659	44,460,327	28,796,368	12,358,229	3,305,730	39,027,793	23,923,954	10,691,910	4,411,929
2020	86,302,262	54,372,149	23,865,214	8,064,899	46,106,539	29,457,040	12,872,587	3,776,912	40,195,723	24,915,109	10,992,627	4,287,987
2021	89,694,837	56,197,180	24,798,604	8,699,053	49,116,033	31,292,071	13,717,410	4,106,552	40,578,804	24,905,109	11,081,194	4,592,501
2022	97,680,528	61,698,057	26,722,947	9,259,524	53,971,468	34,673,895	14,880,303	4,417,270	43,709,060	27,024,162	11,842,644	4,842,254

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 10
Higher education R&D expenditures, by R&D field: FYs 2010–22

(Dollars in thousands)

Field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All R&D fields	61,286,610	65,274,393	65,729,007	66,977,566	67,161,428	68,519,962	71,736,671	75,148,301	79,024,262	83,488,120	86,302,262	89,694,837	97,680,528
Science	49,061,829	51,955,427	51,914,870	52,608,816	52,761,785	53,843,479	56,236,111	58,936,243	62,018,905	65,419,110	67,563,860	70,288,825	76,226,286
Computer and information sciences	1,638,047	1,742,486	1,822,321	2,067,869	1,927,578	1,962,053	2,079,440	2,192,315	2,397,625	2,637,165	2,924,673	2,952,940	3,224,949
Geosciences, atmospheric sciences, and ocean sciences	2,991,741	3,153,174	3,173,011	3,195,029	3,227,092	3,246,105	3,082,816	3,147,878	3,159,553	3,185,919	3,281,415	3,294,584	3,690,235
Atmospheric science and meteorology	429,354	481,275	476,729	493,385	501,517	573,913	626,676	623,504	608,041	590,385	612,496	624,278	668,918
Geological and earth sciences	1,083,969	1,142,630	1,168,945	1,163,446	1,159,067	1,113,536	997,666	1,084,087	1,131,923	1,121,261	1,159,394	1,241,621	1,370,650
Ocean sciences and marine sciences	1,021,857	1,049,630	1,025,472	1,051,418	1,071,370	1,049,538	1,097,963	1,098,634	1,061,402	1,100,768	1,136,721	1,035,249	1,211,130
Geosciences, atmospheric sciences, and ocean sciences nec	456,561	479,639	501,865	486,780	495,138	509,118	360,511	341,653	358,187	373,505	372,804	393,436	439,537
Life sciences	34,984,249	37,337,522	37,200,171	37,556,765	37,938,741	38,769,105	40,859,076	43,098,275	45,606,391	48,226,684	49,614,879	52,349,524	56,498,207
Agricultural sciences	3,011,150	3,116,840	3,300,098	3,347,687	3,381,853	3,479,612	3,287,685	3,274,597	3,307,251	3,426,773	3,625,348	3,552,705	3,935,731
Biological and biomedical sciences	10,946,456	11,855,468	11,611,632	11,679,165	11,699,720	11,703,939	13,027,525	13,723,154	14,517,866	15,390,991	15,766,819	16,566,463	18,161,442
Health sciences	19,268,085	20,398,377	20,330,413	20,453,217	20,707,633	21,298,214	22,387,230	23,990,079	25,773,405	27,265,024	27,991,752	29,859,263	31,869,957
Natural resources and conservation ^a	na	na	na	na	na	na	693,318	691,653	779,523	841,914	901,705	935,265	1,012,919
Life sciences nec	1,758,558	1,966,837	1,958,028	2,076,696	2,149,535	2,287,340	1,463,318	1,418,792	1,228,346	1,301,982	1,329,255	1,435,828	1,518,158
Mathematics and statistics	592,200	640,471	674,461	670,801	657,656	640,828	679,295	700,251	750,328	769,019	800,583	772,890	879,526
Physical sciences	4,621,772	4,768,816	4,710,125	4,646,791	4,613,739	4,648,566	4,876,304	5,050,084	5,232,149	5,550,678	5,672,442	5,737,169	6,167,583
Astronomy and astrophysics	573,229	583,847	706,544	558,635	566,965	626,589	621,738	648,813	668,227	734,987	780,433	740,819	813,900
Chemistry	1,748,465	1,783,604	1,748,904	1,704,070	1,723,214	1,757,480	1,773,336	1,791,492	1,866,133	1,965,378	1,928,978	1,996,074	2,126,741
Materials science ^a	na	na	na	na	na	na	172,271	227,825	254,447	259,316	252,531	285,940	286,461
Physics	1,998,732	2,108,340	1,985,954	2,097,089	2,054,772	2,037,057	2,108,936	2,155,653	2,206,576	2,327,059	2,435,368	2,463,514	2,669,076
Physical sciences nec	301,346	293,025	268,723	286,997	268,788	227,440	200,023	226,301	236,766	263,938	275,132	250,822	271,405
Psychology	1,077,655	1,159,180	1,179,323	1,128,328	1,143,065	1,183,561	1,222,998	1,246,513	1,261,399	1,328,432	1,364,798	1,329,505	1,443,894
Social sciences	1,999,942	2,063,007	2,053,656	2,172,234	2,210,266	2,315,180	2,361,414	2,554,534	2,721,668	2,805,654	2,951,369	2,827,648	3,165,440
Anthropology ^a	na	na	na	na	na	na	95,932	110,926	118,227	124,390	119,377	108,148	132,764
Economics	352,890	387,036	383,405	408,264	428,076	453,590	395,587	433,997	455,889	458,086	558,855	549,735	667,707
Political science and government	374,903	370,694	390,074	427,435	426,375	459,265	383,986	412,095	438,040	447,709	425,391	423,893	488,480
Sociology, demography, and population studies	419,895	433,484	461,011	482,284	504,735	524,200	503,290	551,845	608,697	610,104	594,076	553,001	616,142
Social sciences nec	852,254	871,793	819,166	854,251	851,080	878,125	982,619	1,045,671	1,100,815	1,165,365	1,253,670	1,192,871	1,260,347
Sciences nec	1,156,223	1,090,771	1,101,802	1,170,999	1,043,648	1,078,081	1,074,768	946,393	889,792	915,559	953,701	1,024,565	1,156,452
Engineering	9,325,722	10,032,590	10,284,111	10,733,954	10,971,498	11,062,806	11,367,127	11,911,132	12,363,204	13,214,142	13,702,434	14,291,729	15,596,634
Aerospace, aeronautical, and astronautical engineering	635,234	667,757	662,444	689,553	662,479	732,092	881,968	990,725	1,010,493	1,170,171	1,293,584	1,452,239	1,647,191
Bioengineering and biomedical engineering	745,277	817,389	871,917	884,421	951,058	1,003,096	1,085,832	1,220,680	1,343,570	1,450,833	1,469,689	1,560,170	1,726,307
Chemical engineering	821,163	913,905	903,613	910,222	906,471	914,308	884,185	934,527	931,029	977,578	1,001,519	1,024,446	1,108,245
Civil engineering	1,106,759	1,208,592	1,232,944	1,296,972	1,256,412	1,284,850	1,328,603	1,302,314	1,354,766	1,432,949	1,424,894	1,481,973	1,647,038
Electrical, electronic, and communications engineering	2,050,292	2,206,894	2,311,665	2,408,824	2,478,216	2,492,197	2,512,453	2,726,458	2,843,755	2,937,880	3,052,761	3,078,737	3,436,892

TABLE 10
Higher education R&D expenditures, by R&D field: FYs 2010–22

(Dollars in thousands)

Field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Industrial and manufacturing engineering ^a	na	na	na	na	na	na	236,678	351,081	514,775	556,355	586,908	573,923	615,228
Mechanical engineering	1,458,382	1,556,892	1,550,151	1,647,640	1,503,710	1,513,951	1,434,664	1,535,819	1,630,521	1,704,961	1,813,657	1,881,980	2,062,508
Metallurgical and materials engineering	703,332	738,892	757,967	812,231	1,202,757	1,101,599	743,980	735,699	762,686	792,370	818,667	841,719	886,681
Engineering nec	1,805,283	1,922,269	1,993,410	2,084,091	2,010,395	2,020,713	2,258,764	2,113,829	1,971,609	2,191,045	2,240,755	2,396,542	2,466,544
Non-S&E	2,899,059	3,286,376	3,530,026	3,634,796	3,428,145	3,613,677	4,133,433	4,300,926	4,642,153	4,854,868	5,035,968	5,114,283	5,857,608
Business management and business administration	370,015	400,376	443,079	473,157	481,154	569,570	642,167	725,255	784,333	868,051	887,853	934,362	1,081,380
Communication and communications technologies	130,396	153,743	159,920	148,496	166,040	168,512	166,405	202,535	191,597	206,724	192,105	186,214	213,000
Education	993,588	1,120,766	1,233,437	1,220,888	1,243,226	1,292,178	1,340,222	1,384,259	1,503,577	1,521,635	1,607,383	1,615,608	1,740,784
Humanities	260,374	313,032	339,633	386,736	402,173	430,058	443,588	493,092	504,569	538,544	564,529	560,815	713,685
Law	98,109	124,779	131,514	173,479	149,235	174,692	184,334	223,819	266,344	255,789	267,866	282,710	358,693
Social work	177,331	194,667	199,046	212,323	225,897	214,205	211,546	235,292	245,110	285,635	306,371	319,608	363,079
Visual and performing arts	68,717	77,358	84,596	87,291	95,837	100,681	133,845	124,904	137,154	158,962	174,607	178,422	224,572
Non-S&E nec	800,529	901,655	938,801	932,426	664,583	663,781	1,011,326	911,770	1,009,469	1,019,528	1,035,254	1,036,544	1,162,415

na = not applicable; separate data for natural resources and conservation, materials science, anthropology, and industrial and manufacturing engineering were not collected prior to FY 2016.

nec = not elsewhere classified; S&E = science and engineering.

^a Prior to FY 2016, expenditures for natural resources and conservation, materials science, anthropology, and industrial and manufacturing engineering were not collected separately. See the FY 2016 Technical Notes, Appendix A (<https://ncesdata.nsf.gov/herd/2016>) for information detailing where these fields were previously reported.

Note(s):

FY 2016 R&D expenditure amounts in various fields may show increases or decreases from amounts reported in FY 2015 because of the reclassification of disciplines. See the FY 2016 Technical Notes, Appendix A (<https://ncesdata.nsf.gov/herd/2016>) for specific details about discipline changes.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 11
Federally financed higher education R&D expenditures, by R&D field: FYs 2010–22

(Dollars in thousands)

Field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All R&D fields	37,477,582	40,768,251	40,142,223	39,445,931	37,961,118	37,846,802	38,787,997	40,248,058	41,860,369	44,460,327	46,106,539	49,116,033	53,971,468
Science	30,791,579	33,373,047	32,497,010	31,764,798	30,400,058	30,316,969	31,092,549	32,203,558	33,519,201	35,549,587	36,748,656	39,046,586	42,786,338
Computer and information sciences	1,175,343	1,294,280	1,360,430	1,552,300	1,390,677	1,419,654	1,443,353	1,497,617	1,630,004	1,794,451	1,999,926	1,994,423	2,184,767
Geosciences, atmospheric sciences, and ocean sciences	2,013,754	2,181,206	2,203,399	2,094,769	2,049,449	2,065,928	1,991,778	2,042,334	2,048,305	2,067,218	2,108,685	2,144,257	2,478,702
Atmospheric science and meteorology	338,687	383,740	389,095	397,620	389,370	453,694	513,280	503,368	485,737	460,463	470,710	483,964	528,068
Geological and earth sciences	735,094	799,906	818,785	767,849	740,590	699,066	604,474	685,673	697,973	676,569	696,982	771,983	875,493
Ocean sciences and marine sciences	666,930	705,852	673,888	662,219	663,049	647,098	665,139	656,802	649,212	698,401	713,042	640,209	785,545
Geosciences, atmospheric sciences, and ocean sciences nec	273,043	291,708	321,631	267,081	256,440	266,070	208,885	196,491	215,383	231,785	227,951	248,101	289,596
Life sciences	21,702,125	23,663,408	22,753,602	22,227,173	21,270,352	21,163,876	21,794,872	22,749,301	23,864,701	25,435,484	26,229,693	28,446,519	30,958,717
Agricultural sciences	957,710	1,042,740	1,137,729	1,111,006	1,084,890	1,096,949	977,258	978,308	950,634	989,763	1,073,703	1,100,161	1,265,977
Biological and biomedical sciences	7,579,196	8,213,534	7,741,440	7,604,784	7,238,875	7,103,719	7,699,147	8,179,749	8,572,742	9,261,749	9,337,678	10,006,403	10,949,628
Health sciences	12,068,659	13,184,595	12,681,515	12,287,305	11,742,489	11,722,981	12,101,184	12,687,813	13,392,912	14,173,029	14,705,799	16,130,097	17,494,324
Natural resources and conservation ^a	na	na	na	na	na	na	316,604	271,470	320,411	369,968	410,798	429,949	480,042
Life sciences nec	1,096,560	1,222,539	1,192,918	1,224,078	1,204,098	1,240,227	700,679	631,961	628,002	640,975	701,715	779,909	768,746
Mathematics and statistics	417,775	458,966	490,534	464,608	441,383	424,522	444,385	437,040	456,773	466,994	485,550	475,602	537,322
Physical sciences	3,384,275	3,527,330	3,474,586	3,311,054	3,155,599	3,111,777	3,288,043	3,384,753	3,472,520	3,691,494	3,790,504	3,847,941	4,212,405
Astronomy and astrophysics	405,954	408,963	535,180	400,294	380,884	403,025	417,930	441,522	454,476	514,408	543,042	509,691	581,652
Chemistry	1,200,120	1,243,767	1,213,495	1,135,108	1,080,513	1,095,296	1,097,416	1,098,004	1,130,042	1,182,601	1,167,364	1,235,822	1,322,328
Materials science ^a	na	na	na	na	na	na	111,806	142,472	162,048	165,880	157,056	174,339	195,404
Physics	1,557,421	1,660,377	1,532,612	1,567,937	1,509,916	1,463,084	1,525,610	1,549,412	1,570,667	1,657,808	1,735,971	1,767,295	1,941,833
Physical sciences nec	220,780	214,223	193,299	207,715	184,286	150,372	135,281	153,343	155,287	170,797	187,071	160,794	171,188
Psychology	758,520	835,448	859,500	776,402	752,501	763,632	765,239	764,703	760,293	790,261	808,930	812,390	875,330
Social sciences	901,009	947,176	915,874	897,585	917,670	921,751	899,551	932,620	937,714	938,439	963,498	949,863	1,075,470
Anthropology ^a	na	na	na	na	na	na	39,602	38,712	43,461	43,001	38,891	29,484	40,119
Economics	127,858	148,737	144,446	137,236	138,806	149,567	112,576	110,739	102,144	91,716	120,846	138,029	194,381
Political science and government	152,547	148,643	141,267	143,356	145,662	136,482	103,690	103,869	98,298	86,702	78,384	85,375	95,363
Sociology, demography, and population studies	226,462	232,834	247,739	237,479	251,800	262,243	268,823	280,557	285,140	289,741	247,835	227,075	272,683
Social sciences nec	394,142	416,962	382,422	379,514	381,402	373,459	374,860	398,743	408,671	427,279	477,542	469,900	472,924
Sciences nec	438,778	465,233	439,085	440,907	422,427	445,829	465,328	395,190	348,891	365,246	361,870	375,591	463,625
Engineering	5,718,852	6,275,548	6,442,986	6,499,575	6,424,206	6,458,636	6,582,994	6,828,629	7,093,381	7,667,876	8,119,848	8,713,515	9,694,378
Aerospace, aeronautical, and astronautical engineering	466,991	504,536	501,722	513,134	474,601	516,035	623,637	659,882	678,118	820,576	956,641	1,110,337	1,246,002
Bioengineering and biomedical engineering	470,432	515,611	552,555	556,651	606,940	606,681	651,534	725,241	791,872	879,791	905,895	960,328	1,100,258
Chemical engineering	421,269	490,918	504,753	478,542	471,558	462,813	467,519	471,749	461,475	498,223	521,895	572,307	646,644
Civil engineering	460,880	544,992	570,303	578,390	577,958	570,405	591,837	557,671	590,881	621,055	605,760	664,406	784,286
Electrical, electronic, and communications engineering	1,373,311	1,511,458	1,601,917	1,642,771	1,742,317	1,771,541	1,742,704	1,891,348	1,981,178	2,049,393	2,143,808	2,208,461	2,484,203

TABLE 11
Federally financed higher education R&D expenditures, by R&D field: FYs 2010–22

(Dollars in thousands)

Field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Industrial and manufacturing engineering ^a	na	na	na	na	na	na	147,192	186,352	306,763	366,712	384,571	384,162	434,246
Mechanical engineering	953,244	1,032,641	1,035,551	1,061,270	946,699	957,328	861,039	937,849	993,231	1,055,663	1,160,453	1,274,048	1,409,792
Metallurgical and materials engineering	429,412	455,722	462,246	465,657	494,403	501,180	442,377	440,746	464,468	483,774	504,486	559,478	589,129
Engineering nec	1,143,313	1,219,670	1,213,939	1,203,160	1,109,730	1,072,653	1,055,155	957,791	825,395	892,689	936,339	979,988	999,818
Non-S&E	967,151	1,119,656	1,202,227	1,181,558	1,136,854	1,071,197	1,112,454	1,215,871	1,247,787	1,242,864	1,238,035	1,355,932	1,490,752
Business management and business administration	86,440	99,661	96,659	95,268	77,292	69,856	68,283	69,110	71,781	73,178	74,127	97,347	97,962
Communication and communications technologies	41,339	53,266	53,337	51,060	54,334	42,461	36,763	61,310	34,258	35,637	39,806	39,465	42,707
Education	535,744	632,117	689,060	666,506	663,543	644,087	624,465	653,069	680,399	668,069	672,165	699,686	783,518
Humanities	57,510	61,420	67,692	76,804	75,113	59,961	57,170	59,050	49,999	49,801	53,655	56,701	68,956
Law	19,338	27,388	24,575	22,522	23,731	24,414	26,081	33,021	50,924	31,866	26,695	28,799	32,391
Social work	94,422	105,661	109,359	111,693	109,172	101,662	95,299	110,678	114,293	133,068	140,774	165,256	181,943
Visual and performing arts	4,843	6,521	10,435	7,039	9,049	8,603	8,585	8,334	10,796	9,102	15,118	11,482	21,188
Non-S&E nec	127,515	133,622	151,110	150,666	124,620	120,153	195,808	221,299	235,337	242,143	215,695	257,196	262,087

na = not applicable; separate data for natural resources and conservation, materials science, anthropology, and industrial and manufacturing engineering were not collected prior to FY 2016.

nec = not elsewhere classified; S&E = science and engineering.

^a Prior to FY 2016, expenditures for natural resources and conservation, materials science, anthropology, and industrial and manufacturing engineering were not collected separately. See the FY 2016 Technical Notes, Appendix A (<https://ncesdata.nsf.gov/herd/2016>) for information detailing where these fields were previously reported.

Note(s):

FY 2016 R&D expenditure amounts in various fields may show increases or decreases from amounts reported in FY 2015 because of the reclassification of disciplines. See the FY 2016 Technical Notes, Appendix A (<https://ncesdata.nsf.gov/herd/2016>) for specific details about discipline changes.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 12
Nonfederally financed higher education R&D expenditures, by R&D field: FYs 2010–22

(Dollars in thousands)

Field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All R&D fields	23,809,028	24,506,142	25,586,784	27,531,635	29,200,310	30,673,160	32,948,674	34,900,243	37,163,893	39,027,793	40,195,723	40,578,804	43,709,060
Science	18,270,250	18,582,380	19,417,860	20,844,018	22,361,727	23,526,510	25,143,562	26,732,685	28,499,704	29,869,523	30,815,204	31,242,239	33,439,948
Computer and information sciences	462,704	448,206	461,891	515,569	536,901	542,399	636,087	694,698	767,621	842,714	924,747	958,517	1,040,182
Geosciences, atmospheric sciences, and ocean sciences	977,987	971,968	969,612	1,100,260	1,177,643	1,180,177	1,091,038	1,105,544	1,111,248	1,118,701	1,172,730	1,150,327	1,211,533
Atmospheric science and meteorology	90,667	97,535	87,634	95,765	112,147	120,219	113,396	120,136	122,304	129,922	141,786	140,314	140,850
Geological and earth sciences	348,875	342,724	350,160	395,597	418,477	414,470	393,192	398,414	433,950	444,692	462,412	469,638	495,157
Ocean sciences and marine sciences	354,927	343,778	351,584	389,199	408,321	402,440	432,824	441,832	412,190	402,367	423,679	395,040	425,585
Geosciences, atmospheric sciences, and ocean sciences nec	183,518	187,931	180,234	219,699	238,698	243,048	151,626	145,162	142,804	141,720	144,853	145,335	149,941
Life sciences	13,282,124	13,674,114	14,446,569	15,329,592	16,668,389	17,605,229	19,064,204	20,348,974	21,741,690	22,791,200	23,385,186	23,903,005	25,539,490
Agricultural sciences	2,053,440	2,074,100	2,162,369	2,236,681	2,296,963	2,382,663	2,310,427	2,296,289	2,356,617	2,437,010	2,551,645	2,452,544	2,669,754
Biological and biomedical sciences	3,367,260	3,641,934	3,870,192	4,074,381	4,460,845	4,600,220	5,328,378	5,543,405	5,945,124	6,129,242	6,429,141	6,560,060	7,211,814
Health sciences	7,199,426	7,213,782	7,648,898	8,165,912	8,965,144	9,575,233	10,286,046	11,302,266	12,380,493	13,091,995	13,285,953	13,729,166	14,375,633
Natural resources and conservation ^a	na	na	na	na	na	na	376,714	420,183	459,112	471,946	490,907	505,316	532,877
Life sciences nec	661,998	744,298	765,110	852,618	945,437	1,047,113	762,639	786,831	600,344	661,007	627,540	655,919	749,412
Mathematics and statistics	174,425	181,505	183,927	206,193	216,273	216,306	234,910	263,211	293,555	302,025	315,033	297,288	342,204
Physical sciences	1,237,497	1,241,486	1,235,539	1,335,737	1,458,140	1,536,789	1,588,261	1,665,331	1,759,629	1,859,184	1,881,938	1,889,228	1,955,178
Astronomy and astrophysics	167,275	174,884	171,364	158,341	186,081	223,564	203,808	207,291	213,751	220,579	237,391	231,128	232,248
Chemistry	548,345	539,837	535,409	568,962	642,701	662,184	675,920	693,488	736,091	782,777	761,614	760,252	804,413
Materials science ^a	na	na	na	na	na	na	60,465	85,353	92,399	93,436	95,475	111,601	91,057
Physics	441,311	447,963	453,342	529,152	544,856	573,973	583,326	606,241	635,909	669,251	699,397	696,219	727,243
Physical sciences nec	80,566	78,802	75,424	79,282	84,502	77,068	64,742	72,958	81,479	93,141	88,061	90,028	100,217
Psychology	319,135	323,732	319,823	351,926	390,564	419,929	457,759	481,810	501,106	538,171	555,868	517,115	568,564
Social sciences	1,098,933	1,115,831	1,137,782	1,274,649	1,292,596	1,393,429	1,461,863	1,621,914	1,783,954	1,867,215	1,987,871	1,877,785	2,089,970
Anthropology ^a	na	na	na	na	na	na	56,330	72,214	74,766	81,389	80,486	78,664	92,645
Economics	225,032	238,299	238,959	271,028	289,270	304,023	283,011	323,258	353,745	366,370	438,009	411,706	473,326
Political science and government	222,356	222,051	248,807	284,079	280,713	322,783	280,296	308,226	339,742	361,007	347,007	338,518	393,117
Sociology, demography, and population studies	193,433	200,650	213,272	244,805	252,935	261,957	234,467	271,288	323,557	320,363	346,241	325,926	343,459
Social sciences nec	458,112	454,831	436,744	474,737	469,678	504,666	607,759	646,928	692,144	738,086	776,128	722,971	787,423
Sciences nec	717,445	625,538	662,717	730,092	621,221	632,252	609,440	551,203	540,901	550,313	591,831	648,974	692,827
Engineering	3,606,870	3,757,042	3,841,125	4,234,379	4,547,292	4,604,170	4,784,133	5,082,503	5,269,823	5,546,266	5,582,586	5,578,214	5,902,256
Aerospace, aeronautical, and astronautical engineering	168,243	163,221	160,722	176,419	187,878	216,057	258,331	330,843	332,375	349,595	336,943	341,902	401,189
Bioengineering and biomedical engineering	274,845	301,778	319,362	327,770	344,118	396,415	434,298	495,439	551,698	571,042	563,794	599,842	626,049
Chemical engineering	399,894	422,987	398,860	431,680	434,913	451,495	416,666	462,778	469,554	479,355	479,624	452,139	461,601
Civil engineering	645,879	663,600	662,641	718,582	678,454	714,445	736,766	744,643	763,885	811,894	819,134	817,567	862,752
Electrical, electronic, and communications engineering	676,981	695,436	709,748	766,053	735,899	720,656	769,749	835,110	862,577	888,487	908,953	870,276	952,689

TABLE 12
Nonfederally financed higher education R&D expenditures, by R&D field: FYs 2010–22

(Dollars in thousands)

Field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Industrial and manufacturing engineering ^a	na	na	na	na	na	na	89,486	164,729	208,012	189,643	202,337	189,761	180,982
Mechanical engineering	505,138	524,251	514,600	586,370	557,011	556,623	573,625	597,970	637,290	649,298	653,204	607,932	652,716
Metallurgical and materials engineering	273,920	283,170	295,721	346,574	708,354	600,419	301,603	294,953	298,218	308,596	314,181	282,241	297,552
Engineering nec	661,970	702,599	779,471	880,931	900,665	948,060	1,203,609	1,156,038	1,146,214	1,298,356	1,304,416	1,416,554	1,466,726
Non-S&E	1,931,908	2,166,720	2,327,799	2,453,238	2,291,291	2,542,480	3,020,979	3,085,055	3,394,366	3,612,004	3,797,933	3,758,351	4,366,856
Business management and business administration	283,575	300,715	346,420	377,889	403,862	499,714	573,884	656,145	712,552	794,873	813,726	837,015	983,418
Communication and communications technologies	89,057	100,477	106,583	97,436	111,706	126,051	129,642	141,225	157,339	171,087	152,299	146,749	170,293
Education	457,844	488,649	544,377	554,382	579,683	648,091	715,757	731,190	823,178	853,566	935,218	915,922	957,266
Humanities	202,864	251,612	271,941	309,932	327,060	370,097	386,418	434,042	454,570	488,743	510,874	504,114	644,729
Law	78,771	97,391	106,939	150,957	125,504	150,278	158,253	190,798	215,420	223,923	241,171	253,911	326,302
Social work	82,909	89,006	89,687	100,630	116,725	112,543	116,247	124,614	130,817	152,567	165,597	154,352	181,136
Visual and performing arts	63,874	70,837	74,161	80,252	86,788	92,078	125,260	116,570	126,358	149,860	159,489	166,940	203,384
Non-S&E nec	673,014	768,033	787,691	781,760	539,963	543,628	815,518	690,471	774,132	777,385	819,559	779,348	900,328

na = not applicable; separate data for natural resources and conservation, materials science, anthropology, and industrial and manufacturing engineering were not collected prior to FY 2016.

nec = not elsewhere classified; S&E = science and engineering.

^a Prior to FY 2016, expenditures for natural resources and conservation, materials science, anthropology, and industrial and manufacturing engineering were not collected separately. See the FY 2016 Technical Notes, Appendix A (<https://ncesdata.nsf.gov/herd/2016>) for information detailing where these fields were previously reported.

Note(s):

FY 2016 R&D expenditure amounts in various fields may show increases or decreases from amounts reported in FY 2015 because of the reclassification of disciplines. See the FY 2016 Technical Notes, Appendix A (<https://ncesdata.nsf.gov/herd/2016>) for specific details about discipline changes.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 13
Higher education R&D expenditures, by source of funds and R&D field: FY 2022

(Dollars in thousands)

Field	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
All R&D fields	97,680,528	53,971,468	4,907,199	24,492,663	5,701,656	5,974,155	2,633,387
Science	76,226,286	42,786,338	3,660,829	18,362,439	4,376,552	4,979,772	2,060,356
Computer and information sciences	3,224,949	2,184,767	76,545	652,629	164,698	87,070	59,240
Geosciences, atmospheric sciences, and ocean sciences	3,690,235	2,478,702	218,642	680,423	90,513	148,997	72,958
Atmospheric science and meteorology	668,918	528,068	17,169	93,954	8,144	14,213	7,370
Geological and earth sciences	1,370,650	875,493	66,599	288,039	48,475	58,672	33,372
Ocean sciences and marine sciences	1,211,130	785,545	107,877	223,759	22,019	50,512	21,418
Geosciences, atmospheric sciences, and ocean sciences nec	439,537	289,596	26,997	74,671	11,875	25,600	10,798
Life sciences	56,498,207	30,958,717	2,929,174	13,333,506	3,840,001	3,799,516	1,637,293
Agricultural sciences	3,935,731	1,265,977	990,784	1,253,587	140,477	146,190	138,716
Biological and biomedical sciences	18,161,442	10,949,628	576,765	4,130,030	883,131	1,180,359	441,529
Health sciences	31,869,957	17,494,324	1,131,259	7,192,949	2,737,909	2,335,052	978,464
Natural resources and conservation	1,012,919	480,042	146,231	295,046	23,054	44,624	23,922
Life sciences nec	1,518,158	768,746	84,135	461,894	55,430	93,291	54,662
Mathematics and statistics	879,526	537,322	26,951	248,527	12,774	45,963	7,989
Physical sciences	6,167,583	4,212,405	109,478	1,313,681	176,315	263,520	92,184
Astronomy and astrophysics	813,900	581,652	5,647	145,274	4,856	51,438	25,033
Chemistry	2,126,741	1,322,328	47,140	556,117	81,665	88,605	30,886
Materials science	286,461	195,404	2,900	48,941	26,914	7,150	5,152
Physics	2,669,076	1,941,833	39,810	503,922	50,312	107,383	25,816
Physical sciences nec	271,405	171,188	13,981	59,427	12,568	8,944	5,297
Psychology	1,443,894	875,330	47,240	397,720	16,385	88,936	18,283
Social sciences	3,165,440	1,075,470	167,433	1,253,436	43,081	482,180	143,840
Anthropology	132,764	40,119	4,079	73,935	1,961	7,221	5,449
Economics	667,707	194,381	46,611	253,363	13,403	118,085	41,864
Political science and government	488,480	95,363	16,138	233,476	4,044	105,314	34,145
Sociology, demography, and population studies	616,142	272,683	32,664	208,094	5,822	84,437	12,442
Social sciences nec	1,260,347	472,924	67,941	484,568	17,851	167,123	49,940
Sciences nec	1,156,452	463,625	85,366	482,517	32,785	63,590	28,569
Engineering	15,596,634	9,694,378	891,234	3,031,767	1,184,067	407,915	387,273
Aerospace, aeronautical, and astronautical engineering	1,647,191	1,246,002	30,324	163,156	177,612	4,019	26,078
Bioengineering and biomedical engineering	1,726,307	1,100,258	52,882	373,311	67,913	101,641	30,302
Chemical engineering	1,108,245	646,644	41,255	251,281	99,665	44,709	24,691
Civil engineering	1,647,038	784,286	275,882	408,958	89,415	47,997	40,500
Electrical, electronic, and communications engineering	3,436,892	2,484,203	97,370	507,452	205,336	79,674	62,857

TABLE 13
Higher education R&D expenditures, by source of funds and R&D field: FY 2022

(Dollars in thousands)

Field	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Industrial and manufacturing engineering	615,228	434,246	32,440	98,616	34,350	10,233	5,343
Mechanical engineering	2,062,508	1,409,792	69,034	344,809	164,831	37,558	36,484
Metallurgical and materials engineering	886,681	589,129	27,191	170,574	59,051	18,723	22,013
Engineering nec	2,466,544	999,818	264,856	713,610	285,894	63,361	139,005
Non-S&E	5,857,608	1,490,752	355,136	3,098,457	141,037	586,468	185,758
Business management and business administration	1,081,380	97,962	54,624	794,310	36,627	51,713	46,144
Communication and communications technologies	213,000	42,707	12,276	110,994	5,369	34,284	7,370
Education	1,740,784	783,518	143,117	533,086	39,802	212,572	28,689
Humanities	713,685	68,956	16,674	498,360	13,308	87,590	28,797
Law	358,693	32,391	14,542	208,060	8,970	73,053	21,677
Social work	363,079	181,943	36,805	95,163	5,250	38,758	5,160
Visual and performing arts	224,572	21,188	7,736	171,166	1,220	14,082	9,180
Non-S&E nec	1,162,415	262,087	69,362	687,318	30,491	74,416	38,741

nec = not elsewhere classified; S&E = science and engineering.

Note(s):

This table includes only institutions reporting \$1 million or more in total R&D expenditures in 2021. Institutions reporting less than \$1 million in total R&D expenditures in 2021 completed a shorter version of the survey form in FY 2022, and that form did not collect R&D expenditures by source and detailed field. For R&D expenditures by major field at institutions completing the shorter version of the survey, see [table 83](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 14

Federally financed higher education R&D expenditures, by federal agency and R&D field: FY 2022

(Dollars in thousands)

Field	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
All R&D fields	53,971,468	7,978,816	2,488,278	30,288,941	2,044,072	6,035,698	1,500,988	3,634,675
Science	42,786,338	3,785,848	1,405,523	28,721,809	1,372,761	4,174,626	1,364,342	1,961,429
Computer and information sciences	2,184,767	1,008,407	67,103	181,941	27,517	760,906	13,291	125,602
Geosciences, atmospheric sciences, and ocean sciences	2,478,702	265,345	131,608	77,148	525,426	793,092	35,995	650,088
Atmospheric science and meteorology	528,068	67,762	26,741	3,330	167,338	91,734	2,732	168,431
Geological and earth sciences	875,493	72,031	82,687	5,097	252,146	302,735	17,249	143,548
Ocean sciences and marine sciences	785,545	113,841	11,820	13,600	75,047	338,708	2,982	229,547
Geosciences, atmospheric sciences, and ocean sciences nec	289,596	11,711	10,360	55,121	30,895	59,915	13,032	108,562
Life sciences	30,958,717	1,398,169	252,351	26,479,262	89,305	851,067	1,212,975	675,588
Agricultural sciences	1,265,977	17,689	45,362	160,253	8,354	82,090	834,540	117,689
Biological and biomedical sciences	10,949,628	429,447	131,060	9,384,542	29,338	606,171	206,407	162,663
Health sciences	17,494,324	829,525	22,369	16,246,165	38,098	79,904	35,362	242,901
Natural resources and conservation	480,042	100,595	47,349	21,847	11,437	59,292	115,013	124,509
Life sciences nec	768,746	20,913	6,211	666,455	2,078	23,610	21,653	27,826
Mathematics and statistics	537,322	172,278	11,593	72,368	20,385	225,434	8,437	26,827
Physical sciences	4,212,405	688,996	896,963	678,686	673,259	1,164,641	10,243	99,617
Astronomy and astrophysics	581,652	20,525	15,965	4,109	411,440	125,536	85	3,992
Chemistry	1,322,328	140,461	179,357	577,302	19,043	379,718	3,604	22,843
Materials science	195,404	74,913	39,015	12,198	2,774	57,255	1,870	7,379
Physics	1,941,833	416,045	632,939	66,674	221,662	554,042	1,234	49,237
Physical sciences nec	171,188	37,052	29,687	18,403	18,340	48,090	3,450	16,166
Psychology	875,330	58,674	705	644,047	16,575	81,415	2,508	71,406
Social sciences	1,075,470	82,686	14,712	461,238	15,289	161,171	73,069	267,305
Anthropology	40,119	4,662	1,174	3,793	155	19,038	1,455	9,842
Economics	194,381	7,532	7,673	56,451	207	27,780	52,137	42,601
Political science and government	95,363	15,601	2,027	21,043	325	21,143	1,027	34,197
Sociology, demography, and population studies	272,683	15,063	180	152,863	535	35,695	7,302	61,045
Social sciences nec	472,924	39,828	3,658	227,088	14,067	57,515	11,148	119,620
Sciences nec	463,625	111,293	30,488	127,119	5,005	136,900	7,824	44,996
Engineering	9,694,378	4,116,469	1,074,222	1,191,971	660,630	1,523,416	87,560	1,040,110
Aerospace, aeronautical, and astronautical engineering	1,246,002	773,665	26,489	5,555	242,020	44,609	514	153,150
Bioengineering and biomedical engineering	1,100,258	167,990	23,283	725,852	11,752	110,187	22,919	38,275
Chemical engineering	646,644	116,252	183,834	98,261	12,884	168,647	8,292	58,474
Civil engineering	784,286	105,555	106,673	43,260	19,105	172,993	13,041	323,659
Electrical, electronic, and communications engineering	2,484,203	1,428,526	181,846	106,018	153,971	463,298	5,840	144,704
Industrial and manufacturing engineering	434,246	278,026	23,305	10,205	28,632	46,025	1,826	46,227

TABLE 14

Federally financed higher education R&D expenditures, by federal agency and R&D field: FY 2022

(Dollars in thousands)

Field	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
Mechanical engineering	1,409,792	660,149	185,887	92,246	116,094	241,401	7,544	106,471
Metallurgical and materials engineering	589,129	280,933	133,194	25,815	16,763	105,492	1,118	25,814
Engineering nec	999,818	305,373	209,711	84,759	59,409	170,764	26,466	143,336
Non-S&E	1,490,752	76,499	8,533	375,161	10,681	337,656	49,086	633,136
Business management and business administration	97,962	13,722	1,668	8,763	200	18,032	6,153	49,424
Communication and communications technologies	42,707	4,649	1,111	15,329	681	11,924	525	8,488
Education	783,518	16,679	1,356	104,154	7,222	236,173	9,080	408,854
Humanities	68,956	6,491	665	16,792	23	13,092	297	31,596
Law	32,391	240	109	7,471	1	2,310	495	21,765
Social work	181,943	1,029	3	165,978	3	1,311	931	12,688
Visual and performing arts	21,188	958	106	4,921	242	3,770	476	10,715
Non-S&E nec	262,087	32,731	3,515	51,753	2,309	51,044	31,129	89,606

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NSF = National Science Foundation; nec = not elsewhere classified; S&E = science and engineering; USDA = Department of Agriculture.

^a Includes all other agencies reported.

Note(s):

This table includes only institutions reporting \$1 million or more in total R&D expenditures in 2021. Institutions reporting less than \$1 million in total R&D expenditures in 2021 completed a shorter version of the survey form in FY 2022, and that form did not collect federally financed R&D expenditures by source and detailed field. For federally financed R&D expenditures by major field at institutions completing the shorter version of the survey, see [table 84](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 15
Higher education R&D expenditures from foreign sources, by highest degree granted and institutional control: FYs 2010–22 and by source of foreign funds for FYs 2016–22

(Dollars in thousands)

Source of foreign funds, highest degree granted, and institutional control	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All institutions													
All foreign funds	642,858	719,255	797,787	979,476	1,003,537	1,065,671	1,184,830	1,220,847	1,254,413	1,273,195	1,308,535	1,344,476	1,479,275
Foreign government	na	na	na	na	na	na	170,704	177,391	254,788	279,610	303,249	294,413	309,062
Business	na	na	na	na	na	na	488,986	511,627	543,767	571,130	622,550	652,622	708,214
Nonprofit organizations	na	na	na	na	na	na	302,809	320,919	275,129	276,275	251,251	265,517	333,327
Higher education institutions	na	na	na	na	na	na	114,508	112,391	116,199	110,744	108,802	107,830	101,329
All other sources	na	na	na	na	na	na	107,823	98,519	64,530	35,436	22,683	24,094	27,343
Doctorate													
All foreign funds	640,490	715,437	795,057	975,436	999,123	1,060,276	1,171,157	1,216,291	1,247,904	1,268,633	1,302,997	1,339,869	1,474,884
Foreign government	na	na	na	na	na	na	168,903	177,001	254,237	279,180	303,025	294,290	308,038
Business	na	na	na	na	na	na	479,482	509,167	540,444	569,435	620,027	650,322	707,513
Nonprofit organizations	na	na	na	na	na	na	302,156	320,365	274,467	275,371	249,683	264,118	331,705
Higher education institutions	na	na	na	na	na	na	114,023	112,050	115,342	109,778	108,087	107,622	101,119
All other sources	na	na	na	na	na	na	106,593	97,708	63,414	34,869	22,175	23,517	26,509
Nondoctorate													
All foreign funds	2,368	3,818	2,730	4,040	4,414	5,395	13,673	4,556	6,509	4,562	5,538	4,607	4,391
Foreign government	na	na	na	na	na	na	1,801	390	551	430	224	123	1,024
Business	na	na	na	na	na	na	9,504	2,460	3,323	1,695	2,523	2,300	701
Nonprofit organizations	na	na	na	na	na	na	653	554	662	904	1,568	1,399	1,622
Higher education institutions	na	na	na	na	na	na	485	341	857	966	715	208	210
All other sources	na	na	na	na	na	na	1,230	811	1,116	567	508	577	834
Public													
All foreign funds	381,519	418,115	437,190	493,577	518,759	528,668	546,467	565,881	594,110	597,565	625,204	649,479	713,501
Foreign government	na	na	na	na	na	na	57,063	51,148	116,685	89,357	77,892	64,918	65,429
Business	na	na	na	na	na	na	265,472	263,553	277,914	308,206	355,650	380,291	431,545
Nonprofit organizations	na	na	na	na	na	na	153,363	174,841	120,184	121,217	113,527	126,355	141,098
Higher education institutions	na	na	na	na	na	na	51,123	56,765	60,290	61,045	64,312	65,254	61,152
All other sources	na	na	na	na	na	na	19,446	19,574	19,037	17,740	13,823	12,661	14,277
Private													
All foreign funds	261,339	301,140	360,597	485,899	484,778	537,003	638,363	654,966	660,303	675,630	683,331	694,997	765,774
Foreign government	na	na	na	na	na	na	113,641	126,243	138,103	190,253	225,357	229,495	243,633
Business	na	na	na	na	na	na	223,514	248,074	265,853	262,924	266,900	272,331	276,669
Nonprofit organizations	na	na	na	na	na	na	149,446	146,078	154,945	155,058	137,724	139,162	192,229
Higher education institutions	na	na	na	na	na	na	63,385	55,626	55,909	49,699	44,490	42,576	40,177
All other sources	na	na	na	na	na	na	88,377	78,945	45,493	17,696	8,860	11,433	13,066

na = not applicable; separate data for source of foreign funds were not collected for these years.

Note(s):

Prior to FY 2016, only total R&D expenditures from foreign sources was collected. Beginning in FY 2016, institutions were asked for the source of foreign funding.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 16

Externally funded higher education R&D expenditures, by highest degree granted, institutional control, and type of agreement: FYs 2010–22

(Dollars in thousands)

Type of agreement, highest degree granted, and institutional control	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All institutions													
All externally funded R&D	49,344,078	52,694,073	52,141,609	52,076,758	51,463,714	51,957,808	53,865,547	56,299,144	58,845,854	62,417,157	64,312,784	67,252,206	73,187,865
Contracts	10,771,669	11,013,679	11,368,460	11,538,086	11,549,308	12,025,452	12,166,808	12,836,111	13,421,804	14,504,663	15,378,562	16,034,505	17,403,926
Grants, reimbursements, and all other agreements	38,572,409	41,680,394	40,773,149	40,538,672	39,914,406	39,932,356	41,698,739	43,463,033	45,424,050	47,912,494	48,934,222	51,217,701	55,783,939
Doctorate													
All externally funded R&D	48,504,214	51,725,752	51,314,264	51,439,912	50,881,747	51,452,527	53,027,143	55,772,958	58,347,330	61,911,307	63,807,737	66,729,210	72,583,022
Contracts	10,607,924	10,830,416	11,224,244	11,441,480	11,458,319	11,959,505	11,996,943	12,779,515	13,364,674	14,431,481	15,300,227	15,962,862	17,322,055
Grants, reimbursements, and all other agreements	37,896,290	40,895,336	40,090,020	39,998,432	39,423,428	39,493,022	41,030,200	42,993,443	44,982,656	47,479,826	48,507,510	50,766,348	55,260,967
Nondoctorate													
All externally funded R&D	839,864	968,321	827,345	636,846	581,967	505,281	838,404	526,186	498,524	505,850	505,047	522,996	604,843
Contracts	163,745	183,263	144,216	96,606	90,989	65,947	169,865	56,596	57,130	73,182	78,335	71,643	81,871
Grants, reimbursements, and all other agreements	676,119	785,058	683,129	540,240	490,978	439,334	668,539	469,590	441,394	432,668	426,712	451,353	522,972
Public													
All externally funded R&D	31,934,135	34,048,019	33,752,723	33,705,035	33,067,468	33,292,859	34,453,166	35,917,977	37,546,488	39,665,446	41,017,289	42,611,551	46,343,999
Contracts	7,153,099	7,274,860	7,507,054	7,835,919	7,697,443	7,963,143	7,936,739	8,363,518	8,876,201	9,547,486	10,126,248	10,357,765	11,158,164
Grants, reimbursements, and all other agreements	24,781,036	26,773,159	26,245,669	25,869,116	25,370,025	25,329,716	26,516,427	27,554,459	28,670,287	30,117,960	30,891,041	32,253,786	35,185,835
Private													
All externally funded R&D	17,409,943	18,646,054	18,388,886	18,371,723	18,396,246	18,664,949	19,412,381	20,381,167	21,299,366	22,751,711	23,295,495	24,640,655	26,843,866
Contracts	3,618,570	3,738,819	3,861,406	3,702,167	3,851,865	4,062,309	4,230,069	4,472,593	4,545,603	4,957,177	5,252,314	5,676,740	6,245,762
Grants, reimbursements, and all other agreements	13,791,373	14,907,235	14,527,480	14,669,556	14,544,381	14,602,640	15,182,312	15,908,574	16,753,763	17,794,534	18,043,181	18,963,915	20,598,104

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 17

Higher education R&D expenditures, by type of cost, highest degree granted, and institutional control: FYs 2010–22

(Dollars in thousands)

Type of cost, highest degree granted, and institutional control	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All institutions													
All R&D	61,286,610	65,274,393	65,729,007	66,977,566	67,161,428	68,519,962	71,736,671	75,148,301	79,024,262	83,488,120	86,302,262	89,694,837	97,680,528
Direct costs	46,159,649	49,311,567	49,897,854	51,053,891	51,526,977	52,582,354	55,249,769	57,935,944	60,776,661	64,346,077	66,527,478	69,158,330	75,399,863
Salaries, wages, and fringe benefits	25,929,799	27,860,610	28,339,070	28,776,405	29,091,522	29,873,561	31,434,222	33,231,352	34,675,304	36,566,229	38,727,777	40,336,580	43,076,988
Software	105,970	116,422	103,456	107,685	96,517	117,007	113,550	109,645	121,855	136,490	158,550	173,026	192,819
Noncapitalized software	88,456	98,438	93,250	95,652	84,275	93,204	95,162	98,620	110,792	120,936	144,292	158,542	178,059
Capitalized software	17,514	17,984	10,206	12,033	12,242	23,803	18,388	11,025	11,063	15,554	14,258	14,484	14,760
Capitalized equipment	2,148,421	2,256,025	2,040,534	2,254,429	2,036,407	2,119,877	2,169,442	2,193,909	2,148,636	2,439,825	2,588,968	2,662,636	2,700,652
Passed through to subrecipients	4,956,929	5,436,850	5,531,421	5,689,087	5,702,930	5,633,803	5,696,733	5,915,059	6,315,464	6,716,582	7,049,955	7,575,028	8,521,194
Other direct costs	13,018,530	13,641,660	13,883,373	14,226,285	14,599,601	14,838,106	15,835,822	16,485,979	17,515,402	18,486,951	18,002,228	18,411,060	20,908,210
Indirect costs	15,126,961	15,962,826	15,831,153	15,923,675	15,634,451	15,937,608	16,486,902	17,212,357	18,247,601	19,142,043	19,774,784	20,536,507	22,280,665
Recovered	10,465,893	11,352,339	11,221,624	11,220,177	10,873,913	11,100,901	11,452,832	12,022,230	12,745,675	13,608,339	14,036,848	14,660,672	16,106,829
Unrecovered	4,661,068	4,610,487	4,609,529	4,703,498	4,760,538	4,836,707	5,034,070	5,190,127	5,501,926	5,533,704	5,737,936	5,875,835	6,173,836
Doctorate													
All R&D	60,266,691	64,064,133	64,700,201	66,182,145	66,410,192	67,860,286	70,686,976	74,441,469	78,355,175	82,803,180	85,612,361	89,019,187	96,904,532
Direct costs	45,266,156	48,282,499	49,022,847	50,363,045	50,877,837	52,011,214	54,331,813	57,313,686	60,194,963	63,754,476	65,934,226	68,578,475	74,740,013
Salaries, wages, and fringe benefits	25,494,721	27,357,645	27,906,910	28,436,384	28,757,955	29,582,809	31,084,409	32,913,285	34,363,810	36,256,830	38,415,945	40,014,704	42,728,472
Software	98,119	110,285	95,627	102,523	91,341	111,641	108,663	107,221	119,961	134,750	156,205	169,166	188,700
Noncapitalized software	80,940	92,808	86,115	90,658	79,637	88,076	90,566	96,577	109,039	119,350	142,274	155,046	174,038
Capitalized software	17,179	17,477	9,512	11,865	11,704	23,565	18,097	10,644	10,922	15,400	13,931	14,120	14,662
Capitalized equipment	2,086,956	2,192,296	1,995,345	2,219,549	2,011,006	2,095,655	2,039,239	2,166,648	2,124,728	2,418,345	2,565,758	2,634,376	2,667,942
Passed through to subrecipients	4,901,412	5,371,178	5,469,627	5,647,933	5,663,448	5,609,183	5,659,155	5,883,733	6,285,962	6,688,436	7,022,404	7,546,959	8,486,741
Other direct costs	12,684,948	13,251,095	13,555,338	13,956,656	14,354,087	14,611,926	15,440,347	16,242,799	17,300,502	18,256,115	17,773,914	18,213,270	20,668,158
Indirect costs	15,000,535	15,781,634	15,677,354	15,819,100	15,532,355	15,849,072	16,355,163	17,127,783	18,160,212	19,048,704	19,678,135	20,440,712	22,164,519
Recovered	10,382,463	11,236,113	11,125,166	11,147,825	10,808,902	11,040,966	11,384,161	11,966,405	12,686,045	13,547,482	13,974,266	14,596,935	16,029,029
Unrecovered	4,618,072	4,545,521	4,552,188	4,671,275	4,723,453	4,808,106	4,971,002	5,161,378	5,474,167	5,501,222	5,703,869	5,843,777	6,135,490
Nondoctorate													
All R&D	1,019,919	1,210,260	1,028,806	795,421	751,236	659,676	1,049,695	706,832	669,087	684,940	689,901	675,650	775,996
Direct costs	893,493	1,029,068	875,007	690,846	649,140	571,140	917,956	622,258	581,698	591,601	593,252	579,855	659,850
Salaries, wages, and fringe benefits	435,078	502,965	432,160	340,021	333,567	290,752	349,813	318,067	311,494	309,399	311,832	321,876	348,516
Software	7,851	6,137	7,829	5,162	5,176	5,366	4,887	2,424	1,894	1,740	2,345	3,860	4,119
Noncapitalized software	7,516	5,630	7,135	4,994	4,638	5,128	4,596	2,043	1,753	1,586	2,018	3,496	4,021
Capitalized software	335	507	694	168	538	238	291	381	141	154	327	364	98
Capitalized equipment	61,465	63,729	45,189	34,880	25,401	24,222	130,203	27,261	23,908	21,480	23,210	28,260	32,710
Passed through to subrecipients	55,517	65,672	61,794	41,154	39,482	24,620	37,578	31,326	29,502	28,146	27,551	28,069	34,453
Other direct costs	333,582	390,565	328,035	269,629	245,514	226,180	395,475	243,180	214,900	230,836	228,314	197,790	240,052

TABLE 17

Higher education R&D expenditures, by type of cost, highest degree granted, and institutional control: FYs 2010–22

(Dollars in thousands)

Type of cost, highest degree granted, and institutional control	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Indirect costs	126,426	181,192	153,799	104,575	102,096	88,536	131,739	84,574	87,389	93,339	96,649	95,795	116,146
Recovered	83,430	116,226	96,458	72,352	65,011	59,935	68,671	55,825	59,630	60,857	62,582	63,737	77,800
Unrecovered	42,996	64,966	57,341	32,223	37,085	28,601	63,068	28,749	27,759	32,482	34,067	32,058	38,346
Public													
All R&D	41,266,626	43,915,960	44,162,595	44,814,125	44,640,610	45,382,410	47,074,583	49,257,662	51,890,982	54,655,748	56,635,979	58,649,721	63,712,945
Direct costs	31,705,979	33,922,562	34,339,324	34,970,423	34,982,571	35,611,429	36,936,818	38,696,275	40,643,826	42,882,690	44,471,946	45,998,532	49,992,597
Salaries, wages, and fringe benefits	18,317,189	19,636,095	19,949,722	20,205,730	20,413,042	20,779,313	21,724,959	22,901,546	23,752,695	25,069,371	26,482,248	27,543,343	29,241,340
Software	82,340	96,499	83,509	85,149	74,459	92,877	89,420	81,618	94,259	103,470	121,019	139,455	149,318
Noncapitalized software	69,454	80,693	74,897	76,518	65,040	74,445	74,083	73,831	85,049	92,390	111,925	127,416	138,924
Capitalized software	12,886	15,806	8,612	8,631	9,419	18,432	15,337	7,787	9,210	11,080	9,094	12,039	10,394
Capitalized equipment	1,457,694	1,555,049	1,476,328	1,655,640	1,468,659	1,508,998	1,578,490	1,554,190	1,522,210	1,744,709	1,924,757	1,939,067	1,980,284
Passed through to subrecipients	3,065,688	3,418,705	3,502,384	3,608,137	3,558,959	3,541,642	3,520,318	3,662,377	3,917,036	4,149,921	4,385,098	4,598,205	5,143,769
Other direct costs	8,783,068	9,216,214	9,327,381	9,415,767	9,467,452	9,688,599	10,023,631	10,496,544	11,357,626	11,815,219	11,558,824	11,778,462	13,477,886
Indirect costs	9,560,647	9,993,398	9,823,271	9,843,702	9,658,039	9,770,981	10,137,765	10,561,387	11,247,156	11,773,058	12,164,033	12,651,189	13,720,348
Recovered	6,175,654	6,585,483	6,554,816	6,539,581	6,339,755	6,409,794	6,622,242	6,946,564	7,365,362	7,916,768	8,106,698	8,507,761	9,337,481
Unrecovered	3,384,993	3,407,915	3,268,455	3,304,121	3,318,284	3,361,187	3,515,523	3,614,823	3,881,794	3,856,290	4,057,335	4,143,428	4,382,867
Private													
All R&D	20,019,984	21,358,433	21,566,412	22,163,441	22,520,818	23,137,552	24,662,088	25,890,639	27,133,280	28,832,372	29,666,283	31,045,116	33,967,583
Direct costs	14,453,670	15,389,005	15,558,530	16,083,468	16,544,406	16,970,925	18,312,951	19,239,669	20,132,835	21,463,387	22,055,532	23,159,798	25,407,266
Salaries, wages, and fringe benefits	7,612,610	8,224,515	8,389,348	8,570,675	8,678,480	9,094,248	9,709,263	10,329,806	10,922,609	11,496,858	12,245,529	12,793,237	13,835,648
Software	23,630	19,923	19,947	22,536	22,058	24,130	24,130	28,027	27,596	33,020	37,531	33,571	43,501
Noncapitalized software	19,002	17,745	18,353	19,134	19,235	18,759	21,079	24,789	25,743	28,546	32,367	31,126	39,135
Capitalized software	4,628	2,178	1,594	3,402	2,823	5,371	3,051	3,238	1,853	4,474	5,164	2,445	4,366
Capitalized equipment	690,727	700,976	564,206	598,789	567,748	610,879	590,952	639,719	626,426	695,116	664,211	723,569	720,368
Passed through to subrecipients	1,891,241	2,018,145	2,029,037	2,080,950	2,143,971	2,092,161	2,176,415	2,252,682	2,398,428	2,566,661	2,664,857	2,976,823	3,377,425
Other direct costs	4,235,462	4,425,446	4,555,992	4,810,518	5,132,149	5,149,507	5,812,191	5,989,435	6,157,776	6,671,732	6,443,404	6,632,598	7,430,324
Indirect costs	5,566,314	5,969,428	6,007,882	6,079,973	5,976,412	6,166,627	6,349,137	6,650,970	7,000,445	7,368,985	7,610,751	7,885,318	8,560,317
Recovered	4,290,239	4,766,856	4,666,808	4,680,596	4,534,158	4,691,107	4,830,590	5,075,666	5,380,313	5,691,571	5,930,150	6,152,911	6,769,348
Unrecovered	1,276,075	1,202,572	1,341,074	1,399,377	1,442,254	1,475,520	1,518,547	1,575,304	1,620,132	1,677,414	1,680,601	1,732,407	1,790,969

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 18

Higher education R&D expenditures for equipment, by R&D field, source of funds, and institutional control: FY 2022

(Dollars in thousands)

Field	All expenditures			Federal			Nonfederal		
	Total	Public	Private	Total	Public	Private	Total	Public	Private
All R&D fields	2,700,652	1,980,284	720,368	1,336,692	955,690	381,002	1,363,960	1,024,594	339,366
Science	1,844,183	1,320,322	523,861	886,412	609,492	276,920	957,771	710,830	246,941
Computer and information sciences	136,868	96,925	39,943	78,813	56,021	22,792	58,055	40,904	17,151
Geosciences, atmospheric sciences, and ocean sciences	136,651	115,844	20,807	85,617	77,688	7,929	51,034	38,156	12,878
Atmospheric science and meteorology	23,944	21,484	2,460	18,413	16,938	1,475	5,531	4,546	985
Geological and earth sciences	47,613	33,753	13,860	22,360	17,824	4,536	25,253	15,929	9,324
Ocean sciences and marine sciences	52,689	49,204	3,485	36,435	35,046	1,389	16,254	14,158	2,096
Geosciences, atmospheric sciences, and ocean sciences nec	12,405	11,403	1,002	8,409	7,880	529	3,996	3,523	473
Life sciences	1,056,808	771,516	285,292	429,317	282,512	146,805	627,491	489,004	138,487
Agricultural sciences	120,530	117,922	2,608	33,636	32,829	807	86,894	85,093	1,801
Biological and biomedical sciences	485,746	313,990	171,756	231,374	146,206	85,168	254,372	167,784	86,588
Health sciences	408,455	306,476	101,979	149,025	92,094	56,931	259,430	214,382	45,048
Natural resources and conservation	13,797	13,349	448	5,278	5,085	193	8,519	8,264	255
Life sciences nec	28,280	19,779	8,501	10,004	6,298	3,706	18,276	13,481	4,795
Mathematics and statistics	10,648	5,407	5,241	5,277	3,473	1,804	5,371	1,934	3,437
Physical sciences	408,769	262,534	146,235	262,166	170,562	91,604	146,603	91,972	54,631
Astronomy and astrophysics	27,500	18,568	8,932	17,656	11,165	6,491	9,844	7,403	2,441
Chemistry	139,819	92,354	47,465	78,071	50,950	27,121	61,748	41,404	20,344
Materials science	22,064	14,493	7,571	16,928	11,380	5,548	5,136	3,113	2,023
Physics	198,354	127,429	70,925	136,324	91,056	45,268	62,030	36,373	25,657
Physical sciences nec	21,032	9,690	11,342	13,187	6,011	7,176	7,845	3,679	4,166
Psychology	14,616	9,652	4,964	6,886	3,872	3,014	7,730	5,780	1,950
Social sciences	21,001	14,438	6,563	6,247	4,801	1,446	14,754	9,637	5,117
Anthropology	2,944	2,463	481	308	172	136	2,636	2,291	345
Economics	2,346	1,578	768	1,191	721	470	1,155	857	298
Political science and government	1,640	1,509	131	740	739	1	900	770	130
Sociology, demography, and population studies	1,882	1,637	245	263	200	63	1,619	1,437	182
Social sciences nec	12,189	7,251	4,938	3,745	2,969	776	8,444	4,282	4,162
Sciences nec	58,822	44,006	14,816	12,089	10,563	1,526	46,733	33,443	13,290
Engineering	802,784	618,607	184,177	440,036	338,669	101,367	362,748	279,938	82,810
Aerospace, aeronautical, and astronautical engineering	72,887	61,707	11,180	48,599	44,387	4,212	24,288	17,320	6,968
Bioengineering and biomedical engineering	67,216	39,963	27,253	33,218	17,512	15,706	33,998	22,451	11,547
Chemical engineering	62,492	48,318	14,174	33,584	23,924	9,660	28,908	24,394	4,514
Civil engineering	48,545	41,022	7,523	24,667	21,104	3,563	23,878	19,918	3,960
Electrical, electronic, and communications engineering	181,826	135,778	46,048	124,371	103,585	20,786	57,455	32,193	25,262

TABLE 18

Higher education R&D expenditures for equipment, by R&D field, source of funds, and institutional control: FY 2022

(Dollars in thousands)

Field	All expenditures			Federal			Nonfederal		
	Total	Public	Private	Total	Public	Private	Total	Public	Private
Industrial and manufacturing engineering	26,538	16,604	9,934	16,102	9,792	6,310	10,436	6,812	3,624
Mechanical engineering	100,619	71,751	28,868	62,624	48,720	13,904	37,995	23,031	14,964
Metallurgical and materials engineering	66,604	47,301	19,303	43,734	29,520	14,214	22,870	17,781	5,089
Engineering nec	176,057	156,163	19,894	53,137	40,125	13,012	122,920	116,038	6,882
Non-S&E	53,685	41,355	12,330	10,244	7,529	2,715	43,441	33,826	9,615
Business management and business administration	8,885	6,461	2,424	916	903	13	7,969	5,558	2,411
Communication and communications technologies	4,102	3,328	774	900	140	760	3,202	3,188	14
Education	4,331	3,096	1,235	1,294	1,038	256	3,037	2,058	979
Humanities	3,092	1,610	1,482	237	224	13	2,855	1,386	1,469
Law	779	517	262	110	109	1	669	408	261
Social work	530	452	78	160	96	64	370	356	14
Visual and performing arts	2,563	1,688	875	99	49	50	2,464	1,639	825
Non-S&E nec	29,403	24,203	5,200	6,528	4,970	1,558	22,875	19,233	3,642

nec = not elsewhere classified; S&E = science and engineering.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 19

Total R&D expenditures within medical schools, by institutional control: FYs 2010–22

(Dollars in thousands)

Number, medical school status, highest degree granted, and institutional control	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All institutions													
Number of institutions with medical schools	141	144	145	146	150	152	157	155	156	159	160	160	158
All R&D	40,380,697	42,941,206	43,056,379	44,826,210	46,138,811	47,372,130	49,965,703	52,568,534	55,515,110	60,549,529	62,485,784	65,070,863	70,503,270
Medical school R&D	21,437,682	23,215,960	22,885,999	22,716,092	22,867,301	23,550,033	24,764,109	26,282,480	27,849,424	29,906,763	30,849,038	33,120,326	35,944,348
Doctorate													
Number of institutions with medical schools	131	130	135	137	140	142	144	144	147	152	154	154	152
All R&D	40,333,614	42,835,538	42,957,410	44,780,213	46,085,337	47,326,040	49,878,276	52,496,944	55,458,527	60,498,790	62,436,517	65,020,742	70,445,935
Medical school R&D	21,419,712	23,174,106	22,844,442	22,695,488	22,847,813	23,531,182	24,714,792	26,245,661	27,819,236	29,879,611	30,822,412	33,094,404	35,915,655
Nondoctorate													
Number of institutions with medical schools	10	14	10	9	10	10	13	11	9	7	6	6	6
All R&D	47,083	105,668	98,969	45,997	53,474	46,090	87,427	71,590	56,583	50,739	49,267	50,121	57,335
Medical school R&D	17,970	41,854	41,557	20,604	19,488	18,851	49,317	36,819	30,188	27,152	26,626	25,922	28,693
Public													
Number of institutions with medical schools	83	84	85	86	89	91	94	94	94	99	100	100	100
All R&D	24,313,348	25,927,387	25,938,222	27,210,089	28,237,378	28,969,948	30,259,622	31,838,522	33,691,595	37,359,453	38,614,534	39,963,419	42,952,714
Medical school R&D	11,684,912	12,678,932	12,375,216	12,419,947	12,416,501	12,785,042	13,172,552	13,964,235	15,001,469	16,178,180	16,796,108	17,975,229	19,335,012
Private													
Number of institutions with medical schools	58	60	60	60	61	61	63	61	62	60	60	60	58
All R&D	16,067,349	17,013,819	17,118,157	17,616,121	17,901,433	18,402,182	19,706,081	20,730,012	21,823,515	23,190,076	23,871,250	25,107,444	27,550,556
Medical school R&D	9,752,770	10,537,028	10,510,783	10,296,145	10,450,800	10,764,991	11,591,557	12,318,245	12,847,955	13,728,583	14,052,930	15,145,097	16,609,336

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 20

Higher education R&D expenditures for clinical trials, by source of funds, highest degree granted, and institutional control: FYs 2010–22

(Dollars in thousands)

Number, source of funds, highest degree granted, and institutional control	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All institutions													
Number of institutions with clinical trials R&D	173	178	166	168	175	177	173	180	179	190	189	194	195
All R&D	43,587,067	46,154,058	46,182,393	47,418,917	48,723,966	50,430,594	52,864,519	56,008,482	60,122,411	64,855,950	66,902,937	69,659,572	76,975,963
All clinical trials R&D	1,714,192	1,794,605	1,873,001	1,965,214	2,202,132	2,340,220	2,587,395	2,852,132	3,180,148	3,353,337	3,424,231	3,691,698	4,142,673
Federal R&D	27,502,023	29,715,665	28,976,410	28,789,379	28,198,218	28,177,539	29,009,441	30,367,880	31,974,883	34,781,483	36,094,442	38,583,025	42,963,506
Federal clinical trials R&D	705,908	827,470	851,445	934,697	978,436	1,023,680	1,069,439	1,128,365	1,248,313	1,417,236	1,433,080	1,726,712	1,892,665
Nonfederal R&D	16,085,044	16,438,393	17,205,983	18,629,538	20,525,748	22,253,055	23,855,078	25,640,602	28,147,528	30,074,467	30,808,495	31,076,547	34,012,457
Nonfederal clinical trials R&D	1,008,284	967,135	1,021,556	1,030,517	1,223,696	1,316,540	1,517,956	1,723,767	1,931,835	1,936,101	1,991,151	1,964,986	2,250,008
Doctorate													
Number of institutions with clinical trials R&D	147	150	150	153	158	162	158	166	167	177	179	181	183
All R&D	43,531,732	46,058,907	46,080,033	47,361,367	48,665,453	50,369,223	52,788,285	55,935,168	60,065,299	64,779,841	66,833,097	69,540,915	76,841,870
All clinical trials R&D	1,707,121	1,785,054	1,864,766	1,957,251	2,192,744	2,333,744	2,580,786	2,847,006	3,176,169	3,349,337	3,419,355	3,684,688	4,136,504
Federal R&D	27,465,906	29,664,114	28,918,557	28,753,249	28,169,821	28,149,627	28,979,577	30,339,888	31,948,946	34,749,034	36,069,100	38,534,189	42,907,174
Federal clinical trials R&D	701,140	820,906	844,494	927,428	970,563	1,018,512	1,064,609	1,123,993	1,245,075	1,414,153	1,429,637	1,721,223	1,887,904
Nonfederal R&D	16,065,826	16,394,793	17,161,476	18,608,118	20,495,632	22,219,596	23,808,708	25,595,280	28,116,353	30,030,807	30,763,997	31,006,726	33,934,696
Nonfederal clinical trials R&D	1,005,981	964,148	1,020,272	1,029,823	1,222,181	1,315,232	1,516,177	1,723,013	1,931,094	1,935,184	1,989,718	1,963,465	2,248,600
Nondoctorate													
Number of institutions with clinical trials R&D	26	28	16	15	17	15	15	14	12	13	10	13	12
All R&D	55,335	95,151	102,360	57,550	58,513	61,371	76,234	73,314	57,112	76,109	69,840	118,657	134,093
All clinical trials R&D	7,071	9,551	8,235	7,963	9,388	6,476	6,609	5,126	3,979	4,000	4,876	7,010	6,169
Federal R&D	36,117	51,551	57,853	36,130	28,397	27,912	29,864	27,992	25,937	32,449	25,342	48,836	56,332
Federal clinical trials R&D	4,768	6,564	6,951	7,269	7,873	5,168	4,830	4,372	3,238	3,083	3,443	5,489	4,761
Nonfederal R&D	19,218	43,600	44,507	21,420	30,116	33,459	46,370	45,322	31,175	43,660	44,498	69,821	77,761
Nonfederal clinical trials R&D	2,303	2,987	1,284	694	1,515	1,308	1,779	754	741	917	1,433	1,521	1,408
Public													
Number of institutions with clinical trials R&D	100	101	96	99	105	110	106	110	113	123	123	124	123
All R&D	27,143,937	29,081,518	28,993,617	29,729,578	30,628,443	31,888,357	33,093,010	34,885,172	37,838,586	40,986,027	42,415,108	43,881,084	48,264,210
All clinical trials R&D	578,615	599,545	633,542	709,484	754,680	802,260	946,784	1,070,209	1,209,865	1,291,224	1,416,674	1,561,088	1,737,704
Federal R&D	15,921,337	17,253,156	16,779,967	16,780,475	16,373,306	16,420,639	16,971,884	17,696,570	18,755,790	20,552,572	21,362,477	22,578,833	25,286,088
Federal clinical trials R&D	162,213	204,202	223,816	244,154	235,678	245,828	262,305	264,682	304,152	387,333	440,614	577,481	642,691
Nonfederal R&D	11,222,600	11,828,362	12,213,650	12,949,103	14,255,137	15,467,718	16,121,126	17,188,602	19,082,796	20,433,455	21,052,631	21,302,251	22,978,122
Nonfederal clinical trials R&D	416,402	395,343	409,726	465,330	519,002	556,432	684,479	805,527	905,713	903,891	976,060	983,607	1,095,013
Private													
Number of institutions with clinical trials R&D	73	77	70	69	70	67	67	70	66	67	66	70	72
All R&D	16,443,130	17,072,540	17,188,776	17,689,339	18,095,523	18,542,237	19,771,509	21,123,310	22,283,825	23,869,923	24,487,829	25,778,488	28,711,753
All clinical trials R&D	1,135,577	1,195,060	1,239,459	1,255,730	1,447,452	1,537,960	1,640,611	1,781,923	1,970,283	2,062,113	2,007,557	2,130,610	2,404,969

TABLE 20

Higher education R&D expenditures for clinical trials, by source of funds, highest degree granted, and institutional control: FYs 2010–22

(Dollars in thousands)

Number, source of funds, highest degree granted, and institutional control	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Federal R&D	11,580,686	12,462,509	12,196,443	12,008,904	11,824,912	11,756,900	12,037,557	12,671,310	13,219,093	14,228,911	14,731,965	16,004,192	17,677,418
Federal clinical trials R&D	543,695	623,268	627,629	690,543	742,758	777,852	807,134	863,683	944,161	1,029,903	992,466	1,149,231	1,249,974
Nonfederal R&D	4,862,444	4,610,031	4,992,333	5,680,435	6,270,611	6,785,337	7,733,952	8,452,000	9,064,732	9,641,012	9,755,864	9,774,296	11,034,335
Nonfederal clinical trials R&D	591,882	571,792	611,830	565,187	704,694	760,108	833,477	918,240	1,026,122	1,032,210	1,015,091	981,379	1,154,995

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All institutions	-	61,286,610	65,274,393	65,729,007	66,977,566	67,161,428	68,519,962	71,736,671	75,148,301	79,024,262	83,488,120	86,302,262	89,694,837	97,680,528
Johns Hopkins U. ^a	1	2,004,482	2,145,308	2,106,185	2,168,568	2,242,478	2,305,679	2,431,180	2,562,307	2,661,033	2,917,436	3,110,494	3,181,385	3,420,312
U. California, San Francisco	2	935,509	995,226	1,032,673	1,042,841	1,084,031	1,126,620	1,294,261	1,409,398	1,595,732	1,595,098	1,651,073	1,710,036	1,805,950
U. Pennsylvania	3	836,322	886,036	847,077	828,422	828,350	864,068	1,296,429	1,374,293	1,441,931	1,506,285	1,579,364	1,631,950	1,791,311
U. Michigan, Ann Arbor	4	1,184,445	1,279,123	1,322,711	1,375,117	1,349,262	1,369,278	1,436,448	1,530,139	1,600,869	1,675,805	1,673,862	1,639,645	1,770,708
U. Washington, Seattle	5	1,022,740	1,148,533	1,109,008	1,192,513	1,176,340	1,180,563	1,277,679	1,348,220	1,413,902	1,425,601	1,456,902	1,488,645	1,559,708
U. California, Los Angeles	6	936,995	982,357	1,003,375	966,659	948,197	1,021,227	1,037,528	1,076,917	1,318,110	1,306,376	1,392,941	1,454,880	1,536,197
U. California, San Diego	7	943,219	1,009,378	1,073,864	1,075,554	1,067,388	1,101,466	1,087,117	1,133,454	1,265,196	1,353,763	1,403,735	1,425,499	1,533,357
U. Wisconsin-Madison	8	1,029,295	1,111,642	1,169,779	1,123,501	1,108,564	1,069,077	1,157,680	1,193,413	1,205,518	1,297,331	1,363,931	1,380,075	1,523,513
Duke U.	9	983,289	1,022,207	1,009,911	992,821	1,036,813	1,036,698	1,055,778	1,126,924	1,167,611	1,226,517	1,196,638	1,237,686	1,390,538
Stanford U.	10	839,839	907,971	903,238	945,450	959,247	1,022,551	1,066,269	1,109,708	1,157,597	1,204,116	1,203,950	1,274,483	1,384,555
Ohio State U.	11	755,194	832,126	766,513	793,373	815,075	817,881	818,464	864,327	875,014	929,250	968,260	1,236,111	1,363,388
U. North Carolina, Chapel Hill	12	755,284	869,174	884,791	973,007	989,766	966,781	1,045,338	1,102,063	1,136,158	1,153,773	1,159,725	1,205,883	1,361,028
Harvard U.	13	583,361	649,774	799,432	1,012,766	933,975	1,013,753	1,077,253	1,123,160	1,173,371	1,239,736	1,239,983	1,254,008	1,308,458
Cornell U.	14	749,721	781,651	802,387	845,184	883,292	954,412	974,199	984,478	1,071,621	1,144,534	1,190,063	1,183,524	1,300,357
New York U.	15	365,944	430,752	458,645	471,909	523,623	602,041	809,739	917,744	887,558	934,720	947,293	1,063,704	1,276,038
U. Pittsburgh, Pittsburgh	16	822,491	899,386	866,638	872,736	856,806	861,205	889,793	939,706	1,006,513	1,080,951	1,105,532	1,135,416	1,251,998
Georgia Institute of Technology	17	615,833	655,375	688,905	730,488	725,550	765,370	790,706	804,301	891,728	960,167	1,048,988	1,114,481	1,231,485
Columbia U. in the City of New York	18	807,235	878,900	889,487	889,188	890,642	868,159	837,312	893,062	947,504	1,003,615	1,032,909	1,098,570	1,230,924
U. Maryland ^b	19	na	na	na	na	na	na	na	na	na	1,096,600	1,103,062	1,142,264	1,228,550
U. Minnesota, Twin Cities	20	786,074	847,419	826,173	858,378	876,870	880,618	910,181	921,681	954,683	1,013,112	1,042,382	1,072,961	1,202,084
Yale U.	21	623,510	656,967	656,555	788,784	772,840	803,004	881,765	951,084	990,399	1,072,309	1,094,135	1,165,148	1,191,201
U. Texas M. D. Anderson Cancer Center	22	599,529	663,279	685,814	718,096	794,980	833,406	852,095	888,029	929,710	969,496	1,051,297	1,124,971	1,182,536
Texas A&M U., College Station and Health Science Center	23	689,624	705,720	693,421	820,015	854,214	866,678	892,718	905,474	922,178	952,156	1,130,803	1,147,720	1,152,666

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Vanderbilt U. and Vanderbilt U. Medical Center	24	504,959	566,031	560,466	571,603	683,890	647,816	640,842	712,036	738,620	776,937	824,803	1,019,273	1,086,223
U. Florida	25	681,548	739,931	696,985	695,063	708,526	739,522	791,294	801,418	865,093	928,639	942,223	959,965	1,085,834
Washington U., Saint Louis	26	695,974	725,039	706,410	684,847	664,752	694,069	741,115	754,462	816,139	887,088	920,215	989,214	1,047,098
U. Southern California	27	592,791	603,294	623,544	645,636	687,222	691,031	702,866	764,322	891,625	909,683	941,198	955,565	1,039,905
Pennsylvania State U., University Park and Hershey Medical Center	28	770,449	794,846	797,679	837,880	800,773	791,031	825,561	854,815	908,708	949,679	991,923	970,544	1,019,940
Northwestern U.	29	575,078	618,980	631,078	639,781	645,333	656,167	713,491	751,809	805,672	857,069	874,671	913,178	1,000,695
Massachusetts Institute of Technology	30	677,138	723,610	824,130	900,524	908,017	930,719	946,159	952,017	964,336	1,009,466	987,968	949,076	989,166
U. California, Berkeley	31	694,049	707,945	730,348	727,002	744,343	788,505	774,255	770,822	796,505	802,931	840,000	846,872	981,035
Emory U.	32	529,453	547,316	565,766	575,943	558,600	585,210	614,527	664,888	712,417	794,928	808,792	852,922	958,281
Icahn School of Medicine at Mount Sinai	33	370,666	405,527	400,680	428,654	463,429	508,353	540,296	575,448	640,141	722,241	747,014	820,260	893,968
U. California, Davis	34	679,915	707,896	713,292	725,734	711,721	721,077	741,892	738,347	788,832	804,282	816,693	817,409	883,807
U. Texas, Austin	35	589,502	632,171	621,538	634,132	585,251	604,376	621,692	652,187	679,781	696,111	797,199	779,348	845,896
Baylor C. of Medicine	36	447,874	466,061	474,700	508,799	496,314	520,220	572,527	604,952	623,396	651,920	685,641	716,976	827,005
U. Arizona	37	586,647	610,565	625,365	629,466	588,088	606,219	604,464	622,200	687,066	734,270	760,975	770,031	824,340
Arizona State U.	38	329,345	355,215	385,959	405,154	426,651	458,412	518,239	545,016	617,717	639,637	673,357	677,303	797,224
U. Illinois, Urbana-Champaign	39	515,133	545,669	583,754	743,487	621,733	639,817	625,180	642,084	652,709	677,523	689,176	731,268	765,909
Michigan State U.	40	431,373	454,248	507,061	515,707	526,906	558,248	613,369	694,917	715,290	725,708	713,197	710,178	759,229
Purdue U., West Lafayette	41	548,980	578,231	602,501	595,739	564,923	558,611	606,302	622,813	631,574	663,927	687,144	679,482	754,627
Indiana U., Bloomington	42	177,520	184,096	184,486	197,897	206,039	485,076	508,766	540,421	566,907	668,157	710,850	695,258	751,309
Boston U.	43	352,817	355,916	334,496	368,281	367,328	388,336	395,921	421,360	484,205	534,205	583,267	652,096	725,402
U. Texas Southwestern Medical Center	44	419,220	431,883	435,085	440,620	434,627	438,824	442,666	461,797	474,260	496,697	595,939	632,134	719,002
U. Alabama, Birmingham	45	489,845	503,698	453,779	440,796	428,563	516,229	537,825	561,851	588,207	607,863	618,226	644,330	713,480

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Rutgers, State U. New Jersey, New Brunswick	46	428,432	432,306	434,901	493,320	644,116	628,613	630,212	681,719	706,282	657,249	688,077	643,955	712,231
U. Utah	47	379,200	414,316	430,056	494,058	486,140	518,928	350,212	380,295	552,306	601,133	607,061	624,737	670,119
U. Virginia, Charlottesville	48	276,308	398,096	383,359	385,828	358,576	373,218	397,458	469,682	551,761	613,938	652,002	611,313	662,658
U. Cincinnati	49	411,269	448,936	433,668	438,642	422,873	436,028	430,579	455,250	480,095	529,796	530,138	551,826	615,070
U. Colorado Boulder	50	349,449	390,677	392,004	385,849	379,475	420,775	453,123	499,389	514,573	513,822	525,674	547,724	611,380
U. Colorado Anschutz Medical Campus ^c	51	na	na	na	na	na	na	na	na	na	na	na	562,855	611,358
U. Iowa	52	444,034	443,893	446,429	435,377	449,147	443,218	473,362	494,280	511,973	508,353	538,583	553,876	594,215
Virginia Polytechnic Institute and State U.	53	398,169	450,058	454,417	496,169	513,149	504,282	521,773	522,425	531,636	541,969	556,341	542,045	591,861
U. Chicago	54	437,721	453,562	419,631	402,621	390,082	412,536	420,997	433,328	423,993	459,171	458,891	497,651	591,805
North Carolina State U.	55	360,795	378,154	404,225	417,468	446,112	468,293	489,918	500,445	509,841	541,100	546,290	547,118	583,203
U. Georgia	56	295,339	335,901	351,395	350,225	355,471	374,264	410,345	455,432	453,249	477,536	482,786	493,944	545,631
U. California, Irvine	57	327,594	344,678	350,030	347,773	340,056	329,798	345,319	361,414	426,610	448,967	490,597	523,752	534,947
Scripps Research Institute	58	387,298	400,768	398,673	399,899	386,231	384,161	364,670	354,582	396,839	427,734	444,964	485,435	492,639
Oregon Health and Science U.	59	314,990	334,324	305,530	308,767	314,802	326,915	331,524	348,449	372,180	415,629	446,890	452,812	479,226
California Institute of Technology	60	362,172	377,514	379,713	347,105	367,182	374,424	371,060	400,312	391,003	399,931	449,651	438,624	478,142
U. Kentucky	61	359,944	372,932	360,776	339,764	328,239	331,705	349,661	378,374	393,034	410,581	417,674	429,241	476,517
Case Western Reserve U.	62	418,164	429,206	431,090	425,788	419,011	401,527	405,655	408,609	434,441	438,994	439,778	421,868	467,389
Princeton U.	63	242,570	263,335	275,666	269,908	293,274	279,851	307,653	334,125	365,007	385,739	396,502	404,448	461,185
Colorado State U., Fort Collins	64	302,896	330,784	375,919	313,238	307,978	317,219	331,862	338,404	374,955	398,477	407,302	447,197	456,911
U. Rochester	65	414,655	429,034	389,612	389,355	353,419	346,932	346,165	353,003	370,645	393,960	397,211	409,255	450,805
Carnegie Mellon U.	66	222,790	242,882	255,933	271,277	251,222	242,004	319,168	328,100	331,383	359,720	386,996	402,376	449,707
U. Illinois, Chicago	67	362,939	380,828	388,625	367,848	347,888	354,560	337,296	372,619	361,690	382,949	412,147	429,585	440,573
SUNY, U. Buffalo	68	349,670	353,172	360,226	387,863	386,562	382,935	389,569	401,591	410,220	413,817	422,038	425,349	439,709
U. Miami	69	280,671	323,486	365,301	344,757	345,805	331,036	358,441	367,877	357,104	360,716	381,410	375,841	439,300
U. Missouri, Columbia	70	238,500	230,957	239,810	236,423	237,266	246,684	280,051	293,006	294,686	310,421	332,180	388,779	432,310
SUNY, Polytechnic Institute	71	na	na	na	na	412,851	295,313	316,680	308,861	257,358	352,889	355,651	465,273	413,763

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Oklahoma, Norman and Health Science Center	72	218,089	249,297	240,974	255,674	253,344	242,367	259,998	272,239	283,638	302,679	362,209	380,048	408,656
Virginia Commonwealth U.	73	197,709	207,756	201,366	196,015	201,858	218,925	225,999	235,464	246,190	255,648	283,874	364,096	405,898
U. Kansas	74	267,961	274,727	286,262	298,498	301,534	311,383	297,933	300,319	339,046	352,643	368,811	385,637	405,267
U. South Florida ^d	75	385,029	394,963	443,206	459,409	488,641	485,354	505,965	557,889	385,686	391,325	333,344	385,965	405,166
Iowa State U.	76	250,120	267,641	260,995	266,596	313,263	306,125	328,385	323,584	361,206	358,474	363,107	360,275	393,184
Washington State U.	77	304,352	320,510	335,930	305,510	288,752	303,214	301,640	331,051	331,424	344,997	335,201	357,648	368,396
U. Delaware	78	153,311	169,746	170,174	179,967	175,563	175,724	176,295	183,428	186,192	206,270	220,445	231,532	368,107
U. Connecticut	79	237,908	253,792	256,854	242,251	258,056	259,397	265,522	267,647	269,685	285,764	280,131	302,329	367,557
Rockefeller U.	80	265,750	272,491	292,896	298,474	316,368	323,932	335,136	348,845	353,142	351,089	356,217	357,543	360,877
U. Massachusetts, Medical School	81	232,039	262,714	256,090	245,923	241,869	250,338	253,099	279,884	274,211	281,507	279,096	347,337	358,204
Florida State U.	82	227,329	230,411	225,378	250,877	252,548	256,449	268,288	282,901	297,661	329,205	350,430	328,604	355,986
Utah State U.	83	149,169	174,167	157,355	158,352	169,605	175,353	180,590	187,314	219,397	283,917	304,256	325,223	344,851
Louisiana State U., Baton Rouge	84	289,872	287,841	285,395	283,400	290,076	281,154	291,972	265,168	286,726	296,497	286,733	296,673	344,556
Dartmouth C. and Dartmouth Hitchcock Medical Center	85	194,141	210,631	195,930	201,591	212,606	209,646	233,636	308,445	323,927	323,020	326,349	330,226	344,126
U. Texas Health Science Center, Houston	86	240,772	261,172	236,250	233,256	233,737	234,299	237,016	246,060	258,411	271,525	273,862	308,823	342,633
U. Nebraska, Lincoln	87	224,135	235,296	253,321	266,507	278,299	284,438	294,856	302,204	308,053	316,820	320,463	320,758	340,260
U. New Mexico	88	211,771	220,565	220,360	227,703	228,849	232,271	239,550	246,597	251,322	239,696	243,375	332,566	331,164
U. Tennessee, Knoxville ^e	89	150,671	167,456	179,252	193,054	179,041	173,533	183,268	203,800	259,607	247,693	320,407	316,273	324,435
Thomas Jefferson U.	90	103,064	104,923	100,506	89,273	118,378	119,631	122,396	142,569	148,573	170,458	171,377	200,393	321,644
Medical C. Wisconsin	91	191,816	215,358	209,040	201,237	199,713	199,283	199,925	209,618	229,436	251,300	264,325	276,850	321,506
Albert Einstein C. of Medicine	92	na	na	na	na	na	na	289,660	289,685	297,328	298,824	288,654	301,715	318,314
Georgetown U.	93	159,355	169,916	180,308	178,995	172,726	176,131	183,788	212,319	221,449	240,960	258,659	279,932	313,220
SUNY, Stony Brook U.	94	204,728	211,356	219,744	225,712	211,631	220,580	230,621	238,612	245,016	260,813	263,470	274,516	312,698
Brown U.	95	335,838	344,090	365,120	361,010	341,531	342,040	347,016	212,290	244,838	256,954	266,127	276,331	310,780
Auburn U., Auburn	96	145,115	163,335	133,013	147,229	142,487	135,899	152,381	190,340	212,925	231,619	255,281	266,374	304,439
Mississippi State U.	97	231,675	226,070	233,197	206,424	209,729	226,359	239,446	240,972	244,102	264,526	280,485	275,143	303,418
Temple U.	98	124,528	134,533	138,318	224,087	224,101	227,468	246,392	268,385	276,011	284,301	299,707	299,778	301,395

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Oregon State U.	99	216,595	228,814	240,507	232,677	230,963	245,317	254,275	267,068	272,433	263,830	268,385	276,955	297,934
Medical U. South Carolina	100	224,632	213,346	236,586	245,451	242,594	243,534	260,098	262,267	282,253	295,600	272,590	277,761	284,553
Florida International U.	101	110,271	110,006	118,058	128,070	132,531	163,033	170,846	177,292	196,180	225,864	236,842	246,075	281,665
U. Notre Dame	102	110,369	134,410	157,691	175,220	182,228	190,954	202,216	212,823	219,993	240,078	227,535	240,324	280,604
U. California, Santa Barbara	103	225,730	230,435	233,883	236,497	231,322	222,870	230,139	238,246	235,164	243,778	254,434	248,961	278,897
U. Hawaii, Manoa	104	303,085	318,316	312,311	326,750	324,342	316,497	304,476	292,021	276,388	280,416	275,929	271,768	277,323
Uniformed Services U. of the Health Sciences	105	134,126	175,365	143,250	164,232	262,489	361,173	256,203	298,370	308,326	417,300	324,510	384,490	277,240
George Washington U.	106	196,917	197,621	196,448	202,428	227,995	241,117	231,829	245,519	260,656	269,799	270,369	266,108	275,483
Wake Forest U.	107	192,034	209,134	204,328	182,721	176,380	171,926	170,006	182,227	191,371	238,933	244,643	264,216	269,109
Clemson U.	108	174,693	166,350	142,096	152,444	161,070	171,215	183,965	193,268	213,458	218,760	228,597	237,485	263,158
Wichita State U.	109	51,524	63,538	61,279	61,388	58,859	59,940	65,930	78,514	81,137	128,795	153,816	192,042	261,519
Woods Hole Oceanographic Institution	110	181,746	198,775	204,352	198,232	220,016	216,592	212,374	194,088	204,400	229,143	227,573	262,048	255,017
U. Massachusetts, Amherst	111	169,141	181,297	194,775	190,739	200,199	213,902	214,576	210,416	211,140	223,177	219,389	213,824	245,158
Wayne State U.	112	254,492	259,895	227,070	224,331	218,435	213,878	221,537	227,728	238,859	244,217	243,259	235,519	242,247
U. Houston	113	119,811	113,709	116,288	130,844	140,597	150,628	162,049	169,431	177,484	195,398	200,428	202,536	240,126
U. Texas Health Science Center, San Antonio	114	207,115	198,655	184,298	175,983	172,716	170,277	194,885	169,200	179,219	188,483	202,572	219,734	238,510
Northeastern U.	115	79,949	86,783	107,862	116,088	116,245	122,915	129,040	142,349	166,711	183,998	200,068	211,342	231,607
Tufts U.	116	156,106	156,395	160,922	156,525	160,825	168,314	189,085	223,409	213,457	213,285	216,241	224,956	231,224
George Mason U.	117	84,120	88,089	90,198	95,913	98,680	106,410	108,899	112,404	149,138	186,267	218,445	214,207	230,068
U. Louisville	118	189,090	197,438	196,842	186,772	183,376	163,262	172,907	177,588	176,655	177,862	198,818	200,362	229,582
U. South Carolina, Columbia	119	229,145	201,592	214,901	203,365	206,173	208,736	209,271	208,670	206,355	205,940	219,734	215,374	229,162
Texas Tech U.	120	133,360	149,399	138,026	142,676	159,308	163,897	172,521	191,482	185,742	193,923	199,643	197,739	226,729
Tulane U.	121	165,513	171,703	164,373	160,414	157,825	152,658	165,438	180,993	193,294	196,933	204,430	205,206	222,605
U. Central Florida	122	117,985	109,190	116,891	126,681	185,555	215,519	198,211	200,387	215,332	225,085	213,757	218,596	221,488
U. Vermont	123	129,856	132,356	115,697	115,486	109,701	114,547	115,611	117,667	128,293	135,859	191,147	195,320	216,307
Rice U.	124	97,903	110,235	117,223	131,003	138,536	144,679	154,543	167,277	161,831	182,564	198,681	207,404	216,202
Georgia State U.	125	81,015	92,725	91,148	111,999	123,915	139,596	161,314	200,171	201,235	195,572	202,451	206,472	215,908

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
West Virginia U.	126	154,926	166,420	169,303	167,144	164,454	170,145	172,477	185,606	185,110	187,512	188,452	199,907	214,081
Kansas State U.	127	160,679	169,167	176,141	183,096	184,945	188,721	193,254	196,478	218,299	218,622	213,900	203,846	212,974
U. Dayton	128	93,309	90,557	81,030	84,252	86,881	98,182	116,589	135,214	147,001	165,343	163,718	191,228	211,494
U. New Hampshire	129	115,562	143,002	165,156	147,446	147,544	144,735	145,015	145,375	146,430	148,980	156,901	167,373	206,392
U. Arkansas for Medical Sciences	130	119,518	122,066	129,056	133,677	131,438	132,451	125,378	128,508	139,187	153,135	174,549	194,709	205,493
U. Nebraska, Medical Center	131	138,219	133,036	141,619	137,485	139,126	145,009	150,694	171,491	177,245	194,455	202,406	200,974	205,253
U. Louisiana, Lafayette	132	69,412	69,978	65,275	61,887	67,580	77,300	80,099	100,956	124,713	144,187	164,070	181,400	205,201
U. Texas Medical Branch	133	188,399	193,555	180,888	180,198	178,014	173,506	179,541	185,106	181,831	175,372	180,595	185,759	204,518
U. Alaska, Fairbanks	134	161,986	165,530	160,407	162,658	155,769	142,742	144,259	152,694	140,917	144,457	152,299	172,957	202,516
Montana State U., Bozeman	135	135,084	125,966	124,228	113,136	113,348	108,414	112,073	129,622	125,129	154,811	166,285	193,577	200,820
U. California, Riverside	136	130,288	132,238	135,494	132,617	133,558	144,511	152,233	163,632	167,847	177,655	184,894	189,600	199,135
Oklahoma State U., Stillwater	137	147,094	162,786	166,523	134,500	126,543	129,968	181,617	189,024	188,756	184,276	187,060	198,799	195,041
U. Arkansas, Fayetteville	138	113,909	120,007	123,199	125,501	125,824	133,660	145,020	157,791	175,498	180,225	165,887	164,443	184,080
U. Nevada, Reno	139	95,423	89,740	85,726	89,797	87,324	90,138	95,475	105,869	144,426	152,128	159,790	175,386	181,782
U. California, Santa Cruz	140	143,919	155,617	155,516	150,777	151,734	151,713	151,192	124,344	127,538	142,958	150,400	160,615	176,760
North Dakota State U.	141	126,419	134,064	135,493	150,173	154,437	153,542	156,297	153,119	145,669	152,381	155,645	164,050	174,904
U. Maine	142	111,282	111,600	92,135	77,583	101,247	79,500	79,222	99,502	106,694	129,913	134,183	146,801	171,931
U. Alabama, Huntsville	143	75,683	75,724	87,388	101,016	89,325	88,439	96,865	94,376	99,405	109,744	131,648	149,792	169,532
New Jersey Institute of Technology	144	92,318	100,491	102,851	107,310	106,081	110,512	130,812	142,164	162,349	161,232	163,447	166,587	167,135
U. Alabama, Tuscaloosa	145	40,762	53,633	55,885	55,443	53,140	58,234	62,549	63,282	71,992	83,317	95,200	129,509	163,204
U. Oregon	146	94,107	103,019	105,030	94,522	91,203	79,698	100,754	95,974	111,896	110,664	114,259	139,193	160,500
Syracuse U.	147	107,024	83,686	85,649	70,967	66,321	69,896	84,651	145,705	147,751	154,366	149,652	151,717	157,407
U. Mississippi	148	110,020	122,765	121,731	108,168	109,922	94,040	121,665	134,542	137,521	158,809	122,960	116,175	152,903
Drexel U.	149	118,349	115,020	116,768	123,813	131,170	128,027	127,909	138,577	155,908	149,481	143,123	152,752	151,903
U. North Dakota	150	76,560	74,882	80,149	68,942	67,595	64,384	70,275	102,823	109,865	110,836	111,663	143,506	147,717
U. Texas, San Antonio	151	56,279	58,667	57,233	53,626	47,061	54,949	59,831	70,163	72,682	84,326	138,586	145,362	147,629
U. Wyoming	152	55,319	57,549	65,611	65,490	51,422	56,996	112,056	125,032	113,063	80,353	93,061	93,202	139,764

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Texas, Arlington	153	71,414	72,483	78,556	86,735	89,175	77,798	87,386	97,197	105,688	123,858	133,793	126,477	133,770
U. Texas, Dallas	154	82,044	93,230	90,700	98,842	99,727	98,551	106,205	113,205	113,315	126,661	132,192	122,825	130,914
SUNY, Binghamton U.	155	72,057	72,539	81,000	76,005	71,382	79,895	85,192	98,089	113,851	104,297	117,870	124,565	130,882
U. Texas, El Paso	156	68,870	74,069	79,649	83,249	79,537	89,418	91,330	94,565	91,032	106,809	108,628	109,410	130,501
SUNY, U. Albany	157	359,364	148,625	137,758	137,759	130,955	111,705	120,232	156,386	173,031	181,531	138,088	114,501	129,796
U. Rhode Island	158	90,016	102,630	114,323	101,898	91,706	93,828	97,900	101,871	104,490	115,160	109,967	129,296	129,102
Augusta U.	159	na	na	na	64,033	64,118	67,737	71,338	99,661	99,081	96,502	103,961	116,480	127,313
U. Montana, Missoula	160	63,540	60,159	59,313	60,189	55,032	60,485	70,059	85,044	90,563	104,665	110,218	121,571	125,603
San Diego State U.	161	99,137	106,591	92,867	86,733	95,674	93,572	90,722	89,187	88,177	92,964	97,710	107,681	123,856
Rensselaer Polytechnic Institute	162	83,952	84,834	92,720	92,495	105,608	102,841	101,127	104,797	100,856	103,739	122,753	119,056	121,809
New Mexico State U.	163	157,872	139,062	141,151	142,365	134,262	132,377	106,282	102,218	96,270	101,457	107,275	110,580	121,472
Cold Spring Harbor Laboratory	164	ne	89,913	84,072	78,236	76,733	84,653	88,943	97,288	115,870	126,773	115,198	114,903	118,034
U. Idaho	165	87,207	96,229	97,227	95,891	95,594	97,493	102,457	109,537	111,590	113,107	112,810	105,895	115,603
U. Tennessee, Health Science Center	166	81,904	81,220	77,754	71,902	67,841	65,771	71,547	73,393	79,460	96,979	99,716	109,562	115,161
Rush U.	167	73,398	79,212	80,300	81,770	80,551	79,048	73,351	74,062	89,101	96,267	94,438	107,398	114,874
U. Massachusetts, Lowell	168	59,345	60,013	60,624	63,136	64,591	70,384	68,494	69,677	72,266	83,996	92,216	94,708	111,144
U. Maryland, Baltimore County	169	87,156	91,657	74,993	71,819	67,833	68,688	70,166	70,406	71,481	80,632	83,867	84,418	110,319
Texas State U.	170	30,560	33,487	36,664	37,053	39,265	47,694	54,298	60,741	64,322	64,554	70,714	72,510	110,102
Brandeis U.	171	71,006	74,889	74,660	76,060	74,992	74,700	73,435	68,437	61,639	60,825	91,355	95,001	102,378
Colorado School of Mines	172	44,879	48,704	58,836	59,091	59,695	58,349	60,931	59,477	60,372	70,397	78,517	81,443	98,404
U. Nevada, Las Vegas	173	44,457	39,526	34,543	35,935	39,448	42,000	62,825	66,285	83,800	99,445	105,872	101,009	94,967
U. North Texas, Denton	174	31,496	42,475	46,943	49,518	44,180	43,628	37,106	43,789	44,025	78,691	84,239	81,252	93,538
Michigan Technological U.	175	63,471	70,089	71,989	70,689	68,526	69,607	72,536	71,629	78,678	80,443	77,927	81,715	91,084
New Mexico Institute of Mining and Technology	176	51,696	43,857	37,875	32,499	48,338	26,265	19,598	20,491	21,383	24,616	24,591	28,745	89,900
Saint Louis U.	177	46,839	53,179	49,086	48,231	44,481	44,457	42,151	56,402	60,380	66,103	69,528	79,005	82,740
Cleveland State U.	178	34,235	55,502	61,111	67,378	61,783	57,662	77,720	83,762	83,641	80,077	78,189	71,451	81,225
Van Andel Research Institute	179	ne	ne	ne	ne	ne	40,502	40,040	44,578	55,171	61,738	58,982	65,789	78,626

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
William & Mary	180	57,461	58,919	55,805	57,940	59,015	61,554	63,027	64,127	65,269	64,835	66,763	68,801	75,953
U. Southern Mississippi	181	42,059	46,591	60,079	51,962	51,938	51,840	59,363	61,659	61,336	76,464	72,322	67,417	72,477
San Jose State U.	182	38,241	40,149	34,727	38,326	43,509	45,037	41,662	39,192	41,366	44,309	47,301	60,100	71,695
U. Memphis	183	49,517	48,321	51,194	48,141	55,566	46,675	48,321	49,695	64,297	58,700	69,463	67,092	71,271
Boston C.	184	50,537	52,253	51,442	50,702	49,724	47,761	54,469	58,088	57,030	61,956	63,063	65,156	68,958
American U.	185	39,747	46,611	43,526	61,087	63,628	58,325	57,064	56,034	61,741	71,053	71,839	65,912	67,616
Howard U.	186	40,080	42,341	45,486	42,789	40,771	47,322	41,038	45,768	45,965	44,163	44,933	52,412	67,594
Northern Arizona U.	187	28,803	30,785	28,100	30,516	31,590	35,206	39,580	46,253	52,899	58,914	64,456	69,129	66,729
Baylor U.	188	10,925	12,343	10,161	13,616	20,729	24,642	26,767	29,400	31,936	33,304	39,765	48,809	66,014
CUNY, City C.	189	46,699	60,648	57,982	55,138	52,654	53,223	62,484	54,627	53,979	52,738	45,632	57,361	65,569
U. Massachusetts, Boston	190	56,416	57,040	60,086	60,380	61,186	62,374	64,223	70,019	61,473	62,018	64,219	63,723	65,215
Old Dominion U.	191	97,176	102,192	104,579	99,138	67,037	65,092	70,054	67,990	60,321	67,425	65,704	62,332	64,877
U. Toledo	192	70,399	74,149	68,228	69,072	61,900	52,354	50,019	50,030	50,320	55,006	54,100	53,169	64,654
U. Texas Rio Grande Valley	193	na	na	na	na	na	na	31,007	29,500	27,125	52,016	56,702	58,187	64,401
Indiana U.-Purdue U., Indianapolis	194	296,194	322,617	316,914	332,760	324,261	55,973	57,853	58,056	60,501	67,635	70,778	65,330	64,162
Naval Postgraduate School	195	103,510	101,363	132,450	94,880	99,032	89,170	65,529	60,386	59,213	67,323	62,903	65,101	64,055
Rochester Institute of Technology	196	38,663	34,889	36,935	36,613	35,945	40,442	45,518	51,263	49,413	58,175	57,777	56,043	62,383
Florida Atlantic U.	197	56,472	62,024	65,377	23,967	22,997	21,214	26,750	46,025	48,024	51,085	53,845	58,471	61,748
South Dakota State U.	198	67,552	69,680	68,743	63,843	58,334	58,373	60,677	63,412	63,465	66,794	60,939	51,542	59,590
Southern Methodist U.	199	18,742	24,453	24,397	22,544	32,401	29,282	31,819	29,879	31,140	42,562	43,081	41,960	57,544
Worcester Polytechnic Institute	200	18,613	22,137	20,232	25,298	29,929	36,130	37,822	33,368	33,067	39,878	43,092	48,702	56,904
U. Wisconsin-Milwaukee	201	71,181	65,648	61,771	56,587	60,752	63,414	59,813	54,181	55,771	53,773	61,069	55,664	56,822
East Carolina U.	202	23,995	28,114	31,990	38,271	29,925	26,549	25,273	26,117	39,074	55,611	57,820	51,662	55,693
U. California, Office of the President	203	72,542	63,420	65,627	67,447	50,103	48,341	39,051	46,399	55,676	67,702	60,686	50,848	54,640
Louisiana State U., Health Sciences Center, New Orleans	204	59,776	57,007	53,712	49,443	45,486	46,840	43,067	40,785	38,989	40,914	43,419	44,370	53,995

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Maryland Center for Environmental Science	205	42,670	50,007	48,224	53,683	50,814	52,235	54,974	55,078	54,136	56,033	54,560	51,201	53,718
Stevens Institute of Technology	206	35,544	41,622	31,929	28,908	30,826	34,082	35,765	35,144	33,060	36,695	44,747	43,386	53,563
Missouri U. of Science and Technology	207	42,263	41,581	38,588	40,397	39,065	35,842	35,756	38,243	42,986	47,807	47,001	54,437	53,357
U. Missouri, Kansas City	208	30,163	32,769	29,227	28,829	29,164	26,595	26,292	25,123	25,136	31,956	36,356	33,855	52,657
Ohio U.	209	50,440	57,643	57,203	59,734	60,800	61,078	59,117	61,092	53,303	53,735	51,914	49,764	52,465
Kent State U.	210	26,331	27,455	26,507	23,149	25,666	38,069	34,661	42,003	42,792	47,188	50,307	50,408	52,175
Lehigh U.	211	37,332	32,086	31,992	35,220	37,066	36,788	32,941	36,969	38,674	38,185	38,064	41,279	51,769
Florida A&M U.	212	53,474	53,326	52,263	51,149	46,367	46,522	45,390	37,578	39,682	42,470	41,319	47,124	50,636
SUNY, Upstate Medical U.	213	43,824	39,988	35,897	34,286	33,460	32,453	31,892	35,551	36,674	38,091	41,557	44,870	50,586
Mercer U.	214	27,298	29,039	31,376	28,892	30,209	32,838	31,735	29,447	34,197	44,128	49,116	51,989	50,222
U. California, Merced	215	21,591	21,328	22,656	22,909	23,916	29,688	29,370	35,093	38,226	44,890	45,966	45,964	48,147
North Carolina A&T State U.	216	35,297	34,930	35,103	33,994	35,047	35,172	33,759	37,379	38,140	37,339	36,151	40,751	47,908
Boise State U.	217	18,731	24,204	27,920	25,690	26,568	31,341	32,085	34,992	41,382	39,824	43,307	46,065	47,617
U. Puerto Rico, Medical Sciences Campus	218	39,134	64,017	45,649	43,374	40,444	43,316	46,232	42,423	41,216	45,014	37,217	44,111	47,578
Southern Illinois U., Carbondale	219	69,924	71,130	71,097	70,854	65,256	57,509	53,172	48,416	49,636	41,729	41,617	47,210	46,967
Texas Tech U., Health Sciences Center	220	51,282	58,774	61,219	61,412	38,015	40,438	40,235	39,767	37,819	44,072	44,135	41,583	46,574
Loyola U., Chicago	221	43,903	42,708	45,903	51,676	50,774	48,664	42,672	39,738	39,332	39,223	39,365	44,036	46,169
Brigham Young U., Provo	222	32,997	37,142	33,843	36,562	38,051	39,126	42,304	43,406	40,755	39,582	38,569	43,916	45,610
U. Denver	223	15,748	17,004	15,237	19,262	18,183	16,116	21,326	22,289	27,270	36,551	41,349	38,751	45,561
Air Force Institute of Technology	224	31,259	31,879	32,746	27,592	23,902	26,866	29,998	35,733	33,360	34,016	35,584	45,703	44,391
U. South Alabama	225	35,500	42,233	40,172	40,590	41,681	43,722	46,670	41,431	41,056	52,540	51,102	47,610	43,491
U. North Carolina, Charlotte	226	31,814	27,533	25,141	24,764	23,342	24,870	27,815	26,097	39,888	47,187	50,050	51,877	43,126
Morehouse School of Medicine	227	30,669	33,946	37,586	36,638	41,858	33,367	38,774	36,925	33,215	31,289	29,813	32,637	42,489

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Portland State U.	228	56,533	58,975	58,489	55,435	54,787	53,872	56,572	48,964	46,911	50,045	43,667	41,311	41,483
U. North Carolina, Greensboro	229	22,436	26,121	19,080	16,590	20,723	23,026	23,965	23,231	22,743	26,325	28,966	37,033	41,303
Marquette U.	230	14,310	19,876	18,606	20,856	23,633	24,816	28,422	30,034	32,471	37,777	37,136	37,087	40,638
U. West Florida	231	17,757	21,710	16,221	19,332	19,579	31,232	40,815	35,054	41,035	38,555	37,397	36,837	38,870
Catholic U. of America	232	21,454	25,397	24,971	23,235	22,331	24,265	25,139	24,282	25,497	24,484	25,221	35,548	38,191
Oakland U.	233	12,856	15,868	18,194	16,767	15,196	17,108	16,001	14,561	13,817	18,002	12,949	20,261	38,061
San Francisco State U.	234	25,615	26,198	30,291	33,885	29,457	26,345	28,273	29,940	30,903	31,888	33,828	35,768	36,617
U.S. Air Force Academy	235	62,097	73,607	56,044	57,164	44,663	38,326	55,358	48,287	35,925	43,941	42,197	32,086	36,506
Georgia Southern U.	236	3,704	3,912	5,719	18,069	20,245	17,152	17,395	16,084	12,978	11,166	12,166	37,201	36,362
Texas A&M U.-Corpus Christi	237	17,266	17,509	15,776	17,418	21,321	24,507	24,786	27,993	30,253	32,944	32,284	30,500	36,014
CUNY, Hunter C.	238	38,900	39,772	41,022	40,059	38,879	36,368	37,094	31,273	33,702	37,478	38,345	33,816	35,348
Chapman U.	239	3,830	3,547	3,314	4,463	4,794	5,353	6,554	10,626	14,141	19,592	26,660	25,820	34,212
U. Texas Health Science Center, Tyler	240	ne	ne	ne	ne	ne	12,191	11,799	16,292	17,949	19,606	21,265	27,928	33,872
California Polytechnic State U., San Luis Obispo	241	19,732	16,532	17,412	16,067	15,096	16,312	18,081	17,979	16,352	25,249	26,605	25,953	33,155
U. Massachusetts, Dartmouth	242	25,725	25,644	22,732	27,326	28,219	26,776	26,824	26,102	26,626	28,036	26,836	28,729	33,136
SUNY, C. of Environmental Science and Forestry	243	26,916	25,024	23,132	21,239	19,027	22,051	24,504	27,923	26,610	29,137	29,296	28,440	32,904
Montclair State U.	244	2,255	3,621	5,123	4,568	4,266	4,274	5,207	5,796	7,980	15,588	17,636	17,390	32,202
Nova Southeastern U.	245	10,116	12,322	12,908	12,712	13,716	14,775	19,559	22,508	23,296	24,567	26,035	24,513	31,189
Teachers C., Columbia U.	246	17,167	18,406	20,805	19,649	20,538	23,269	24,124	24,194	24,477	24,865	22,630	24,335	30,978
SUNY, Downstate Health Sciences U.	247	32,512	41,993	43,257	39,354	33,331	28,652	33,735	31,873	34,661	36,015	33,204	34,459	30,918
U. South Dakota	248	30,616	28,959	31,982	33,187	30,700	25,661	25,864	28,358	30,943	32,028	29,279	27,537	30,322
Rowan U.	249	2,987	3,247	3,783	3,407	8,202	8,044	10,212	12,856	16,247	22,892	26,018	26,458	29,949
Illinois Institute of Technology	250	36,554	44,463	32,576	36,722	31,356	34,336	29,826	32,659	33,280	34,334	29,122	29,698	29,791

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Louisiana State U., Health Sciences Center, Shreveport	251	30,817	31,021	29,365	28,266	25,004	24,069	23,353	22,560	24,463	26,262	25,321	24,600	29,502
Morgan State U.	252	12,804	12,803	17,751	15,475	15,720	13,577	15,727	14,978	12,993	13,253	17,193	20,628	29,482
Delaware State U.	253	15,200	19,019	15,668	17,295	17,679	15,980	21,320	20,793	21,377	23,017	23,105	23,193	29,016
Miami U.	254	26,521	26,093	26,311	23,924	21,216	16,108	16,057	17,239	19,658	22,380	24,489	25,138	28,799
Embry-Riddle Aeronautical U.	255	12,189	16,289	19,376	16,484	15,393	11,942	16,761	13,335	16,767	12,478	17,786	19,830	28,650
Desert Research Institute	256	34,367	35,331	33,056	27,695	23,778	22,103	29,422	29,440	27,875	26,991	26,428	26,365	28,478
Rutgers, State U. New Jersey, Newark	257	27,745	35,774	34,797	37,134	28,083	24,387	21,492	25,898	27,206	26,661	28,006	23,854	28,345
U. Puerto Rico, Rio Piedras	258	30,515	32,582	33,099	29,234	28,793	28,579	23,491	21,204	17,085	24,088	22,895	28,896	28,083
Western Michigan U. and Homer Stryker M.D. School of Medicine	259	26,391	25,051	21,073	18,979	18,942	19,679	18,927	22,372	21,184	25,071	24,541	25,314	27,768
Creighton U.	260	27,700	31,443	32,594	29,983	25,560	23,825	23,510	24,315	20,587	24,039	20,339	23,251	27,609
Wright State U.	261	48,575	48,501	46,213	50,489	54,985	54,289	55,484	59,379	68,035	64,208	49,825	26,259	27,440
Northern Illinois U.	262	27,036	21,748	21,823	23,027	16,427	17,722	21,225	19,150	23,280	26,570	25,420	25,261	27,068
Louisiana Tech U.	263	26,020	27,583	26,546	24,949	22,942	23,827	23,104	22,741	24,655	26,143	26,585	27,417	26,591
Villanova U.	264	10,066	10,044	8,547	7,049	13,700	14,512	14,903	19,037	20,730	22,837	25,505	24,723	25,955
Marshall U.	265	24,501	26,723	18,998	19,617	20,382	19,936	20,687	18,348	20,050	19,622	22,250	23,620	25,692
Illinois State U.	266	18,417	17,833	17,760	17,589	19,159	18,742	20,408	20,080	21,055	27,082	31,539	24,152	25,510
U. Nebraska, central administration	267	ne	ne	ne	ne	ne	ne	ne	ne	13,352	18,860	23,672	21,295	25,402
Central Michigan U.	268	7,483	8,671	10,907	12,879	15,015	12,880	14,166	14,652	15,616	17,102	17,448	21,726	25,105
U. Nebraska, Omaha	269	8,951	9,509	8,376	9,181	9,222	9,422	10,459	12,061	12,943	14,302	16,134	19,006	24,259
California State U., Sacramento	270	15,207	16,344	14,053	15,564	13,136	17,930	20,676	21,106	21,429	23,544	24,939	23,699	23,795
Texas A&M U.-Kingsville	271	17,378	17,114	17,419	18,653	21,819	20,894	21,309	22,633	21,150	22,268	22,745	23,578	23,451
East Tennessee State U.	272	9,869	10,249	11,213	8,919	7,836	6,930	7,982	9,493	14,043	14,197	13,925	18,449	23,420
U. Minnesota, Duluth	273	21,150	23,400	21,530	21,383	21,904	27,550	27,528	24,956	25,189	27,530	26,137	23,767	23,362
Middle Tennessee State U.	274	4,793	4,969	7,108	5,718	4,334	4,350	6,164	4,714	7,132	7,673	8,697	22,531	22,631
Albany Medical C.	275	22,953	20,876	17,735	15,093	16,093	18,043	20,166	20,443	21,187	23,028	23,510	22,443	22,297

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Eastern Virginia Medical School	276	44,420	36,569	37,745	44,183	43,917	42,296	32,550	28,671	30,010	27,064	20,870	19,415	22,165
Tuskegee U.	277	15,581	15,685	15,991	21,150	24,945	20,740	16,535	16,535	16,535	20,562	20,973	21,355	21,941
U. New Orleans	278	35,021	35,359	28,450	24,607	20,614	18,960	15,719	15,939	14,437	15,328	16,594	16,979	21,911
Kennesaw State U.	279	1,854	1,961	3,511	5,062	2,192	4,762	8,279	9,510	11,214	12,850	17,954	18,880	21,705
Clarkson U.	280	18,584	17,951	14,809	12,061	13,750	13,406	12,983	15,148	16,927	17,147	15,104	16,765	21,703
CUNY, Queens C.	281	16,845	23,219	22,399	19,762	23,434	19,092	19,168	15,936	16,676	18,391	16,470	16,063	21,434
U. Alaska, Anchorage	282	16,709	18,620	20,194	20,255	17,150	17,436	19,883	20,861	21,096	21,724	22,713	21,332	21,024
U.S. Military Academy	283	22,171	13,799	12,227	11,630	14,819	15,312	13,500	13,617	13,582	10,765	12,473	19,696	20,841
U. Guam	284	5,555	5,626	6,131	6,043	7,075	6,062	7,402	8,842	11,225	12,249	13,043	17,666	20,481
Fordham U.	285	19,289	18,350	19,311	18,822	17,961	20,939	25,374	20,807	20,644	20,287	20,456	16,731	20,432
Prairie View A&M U.	286	12,565	15,243	14,552	13,198	12,292	13,123	12,616	13,982	17,278	18,018	18,723	17,582	20,429
U. of the Virgin Islands	287	32,350	21,994	25,719	20,041	20,371	20,630	21,215	12,298	11,957	12,236	13,631	15,231	20,259
South Dakota School of Mines and Technology	288	28,572	32,070	19,140	12,156	10,524	14,970	15,396	15,541	15,092	12,973	14,490	15,746	20,061
Tarleton State U.	289	10,763	10,426	9,393	9,722	10,996	9,825	9,404	10,893	12,503	13,171	14,890	17,729	20,056
U. North Carolina, Wilmington	290	23,143	22,593	19,722	18,145	14,648	15,564	15,715	16,015	16,955	17,515	16,544	16,656	20,053
U. Akron	291	52,884	60,352	66,413	69,640	69,528	58,512	58,817	41,326	32,582	30,020	23,496	17,340	19,943
California State U., Northridge	292	29,469	25,654	29,491	9,640	12,991	13,333	16,330	17,979	19,618	21,095	21,228	16,573	19,638
Bowling Green State U.	293	8,124	8,999	8,566	13,157	8,861	7,995	14,460	14,333	17,991	17,026	18,729	18,619	19,342
New School	294	5,178	6,420	7,568	9,219	7,160	8,978	17,425	12,740	13,606	13,421	13,186	14,281	19,218
Southern Illinois U., Edwardsville	295	31,781	33,736	26,992	25,807	18,915	19,051	18,780	17,393	18,420	18,088	18,273	18,044	19,152
California State U., East Bay	296	1,312	1,644	1,039	934	ne	ne	837	ne	ne	ne	9,072	10,852	19,035
U. North Florida	297	8,041	9,379	7,031	4,480	3,674	3,689	5,141	6,476	9,994	12,341	13,573	15,782	18,394
Texas Christian U.	298	5,306	5,595	7,775	8,574	7,872	8,007	6,589	7,255	5,808	6,552	15,326	15,336	18,353
U. Puerto Rico, Mayaguez	299	26,475	34,424	32,115	29,225	27,152	28,100	25,491	26,130	24,769	26,877	26,553	18,368	18,274
U. Colorado Denver ^c	300	na	na	na	na	na	na	na	na	na	na	na	18,039	18,080
Tennessee State U.	301	12,432	13,468	15,439	16,177	20,068	19,955	19,520	18,108	17,681	15,236	25,942	21,977	18,012
Meharry Medical C.	302	27,001	29,055	25,559	22,532	18,997	13,998	14,768	16,782	16,980	18,286	13,870	15,840	17,960

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
California State U., Long Beach	303	15,494	14,595	13,696	12,796	10,097	8,830	16,390	18,805	22,880	18,664	16,684	15,134	17,807
Florida Institute of Technology	304	12,054	14,523	17,100	13,298	14,255	14,282	18,860	18,180	17,378	17,876	18,271	23,195	17,706
Jackson State U.	305	44,862	49,998	46,943	36,264	26,609	23,908	23,832	22,790	19,465	18,160	15,081	16,157	17,481
U. Tulsa	306	23,387	19,489	20,270	21,757	27,077	25,066	22,347	20,879	20,072	18,648	18,787	17,187	17,416
Long Island U.	307	832	877	890	915	ne	ne	1,420	2,290	2,405	5,113	13,997	15,059	17,183
James Madison U.	308	7,038	7,303	8,891	5,835	4,628	3,712	3,303	3,248	4,191	8,726	10,247	14,687	17,021
Alcorn State U.	309	10,280	11,397	11,515	11,315	10,060	9,396	8,204	16,129	13,834	14,435	13,710	14,188	16,726
California State U., Fullerton	310	21,776	28,186	22,222	18,478	7,919	5,611	5,755	5,510	6,348	7,173	5,929	9,006	16,642
Idaho State U.	311	20,495	21,450	21,179	22,147	20,610	17,866	20,447	18,564	18,081	14,972	14,478	13,953	16,615
North Carolina Central U.	312	6,870	9,496	11,076	8,979	11,537	12,448	12,463	14,119	14,942	16,227	15,833	14,105	16,600
CUNY, Advanced Science Research Center	313	na	na	na	na	na	569	ne	3,541	5,666	8,310	11,373	15,403	16,507
New York Medical C.	314	28,400	27,316	23,277	20,243	17,908	17,653	17,311	15,637	16,226	19,398	20,137	18,872	16,461
CUNY, Graduate School of Public Health and Health Policy	315	na	na	na	na	na	na	na	na	9,751	9,521	12,177	15,035	16,423
Tennessee Technological U.	316	16,754	13,247	10,233	9,715	10,097	11,082	11,528	12,079	12,765	13,801	14,085	15,387	16,398
CUNY, John Jay C. of Criminal Justice	317	5,916	6,205	9,319	7,355	8,633	8,689	9,688	11,934	14,310	12,295	13,939	11,791	16,233
California State Polytechnic U., Humboldt	318	9,845	9,570	9,510	8,025	8,306	11,218	16,143	15,969	15,044	15,076	14,236	14,103	15,612
Loma Linda U.	319	35,990	39,409	31,772	31,715	23,375	25,519	22,977	21,846	19,892	17,938	15,984	14,029	15,517
Western Washington U.	320	10,571	9,498	7,597	8,157	8,567	9,921	10,743	13,014	13,075	11,983	12,823	13,450	15,081
Charles R. Drew U. of Medicine and Science	321	22,152	22,150	20,580	18,547	20,686	14,128	13,360	15,652	11,490	13,739	13,682	13,228	14,581
Texas Tech U., Health Sciences Center, El Paso	322	ne	ne	ne	ne	23,282	18,889	17,391	16,479	12,556	11,883	10,421	11,360	14,206
Montana Technological U.	323	7,424	6,705	11,765	11,059	11,348	11,595	11,851	13,059	12,666	12,731	12,987	14,933	14,188
Xavier U. Louisiana	324	8,029	9,849	10,606	8,789	9,346	9,588	12,084	12,424	11,784	10,152	11,387	12,799	14,156

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Duquesne U.	325	15,804	16,814	15,547	15,661	15,025	16,159	17,089	17,197	17,420	16,947	17,485	10,521	13,944
Northeast Ohio Medical U.	326	10,819	13,581	13,358	12,722	15,916	17,103	18,823	19,216	18,231	18,016	15,758	13,853	13,465
U. Missouri, Saint Louis	327	14,628	18,461	19,356	20,869	18,618	12,061	13,460	12,042	12,266	14,432	15,352	14,632	13,247
Rosalind Franklin U. of Medicine and Science	328	12,426	14,261	15,587	17,401	17,794	16,604	16,760	17,006	16,765	16,126	14,601	13,805	12,988
U. Tennessee, Chattanooga	329	10,749	9,251	10,896	7,844	6,239	6,817	5,600	6,352	7,585	9,280	10,834	11,192	12,808
Loyola Marymount U.	330	4,557	6,455	5,746	6,766	7,635	6,389	7,504	7,071	7,911	7,272	7,193	12,819	12,773
U. Hawaii, system office	331	ne	ne	ne	ne	ne	ne	ne	ne	12,340	12,159	13,568	12,918	12,646
California State U., Fresno	332	8,698	8,597	8,359	7,682	8,109	8,624	8,586	8,102	8,988	8,599	8,856	9,213	12,603
Virginia State U.	333	7,466	8,562	10,296	9,535	8,374	7,808	8,147	10,725	10,673	11,457	10,014	10,123	12,326
Texas Southern U.	334	7,003	6,318	6,380	6,548	6,038	5,005	4,495	4,722	3,740	4,893	10,138	9,128	12,120
Sam Houston State U.	335	7,555	5,816	4,349	4,608	3,996	3,086	3,266	3,658	7,152	9,445	12,437	13,315	12,009
California State U., San Bernardino	336	4,188	11,591	9,303	11,942	13,582	15,317	10,771	12,924	16,702	16,062	10,819	11,607	11,929
Lincoln U., Jefferson City	337	8,475	8,518	7,899	6,585	6,742	6,296	5,826	5,164	4,215	4,581	5,777	7,621	11,500
Hampton U.	338	14,455	12,414	15,356	12,641	11,169	14,895	14,225	16,482	14,424	13,605	11,402	11,669	11,462
Missouri State U.	339	7,770	5,584	4,340	3,882	3,782	3,540	3,069	3,215	4,409	5,910	13,131	10,014	11,162
Rhode Island C.	340	ne	8,027	10,389	10,385	8,938	10,080	9,943	9,030	9,287	9,480	10,094	10,990	11,127
Midwestern U.	341	3,626	4,022	5,200	6,292	7,310	8,560	7,732	9,207	10,173	10,343	10,479	10,961	11,069
U. of the District of Columbia	342	5,012	4,422	4,030	3,073	2,361	2,043	3,469	3,733	2,960	4,800	4,590	8,104	10,779
U.S. Naval Academy	343	11,093	10,543	9,610	10,816	10,861	9,609	11,374	13,541	14,057	13,621	13,123	10,818	10,664
Salisbury U.	344	3,503	1,852	6,891	6,959	7,923	7,960	8,473	7,731	9,119	9,368	9,496	10,552	10,614
U. North Texas, Health Science Center	345	38,862	45,943	46,865	44,904	47,002	46,335	50,567	48,476	49,503	50,124	42,766	50,698	10,439
Winston-Salem State U.	346	ne	1,179	1,977	841	ne	ne	1,356	1,575	1,629	2,011	5,781	8,123	10,436
Central State U.	347	3,233	3,821	3,591	2,771	2,025	1,508	1,643	2,008	3,615	3,766	6,107	8,751	10,274
U. San Diego	348	2,934	3,483	4,275	4,554	5,146	4,476	4,734	5,089	5,642	6,036	8,607	7,580	10,143
Wesleyan U.	349	8,397	10,367	8,945	8,120	7,262	7,223	7,740	8,945	10,662	9,958	8,300	8,009	10,101
Fort Valley State U.	350	5,310	3,850	3,665	3,688	4,547	4,320	5,138	5,374	3,916	4,563	4,921	4,842	9,969
Ball State U.	351	20,477	18,765	11,740	10,357	9,209	10,548	11,763	8,797	11,163	12,145	9,429	8,826	9,932

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Florida Gulf Coast U.	352	13,906	17,051	14,393	14,204	9,626	8,992	7,335	6,025	5,115	5,907	6,671	8,197	9,896
California State U., Los Angeles	353	7,714	8,823	7,192	7,659	5,172	5,010	5,371	8,274	9,594	12,476	10,590	9,382	9,839
Alabama A&M U.	354	30,497	30,238	29,979	29,720	29,461	29,202	25,112	21,022	16,932	12,840	8,749	9,180	9,611
West Texas A&M U.	355	7,346	5,847	6,937	5,510	5,407	4,513	4,048	4,943	4,797	5,437	6,220	9,920	9,438
Kentucky State U.	356	4,912	4,562	6,859	5,605	5,694	6,017	7,178	8,151	9,125	8,433	7,963	8,756	9,284
U. Maryland, Eastern Shore	357	8,692	8,664	7,309	8,826	8,982	9,700	8,250	7,403	4,941	7,133	8,092	8,636	9,274
California State U., San Marcos	358	5,788	6,795	7,802	8,809	8,302	6,432	6,634	6,549	8,348	10,595	13,250	10,213	9,238
Bryn Mawr C.	359	7,476	8,388	9,837	9,452	9,143	11,692	10,867	11,146	10,282	9,846	11,575	8,987	9,123
Saint Joseph's U.	360	2,918	3,073	2,955	2,921	1,988	2,093	2,171	2,409	2,151	2,851	3,150	2,922	9,041
Western U. of Health Sciences	361	1,786	1,768	3,005	3,721	5,474	4,904	6,895	6,187	5,140	4,951	5,899	6,688	9,029
California State U., Monterey Bay	362	5,305	6,959	6,567	6,129	4,787	5,492	5,680	5,397	5,799	6,444	5,874	6,882	8,975
Clark U.	363	7,111	6,861	7,260	5,693	6,168	7,050	6,970	8,453	8,318	10,193	10,277	7,931	8,813
Clark Atlanta U.	364	8,515	8,245	10,406	9,159	9,192	9,945	8,513	8,007	7,833	9,048	8,452	8,892	8,791
Towson U.	365	3,052	3,574	2,599	2,800	2,997	3,153	2,303	2,834	3,194	3,423	3,612	3,794	8,788
Claremont Graduate U.	366	7,116	6,589	10,350	9,705	9,540	9,375	9,210	9,045	8,880	8,715	9,403	7,235	8,382
Oklahoma State U., Center for Health Sciences	367	4,398	2,815	2,122	2,137	1,805	1,625	2,182	2,454	2,608	5,408	8,378	7,758	8,368
DePaul U.	368	4,889	5,798	5,706	5,524	6,415	9,479	9,558	8,561	7,079	6,144	6,557	6,675	8,362
Arkansas State U., Jonesboro	369	11,115	13,435	14,250	10,463	8,099	8,453	8,169	7,952	8,245	8,945	8,640	8,422	8,214
U. Washington, Bothell	370	630	2,857	4,285	4,704	7,550	7,657	8,406	10,219	8,097	7,950	7,107	8,311	8,197
U. Michigan, Dearborn	371	6,779	7,554	6,015	6,846	8,176	7,802	7,904	8,315	8,094	8,813	8,777	7,472	8,180
Eastern Michigan U.	372	14,133	11,643	12,437	3,128	1,428	1,761	3,815	6,281	6,600	7,175	9,088	7,233	8,025
U. Hawaii, Hilo	373	14,857	9,934	22,003	16,009	9,323	14,495	11,287	7,008	7,133	6,864	6,992	7,411	8,001
U. Oklahoma, Tulsa	374	ne	ne	ne	ne	ne	4,104	4,962	4,487	6,233	6,373	7,483	7,185	7,945
California State Polytechnic U., Pomona	375	6,493	7,198	6,597	6,988	5,455	4,611	5,254	5,863	8,043	6,099	7,396	7,011	7,909
U. Colorado Colorado Springs	376	9,088	7,425	4,727	4,721	5,363	6,988	6,812	6,680	5,976	4,720	5,557	5,338	7,761
Western Kentucky U.	377	9,943	8,344	10,639	9,322	8,280	7,854	8,926	10,814	9,617	9,281	8,241	6,944	7,720

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
William Paterson U.	378	1,051	1,452	ne	ne	ne	ne	1,919	3,012	9,456	10,122	9,603	7,867	7,574
U. Arkansas, Little Rock	379	11,007	12,039	10,500	13,107	8,068	7,003	7,604	6,833	8,167	9,975	9,711	7,397	7,530
U. Arkansas, Pine Bluff	380	8,343	9,415	9,082	8,911	8,198	8,425	8,873	8,136	8,349	9,024	8,540	8,713	7,506
Yeshiva U.	381	314,240	281,334	289,027	271,166	306,826	306,174	46,130	3,258	3,302	2,420	2,763	5,452	7,274
Appalachian State U.	382	2,898	3,835	4,438	3,051	4,289	3,878	3,146	4,475	3,631	3,268	4,894	4,509	7,189
Amherst C.	383	3,628	4,623	5,448	6,275	4,308	4,412	4,260	4,070	4,849	6,325	4,906	4,636	7,177
Edward Via C. of Osteopathic Medicine	384	ne	2,453	2,576	4,992	2,633	2,237	5,692	8,119	7,601	7,225	7,475	6,629	7,121
U. Central Oklahoma	385	1,786	1,548	1,028	1,067	1,362	7,691	6,275	5,832	5,104	5,682	5,788	5,997	7,070
Southern U. and A&M C., Agricultural Research and Extension Center	386	ne	6,143	8,122	5,530	5,606	4,761	4,704	5,000	5,296	5,448	4,475	6,164	7,048
Hofstra U.	387	2,552	2,472	3,237	2,394	3,102	2,585	2,440	1,702	1,662	1,744	1,445	5,545	6,939
West Virginia State U.	388	3,770	4,176	5,087	4,491	7,221	7,365	5,224	6,305	6,535	5,829	5,775	6,565	6,703
Grand Valley State U.	389	5,044	6,429	7,814	9,202	8,198	7,453	6,764	6,917	6,968	6,592	6,792	6,809	6,695
Philadelphia C. of Osteopathic Medicine	390	1,278	2,401	1,898	2,614	2,209	2,561	2,458	2,969	3,059	3,162	3,360	6,186	6,667
U. New England	391	3,560	4,016	5,224	6,637	7,650	7,498	7,566	8,064	6,700	7,346	6,886	6,234	6,664
U. Baltimore	392	4,229	5,944	5,556	5,448	4,990	5,022	5,798	6,851	10,556	12,451	15,054	14,672	6,646
Langston U.	393	4,492	5,206	5,326	4,932	8,512	8,126	11,178	11,025	10,872	10,719	14,409	6,345	6,481
Rutgers, State U. New Jersey, Camden	394	3,574	5,079	3,810	5,722	4,919	5,123	4,250	5,103	3,264	3,211	3,950	5,142	6,480
C. Charleston	395	14,218	8,320	9,579	10,224	10,034	10,607	10,189	8,927	7,375	7,610	5,728	6,361	6,421
Purdue U., Northwest	396	na	na	na	na	na	na	na	8,924	8,062	5,272	5,839	5,647	6,387
Pennsylvania State U., Behrend	397	3,265	3,183	3,374	3,203	4,282	3,737	5,382	3,804	2,760	3,414	1,743	5,509	6,384
Gallaudet U.	398	7,652	7,161	6,765	6,769	5,655	4,477	6,947	7,603	7,617	5,382	4,599	6,126	6,360
Hope C.	399	3,596	4,185	3,376	3,559	3,016	2,932	2,811	3,225	3,179	2,745	3,822	5,211	6,355
Wellesley C.	400	8,422	7,242	8,439	9,113	10,127	9,595	11,664	10,326	11,530	8,810	8,088	6,252	6,326
Indiana U. Pennsylvania	401	1,376	1,736	1,809	1,280	938	ne	1,241	2,291	6,450	8,119	6,531	6,180	6,313
Abilene Christian U.	402	662	487	ne	ne	ne	ne	ne	ne	ne	ne	ne	4,597	6,310
Roseman U. of Health Sciences	403	ne	840	ne	ne	3,021	3,287	3,433	4,167	3,973	4,176	4,380	5,985	6,296
Southern Connecticut State U.	404	3,840	4,083	3,526	2,012	5,465	5,482	3,243	2,493	2,763	4,627	5,413	5,750	6,286

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CUNY, Brooklyn C.	405	6,846	9,306	9,216	8,064	9,407	9,091	9,602	7,393	6,600	6,837	7,074	6,318	6,220
High Tech High Graduate School of Ed.	406	ne	ne	ne	ne	ne	ne	ne	ne	861	ne	3,304	5,032	6,203
Pacific U.	407	1,849	1,129	2,110	2,535	2,122	2,016	2,508	7,770	6,264	8,753	5,842	4,690	6,128
Texas Woman's U.	408	2,271	2,919	4,129	2,704	2,650	2,310	3,014	4,073	4,822	4,477	4,135	4,943	6,029
U. North Carolina, Asheville	409	2,671	3,157	3,068	2,647	2,150	2,384	3,348	2,863	3,414	4,602	4,789	4,844	5,973
Reed C.	410	1,904	1,839	1,837	2,395	3,124	3,050	3,213	1,415	2,607	3,240	5,155	5,132	5,922
West Chester U. Pennsylvania	411	5,584	8,103	4,591	1,635	2,793	5,009	5,895	7,293	6,340	6,777	6,414	4,433	5,903
Claremont McKenna C.	412	5,725	5,316	5,365	5,414	5,463	ne	6,094	5,818	5,693	6,214	5,846	4,515	5,893
Grinnell C.	413	2,069	1,340	2,735	4,023	3,974	3,723	4,183	4,953	5,573	5,500	5,826	4,122	5,867
Smith C.	414	4,613	4,529	4,246	4,234	4,283	5,268	4,466	6,055	5,954	6,041	4,685	4,085	5,831
MGH Institute of Health Professions	415	ne	607	ne	ne	ne	3,931	2,548	2,282	3,328	4,130	3,549	3,037	5,805
Seton Hall U.	416	4,003	7,701	6,398	6,489	6,675	7,058	7,244	7,272	6,536	7,056	5,718	5,320	5,741
Morehouse C.	417	7,857	8,485	9,113	9,581	7,349	6,180	4,315	3,667	4,531	4,564	4,825	4,533	5,664
Williams C.	418	4,691	4,513	4,518	3,857	4,440	5,679	5,747	5,227	5,506	5,188	4,924	4,902	5,657
Northwest Indian C.	419	2,426	2,744	2,847	3,247	2,609	1,631	ne	ne	2,154	2,659	3,650	4,641	5,632
New York Institute of Technology	420	1,785	2,059	3,013	4,007	5,761	4,169	4,114	3,236	3,832	5,820	3,580	4,465	5,555
Naval War C.	421	ne	ne	2,938	2,700	2,736	2,653	3,210	4,240	5,270	5,060	5,944	5,542	5,529
CUNY, Graduate Center	422	11,562	11,974	9,173	11,982	7,797	6,175	7,093	8,011	4,781	5,399	4,787	4,265	5,509
Kean U.	423	ne	1,497	2,029	761	ne	1,064	908	ne	ne	ne	2,201	3,538	5,499
U. Southern Maine	424	16,358	16,938	13,915	11,725	9,408	7,091	4,773	7,147	7,414	6,654	5,635	5,480	5,498
U.S. Army War C.	425	ne	ne	ne	ne	ne	ne	ne	ne	ne	4,418	ne	4,662	5,496
U. Washington, Tacoma	426	872	1,359	1,845	2,203	2,938	3,618	3,957	3,246	3,006	3,471	3,504	4,291	5,484
Des Moines U.	427	855	924	ne	ne	929	ne	1,401	1,416	1,423	1,954	5,021	5,164	5,307
Lamar U.	428	5,829	4,762	3,589	2,605	2,447	2,824	2,783	3,883	3,595	4,848	4,327	4,734	5,304
Bucknell U.	429	5,456	5,043	4,009	4,297	4,464	4,140	4,516	4,892	5,269	5,625	5,051	4,476	5,259
U. Detroit Mercy	430	1,148	1,462	970	ne	1,320	1,882	3,654	2,748	4,605	5,210	4,786	4,578	5,186
Oregon Institute of Technology	431	ne	258	ne	ne	ne	2,056	4,027	3,595	3,163	4,793	4,267	4,314	5,086
U. Central del Caribe	432	7,122	7,515	7,313	7,095	7,181	6,964	7,090	5,634	4,111	3,953	3,931	3,831	5,053

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Barnard C.	433	3,353	4,046	3,684	2,931	2,738	2,916	3,534	3,730	3,458	4,010	3,748	4,632	4,988
Texas A&M U.- Commerce	434	2,679	2,242	2,279	2,541	2,833	3,755	2,943	4,227	3,431	3,403	4,166	3,827	4,955
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	435	ne	2,342	2,562	2,979	3,356	3,089	3,177	3,285	3,502	3,769	3,737	3,776	4,954
California State U., Bakersfield	436	2,083	3,162	1,241	2,602	2,432	3,192	3,161	4,652	5,577	7,591	7,053	6,253	4,815
Dakota State U.	437	ne	1,015	5,709	1,574	1,446	1,152	2,171	2,284	3,619	3,710	4,412	3,416	4,684
CUNY, Lehman C.	438	3,593	i 3,762	3,228	2,904	3,265	3,130	5,347	4,979	5,556	4,690	4,154	4,181	4,656
U. Wisconsin-Superior	439	5,890	6,187	i 6,041	i ne	3,030	i ne	ne	ne	3,068	2,250	2,301	2,602	4,615
U. New Haven	440	ne	2,009	2,723	1,400	1,616	i 1,832	3,822	5,005	5,585	5,062	3,843	4,069	4,548
SUNY, C. of Optometry	441	3,529	3,738	3,466	3,637	3,481	3,906	4,169	3,304	3,120	2,968	3,477	3,460	4,497
Haverford C.	442	3,620	2,765	2,588	2,769	2,546	2,633	2,173	2,442	3,041	3,752	4,473	3,835	4,487
Texas A&M International U.	443	2,428	3,121	3,344	3,674	3,441	2,917	3,742	4,745	5,735	6,068	3,067	3,740	4,486
Toyota Technological Institute, Chicago	444	ne	746	ne	ne	ne	2,543	2,710	2,880	3,251	3,681	5,887	4,967	4,470
Franklin and Marshall C.	445	3,770	3,439	2,997	3,475	3,105	3,888	3,772	4,385	4,769	5,041	3,623	3,722	4,440
Citadel Military C. South Carolina	446	ne	415	ne	ne	ne	ne	ne	ne	ne	ne	1,012	2,054	4,374
Carleton C.	447	4,575	5,382	4,957	5,848	5,657	6,746	6,385	6,888	5,515	4,388	3,732	3,800	4,358
Southern U. and A&M C., Baton Rouge	448	6,865	6,819	i 6,773	4,920	4,812	4,766	4,322	4,043	4,171	4,492	3,849	4,943	4,344
Colgate U.	449	2,851	2,291	3,268	2,704	2,444	2,721	3,219	3,414	3,823	3,756	2,913	3,306	4,343
Western Illinois U.	450	1,221	1,528	4,514	1,983	1,349	860	ne	2,006	2,466	2,373	2,461	3,532	4,311
U. of Health Sciences and Pharmacy in St. Louis	451	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	4,835	5,313	4,280
South Carolina State U.	452	7,167	10,037	i 12,909	12,809	i 12,709	i 12,607	13,076	i 14,300	15,130	i 3,659	3,796	i 3,933	i 4,270
California State U., Dominguez Hills	453	2,743	2,780	2,894	4,671	3,614	i 2,557	2,790	1,858	2,043	1,957	2,065	2,690	4,230
Santa Clara U.	454	3,816	2,407	3,329	2,376	2,883	1,659	2,056	2,145	2,299	2,319	2,682	3,142	4,225

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Swarthmore C.	454	2,984	2,994	3,281	3,415	3,528	2,943	3,211	3,569	3,921	4,203	3,544	3,296	4,225
California State U., Chico	456	2,881	2,684	2,492	2,868	2,384	1,837	2,363	1,600	2,452	3,232	4,305	4,209	4,177
Youngstown State U.	457	4,523	4,732	3,598	3,785	3,464	3,348	2,342	4,439	4,463	4,447	4,120	2,775	4,157
Occidental C.	458	2,289	1,809	1,592	1,634	2,177	1,544	2,008	1,764	1,445	2,458	2,657	3,587	4,139 i
U. Nebraska, Kearney	459	1,655	2,199	1,715	1,761	1,504	1,496	1,864	3,510	2,639	2,919	2,640	3,201	4,009
Fisk U.	460	7,700	4,849	4,058	6,565 i	9,073	9,854 i	10,635	5,017	2,790	4,748	3,904	4,320	4,000
National Defense U.	461	ne	ne	ne	5,865	7,682	5,542	6,447	6,293	4,276	4,231	4,583	3,786	3,920
Northern Kentucky U.	462	2,316	2,397	2,201	1,810	2,052	2,026	1,846	1,649	1,653	2,363	2,693	3,403	3,888
Pepperdine U.	463	2,672	1,924	2,571	2,400	2,401	2,714	3,178	2,396	1,954	2,170	2,006	2,655	3,775
Sonoma State U.	464	858	825	ne	1,938	1,714	1,163	693	ne	ne	ne	1,545	2,957	3,774
U. Wisconsin-Stevens Point	465	6,766	6,171 i	5,576	4,392	3,919 i	3,446 i	2,973	3,420 i	3,867 i	4,314 i	4,764	4,401	3,740
Coastal Carolina U.	466	2,404	2,162	2,412	2,516	2,166	1,862	1,779	1,893	1,631	2,042	1,903	2,245	3,724
Chicago State U.	467	1,598	2,014	565	ne	ne	ne	910	ne	1,154	898	ne	ne	3,701
U. Central Arkansas	468	2,670	2,821	3,277	2,913	4,064	3,502	3,453	3,313	3,620	3,477	3,455	3,990	3,684
Trinity U.	469	1,446	1,355	1,611	3,094	2,992	2,633	2,383	3,274	3,244	3,736	3,472	2,905	3,657
Colorado C.	470	671	1,198	1,248	1,229	1,823	2,247	1,775	2,215	2,560	2,233	2,291	5,467	3,646
Norfolk State U.	471	5,944	7,140	8,336	6,431	6,936	5,348	7,593	7,296	6,914	8,050	7,153	4,316	3,593
St. John's U., New York	472	1,643	1,786	2,161	2,401	2,507	2,558	2,307	2,542	2,903	2,352	3,282	2,940	3,592
U. Texas of the Permian Basin	473	1,417	1,232	1,707	1,146	1,532	1,725	1,561	1,152	668	ne	2,105	3,504	3,577
CUNY, C. Staten Island	474	3,290	4,188	4,955	3,691	3,731	3,060	3,511	4,250	4,118 i	3,986	3,682	2,860	3,545
Milwaukee School of Engineering	474	3,944	4,472	4,635	4,376	4,410	4,524	3,930	3,374	3,232	4,026	3,190	3,193	3,545
Pace U.	476	3,085	3,732	4,214	3,611	4,373	4,647	5,359	5,028	4,282	3,855	4,272	3,649	3,524
U. North Carolina, general administration	477	ne	ne	ne	ne	ne	4,197	4,137	3,721	4,843	4,154	3,942	4,024	3,522
U. Northern Iowa	478	3,064	4,248	3,615	3,678	3,711	4,032	3,632	3,303	2,983	3,628	2,970	3,259	3,486
Alfred U.	479	4,524	6,084	5,451	6,731	4,655	5,193	3,975	3,231	3,641	5,153	2,780	2,660	3,477
C. New Jersey	480	850	486	ne	ne	ne	ne	ne	1,078	949	ne	1,464	1,912	3,464
Winthrop U.	481	ne	5,089	7,993	12,495	13,981	10,156	1,993	1,826	2,007	2,189	2,217	2,586	3,424
St. Edward's U.	482	ne	7,160	5,906	8,040	3,975	9,515	9,325	10,149	10,431	9,650	9,619	9,527	3,393
Azusa Pacific U.	483	ne	3,620	2,056 i	ne	ne	7,521	8,898	8,430	8,380	5,598	7,068	5,318	3,389

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
California State U., Channel Islands	484	ne	524	ne	1,236	3,862	1,949	1,383	1,096	1,248	1,572	1,497	2,341	3,377
Murray State U.	485	3,396	3,718	3,345	2,192	2,080	2,371	2,124	2,459	2,872	3,710	3,019	3,844	3,371
Bowie State U.	486	ne	1,910	1,739	1,422	1,761	1,497	1,927	1,813	1,839	1,911	1,967	1,398	3,351
Harvey Mudd C.	487	3,214	3,861	3,512	3,595	3,127	3,272	4,332	3,748	3,790	3,353	2,916	2,359	3,350
U. Northern Colorado	488	2,607	2,078	2,896	3,034	4,176	3,652	4,028	4,538	5,089	4,571	3,738	3,159	3,308
Hawaii Pacific U.	489	ne	1,436	1,390	1,043	1,524	1,241	2,371	2,175	2,114	1,980	1,796	1,849	3,302
Biola U.	490	ne	ne	ne	ne	ne	ne	2,418	2,499	2,622	2,792	2,868	3,003	3,260
U. Texas, Tyler	491	5,679	2,766	8,520	5,317	6,894	4,610	2,844	1,837	1,828	2,063	2,007	2,279	3,246
Hobart and William Smith Colleges	492	1,434	1,566	1,516	2,238	1,221	946	ne	952	ne	1,919	2,114	1,941	3,228
Fayetteville State U.	493	11,865	14,618	15,719	16,698	14,732	13,746	15,725	5,105	4,980	4,695	2,797	3,933	3,206
Stephen F. Austin State U.	494	9,127	6,046	5,495	4,612	4,298	5,170	4,749	3,677	3,336	3,679	3,672	3,204	3,184
Alabama State U.	495	13,340	12,340	13,607	1,927	2,236	2,303	2,372	2,253	2,434	2,577	2,582	2,631	3,178
Central Washington U.	496	5,159	2,858	2,753	2,122	2,124	2,581	2,751	3,798	3,066	3,223	2,674	2,410	3,176
Calvin U.	497	5,010	3,113	3,252	3,466	3,051	2,430	1,809	1,456	1,937	1,577	2,107	2,637	3,169
CUNY, Baruch C.	498	2,616	2,645	3,605	2,264	2,183	2,451	2,998	2,543	2,817	2,387	2,396	2,521	3,156
Austin Peay State U.	499	ne	2,180	2,124	2,067	2,002	2,113	1,823	2,134	2,644	2,285	2,833	2,740	3,149
U. Louisiana, Monroe	500	2,884	2,812	2,469	2,781	2,267	1,672	2,441	2,297	2,123	2,364	2,362	2,198	3,128
Colorado State U., Pueblo	501	413	364	ne	ne	ne	ne	ne	ne	ne	3,107	3,104	2,990	3,117
Lawrence Technological U.	502	3,952	3,348	1,483	2,022	1,876	2,528	1,907	1,942	1,668	1,352	1,521	1,764	3,050
U. Wisconsin-La Crosse	503	4,141	3,862	3,583	3,796	3,424	3,615	3,211	3,187	3,569	2,692	2,795	3,001	2,942
Pennsylvania State U., Harrisburg	504	2,734	3,460	2,903	2,230	2,557	3,379	2,558	1,654	2,119	2,805	1,866	2,938	2,927
CUNY, system office	505	ne	ne	1,817	1,210	1,088	1,782	1,655	1,114	3,253	2,619	1,704	1,664	2,900
Pittsburg State U.	506	1,759	1,687	1,479	1,536	2,475	2,210	2,162	2,255	2,253	2,513	2,173	2,730	2,884
U. Illinois, Springfield	507	2,096	2,002	2,370	2,276	1,916	2,070	1,683	2,900	2,164	1,876	3,406	2,612	2,881
Morehead State U.	508	2,145	2,018	2,174	2,631	1,892	1,838	2,399	2,860	2,434	2,028	1,883	1,754	2,880
Saginaw Valley State U.	509	873	1,249	1,094	939	ne	1,220	1,190	1,406	1,640	2,818	2,343	2,428	2,862
Framingham State U.	510	ne	ne	ne	ne	ne	ne	ne	1,901	164	ne	2,317	2,401	2,830
Davidson C.	511	1,493	1,977	1,400	2,337	1,804	2,377	1,521	1,736	1,638	1,777	2,263	2,466	2,788
Western Carolina U.	512	2,376	1,451	1,811	1,028	1,048	1,145	1,305	1,474	1,507	2,633	2,696	2,847	2,783
Fort Lewis C.	513	392	606	ne	ne	ne	ne	ne	ne	ne	1,460	1,370	1,926	2,765

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Christopher Newport U.	514	1,110	1,669	1,327	1,187	1,508	1,208	1,172	1,264	1,732	1,961	2,608	2,656	2,762
U. Wisconsin-Green Bay	515	1,219	1,239	1,259	1,279	1,299	1,320	1,599	1,510	1,454	2,083	1,982	1,879	2,713
Spelman C.	516	3,181	2,273	2,148	1,602	1,595	1,524	1,929	2,079	2,350	2,751	2,750	2,282	2,686
Johnson C. Smith U.	517	ne	ne	ne	ne	ne	ne	2,094	2,255	2,468	2,148	2,472	2,578	2,685
U. Richmond	518	4,052	4,064	4,282	3,351	3,598	3,069	3,047	3,106	2,784	2,783	2,469	2,294	2,670
U. San Francisco	519	2,124	2,668	4,301	2,663	2,764	2,599	2,365	2,602	2,741	2,712	2,161	1,375	2,657
Furman U.	520	2,311	2,184	2,049	2,199	1,600	1,928	1,869	2,051	2,064	1,628	2,101	2,431	2,650
Bowdoin C.	521	2,627	2,877	4,732	4,292	3,126	2,991	3,204	2,340	2,724	2,991	2,719	2,417	2,648
U. Virginia's C. Wise	522	481	336	ne	ne	ne	ne	ne	ne	ne	ne	ne	3,310	2,628
Middlebury C.	523	2,292	2,408	3,031	2,179	1,450	1,599	1,822	2,043	1,895	1,657	1,720	2,927	2,603
U. South Carolina, Aiken	524	337	750	ne	1,309	1,133	1,154	1,445	2,961	2,602	2,481	2,590	2,042	2,595
Pomona C.	525	2,924	3,640	3,259	3,679	3,818	3,538	3,691	3,205	2,983	2,985	2,855	2,146	2,589
Vassar C.	526	1,280	1,838	1,258	1,694	1,220	2,854	1,495	1,600	4,185	1,009	1,568	1,606	2,580
Lewis and Clark C.	527	2,753	2,778	2,246	3,628	4,713	3,873	3,267	3,438	2,811	2,750	3,350	2,281	2,566
Touro U., California	528	1,221	1,779	2,237	2,155	3,067	3,106	3,466	3,122	3,233	3,543	3,551	3,489	2,561
Franklin W. Olin C. of Engineering	529	ne	1,016	1,777	1,157	1,561	2,136	1,762	1,553	1,254	1,655	1,404	1,627	2,554
Colby C.	530	1,782	1,772	1,996	1,822	1,673	1,748	1,903	2,071	2,240	1,852	1,536	1,672	2,530
Sul Ross State U.	531	3,039	3,183	2,375	2,159	2,528	2,204	2,015	2,500	2,934	2,352	2,068	2,143	2,526
Troy U.	532	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,692	1,548	2,517
U. of St. Thomas (MN)	533	1,330	1,316	1,030	1,424	916	ne	1,266	1,241	1,645	1,870	2,679	5,146	2,476
Bates C.	534	1,590	1,897	2,070	2,514	1,584	2,791	1,781	1,853	1,635	2,135	2,303	2,620	2,468
Eastern Washington U.	535	3,266	3,910	2,700	2,115	1,867	2,973	3,368	2,000	2,590	2,024	2,282	1,921	2,437
Southeastern Louisiana U.	536	2,561	1,952	2,121	2,067	1,503	2,670	2,128	2,206	2,039	1,971	2,258	1,723	2,407
Tougaloo C.	537	2,978	2,753	2,613	2,639	2,285	2,689	2,473	3,030	3,173	3,380	2,102	2,092	2,336
Pratt Institute	538	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	2,547	2,325
Grambling State U.	539	993	2,135	2,179	1,695	1,469	1,863	1,570	5,911	2,981	2,836	2,427	2,124	2,306
Albany C. of Pharmacy and Health Sciences	540	3,074	3,496	2,639	2,637	3,200	2,533	1,789	2,567	2,732	3,383	3,765	3,687	2,276
Dillard U.	541	8,425	7,936	7,448	7,741	6,939	9,387	9,566	7,095	6,573	2,772	2,523	2,528	2,270
La Sierra U.	542	ne	732	ne	ne	1,057	1,165	1,255	2,202	2,227	1,581	1,647	1,517	2,246

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
St. Cloud State U.	543	4,184	3,404	2,932	2,912	3,380	4,192	3,497	3,588	3,725	3,275	3,056	2,379	2,226
Northeastern Illinois U.	544	711	533	ne	ne	703	ne	ne	1,403	2,442	2,478	2,018	1,913	2,224
Minnesota State U., Mankato	545	3,837	2,654	2,082	2,640	3,310	2,294	4,034	2,471	2,943	3,392	2,754	2,170	2,206
Willamette U.	546	2,059	1,940	2,652	1,960	1,698	2,007	2,459	3,147	2,723	1,953	1,546	1,817	2,183
SUNY, Buffalo State	547	1,935	2,539	2,970	2,106	1,996	2,366	2,221	1,887	1,928	2,124	2,253	1,962	2,172
Roger Williams U.	548	1,967	2,627	2,596	2,186	2,558	2,348	2,441	2,952	1,937	1,852	1,531	1,854	2,156
Purdue U., Fort Wayne	549	8,523	8,864	8,570	8,128	7,882	7,052	5,952	5,254	4,945	2,416	2,264	2,495	2,134
Mount Holyoke C.	550	2,788	3,317	3,323	3,118	3,871	3,826	3,403	3,635	3,027	2,979	2,016	2,026	2,112
Dine C.	551	ne	959	ne	ne	ne	ne	ne	ne	1,238	1,126	347	ne	2,091
SUNY, Geneseo	551	1,373	2,677	2,132	1,201	1,084	1,314	1,750	1,758	1,939	2,139	1,642	2,070	2,091
Erikson Institute	553	ne	1,212	2,511	2,001	1,321	2,397	3,117	3,965	3,583	2,279	1,992	1,723	2,068
U. of the Incarnate Word	554	ne	667	ne	ne	ne	848	ne	ne	1,338	1,800	1,469	1,982	2,064
Lafayette C.	555	2,089	2,426	1,864	1,947	1,915	1,693	1,553	1,831	1,815	1,554	1,390	1,015	2,059
Lake Superior State U.	556	ne	752	ne	ne	ne	1,170	1,039	1,067	633	ne	ne	ne	2,056
Western New England U.	557	ne	1,111	483	ne	ne	ne	1,291	610	ne	ne	ne	ne	2,052
Palmer C. of Chiropractic, Davenport	558	4,693	4,861	4,507	3,774	2,736	1,698	1,510	1,836	1,600	1,650	1,900	2,233	2,050
U. Wisconsin-Oshkosh	559	1,556	2,384	2,331	2,167	1,935	1,703	ne	1,507	1,544	1,581	1,618	1,656	1,990
Black Hills State U.	560	2,883	1,643	2,466	3,061	2,380	2,430	2,833	2,109	1,571	2,031	1,499	1,280	1,987
California State U., Stanislaus	561	ne	1,487	1,881	1,342	1,136	1,080	1,248	1,365	1,394	1,477	1,843	2,085	1,966
CUNY, New York City C. of Technology	562	231	343	ne	ne	ne	ne	ne	ne	2,418	2,711	2,130	1,367	1,955
Monmouth U.	563	2,195	1,956	904	ne	865	ne	900	ne	ne	1,294	1,729	1,667	1,938
Elizabeth City State U.	564	5,576	10,455	4,455	4,515	2,988	2,277	1,889	1,340	978	ne	1,473	1,717	1,934
CUNY, York C.	565	ne	2,180	1,544	999	ne	716	ne	ne	ne	1,621	1,691	1,133	1,912
Utah Valley U.	566	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,895
Seattle U.	567	1,337	1,274	642	ne	2,692	2,847	2,050	1,623	2,535	2,223	2,060	1,562	1,894
Northern Michigan U.	568	910	841	ne	ne	ne	ne	1,118	1,339	1,728	1,520	1,523	1,364	1,888
Savannah State U.	568	1,874	2,700	1,996	2,613	2,210	1,801	2,267	1,407	1,793	1,720	1,804	1,804	1,888
Hamilton C.	570	3,192	3,109	3,069	2,942	2,846	2,291	2,662	2,354	1,796	2,050	1,869	1,747	1,879
Connecticut C.	571	1,532	1,801	1,740	1,842	1,966	1,900	1,972	1,875	1,349	1,894	1,598	1,244	1,875

TABLE 21

Higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Kettering U.	630	6,880	5,087	4,059	3,449	3,517	3,673	3,463	4,233	2,531	1,765	2,081	1,315	816
Augustana U.	631	912	1,578	1,160	1,045	1,106	782	ne	1,212	1,170	841	ne	1,013	724
Plymouth State U.	632	1,752	i 3,729	2,913	2,872	2,786	2,318	1,340	1,131	990	ne	ne	ne	669
Mercyhurst U.	633	2,040	1,206	1,539	1,414	1,914	1,987	1,647	1,669	i ne	1,434	i 1,177	i 920	i 661
California Lutheran U.	634	ne	741	ne	ne	ne	ne	ne	ne	ne	1,143	630	ne	627
California State U., Maritime Academy	635	ne	3,005	2,793	2,480	1,011	1,542	2,205	1,921	3,039	2,959	3,202	2,799	526
Sonoran U. Health Sciences	636	ne	ne	ne	ne	ne	ne	ne	ne	ne	230	ne	ne	520
U. Charleston	637	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	217
All other surveyed institutions	-	1,878,985	2,322,758	2,289,227	2,193,462	1,534,411	1,526,850	1,560,077	1,635,469	1,705,045	700,910	634,727	53,692	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$2,056,063 thousand in total R&D expenditures in FY 2022.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

Note(s):

Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
All institutions	-	97,680,528	53,971,468	4,907,199	24,492,663	5,701,656	5,974,155	2,633,387
Johns Hopkins U. ^a	1	3,420,312	2,971,816	7,785	158,738	120,023	153,334	8,616
U. California, San Francisco	2	1,805,950	780,318	40,658	438,949	128,983	251,612	165,430
U. Pennsylvania	3	1,791,311	873,318	23,189	562,094	204,216	120,832	7,662
U. Michigan, Ann Arbor	4	1,770,708	970,636	1,592	612,187	106,122	71,520	8,651
U. Washington, Seattle	5	1,559,708	1,083,090	19,188	117,096	61,099	231,172	48,063
U. California, Los Angeles	6	1,536,197	848,138	89,554	287,147	87,218	187,416	36,724
U. California, San Diego	7	1,533,357	970,696	58,556	213,400	106,189	111,854	72,662
U. Wisconsin-Madison	8	1,523,513	740,854	109,946	463,759	40,450	127,756	40,748
Duke U.	9	1,390,538	901,807	802	167,200	208,132	92,526	20,071
Stanford U.	10	1,384,555	860,125	20,064	169,346	138,118	189,536	7,366
Ohio State U.	11	1,363,388	636,902	66,409	424,790	141,894	52,073	41,320
U. North Carolina, Chapel Hill	12	1,361,028	827,158	38,681	343,102	49,664	84,942	17,481
Harvard U.	13	1,308,458	628,683	5,379	415,763	62,034	179,073	17,526
Cornell U.	14	1,300,357	636,481	88,200	250,308	55,328	115,788	154,252
New York U.	15	1,276,038	668,381	17,982	296,131	58,776	101,175	133,593
U. Pittsburgh, Pittsburgh	16	1,251,998	814,647	10,753	281,033	36,310	63,172	46,083
Georgia Institute of Technology	17	1,231,485	940,488	117,204	62,025	82,540	25,348	3,880
Columbia U. in the City of New York	18	1,230,924	904,346	6,391	113,189	83,684	121,435	1,879
U. Maryland ^b	19	1,228,550	750,447	49,950	334,100	34,844	52,546	6,663
U. Minnesota, Twin Cities	20	1,202,084	652,384	73,329	345,240	51,926	45,113	34,092
Yale U.	21	1,191,201	689,270	2,364	343,754	76,240	75,151	4,422
U. Texas M. D. Anderson Cancer Center	22	1,182,536	225,659	297,033	231,583	241,850	34,523	151,888
Texas A&M U., College Station and Health Science Center	23	1,152,666	505,355	218,735	315,112	35,535	47,156	30,773
Vanderbilt U. and Vanderbilt U. Medical Center	24	1,086,223	666,282	2,954	301,424	83,213	29,292	3,058
U. Florida	25	1,085,834	467,739	171,655	327,074	39,233	51,825	28,308
Washington U., Saint Louis	26	1,047,098	681,353	638	154,896	121,140	86,700	2,371
U. Southern California	27	1,039,905	601,747	11,421	201,486	91,844	58,895	74,512
Pennsylvania State U., University Park and Hershey Medical Center	28	1,019,940	681,159	47,345	207,630	24,121	30,128	29,557
Northwestern U.	29	1,000,695	618,771	783	262,434	59,850	51,091	7,766
Massachusetts Institute of Technology	30	989,166	531,056	2,523	117,128	165,200	100,640	72,619
U. California, Berkeley	31	981,035	468,542	37,894	210,324	69,062	169,790	25,423
Emory U.	32	958,281	568,149	522	252,545	64,536	70,269	2,260
Icahn School of Medicine at Mount Sinai	33	893,968	610,646	3,652	132,627	81,384	50,251	15,408

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. California, Davis	34	883,807	468,468	71,806	211,277	50,684	42,552	39,020
U. Texas, Austin	35	845,896	536,296	31,721	151,594	76,512	45,893	3,880
Baylor C. of Medicine	36	827,005	420,054	35,155	292,730	28,251	50,815	0
U. Arizona	37	824,340	374,936	30,993	254,878	27,911	28,814	106,808
Arizona State U.	38	797,224	309,094	98,817	282,983	21,980	62,833	21,517
U. Illinois, Urbana-Champaign	39	765,909	420,953	28,024	215,146	49,272	33,693	18,821
Michigan State U.	40	759,229	381,504	42,516	291,592	10,942	17,393	15,282
Purdue U., West Lafayette	41	754,627	352,890	39,511	227,592	69,428	25,281	39,925
Indiana U., Bloomington	42	751,309	360,300	3,951	272,216	34,091	67,315	13,436
Boston U.	43	725,402	413,102	752	187,662	22,525	84,116	17,245
U. Texas Southwestern Medical Center	44	719,002	298,154	85,808	166,635	47,282	54,435	66,688
U. Alabama, Birmingham	45	713,480	421,223	8,816	172,809	73,595	35,196	1,841
Rutgers, State U. New Jersey, New Brunswick	46	712,231	351,660	90,882	149,889	44,250	71,821	3,729
U. Utah	47	670,119	367,040	3,347	221,473	43,073	31,556	3,630
U. Virginia, Charlottesville	48	662,658	332,993	9,520	187,912	32,511	32,320	67,402
U. Cincinnati	49	615,070	350,392	6,044	161,967	45,002	38,204	13,461
U. Colorado Boulder	50	611,380	507,892	5,422	46,096	11,316	17,307	23,347
U. Colorado Anschutz Medical Campus ^c	51	611,358	429,949	24,575	47,955	52,346	43,531	13,002
U. Iowa	52	594,215	314,346	5,957	220,605	32,201	21,085	21
Virginia Polytechnic Institute and State U.	53	591,861	240,305	75,010	225,690	37,005	6,972	6,879
U. Chicago	54	591,805	456,806	322	40,734	46,694	45,554	1,695
North Carolina State U.	55	583,203	250,582	130,707	145,171	52,960	3,451	332
U. Georgia	56	545,631	220,343	55,206	237,894	12,775	12,380	7,033
U. California, Irvine	57	534,947	291,393	15,008	115,832	42,941	33,110	36,663
Scripps Research Institute	58	492,639	242,135	1,424	164,488	35,318	49,274	0
Oregon Health and Science U.	59	479,226	346,724	1,322	45,950	43,965	40,925	340
California Institute of Technology	60	478,142	326,401	5,009	54,587	17,200	52,970	21,975
U. Kentucky	61	476,517	253,852	32,619	137,897	10,715	13,292	28,142
Case Western Reserve U.	62	467,389	380,423	6,503	53,133	4,856	20,142	2,332
Princeton U.	63	461,185	218,390	255	102,851	17,455	73,840	48,394
Colorado State U., Fort Collins	64	456,911	316,727	30,749	65,700	11,888	22,618	9,229
U. Rochester	65	450,805	334,503	2,037	53,315	36,329	18,783	5,838
Carnegie Mellon U.	66	449,707	259,160	4,379	123,903	42,115	13,772	6,378
U. Illinois, Chicago	67	440,573	251,328	6,914	131,574	11,917	30,691	8,149

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
SUNY, U. Buffalo	68	439,709	218,231	33,635	122,816	29,723	26,045	9,259
U. Miami	69	439,300	265,212	18,607	97,990	35,378	21,416	697
U. Missouri, Columbia	70	432,310	182,432	35,573	181,090	17,608	10,296	5,311
SUNY, Polytechnic Institute	71	413,763	32,396	97,519	110,878	169,101	223	3,646
U. Oklahoma, Norman and Health Science Center	72	408,656	210,994	26,614	140,592	15,450	11,616	3,390
Virginia Commonwealth U.	73	405,898	166,726	34,539	173,811	16,124	14,537	161
U. Kansas	74	405,267	200,117	29,376	120,620	29,384	12,073	13,697
U. South Florida ^d	75	405,166	206,552	24,683	146,620	12,463	12,424	2,424
Iowa State U.	76	393,184	187,156	37,071	134,050	18,924	15,284	699
Washington State U.	77	368,396	187,580	54,610	103,067	9,099	13,119	921
U. Delaware	78	368,107	194,775	11,552	142,398	5,839	5,252	8,291
U. Connecticut	79	367,557	230,752	4,242	103,966	11,371	13,166	4,060
Rockefeller U.	80	360,877	94,693	102	225,209	2,292	37,218	1,363
U. Massachusetts, Medical School	81	358,204	258,147	2,878	49,909	20,870	20,992	5,408
Florida State U.	82	355,986	163,744	24,003	152,444	4,914	3,723	7,158
Utah State U.	83	344,851	280,866	22,243	28,019	6,871	578	6,274
Louisiana State U., Baton Rouge	84	344,556	111,886	69,770	138,650	13,449	4,727	6,074
Dartmouth C. and Dartmouth Hitchcock Medical Center	85	344,126	155,445	1,344	156,384	2,383	19,943	8,627
U. Texas Health Science Center, Houston	86	342,633	184,205	46,379	55,120	15,764	28,031	13,134
U. Nebraska, Lincoln	87	340,260	113,248	61,070	134,864	19,767	6,247	5,064
U. New Mexico	88	331,164	232,774	6,491	67,949	4,625	17,427	1,898
U. Tennessee, Knoxville	89	324,435	149,260	15,785	138,287	9,528	7,012	4,563
Thomas Jefferson U.	90	321,644	173,861	14,252	63,739	26,469	24,927	18,396
Medical C. Wisconsin	91	321,506	152,301	586	102,906	35,121	27,050	3,542
Albert Einstein C. of Medicine	92	318,314	220,780	719	73,665	3,820	19,330	0
Georgetown U.	93	313,220	127,213	1,144	81,692	16,111	61,547	25,513
SUNY, Stony Brook U.	94	312,698	184,154	16,238	88,630	9,512	11,750	2,414
Brown U.	95	310,780	215,067	9	56,819	4,247	28,539	6,099
Auburn U., Auburn	96	304,439	104,883	33,555	143,876	8,338	1,912	11,875
Mississippi State U.	97	303,418	138,207	92,113	60,534	3,170	7,928	1,466
Temple U.	98	301,395	143,580	8,109	99,543	26,463	17,459	6,241
Oregon State U.	99	297,934	192,621	50,654	28,792	8,037	2,772	15,058
Medical U. South Carolina	100	284,553	163,395	4,565	76,566	20,932	9,097	9,998
Florida International U.	101	281,665	129,683	20,013	120,737	2,800	7,184	1,248

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Notre Dame	102	280,604	124,411	487	94,156	16,225	21,210	24,115
U. California, Santa Barbara	103	278,897	161,241	6,212	57,814	16,324	27,839	9,467
U. Hawaii, Manoa	104	277,323	169,762	17,799	75,287	2,304	11,546	625
Uniformed Services U. of the Health Sciences	105	277,240	194,187	0	75,736	0	7,317	0
George Washington U.	106	275,483	161,867	2,264	67,384	5,048	25,886	13,034
Wake Forest U.	107	269,109	180,754	9,209	26,816	22,212	21,022	9,096
Clemson U.	108	263,158	119,512	25,685	95,211	17,690	4,796	264
Wichita State U.	109	261,519	93,367	18,882	28,618	120,443	170	39
Woods Hole Oceanographic Institution	110	255,017	211,550	398	10,972	3,874	12,807	15,416
U. Massachusetts, Amherst	111	245,158	129,044	12,632	79,588	8,582	8,646	6,666
Wayne State U.	112	242,247	126,814	9,796	78,061	6,556	17,750	3,270
U. Houston	113	240,126	84,295	28,999	107,699	9,709	6,502	2,922
U. Texas Health Science Center, San Antonio	114	238,510	119,071	27,587	57,408	9,276	24,858	310
Northeastern U.	115	231,607	150,093	1,747	55,478	12,107	11,909	273
Tufts U.	116	231,224	150,081	3,780	29,719	12,765	11,331	23,548
George Mason U.	117	230,068	119,406	5,816	55,812	6,969	35,685	6,380
U. Louisville	118	229,582	117,363	11,543	63,606	11,915	8,259	16,896
U. South Carolina, Columbia	119	229,162	106,752	13,021	95,360	4,322	8,292	1,415
Texas Tech U.	120	226,729	45,136	29,861	121,050	13,367	16,426	889
Tulane U.	121	222,605	127,544	4,215	51,561	10,974	13,868	14,443
U. Central Florida	122	221,488	110,131	8,500	82,434	11,278	5,068	4,077
U. Vermont	123	216,307	117,163	1,379	82,412	2,785	7,081	5,487
Rice U.	124	216,202	105,345	5,071	63,401	5,535	31,834	5,016
Georgia State U.	125	215,908	81,641	6,415	112,773	502	13,940	637
West Virginia U.	126	214,081	97,327	9,769	79,689	5,016	3,862	18,418
Kansas State U.	127	212,974	81,820	40,926	72,772	8,259	8,047	1,150
U. Dayton	128	211,494	203,206	756	853	5,620	408	651
U. New Hampshire	129	206,392	129,721	3,938	56,891	9,893	5,107	842
U. Arkansas for Medical Sciences	130	205,493	95,080	15,287	71,431	11,022	6,253	6,420
U. Nebraska, Medical Center	131	205,253	114,754	12,652	39,600	8,591	14,617	15,039
U. Louisiana, Lafayette	132	205,201	77,110	10,541	42,605	74,657	288	0
U. Texas Medical Branch	133	204,518	123,467	8,481	53,371	7,267	11,932	0
U. Alaska, Fairbanks	134	202,516	154,742	1,508	39,501	3,346	1,433	1,986
Montana State U., Bozeman	135	200,820	118,974	18,147	55,164	1,546	3,208	3,781

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. California, Riverside	136	199,135	114,257	8,566	51,532	6,267	8,538	9,975
Oklahoma State U., Stillwater	137	195,041	53,885	21,322	106,925	11,236	1,351	322
U. Arkansas, Fayetteville	138	184,080	64,252	48,654	59,522	4,705	5,742	1,205
U. Nevada, Reno	139	181,782	83,631	7,477	78,594	2,787	2,018	7,275
U. California, Santa Cruz	140	176,760	107,082	7,101	34,599	7,330	13,485	7,163
North Dakota State U.	141	174,904	45,343	50,066	71,056	1,507	864	6,068
U. Maine	142	171,931	84,072	19,449	60,064	3,848	2,568	1,930
U. Alabama, Huntsville	143	169,532	132,060	5,091	30,776	626	496	483
New Jersey Institute of Technology	144	167,135	71,326	14,576	62,576	1,872	7,207	9,578
U. Alabama, Tuscaloosa	145	163,204	67,986	17,040	73,435	2,701	1,631	411
U. Oregon	146	160,500	97,238	1,061	55,247	782	5,795	377
Syracuse U.	147	157,407	33,976	3,890	101,347	8,568	9,378	248
U. Mississippi	148	152,903	84,270	183	61,653	2,696	3,489	612
Drexel U.	149	151,903	99,399	3,418	36,121	2,323	7,882	2,760
U. North Dakota	150	147,717	62,737	26,441	44,072	13,559	727	181
U. Texas, San Antonio	151	147,629	54,384	13,795	64,443	5,765	6,123	3,119
U. Wyoming	152	139,764	68,772	5,592	58,184	4,099	2,167	950
U. Texas, Arlington	153	133,770	56,025	27,482	38,339	2,935	6,948	2,041
U. Texas, Dallas	154	130,914	60,706	13,882	32,378	9,499	14,449	0
SUNY, Binghamton U.	155	130,882	24,888	5,225	94,515	3,458	1,306	1,490
U. Texas, El Paso	156	130,501	60,387	15,999	41,654	1,177	2,151	9,133
SUNY, U. Albany	157	129,796	51,492	1,234	71,042	735	2,963	2,330
U. Rhode Island	158	129,102	93,190	5,508	24,722	1,304	3,470	908
Augusta U.	159	127,313	64,609	95	51,995	3,451	6,725	438
U. Montana, Missoula	160	125,603	73,507	659	48,353	709	2,220	155
San Diego State U.	161	123,856	50,540	4,812	64,484	457	2,489	1,074
Rensselaer Polytechnic Institute	162	121,809	50,605	3,485	47,193	15,282	2,012	3,232
New Mexico State U.	163	121,472	71,718	23,036	16,167	2,451	2,366	5,734
Cold Spring Harbor Laboratory	164	118,034	59,163	134	36,235	3,766	18,736	0
U. Idaho	165	115,603	56,160	35,703	17,659	1,923	766	3,392
U. Tennessee, Health Science Center	166	115,161	60,221	6,205	32,641	3,958	6,232	5,904
Rush U.	167	114,874	79,647	1,548	9,884	15,789	8,006	0
U. Massachusetts, Lowell	168	111,144	62,195	2,599	39,067	4,463	2,112	708
U. Maryland, Baltimore County	169	110,319	65,368	7,264	31,743	1,958	2,611	1,375

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Texas State U.	170	110,102	38,936	3,810	60,338	1,102	5,800	116
Brandeis U.	171	102,378	44,205	1,027	40,627	1,100	11,813	3,606
Colorado School of Mines	172	98,404	66,200	1,446	13,739	9,580	2,329	5,110
U. Nevada, Las Vegas	173	94,967	28,867	2,174	59,398	1,656	809	2,063
U. North Texas, Denton	174	93,538	23,056	5,007	61,728	1,979	1,762	6
Michigan Technological U.	175	91,084	48,766	999	32,247	6,687	591	1,794
New Mexico Institute of Mining and Technology	176	89,900	72,594	10,532	2,895	2,922	269	688
Saint Louis U.	177	82,740	42,170	355	22,991	5,459	11,584	181
Cleveland State U.	178	81,225	53,395	848	18,497	3,481	4,812	192
Van Andel Research Institute	179	78,626	29,424	701	35,812	227	4,633	7,829
William & Mary	180	75,953	33,730	4,124	30,035	966	4,212	2,886
U. Southern Mississippi	181	72,477	48,368	11,944	10,942	555	668	0
San Jose State U.	182	71,695	30,984	7,796	27,661	1,792	2,296	1,166
U. Memphis	183	71,271	24,686	8,365	33,900	1,084	3,045	191
Boston C.	184	68,958	36,560	1,439	13,949	652	15,649	709
American U.	185	67,616	14,752	874	40,650	428	8,424	2,488
Howard U.	186	67,594	37,331	1,197	23,130	2,908	1,816	1,212
Northern Arizona U.	187	66,729	43,453	7,055	14,501	813	768	139
Baylor U.	188	66,014	15,856	2,211	34,144	3,165	7,682	2,956
CUNY, City C.	189	65,569	38,596	11,892	13,103	467	1,311	200
U. Massachusetts, Boston	190	65,215	23,131	8,852	25,606	2,043	4,958	625
Old Dominion U.	191	64,877	27,804	12,866	19,957	820	2,515	915
U. Toledo	192	64,654	36,694	1,211	19,679	3,312	3,509	249
U. Texas Rio Grande Valley	193	64,401	18,317	5,380	32,862	212	7,326	304
Indiana U.-Purdue U., Indianapolis	194	64,162	29,353	413	27,461	1,313	5,475	147
Naval Postgraduate School	195	64,055	44,852	0	18,483	313	66	341
Rochester Institute of Technology	196	62,383	33,373	7,076	16,109	2,789	1,998	1,038
Florida Atlantic U.	197	61,748	28,641	7,443	15,422	2,431	5,831	1,980
South Dakota State U.	198	59,590	22,991	16,267	4,841	1,278	2,537	11,676
Southern Methodist U.	199	57,544	17,680	1,106	33,929	1,918	2,751	160
Worcester Polytechnic Institute	200	56,904	34,004	3,041	14,261	3,308	1,414	876
U. Wisconsin-Milwaukee	201	56,822	24,036	16,504	12,368	1,535	935	1,444
East Carolina U.	202	55,693	29,648	408	19,542	3,991	1,783	321
U. California, Office of the President	203	54,640	158	34,007	20,390	0	0	85

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Louisiana State U., Health Sciences Center, New Orleans	204	53,995	33,087	168	13,488	3,193	3,275	784
U. Maryland Center for Environmental Science	205	53,718	15,109	26,071	10,222	223	1,792	301
Stevens Institute of Technology	206	53,563	41,836	2,264	5,895	2,608	539	421
Missouri U. of Science and Technology	207	53,357	28,792	227	15,993	4,559	662	3,124
U. Missouri, Kansas City	208	52,657	31,134	225	17,201	338	969	2,790
Ohio U.	209	52,465	20,587	1,035	26,187	3,634	634	388
Kent State U.	210	52,175	16,195	1,308	32,748	640	1,242	42
Lehigh U.	211	51,769	36,535	2,342	11,162	595	1,060	75
Florida A&M U.	212	50,636	41,943	1,510	6,256	334	593	0
SUNY, Upstate Medical U.	213	50,586	27,737	2,261	10,660	5,883	2,331	1,714
Mercer U.	214	50,222	32,504	46	9,218	4,083	112	4,259
U. California, Merced	215	48,147	23,421	5,992	14,279	768	1,918	1,769
North Carolina A&T State U.	216	47,908	29,094	3,899	14,445	261	195	14
Boise State U.	217	47,617	32,015	2,842	11,230	536	876	118
U. Puerto Rico, Medical Sciences Campus	218	47,578	35,050	1,005	8,295	3,228	0	0
Southern Illinois U., Carbondale	219	46,967	13,582	802	24,670	7,169	744	0
Texas Tech U., Health Sciences Center	220	46,574	14,620	16,937	9,544	508	2,963	2,002
Loyola U., Chicago	221	46,169	26,972	204	9,904	3,527	3,955	1,607
Brigham Young U., Provo	222	45,610	31,636	1,032	6,962	3,577	2,171	232
U. Denver	223	45,561	26,040	4,419	6,953	1,937	5,210	1,002
Air Force Institute of Technology	224	44,391	32,479	0	11,869	43	0	0
U. South Alabama	225	43,491	23,762	998	15,313	1,232	1,383	803
U. North Carolina, Charlotte	226	43,126	26,871	1,158	11,848	2,689	560	0
Morehouse School of Medicine	227	42,489	31,339	440	7,155	0	3,555	0
Portland State U.	228	41,483	30,922	2,635	3,949	636	2,882	459
U. North Carolina, Greensboro	229	41,303	29,822	524	9,054	593	579	731
Marquette U.	230	40,638	15,316	207	16,222	752	2,440	5,701
U. West Florida	231	38,870	17,114	203	20,673	683	197	0
Catholic U. of America	232	38,191	26,285	130	4,211	370	7,195	0
Oakland U.	233	38,061	9,533	2,911	18,539	2,613	2,636	1,829
San Francisco State U.	234	36,617	15,276	2,013	18,257	53	990	28
U.S. Air Force Academy	235	36,506	35,826	0	0	680	0	0
Georgia Southern U.	236	36,362	2,605	322	28,826	4,608	1	0
Texas A&M U.-Corpus Christi	237	36,014	15,229	9,903	5,287	90	2,782	2,723

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
CUNY, Hunter C.	238	35,348	21,142	3,367	8,895	716	1,165	63
Chapman U.	239	34,212	11,098	854	13,710	425	7,989	136
U. Texas Health Science Center, Tyler	240	33,872	14,362	8,127	6,016	858	4,509	0
California Polytechnic State U., San Luis Obispo	241	33,155	15,084	3,155	9,964	2,008	2,890	54
U. Massachusetts, Dartmouth	242	33,136	11,162	1,519	18,713	1,035	440	267
SUNY, C. of Environmental Science and Forestry	243	32,904	7,766	14,020	8,411	795	817	1,095
Montclair State U.	244	32,202	5,189	619	24,540	54	1,683	117
Nova Southeastern U.	245	31,189	9,314	3,571	16,839	417	616	432
Teachers C., Columbia U.	246	30,978	10,177	4,357	NA	1,846	12,335	2,263
SUNY, Downstate Health Sciences U.	247	30,918	25,081	31	3,816	177	1,475	338
U. South Dakota	248	30,322	13,702	1,919	14,176	32	493	0
Rowan U.	249	29,949	18,613	4,720	4,546	1,177	893	0
Illinois Institute of Technology	250	29,791	25,963	2	1,759	948	371	748
Louisiana State U., Health Sciences Center, Shreveport	251	29,502	15,503	21	8,434	1,045	4,499	0
Morgan State U.	252	29,482	24,670	2,835	707	601	344	325
Delaware State U.	253	29,016	24,361	598	3,457	150	440	10
Miami U.	254	28,799	10,277	1,997	13,843	1,375	969	338
Embry-Riddle Aeronautical U.	255	28,650	23,863	358	1,425	1,002	225	1,777
Desert Research Institute	256	28,478	17,341	385	4,377	960	4,381	1,034
Rutgers, State U. New Jersey, Newark	257	28,345	16,099	421	8,531	167	3,041	86
U. Puerto Rico, Rio Piedras	258	28,083	16,905	60	10,458	229	376	55
Western Michigan U. and Homer Stryker M.D. School of Medicine	259	27,768	12,895	1,348	9,489	2,063	473	1,500
Creighton U.	260	27,609	12,022	3,702	8,993	1,289	320	1,283
Wright State U.	261	27,440	20,529	757	5,368	407	343	36
Northern Illinois U.	262	27,068	9,840	774	14,986	634	606	228
Louisiana Tech U.	263	26,591	5,734	2,532	15,621	713	0	1,991
Villanova U.	264	25,955	6,476	1,404	15,309	605	2,140	21
Marshall U.	265	25,692	16,369	1,909	6,479	320	615	0
Illinois State U.	266	25,510	8,673	487	14,540	54	1,752	4
U. Nebraska, central administration	267	25,402	23,872	0	1,498	0	0	32
Central Michigan U.	268	25,105	9,773	1	14,061	157	794	319
U. Nebraska, Omaha	269	24,259	17,301	2,445	4,038	44	387	44
California State U., Sacramento	270	23,795	6,646	10,203	5,694	115	511	626
Texas A&M U.-Kingsville	271	23,451	8,225	6,241	2,812	389	5,647	137

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
East Tennessee State U.	272	23,420	9,715	315	9,214	35	3,881	260
U. Minnesota, Duluth	273	23,362	6,122	5,928	10,794	382	105	31
Middle Tennessee State U.	274	22,631	4,347	509	16,715	261	799	0
Albany Medical C.	275	22,297	13,384	0	3,132	3,606	689	1,486
Eastern Virginia Medical School	276	22,165	17,616	1,186	2,603	148	612	0
Tuskegee U.	277	21,941	14,911	3,206	1,128	0	0	2,696
U. New Orleans	278	21,911	8,270	788	10,393	483	1,067	910
Kennesaw State U.	279	21,705	3,290	529	17,003	205	543	135
Clarkson U.	280	21,703	8,834	2,713	8,116	1,363	508	169
CUNY, Queens C.	281	21,434	14,756	1,362	4,717	83	439	77
U. Alaska, Anchorage	282	21,024	15,249	1,227	3,392	282	493	381
U.S. Military Academy	283	20,841	19,708	0	95	482	280	276
U. Guam	284	20,481	17,066	1,682	1,339	375	19	0
Fordham U.	285	20,432	4,856	0	13,005	27	1,523	1,021
Prairie View A&M U.	286	20,429	11,665	4,037	3,898	327	502	0
U. of the Virgin Islands	287	20,259	19,127	1,010	NA	48	74	0
South Dakota School of Mines and Technology	288	20,061	15,100	1,467	2,488	741	55	210
Tarleton State U.	289	20,056	5,055	3,927	10,533	257	284	0
U. North Carolina, Wilmington	290	20,053	7,178	6,644	3,338	1,166	1,638	89
U. Akron	291	19,943	11,036	160	5,608	2,102	893	144
California State U., Northridge	292	19,638	15,546	984	1,207	181	1,703	17
Bowling Green State U.	293	19,342	7,918	1,649	8,895	122	758	0
New School	294	19,218	1,261	298	3,023	2	11,860	2,774
Southern Illinois U., Edwardsville	295	19,152	3,250	556	14,766	577	3	0
California State U., East Bay	296	19,035	8,997	693	8,232	2	1,036	75
U. North Florida	297	18,394	7,758	746	8,817	107	232	734
Texas Christian U.	298	18,353	5,670	302	9,201	2,028	1,096	56
U. Puerto Rico, Mayaguez	299	18,274	16,223	455	314	1,049	233	0
U. Colorado Denver ^C	300	18,080	12,668	2,422	1,063	453	1,160	314
Tennessee State U.	301	18,012	10,859	567	6,466	4	116	0
Meharry Medical C.	302	17,960	15,048	0	648	25	2,239	0
California State U., Long Beach	303	17,807	11,739	572	2,980	534	837	1,145
Florida Institute of Technology	304	17,706	10,970	1,170	4,740	465	361	0
Jackson State U.	305	17,481	15,045	0	1,427	93	916	0

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Tulsa	306	17,416	5,893	320	4,023	6,130	967	83
Long Island U.	307	17,183	2,652	0	13,962	184	334	51
James Madison U.	308	17,021	2,884	798	12,602	218	518	1
Alcorn State U.	309	16,726 i	9,361 i	4,977 i	2,349 i	7 i	32 i	0 i
California State U., Fullerton	310	16,642	6,136	305	9,664	95	442	0
Idaho State U.	311	16,615	9,080	2,223	4,292	547	249	224
North Carolina Central U.	312	16,600	13,709	954	NA	434	776	727
CUNY, Advanced Science Research Center	313	16,507	12,580	365	2,226	324	888	124
New York Medical C.	314	16,461	9,070	985	813	2,947	1,980	666
CUNY, Graduate School of Public Health and Health Policy	315	16,423	11,880	318	2,189	658	1,340	38
Tennessee Technological U.	316	16,398	8,156	4,256	3,464	117	146	259
CUNY, John Jay C. of Criminal Justice	317	16,233	5,777	3,516	3,492	144	2,171	1,133
California State Polytechnic U., Humboldt	318	15,612	2,421	4,248	4,784	110	2,209	1,840
Loma Linda U.	319	15,517	9,134	630	3,012	1,358	942	441
Western Washington U.	320	15,081	6,347	1,063	5,954	68	1,614	35
Charles R. Drew U. of Medicine and Science	321	14,581	10,656	220	3,098	0	607	0
Texas Tech U., Health Sciences Center, El Paso	322	14,206	2,339	2,856	8,097	475	438	1
Montana Technological U.	323	14,188	5,600	6,085	2,221	282	0	0
Xavier U. Louisiana	324	14,156	11,733	585	1,452	0	386	0
Duquesne U.	325	13,944	6,309	928	4,043	217	2,447	0
Northeast Ohio Medical U.	326	13,465	9,400	47	3,197	0	821	0
U. Missouri, Saint Louis	327	13,247	4,573	61	5,106	81	2,934	492
Rosalind Franklin U. of Medicine and Science	328	12,988	7,292	144	4,239	593	720	0
U. Tennessee, Chattanooga	329	12,808	5,214	1,291	5,510	106	229	458
Loyola Marymount U.	330	12,773	2,824	1,334	7,360	6	1,249	0
U. Hawaii, system office	331	12,646	12,511	0	135	0	0	0
California State U., Fresno	332	12,603	5,928	1,102	3,854	356	1,258	105
Virginia State U.	333	12,326	7,115	2,006	2,544	0	661	0
Texas Southern U.	334	12,120	7,550	1,150	3,362	0	58	0
Sam Houston State U.	335	12,009	4,936	132	6,444	1	382	114
California State U., San Bernardino	336	11,929	6,693	2,445	2,657	3	131	0
Lincoln U., Jefferson City	337	11,500	8,988	2,512	NA	0	0	0
Hampton U.	338	11,462	11,274	0	188	0	0	0
Missouri State U.	339	11,162	10,084	94	754	95	135	0

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Rhode Island C.	340	11,127	5,372	5,301	92	0	362	0
Midwestern U.	341	11,069	1,609	160	8,714	290	296	0
U. of the District of Columbia	342	10,779	9,859	920	0	0	0	0
U.S. Naval Academy	343	10,664	10,147	0	0	0	251	266
Salisbury U.	344	10,614	3,734	3,405	3,415	0	50	10
U. North Texas, Health Science Center	345	10,439	3,172	0	6,615	502	14	136
Winston-Salem State U.	346	10,436	8,903	283	0	0	785	465
Central State U.	347	10,274	5,576	3,039	1,659	0	0	0
U. San Diego	348	10,143	2,911	510	5,842	0	576	304
Wesleyan U.	349	10,101	5,267	0	3,652	93	1,052	37
Fort Valley State U.	350	9,969	7,265	2,704	0	0	0	0
Ball State U.	351	9,932	5,302	257	3,754	247	372	0
Florida Gulf Coast U.	352	9,896	6,482	1,823	214	110	1,211	56
California State U., Los Angeles	353	9,839	8,605	130	943	0	161	0
Alabama A&M U.	354	9,611	9,221	4	0	386	0	0
West Texas A&M U.	355	9,438	2,123	4,302	1,972	966	29	46
Kentucky State U.	356	9,284	4,743	4,357	0	83	101	0
U. Maryland, Eastern Shore	357	9,274	9,062	192	20	0	0	0
California State U., San Marcos	358	9,238	7,986	980	265	0	7	0
Bryn Mawr C.	359	9,123	1,257	0	7,692	0	174	0
Saint Joseph's U.	360	9,041	2,520	1,205	2,609	2,252	455	0
Western U. of Health Sciences	361	9,029	7,131	600	224	351	704	19
California State U., Monterey Bay	362	8,975	5,051	1,404	2,300	50	164	6
Clark U.	363	8,813	2,500	77	4,552	0	1,577	107
Clark Atlanta U.	364	8,791	5,895	0	2,647	198	51	0
Towson U.	365	8,788	2,844	177	5,513	30	217	7
Claremont Graduate U.	366	8,382	1,610	342	1,113	3,384	1,381	552
Oklahoma State U., Center for Health Sciences	367	8,368	3,366	35	4,897	53	17	0
DePaul U.	368	8,362	3,757	169	2,195	260	1,948	33
Arkansas State U., Jonesboro	369	8,214	3,932	3,325	658	271	28	0
U. Washington, Bothell	370	8,197	4,009	259	786	85	3,007	51
U. Michigan, Dearborn	371	8,180	2,537	9	3,259	2,070	223	82
Eastern Michigan U.	372	8,025	2,346	50	5,324	57	248	0
U. Hawaii, Hilo	373	8,001	5,292	66	1,533	131	931	48

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Oklahoma, Tulsa	374	7,945	1,804	1,709	2,892	104	1,120	316
California State Polytechnic U., Pomona	375	7,909	5,407	846	1,441	204	11	0
U. Colorado Colorado Springs	376	7,761	5,345	752	939	595	130	0
Western Kentucky U.	377	7,720	3,127	531	3,961	55	46	0
William Paterson U.	378	7,574	1,896	0	5,401	121	131	25
U. Arkansas, Little Rock	379	7,530	6,675	220	80	170	157	228
U. Arkansas, Pine Bluff	380	7,506	3,306	1,449	2,737	0	14	0
Yeshiva U.	381	7,274	1,695	0	4,765	0	349	465
Appalachian State U.	382	7,189	2,567	103	3,129	617	771	2
Amherst C.	383	7,177	2,862	0	2,130	0	127	2,058
Edward Via C. of Osteopathic Medicine	384	7,121	482	58	6,520	8	53	0
U. Central Oklahoma	385	7,070 i	1,869 i	747 i	4,365 i	85 i	3 i	1 i
Southern U. and A&M C., Agricultural Research and Extension Center	386	7,048	4,261	2,765	22	0	0	0
Hofstra U.	387	6,939	2,118	139	4,485	0	197	0
West Virginia State U.	388	6,703	4,278	1,601	815	0	9	0
Grand Valley State U.	389	6,695	1,819	378	2,986	0	948	564
Philadelphia C. of Osteopathic Medicine	390	6,667	40	57	2,675	2,300	1,595	0
U. New England	391	6,664	3,660	15	2,503	126	360	0
U. Baltimore	392	6,646	4,853	1,445	NA	4	259	85
Langston U.	393	6,481	3,616	0	2,449	416	0	0
Rutgers, State U. New Jersey, Camden	394	6,480	3,349	60	2,003	330	724	14
C. Charleston	395	6,421	4,485	383	1,032	40	465	16
Purdue U., Northwest	396	6,387	3,171	767	1,323	477	128	521
Pennsylvania State U., Behrend	397	6,384	3,262	405	1,345	848	514	10
Gallaudet U.	398	6,360	3,287	1	2,396	0	128	548
Hope C.	399	6,355	3,691	0	1,928	0	625	111
Wellesley C.	400	6,326	2,915	552	NA	89	2,008	762
Indiana U. Pennsylvania	401	6,313	1,797	729	3,303	0	469	15
Abilene Christian U.	402	6,310	1,032	0	231	4,907	140	0
Roseman U. of Health Sciences	403	6,296	30	0	6,158	106	2	0
Southern Connecticut State U.	404	6,286	848	103	4,722	0	362	251
CUNY, Brooklyn C.	405	6,220	4,623	0	1,418	3	160	16
High Tech High Graduate School of Ed.	406	6,203	0	0	0	0	6,203	0
Pacific U.	407	6,128	2,672	498	2,670	45	243	0

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Texas Woman's U.	408	6,029	2,091	2,386	883	135	534	0
U. North Carolina, Asheville	409	5,973	2,600	542	543	54	2,234	0
Reed C.	410	5,922 i	2,139 i	38 i	3,272 i	0 i	342 i	131 i
West Chester U. Pennsylvania	411	5,903	854	20	4,618	32	379	0
Claremont McKenna C.	412	5,893	1,070	56	4,377	0	390	0
Grinnell C.	413	5,867	242	0	5,237	15	208	165
Smith C.	414	5,831	2,403	0	1,740	248	1,440	0
MGH Institute of Health Professions	415	5,805	4,628	0	20	0	1,157	0
Seton Hall U.	416	5,741	2,092	1,737	1,176	150	586	0
Morehouse C.	417	5,664	5,664	0	0	0	0	0
Williams C.	418	5,657 i	1,286 i	0 i	1,894 i	0 i	156 i	2,321 i
Northwest Indian C.	419	5,632	4,298	0	1,334	0	0	0
New York Institute of Technology	420	5,555	2,988	167	2,180	0	220	0
Naval War C.	421	5,529	5,529	0	0	0	0	0
CUNY, Graduate Center	422	5,509	2,535	154	1,080	0	1,208	532
Kean U.	423	5,499	715	180	4,548	15	41	0
U. Southern Maine	424	5,498	2,201	2,893	237	0	126	41
U.S. Army War C.	425	5,496 i	5,496 i	0 i	0 i	0 i	0 i	0 i
U. Washington, Tacoma	426	5,484	4,553	432	207	0	138	154
Des Moines U.	427	5,307	1,589	179	3,455	0	84	0
Lamar U.	428	5,304	1,180	3,639	220	167	98	0
Bucknell U.	429	5,259	2,539	0	1,150	369	236	965
U. Detroit Mercy	430	5,186	4,663	0	494	16	13	0
Oregon Institute of Technology	431	5,086 i	340	4,431 i	NA	109 i	206 i	0
U. Central del Caribe	432	5,053	2,807	356	1,486	0	0	404
Barnard C.	433	4,988	3,758	0	652	39	539	0
Texas A&M U.-Commerce	434	4,955	1,776	222	2,783	4	153	17
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	435	4,954	858	0	3,799	0	91	206
California State U., Bakersfield	436	4,815	2,665	259	1,878	0	13	0
Dakota State U.	437	4,684	3,976	236	382	84	6	0
CUNY, Lehman C.	438	4,656	3,652	10	421	177	273	123
U. Wisconsin-Superior	439	4,615	3,635	135	617	152	76	0
U. New Haven	440	4,548	2,447	504	405	352	807	33
SUNY, C. of Optometry	441	4,497	2,080	0	708	1,642	56	11

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Haverford C.	442	4,487	2,722	0	852	0	381	532
Texas A&M International U.	443	4,486	1,624	917	1,093	73	751	28
Toyota Technological Institute, Chicago	444	4,470	2,199	0	1,568	431	272	0
Franklin and Marshall C.	445	4,440	1,680	266	1,555	339	333	267
Citadel Military C. South Carolina	446	4,374	3,741	270	336	3	20	4
Carleton C.	447	4,358	1,914	18	2,055	0	214	157
Southern U. and A&M C., Baton Rouge	448	4,344	3,595	80	34	635	0	0
Colgate U.	449	4,343	1,570	0	2,625	78	66	4
Western Illinois U.	450	4,311	4,032	0	47	160	0	72
U. of Health Sciences and Pharmacy in St. Louis	451	4,280	2,523	0	977	635	145	0
South Carolina State U.	452	4,270 i	4,270 i	NA	NA	NA	NA	NA
California State U., Dominguez Hills	453	4,230	3,156	23	1,001	0	50	0
Santa Clara U.	454	4,225	2,660	299	NA	518	748	0
Swarthmore C.	454	4,225	1,733	6	2,130	0	356	0
California State U., Chico	456	4,177	2,312	763	422	130	44	506
Youngstown State U.	457	4,157	3,533	260	305	42	17	0
Occidental C.	458	4,139 i	2,622 i	484 i	NA	480 i	553 i	0 i
U. Nebraska, Kearney	459	4,009	1,900	530	1,459	48	0	72
Fisk U.	460	4,000	3,486	93	10	0	411	0
National Defense U.	461	3,920	3,920	0	0	0	0	0
Northern Kentucky U.	462	3,888	2,596	2	890	22	378	0
Pepperdine U.	463	3,775	883	19	885	0	1,988	0
Sonoma State U.	464	3,774	2,889	406	298	40	141	0
U. Wisconsin-Stevens Point	465	3,740	1,235	1,074	829	1	314	287
Coastal Carolina U.	466	3,724	1,130	948	1,580	0	66	0
Chicago State U.	467	3,701	3,699	0	0	0	2	0
U. Central Arkansas	468	3,684	1,731	623	1,186	0	144	0
Trinity U.	469	3,657	1,345	5	1,117	0	1,149	41
Colorado C.	470	3,646	1,371	258	1,090	0	927	0
Norfolk State U.	471	3,593	3,398	89	0	0	106	0
St. John's U., New York	472	3,592	2,456	0	326	195	387	228
U. Texas of the Permian Basin	473	3,577	1,538	685	756	132	466	0
CUNY, C. Staten Island	474	3,545	2,916	93	342	1	133	60
Milwaukee School of Engineering	474	3,545	969	0	79	2,485	12	0

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Pace U.	476	3,524	2,534	0	711	0	279	0
U. North Carolina, general administration	477	3,522	369	3,153	0	0	0	0
U. Northern Iowa	478	3,486	2,132	465	808	0	81	0
Alfred U.	479	3,477	1,008	1,659	517	264	29	0
C. New Jersey	480	3,464	1,984	186	579	0	715	0
Winthrop U.	481	3,424	2,542	196	628	13	45	0
St. Edward's U.	482	3,393	1,940	101	1,150	15	160	27
Azusa Pacific U.	483	3,389	282	266	2,680	0	161	0
California State U., Channel Islands	484	3,377	1,638	746	690	267	36	0
Murray State U.	485	3,371	2,176	23	1,060	112	0	0
Bowie State U.	486	3,351	3,351	0	0	0	0	0
Harvey Mudd C.	487	3,350	1,956	0	1,020	2	138	234
U. Northern Colorado	488	3,308	1,692	100	1,224	143	149	0
Hawaii Pacific U.	489	3,302	2,667	48	4	315	240	28
Biola U.	490	3,260	0	2	0	0	3,088	170
U. Texas, Tyler	491	3,246	1,585	651	821	111	64	14
Hobart and William Smith Colleges	492	3,228	1,264	955	557	0	201	251
Fayetteville State U.	493	3,206	1,667	479	898	116	46	0
Stephen F. Austin State U.	494	3,184	879	1,326	511	22	267	179
Alabama State U.	495	3,178	2,930	0	0	216	1	31
Central Washington U.	496	3,176	2,429	266	350	55	42	34
Calvin U.	497	3,169	931	12	559	24	1,376	267
CUNY, Baruch C.	498	3,156	1,894	23	640	0	505	94
Austin Peay State U.	499	3,149	870	1,186	984	0	89	20
U. Louisiana, Monroe	500	3,128	1,993	748	208	41	138	0
Colorado State U., Pueblo	501	3,117	1,278	1,721	82	0	27	9
Lawrence Technological U.	502	3,050	1,109	1,037	154	192	558	0
U. Wisconsin-La Crosse	503	2,942	968	694	977	227	70	6
Pennsylvania State U., Harrisburg	504	2,927	1,911	491	251	173	101	0
CUNY, system office	505	2,900	798	1,528	223	99	252	0
Pittsburg State U.	506	2,884	1,167	666	NA	1,051	0	0
U. Illinois, Springfield	507	2,881	1,210	646	797	0	228	0
Morehead State U.	508	2,880	2,086	431	15	345	3	0
Saginaw Valley State U.	509	2,862	2,341	0	388	5	112	16

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Framingham State U.	510	2,830 i	232 i	0 i	0 i	95 i	2,503 i	0 i
Davidson C.	511	2,788	1,370	4	702	31	542	139
Western Carolina U.	512	2,783	1,727	297	519	157	83	0
Fort Lewis C.	513	2,765	2,590	48	51	0	76	0
Christopher Newport U.	514	2,762	1,701	0	855	48	158	0
U. Wisconsin-Green Bay	515	2,713	1,046	752	843	25	47	0
Spelman C.	516	2,686	2,539	0	0	147	0	0
Johnson C. Smith U.	517	2,685	1,868	674	0	12	131	0
U. Richmond	518	2,670	1,624	0	529	0	476	41
U. San Francisco	519	2,657	547	265	1,123	0	717	5
Furman U.	520	2,650	1,280	22	1,069	25	169	85
Bowdoin C.	521	2,648	1,867	46	635	0	91	9
U. Virginia's C. Wise	522	2,628	786	837	965	4	36	0
Middlebury C.	523	2,603	2,281	10	49	0	263	0
U. South Carolina, Aiken	524	2,595	857	0	1,729	0	9	0
Pomona C.	525	2,589	1,217	12	1,238	0	122	0
Vassar C.	526	2,580	1,052	21	1,106	0	378	23
Lewis and Clark C.	527	2,566	746	0	1,522	0	298	0
Touro U., California	528	2,561	964	0	1,354	182	0	61
Franklin W. Olin C. of Engineering	529	2,554	809	0	698	82	882	83
Colby C.	530	2,530	1,466	0	573	0	243	248
Sul Ross State U.	531	2,526 i	623 i	151 i	143 i	30 i	941 i	638 i
Troy U.	532	2,517	2,296	48	135	38	0	0
U. of St. Thomas (MN)	533	2,476	527	407	715	327	437	63
Bates C.	534	2,468	1,785	0	281	0	235	167
Eastern Washington U.	535	2,437	855	1,332	NA	13	149	88
Southeastern Louisiana U.	536	2,407	1,285	266	784	61	11	0
Tougaloo C.	537	2,336 i	2,336 i	0 i	0 i	0 i	0 i	0 i
Pratt Institute	538	2,325	228	995	5	0	1,097	0
Grambling State U.	539	2,306 i	809 i	639 i	858 i	0 i	0 i	0 i
Albany C. of Pharmacy and Health Sciences	540	2,276	1,110	0	769	250	147	0
Dillard U.	541	2,270	1,422	0	848	0	0	0
La Sierra U.	542	2,246	972	0	654	0	620	0
St. Cloud State U.	543	2,226	401	235	690	601	299	0

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Northeastern Illinois U.	544	2,224	2,224	0	0	0	0	0
Minnesota State U., Mankato	545	2,206	575	110	1,300	0	18	203
Willamette U.	546	2,183	791	0	1,344	0	48	0
SUNY, Buffalo State	547	2,172	1,299	658	189	5	1	20
Roger Williams U.	548	2,156	1,351	165	445	30	165	0
Purdue U., Fort Wayne	549	2,134	313	371	814	140	186	310
Mount Holyoke C.	550	2,112	1,511	0	285	0	316	0
Dine C.	551	2,091	2,091	0	0	0	0	0
SUNY, Geneseo	551	2,091	1,564	8	502	0	17	0
Erikson Institute	553	2,068	815	178	125	0	950	0
U. of the Incarnate Word	554	2,064	1,078	0	886	8	92	0
Lafayette C.	555	2,059	1,300	0	605	32	110	12
Lake Superior State U.	556	2,056	1,184	125	569	83	0	95
Western New England U.	557	2,052	648	869	314	46	175	0
Palmer C. of Chiropractic, Davenport	558	2,050	1,550	0	500	0	0	0
U. Wisconsin-Oshkosh	559	1,990	1,336	72	546	36	0	0
Black Hills State U.	560	1,987	1,676	119	192	0	0	0
California State U., Stanislaus	561	1,966	1,056	243	176	464	27	0
CUNY, New York City C. of Technology	562	1,955	1,769	16	120	20	0	30
Monmouth U.	563	1,938	535	505	93	407	397	1
Elizabeth City State U.	564	1,934	1,667	206	NA	61	0	0
CUNY, York C.	565	1,912	1,659	0	189	0	64	0
Utah Valley U.	566	1,895	1,280	490	59	0	66	0
Seattle U.	567	1,894	1,143	52	471	3	225	0
Northern Michigan U.	568	1,888	571	90	723	0	291	213
Savannah State U.	568	1,888	1,881	7	0	0	0	0
Hamilton C.	570	1,879	338	0	1,039	0	410	92
Connecticut C.	571	1,875	620	0	1,252	0	0	3
New England C. of Optometry	572	1,868	1,609	52	108	88	11	0
Northwestern State U. Louisiana	573	1,848	742	838	268	0	0	0
U. of the Pacific	574	1,835	1,351	413	NA	18	53	0
Babson C.	575	1,825	45	0	650	140	281	709
U. Houston-Clear Lake	576	1,800	841	408	91	399	61	0
Elon U.	577	1,797	428	0	1,303	0	47	19

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Virginia Military Institute	578	1,746	1,137	221	378	0	10	0
Eastern Connecticut State U.	579	1,734	126	3	1,605	0	0	0
Skidmore C.	579	1,734	861	0	337	0	536	0
U. North Georgia	579	1,734	734	138	690	13	159	0
Florida Polytechnic U.	582	1,725	706	144	588	225	62	0
C. Wooster	583	1,717	737	0	797	0	183	0
Butler U.	584	1,691	1,227	0	216	113	135	0
Drake U.	584	1,691	1,211	89	150	177	64	0
Macalester C.	584	1,691	943	51	459	0	238	0
Stockton U.	587	1,657	728	180	720	3	26	0
Manhattan C.	588	1,641	440	316	367	518	0	0
U. Wisconsin-Eau Claire	589	1,628	681	396	278	243	24	6
Trinity C., Hartford	590	1,620	1,049	0	533	4	34	0
Alaska Pacific U.	591	1,607	581	0	0	1,015	0	11
U. Alaska, Southeast	592	1,570	1,392	28	43	24	64	19
Marshall B. Ketchum U.	593	1,559 i	383 i	0 i	779 i	397 i	0 i	0 i
SUNY, C. Brockport	594	1,500	751	166	435	23	43	82
U. Houston-Downtown	595	1,485	903	57	238	0	287	0
Union C., Schenectady	596	1,479	750	0	596	2	107	24
U. Puerto Rico, Humacao	597	1,448	1,160	0	288	0	0	0
U. Ana G. Mendez, Gurabo	598	1,419	1,407	0	12	0	0	0
East Stroudsburg U. Pennsylvania	599	1,410	598	44	149	0	619	0
Suffolk U.	600	1,401	340	0	996	0	65	0
U. Puerto Rico, Cayey	601	1,390	757	0	430	0	203	0
Indiana State U.	602	1,354	894	128	210	84	26	12
U. Wisconsin-Platteville	603	1,349 i	435 i	340 i	224 i	305 i	35 i	10 i
New Mexico Highlands U.	604	1,331 i	1,288 i	0 i	0 i	0 i	43 i	0 i
Kenyon C.	605	1,330	1,021	0	162	0	123	24
West Virginia School of Osteopathic Medicine	606	1,329	468	11	850	0	0	0
Albion C.	607	1,300 i	323 i	0 i	977 i	0 i	0 i	0 i
Marymount U.	608	1,298	178	31	965	66	58	0
Saint John's U.	608	1,298 i	0 i	0 i	1,298 i	0 i	0 i	0 i
Keck Graduate Institute	610	1,282	643	0	153	165	321	0
Whitman C.	611	1,270	434	25	617	0	194	0

TABLE 22

Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds							
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources		
Northland C.	612	1,265 i	778 i	35 i	192 i	0 i	260 i	0 i		
Texas A&M U.-San Antonio	613	1,242	394	119	570	22	60	77		
U. of Mary Washington	614	1,229	501	54	601	6	39	28		
C. of Saint Benedict	615	1,228 i	51 i	0 i	1,177 i	0 i	0 i	0 i		
SUNY, Cobleskill	616	1,211	379	828	0	4	0	0		
SUNY, Oswego	617	1,209	544	36	549	0	74	6		
Nevada State C.	618	1,191	1,167	0	22	0	2	0		
Heidelberg U.	619	1,184	262	661	246	0	15	0		
Clafin U.	620	1,179	1,179	0	0	0	0	0		
Bentley U.	621	1,161	509	0	0	0	652	0		
Canisius C.	622	1,160	454	0	0	0	706	0		
U. Hartford	623	1,090	886	17	117	6	64	0		
U. Puget Sound	624	1,051	780	0	174	0	97	0		
SUNY, C. Plattsburgh	625	1,043	584	46	334	0	57	22		
Central Connecticut State U.	626	1,035	511	58	459	0	4	3		
Ithaca C.	627	1,000	703	46	149	0	23	79		
Robert Morris U.	627	1,000 i	577 i	13 i	235 i	67 i	81 i	27 i		
St. Catherine U.	629	933	300	0	83	30	364	156		
Kettering U.	630	816	213	34	294	214	57	4		
Augustana U.	631	724	724	0	0	0	0	0		
Plymouth State U.	632	669	571	0	84	0	0	14		
Mercyhurst U.	633	661	82	387	59	108	6	19		
California Lutheran U.	634	627	298	0	116	178	35	0		
California State U., Maritime Academy	635	526	192	105	10	219	0	0		
Sonoran U. Health Sciences	636	520	0	0	20	500	0	0		
U. Charleston	637	217	217	0	0	0	0	0		

i = imputed. NA = not available; data were not provided by institution.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$2,056,063 thousand in total R&D expenditures in FY 2022.^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.^c The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical

Campus.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

Note(s):

Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#). For complete rankings of all institutions in both survey populations, see [table 5](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
All institutions	-	97,680,528	3,225,002	3,690,235	56,498,207	879,526	6,167,583	1,443,894	3,165,440	1,156,452	15,596,634	5,857,608
Johns Hopkins U. ^a	1	3,420,312	270,237	96,789	1,179,546	141,477	317,282	7,744	9,118	63,353	1,324,646	10,120
U. California, San Francisco	2	1,805,950	0	0	1,734,339	0	71,611	0	0	0	0	0
U. Pennsylvania	3	1,791,311	29,513	1,856	1,364,745	8,921	67,341	16,035	53,759	3,520	106,282	139,339
U. Michigan, Ann Arbor	4	1,770,708	16,789	15,865	1,018,062	20,129	65,018	20,806	189,167	4,036	299,254	121,582
U. Washington, Seattle	5	1,559,708	25,836	152,187	1,045,014	7,095	62,596	10,431	16,490	15	172,004	68,040
U. California, Los Angeles	6	1,536,197	14,755	45,869	1,110,788	9,537	55,159	17,022	68,872	50,149	98,403	65,643
U. California, San Diego	7	1,533,357	28,879	187,175	915,619	6,383	97,804	19,075	31,031	8,417	212,583	26,391
U. Wisconsin-Madison	8	1,523,513	30,295	68,178	952,068	7,005	97,161	10,208	65,924	48,230	148,673	95,771
Duke U.	9	1,390,538	8,320	8,178	1,174,640	9,125	23,281	7,467	40,627	284	102,748	15,868
Stanford U.	10	1,384,555	25,448	30,947	999,214	6,408	101,529	15,648	18,390	161	142,213	44,597
Ohio State U.	11	1,363,388	27,225	9,228	897,954	5,660	47,143	10,892	28,605	43,348	219,388	73,945
U. North Carolina, Chapel Hill	12	1,361,028	39,486	23,339	1,020,666	5,464	49,368	49,297	77,515	234	39,242	56,417
Harvard U.	13	1,308,458	21,712	38,984	741,297	22,230	118,530	6,355	144,801	6,472	96,920	111,157
Cornell U.	14	1,300,357	29,874	6,463	929,175	3,287	120,697	11,971	23,814	0	125,320	49,756
New York U.	15	1,276,038	14,731	800	909,144	20,916	26,391	30,932	38,528	321	119,160	115,115
U. Pittsburgh, Pittsburgh	16	1,251,998	11,763	11,232	1,082,521	4,042	30,591	16,203	4,587	14,631	65,936	10,492
Georgia Institute of Technology	17	1,231,485	161,111	14,771	37,289	8,634	33,858	4,126	12,596	0	935,632	23,468
Columbia U. in the City of New York	18	1,230,924	31,786	79,949	893,199	4,427	52,767	5,168	13,157	0	87,884	62,587
U. Maryland ^b	19	1,228,550	63,281	78,455	655,867	4,538	110,607	9,885	56,249	22,223	164,304	63,141
U. Minnesota, Twin Cities	20	1,202,084	28,809	13,095	864,018	7,615	42,715	29,392	40,045	2,966	131,042	42,387
Yale U.	21	1,191,201	8,675	6,411	1,044,120	3,632	57,627	11,550	13,840	64	36,714	8,568
U. Texas M. D. Anderson Cancer Center	22	1,182,536	0	0	1,104,846	20,403	19,651	19,296	18,340	0	0	0
Texas A&M U., College Station and Health Science Center	23	1,152,666	25,705	122,622	435,563	6,898	56,540	7,635	29,994	8,415	402,999	56,295
Vanderbilt U. and Vanderbilt U. Medical Center	24	1,086,223	14,617	1,737	846,605	1,421	28,937	15,372	21,601	0	78,534	77,399
U. Florida	25	1,085,834	15,896	18,734	797,710	2,303	39,928	14,968	16,987	20	134,339	44,949
Washington U., Saint Louis	26	1,047,098	4,634	6,678	938,655	1,584	25,954	7,209	1,631	1,737	28,151	30,865
U. Southern California	27	1,039,905	112,104	22,308	680,873	1,392	17,696	5,103	75,558	0	63,694	61,177
Pennsylvania State U., University Park and Hershey Medical Center	28	1,019,940	79,162	35,715	319,598	17,140	73,580	30,225	41,275	0	385,594	37,651
Northwestern U.	29	1,000,695	10,117	1,443	721,230	2,215	90,194	4,231	24,515	26,507	88,008	32,235
Massachusetts Institute of Technology	30	989,166	124,985	29,992	128,090	9,676	174,813	803	54,104	19,882	397,946	48,875
U. California, Berkeley	31	981,035	12,736	8,644	275,739	9,474	196,281	16,945	73,560	106,357	206,541	74,758

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Emory U.	32	958,281	4,730	2,792	874,729	1,385	28,576	4,796	4,780	0	16,415	20,078
Icahn School of Medicine at Mount Sinai	33	893,968	0	0	893,968	0	0	0	0	0	0	0
U. California, Davis	34	883,807	5,764	32,940	626,320	4,392	35,319	3,509	38,078	10,220	114,118	13,147
U. Texas, Austin	35	845,896	100,730	55,612	156,202	18,319	93,232	11,067	22,612	2,548	319,719	65,855
Baylor C. of Medicine	36	827,005	0	0	827,005	0	0	0	0	0	0	0
U. Arizona	37	824,340	18,270	33,859	471,046	4,105	142,519	6,573	22,491	10,723	84,682	30,072
Arizona State U.	38	797,224	21,414	67,062	141,306	3,418	27,777	15,720	80,307	119,141	192,681	128,398
U. Illinois, Urbana-Champaign	39	765,909	104,436	6,575	270,361	3,729	77,419	13,192	6,718	15,852	228,786	38,841
Michigan State U.	40	759,229	15,978	6,532	347,119	11,990	183,514	13,643	43,672	16,268	81,143	39,370
Purdue U., West Lafayette	41	754,627	38,868	8,127	254,784	2,727	49,938	8,597	14,770	1,154	312,394	63,268
Indiana U., Bloomington	42	751,309	40,488	9,084	550,148	2,329	31,360	13,583	40,995	12,406	12,030	38,886
Boston U.	43	725,402	17,480	9,399	485,379	4,935	38,445	24,237	12,084	7,203	91,643	34,597
U. Texas Southwestern Medical Center	44	719,002	0	0	719,002	0	0	0	0	0	0	0
U. Alabama, Birmingham	45	713,480	898	66	653,373	263	6,282	9,755	494	0	30,637	11,712
Rutgers, State U. New Jersey, New Brunswick	46	712,231	9,306	27,807	521,311	10,013	32,108	10,418	11,158	2,491	57,490	30,129
U. Utah	47	670,119	29,132	47,824	379,462	6,083	18,579	6,805	16,524	1,015	47,060	117,635
U. Virginia, Charlottesville	48	662,658	27,291	6,392	432,700	2,552	27,721	6,549	17,920	5,596	65,604	70,333
U. Cincinnati	49	615,070	3,655	993	508,639	1,549	10,335	8,721	9,610	863	46,955	23,750
U. Colorado Boulder	50	611,380	19,612	129,830	56,184	3,616	143,342	13,945	15,231	1,523	191,531	36,566
U. Colorado Anschutz Medical Campus ^c	51	611,358	0	71	606,860	0	566	313	449	0	957	2,142
U. Iowa	52	594,215	4,187	3,663	431,761	690	55,128	10,399	3,682	1,910	49,233	33,562
Virginia Polytechnic Institute and State U.	53	591,861	28,642	4,652	223,775	12,917	23,394	5,111	14,507	72	260,158	18,633
U. Chicago	54	591,805	31,302	10,117	384,527	5,395	70,483	7,883	26,781	0	41,866	13,451
North Carolina State U.	55	583,203	20,889	30,854	262,669	17,531	27,486	1,739	9,396	26,024	171,162	15,453
U. Georgia	56	545,631	5,509	19,938	334,447	5,701	10,161	30,933	33,930	11,976	22,379	70,657
U. California, Irvine	57	534,947	24,680	11,555	318,016	7,424	40,171	11,147	13,324	987	75,898	31,745
Scripps Research Institute	58	492,639	0	0	492,639	0	0	0	0	0	0	0
Oregon Health and Science U.	59	479,226	0	0	463,631	0	0	2,090	0	0	13,373	132
California Institute of Technology	60	478,142	11,363	57,033	98,580	1,063	227,465	0	0	0	51,975	30,663
U. Kentucky	61	476,517	5,913	2,948	352,400	1,582	9,118	5,066	5,072	19,971	61,287	13,160
Case Western Reserve U.	62	467,389	3,165	634	406,880	520	10,694	1,539	790	228	41,783	1,156
Princeton U.	63	461,185	28,066	29,942	112,932	15,763	101,461	4,568	72,862	0	78,831	16,760
Colorado State U., Fort Collins	64	456,911	4,052	53,708	289,050	3,006	14,885	3,476	15,024	14,505	47,833	11,372

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Rochester	65	450,805	3,099	2,724	291,673	175	112,275	6,367	634	9,138	22,179	2,541
Carnegie Mellon U.	66	449,707	211,839	736	15,109	14,435	23,841	10,640	12,720	5,264	138,117	17,006
U. Illinois, Chicago	67	440,573	12,880	948	325,514	4,213	21,497	3,620	8,851	5,584	39,656	17,810
SUNY, U. Buffalo	68	439,709	20,493	4,848	257,060	1,926	11,990	4,111	6,573	187	109,870	22,651
U. Miami	69	439,300	1,620	59,693	342,103	1,257	5,939	16,155	1,907	128	5,961	4,537
U. Missouri, Columbia	70	432,310	6,157	1,575	283,404	1,666	9,469	6,487	8,731	1,838	78,494	34,489
SUNY, Polytechnic Institute	71	413,763	0	0	1,673	0	0	0	0	0	411,929	161
U. Oklahoma, Norman and Health Science Center	72	408,656	6,637	89,076	176,123	2,495	18,730	3,077	13,702	0	44,727	54,089
Virginia Commonwealth U.	73	405,898	7,073	269	269,742	931	3,282	10,807	4,628	0	30,592	78,574
U. Kansas	74	405,267	4,418	13,717	237,780	682	16,123	11,416	2,768	9,786	22,075	86,502
U. South Florida ^d	75	405,166	9,503	22,129	203,592	3,192	10,866	7,280	30,394	1,398	50,859	65,953
Iowa State U.	76	393,184	5,782	4,897	160,235	19,927	30,440	3,852	10,305	375	132,475	24,896
Washington State U.	77	368,396	8,523	10,772	211,742	509	25,553	3,860	12,699	3,333	45,571	45,834
U. Delaware	78	368,107	5,740	33,416	81,458	5,684	50,077	12,949	22,727	7,511	123,997	24,548
U. Connecticut	79	367,557	4,766	11,254	220,304	2,616	11,245	26,385	9,724	1,684	68,902	10,677
Rockefeller U.	80	360,877	8,486	800	344,493	1,405	5,693	0	0	0	0	0
U. Massachusetts, Medical School	81	358,204	0	0	358,204	0	0	0	0	0	0	0
Florida State U.	82	355,986	9,004	17,014	67,760	7,277	65,661	17,992	17,838	6,779	58,212	88,449
Utah State U.	83	344,851	3,545	2,173	60,940	943	5,408	5,562	1,911	0	259,482	4,887
Louisiana State U., Baton Rouge	84	344,556	18,477	33,440	173,539	6,720	30,594	832	4,752	11,070	53,974	11,158
Dartmouth C. and Dartmouth Hitchcock Medical Center	85	344,126	17,794	8,933	171,185	8,959	24,806	15,457	19,335	2,660	36,219	38,778
U. Texas Health Science Center, Houston	86	342,633	0	0	342,633	0	0	0	0	0	0	0
U. Nebraska, Lincoln	87	340,260	11,208	2,220	170,212	5,411	29,612	15,053	10,339	838	56,068	39,299
U. New Mexico	88	331,164	4,264	7,336	230,657	801	10,115	6,521	13,611	6,865	45,191	5,803
U. Tennessee, Knoxville	89	324,435	10,765	2,609	100,488	3,044	23,139	4,977	9,813	22,697	115,464	31,439
Thomas Jefferson U.	90	321,644	0	0	321,561	0	0	0	0	0	77	6
Medical C. Wisconsin	91	321,506	0	0	313,888	0	0	0	0	0	7,618	0
Albert Einstein C. of Medicine	92	318,314	0	0	318,314	0	0	0	0	0	0	0
Georgetown U.	93	313,220	18,321	0	190,912	2,463	15,192	2,719	38,879	0	0	44,734
SUNY, Stony Brook U.	94	312,698	12,929	33,444	139,641	6,847	45,541	6,579	2,472	22,228	38,670	4,347
Brown U.	95	310,780	16,895	9,945	149,795	14,835	18,299	8,605	39,703	10,284	29,569	12,850
Auburn U., Auburn	96	304,439	5,174	4,791	128,578	3,875	17,011	3,848	3,856	3,031	93,219	41,056
Mississippi State U.	97	303,418	7,546	16,607	140,283	1,721	12,061	2,015	25,716	3,487	73,980	20,002

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Temple U.	98	301,395	6,734	1,498	223,126	3,063	17,215	13,248	7,110	591	8,898	19,912
Oregon State U.	99	297,934	5,820	46,982	162,192	1,601	6,297	1,024	6,357	3,181	58,552	5,928
Medical U. South Carolina	100	284,553	0	0	284,553	0	0	0	0	0	0	0
Florida International U.	101	281,665	18,348	18,793	67,166	2,201	33,613	37,185	20,526	3,325	48,549	31,959
U. Notre Dame	102	280,604	15,067	0	35,522	5,031	47,516	5,922	12,729	16,480	103,773	38,564
U. California, Santa Barbara	103	278,897	13,354	43,416	19,387	1,335	72,934	3,276	10,473	4,939	97,329	12,454
U. Hawaii, Manoa	104	277,323	17,690	78,404	122,760	409	23,293	455	2,407	3,976	24,574	3,355
Uniformed Services U. of the Health Sciences	105	277,240	0	0	257,828	0	0	19,412	0	0	0	0
George Washington U.	106	275,483	8,137	288	184,091	781	6,840	3,090	25,553	4,661	23,736	18,306
Wake Forest U.	107	269,109	401	0	253,966	381	1,996	1,035	2,534	0	1,427	7,369
Clemson U.	108	263,158	8,664	0	72,699	1,919	11,923	3,225	6,858	0	98,733	59,137
Wichita State U.	109	261,519	63	0	15,666	127	1,703	1,023	817	0	226,111	16,009
Woods Hole Oceanographic Institution	110	255,017	0	166,020	0	0	0	0	0	0	88,997	0
U. Massachusetts, Amherst	111	245,158	30,721	4,378	77,193	3,351	23,286	8,227	7,235	1,260	67,776	21,731
Wayne State U.	112	242,247	2,214	193	183,074	208	20,880	2,572	1,575	6,648	13,632	11,251
U. Houston	113	240,126	6,539	10,320	40,187	5,858	60,462	17,383	3,842	36	64,026	31,473
U. Texas Health Science Center, San Antonio	114	238,510	0	0	238,510	0	0	0	0	0	0	0
Northeastern U.	115	231,607	27,623	5,122	37,639	1,107	27,207	10,494	9,361	0	92,855	20,199
Tufts U.	116	231,224	2,568	982	134,584	6,353	11,206	5,146	19,308	14,093	32,535	4,449
George Mason U.	117	230,068	25,373	14,205	30,410	3,606	6,154	3,809	61,667	51	57,196	27,597
U. Louisville	118	229,582	119	166	185,107	661	3,872	2,457	1,130	307	23,630	12,133
U. South Carolina, Columbia	119	229,162	4,628	8,202	97,376	4,101	4,761	9,997	19,583	34	35,508	44,972
Texas Tech U.	120	226,729	5,410	11,018	65,627	3,793	15,739	8,234	12,411	0	46,952	57,545
Tulane U.	121	222,605	1,713	4,967	179,205	1,083	4,579	2,081	6,996	0	6,823	15,158
U. Central Florida	122	221,488	26,882	5,319	33,455	3,609	39,361	9,368	8,004	634	59,060	35,796
U. Vermont	123	216,307	3,614	4,278	158,896	3,132	4,354	5,186	8,023	2,755	11,621	14,448
Rice U.	124	216,202	11,172	4,738	18,022	6,937	31,638	4,805	21,779	571	110,648	5,892
Georgia State U.	125	215,908	5,346	2,276	73,616	2,033	18,277	10,364	37,729	0	0	66,267
West Virginia U.	126	214,081	1,562	5,177	135,260	432	13,067	1,638	3,216	1,756	43,972	8,001
Kansas State U.	127	212,974	3,900	1,295	124,308	2,956	14,709	4,337	10,049	7,521	29,980	13,919
U. Dayton	128	211,494	10,551	851	823	18	876	414	47	0	195,856	2,058
U. New Hampshire	129	206,392	1,465	86,032	55,600	1,481	5,090	1,086	15,906	0	25,040	14,692
U. Arkansas for Medical Sciences	130	205,493	0	0	205,493	0	0	0	0	0	0	0

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Nebraska, Medical Center	131	205,253	0	0	205,253	0	0	0	0	0	0	0
U. Louisiana, Lafayette	132	205,201	25,361	4,439	89,731	2,939	3,957	86	4,463	1,343	32,259	40,623
U. Texas Medical Branch	133	204,518	0	0	202,875	0	0	0	0	0	1,643	0
U. Alaska, Fairbanks	134	202,516	907	121,905	28,235	181	13,832	59	1,184	16,488	17,869	1,856
Montana State U., Bozeman	135	200,820	3,026	5,246	82,986	2,852	19,778	673	1,946	10,256	54,188	19,869
U. California, Riverside	136	199,135	7,468	11,310	107,118	2,207	17,938	5,411	6,764	2,261	32,758	5,900
Oklahoma State U., Stillwater	137	195,041	3,099	3,663	77,513	4,176	8,685	6,977	9,806	9,603	36,217	35,302
U. Arkansas, Fayetteville	138	184,080	6,819	5,333	92,217	59	10,739	1,294	6,866	0	40,691	20,062
U. Nevada, Reno	139	181,782	6,103	20,831	78,928	1,640	10,640	6,146	5,985	3,112	32,454	15,943
U. California, Santa Cruz	140	176,760	5,441	35,788	30,133	348	37,808	682	5,793	236	55,542	4,989
North Dakota State U.	141	174,904	2,957	804	115,027	1,357	9,362	2,354	7,856	6,064	20,187	8,936
U. Maine	142	171,931	2,084	25,600	41,542	660	6,427	1,217	2,169	13,120	68,261	10,851
U. Alabama, Huntsville	143	169,532	60,893	23,111	2,695	655	17,852	349	1,113	0	53,958	8,906
New Jersey Institute of Technology	144	167,135	10,764	0	31,619	4,727	17,202	0	7,277	114	83,738	11,694
U. Alabama, Tuscaloosa	145	163,204	16,400	5,895	22,348	2,367	7,524	5,349	12,938	58	49,885	40,440
U. Oregon	146	160,500	6,598	5,895	67,072	1,249	15,315	21,629	4,723	2,074	4,656	31,289
Syracuse U.	147	157,407	4,858	2,463	11,393	2,279	14,286	3,719	19,097	146	21,602	77,564
U. Mississippi	148	152,903	251	1,614	93,555	500	11,784	2,037	5,018	623	8,095	29,426
Drexel U.	149	151,903	6,589	0	87,434	729	2,306	3,077	1,870	1,890	38,649	9,359
U. North Dakota	150	147,717	2,266	6,874	35,064	348	3,641	1,682	1,618	175	84,614	11,435
U. Texas, San Antonio	151	147,629	21,484	4,787	27,073	2,075	12,128	3,738	10,456	5,839	24,403	35,646
U. Wyoming	152	139,764	2,220	19,400	52,377	1,661	2,625	883	5,421	19,572	28,379	7,226
U. Texas, Arlington	153	133,770	8,415	668	20,310	2,443	18,905	1,404	124	0	61,467	20,034
U. Texas, Dallas	154	130,914	10,179	815	31,502	1,429	16,709	5,601	2,262	930	51,310	10,177
SUNY, Binghamton U.	155	130,882	7,724	1,789	15,476	3,211	14,636	11,896	22,172	0	33,595	20,383
U. Texas, El Paso	156	130,501	7,833	4,565	30,381	2,413	10,021	4,911	3,365	2,705	40,798	23,509
SUNY, U. Albany	157	129,796	6,141	15,821	49,048	2,264	7,299	3,901	16,133	0	4,266	24,923
U. Rhode Island	158	129,102	743	54,685	29,670	0	4,119	3,552	2,746	7,743	11,931	13,913
Augusta U.	159	127,313	291	0	123,587	110	266	183	689	0	0	2,187
U. Montana, Missoula	160	125,603	2,206	5,818	76,032	983	7,724	716	20,418	0	0	11,706
San Diego State U.	161	123,856	2,321	2,684	36,057	3,896	7,435	18,073	5,482	7,315	14,048	26,545
Rensselaer Polytechnic Institute	162	121,809	14,752	2,214	8,885	3,658	15,894	3,954	1,829	0	63,146	7,477
New Mexico State U.	163	121,472	4,103	4,830	53,389	164	13,339	480	679	2,713	40,367	1,408

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Cold Spring Harbor Laboratory	164	118,034	0	0	118,034	0	0	0	0	0	0	0
U. Idaho	165	115,603	3,673	5,991	78,351	128	2,177	125	5,960	2,073	13,720	3,405
U. Tennessee, Health Science Center	166	115,161	0	0	113,398	0	0	0	0	1,123	640	0
Rush U.	167	114,874	0	0	111,165	0	0	3,709	0	0	0	0
U. Massachusetts, Lowell	168	111,144	9,858	2,493	17,817	767	18,186	1,726	6,681	426	44,358	8,832
U. Maryland, Baltimore County	169	110,319	13,685	20,378	13,643	1,893	20,806	1,891	17,891	2,430	8,140	9,562
Texas State U.	170	110,102	1,598	8,853	17,849	1,343	5,123	908	10,265	2,082	9,722	52,359
Brandeis U.	171	102,378	3,218	27	30,648	2,092	16,778	3,793	22,375	2,784	5,264	15,399
Colorado School of Mines	172	98,404	3,443	9,411	2,918	1,012	12,923	90	696	0	60,371	7,540
U. Nevada, Las Vegas	173	94,967	1,556	5,393	31,571	2,224	9,030	1,959	7,012	1,068	12,665	22,489
U. North Texas, Denton	174	93,538	9,124	687	17,731	0	8,762	3,186	3,953	0	23,078	27,017
Michigan Technological U.	175	91,084	7,889	19,663	2,804	1,720	4,600	697	1,438	769	48,400	3,104
New Mexico Institute of Mining and Technology	176	89,900	14,645	15,847	691	77	1,798	572	0	0	53,897	2,373
Saint Louis U.	177	82,740	1,221	3,879	66,726	192	3,579	435	1,974	0	1,559	3,175
Cleveland State U.	178	81,225	0	0	51,438	521	1,030	751	4,782	214	14,519	7,970
Van Andel Research Institute	179	78,626	0	0	78,626	0	0	0	0	0	0	0
William & Mary	180	75,953	2,873	38,810	3,112	395	6,411	351	10,114	2,076	0	11,811
U. Southern Mississippi	181	72,477	662	27,927	12,031	119	14,071	139	2,114	0	7,380	8,034
San Jose State U.	182	71,695	151	16,303	5,838	1,157	4,464	17,046	3,260	0	6,968	16,508
U. Memphis	183	71,271	6,795	4,298	10,731	1,138	3,012	6,817	8,068	1,554	11,825	17,033
Boston C.	184	68,958	1,399	9,912	8,226	951	12,202	4,174	9,261	0	438	22,395
American U.	185	67,616	753	1,091	1,117	1,615	4,351	1,109	17,191	4,458	0	35,931
Howard U.	186	67,594	1,576	305	44,152	215	6,125	2,546	1,296	0	10,431	948
Northern Arizona U.	187	66,729	2,492	5,396	43,147	5	7,427	178	345	1,148	4,194	2,397
Baylor U.	188	66,014	2,382	3,569	13,144	1,451	11,717	4,051	3,244	2,908	9,061	14,487
CUNY, City C.	189	65,569	820	2,547	7,942	220	11,590	1,260	3	0	36,189	4,998
U. Massachusetts, Boston	190	65,215	1,996	3,666	8,974	541	3,076	5,519	12,312	451	1,218	27,462
Old Dominion U.	191	64,877	2,672	3,787	12,010	857	8,410	1,526	2,345	0	28,288	4,982
U. Toledo	192	64,654	127	5,367	30,176	38	11,637	344	174	0	11,957	4,834
U. Texas Rio Grande Valley	193	64,401	3,543	1,981	26,835	2,731	3,997	1,119	4,604	48	7,844	11,699
Indiana U.-Purdue U., Indianapolis	194	64,162	5,049	1,393	21,631	177	2,736	4,196	11,122	3,754	6,626	7,478
Naval Postgraduate School	195	64,055	11,304	5,148	872	2,859	4,745	257	6,114	6,039	21,556	5,161
Rochester Institute of Technology	196	62,383	9,956	0	1,657	2,356	14,979	159	2,590	0	22,869	7,817

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Florida Atlantic U.	197	61,748	2,776	1,332	31,522	1,403	2,364	2,486	261	0	16,449	3,155
South Dakota State U.	198	59,590	44	953	44,606	657	1,610	426	1,791	0	8,977	526
Southern Methodist U.	199	57,544	494	4,956	2,765	2,009	5,607	1,276	2,132	10,766	7,313	20,226
Worcester Polytechnic Institute	200	56,904	10,044	0	3,538	3,090	3,487	0	1,854	0	31,514	3,377
U. Wisconsin-Milwaukee	201	56,822	376	9,026	10,207	25	10,084	4,294	5,843	2,404	8,246	6,317
East Carolina U.	202	55,693	484	4,751	34,271	439	1,740	1,336	1,226	0	2,737	8,709
U. California, Office of the President	203	54,640	0	0	45,843	0	8,725	0	0	0	0	72
Louisiana State U., Health Sciences Center, New Orleans	204	53,995	0	0	53,995	0	0	0	0	0	0	0
U. Maryland Center for Environmental Science	205	53,718	6	42,407	8,403	0	1,014	0	509	475	0	904
Stevens Institute of Technology	206	53,563	4,815	0	1,245	355	1,775	0	96	0	43,702	1,575
Missouri U. of Science and Technology	207	53,357	2,899	0	797	221	3,734	154	149	169	43,119	2,115
U. Missouri, Kansas City	208	52,657	1,075	285	33,588	0	1,277	1,359	148	734	12,219	1,972
Ohio U.	209	52,465	89	2,847	17,612	38	5,892	2,551	1,245	0	17,216	4,975
Kent State U.	210	52,175	1,619	1,088	10,845	1,824	8,065	4,245	5,668	1,239	1,847	15,735
Lehigh U.	211	51,769	2,373	1,124	9,078	289	5,157	911	439	43	28,948	3,407
Florida A&M U.	212	50,636	1,208	6,499	26,175	15	1,905	108	62	62	5,752	8,850
SUNY, Upstate Medical U.	213	50,586	0	0	50,586	0	0	0	0	0	0	0
Mercer U.	214	50,222	149	0	8,473	221	1,925	300	89	464	38,452	149
U. California, Merced	215	48,147	1,387	4,454	10,814	1,863	6,863	493	2,936	2,638	11,997	4,702
North Carolina A&T State U.	216	47,908	1,008	0	19,160	863	2,053	156	0	0	18,186	6,482
Boise State U.	217	47,617	3,448	2,927	12,000	1,550	6,848	101	2,458	606	14,758	2,921
U. Puerto Rico, Medical Sciences Campus	218	47,578	0	264	47,314	0	0	0	0	0	0	0
Southern Illinois U., Carbondale	219	46,967	389	1,522	38,470	9	1,825	252	1,358	834	2,308	0
Texas Tech U., Health Sciences Center	220	46,574	0	0	44,961	0	0	0	0	0	0	1,613
Loyola U., Chicago	221	46,169	456	0	39,546	90	1,691	1,115	1,189	0	95	1,987
Brigham Young U., Provo	222	45,610	1,533	787	10,040	769	6,726	400	880	0	19,599	4,876
U. Denver	223	45,561	78	96	5,422	243	4,420	7,261	3,542	0	3,632	20,867
Air Force Institute of Technology	224	44,391	3,474	1,025	0	164	11,934	0	0	0	27,794	0
U. South Alabama	225	43,491	1,432	4,841	25,738	267	561	2,217	633	0	6,231	1,571
U. North Carolina, Charlotte	226	43,126	8,681	1,077	5,643	803	3,345	1,100	2,519	0	15,096	4,862
Morehouse School of Medicine	227	42,489	0	0	42,489	0	0	0	0	0	0	0
Portland State U.	228	41,483	1,521	1,826	14,531	1,192	2,410	1,497	3,900	558	5,582	8,466
U. North Carolina, Greensboro	229	41,303	398	135	11,226	609	5,251	3,551	1,033	0	0	19,100

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Marquette U.	230	40,638	1,681	0	13,619	892	2,539	991	871	0	10,278	9,767
U. West Florida	231	38,870	4,832	92	3,311	71	1,269	340	3,261	819	450	24,425
Catholic U. of America	232	38,191	0	0	637	0	23,353	1,064	1,897	8	3,076	8,156
Oakland U.	233	38,061	3,608	0	9,762	80	8,447	367	61	0	14,783	953
San Francisco State U.	234	36,617	1,878	4,988	13,356	1,288	3,626	1,917	3,159	1,424	2,423	2,558
U.S. Air Force Academy	235	36,506	210	120	244	451	2,310	0	0	0	33,169	2
Georgia Southern U.	236	36,362	1,104	642	6,734	1,344	5,740	994	4,176	119	3,302	12,207
Texas A&M U.-Corpus Christi	237	36,014	355	14,478	5,184	19	1,459	4	623	1,132	8,737	4,023
CUNY, Hunter C.	238	35,348	1,556	1,197	7,870	200	4,838	9,591	1,827	386	191	7,692
Chapman U.	239	34,212	708	324	13,148	29	1,814	1,329	3,609	0	539	12,712
U. Texas Health Science Center, Tyler	240	33,872	0	0	33,872	0	0	0	0	0	0	0
California Polytechnic State U., San Luis Obispo	241	33,155	359	2,006	9,048	2,826	5,294	183	738	74	8,472	4,155
U. Massachusetts, Dartmouth	242	33,136	2,552	13,329	2,620	1,417	3,290	0	164	0	8,480	1,284
SUNY, C. of Environmental Science and Forestry	243	32,904	409	1,103	27,321	0	561	1,793	98	30	1,291	298
Montclair State U.	244	32,202	1,888	2,393	3,830	1,388	1,811	4,824	3,543	0	1,129	11,396
Nova Southeastern U.	245	31,189	57	11,526	14,336	20	0	846	981	20	0	3,403
Teachers C., Columbia U.	246	30,978	3,235	0	6,007	0	0	1,729	19,950	0	0	57
SUNY, Downstate Health Sciences U.	247	30,918	0	0	30,918	0	0	0	0	0	0	0
U. South Dakota	248	30,322	450	0	17,850	117	4,107	1,288	693	188	1,447	4,182
Rowan U.	249	29,949	540	494	10,188	397	1,483	1,055	0	134	15,432	226
Illinois Institute of Technology	250	29,791	3,307	146	9,464	429	3,705	0	91	66	12,502	81
Louisiana State U., Health Sciences Center, Shreveport	251	29,502	0	0	29,502	0	0	0	0	0	0	0
Morgan State U.	252	29,482	605	5,672	7,898	192	2,314	36	86	0	8,375	4,304
Delaware State U.	253	29,016	185	752	15,815	652	3,965	240	1,618	0	207	5,582
Miami U.	254	28,799	462	829	9,782	346	2,701	3,279	782	0	4,474	6,144
Embry-Riddle Aeronautical U.	255	28,650	2,417	1,823	1,064	111	5,852	0	66	0	16,049	1,268
Desert Research Institute	256	28,478	0	24,804	3,674	0	0	0	0	0	0	0
Rutgers, State U. New Jersey, Newark	257	28,345	2,252	2,487	10,990	0	4,099	1,039	2,024	415	0	5,039
U. Puerto Rico, Rio Piedras	258	28,083	609	2,586	3,500	234	5,456	63	1,270	4,306	4,135	5,924
Western Michigan U. and Homer Stryker M.D. School of Medicine	259	27,768	159	2,077	6,080	75	1,227	1,152	481	84	9,515	6,918
Creighton U.	260	27,609	1,153	0	20,856	298	2,020	337	1,186	0	0	1,759
Wright State U.	261	27,440	5,329	418	11,782	92	1,253	1,388	0	112	6,843	223

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Northern Illinois U.	262	27,068	983	1,320	2,620	62	6,220	1,018	4,365	0	4,132	6,348
Louisiana Tech U.	263	26,591	1,938	0	3,703	914	2,110	261	785	0	11,673	5,207
Villanova U.	264	25,955	360	565	3,993	119	3,052	1,031	309	0	9,453	7,073
Marshall U.	265	25,692	201	239	17,965	0	1,224	20	0	0	3,333	2,710
Illinois State U.	266	25,510	165	491	4,488	198	1,812	489	43	0	125	17,699
U. Nebraska, central administration	267	25,402	742	0	13,754	0	0	0	0	0	10,082	824
Central Michigan U.	268	25,105	100	683	17,871	122	2,396	390	112	1,831	499	1,101
U. Nebraska, Omaha	269	24,259	4,810	56	7,982	459	180	215	2,807	4,874	1,510	1,366
California State U., Sacramento	270	23,795	221	808	1,154	131	403	319	3,830	5,269	8,253	3,407
Texas A&M U.-Kingsville	271	23,451	0	242	17,132	0	323	51	0	66	4,044	1,593
East Tennessee State U.	272	23,420	0	18	21,542	185	464	97	120	0	27	967
U. Minnesota, Duluth	273	23,362	133	528	19,244	184	493	198	265	0	1,892	425
Middle Tennessee State U.	274	22,631	1,050	229	4,950	1,243	2,115	728	3,527	0	889	7,900
Albany Medical C.	275	22,297	0	0	22,297	0	0	0	0	0	0	0
Eastern Virginia Medical School	276	22,165	0	0	22,165	0	0	0	0	0	0	0
Tuskegee U.	277	21,941	875	0	15,072	888	1,910	108	89	0	2,955	44
U. New Orleans	278	21,911	1,492	1,576	1,016	603	2,181	622	2,787	2,278	2,134	7,222
Kennesaw State U.	279	21,705	3,538	0	5,744	1,114	1,096	112	1,661	1,211	1,652	5,577
Clarkson U.	280	21,703	531	112	1,339	784	3,918	89	146	0	12,446	2,338
CUNY, Queens C.	281	21,434	508	561	14,572	278	2,266	2,015	603	224	0	407
U. Alaska, Anchorage	282	21,024	48	5,286	8,875	0	577	57	1,529	1,296	1,957	1,399
U.S. Military Academy	283	20,841	6,651	26	132	1,074	185	925	4,806	0	6,640	402
U. Guam	284	20,481	0	6,937	12,397	63	131	0	174	0	6	773
Fordham U.	285	20,432	511	0	1,213	212	1,532	2,567	1,519	0	0	12,878
Prairie View A&M U.	286	20,429	134	0	9,381	5	2,139	33	247	117	5,305	3,068
U. of the Virgin Islands	287	20,259	267	8,729	8,130	679	1,130	0	534	0	790	0
South Dakota School of Mines and Technology	288	20,061	0	0	0	16	2,883	0	0	0	17,162	0
Tarleton State U.	289	20,056	763	2,594	9,239	376	503	475	1,033	1,126	685	3,262
U. North Carolina, Wilmington	290	20,053	280	6,351	7,428	51	675	223	1,683	406	537	2,419
U. Akron	291	19,943	44	659	1,587	191	8,690	581	139	0	7,558	494
California State U., Northridge	292	19,638	173	1,181	5,528	435	7,084	308	312	82	2,621	1,914
Bowling Green State U.	293	19,342	97	1,679	4,077	348	2,201	1,200	3,623	58	80	5,979
New School	294	19,218	3	192	675	20	10	1,041	6,743	608	3,301	6,625

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Southern Illinois U., Edwardsville	295	19,152	71	604	8,447	70	426	0	100	36	8,439	959
California State U., East Bay	296	19,035	287	816	2,587	377	895	207	2,148	0	133	11,585
U. North Florida	297	18,394	575	213	2,409	28	1,134	1,180	1,040	0	2,472	9,343
Texas Christian U.	298	18,353	106	307	558	189	4,131	1,827	2,551	5,670	88	2,926
U. Puerto Rico, Mayaguez	299	18,274	254	4,127	654	74	1,580	219	524	0	8,482	2,360
U. Colorado Denver ^C	300	18,080	687	650	2,804	989	1,895	1,554	638	0	3,906	4,957
Tennessee State U.	301	18,012	384	120	16,043	0	0	0	0	0	1,278	187
Meharry Medical C.	302	17,960	65	0	17,895	0	0	0	0	0	0	0
California State U., Long Beach	303	17,807	390	399	4,858	369	3,494	1,974	574	52	3,671	2,026
Florida Institute of Technology	304	17,706	5,289	1,985	1,313	298	1,682	1,261	0	0	5,100	778
Jackson State U.	305	17,481	671	0	5,257	26	7,277	181	4	190	2,512	1,363
U. Tulsa	306	17,416	3,849	192	1,008	6	718	679	287	163	9,554	960
Long Island U.	307	17,183	142	372	10,025	414	767	1,119	838	1	0	3,505
James Madison U.	308	17,021	961	870	4,434	335	2,256	1,156	225	0	808	5,976
Alcorn State U.	309	16,726	0	0	8,074	0	0	0	8,429	0	222	1
California State U., Fullerton	310	16,642	1,047	414	4,038	1,234	1,615	404	1,163	1,423	1,062	4,242
Idaho State U.	311	16,615	735	2,092	6,213	18	1,490	200	334	527	4,752	254
North Carolina Central U.	312	16,600	138	234	6,414	0	4,976	0	319	259	2,074	2,186
CUNY, Advanced Science Research Center	313	16,507	0	365	4,493	0	9,558	0	0	0	2,083	8
New York Medical C.	314	16,461	0	0	16,461	0	0	0	0	0	0	0
CUNY, Graduate School of Public Health and Health Policy	315	16,423	0	0	14,429	0	0	1,994	0	0	0	0
Tennessee Technological U.	316	16,398	3,541	14	3,456	0	672	77	52	0	7,436	1,150
CUNY, John Jay C. of Criminal Justice	317	16,233	0	0	666	106	650	2,221	764	474	0	11,352
California State Polytechnic U., Humboldt	318	15,612	76	863	4,020	1	899	0	2,088	259	6,779	627
Loma Linda U.	319	15,517	0	0	14,632	0	0	866	0	0	0	19
Western Washington U.	320	15,081	316	3,298	600	332	2,569	1,493	1,204	1,397	560	3,312
Charles R. Drew U. of Medicine and Science	321	14,581	0	0	14,581	0	0	0	0	0	0	0
Texas Tech U., Health Sciences Center, El Paso	322	14,206	0	0	13,073	0	0	0	0	0	0	1,133
Montana Technological U.	323	14,188	18	8,666	656	0	375	0	0	0	4,473	0
Xavier U. Louisiana	324	14,156	696	0	5,786	0	7,578	63	18	0	0	15
Duquesne U.	325	13,944	0	886	8,351	57	629	245	145	0	66	3,565
Northeast Ohio Medical U.	326	13,465	0	6	13,150	0	0	0	278	28	3	0
U. Missouri, Saint Louis	327	13,247	184	0	5,842	174	1,076	228	1,935	740	0	3,068

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Rosalind Franklin U. of Medicine and Science	328	12,988	0	0	12,579	0	0	409	0	0	0	0
U. Tennessee, Chattanooga	329	12,808	830	0	994	365	40	406	253	3,803	3,823	2,294
Loyola Marymount U.	330	12,773	303	13	2,308	14	383	1,713	1,072	165	57	6,745
U. Hawaii, system office	331	12,646	520	12,125	0	0	0	0	0	0	0	1
California State U., Fresno	332	12,603	234	7	4,894	1,626	2,668	11	652	0	1,970	541
Virginia State U.	333	12,326	0	37	7,493	206	80	76	0	0	2,260	2,174
Texas Southern U.	334	12,120	132	173	8,033	96	1,015	572	531	0	24	1,544
Sam Houston State U.	335	12,009	8	196	3,358	413	308	469	2,785	0	253	4,219
California State U., San Bernardino	336	11,929	672	75	1,251	311	2,161	2,206	278	235	658	4,082
Lincoln U., Jefferson City	337	11,500	0	28	11,109	0	0	0	145	218	0	0
Hampton U.	338	11,462	720	2,576	1,659	163	4,282	0	434	0	1,215	413
Missouri State U.	339	11,162	1	337	1,673	0	291	52	172	0	8,630	6
Rhode Island C.	340	11,127	85	0	634	0	441	194	13	0	0	9,760
Midwestern U.	341	11,069	0	0	11,069	0	0	0	0	0	0	0
U. of the District of Columbia	342	10,779	255	183	2,810	502	0	0	0	0	5,725	1,304
U.S. Naval Academy	343	10,664	867	550	0	1,216	1,679	0	10	0	6,342	0
Salisbury U.	344	10,614	328	882	2,182	123	326	34	474	0	3	6,262
U. North Texas, Health Science Center	345	10,439	0	0	10,439	0	0	0	0	0	0	0
Winston-Salem State U.	346	10,436	419	100	2,711	82	964	509	755	138	0	4,758
Central State U.	347	10,274	0	124	8,806	42	954	0	0	34	314	0
U. San Diego	348	10,143	0	185	233	1,524	1,237	29	1,086	0	820	5,029
Wesleyan U.	349	10,101	0	632	1,833	506	2,622	1,363	262	16	0	2,867
Fort Valley State U.	350	9,969	0	79	9,807	0	83	0	0	0	0	0
Ball State U.	351	9,932	348	0	4,876	83	1,106	219	772	0	0	2,528
Florida Gulf Coast U.	352	9,896	5	2,791	2,606	105	207	79	2	0	222	3,879
California State U., Los Angeles	353	9,839	241	202	1,229	0	5,776	58	391	0	1,423	519
Alabama A&M U.	354	9,611	372	0	5,654	78	758	201	237	0	1,925	386
West Texas A&M U.	355	9,438	257	305	6,054	7	258	0	0	150	1,713	694
Kentucky State U.	356	9,284	5	0	9,156	119	0	0	0	0	0	4
U. Maryland, Eastern Shore	357	9,274	0	3,778	5,437	0	0	0	0	0	59	0
California State U., San Marcos	358	9,238	450	123	1,456	9	981	987	121	3,730	527	854
Bryn Mawr C.	359	9,123	335	189	1,259	545	1,254	508	1,449	0	0	3,584
Saint Joseph's U.	360	9,041	126	0	5,199	15	1,397	295	277	0	0	1,732

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Western U. of Health Sciences	361	9,029	0	0	7,043	0	0	0	0	0	0	1,986
California State U., Monterey Bay	362	8,975	1,517	2,702	3,977	175	446	8	89	0	0	61
Clark U.	363	8,813	138	843	3,706	0	1,277	102	2,504	0	0	243
Clark Atlanta U.	364	8,791	395	0	5,400	323	2,620	0	0	0	41	12
Towson U.	365	8,788	1,204	654	1,816	269	880	586	816	0	0	2,563
Claremont Graduate U.	366	8,382	76	0	0	74	0	595	2,075	0	0	5,562
Oklahoma State U., Center for Health Sciences	367	8,368	104	0	7,092	0	0	1,111	0	0	0	61
DePaul U.	368	8,362	736	88	2,088	154	13	194	2,780	0	76	2,233
Arkansas State U., Jonesboro	369	8,214	299	0	5,942	0	886	43	187	276	508	73
U. Washington, Bothell	370	8,197	537	351	784	33	1,194	0	68	12	387	4,831
U. Michigan, Dearborn	371	8,180	24	0	217	163	262	178	88	131	6,703	414
Eastern Michigan U.	372	8,025	232	139	2,225	55	540	220	632	59	407	3,516
U. Hawaii, Hilo	373	8,001	89	1,770	4,995	33	376	0	338	354	0	46
U. Oklahoma, Tulsa	374	7,945	0	0	2,351	0	0	17	203	0	1,368	4,006
California State Polytechnic U., Pomona	375	7,909	304	13	3,501	80	1,301	20	22	0	1,759	909
U. Colorado Colorado Springs	376	7,761	2,607	187	379	21	457	378	861	7	1,883	981
Western Kentucky U.	377	7,720	7	1,142	2,547	75	1,714	809	299	0	510	617
William Paterson U.	378	7,574	60	328	1,379	63	124	479	1,506	0	0	3,635
U. Arkansas, Little Rock	379	7,530	3,204	1	1,519	1	292	0	146	0	1,571	796
U. Arkansas, Pine Bluff	380	7,506	0	0	6,299	0	513	0	114	580	0	0
Yeshiva U.	381	7,274	749	0	3,741	1,016	682	0	0	0	0	1,086
Appalachian State U.	382	7,189	327	987	3,066	22	1,013	244	405	0	237	888
Amherst C.	383	7,177	164	1,265	1,741	422	1,649	278	488	447	0	723
Edward Via C. of Osteopathic Medicine	384	7,121	0	0	7,121	0	0	0	0	0	0	0
U. Central Oklahoma	385	7,070	238	0	3,393	106	572	133	342	0	928	1,358
Southern U. and A&M C., Agricultural Research and Extension Center	386	7,048	0	0	7,048	0	0	0	0	0	0	0
Hofstra U.	387	6,939	166	410	1,232	286	711	107	525	0	521	2,981
West Virginia State U.	388	6,703	2	0	6,701	0	0	0	0	0	0	0
Grand Valley State U.	389	6,695	111	2,928	1,765	38	331	54	839	0	117	512
Philadelphia C. of Osteopathic Medicine	390	6,667	0	0	6,667	0	0	0	0	0	0	0
U. New England	391	6,664	0	662	5,953	0	14	7	5	0	0	23
U. Baltimore	392	6,646	336	48	0	0	0	0	2,501	0	0	3,761

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Langston U.	393	6,481	0	0	6,074	2	53	119	0	0	0	233
Rutgers, State U. New Jersey, Camden	394	6,480	2,722	0	275	0	297	108	1,790	0	0	1,288
C. Charleston	395	6,421	300	2,470	1,536	31	518	129	87	0	158	1,192
Purdue U., Northwest	396	6,387	394	0	1,120	0	202	9	0	288	2,606	1,768
Pennsylvania State U., Behrend	397	6,384	47	1,727	1,484	41	521	206	80	0	1,799	479
Gallaudet U.	398	6,360	1,954	0	1,682	2	60	1,576	813	0	0	273
Hope C.	399	6,355	74	47	2,230	33	2,122	45	515	0	430	859
Wellesley C.	400	6,326	437	169	1,033	179	214	954	1,133	0	395	1,812
Indiana U. Pennsylvania	401	6,313	113	234	1,747	17	456	728	579	196	0	2,243
Abilene Christian U.	402	6,310	0	0	185	0	5,831	10	6	12	29	237
Roseman U. of Health Sciences	403	6,296	0	0	6,285	0	0	0	0	0	0	11
Southern Connecticut State U.	404	6,286	121	386	1,001	107	753	146	466	323	0	2,983
CUNY, Brooklyn C.	405	6,220	273	222	802	107	1,998	1,656	109	265	0	788
High Tech High Graduate School of Ed.	406	6,203	0	0	0	0	0	0	0	0	0	6,203
Pacific U.	407	6,128	66	0	3,813	22	467	4	342	0	0	1,414
Texas Woman's U.	408	6,029	3	0	3,015	125	585	618	312	0	0	1,371
U. North Carolina, Asheville	409	5,973	289	96	1,605	22	718	0	354	648	0	2,241
Reed C.	410	5,922	i 151	i 0	i 2,626	i 136	i 860	i 238	i 514	i 0	i 0	i 1,397
West Chester U. Pennsylvania	411	5,903	39	31	1,055	82	771	457	739	12	0	2,717
Claremont McKenna C.	412	5,893	24	4	272	163	385	478	4,189	30	0	348
Grinnell C.	413	5,867	278	0	272	86	823	295	1,087	0	0	3,026
Smith C.	414	5,831	504	120	2,701	296	453	145	152	66	599	795
MGH Institute of Health Professions	415	5,805	0	0	4,628	0	0	0	0	0	0	1,177
Seton Hall U.	416	5,741	0	0	463	0	743	0	0	0	0	4,535
Morehouse C.	417	5,664	396	0	451	47	2,393	59	0	1,710	0	608
Williams C.	418	5,657	i 120	i 337	i 2,275	i 105	i 675	i 206	i 531	i 0	i 0	i 1,408
Northwest Indian C.	419	5,632	0	60	504	0	0	0	0	0	227	4,841
New York Institute of Technology	420	5,555	323	0	3,871	0	101	0	1	0	1,181	78
Naval War C.	421	5,529	0	0	0	0	0	0	929	0	0	4,600
CUNY, Graduate Center	422	5,509	6	3	6	88	0	249	1,067	462	0	3,628
Kean U.	423	5,499	850	53	1,234	80	1,576	49	270	14	32	1,341
U. Southern Maine	424	5,498	1,553	64	801	13	0	0	2,619	20	228	200
U.S. Army War C.	425	5,496	i 0	i 0	i 0	i 0	i 0	i 0	i 5,496	i 0	i 0	i 0

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Washington, Tacoma	426	5,484	421	3,535	463	137	0	0	97	19	250	562
Des Moines U.	427	5,307	0	600	4,128	0	36	36	280	0	0	227
Lamar U.	428	5,304	154	0	248	0	124	0	160	0	3,536	1,082
Bucknell U.	429	5,259	113	40	1,255	169	1,038	83	322	265	1,589	385
U. Detroit Mercy	430	5,186	24	0	4,455	0	0	53	0	0	560	94
Oregon Institute of Technology	431	5,086 i	160 i	387 i	3,404 i	100 i	0 i	133 i	0 i	0 i	902 i	0 i
U. Central del Caribe	432	5,053	0	0	5,053	0	0	0	0	0	0	0
Barnard C.	433	4,988	250	76	1,322	0	1,541	1,030	474	0	0	295
Texas A&M U.-Commerce	434	4,955	141	0	2,119	9	1,028	183	46	0	48	1,381
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	435	4,954	0	0	4,954	0	0	0	0	0	0	0
California State U., Bakersfield	436	4,815	0	69	75	1,457	322	72	261	0	440	2,119
Dakota State U.	437	4,684	4,589	15	65	0	15	0	0	0	0	0
CUNY, Lehman C.	438	4,656	9	44	371	214	2,650	16	380	253	0	719
U. Wisconsin-Superior	439	4,615	0	28	4,213	0	0	0	63	0	297	14
U. New Haven	440	4,548	1,363	151	350	17	128	325	1,738	0	329	147
SUNY, C. of Optometry	441	4,497	0	0	4,497	0	0	0	0	0	0	0
Haverford C.	442	4,487	47 i	115 i	1,153 i	51 i	2,231 i	162 i	202 i	0 i	0 i	526 i
Texas A&M International U.	443	4,486	1	53	531	101	275	17	743	853	127	1,785
Toyota Technological Institute, Chicago	444	4,470	4,470	0	0	0	0	0	0	0	0	0
Franklin and Marshall C.	445	4,440	33	305	1,001	30	835	154	441	30	0	1,611
Citadel Military C. South Carolina	446	4,374	2,615	0	225	28	184	66	25	0	363	868
Carleton C.	447	4,358	402	1,374	330	372	301	217	675	0	0	687
Southern U. and A&M C., Baton Rouge	448	4,344	611	0	837	87	200	0	0	0	1,938	671
Colgate U.	449	4,343	101	728	676	153	1,215	112	406	0	0	952
Western Illinois U.	450	4,311	0	0	1,917	0	84	0	182	0	1,983	145
U. of Health Sciences and Pharmacy in St. Louis	451	4,280	0	0	4,271	0	9	0	0	0	0	0
South Carolina State U.	452	4,270 i	117 i	0 i	1,537 i	0 i	1,086 i	0 i	0 i	0 i	773 i	757 i
California State U., Dominguez Hills	453	4,230	413	15	335	72	1,464	435	197	0	0	1,299
Santa Clara U.	454	4,225	0	0	543	41	589	140	512	0	1,741	659
Swarthmore C.	454	4,225	71	0	1,295	174	779	130	219	0	215	1,342
California State U., Chico	456	4,177	0	624	1,445	42	166	0	102	0	1,192	606
Youngstown State U.	457	4,157	167	2	292	74	366	65	50	0	3,058	83

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Occidental C.	458	4,139	313	1,416	577	108	877	443	334	0	0	71
U. Nebraska, Kearney	459	4,009	105	0	2,409	0	625	34	23	0	0	813
Fisk U.	460	4,000	431	0	1,289	167	1,926	54	0	0	10	123
National Defense U.	461	3,920	0	0	400	0	0	0	3,020	0	0	500
Northern Kentucky U.	462	3,888	122	0	2,148	73	875	405	126	28	0	111
Pepperdine U.	463	3,775	0	0	2,022	29	89	174	248	131	0	1,082
Sonoma State U.	464	3,774	5	1,938	748	511	62	73	72	30	17	318
U. Wisconsin-Stevens Point	465	3,740	0	338	3,144	0	136	0	0	0	111	11
Coastal Carolina U.	466	3,724	133	1,573	497	0	209	66	284	18	175	769
Chicago State U.	467	3,701	78	0	2,223	0	1,341	0	59	0	0	0
U. Central Arkansas	468	3,684	610	0	1,209	10	465	81	252	0	0	1,057
Trinity U.	469	3,657	72	194	756	50	1,272	344	319	0	69	581
Colorado C.	470	3,646	0	806	128	44	316	97	136	0	0	2,119
Norfolk State U.	471	3,593	344	0	148	35	1,051	0	0	0	1,656	359
St. John's U., New York	472	3,592	160	0	2,213	0	510	357	5	0	0	347
U. Texas of the Permian Basin	473	3,577	18	77	887	1	30	70	494	0	797	1,203
CUNY, C. Staten Island	474	3,545	133	25	1,070	173	1,097	631	9	60	0	347
Milwaukee School of Engineering	474	3,545	65	0	0	0	0	0	0	0	3,480	0
Pace U.	476	3,524	903	0	607	0	100	5	10	0	529	1,370
U. North Carolina, general administration	477	3,522	903	0	250	0	0	0	0	0	2,232	137
U. Northern Iowa	478	3,486	5	129	337	6	921	0	2,045	0	0	43
Alfred U.	479	3,477	0	1	0	2	16	0	0	0	3,458	0
C. New Jersey	480	3,464	221	0	1,502	22	923	25	31	312	265	163
Winthrop U.	481	3,424	64	10	352	8	444	3	280	0	0	2,263
St. Edward's U.	482	3,393	270	0	734	209	571	100	30	0	0	1,479
Azusa Pacific U.	483	3,389	29	0	691	30	176	868	87	0	10	1,498
California State U., Channel Islands	484	3,377	69	0	1,401	568	406	8	140	696	4	85
Murray State U.	485	3,371	0	249	2,449	354	293	0	0	0	0	26
Bowie State U.	486	3,351	1,169	0	1,462	0	481	0	0	0	0	239
Harvey Mudd C.	487	3,350	711	0	605	378	744	0	0	249	608	55
U. Northern Colorado	488	3,308	0	202	1,368	83	72	80	597	0	0	906
Hawaii Pacific U.	489	3,302	0	947	1,431	0	0	0	82	0	14	828
Biola U.	490	3,260	0	0	170	0	0	2,469	0	0	2	619

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Texas, Tyler	491	3,246	38	0	2,233	74	29	2	67	0	542	261
Hobart and William Smith Colleges	492	3,228	13	288	2,357	90	300	5	21	10	0	144
Fayetteville State U.	493	3,206	472	0	784	0	165	0	155	42	127	1,461
Stephen F. Austin State U.	494	3,184	3	62	1,773	241	114	2	212	0	0	777
Alabama State U.	495	3,178	192	0	2,471	0	0	0	0	0	483	32
Central Washington U.	496	3,176	406	1,394	437	196	541	0	128	0	32	42
Calvin U.	497	3,169	73	39	479	57	358	41	62	289	129	1,642
CUNY, Baruch C.	498	3,156	1	102	933	533	338	231	84	0	0	934
Austin Peay State U.	499	3,149	3	635	1,657	0	89	1	0	6	0	758
U. Louisiana, Monroe	500	3,128	0	103	2,583	0	247	0	154	0	0	41
Colorado State U., Pueblo	501	3,117	326	0	1,214	0	0	0	27	82	0	1,468
Lawrence Technological U.	502	3,050	53	0	0	21	148	0	0	0	726	2,102
U. Wisconsin-La Crosse	503	2,942	76	35	897	59	299	16	1,383	13	0	164
Pennsylvania State U., Harrisburg	504	2,927	8	6	1,433	7	8	66	144	0	160	1,095
CUNY, system office	505	2,900	113	0	180	0	0	88	0	32	2,447	40
Pittsburg State U.	506	2,884	0	0	526	0	27	0	22	0	2,309	0
U. Illinois, Springfield	507	2,881	0	0	33	0	14	0	1,978	57	0	799
Morehead State U.	508	2,880	0	0	517	0	10	41	0	0	2,312	0
Saginaw Valley State U.	509	2,862	268	0	1,845	0	0	0	203	0	0	546
Framingham State U.	510	2,830	82	0	1,586	39	238	53	156	0	0	676
Davidson C.	511	2,788	179	0	787	86	531	482	523	0	0	200
Western Carolina U.	512	2,783	0	313	1,326	0	9	0	267	0	363	505
Fort Lewis C.	513	2,765	17	3	806	0	743	0	0	0	623	573
Christopher Newport U.	514	2,762	0	0	625	225	851	44	195	0	437	385
U. Wisconsin-Green Bay	515	2,713	77	114	1,543	21	156	43	97	0	465	197
Spelman C.	516	2,686	26	0	685	668	410	565	55	0	0	277
Johnson C. Smith U.	517	2,685	188	0	146	2	4	0	2	0	52	2,291
U. Richmond	518	2,670	19	369	835	36	519	438	131	0	0	323
U. San Francisco	519	2,657	204	374	970	13	172	42	272	29	3	578
Furman U.	520	2,650	28	132	968	24	1,313	137	15	0	0	33
Bowdoin C.	521	2,648	64	349	1,275	40	376	126	60	0	0	358
U. Virginia's C. Wise	522	2,628	455	0	116	0	44	0	95	0	197	1,721
Middlebury C.	523	2,603	162	513	692	0	564	247	289	0	0	136

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. South Carolina, Aiken	524	2,595	0	0	1,165	12	292	11	245	0	231	639
Pomona C.	525	2,589	120	272	338	301	695	86	515	0	0	262
Vassar C.	526	2,580	133	51	918	95	233	312	472	0	0	366
Lewis and Clark C.	527	2,566	13	222	545	0	246	15	77	0	0	1,448
Touro U., California	528	2,561	0	0	2,290	0	0	0	0	0	0	271
Franklin W. Olin C. of Engineering	529	2,554	0	0	0	0	0	0	0	0	2,380	174
Colby C.	530	2,530	97	376	831	36	345	80	316	0	0	449
Sul Ross State U.	531	2,526 i	92 i	168 i	1,303 i	40 i	219 i	51 i	132 i	0 i	0 i	521 i
Troy U.	532	2,517	1	71	180	4	1,916	3	40	0	56	246
U. of St. Thomas (MN)	533	2,476	11	7	286	19	340	396	15	0	862	540
Bates C.	534	2,468	40	65	1,743	1	330	54	144	0	0	91
Eastern Washington U.	535	2,437	0	17	410	2	125	87	1,789	0	0	7
Southeastern Louisiana U.	536	2,407	38	0	1,022	0	606	0	10	0	24	707
Tougaloo C.	537	2,336 i	92 i	0 i	1,207 i	91 i	537 i	111 i	60 i	0 i	0 i	238 i
Pratt Institute	538	2,325	0	0	0	0	0	0	0	0	0	2,325
Grambling State U.	539	2,306 i	0 i	0 i	0 i	0 i	1,345 i	0 i	0 i	0 i	0 i	961 i
Albany C. of Pharmacy and Health Sciences	540	2,276	0	0	2,276	0	0	0	0	0	0	0
Dillard U.	541	2,270	0	89	1,199	21	158	1	6	265	7	524
La Sierra U.	542	2,246	0	0	7	0	1	73	0	0	0	2,165
St. Cloud State U.	543	2,226	16	12	417	0	19	3	217	2	30	1,510
Northeastern Illinois U.	544	2,224	104	54	1,447	43	0	0	8	0	7	561
Minnesota State U., Mankato	545	2,206	5	8	813	0	39	120	310	0	871	40
Willamette U.	546	2,183	5	119	833	20	139	46	0	76	0	945
SUNY, Buffalo State	547	2,172	3	1,098	767	139	0	0	90	0	23	52
Roger Williams U.	548	2,156	25	506	831	2	47	54	0	3	221	467
Purdue U., Fort Wayne	549	2,134	0	0	343	229	76	262	105	179	169	771
Mount Holyoke C.	550	2,112	235	90	520	159	370	457	37	0	0	244
Dine C.	551	2,091	0	0	2,091	0	0	0	0	0	0	0
SUNY, Geneseo	551	2,091	0	82	152	16	1,234	311	64	0	0	232
Erikson Institute	553	2,068	0	0	0	0	0	0	0	0	0	2,068
U. of the Incarnate Word	554	2,064	0	0	972	0	478	0	0	0	339	275
Lafayette C.	555	2,059	35	13	649	41	483	81	117	0	384	256
Lake Superior State U.	556	2,056	0	0	1,988	0	21	0	6	0	41	0

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Western New England U.	557	2,052	69	0	467	50	0	2	0	0	1,464	0
Palmer C. of Chiropractic, Davenport	558	2,050	0	0	2,050	0	0	0	0	0	0	0
U. Wisconsin-Oshkosh	559	1,990	1	43	640	0	398	20	93	0	294	501
Black Hills State U.	560	1,987	385	0	1,421	0	101	0	0	0	0	80
California State U., Stanislaus	561	1,966	215	2	1,094	218	117	114	123	0	0	83
CUNY, New York City C. of Technology	562	1,955	195	0	304	239	727	0	0	9	50	431
Monmouth U.	563	1,938	0	1,572	185	0	110	12	49	0	0	10
Elizabeth City State U.	564	1,934	585	0	802	0	0	0	3	0	0	544
CUNY, York C.	565	1,912	0	953	429	109	172	140	0	2	0	107
Utah Valley U.	566	1,895	123	140	380	82	815	0	0	0	310	45
Seattle U.	567	1,894	93	0	281	153	311	0	103	0	137	816
Northern Michigan U.	568	1,888	28	149	1,248	0	43	93	39	0	0	288
Savannah State U.	568	1,888	0	694	255	0	53	0	13	264	609	0
Hamilton C.	570	1,879	3	52	116	4	127	132	337	44	0	1,064
Connecticut C.	571	1,875	134	0	477	0	690	325	57	0	0	192
New England C. of Optometry	572	1,868	0	0	1,868	0	0	0	0	0	0	0
Northwestern State U. Louisiana	573	1,848	132	0	183	23	0	7	881	0	8	614
U. of the Pacific	574	1,835	70	53	1,392	0	152	0	0	30	135	3
Babson C.	575	1,825	0	16	0	56	0	0	483	0	0	1,270
U. Houston-Clear Lake	576	1,800	21	0	1,322	0	123	146	79	0	21	88
Elon U.	577	1,797	25	0	287	135	45	215	193	14	18	865
Virginia Military Institute	578	1,746	1,304	0	83	39	112	0	29	0	119	60
Eastern Connecticut State U.	579	1,734	9	8	281	0	7	109	399	99	0	822
Skidmore C.	579	1,734	18	547	329	26	433	197	55	0	0	129
U. North Georgia	579	1,734	456	137	169	0	15	26	148	0	0	783
Florida Polytechnic U.	582	1,725	210	0	0	9	4	0	33	0	1,310	159
C. Wooster	583	1,717	16	188	429	93	549	1	167	0	0	274
Butler U.	584	1,691	0	0	1,276	0	154	48	15	0	0	198
Drake U.	584	1,691	19	0	536	109	220	6	9	0	0	792
Macalester C.	584	1,691	17	223	158	123	622	28	252	0	0	268
Stockton U.	587	1,657	0	798	291	0	0	0	568	0	0	0
Manhattan C.	588	1,641	0	0	37	242	140	0	0	0	899	323
U. Wisconsin-Eau Claire	589	1,628	46	135	138	11	954	293	17	0	0	34

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Trinity C., Hartford	590	1,620	9	0	965	31	147	118	161	0	42	147
Alaska Pacific U.	591	1,607	0	1,548	20	0	0	0	0	0	0	39
U. Alaska, Southeast	592	1,570	0	493	479	0	44	0	50	504	0	0
Marshall B. Ketchum U.	593	1,559	0	0	1,559	0	0	0	0	0	0	0
SUNY, C. Brockport	594	1,500	8	79	1,120	1	211	0	28	0	0	53
U. Houston-Downtown	595	1,485	135	14	135	2	88	37	66	0	71	937
Union C., Schenectady	596	1,479	69	181	143	64	244	38	124	0	446	170
U. Puerto Rico, Humacao	597	1,448	0	92	1	0	1,302	53	0	0	0	0
U. Ana G. Mendez, Gurabo	598	1,419	0	0	274	0	33	0	0	1	996	115
East Stroudsburg U. Pennsylvania	599	1,410	15	0	828	8	7	0	2	0	0	550
Suffolk U.	600	1,401	0	14	19	0	45	236	47	0	18	1,022
U. Puerto Rico, Cayey	601	1,390	0	0	30	0	61	55	4	1,224	0	16
Indiana State U.	602	1,354	0	139	548	24	130	0	0	0	87	426
U. Wisconsin-Platteville	603	1,349	44	0	605	23	98	23	109	17	204	226
New Mexico Highlands U.	604	1,331	186	187	207	184	187	0	186	0	0	194
Kenyon C.	605	1,330	0	0	788	45	362	32	34	0	0	69
West Virginia School of Osteopathic Medicine	606	1,329	0	0	1,327	0	0	0	0	0	0	2
Albion C.	607	1,300	63	103	430	59	139	0	162	0	0	344
Marymount U.	608	1,298	350	0	394	0	2	46	200	0	3	303
Saint John's U.	608	1,298	23	0	542	15	125	43	144	0	0	406
Keck Graduate Institute	610	1,282	0	0	1,282	0	0	0	0	0	0	0
Whitman C.	611	1,270	22	121	325	0	486	77	70	0	0	169
Northland C.	612	1,265	0	90	719	44	0	72	86	0	0	254
Texas A&M U.-San Antonio	613	1,242	239	10	348	0	0	3	36	429	104	73
U. of Mary Washington	614	1,229	20	57	190	0	117	0	39	0	0	806
C. of Saint Benedict	615	1,228	23	0	519	16	124	42	132	0	0	372
SUNY, Cobleskill	616	1,211	0	0	0	0	0	0	0	0	1,211	0
SUNY, Oswego	617	1,209	38	64	194	0	450	43	56	340	0	24
Nevada State C.	618	1,191	0	82	1,109	0	0	0	0	0	0	0
Heidelberg U.	619	1,184	0	1,184	0	0	0	0	0	0	0	0
Clafin U.	620	1,179	387	105	458	0	102	0	64	0	63	0
Bentley U.	621	1,161	75	13	652	51	0	0	84	0	0	286
Canisius C.	622	1,160	0	0	0	0	159	0	0	1,001	0	0

TABLE 23

Higher education R&D expenditures, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Hartford	623	1,090	3	0	82	34	8	34	142	0	752	35
U. Puget Sound	624	1,051	0	42	778	4	123	5	36	0	1	62
SUNY, C. Plattsburgh	625	1,043	0	905	112	0	26	0	0	0	0	0
Central Connecticut State U.	626	1,035	27	5	121	24	104	19	346	0	185	204
Ithaca C.	627	1,000	57	80	303	122	291	2	54	0	0	91
Robert Morris U.	627	1,000	41	0	704	11	0	11	35	0	144	54
St. Catherine U.	629	933	0	0	537	0	33	0	322	0	0	41
Kettering U.	630	816	19	0	0	3	29	0	0	0	424	341
Augustana U.	631	724	0	0	403	0	306	0	0	0	0	15
Plymouth State U.	632	669	1	424	182	0	0	0	40	5	0	17
Mercyhurst U.	633	661	0	1	40	0	27	2	380	45	0	166
California Lutheran U.	634	627	0	3	171	0	42	0	178	233	0	0
California State U., Maritime Academy	635	526	0	70	0	0	0	0	0	0	388	68
Sonoran U. Health Sciences	636	520	0	0	520	0	0	0	0	0	0	0
U. Charleston	637	217	0	0	217	0	0	0	0	0	0	0

i = imputed.

nec = not elsewhere classified; S&E = science and engineering.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$2,056,063 thousand in total R&D expenditures in FY 2022.^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.^c The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.**Note(s):**Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#). This table includes only institutions reporting \$1 million or more in total R&D expenditures in 2021. Institutions reporting less than \$1 million in total R&D expenditures in 2021 completed a shorter version of the survey form in FY 2022, and that form did not collect R&D expenditures by source and detailed field. For R&D expenditures by major field at institutions completing the shorter version of the survey, see [table 83](#).**Source(s):**

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All institutions	-	37,477,582	40,768,251	40,142,223	39,445,931	37,961,118	37,846,802	38,787,997	40,248,058	41,860,369	44,460,327	46,106,539	49,116,033	53,971,468
Johns Hopkins U. ^a	1	1,737,261	1,884,025	1,857,580	1,898,927	1,950,016	1,992,837	2,104,653	2,178,605	2,251,097	2,482,130	2,682,410	2,774,643	2,971,816
U. Washington, Seattle	2	829,885	948,976	909,652	928,193	909,034	906,768	946,787	952,738	989,221	992,643	1,024,195	1,046,377	1,083,090
U. California, San Diego	3	580,279	636,879	656,891	632,593	599,095	603,343	604,298	641,469	635,888	698,925	727,289	801,117	970,696
U. Michigan, Ann Arbor	4	747,778	820,125	791,729	814,167	742,160	735,447	786,749	829,695	849,123	886,851	884,880	891,125	970,636
Georgia Institute of Technology	5	372,122	427,867	484,212	522,134	512,015	551,084	568,430	584,891	654,877	716,207	790,518	852,319	940,488
Columbia U. in the City of New York	6	572,213	645,233	645,573	635,987	608,588	592,545	600,457	647,840	686,338	736,536	762,289	831,648	904,346
Duke U.	7	514,084	585,262	587,268	581,695	557,969	559,217	575,521	623,573	645,259	709,705	707,746	776,632	901,807
U. Pennsylvania	8	642,180	707,051	669,970	636,589	620,396	611,620	655,791	669,911	688,313	717,359	721,308	792,089	873,318
Stanford U.	9	593,016	656,114	636,348	652,472	637,730	675,930	694,693	710,698	711,443	738,957	751,414	811,183	860,125
U. California, Los Angeles	10	538,521	563,560	539,054	501,368	465,170	489,404	487,869	487,846	576,076	600,714	655,030	721,043	848,138
U. North Carolina, Chapel Hill	11	545,993	600,843	606,348	623,237	610,664	585,758	632,426	676,282	701,169	720,613	706,145	747,895	827,158
U. Pittsburgh, Pittsburgh	12	594,675	662,471	637,857	622,232	582,136	561,210	580,650	617,884	649,166	677,559	689,273	724,993	814,647
U. California, San Francisco	13	514,693	570,116	559,329	566,117	544,697	535,457	602,705	606,768	669,470	671,047	676,331	683,179	780,318
U. Maryland ^b	14	na	na	na	na	na	na	na	na	na	696,880	689,125	713,283	750,447
U. Wisconsin-Madison	15	545,189	593,633	580,661	555,875	548,388	533,286	567,132	570,796	574,048	608,925	632,558	646,764	740,854
Yale U.	16	475,794	519,844	518,184	503,227	480,384	477,143	503,221	541,608	552,242	576,776	585,170	647,656	689,270
Washington U., Saint Louis	17	468,642	469,490	441,406	411,299	419,122	432,228	442,335	474,446	506,006	543,508	559,882	606,127	681,353
Pennsylvania State U., University Park and Hershey Medical Center	18	464,750	468,705	531,421	558,871	520,574	513,410	538,938	538,164	565,348	600,489	638,930	622,532	681,159
New York U.	19	260,463	302,221	316,208	300,730	330,484	344,570	350,355	391,144	416,143	436,850	448,850	547,027	668,381
Vanderbilt U. and Vanderbilt U. Medical Center	20	397,656	458,173	448,948	445,044	422,448	401,738	405,589	452,885	471,625	492,808	514,299	586,880	666,282
U. Minnesota, Twin Cities	21	426,359	489,480	485,462	494,206	489,767	476,029	469,260	456,443	464,300	494,549	514,092	570,946	652,384
Ohio State U.	22	399,942	493,130	445,635	456,590	454,484	446,048	454,834	464,311	474,994	497,651	539,359	559,797	636,902

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Cornell U.	23	448,085	476,583	472,673	445,116	439,770	446,360	430,987	438,182	470,020	525,182	562,021	592,359	636,481
Harvard U.	24	474,899	543,097	589,860	594,392	572,918	545,202	558,611	573,157	587,584	618,405	605,603	616,589	628,683
Northwestern U.	25	360,980	399,719	393,074	396,138	391,946	393,186	432,413	446,609	469,525	502,300	531,654	572,975	618,771
Icahn School of Medicine at Mount Sinai	26	302,770	296,835	271,722	277,517	300,667	329,641	342,104	367,522	398,656	443,745	480,452	554,582	610,646
U. Southern California	27	408,564	453,283	443,842	437,813	431,430	421,227	409,516	450,204	501,893	543,607	562,120	574,185	601,747
Emory U.	28	336,986	369,982	361,165	365,121	330,378	348,071	361,288	382,177	393,647	424,461	452,636	515,940	568,149
U. Texas, Austin	29	350,308	355,437	354,873	372,633	332,758	346,215	357,309	396,447	405,131	407,981	500,409	489,827	536,296
Massachusetts Institute of Technology	30	457,575	489,080	496,132	490,809	483,891	488,421	503,858	487,434	479,654	489,345	488,741	483,526	531,056
U. Colorado Boulder	31	292,030	323,078	330,089	319,869	314,890	353,341	371,995	374,209	391,817	412,691	427,869	459,816	507,892
Texas A&M U., College Station and Health Science Center	32	288,173	291,812	269,460	314,104	311,920	304,437	293,551	307,656	333,768	359,609	517,489	528,057	505,355
U. California, Berkeley	33	312,789	336,191	338,759	311,809	313,390	346,262	341,807	330,339	329,464	347,601	349,989	354,478	468,542
U. California, Davis	34	332,325	362,976	358,577	347,038	330,367	326,039	339,209	342,407	360,018	374,707	380,965	373,719	468,468
U. Florida	35	279,649	306,349	305,067	296,199	289,327	287,230	307,140	327,288	355,517	387,906	397,202	423,154	467,739
U. Chicago	36	352,728	372,288	336,125	300,718	281,464	294,437	297,953	308,002	303,175	332,776	352,447	394,275	456,806
U. Colorado Anschutz Medical Campus ^c	37	na	na	na	na	na	na	na	na	na	na	na	363,999	429,949
U. Alabama, Birmingham	38	325,103	344,164	306,210	290,082	280,333	328,531	348,632	358,916	373,360	398,403	400,110	423,290	421,223
U. Illinois, Urbana-Champaign	39	303,852	323,454	359,989	468,798	343,275	338,178	335,056	358,905	353,710	382,206	387,853	406,612	420,953
Baylor C. of Medicine	40	284,072	295,529	268,753	285,230	264,641	256,895	267,849	292,806	300,098	309,354	315,101	365,472	420,054
Boston U.	41	302,411	305,476	275,319	267,194	257,017	259,736	253,475	259,832	284,888	318,511	339,172	402,443	413,102
Michigan State U.	42	214,134	240,837	268,952	260,610	261,826	272,838	310,225	343,751	328,618	331,148	329,748	349,889	381,504
Case Western Reserve U.	43	333,689	353,470	359,000	349,487	329,320	308,434	321,214	326,643	349,177	357,549	357,589	340,438	380,423
U. Arizona	44	308,157	327,565	331,578	338,790	290,370	269,959	262,989	273,567	291,767	327,025	328,807	353,117	374,936
U. Utah	45	227,021	264,234	273,150	301,045	288,514	274,375	233,652	248,908	307,844	302,585	314,023	340,434	367,040
Indiana U., Bloomington	46	71,208	74,143	79,727	85,852	84,592	210,899	221,801	245,155	249,243	308,586	319,039	326,326	360,300
Purdue U., West Lafayette	47	232,564	259,948	270,655	271,504	236,860	217,330	229,093	245,110	251,517	249,831	270,605	295,278	352,890

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Rutgers, State U. New Jersey, New Brunswick	48	224,894	239,908	279,161	295,028	360,157	323,675	321,432	340,801	350,912	297,609	311,743	339,015	351,660
U. Cincinnati	49	262,513	287,182	267,691	258,460	245,086	251,717	231,817	242,237	250,202	252,892	285,899	309,097	350,392
Oregon Health and Science U.	50	247,054	268,777	242,337	246,491	247,740	245,509	232,688	245,199	264,492	298,227	321,572	329,016	346,724
U. Rochester	51	322,048	337,907	308,115	299,553	266,767	262,681	266,322	267,860	285,330	306,551	296,241	309,647	334,503
U. Virginia, Charlottesville	52	228,917	252,928	240,254	225,567	205,865	203,401	210,980	228,910	250,168	276,335	300,348	297,273	332,993
California Institute of Technology	53	328,522	342,945	326,701	282,823	279,515	272,673	265,206	277,358	280,451	287,198	316,519	293,197	326,401
Colorado State U., Fort Collins	54	211,297	236,566	252,286	219,856	212,054	219,321	232,108	239,165	268,747	284,482	287,100	303,901	316,727
U. Iowa	55	282,465	283,627	269,734	255,329	235,527	225,587	237,743	238,842	246,117	252,563	259,639	283,763	314,346
Arizona State U.	56	172,202	185,766	194,376	201,363	196,270	196,528	212,396	227,621	254,384	267,087	278,150	274,541	309,094
U. Texas Southwestern Medical Center	57	232,027	231,639	207,513	198,114	185,137	183,787	185,263	200,085	197,910	203,544	242,679	257,611	298,154
U. California, Irvine	58	194,559	209,117	206,985	198,730	182,585	174,875	177,779	187,535	201,173	217,094	241,734	255,010	291,393
Utah State U.	59	90,581	113,871	108,501	106,985	114,959	120,369	125,661	138,518	159,447	220,504	242,156	264,575	280,866
U. Miami	60	197,824	225,352	224,172	205,870	203,751	193,606	195,328	194,385	192,598	212,023	224,184	231,001	265,212
Carnegie Mellon U.	61	179,386	200,967	209,522	215,560	198,247	187,259	190,620	189,974	181,958	197,978	217,625	234,993	259,160
U. Massachusetts, Medical School	62	178,293	208,244	202,149	189,159	183,582	183,588	181,446	200,232	194,953	197,388	192,938	248,873	258,147
U. Kentucky	63	171,528	179,161	159,678	150,468	142,312	146,548	154,559	171,323	171,672	192,945	200,664	220,703	253,852
U. Illinois, Chicago	64	232,380	248,936	246,128	222,566	203,733	196,010	187,990	198,049	196,840	208,603	223,030	237,949	251,328
North Carolina State U.	65	139,096	155,293	174,758	177,118	181,449	199,862	202,336	218,274	219,258	228,945	232,110	239,115	250,582
Scripps Research Institute	66	313,746	317,201	309,471	308,628	292,268	274,097	242,489	250,090	267,088	267,122	243,502	272,181	242,135
Virginia Polytechnic Institute and State U.	67	162,566	189,198	184,175	201,646	204,308	196,096	195,859	186,054	199,897	209,607	210,792	216,733	240,305
U. New Mexico	68	148,216	162,854	160,895	158,057	153,889	154,794	159,280	165,128	169,952	159,940	161,627	242,212	232,774
U. Connecticut	69	132,169	144,280	153,264	148,651	144,104	137,980	146,390	145,637	144,048	159,220	164,848	183,362	230,752
U. Texas M. D. Anderson Cancer Center	70	206,664	236,400	196,753	182,971	158,986	161,171	155,044	166,552	173,206	176,156	186,488	217,073	225,659
Albert Einstein C. of Medicine	71	na	na	na	na	na	na	188,521	188,259	196,457	202,513	204,635	214,619	220,780

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Georgia	72	119,486	137,255	137,710	131,824	126,164	132,118	143,886	158,229	148,543	159,948	171,351	188,451	220,343
Princeton U.	73	150,261	163,438	161,591	156,541	164,277	158,313	162,003	176,029	180,305	193,453	203,259	205,000	218,390
SUNY, U. Buffalo	74	167,099	182,585	193,613	204,995	189,209	177,441	182,883	186,836	186,494	182,983	200,155	210,257	218,231
Brown U.	75	127,087	128,628	131,994	126,559	129,248	132,142	136,931	145,556	164,452	178,460	185,676	198,574	215,067
Woods Hole Oceanographic Institution	76	153,066	165,819	161,115	158,672	177,616	172,995	166,010	148,491	163,003	184,995	191,186	222,351	211,550
U. Oklahoma, Norman and Health Science Center	77	105,366	118,970	133,841	132,456	118,925	127,709	134,772	133,177	149,317	164,855	183,728	193,639	210,994
U. South Florida ^d	78	243,017	243,030	236,148	225,414	222,790	218,338	228,365	250,384	179,024	181,882	158,958	185,364	206,552
U. Dayton	79	73,540	70,996	65,169	67,698	66,318	77,973	100,955	118,452	132,358	153,328	154,101	181,445	203,206
U. Kansas	80	147,598	162,721	171,043	174,021	165,442	155,835	140,002	148,178	155,147	169,694	185,007	187,249	200,117
U. Delaware	81	105,454	118,673	117,072	119,756	116,340	114,245	113,217	117,813	118,573	133,020	144,142	157,725	194,775
Uniformed Services U. of the Health Sciences	82	72,125	117,781	102,134	119,647	213,389	299,007	175,007	204,241	218,702	297,808	235,202	275,573	194,187
Oregon State U.	83	135,886	146,882	156,446	149,396	145,247	153,017	158,142	163,479	171,805	168,571	167,494	179,180	192,621
Washington State U.	84	113,452	123,502	129,255	134,329	126,955	134,889	136,646	152,843	151,133	158,982	154,623	179,536	187,580
Iowa State U.	85	109,461	117,522	118,242	121,993	116,273	114,518	125,397	128,221	147,679	147,866	165,912	169,177	187,156
U. Texas Health Science Center, Houston	86	150,324	156,790	146,424	144,235	136,145	125,890	121,098	124,461	128,232	132,647	133,624	165,139	184,205
SUNY, Stony Brook U.	87	120,146	125,102	123,383	118,513	111,683	115,150	118,549	125,688	136,241	144,618	146,478	162,972	184,154
U. Missouri, Columbia	88	116,965	116,403	114,345	111,510	104,910	105,015	126,071	134,525	138,029	139,781	156,190	163,576	182,432
Wake Forest U.	89	159,084	173,130	172,779	156,506	153,069	148,451	141,052	148,001	154,363	165,702	166,596	188,887	180,754
Thomas Jefferson U.	90	77,817	80,027	68,976	56,247	54,676	58,536	58,866	62,029	64,869	74,816	74,676	109,448	173,861
U. Hawaii, Manoa	91	196,275	201,700	193,722	225,359	206,810	200,202	190,336	182,337	167,030	167,816	163,694	157,772	169,762
Virginia Commonwealth U.	92	144,138	153,228	142,053	135,804	138,559	142,447	143,701	147,585	140,363	142,293	152,751	160,995	166,726
Florida State U.	93	134,794	140,850	140,419	148,413	151,701	139,597	126,289	134,278	147,184	149,784	162,296	150,108	163,744
Medical U. South Carolina	94	131,650	143,464	136,907	127,472	118,649	117,255	124,212	134,072	142,639	153,226	153,802	162,394	163,395
George Washington U.	95	122,357	116,611	112,110	120,857	141,552	139,016	142,889	148,369	156,768	155,697	157,533	161,349	161,867
U. California, Santa Barbara	96	129,457	136,244	136,352	132,960	121,045	116,232	116,775	117,457	113,388	118,517	123,198	122,168	161,241

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Dartmouth C. and Dartmouth Hitchcock Medical Center	97	118,271	131,583	147,421	155,209	145,498	146,233	139,090	137,448	140,399	137,965	142,219	152,335	155,445
U. Alaska, Fairbanks	98	99,657	105,469	99,674	94,953	85,904	81,586	89,940	97,314	94,998	92,964	101,414	128,229	154,742
Medical C. Wisconsin	99	121,750	133,929	125,325	116,765	111,241	109,542	108,529	108,276	111,273	119,036	128,783	136,385	152,301
Northeastern U.	100	59,074	67,938	77,667	85,170	79,666	80,576	81,124	93,572	114,711	126,762	136,273	143,421	150,093
Tufts U.	101	116,699	122,208	121,512	113,450	116,204	121,428	126,109	139,532	139,334	146,630	148,320	166,809	150,081
U. Tennessee, Knoxville ^e	102	96,972	111,942	112,471	117,836	112,201	105,417	109,722	117,097	117,776	123,434	138,402	135,202	149,260
Temple U.	103	79,939	89,719	90,243	131,872	126,803	129,499	140,775	153,404	155,312	161,673	154,600	153,316	143,580
Mississippi State U.	104	106,324	98,998	96,689	74,075	71,715	80,097	87,277	87,928	89,012	104,738	120,616	116,713	138,207
U. Alabama, Huntsville	105	73,075	72,665	78,528	85,738	75,343	67,451	69,824	68,609	74,650	85,211	104,288	116,971	132,060
U. New Hampshire	106	84,553	106,806	119,451	102,053	101,125	92,040	93,599	92,338	95,807	90,241	100,373	99,323	129,721
Florida International U.	107	62,580	65,446	69,402	72,357	78,961	76,528	76,127	71,579	85,541	96,912	103,366	105,309	129,683
U. Massachusetts, Amherst	108	97,937	107,683	115,280	111,448	110,189	103,417	106,269	108,871	110,654	117,359	116,170	116,349	129,044
Tulane U.	109	106,872	111,007	101,360	97,994	94,486	84,166	89,087	93,970	102,201	104,219	107,290	113,819	127,544
Georgetown U.	110	120,589	123,540	115,197	114,760	100,475	88,015	83,827	94,435	89,977	94,050	98,682	130,419	127,213
Wayne State U.	111	132,166	134,735	126,915	119,520	113,618	109,586	111,532	109,421	111,018	118,043	113,137	117,976	126,814
U. Notre Dame	112	62,152	79,716	83,295	79,564	79,690	83,710	87,129	91,787	96,182	106,411	104,030	109,891	124,411
U. Texas Medical Branch	113	128,840	128,098	109,867	108,287	101,761	98,050	100,464	104,458	104,356	107,806	114,103	117,915	123,467
Clemson U.	114	62,934	52,919	51,764	52,002	49,887	53,136	60,165	70,256	73,735	81,080	82,203	89,883	119,512
George Mason U.	115	63,011	65,301	63,786	65,096	61,877	63,600	58,864	57,345	69,481	96,307	104,070	103,712	119,406
U. Texas Health Science Center, San Antonio	116	121,723	121,200	106,177	99,198	89,303	85,940	89,742	85,455	86,956	96,502	102,959	106,824	119,071
Montana State U., Bozeman	117	93,100	87,528	86,511	73,619	72,777	69,136	68,471	74,788	75,524	88,955	93,759	113,257	118,974
U. Louisville	118	93,260	96,010	89,976	78,144	65,849	68,345	72,644	72,119	80,511	87,563	88,251	97,179	117,363
U. Vermont	119	98,635	101,471	87,843	85,118	79,743	83,733	83,124	78,394	86,940	90,405	97,981	103,554	117,163
U. Nebraska, Medical Center	120	80,784	86,295	84,196	80,750	76,195	71,918	76,221	84,814	93,463	102,604	105,158	111,042	114,754
U. California, Riverside	121	63,127	62,312	63,821	59,065	57,397	63,515	70,489	76,795	77,314	81,151	92,503	97,182	114,257
U. Nebraska, Lincoln	122	98,417	108,059	106,725	100,592	94,265	95,831	95,426	101,532	103,565	109,954	107,299	107,006	113,248

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Louisiana State U., Baton Rouge	123	97,407	97,517	92,551	94,563	94,701	83,644	86,754	81,644	84,309	88,721	87,895	103,178	111,886
U. Central Florida	124	69,331	69,098	78,411	76,533	70,716	88,814	87,417	89,904	97,539	99,310	101,332	109,310	110,131
U. California, Santa Cruz	125	84,518	97,817	94,222	91,002	90,858	92,870	95,294	66,563	63,197	74,669	76,468	86,263	107,082
U. South Carolina, Columbia	126	125,501	103,296	98,836	91,612	91,890	90,453	93,885	96,048	88,602	102,992	90,243	88,529	106,752
Rice U.	127	69,395	78,730	76,964	80,075	73,965	74,266	83,273	84,469	78,175	83,584	88,768	95,648	105,345
Auburn U., Auburn	128	53,971	59,559	55,557	57,253	50,088	48,352	54,751	55,700	58,488	64,333	73,468	91,157	104,883
Drexel U.	129	77,438	83,702	87,860	76,343	77,684	69,462	67,020	70,921	82,777	85,278	82,576	93,517	99,399
West Virginia U.	130	79,415	88,419	82,149	74,704	69,165	68,731	72,751	72,767	76,527	82,353	79,657	89,802	97,327
U. Oregon	131	76,378	84,997	86,316	75,423	74,603	69,723	66,850	69,598	71,568	80,083	81,278	82,242	97,238
U. Arkansas for Medical Sciences	132	72,217	75,924	69,883	64,856	55,556	50,603	48,999	51,298	57,523	63,498	70,508	83,387	95,080
Rockefeller U.	133	88,705	97,710	84,616	80,384	81,820	81,949	80,667	86,763	87,231	84,566	86,280	96,318	94,693
Wichita State U.	134	13,751	20,569	19,078	13,434	10,424	7,728	10,442	21,685	18,706	29,634	53,540	77,427	93,367
U. Rhode Island	135	62,981	78,303	83,754	74,870	65,715	64,711	61,641	62,785	64,026	73,080	67,242	78,923	93,190
U. Houston	136	52,920	59,580	55,812	61,038	58,954	58,458	62,703	60,033	63,801	68,523	71,779	77,489	84,295
U. Mississippi	137	71,475	74,918	74,955	64,590	64,218	59,978	64,510	62,483	63,736	73,865	82,361	76,886	84,270
U. Maine	138	50,163	59,800	39,661	34,252	50,589	35,369	34,277	37,321	45,348	51,049	54,376	65,249	84,072
U. Nevada, Reno	139	58,115	57,220	55,437	56,900	53,363	51,724	53,371	54,782	62,635	62,903	64,793	77,246	83,631
Kansas State U.	140	68,560	76,953	77,689	70,167	67,438	69,918	71,224	75,468	80,436	81,269	79,100	77,779	81,820
Georgia State U.	141	27,073	28,210	34,075	37,521	42,259	50,122	52,351	71,248	71,650	70,185	78,199	79,834	81,641
Rush U.	142	51,304	57,978	57,512	57,063	53,501	52,193	50,332	51,532	64,178	68,941	65,343	73,279	79,647
U. Louisiana, Lafayette	143	12,881	14,659	13,848	11,090	10,666	15,799	16,893	23,895	28,874	34,400	40,044	65,436	77,110
U. Montana, Missoula	144	40,760	38,565	35,984	34,021	30,319	33,718	38,753	44,534	54,708	55,566	62,067	70,686	73,507
New Mexico Institute of Mining and Technology	145	42,243	37,316	29,894	23,581	33,245	20,018	17,017	18,358	19,560	22,864	22,922	24,900	72,594
New Mexico State U.	146	98,399	90,598	90,722	86,806	80,599	78,903	62,292	59,885	54,009	58,022	60,971	64,699	71,718
New Jersey Institute of Technology	147	50,051	54,250	59,398	57,466	54,655	55,094	67,490	79,397	91,999	89,846	85,746	77,057	71,326
U. Wyoming	148	45,323	48,932	57,441	53,971	42,280	48,970	63,951	56,410	42,595	52,082	57,353	54,444	68,772
U. Alabama, Tuscaloosa	149	26,364	32,999	33,023	28,375	26,161	28,988	28,425	27,692	30,447	37,916	43,017	53,880	67,986
Colorado School of Mines	150	29,892	33,789	33,481	32,399	34,781	34,266	35,677	37,505	40,161	49,603	55,560	61,421	66,200

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Maryland, Baltimore County	151	59,448	61,172	45,014	44,662	47,538	47,954	50,984	52,014	53,522	56,993	59,391	59,882	65,368
Augusta U.	152	na	na	na	47,913	47,771	50,585	50,294	48,921	48,800	47,031	55,797	61,943	64,609
U. Arkansas, Fayetteville	153	33,674	37,587	34,189	30,625	26,111	34,288	40,642	46,490	52,937	50,875	47,454	48,534	64,252
U. North Dakota	154	52,504	54,058	54,476	46,491	40,340	37,697	42,425	43,262	51,050	49,700	44,153	58,463	62,737
U. Massachusetts, Lowell	155	25,550	27,960	26,786	27,360	28,654	31,059	27,694	29,471	30,086	35,309	41,304	48,179	62,195
U. Texas, Dallas	156	30,754	33,216	35,297	33,920	32,699	31,068	35,451	36,097	40,046	48,466	55,983	58,249	60,706
U. Texas, El Paso	157	34,617	35,399	40,024	38,253	35,304	41,897	42,423	44,811	44,352	41,261	39,126	43,930	60,387
U. Tennessee, Health Science Center	158	52,652	51,842	48,473	42,269	41,830	39,356	38,374	39,138	39,421	42,396	48,264	56,021	60,221
Cold Spring Harbor Laboratory	159	ne	51,529	43,874	41,002	41,845	49,063	50,478	54,260	67,139	73,854	62,215	56,907	59,163
U. Idaho	160	46,303	54,243	55,115	53,986	50,638	50,559	51,295	50,935	51,172	51,529	51,450	51,021	56,160
U. Texas, Arlington	161	31,628	30,659	33,150	30,815	24,857	27,712	26,664	33,111	36,027	41,764	44,950	46,946	56,025
U. Texas, San Antonio	162	28,717	31,972	32,672	29,078	23,066	23,511	25,813	29,947	29,824	34,588	34,334	42,952	54,384
Oklahoma State U., Stillwater	163	56,998	81,855	85,876	44,200	36,687	38,585	42,976	44,977	43,421	39,880	39,873	47,428	53,885
Cleveland State U.	164	25,024	42,575	46,645	50,243	44,233	41,851	49,925	52,541	55,468	51,475	53,756	47,402	53,395
SUNY, U. Albany	165	124,324	125,189	112,989	114,158	105,333	79,681	77,734	85,469	87,451	92,709	67,039	56,425	51,492
Rensselaer Polytechnic Institute	166	54,847	59,284	62,341	60,870	59,070	59,528	52,163	51,130	50,120	50,448	52,150	52,465	50,605
San Diego State U.	167	56,504	64,056	56,797	51,274	50,542	46,870	44,495	39,417	39,453	39,515	41,117	43,473	50,540
Michigan Technological U.	168	27,676	32,724	33,189	32,086	30,588	28,692	29,774	28,483	32,606	34,709	36,172	41,505	48,766
U. Southern Mississippi	169	37,054	40,984	37,524	28,694	26,163	25,005	25,482	27,661	31,815	46,924	42,870	44,401	48,368
North Dakota State U.	170	51,883	53,451	46,490	38,453	36,277	35,482	35,590	34,923	35,122	35,322	31,614	42,824	45,343
Texas Tech U.	171	35,970	35,191	29,969	28,827	33,137	32,987	32,405	31,347	31,357	35,136	31,475	33,938	45,136
Naval Postgraduate School	172	93,605	94,278	127,049	91,134	96,573	78,780	56,045	47,082	44,140	54,358	51,870	54,855	44,852
Brandeis U.	173	43,669	48,235	44,532	45,337	47,532	47,841	48,273	46,108	38,632	41,475	41,440	43,471	44,205
Northern Arizona U.	174	15,070	17,765	16,015	15,638	18,209	20,285	23,442	26,035	29,648	35,980	39,387	41,744	43,453
Saint Louis U.	175	33,728	38,323	35,873	31,645	30,071	27,580	26,813	27,436	28,121	34,275	34,419	41,411	42,170
Florida A&M U.	176	45,856	44,905	42,937	39,675	36,570	36,975	37,363	30,383	32,422	35,362	33,136	36,761	41,943
Stevens Institute of Technology	177	29,370	32,570	27,420	24,812	23,656	25,980	28,999	26,855	26,281	28,342	33,461	33,998	41,836

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Texas State U.	178	8,904	10,319	11,950	14,908	14,243	18,289	21,049	25,132	30,314	29,614	26,950	31,116	38,936
CUNY, City C.	179	32,900	40,595	39,572	40,094	40,095	38,434	37,525	35,429	36,866	33,065	30,106	34,218	38,596
Howard U.	180	33,017	36,060	37,690	33,966	32,663	38,820	33,441	34,762	33,602	29,978	29,256	35,443	37,331
U. Toledo	181	38,389	44,881	41,072	40,497	34,684	27,085	27,802	24,167	25,323	28,273	27,770	32,601	36,694
Boston C.	182	33,290	31,953	30,855	27,975	25,115	23,352	27,033	30,448	30,541	32,475	31,038	34,257	36,560
Lehigh U.	183	23,721	22,390	23,312	24,831	24,271	22,910	21,429	25,228	25,834	26,554	26,816	29,051	36,535
U.S. Air Force Academy	184	49,711	62,118	43,431	45,169	34,669	30,637	46,958	40,062	27,973	35,294	33,554	31,818	35,826
U. Puerto Rico, Medical Sciences Campus	185	29,813	54,381	35,173	31,037	30,197	31,889	33,348	29,869	30,597	34,570	27,033	33,262	35,050
Worcester Polytechnic Institute	186	13,582	15,714	12,968	17,003	19,643	26,327	25,976	19,566	18,635	22,964	26,074	30,166	34,004
Syracuse U.	187	33,796	33,850	33,156	27,729	29,404	32,378	36,106	39,781	39,538	37,803	31,861	34,200	33,976
William & Mary	188	27,685	30,361	32,526	31,628	33,320	33,129	34,133	32,760	33,503	31,983	30,436	29,928	33,730
Rochester Institute of Technology	189	23,254	20,396	19,394	18,379	19,465	20,147	26,149	27,311	25,990	26,359	28,092	31,187	33,373
Louisiana State U., Health Sciences Center, New Orleans	190	46,142	45,581	40,637	36,886	34,637	36,027	31,526	28,018	26,988	31,290	31,381	34,272	33,087
Mercer U.	191	18,778	17,904	19,963	19,411	19,666	21,563	21,120	19,772	18,999	27,035	31,572	34,413	32,504
Air Force Institute of Technology	192	15,474	20,196	19,579	18,739	16,782	16,727	19,796	25,588	23,393	21,856	22,854	27,025	32,479
SUNY, Polytechnic Institute	193	na	na	na	na	21,208	14,641	21,380	41,252	41,795	38,245	27,998	25,427	32,396
Boise State U.	194	14,614	18,811	20,070	16,117	15,746	18,296	16,953	19,806	24,918	24,493	26,914	31,357	32,015
Brigham Young U., Provo	195	22,115	24,273	22,069	23,639	24,490	24,250	28,453	26,441	23,892	23,901	24,632	30,439	31,636
Morehouse School of Medicine	196	25,855	28,128	31,786	34,511	33,020	30,012	28,678	28,792	24,326	22,461	22,500	25,181	31,339
U. Missouri, Kansas City	197	16,391	18,988	17,522	15,774	15,178	13,327	13,081	11,296	10,596	18,624	22,320	21,203	31,134
San Jose State U.	198	24,292	26,389	24,153	27,780	32,901	33,782	31,318	31,396	33,886	35,143	34,102	30,877	30,984
Portland State U.	199	36,996	41,580	42,662	40,377	33,523	29,987	32,021	32,727	31,234	33,055	31,315	29,842	30,922
U. North Carolina, Greensboro	200	19,477	20,868	16,530	13,658	13,489	14,978	17,902	17,354	17,016	18,923	20,447	24,423	29,822
East Carolina U.	201	16,113	19,675	17,838	18,227	17,409	15,079	13,073	11,526	12,611	17,428	20,168	22,813	29,648
Van Andel Research Institute	202	ne	ne	ne	ne	ne	8,138	11,970	13,108	14,285	18,259	18,538	22,231	29,424

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Indiana U.-Purdue U., Indianapolis	203	148,672	156,607	166,825	152,578	143,386	18,479	19,954	20,035	22,834	27,349	31,862	30,290	29,353
North Carolina A&T State U.	204	23,883	22,652	22,477	21,663	23,373	22,413	21,112	24,496	24,874	23,863	22,338	25,755	29,094
U. Nevada, Las Vegas	205	32,441	30,457	25,068	24,502	26,950	27,493	25,613	29,172	33,727	28,381	29,252	27,178	28,867
Missouri U. of Science and Technology	206	28,239	27,961	23,731	25,571	21,811	17,632	18,833	19,567	21,835	22,426	22,860	26,164	28,792
Florida Atlantic U.	207	17,268	15,579	17,226	13,555	13,234	11,574	15,356	17,172	18,771	21,667	23,695	28,510	28,641
Old Dominion U.	208	34,687	39,534	38,555	39,963	41,270	40,002	39,743	42,412	32,584	31,355	30,330	25,514	27,804
SUNY, Upstate Medical U.	209	27,959	28,663	27,013	23,730	21,334	19,213	18,942	19,991	20,391	22,028	23,940	24,974	27,737
Loyola U., Chicago	210	28,995	28,633	28,530	33,074	31,189	28,200	25,363	23,324	21,994	23,562	24,018	26,793	26,972
U. North Carolina, Charlotte	211	17,284	15,930	19,230	20,994	19,069	19,132	20,269	20,462	22,386	26,199	27,618	27,145	26,871
Catholic U. of America	212	15,878	19,890	17,608	17,310	17,205	19,900	19,928	19,857	20,749	21,642	22,503	23,128	26,285
U. Denver	213	13,364	14,042	11,779	15,089	14,202	12,048	11,029	11,648	15,713	22,012	24,753	23,415	26,040
Illinois Institute of Technology	214	28,349	34,858	27,767	28,319	25,679	25,826	23,821	26,330	28,265	28,827	24,244	24,762	25,963
SUNY, Downstate Health Sciences U.	215	25,023	33,964	34,884	31,972	25,802	20,779	25,941	22,496	26,302	26,914	26,454	27,620	25,081
SUNY, Binghamton U.	216	20,979	21,244	21,162	17,715	14,843	16,171	18,562	20,639	23,392	24,213	24,564	23,225	24,888
U. Memphis	217	20,654	20,348	22,142	18,619	21,898	18,825	18,098	18,185	25,166	18,370	18,063	21,578	24,686
Morgan State U.	218	10,039	9,884	15,408	13,357	14,144	12,805	14,343	13,328	11,603	11,952	14,101	16,319	24,670
Delaware State U.	219	10,154	12,822	11,305	11,837	12,464	12,091	15,260	14,693	13,007	12,179	14,319	16,460	24,361
U. Wisconsin-Milwaukee	220	29,042	30,479	28,862	26,450	25,377	25,587	25,651	23,916	24,612	23,342	25,354	24,397	24,036
U. Nebraska, central administration	221	ne	ne	ne	ne	ne	ne	ne	ne	13,200	18,523	23,104	20,675	23,872
Embry-Riddle Aeronautical U.	222	8,241	11,444	14,048	11,456	13,030	10,049	14,135	10,525	12,661	8,970	11,542	14,859	23,863
U. South Alabama	223	14,730	16,758	13,816	13,743	14,353	15,106	17,628	16,627	15,098	19,947	21,825	23,758	23,762
U. California, Merced	224	9,392	10,140	11,052	10,983	10,509	12,648	12,206	14,923	14,385	16,850	20,000	18,621	23,421
U. Massachusetts, Boston	225	24,527	26,958	33,275	24,924	27,715	28,653	30,608	29,934	30,412	25,083	27,575	23,673	23,131
U. North Texas, Denton	226	14,444	14,754	18,043	16,515	16,318	15,470	12,621	15,668	19,026	17,345	13,653	18,702	23,056
South Dakota State U.	227	38,368	41,904	41,975	33,231	29,524	28,670	29,633	28,003	27,129	29,683	22,531	18,607	22,991

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CUNY, Hunter C.	228	18,498	22,901	24,265	22,512	19,268	19,193	20,037	18,705	21,766	23,485	26,025	23,166	21,142
Ohio U.	229	18,466	23,051	20,780	20,203	16,597	17,303	14,678	16,393	13,961	14,802	15,543	19,164	20,587
Wright State U.	230	24,785	27,422	25,552	26,888	27,838	26,931	30,162	35,533	43,644	41,428	35,321	19,617	20,529
U.S. Military Academy	231	22,146	13,799	12,227	11,630	14,819	15,312	13,500	13,430	13,393	10,528	8,406	13,708	19,708
U. of the Virgin Islands	232	28,369	16,338	22,605	15,627	14,992	19,456	20,951	10,968	10,852	10,445	11,787	13,099	19,127
Rowan U.	233	2,062	2,108	2,349	1,926	4,591	4,674	5,252	7,110	9,602	12,064	15,551	17,400	18,613
U. Texas Rio Grande Valley	234	na	na	na	na	na	na	16,892	14,808	13,330	13,629	13,093	13,018	18,317
Southern Methodist U.	235	13,312	18,502	16,640	14,274	20,611	14,324	15,587	14,464	13,439	17,869	17,752	17,886	17,680
Eastern Virginia Medical School	236	29,291	25,319	24,694	28,728	28,532	28,637	21,459	21,209	21,356	19,408	15,748	14,774	17,616
Desert Research Institute	237	28,307	28,489	27,294	22,814	19,932	16,511	18,883	18,839	17,911	16,745	15,791	16,641	17,341
U. Nebraska, Omaha	238	6,014	6,333	5,980	5,693	5,687	6,066	7,180	7,486	7,939	8,807	9,996	13,503	17,301
U. West Florida	239	11,038	13,156	12,858	12,927	11,593	10,935	9,841	10,127	8,634	11,506	12,369	13,313	17,114
U. Guam	240	4,962	5,391	5,448	5,554	6,599	5,586	6,621	8,067	8,597	9,339	9,722	14,316	17,066
U. Puerto Rico, Rio Piedras	241	21,717	24,887	25,407	17,946	18,262	18,922	15,892	11,512	10,028	13,943	14,071	15,108	16,905
Marshall U.	242	18,218	21,852	13,154	13,472	12,712	11,154	9,158	9,064	8,584	9,617	11,078	12,854	16,369
U. Puerto Rico, Mayaguez	243	12,735	18,568	19,949	14,414	14,162	15,700	14,446	13,604	14,111	15,653	15,842	13,073	16,223
Kent State U.	244	14,586	15,085	14,882	11,506	11,181	11,158	10,013	10,524	11,118	13,350	15,004	15,179	16,195
Rutgers, State U. New Jersey, Newark	245	12,631	18,226	20,588	16,295	12,520	12,611	13,737	16,617	17,516	15,397	16,196	16,281	16,099
Baylor U.	246	2,947	3,704	3,513	3,510	4,062	3,878	4,244	5,265	5,782	6,955	8,851	11,025	15,856
California State U., Northridge	247	17,213	19,769	24,837	7,906	11,309	12,060	13,442	14,756	15,892	16,939	17,261	13,989	15,546
Louisiana State U., Health Sciences Center, Shreveport	248	13,890	15,316	13,504	11,753	8,490	6,321	6,478	7,055	9,235	12,185	11,452	12,359	15,503
Marquette U.	249	9,381	11,291	9,968	8,756	8,191	9,320	10,298	10,111	10,672	12,792	13,187	13,918	15,316
San Francisco State U.	250	15,601	17,337	17,075	19,024	17,129	14,336	12,804	14,817	14,388	15,675	15,834	15,993	15,276
U. Alaska, Anchorage	251	9,368	9,858	10,760	9,686	7,824	8,575	11,867	12,681	13,597	14,219	15,290	15,079	15,249
Texas A&M U.-Corpus Christi	252	7,869	7,506	5,446	6,129	7,176	9,491	8,669	10,259	12,815	14,451	13,349	10,967	15,229

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Maryland Center for Environmental Science	253	12,123	18,007	16,081	16,852	13,202	14,096	13,957	15,069	15,008	17,476	15,498	14,072	15,109
South Dakota School of Mines and Technology	254	25,172	28,105	14,480	7,853	7,078	9,286	10,370	10,639	10,240	9,283	10,659	11,587	15,100
California Polytechnic State U., San Luis Obispo	255	11,637	8,658	10,125	10,280	9,087	9,796	11,276	10,535	9,613	9,720	10,178	11,163	15,084
Meharry Medical C.	256	24,302	26,779	23,467	21,135	17,754	13,068	13,528	15,613	14,515	16,443	12,573	13,784	15,048
Jackson State U.	257	39,457	43,001	39,511	29,700	21,677	19,656	20,854	20,136	17,385	16,259	13,662	14,038	15,045
Tuskegee U.	258	12,309	12,397	12,633	16,789	14,145	12,267	10,388	10,388	10,388	14,825	15,122	15,424	14,911
CUNY, Queens C.	259	13,642	15,573	14,897	15,443	16,460	14,080	14,275	11,884	12,390	13,457	12,726	12,386	14,756
American U.	260	8,841	9,208	7,515	10,421	9,427	9,449	9,554	8,800	13,013	15,229	16,123	12,076	14,752
Texas Tech U., Health Sciences Center	261	12,950	14,790	13,944	14,820	9,853	10,251	10,384	9,143	7,546	11,345	13,043	12,148	14,620
U. Texas Health Science Center, Tyler	262	ne	ne	ne	ne	ne	3,713	3,757	5,792	6,438	7,084	7,732	12,007	14,362
North Carolina Central U.	263	6,870	9,496	11,076	8,253	9,757	10,874	10,455	11,977	12,947	13,503	12,787	10,676	13,709
U. South Dakota	264	16,467	14,490	14,088	15,274	12,162	9,214	8,832	11,134	12,523	13,367	13,034	11,664	13,702
Southern Illinois U., Carbondale	265	22,209	23,696	22,055	18,398	16,288	14,895	14,574	13,421	12,733	12,625	12,735	12,655	13,582
Albany Medical C.	266	15,758	13,884	11,845	10,278	9,716	9,481	10,714	11,040	10,243	11,827	12,940	13,166	13,384
Western Michigan U. and Homer Stryker M.D. School of Medicine	267	19,738	18,736	14,378	12,322	11,334	11,869	12,287	10,565	10,828	14,399	13,187	13,944	12,895
U. Colorado Denver ^c	268	na	na	na	na	na	na	na	na	na	na	na	11,866	12,668
CUNY, Advanced Science Research Center	269	na	na	na	na	na	257	ne	2,355	4,027	6,859	9,208	11,840	12,580
U. Hawaii, system office	270	ne	ne	ne	ne	ne	ne	ne	ne	12,328	12,052	13,367	12,688	12,511
Creighton U.	271	11,850	14,140	14,270	13,569	11,690	9,359	10,619	7,946	5,721	8,265	7,583	8,585	12,022
CUNY, Graduate School of Public Health and Health Policy	272	na	na	na	na	na	na	na	na	5,080	5,572	8,722	12,254	11,880

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
California State U., Long Beach	273	12,731	12,055	11,379	10,701	7,879	6,198	11,176	13,085	14,021	13,579	12,014	11,178	11,739
Xavier U. Louisiana	274	5,669	6,673	7,177	5,856	7,078	7,735	10,503	10,939	10,165	8,679	9,680	11,213	11,733
Prairie View A&M U.	275	8,623	11,058	10,569	9,077	8,278	7,994	7,952	8,722	8,421	9,346	9,249	9,566	11,665
Hampton U.	276	14,455	12,292	15,356	12,620	11,153	14,735	14,201	16,249	14,170	13,390	11,278	11,517	11,274
U. Massachusetts, Dartmouth	277	12,236	13,657	10,979	8,860	8,549	7,321	6,548	7,370	7,156	7,353	6,506	8,223	11,162
Chapman U.	278	1,871	1,576	1,733	2,379	2,373	2,790	3,357	3,598	4,057	5,738	7,850	8,574	11,098
U. Akron	279	12,107	12,962	16,768	19,658	20,263	14,676	25,433	16,395	12,470	11,796	10,574	9,024	11,036
Florida Institute of Technology	280	9,175	7,637	7,500	7,543	8,581	8,315	9,500	8,465	8,511	10,352	10,999	13,049	10,970
Tennessee State U.	281	7,414	8,369	10,240	9,872	12,016	11,145	12,291	10,557	10,291	8,962	19,272	15,066	10,859
Charles R. Drew U. of Medicine and Science	282	20,430	20,679	19,733	17,144	19,412	12,992	12,089	14,461	10,198	10,427	9,863	9,945	10,656
Miami U.	283	13,591	13,210	13,418	12,676	12,048	10,008	9,189	9,093	9,627	9,755	10,473	9,412	10,277
Teachers C., Columbia U.	284	6,533	8,526	10,173	8,494	8,909	12,775	11,635	10,194	8,925	8,054	7,614	8,521	10,177
U.S. Naval Academy	285	10,750	10,243	9,322	10,482	10,416	8,978	11,016	12,963	13,331	12,991	12,577	10,247	10,147
Missouri State U.	286	6,071	4,764	3,697	3,132	3,132	3,165	2,675	2,770	3,995	5,076	12,310	8,931	10,084
U. of the District of Columbia	287	1,946	2,313	2,430	2,168	1,627	1,434	2,451	2,659	2,021	3,283	2,664	6,851	9,859
Northern Illinois U.	288	17,334	11,807	12,861	12,415	9,174	9,158	9,957	7,947	8,903	8,610	8,030	9,080	9,840
Central Michigan U.	289	2,536	4,841	5,055	5,464	6,187	5,464	5,387	5,557	7,130	8,100	7,450	6,919	9,773
East Tennessee State U.	290	6,272	7,705	8,052	6,909	5,484	5,135	5,658	5,933	7,168	7,688	7,329	8,358	9,715
Oakland U.	291	7,130	9,178	9,185	7,605	6,885	6,161	6,198	6,418	5,777	6,690	5,068	7,426	9,533
Northeast Ohio Medical U.	292	4,009	4,081	3,816	5,244	6,582	7,607	9,181	10,043	9,743	10,107	10,684	9,999	9,400
Alcorn State U.	293	9,256	8,655	8,598	8,321	7,447	6,784	6,387	8,634	7,372	7,540	7,023	7,593	9,361
Nova Southeastern U.	294	5,718	6,904	6,653	5,379	5,992	5,896	7,381	7,979	7,853	8,965	10,452	10,386	9,314
Alabama A&M U.	295	22,154	22,120	22,086	22,052	22,018	21,982	18,556	15,130	11,704	8,277	5,643	7,432	9,221
Loma Linda U.	296	29,284	32,187	24,884	26,253	19,088	21,082	16,118	15,192	13,923	12,654	11,385	10,116	9,134
Idaho State U.	297	14,645	17,149	16,095	13,206	11,091	11,738	11,926	11,184	10,081	7,547	7,849	7,216	9,080
New York Medical C.	298	21,095	21,013	16,471	13,806	11,421	11,326	10,772	9,000	8,141	11,061	12,106	10,739	9,070
U. Maryland, Eastern Shore	299	8,583	8,587	6,965	8,511	8,902	9,284	7,853	7,265	4,890	6,983	8,084	8,346	9,062
California State U., East Bay	300	643	921	536	310	ne	ne	479	ne	ne	ne	2,348	3,289	8,997

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Lincoln U., Jefferson City	301	5,984	7,084	6,306	4,989	5,460	5,492	4,953	4,148	2,498	2,700	3,636	5,621	8,988
Winston-Salem State U.	302	ne	1,179	1,977	841	ne	ne	1,356	1,575	1,629	2,011	4,498	4,841	8,903
Clarkson U.	303	9,573	9,531	7,061	5,283	5,476	5,440	6,183	6,819	8,203	8,551	7,095	7,246	8,834
Illinois State U.	304	5,442	4,586	3,833	3,902	5,213	4,424	5,630	5,355	6,312	9,827	8,719	9,787	8,673
California State U., Los Angeles	305	7,234	8,426	6,847	7,065	4,923	4,291	3,804	6,612	8,586	9,288	8,380	7,342	8,605
U. New Orleans	306	19,244	19,000	14,521	11,051	9,490	7,492	6,826	5,568	5,258	4,353	3,868	3,674	8,270
Texas A&M U.-Kingsville	307	7,088	6,280	6,480	7,002	8,678	7,080	7,475	7,869	7,459	8,419	9,610	9,265	8,225
Tennessee Technological U.	308	7,490	6,397	4,674	3,999	3,725	3,578	4,076	4,969	5,390	6,153	6,471	7,625	8,156
California State U., San Marcos	309	4,106	4,827	5,548	6,271	6,091	4,573	5,273	5,594	7,497	9,134	11,547	8,831	7,986
Bowling Green State U.	310	4,963	6,164	7,005	9,323	6,576	5,544	6,229	6,395	6,056	5,852	6,397	7,263	7,918
SUNY, C. of Environmental Science and Forestry	311	8,907	8,732	8,557	8,382	5,564	7,784	8,313	7,730	6,873	7,743	7,809	6,979	7,766
U. North Florida	312	4,636	5,082	3,760	1,424	1,177	1,198	1,356	1,435	3,818	4,017	4,568	7,267	7,758
Texas Southern U.	313	5,240	4,899	4,924	4,741	3,512	3,458	3,269	3,674	2,839	3,238	6,249	5,562	7,550
Rosalind Franklin U. of Medicine and Science	314	8,350	9,317	10,084	11,202	9,754	9,368	8,478	8,828	9,249	8,865	8,504	9,357	7,292
Fort Valley State U.	315	4,586	3,452	3,334	3,329	4,249	4,079	4,844	5,068	3,700	4,434	4,806	4,429	7,265
U. North Carolina, Wilmington	316	14,364	14,218	11,571	9,133	6,063	5,819	5,966	5,990	5,732	7,174	6,783	6,852	7,178
Western U. of Health Sciences	317	885	914	1,300	1,163	1,545	1,206	2,391	2,725	2,755	3,035	4,486	5,620	7,131
Virginia State U.	318	5,552	6,035	6,999	6,212	5,424	4,951	5,204	4,779	5,655	6,636	5,642	4,846	7,115
California State U., San Bernardino	319	3,394	9,953	7,251	6,190	6,414	5,959	6,348	6,565	7,920	8,651	5,886	5,867	6,693
U. Arkansas, Little Rock	320	7,571	8,615	8,104	6,848	5,188	4,259	4,934	4,756	5,764	6,688	7,289	6,939	6,675
California State U., Sacramento	321	5,829	6,965	5,663	7,546	5,241	5,697	5,619	6,894	6,392	5,801	5,693	5,582	6,646
Florida Gulf Coast U.	322	9,542	10,328	5,146	4,800	4,609	4,501	4,442	3,746	3,164	3,773	5,304	4,467	6,482
Villanova U.	323	6,367	6,817	5,518	4,218	5,008	4,572	4,334	4,048	3,968	4,085	4,921	5,826	6,476

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Western Washington U.	324	4,594	4,661	3,891	3,789	4,039	4,546	4,701	5,271	4,393	3,978	3,966	4,290	6,347
Duquesne U.	325	5,904	5,991	5,723	4,343	4,670	5,004	5,809	5,759	5,762	4,552	4,981	5,020	6,309
California State U., Fullerton	326	13,651	16,159	12,440	11,716	6,932	4,784	3,815	4,237	4,981	4,340	4,121	4,551	6,136
U. Minnesota, Duluth	327	6,441	8,564	7,597	7,264	5,940	10,025	8,055	6,033	5,520	7,143	6,454	5,325	6,122
California State U., Fresno	328	3,424	3,795	3,532	2,682	2,921	3,573	3,539	3,511	3,969	2,900	3,117	4,101	5,928
Clark Atlanta U.	329	7,229	7,040	8,447	7,576	7,241	7,455	6,048	5,811	5,634	5,689	5,324	5,355	5,895
U. Tulsa	330	7,126	7,970	6,782	6,279	5,773	6,384	6,426	5,905	4,615	4,142	4,697	5,876	5,893
CUNY, John Jay C. of Criminal Justice	331	3,418	4,086	3,921	3,546	3,214	3,392	4,625	4,826	5,896	4,971	5,297	3,519	5,777
Louisiana Tech U.	332	10,806	11,952	9,835	8,881	7,742	5,776	5,455	5,608	5,801	6,564	7,167	6,428	5,734
Texas Christian U.	333	3,373	3,924	4,998	5,870	5,779	4,732	3,617	4,035	3,198	2,866	3,168	4,448	5,670
Morehouse C.	334	7,857	8,460	9,063	9,226	6,919	5,944	4,301	3,667	4,531	4,494	4,825	4,533	5,664
Montana Technological U.	335	5,321	4,999	3,293	3,507	3,202	3,420	3,916	5,019	4,691	4,926	4,322	6,133	5,600
Central State U.	336	2,544	3,528	3,390	2,688	2,000	1,508	1,546	1,491	2,299	2,517	3,097	4,165	5,576
Naval War C.	337	ne	ne	2,938	2,700	2,736	2,653	3,210	3,797	4,384	5,060	5,944	5,542	5,529
U.S. Army War C.	338	ne	ne	ne	ne	ne	ne	ne	ne	ne	4,418	ne	4,662	5,496
California State Polytechnic U., Pomona	339	2,563	2,978	2,635	2,996	2,165	1,881	2,199	3,231	4,297	3,555	5,514	4,396	5,407
Rhode Island C.	340	ne	2,404	9,060	8,976	6,960	7,258	3,928	3,831	3,337	3,332	4,128	4,894	5,372
U. Colorado Colorado Springs	341	6,699	5,805	3,540	3,407	4,018	4,244	3,976	4,525	4,094	3,072	3,508	3,942	5,345
Ball State U.	342	3,988	3,064	3,320	2,440	1,971	2,291	3,253	2,531	3,028	2,929	2,397	2,469	5,302
U. Hawaii, Hilo	343	12,265	7,150	20,726	15,391	8,603	12,772	9,402	5,461	5,264	4,924	5,274	5,510	5,292
Wesleyan U.	344	4,496	5,525	4,726	3,930	3,363	3,612	3,493	3,902	4,353	4,793	4,305	4,032	5,267
U. Tennessee, Chattanooga	345	4,866	2,932	3,202	2,056	1,501	1,949	1,092	1,144	1,490	2,393	3,915	4,507	5,214
Montclair State U.	346	1,876	2,629	3,593	3,410	2,533	2,716	2,649	2,163	3,505	4,164	3,782	4,146	5,189
Tarleton State U.	347	6,379	6,036	5,086	3,525	3,683	3,927	4,495	4,602	4,288	4,632	4,139	4,620	5,055
California State U., Monterey Bay	348	3,167	4,713	4,341	4,961	3,862	3,459	3,654	3,574	3,607	3,746	3,889	3,813	5,051
Sam Houston State U.	349	5,066	3,855	2,717	2,360	2,209	1,491	1,830	1,872	2,200	3,723	4,764	5,632	4,936
Fordham U.	350	4,132	3,925	4,187	4,874	4,258	3,969	5,979	5,761	4,973	4,218	3,831	4,076	4,856
U. Baltimore	351	1,812	3,288	3,386	2,906	2,947	2,998	3,769	4,289	7,431	9,103	11,748	11,692	4,853

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022								
Kentucky State U.	352	3,501	3,146	4,924	3,906	4,335	4,590	5,146	5,382	i	5,618	4,692	4,456	3,716	4,743							
U. Detroit Mercy	353	633	856	508	ne	317	890	2,565	2,296		4,385	4,936	4,226	3,917	4,663							
MGH Institute of Health Professions	354	ne	408	ne	ne	ne	3,766	2,228	1,839		2,957	3,494	3,014	2,500	4,628							
CUNY, Brooklyn C.	355	5,358	7,098	6,578	5,999	6,548	5,771	5,995	5,244		4,280	4,465	i	4,651	4,505	4,623						
U. Missouri, Saint Louis	356	7,151	10,157	9,650	7,868	5,844	4,369	4,959	5,240		6,364	7,059	6,146	5,812	4,573							
U. Washington, Tacoma	357	573	406	1,098	1,104	1,577	2,515	2,682	2,042		2,230	2,808	3,075	3,459	4,553							
C. Charleston	358	11,610	5,056	6,277	6,385	5,051	6,200	6,269	5,870		4,376	4,395	3,087	4,126	4,485							
Middle Tennessee State U.	359	2,651	2,669	4,553	2,585	1,564	2,302	3,535	2,513		2,391	2,473	3,062	4,150	4,347							
Northwest Indian C.	360	1,943	1,993	i	2,044	2,216	1,705	1,154	i	ne	ne	2,037	2,520	3,112	i	3,704	i	4,298				
West Virginia State U.	361	2,759	3,193	3,945	3,316	6,006	5,562	4,126	5,072		5,361	4,592	3,993	4,119	4,278							
South Carolina State U.	362	6,334	8,630	i	10,926	8,770	i	6,614	i	4,456	4,556	i	14,300	14,938	i	3,659	3,796	i	3,933	i	4,270	i
Southern U. and A&M C., Agricultural Research and Extension Center	363	ne	4,049	5,926	3,481	3,363	2,514	2,415	2,736	i	3,057	3,057	2,085	3,588	4,261							
Western Illinois U.	364	658	746	3,855	1,183	735	373	ne	1,198		1,551	1,495	1,801	3,163	4,032							
U. Washington, Bothell	365	446	911	701	825	2,005	2,236	2,863	3,169		2,920	3,353	2,815	2,956	4,009							
Dakota State U.	366	ne	402	3,555	831	908	765	1,593	1,989		3,273	3,008	3,957	2,603	3,976							
Arkansas State U., Jonesboro	367	6,194	8,644	9,645	6,360	3,958	4,347	4,826	4,396		4,371	4,876	4,712	4,249	3,932							
National Defense U.	368	ne	ne	ne	5,865	7,682	5,542	6,447	6,293		4,276	4,231	4,583	3,786	3,920							
Barnard C.	369	2,754	3,325	3,194	2,568	2,373	2,384	3,082	2,777		2,491	2,871	2,800	3,527	3,758							
DePaul U.	370	3,896	4,629	4,827	4,260	5,023	4,622	4,623	5,424		4,532	4,464	5,156	4,518	3,757							
Citadel Military C. South Carolina	371	ne	157	ne	ne	ne	ne	ne	ne		ne	ne	736	1,714	3,741							
Salisbury U.	372	1,823	586	1,256	2,342	3,131	2,727	2,414	2,203		1,805	2,290	2,413	3,271	3,734							
Chicago State U.	373	1,598	2,014	565	ne	ne	ne	910	ne		1,154	898	ne	ne	3,699							
Hope C.	374	2,523	2,414	1,912	1,993	2,000	1,436	1,251	1,169		1,100	1,361	1,155	1,992	3,691							
U. New England	375	2,829	3,242	3,359	4,271	4,789	4,862	5,298	5,918		4,976	5,269	5,064	3,864	3,660							
CUNY, Lehman C.	376	2,560	i	2,700	2,215	1,874	2,249	2,394	3,625		3,734	4,478	3,342	3,197	3,652							
U. Wisconsin-Superior	377	5,197	5,638	i	5,302	i	ne	1,949	i	ne	ne	ne	1,924	1,527	1,382	1,843	3,635					
Langston U.	378	3,313	3,778	3,957	4,153	5,816	5,621	9,178	8,326	i	7,474	i	6,622	9,004	3,089	3,616						

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Southern U. and A&M C., Baton Rouge	379	5,920	6,057	i 6,194	4,191	3,850	3,258	2,778	2,866	3,431	3,243	2,996	3,770	3,595
Youngstown State U.	380	2,067	3,304	2,159	1,834	1,876	2,346	1,083	3,257	3,634	2,878	3,308	2,198	3,533
Fisk U.	381	7,686	4,631	4,058	6,307	i 8,557	9,050	i 9,544	4,327	2,781	4,615	3,811	3,940	3,486
Norfolk State U.	382	5,413	6,462	7,739	5,523	6,492	5,104	7,230	7,101	6,912	8,046	7,148	3,976	3,398
Oklahoma State U., Center for Health Sciences	383	817	377	83	61	31	321	748	1,055	1,021	985	2,618	2,304	3,366
Bowie State U.	384	ne	1,910	1,739	1,422	1,761	1,497	1,927	1,813	1,839	1,911	1,967	1,398	3,351
Rutgers, State U. New Jersey, Camden	385	2,001	1,555	1,545	1,750	1,766	2,215	2,653	2,412	1,567	1,096	1,952	2,905	3,349
U. Arkansas, Pine Bluff	386	3,947	4,696	4,540	4,550	3,875	3,912	4,233	3,747	3,683	4,299	4,393	3,960	3,306
Kennesaw State U.	387	1,246	1,054	2,214	i 3,374	1,413	2,329	1,925	2,085	2,343	2,499	1,983	3,104	3,290
Gallaudet U.	388	5,522	4,633	4,335	4,500	3,012	2,340	2,135	2,380	2,259	2,190	1,841	2,140	3,287
Pennsylvania State U., Behrend	389	887	1,029	1,232	1,353	1,610	1,510	2,445	1,670	1,025	1,427	543	2,286	3,262
Southern Illinois U., Edwardsville	390	4,192	4,056	3,172	3,209	2,249	2,175	3,422	3,805	3,209	3,561	3,467	3,844	3,250
U. North Texas, Health Science Center	391	25,847	26,132	26,627	24,187	21,943	22,422	27,163	26,368	27,579	27,260	25,917	32,464	3,172
Purdue U., Northwest	392	na	na	na	na	na	na	na	4,024	3,205	2,493	1,996	2,280	3,171
California State U., Dominguez Hills	393	2,658	2,671	2,689	4,235	3,381	i 2,527	2,215	1,238	1,354	1,261	1,433	2,001	3,156
Western Kentucky U.	394	6,866	6,210	5,712	4,279	3,383	3,450	4,018	3,808	3,162	3,391	3,265	2,348	3,127
New York Institute of Technology	395	250	494	1,339	2,527	3,504	2,375	1,607	984	1,501	3,135	1,542	1,988	2,988
Alabama State U.	396	13,340	12,340	13,607	1,927	2,236	2,303	2,372	2,253	2,434	2,577	2,582	2,338	2,930
CUNY, C. Staten Island	397	952	1,583	1,470	1,311	1,400	1,222	1,700	1,543	1,982	i 2,421	2,295	2,234	2,916
Wellesley C.	398	3,677	2,496	2,902	3,135	3,579	2,980	5,197	3,815	3,947	3,602	4,441	3,469	2,915
U. San Diego	399	1,352	1,184	1,903	2,066	2,451	1,836	2,152	2,299	2,397	2,511	2,398	2,554	2,911
Sonoma State U.	400	690	559	ne	1,800	1,581	964	630	ne	ne	ne	936	2,212	2,889
James Madison U.	401	5,563	5,218	6,476	4,617	3,017	2,418	2,203	2,273	1,879	2,717	2,609	2,379	2,884
Amherst C.	402	1,102	1,992	1,988	i 1,985	1,543	1,835	1,207	1,228	1,630	2,118	1,775	1,375	2,862
Towson U.	403	1,806	2,630	1,771	2,015	2,268	2,020	1,616	1,599	2,133	2,144	2,010	1,758	2,844
Loyola Marymount U.	404	1,731	2,815	1,222	1,357	1,142	819	707	883	1,040	1,185	1,105	2,170	2,824
U. Central del Caribe	405	6,504	6,613	6,304	5,946	6,407	6,147	6,290	4,866	2,937	2,705	2,743	2,492	2,807

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Haverford C.	406	2,715	1,851	1,478	1,547	1,309	1,476	972	1,031	1,665	2,343	2,680	2,455	2,722
Pacific U.	407	845	242	1,767	1,674	1,137	962	1,419	4,058	2,637	3,917	2,596	2,072	2,672
Hawaii Pacific U.	408	ne	1,261	1,145	850	1,116	789	2,071	1,921	1,905	1,809	1,699	1,741	2,667
California State U., Bakersfield	409	637	727	641	1,721	1,140	1,875	1,689	2,466	3,243	4,376	4,486	3,827	2,665
Santa Clara U.	410	3,494	2,019	2,074	1,668	2,039	1,226	1,634	1,468	1,592	1,333	1,522	1,930	2,660
Long Island U.	411	630	i 681	i 666	i 655	ne	ne	852	1,615	1,929	1,839	1,349	2,686	2,652
Occidental C.	412	665	904	1,079	1,105	1,365	853	1,260	701	901	1,614	1,567	2,348	2,622
Georgia Southern U.	413	2,077	1,530	1,359	2,092	3,247	3,004	2,695	2,978	1,805	1,780	1,790	3,373	2,605
U. North Carolina, Asheville	414	1,367	1,770	1,789	1,608	1,176	1,531	2,312	1,851	1,442	1,846	2,405	2,322	2,600
Northern Kentucky U.	415	1,476	1,595	1,483	1,240	1,418	1,342	1,133	1,109	890	1,316	1,462	2,156	2,596
Fort Lewis C.	416	340	511	ne	ne	ne	ne	ne	ne	ne	1,284	1,228	1,746	2,590
Appalachian State U.	417	1,813	2,586	2,287	1,731	2,198	1,796	1,896	2,630	1,922	1,332	1,469	1,694	2,567
Winthrop U.	418	ne	3,440	5,243	7,451	7,955	5,802	1,178	1,189	1,419	1,438	1,563	1,495	2,542
Bucknell U.	419	2,745	2,747	1,540	1,590	1,725	1,489	1,436	i 1,383	i 1,329	1,764	1,730	i 1,696	2,539
Spelman C.	419	2,740	1,833	1,874	1,366	1,185	1,035	1,291	1,227	1,673	2,004	2,136	1,886	2,539
U. Michigan, Dearborn	421	2,932	4,305	2,992	3,300	2,901	1,844	2,172	1,930	1,448	1,850	2,264	2,366	2,537
CUNY, Graduate Center	422	4,901	3,462	3,191	2,827	2,310	2,106	1,796	i 1,485	2,592	3,009	2,561	2,496	2,535
Pace U.	423	627	952	1,476	1,054	1,212	1,681	2,845	2,423	2,117	2,579	2,997	2,536	2,534
U. of Health Sciences and Pharmacy in St. Louis	424	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	3,767	4,063	2,523
Saint Joseph's U.	425	1,368	1,087	835	700	468	526	476	239	252	373	1,047	1,158	2,520
Clark U.	426	3,243	3,801	3,141	2,848	2,751	2,515	2,002	2,513	2,962	3,495	3,350	2,754	2,500
St. John's U., New York	427	1,274	1,263	1,185	872	883	992	940	1,020	1,612	1,666	1,805	1,950	2,456
U. New Haven	428	ne	1,592	2,471	1,400	954	i 507	2,157	548	3,853	2,786	1,440	2,069	2,447
Central Washington U.	429	4,038	2,242	1,840	1,263	1,113	1,575	1,580	2,297	1,840	2,159	1,701	1,778	2,429
California State Polytechnic U., Humboldt	430	3,024	3,292	3,588	2,829	2,504	3,280	4,455	3,796	3,024	2,103	2,399	1,975	2,421
Smith C.	431	2,843	3,159	2,690	2,853	3,042	3,575	2,634	3,449	3,305	2,892	2,650	2,433	2,403
Eastern Michigan U.	432	9,088	7,916	7,374	2,428	1,031	1,482	1,627	1,474	1,522	2,135	2,598	2,237	2,346
Saginaw Valley State U.	433	77	525	334	203	ne	223	237	621	1,227	2,339	1,809	1,899	i 2,341

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Texas Tech U., Health Sciences Center, El Paso	434	ne	ne	ne	ne	5,352	2,893	3,064	2,410	2,532	2,279	1,703	1,831	2,339
Tougaloo C.	435	2,978	2,753	2,613	2,639	2,285	2,689	2,473	3,030	3,173	3,380	2,102	2,092	2,336
California State U., Chico	436	1,502	1,317	1,345	1,682	1,169	854	933	581	1,060	1,864	2,520	2,258	2,312
Troy U.	437	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,591	1,488	2,296
Middlebury C.	438	2,245	2,289	2,513	1,856	1,351	1,535	1,736	2,002	1,774	1,558	1,546	2,639	2,281
Northeastern Illinois U.	439	448	311	ne	ne	588	ne	ne	1,403	2,442	2,478	2,018	1,913	2,224
U. Southern Maine	440	9,137	7,752	5,490	4,582	3,821	3,060	2,299	2,252	2,362	2,551	2,231	2,020	2,201
Toyota Technological Institute, Chicago	441	ne	496	ne	ne	ne	1,392	1,410	1,581	1,759	1,934	3,038	3,090	2,199
Murray State U.	442	2,074	2,471	1,904	816	612	798	564	1,200	1,587	2,639	1,929	2,721	2,176
Reed C.	443	796	772	678	897	1,125	1,638	1,690	415	1,065	1,423	1,806	1,916	2,139
U. Northern Iowa	444	1,460	2,294	2,182	2,347	2,094	1,961	2,297	2,154	1,697	2,343	1,881	1,995	2,132
West Texas A&M U.	445	2,100	1,347	1,802	1,315	1,551	1,860	1,735	1,338	1,329	1,565	1,542	2,195	2,123
Hofstra U.	446	2,206	2,182	2,660	1,967	2,577	2,119	2,149	1,471	1,275	1,296	997	1,266	2,118
Seton Hall U.	447	2,206	2,681	1,667	1,694	1,801	1,919	1,975	1,982	3,551	3,982	2,725	2,137	2,092
Dine C.	448	ne	959	ne	ne	ne	ne	ne	ne	1,238	1,126	347	ne	2,091
Texas Woman's U.	448	822	1,173	1,908	1,136	961	722	573	945	1,422	1,864	1,700	1,514	2,091
Morehead State U.	450	1,528	1,656	1,597	1,816	1,069	1,217	1,797	2,162	1,839	1,651	1,674	1,727	2,086
SUNY, C. of Optometry	451	2,829	3,336	3,162	2,757	2,567	2,490	2,487	2,073	1,944	1,823	1,688	2,105	2,080
U. Louisiana, Monroe	452	1,470	1,971	1,752	976	1,705	1,479	2,016	1,838	1,789	1,949	2,025	1,465	1,993
C. New Jersey	453	461	254	ne	ne	ne	ne	ne	929	829	ne	951	1,079	1,984
Harvey Mudd C.	454	2,049	2,594	2,038	2,004	1,457	1,633	2,320	1,521	1,762	1,619	1,748	1,443	1,956
St. Edward's U.	455	ne	6,899	5,500	5,500	2,250	8,000	7,500	7,989	7,289	6,500	7,700	7,600	1,940
Carleton C.	456	1,803	2,332	2,212	3,347	3,157	3,813	3,508	3,366	2,542	1,891	1,236	1,499	1,914
Pennsylvania State U., Harrisburg	457	963	1,302	1,290	701	269	565	270	215	292	80	451	1,616	1,911
U. Nebraska, Kearney	458	289	1,018	716	840	656	515	891	1,047	1,075	1,240	1,259	1,327	1,900
William Paterson U.	459	105	140	ne	ne	ne	ne	564	476	642	1,592	1,896	1,893	1,896
CUNY, Baruch C.	460	1,010	1,150	1,209	735	695	845	1,325	1,027	1,412	1,359	1,470	1,691	1,894
Savannah State U.	461	1,774	2,518	1,874	2,514	2,127	1,796	2,251	1,390	1,778	1,709	1,804	1,804	1,881
U. Central Oklahoma	462	1,059	1,146	750	765	1,042	3,193	1,409	1,168	1,127	1,457	1,444	1,516	1,869
Johnson C. Smith U.	463	ne	ne	ne	ne	ne	ne	1,279	1,469	2,003	1,909	2,230	2,049	1,868
Bowdoin C.	464	1,815	1,942	3,317	3,244	2,330	2,156	2,457	1,812	2,065	1,790	1,862	1,836	1,867

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Grand Valley State U.	465	1,134	1,648	2,162	2,675	2,151	2,033	1,479	1,543	1,719	1,663	1,831	1,415	1,819
U. Oklahoma, Tulsa	466	ne	ne	ne	ne	ne	895	1,104	976	1,605	1,803	1,953	1,267	1,804
Indiana U. Pennsylvania	467	660	833	672	101	169	ne	373	1,309	891	1,810	1,309	1,503	1,797
Bates C.	468	971	1,485	1,555	1,390	1,114	2,004	1,156	1,053	1,121	1,607	1,885	2,079	1,785
Texas A&M U.- Commerce	469	1,362	1,557	1,600	1,349	1,234	1,121	876	823	1,159	836	1,226	1,283	1,776
CUNY, New York City C. of Technology	470	81	145	ne	ne	ne	ne	ne	ne	1,978	1,891	1,585	1,197	1,769
Swarthmore C.	471	913	1,029	1,135	1,239	1,292	1,379	1,458	1,451	1,586	1,539	1,041	1,414	1,733
U. Central Arkansas	472	1,658	1,732	1,989	1,898	1,297	1,300	1,138	1,236	1,262	1,462	1,421	1,640	1,731
Western Carolina U.	473	1,296	721	974	664	669	740	873	971	1,038	1,736	1,707	1,697	1,727
Christopher Newport U.	474	1,049	1,587	1,230	1,083	1,302	1,041	858	957	1,069	1,285	1,365	1,497	1,701
Yeshiva U.	475	163,399	197,032	201,397	193,831	186,885	180,791	30,266	816	683	380	772	1,509	1,695
U. Northern Colorado	476	2,082	1,681	1,373	1,024	1,965	1,359	1,962	2,349	2,271	1,966	1,853	1,942	1,692
Franklin and Marshall C.	477	1,857	1,397	1,116	879	889	1,017	955	1,732	1,760	1,582	1,202	1,363	1,680
Black Hills State U.	478	2,434	1,172	1,675	2,163	1,720	1,674	2,056	1,448	1,437	1,535	1,287	1,124	1,676
Elizabeth City State U.	479	5,552	10,402	4,284	4,439	2,461	2,058	1,827	1,306	960	ne	1,455	1,603	1,667
Fayetteville State U.	479	10,844	10,029	11,187	11,906	10,186	9,243	11,207	2,322	2,445	2,168	1,008	1,988	1,667
CUNY, York C.	481	ne	1,507	861	693	ne	534	ne	ne	ne	1,511	1,513	922	1,659
California State U., Channel Islands	482	ne	451	ne	425	528	825	249	142	284	500	553	993	1,638
Texas A&M International U.	483	1,623	1,195	989	868	977	658	924	1,730	2,008	1,847	986	1,243	1,624
U. Richmond	483	2,138	1,831	2,376	1,979	2,134	2,013	1,924	1,870	1,628	1,575	1,628	1,534	1,624
Claremont Graduate U.	485	5,888	5,215	8,875	8,452	7,358	6,264	5,170	4,076	2,982	1,886	809	1,152	1,610
Midwestern U.	486	315	438	427	369	517	654	1,060	1,184	1,278	1,045	936	1,506	1,609
New England C. of Optometry	486	726	1,236	1,685	1,588	533	419	618	ne	837	928	785	1,623	1,609
Des Moines U.	488	62	91	ne	ne	224	ne	386	878	933	845	449	1,019	1,589
U. Texas, Tyler	489	3,378	1,277	6,535	4,123	4,601	2,570	1,936	708	719	813	774	929	1,585
Colgate U.	490	1,519	1,058	1,497	1,320	1,153	1,109	1,217	1,096	1,389	1,202	918	1,440	1,570
SUNY, Geneseo	491	755	1,306	1,532	640	474	663	930	992	998	1,206	950	1,273	1,564

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Palmer C. of Chiropractic, Davenport	492	3,009	3,344	2,906	1,991	1,775	i 1,558	1,485	1,189	1,100	1,100	1,400	1,733	1,550
U. Texas of the Permian Basin	493	677	761	1,179	974	489	595	510	328	50	ne	757	1,762	1,538
Mount Holyoke C.	494	1,362	2,010	1,827	1,863	2,435	2,327	2,848	3,168	2,210	2,074	1,442	1,539	1,511
Colby C.	495	1,105	1,028	1,197	1,046	943	1,038	1,137	1,048	1,213	1,093	809	750	1,466
Dillard U.	496	7,096	7,211	i 7,325	7,692	6,889	8,853	7,605	5,592	5,503	1,390	1,200	1,257	1,422
U. Ana G. Mendez, Gurabo	497	691	1,054	1,034	747	1,111	447	437	428	471	951	946	926	1,407
U. Alaska, Southeast	498	1,222	941	1,003	1,113	1,183	1,341	1,502	1,480	1,636	1,235	1,098	1,046	1,392
Colorado C.	499	473	458	389	376	570	602	358	745	429	324	196	3,725	1,371
Davidson C.	500	1,153	1,053	651	1,619	1,170	1,703	813	1,105	813	973	1,411	1,151	1,370
Roger Williams U.	501	1,574	2,132	2,166	1,877	2,038	1,696	1,736	2,024	1,052	1,135	1,045	1,202	1,351
U. of the Pacific	501	3,135	2,678	2,090	1,676	2,675	1,751	1,991	1,474	2,141	2,158	1,375	1,106	1,351
Trinity U.	503	1,023	1,046	1,222	2,034	1,544	1,183	973	986	1,187	924	1,207	1,078	1,345
U. Wisconsin-Oshkosh	504	832	1,154	1,238	1,012	1,048	i 1,084	i ne	1,113	i 1,106	i 1,099	i 1,092	i 1,083	1,336
Lafayette C.	505	1,223	1,564	1,205	1,166	1,070	1,066	997	1,493	1,133	910	755	508	1,300
SUNY, Buffalo State	506	1,293	1,965	2,348	1,336	1,076	846	859	877	1,057	1,225	1,241	977	1,299
New Mexico Highlands U.	507	970	989	735	741	969	ne	1,086	1,015	741	ne	1,034	1,085	i 1,288
Williams C.	508	2,330	2,117	2,029	1,498	1,029	1,700	1,614	1,703	1,458	1,131	1,086	i 1,152	i 1,286
Southeastern Louisiana U.	509	1,161	911	985	1,039	692	1,429	975	1,215	1,046	803	884	795	1,285
Furman U.	510	1,332	1,111	1,164	1,217	891	1,136	1,068	1,292	1,110	1,106	847	1,028	1,280
Utah Valley U.	510	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,280
Colorado State U., Pueblo	512	364	354	ne	ne	ne	ne	ne	ne	ne	1,282	1,161	1,508	1,278
Hobart and William Smith Colleges	513	1,118	1,379	1,103	1,896	730	442	ne	528	ne	1,047	1,072	758	1,264
New School	514	1,670	2,042	2,385	2,669	1,972	2,300	2,428	2,345	1,857	1,819	1,050	1,324	1,261
Bryn Mawr C.	515	1,301	1,901	1,848	2,514	1,353	1,713	2,556	2,507	2,242	1,801	1,531	1,429	1,257
U. Wisconsin-Stevens Point	516	4,456	3,754	i 3,052	2,131	1,740	i 1,349	i 957	1,266	i 1,575	i 1,884	i 2,193	1,776	1,235
Butler U.	517	ne	189	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,227
Pomona C.	518	1,048	1,779	1,599	2,227	1,789	1,074	1,579	1,038	868	863	1,123	930	1,217
Drake U.	519	456	382	ne	573	ne	ne	1,116	772	699	463	ne	1,016	1,211

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Illinois, Springfield	520	436	455	602	534	415	307	725	1,533	1,109	980	976	1,071	1,210
Lake Superior State U.	521	ne	133	ne	ne	ne	327	272	726	237	ne	ne	ne	1,184
Lamar U.	522	4,377	4,036	3,072	1,616	1,118	352	611	949	1,380	2,641	2,146	1,873	1,180
Claflin U.	523	3,226	5,103	5,090	2,643	1,711	1,158	1,743	1,344	1,491	1,735	1,907	1,005	1,179
Nevada State C.	524	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,167
Pittsburg State U.	524	999	1,280	989	791	1,023	453	270	316	195	339	477	759	1,167
U. Puerto Rico, Humacao	526	1,950	i 1,976	1,949	1,452	1,102	669	ne	ne	882	828	1,279	1,137	1,160
Seattle U.	527	468	i 622	530	ne	1,348	927	820	862	1,644	1,307	1,303	1,102	1,143
Virginia Military Institute	528	451	133	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,137
Coastal Carolina U.	529	1,533	1,487	1,598	1,714	1,281	1,041	1,052	1,028	1,031	1,294	1,211	948	1,130
Albany C. of Pharmacy and Health Sciences	530	1,380	1,634	1,182	1,333	1,643	1,065	380	566	1,094	1,692	1,938	1,900	1,110
Lawrence Technological U.	531	3,144	2,615	1,108	988	739	976	658	767	479	304	405	284	1,109
U. of the Incarnate Word	532	ne	217	ne	ne	ne	403	ne	ne	868	1,075	869	1,076	1,078
Claremont McKenna C.	533	1,130	1,083	1,082	i 1,081	i 1,080	i ne	644	754	555	730	771	637	1,070
California State U., Stanislaus	534	ne	1,037	1,070	650	341	174	221	478	734	964	1,284	1,354	1,056
Vassar C.	535	1,280	1,838	1,258	1,694	1,220	1,133	1,495	1,600	4,185	909	1,055	918	1,052
Trinity C., Hartford	536	1,026	1,217	1,432	1,040	1,313	889	893	2,084	794	1,077	1,019	1,348	1,049
U. Wisconsin-Green Bay	537	778	732	i 686	i 640	i 594	i 545	919	666	546	821	890	876	1,046
Abilene Christian U.	538	537	427	ne	ne	ne	ne	ne	ne	ne	ne	ne	827	1,032
Kenyon C.	539	413	358	ne	ne	ne	ne	ne	ne	764	776	714	ne	1,021
Alfred U.	540	1,687	2,004	1,648	1,468	1,351	1,434	1,558	917	1,416	1,580	947	939	1,008
La Sierra U.	541	ne	17	ne	ne	0	45	127	575	623	640	618	812	972
Milwaukee School of Engineering	542	1,177	1,181	1,207	1,245	1,500	1,335	1,164	775	680	764	613	751	969
U. Wisconsin-La Crosse	543	2,150	2,013	i 1,876	1,240	1,095	1,006	1,250	1,158	1,171	777	817	895	968
Touro U., California	544	999	1,558	1,390	1,351	1,374	1,332	1,199	1,196	1,410	1,540	1,558	1,377	964
Macalester C.	545	1,075	1,517	1,106	876	879	708	771	970	553	805	647	617	943
Calvin U.	546	2,084	560	664	774	1,273	1,034	i 795	880	1,363	925	927	i 929	i 931

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Houston-Downtown	547	908	1,186	1,828	1,183	1,800	1,571	1,165	1,710	1,836	1,437	1,392	1,169	903
Indiana State U.	548	990	1,352	1,268	858	1,005	992	1,189	816	927	1,190	949	582	894
U. Hartford	549	820	1,576	1,505	1,175	1,080	1,089	1,172	1,178	591	1,019	854	766	886
Pepperdine U.	550	933	299	808	914	1,162	1,058	1,233	1,087	713	914	693	835	883
Stephen F. Austin State U.	551	5,530	1,690	1,800	1,836	1,850	2,340	1,808	1,276	1,242	1,332	1,257	1,029	879
Austin Peay State U.	552	ne	729	484	364	189	334	325	347	599	295	475	597	870
Skidmore C.	553	1,872	1,562	1,334	1,448	1,193	969	747	1,194	1,893	2,261	1,827	1,739	861
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	554	ne	106	179	340	523	264	643	206	201	191	342	376	858
U. South Carolina, Aiken	555	122	592	ne	937	759	689	1,155	2,697	2,437	2,379	2,328	1,884	857
Eastern Washington U.	556	46	559	725	1,226	885	955	1,287	1,193	1,081	864	1,153	775	855
West Chester U. Pennsylvania	557	3,614	5,845	1,457	561	404	511	454	624	671	715	724	608	854
Southern Connecticut State U.	558	1,459	1,199	1,595	1,176	1,620	1,626	1,324	1,274	823	803	1,026	713	848
U. Houston-Clear Lake	559	301	818	730	875	739	541	756	753	894	718	632	865	841
Erikson Institute	560	ne	355	1,648	1,187	1,212	1,610	1,719	2,529	1,822	753	1,006	772	815
Franklin W. Olin C. of Engineering	561	ne	666	1,090	946	1,050	1,103	782	588	472	162	293	636	809
Grambling State U.	561	993	1,515	1,428	1,116	1,065	1,177	974	4,283	1,806	1,066	787	731	809
CUNY, system office	563	ne	ne	1,398	1,001	362	828	832	527	1,977	2,241	884	768	798
Willamette U.	564	666	650	1,327	822	860	745	1,090	1,028	872	549	401	896	791
U. Virginia's C. Wise	565	76	38	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,307	786
U. Puget Sound	566	166	295	ne	ne	ne	ne	ne	459	ne	ne	401	ne	780
Northland C.	567	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	697	778
U. Puerto Rico, Cayey	568	710	1,278	1,515	1,168	1,143	959	1,105	704	632	963	1,210	1,202	757
SUNY, C. Brockport	569	521	677	989	755	564	535	639	747	672	638	781	500	751
Union C., Schenectady	570	1,427	959	867	1,863	1,385	1,080	1,680	554	885	972	462	976	750
Lewis and Clark C.	571	843	684	718	1,490	1,378	872	636	723	848	931	1,268	702	746
Northwestern State U. Louisiana	572	635	683	609	600	494	ne	490	458	490	579	598	738	742

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022				
C. Wooster	573	249	512	183	ne	404	386	i	ne	736	744	456	283	510	i	737		
U. North Georgia	574	ne	ne	ne	ne	ne	ne	ne	671	1,013	637	542	497			734		
Stockton U.	575	ne	405	160	ne	380	198	221	ne	246	553	872	486			728		
Augustana U.	576	889	1,169	1,007	809	737	671	ne	1,140	1,023	784	ne	1,013			724		
Kean U.	577	ne	550	1,191	347	ne	244	323	ne	ne	ne	775	362			715		
Florida Polytechnic U.	578	na	na	na	na	na	203	ne	ne	ne	338	252	459			706		
Ithaca C.	579	617	627	774	825	816	635	ne	ne	ne	ne	981	685			703		
U. Wisconsin-Eau Claire	580	1,320	829	817	655	395	ne	661	955	705	748	647	909			681		
Western New England U.	581	ne	931	325	ne	ne	ne	581	214	ne	ne	ne	ne			648		
Keck Graduate Institute	582	ne	1,744	1,671	1,227	1,302	937	895	i	853	i	811	i	769	i	685	i	643
Sul Ross State U.	583	1,595	1,672	1,073	735	546	333	272	440	553	339	481	505	i		623	i	
Connecticut C.	584	954	1,005	1,130	833	514	756	817	777	505	752	483	439			620		
East Stroudsburg U. Pennsylvania	585	ne	250	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne			598		
SUNY, C. Plattsburgh	586	1,187	726	454	ne	459	717	545	455	1,254	1,197	950	824			584		
Alaska Pacific U.	587	283	349	ne	ne	ne	802	671	665	436	451	148	189			581		
Robert Morris U.	588	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne			577	i	
Minnesota State U., Mankato	589	2,051	852	701	313	317	546	1,260	605	639	708	525	575			575		
Northern Michigan U.	590	287	237	ne	ne	ne	ne	288	304	354	311	446	366			571		
Plymouth State U.	590	1,408	i	2,668	2,503	2,331	2,229	1,770	925	827	794	ne	ne			571		
U. San Francisco	592	428	371	1,867	858	738	503	280	405	310	198	148	255			547		
SUNY, Oswego	593	644	871	ne	673	ne	ne	ne	669	661	628	492	415			544		
Monmouth U.	594	2,190	1,873	714	ne	635	ne	173	ne	ne	120	110	174			535		
U. of St. Thomas (MN)	595	842	933	767	702	352	ne	195	212	320	313	450	1,321			527		
Central Connecticut State U.	596	366	684	677	617	506	243	143	231	ne	540	901	663			511		
Bentley U.	597	ne	ne	ne	ne	ne	ne	ne	110	ne	ne	ne	ne			509		
U. of Mary Washington	598	ne	660	445	ne	ne	425	ne	ne	418	577	660	485			501		
Edward Via C. of Osteopathic Medicine	599	ne	707	502	517	250	89	88	94	195	749	566	537			482		

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
West Virginia School of Osteopathic Medicine	600	22	17	ne	ne	ne	ne	ne	ne	ne	ne	419	423	468
Canisius C.	601	154	181	ne	ne	ne	ne	ne	1,459	1,054	943	ne	597	454
Manhattan C.	602	166	245	ne	ne	ne	ne	ne	ne	ne	245	398	397	440
U. Wisconsin-Platteville	603	46	50 i	ne	ne	328 i	309 i	ne	349 i	ne	339 i	336 i	353 i	435 i
Whitman C.	604	1,080	957	398	ne	ne	ne	ne	ne	ne	704	558	ne	434
Elon U.	605	ne	40	112	161	398	376	423	358	309	284	106	138	428
St. Cloud State U.	606	1,260	622	215	420	797	1,299	643	555	529	733	459	577	401
Texas A&M U.-San Antonio	607	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	394
Marshall B. Ketchum U.	608	ne	ne	ne	ne	48	224	375	368 i	354 i	336 i	323 i	343 i	383 i
SUNY, Cobleskill	609	1,382	909	ne	874	ne	ne	ne	ne	ne	ne	ne	ne	379
U. North Carolina, general administration	610	ne	ne	ne	ne	ne	337	174	161	98	213	572	408	369
Oregon Institute of Technology	611	ne	193	ne	ne	ne	270	1,268	752 i	235	437	326	252	340
Suffolk U.	611	ne	299	249	360	317	250	413 i	576 i	ne	ne	844	634	340
Hamilton C.	613	1,077	1,406	1,400	1,153	918	559	442	135	129	190	144	286	338
Albion C.	614	ne	113	ne	ne	ne	ne	ne	210	114	180	272	289 i	323 i
Purdue U., Fort Wayne	615	1,797	2,443	1,946	1,901	1,479	1,650	874	812	773	544	589	401	313
St. Catherine U.	616	ne	265	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	300
California Lutheran U.	617	ne	171	ne	ne	ne	ne	ne	ne	ne	256	271	ne	298
Azusa Pacific U.	618	ne	970	609 i	ne	ne	323	606	334	199	137	128	212	282
Heidelberg U.	619	ne	266 i	ne	349	199	272	294	428	163	164	188	308	262
Grinnell C.	620	1,161	287	648	372	414	546	340	652	635	364	644	344	242
Framingham State U.	621	ne	ne	ne	ne	ne	ne	ne	4	17	ne	179	188 i	232 i
Pratt Institute	622	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	294	228
U. Charleston	623	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	217
Kettering U.	624	4,477	3,452	2,165	1,306	1,173	1,032	1,279	2,105	1,144	402	568	353	213
California State U., Maritime Academy	625	ne	1,200	1,748	1,257	122	31	71	225	550	617	621	548	192
Marymount U.	626	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	337	178
U. California, Office of the President	627	121	483	1,048	599	248	181	295	288	343	319	217	653	158

TABLE 24

Federally financed higher education R&D expenditures, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Eastern Connecticut State U.	628	ne	20	ne	ne	6	17	27	19	36	181	177	108	126
Mercyhurst U.	629	854	389	729	674	445	616	612	618 i	ne	489 i	354 i	219 i	82
C. of Saint Benedict	630	ne	0	ne	72	71	53	38	44	47	45 i	43 i	46 i	51 i
Babson C.	631	ne	187	ne	ne	ne	ne	0	0	12	14	14	0	45
Philadelphia C. of Osteopathic Medicine	632	812	850	694	277	104	192	150	260	260	346	422	318	40
Roseman U. of Health Sciences	633	ne	0	ne	ne	131	0	0	0	18	37 i	56	53	30
All other surveyed institutions	-	1,146,660	1,297,122	1,261,859	1,166,664	945,647	913,236	949,349	980,482	1,034,814	424,522	387,107	31,999	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$1,983,078 thousand in federally financed R&D expenditures in FY 2022.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

Note(s):

Institutions reporting zero federal expenditures for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
All institutions	-	53,971,468	2,184,767	2,478,702	30,958,717	537,322	4,212,405	875,330	1,075,470	463,625	9,694,378	1,490,752
Johns Hopkins U. ^a	1	2,971,816	258,511	90,660	844,281	137,115	300,741	7,073	6,290	59,456	1,264,048	3,641
U. Washington, Seattle	2	1,083,090	17,137	131,461	678,979	5,777	56,218	8,261	8,206	0	127,827	49,224
U. California, San Diego	3	970,696	24,372	122,993	577,453	3,774	67,979	14,355	10,662	6,658	129,923	12,527
U. Michigan, Ann Arbor	4	970,636	9,398	8,308	602,777	6,956	39,773	7,831	94,899	2,243	189,405	9,046
Georgia Institute of Technology	5	940,488	127,768	8,730	14,410	3,886	22,817	1,926	7,754	0	739,429	13,768
Columbia U. in the City of New York	6	904,346	26,721	59,425	662,559	2,190	43,442	4,091	3,468	0	73,487	28,963
Duke U.	7	901,807	7,363	5,542	752,563	6,171	20,898	4,671	22,646	10	80,356	1,587
U. Pennsylvania	8	873,318	16,990	542	707,840	3,991	46,353	8,545	14,697	121	54,427	19,812
Stanford U.	9	860,125	15,804	13,060	619,699	5,353	74,962	10,450	6,084	0	89,919	24,794
U. California, Los Angeles	10	848,138	9,952	37,619	617,601	7,496	42,141	10,908	10,921	26,018	65,455	20,027
U. North Carolina, Chapel Hill	11	827,158	32,390	14,864	610,132	4,421	34,295	25,474	52,761	0	22,510	30,311
U. Pittsburgh, Pittsburgh	12	814,647	8,113	8,410	706,791	2,971	19,723	13,101	2,188	5,299	43,571	4,480
U. California, San Francisco	13	780,318	0	0	737,748	0	42,570	0	0	0	0	0
U. Maryland ^b	14	750,447	38,622	68,050	368,394	3,340	86,830	8,513	30,603	22,059	104,247	19,789
U. Wisconsin-Madison	15	740,854	19,278	38,120	451,388	4,515	65,819	4,589	24,878	26,848	85,549	19,870
Yale U.	16	689,270	6,245	2,789	608,877	2,242	33,421	6,698	1,846	0	23,926	3,226
Washington U., Saint Louis	17	681,353	4,059	5,869	597,001	1,484	21,448	6,177	955	1,100	24,042	19,218
Pennsylvania State U., University Park and Hershey Medical Center	18	681,159	62,351	24,690	163,120	15,402	53,722	25,948	18,106	0	300,829	16,991
New York U.	19	668,381	9,646	148	559,581	12,236	17,913	23,286	9,297	0	20,507	15,767
Vanderbilt U. and Vanderbilt U. Medical Center	20	666,282	13,064	746	551,132	793	16,621	7,731	2,513	0	52,364	21,318
U. Minnesota, Twin Cities	21	652,384	8,091	8,067	460,220	5,060	32,029	20,176	25,517	142	84,060	9,022
Ohio State U.	22	636,902	9,761	5,813	405,677	2,944	27,702	5,508	12,219	21,139	103,560	42,579
Cornell U.	23	636,481	20,092	5,066	426,964	2,663	94,346	4,406	4,621	0	73,646	4,677
Harvard U.	24	628,683	13,098	25,109	410,122	18,155	66,072	2,872	37,799	253	47,017	8,186
Northwestern U.	25	618,771	6,580	835	470,576	1,290	50,617	2,653	13,131	12,488	56,993	3,608
Icahn School of Medicine at Mount Sinai	26	610,646	0	0	610,646	0	0	0	0	0	0	0
U. Southern California	27	601,747	106,239	13,278	335,673	1,208	13,210	4,803	54,732	0	54,438	18,166
Emory U.	28	568,149	1,817	1,947	529,963	1,237	17,121	3,668	804	0	10,545	1,047
U. Texas, Austin	29	536,296	88,477	19,312	89,915	6,055	65,599	8,511	11,765	18	216,881	29,763
Massachusetts Institute of Technology	30	531,056	68,540	18,567	78,923	4,873	127,635	711	9,284	3,835	215,477	3,211
U. Colorado Boulder	31	507,892	18,032	126,188	45,590	3,145	127,772	12,052	9,730	1,246	148,185	15,952
Texas A&M U., College Station and Health Science Center	32	505,355	17,584	97,109	179,326	4,485	27,656	3,973	13,123	3,575	138,068	20,456

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. California, Berkeley	33	468,542	1,157	6,156	139,051	6,868	134,927	9,775	8,148	59,798	93,638	9,024
U. California, Davis	34	468,468	4,762	9,146	344,180	4,058	23,183	1,929	19,444	83	56,254	5,429
U. Florida	35	467,739	10,685	9,729	306,946	1,435	21,896	11,349	7,942	0	79,991	17,766
U. Chicago	36	456,806	30,256	9,530	294,797	4,573	59,248	5,801	9,500	0	35,751	7,350
U. Colorado Anschutz Medical Campus ^c	37	429,949	0	19	427,999	0	353	254	97	0	730	497
U. Alabama, Birmingham	38	421,223	897	62	385,457	257	3,395	5,924	470	0	22,205	2,556
U. Illinois, Urbana-Champaign	39	420,953	59,157	5,897	133,116	2,586	51,602	7,597	2,349	584	144,390	13,675
Baylor C. of Medicine	40	420,054	0	0	420,054	0	0	0	0	0	0	0
Boston U.	41	413,102	7,577	7,310	291,846	2,891	24,802	14,406	1,000	1,644	54,675	6,951
Michigan State U.	42	381,504	7,450	3,028	157,980	6,732	133,138	8,633	17,060	925	34,356	12,202
Case Western Reserve U.	43	380,423	2,580	572	334,605	505	7,764	1,292	558	40	31,686	821
U. Arizona	44	374,936	10,037	14,396	212,681	3,065	75,484	4,893	7,363	1,940	42,072	3,005
U. Utah	45	367,040	26,098	40,026	216,826	5,830	17,611	5,244	11,759	0	35,141	8,505
Indiana U., Bloomington	46	360,300	27,634	3,155	275,712	1,761	19,586	8,050	9,231	909	7,149	7,113
Purdue U., West Lafayette	47	352,890	30,059	5,251	95,465	1,407	27,908	5,814	5,286	40	163,895	17,765
Rutgers, State U. New Jersey, New Brunswick	48	351,660	5,254	12,612	262,424	5,645	13,707	5,562	2,303	63	35,877	8,213
U. Cincinnati	49	350,392	507	506	313,607	623	5,296	7,994	3,998	0	14,790	3,071
Oregon Health and Science U.	50	346,724	0	0	336,077	0	0	0	0	0	10,647	0
U. Rochester	51	334,503	2,345	2,157	194,048	174	103,745	5,112	354	7,336	17,031	2,201
U. Virginia, Charlottesville	52	332,993	21,875	4,842	204,298	1,871	20,481	4,301	3,221	3,741	42,481	25,882
California Institute of Technology	53	326,401	7,541	34,882	71,848	683	181,341	0	0	0	25,812	4,294
Colorado State U., Fort Collins	54	316,727	3,517	44,116	194,216	2,505	12,006	3,119	7,838	6,259	36,428	6,723
U. Iowa	55	314,346	3,020	1,168	219,128	483	50,134	7,899	1,314	21	24,367	6,812
Arizona State U.	56	309,094	14,710	47,652	69,108	1,525	14,612	7,441	21,805	26,434	85,208	20,599
U. Texas Southwestern Medical Center	57	298,154	0	0	298,154	0	0	0	0	0	0	0
U. California, Irvine	58	291,393	12,523	8,168	174,170	3,837	28,779	5,864	2,435	137	40,869	14,611
Utah State U.	59	280,866	1,910	867	29,461	232	3,837	2,319	495	0	239,736	2,009
U. Miami	60	265,212	1,542	50,038	189,491	463	5,415	12,402	592	0	4,423	846
Carnegie Mellon U.	61	259,160	131,579	665	8,708	5,305	13,327	8,479	2,218	4,073	84,680	126
U. Massachusetts, Medical School	62	258,147	0	0	258,147	0	0	0	0	0	0	0
U. Kentucky	63	253,852	3,569	1,429	187,315	1,139	7,897	4,371	2,326	4,028	38,078	3,700
U. Illinois, Chicago	64	251,328	6,989	582	189,578	2,206	15,452	1,465	2,530	154	24,287	8,085
North Carolina State U.	65	250,582	12,459	14,124	85,984	11,484	16,847	1,002	3,543	11,080	88,636	5,423

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Scripps Research Institute	66	242,135	0	0	242,135	0	0	0	0	0	0	0
Virginia Polytechnic Institute and State U.	67	240,305	9,291	2,538	76,478	6,692	14,686	2,800	4,265	58	114,336	9,161
U. New Mexico	68	232,774	3,287	6,868	162,667	759	8,996	4,875	5,104	340	37,091	2,787
U. Connecticut	69	230,752	2,672	7,812	144,287	1,710	8,473	15,765	4,175	39	42,418	3,401
U. Texas M. D. Anderson Cancer Center	70	225,659	0	0	197,412	9,497	8,306	5,279	5,165	0	0	0
Albert Einstein C. of Medicine	71	220,780	0	0	220,780	0	0	0	0	0	0	0
U. Georgia	72	220,343	2,085	7,577	155,393	837	4,090	20,630	13,225	165	10,503	5,838
Princeton U.	73	218,390	16,783	20,940	54,350	4,759	58,459	2,078	7,521	0	52,615	885
SUNY, U. Buffalo	74	218,231	8,443	3,066	121,956	780	8,088	3,063	991	187	67,985	3,672
Brown U.	75	215,067	11,643	6,164	115,907	10,971	11,868	7,525	22,828	7,689	18,304	2,168
Woods Hole Oceanographic Institution	76	211,550	0	129,264	0	0	0	0	0	0	82,286	0
U. Oklahoma, Norman and Health Science Center	77	210,994	4,383	71,650	83,142	429	11,218	2,506	3,343	0	20,850	13,473
U. South Florida ^d	78	206,552	4,608	12,202	119,772	814	5,335	2,204	14,818	184	27,554	19,061
U. Dayton	79	203,206	10,116	798	780	0	680	374	0	0	189,150	1,308
U. Kansas	80	200,117	2,910	6,530	118,264	621	12,742	8,105	1,888	22	13,244	35,791
U. Delaware	81	194,775	3,963	19,133	33,921	1,541	26,652	7,107	5,313	3,192	88,552	5,401
Uniformed Services U. of the Health Sciences	82	194,187	0	0	180,078	0	0	14,109	0	0	0	0
Oregon State U.	83	192,621	4,593	41,103	83,704	1,015	5,326	854	3,142	2,642	44,377	5,865
Washington State U.	84	187,580	5,753	6,455	107,093	328	14,433	2,176	4,994	2,004	20,359	23,985
Iowa State U.	85	187,156	2,838	3,061	66,732	12,540	23,640	1,100	3,208	0	66,024	8,013
U. Texas Health Science Center, Houston	86	184,205	0	0	184,205	0	0	0	0	0	0	0
SUNY, Stony Brook U.	87	184,154	10,872	14,178	81,202	4,239	34,829	5,009	845	5,070	25,968	1,942
U. Missouri, Columbia	88	182,432	3,774	930	125,007	1,098	6,664	4,290	1,770	844	17,346	20,709
Wake Forest U.	89	180,754	308	0	177,957	85	1,310	183	34	0	804	73
Thomas Jefferson U.	90	173,861	0	0	173,778	0	0	0	0	0	77	6
U. Hawaii, Manoa	91	169,762	17,342	48,908	67,072	366	14,059	285	1,103	2,335	17,241	1,051
Virginia Commonwealth U.	92	166,726	1,398	164	120,851	717	2,560	9,017	637	0	9,441	21,941
Florida State U.	93	163,744	3,159	8,711	34,254	2,385	40,242	9,390	2,402	806	37,798	24,597
Medical U. South Carolina	94	163,395	0	0	163,395	0	0	0	0	0	0	0
George Washington U.	95	161,867	3,209	190	121,121	499	5,637	2,444	10,477	2,456	13,339	2,495
U. California, Santa Barbara	96	161,241	7,620	17,150	11,268	1,140	48,512	2,302	3,735	700	67,267	1,547
Dartmouth C. and Dartmouth Hitchcock Medical Center	97	155,445	4,922	2,054	96,688	2,954	10,411	9,764	2,001	775	25,052	824
U. Alaska, Fairbanks	98	154,742	724	102,308	18,419	168	9,045	59	982	8,720	12,504	1,813

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Medical C. Wisconsin	99	152,301	0	0	147,255	0	0	0	0	0	5,046	0
Northeastern U.	100	150,093	17,903	3,160	20,043	587	17,077	7,642	5,501	0	72,409	5,771
Tufts U.	101	150,081	1,132	702	91,344	6,031	9,794	3,673	3,547	12,648	19,796	1,414
U. Tennessee, Knoxville	102	149,260	7,689	1,799	39,901	856	13,906	1,794	1,231	7,585	70,892	3,607
Temple U.	103	143,580	3,381	458	108,014	894	10,386	9,394	1,380	2	4,494	5,177
Mississippi State U.	104	138,207	4,566	13,476	49,785	131	4,142	419	13,019	987	48,255	3,427
U. Alabama, Huntsville	105	132,060	54,406	18,414	398	28	13,902	68	837	0	43,390	617
U. New Hampshire	106	129,721	606	74,212	27,850	423	2,402	409	11,473	0	9,665	2,681
Florida International U.	107	129,683	9,924	10,615	27,280	461	18,951	19,381	5,941	619	31,994	4,517
U. Massachusetts, Amherst	108	129,044	17,579	2,553	40,676	2,326	16,202	5,574	3,198	286	35,204	5,446
Tulane U.	109	127,544	1,433	2,954	110,696	522	3,091	1,276	3,217	0	3,801	554
Georgetown U.	110	127,213	2,402	0	107,661	0	10,109	1,278	5,175	0	0	588
Wayne State U.	111	126,814	1,568	132	97,488	208	12,936	1,725	660	1,015	6,722	4,360
U. Notre Dame	112	124,411	6,781	0	15,704	2,814	29,426	4,689	1,606	5,888	50,651	6,852
U. Texas Medical Branch	113	123,467	0	0	122,912	0	0	0	0	0	555	0
Clemson U.	114	119,512	4,950	0	24,824	1,314	7,828	2,665	5,191	0	62,349	10,391
George Mason U.	115	119,406	19,743	12,644	11,781	2,458	5,050	2,292	9,194	35	50,246	5,963
U. Texas Health Science Center, San Antonio	116	119,071	0	0	119,071	0	0	0	0	0	0	0
Montana State U., Bozeman	117	118,974	1,386	3,353	40,618	1,493	13,784	240	684	4,770	42,936	9,710
U. Louisville	118	117,363	78	138	96,682	268	1,481	1,112	157	0	14,712	2,735
U. Vermont	119	117,163	1,073	2,946	98,902	473	2,302	2,277	1,533	1,527	5,794	336
U. Nebraska, Medical Center	120	114,754	0	0	114,754	0	0	0	0	0	0	0
U. California, Riverside	121	114,257	5,927	6,008	56,290	1,727	15,648	3,194	1,200	1,702	21,080	1,481
U. Nebraska, Lincoln	122	113,248	3,973	776	50,024	1,343	18,966	8,760	3,378	15	22,395	3,618
Louisiana State U., Baton Rouge	123	111,886	14,250	10,240	56,162	1,691	12,932	187	1,268	113	12,249	2,794
U. Central Florida	124	110,131	17,352	2,753	14,789	673	22,509	6,028	1,300	16	37,217	7,494
U. California, Santa Cruz	125	107,082	2,943	20,767	18,720	294	19,002	98	1,071	0	43,539	648
U. South Carolina, Columbia	126	106,752	2,838	3,255	61,828	1,430	1,401	5,495	3,723	0	21,003	5,779
Rice U.	127	105,345	7,325	3,342	9,357	4,359	18,067	3,670	1,896	440	53,851	3,038
Auburn U., Auburn	128	104,883	1,506	1,743	40,300	516	7,721	603	880	1,335	47,059	3,220
Drexel U.	129	99,399	5,308	0	55,083	630	1,597	2,247	1,072	94	27,063	6,305
West Virginia U.	130	97,327	1,239	2,844	56,203	227	8,912	918	1,016	776	21,919	3,273
U. Oregon	131	97,238	5,083	5,204	36,637	1,185	10,590	19,021	1,392	0	3,729	14,397

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Arkansas for Medical Sciences	132	95,080	0	0	95,080	0	0	0	0	0	0	0
Rockefeller U.	133	94,693	0	524	91,825	159	2,185	0	0	0	0	0
Wichita State U.	134	93,367	0	0	2,016	87	1,037	352	8	0	88,257	1,610
U. Rhode Island	135	93,190	701	42,342	23,613	0	2,698	2,978	1,817	5,972	9,997	3,072
U. Houston	136	84,295	3,307	3,403	20,895	3,377	8,607	9,962	853	32	28,251	5,608
U. Mississippi	137	84,270	104	1,524	67,593	268	7,655	25	154	0	3,779	3,168
U. Maine	138	84,072	605	10,119	20,521	26	2,278	189	171	3,968	44,010	2,185
U. Nevada, Reno	139	83,631	5,808	9,087	44,587	264	5,829	3,413	1,996	24	11,896	727
Kansas State U.	140	81,820	2,185	501	43,414	241	9,933	3,079	3,760	129	15,266	3,312
Georgia State U.	141	81,641	1,962	912	34,497	745	10,406	3,678	13,236	0	0	16,205
Rush U.	142	79,647	0	0	75,962	0	0	3,685	0	0	0	0
U. Louisiana, Lafayette	143	77,110	12,682	1,843	28,295	158	194	0	3,630	0	9,736	20,572
U. Montana, Missoula	144	73,507	1,314	3,072	55,741	524	5,843	279	1,773	0	0	4,961
New Mexico Institute of Mining and Technology	145	72,594	13,911	7,855	593	54	1,645	572	0	0	45,940	2,024
New Mexico State U.	146	71,718	3,334	3,216	24,375	138	7,819	140	530	2,102	29,723	341
New Jersey Institute of Technology	147	71,326	3,214	0	5,041	1,368	8,524	0	65	114	48,863	4,137
U. Wyoming	148	68,772	1,123	10,884	36,464	536	1,541	62	1,009	0	17,026	127
U. Alabama, Tuscaloosa	149	67,986	5,591	1,239	11,663	402	5,722	2,890	1,652	0	30,544	8,283
Colorado School of Mines	150	66,200	3,135	4,590	2,233	905	11,243	90	577	0	42,745	682
U. Maryland, Baltimore County	151	65,368	7,816	16,989	8,873	266	17,591	517	6,096	1,109	4,079	2,032
Augusta U.	152	64,609	228	0	64,015	81	187	98	0	0	0	0
U. Arkansas, Fayetteville	153	64,252	4,113	3,266	21,204	29	6,309	493	3,141	0	22,533	3,164
U. North Dakota	154	62,737	1,014	3,816	20,205	0	1,540	236	139	5	33,233	2,549
U. Massachusetts, Lowell	155	62,195	6,127	1,672	10,577	78	11,112	758	3,389	95	26,414	1,973
U. Texas, Dallas	156	60,706	6,495	316	15,344	819	9,735	2,400	526	34	24,404	633
U. Texas, El Paso	157	60,387	5,880	1,927	14,628	943	5,077	2,608	897	5	26,326	2,096
U. Tennessee, Health Science Center	158	60,221	0	0	60,221	0	0	0	0	0	0	0
Cold Spring Harbor Laboratory	159	59,163	0	0	59,163	0	0	0	0	0	0	0
U. Idaho	160	56,160	2,750	3,065	36,580	65	1,224	59	3,775	0	7,063	1,579
U. Texas, Arlington	161	56,025	2,977	251	8,854	847	11,568	248	20	0	28,177	3,083
U. Texas, San Antonio	162	54,384	13,737	2,814	14,215	392	5,547	918	2,850	269	10,333	3,309
Oklahoma State U., Stillwater	163	53,885	423	949	22,673	512	3,379	1,554	1,830	3,190	16,574	2,801
Cleveland State U.	164	53,395	0	0	41,743	48	394	180	552	0	9,597	881

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
SUNY, U. Albany	165	51,492	1,517	5,828	35,709	212	2,984	1,023	1,843	0	1,355	1,021
Rensselaer Polytechnic Institute	166	50,605	5,250	1,521	4,807	812	4,338	2,101	401	0	29,720	1,655
San Diego State U.	167	50,540	776	1,569	19,519	1,612	4,461	12,573	1,213	207	5,043	3,567
Michigan Technological U.	168	48,766	4,749	12,460	841	146	1,659	249	458	442	27,496	266
U. Southern Mississippi	169	48,368	537	21,980	8,267	119	11,417	98	1,176	0	2,661	2,113
North Dakota State U.	170	45,343	694	355	21,251	3	6,438	1,349	805	3,168	10,191	1,089
Texas Tech U.	171	45,136	933	6,462	10,240	506	4,026	1,267	722	0	18,858	2,122
Naval Postgraduate School	172	44,852	4,953	4,481	704	2,069	4,668	40	4,681	5,020	13,920	4,316
Brandeis U.	173	44,205	1,082	17	22,663	282	9,444	1,920	6,922	1,393	147	335
Northern Arizona U.	174	43,453	1,247	4,468	28,895	0	3,894	60	286	366	2,709	1,528
Saint Louis U.	175	42,170	429	224	37,400	165	2,088	236	315	0	768	545
Florida A&M U.	176	41,943	1,208	6,246	21,483	0	1,874	107	2	62	5,427	5,534
Stevens Institute of Technology	177	41,836	3,994	0	833	333	1,257	0	0	0	34,630	789
Texas State U.	178	38,936	1,064	2,759	5,297	1,148	2,960	294	2,781	23	2,429	20,181
CUNY, City C.	179	38,596	524	2,024	5,466	115	9,999	775	0	0	19,125	568
Howard U.	180	37,331	570	305	20,671	0	4,953	1,662	379	0	8,156	635
U. Toledo	181	36,694	0	2,642	13,301	29	9,009	158	109	0	8,517	2,929
Boston C.	182	36,560	883	7,552	6,009	911	9,471	2,185	3,829	0	0	5,720
Lehigh U.	183	36,535	1,653	989	7,323	247	3,322	836	341	0	19,098	2,726
U.S. Air Force Academy	184	35,826	150	97	244	451	2,175	0	0	0	32,709	0
U. Puerto Rico, Medical Sciences Campus	185	35,050	0	264	34,786	0	0	0	0	0	0	0
Worcester Polytechnic Institute	186	34,004	7,543	0	1,589	1,987	1,869	0	1,163	0	18,401	1,452
Syracuse U.	187	33,976	1,367	846	5,050	208	8,255	1,306	4,152	15	7,290	5,487
William & Mary	188	33,730	1,887	15,166	2,027	302	4,946	170	3,481	0	0	5,751
Rochester Institute of Technology	189	33,373	5,594	0	765	1,886	9,087	143	385	0	10,560	4,953
Louisiana State U., Health Sciences Center, New Orleans	190	33,087	0	0	33,087	0	0	0	0	0	0	0
Mercer U.	191	32,504	3	0	2,175	0	0	0	34	333	29,959	0
Air Force Institute of Technology	192	32,479	1,794	778	0	149	8,136	0	0	0	21,622	0
SUNY, Polytechnic Institute	193	32,396	0	0	1,673	0	0	0	0	0	30,702	21
Boise State U.	194	32,015	1,733	2,061	7,885	1,271	4,686	62	1,468	244	11,149	1,456
Brigham Young U., Provo	195	31,636	1,097	537	5,963	654	5,323	148	736	0	15,386	1,792
Morehouse School of Medicine	196	31,339	0	0	31,339	0	0	0	0	0	0	0
U. Missouri, Kansas City	197	31,134	31	208	19,654	0	969	556	0	0	9,153	563

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
San Jose State U.	198	30,984	0	7,076	2,038	313	2,376	16,209	153	0	1,323	1,496
Portland State U.	199	30,922	1,397	1,660	12,525	1,191	1,762	1,427	1,213	249	3,752	5,746
U. North Carolina, Greensboro	200	29,822	322	121	7,347	392	4,149	2,668	463	0	0	14,360
East Carolina U.	201	29,648	358	2,494	18,567	426	1,216	817	757	0	2,178	2,835
Van Andel Research Institute	202	29,424	0	0	29,424	0	0	0	0	0	0	0
Indiana U.-Purdue U., Indianapolis	203	29,353	2,759	972	11,144	142	1,998	3,075	2,156	548	4,375	2,184
North Carolina A&T State U.	204	29,094	922	0	10,753	836	1,996	133	0	0	10,157	4,297
U. Nevada, Las Vegas	205	28,867	758	2,540	13,038	37	4,861	521	423	35	5,031	1,623
Missouri U. of Science and Technology	206	28,792	1,335	0	172	173	2,838	95	99	0	24,061	19
Florida Atlantic U.	207	28,641	1,715	348	12,398	704	1,498	1,126	179	0	9,749	924
Old Dominion U.	208	27,804	1,430	2,057	3,163	643	5,033	1,123	791	0	11,184	2,380
SUNY, Upstate Medical U.	209	27,737	0	0	27,737	0	0	0	0	0	0	0
Loyola U., Chicago	210	26,972	356	0	23,194	34	1,253	809	359	0	0	967
U. North Carolina, Charlotte	211	26,871	7,560	673	3,320	676	2,574	504	875	0	8,783	1,906
Catholic U. of America	212	26,285	0	0	521	0	23,076	422	0	8	2,099	159
U. Denver	213	26,040	36	47	4,031	139	2,877	5,527	1,707	0	1,180	10,496
Illinois Institute of Technology	214	25,963	2,983	142	8,418	379	3,072	0	91	58	10,795	25
SUNY, Downstate Health Sciences U.	215	25,081	0	0	25,081	0	0	0	0	0	0	0
SUNY, Binghamton U.	216	24,888	1,737	215	2,334	77	5,229	4,687	808	0	8,326	1,475
U. Memphis	217	24,686	5,111	1,724	4,155	243	1,018	1,445	2,800	15	4,518	3,657
Morgan State U.	218	24,670	539	5,512	6,754	185	2,225	6	4	0	5,514	3,931
Delaware State U.	219	24,361	29	615	13,648	241	3,172	25	1,152	0	137	5,342
U. Wisconsin-Milwaukee	220	24,036	0	2,767	6,205	0	7,058	2,884	1,654	6	2,907	555
U. Nebraska, central administration	221	23,872	742	0	13,722	0	0	0	0	0	8,584	824
Embry-Riddle Aeronautical U.	222	23,863	1,888	1,338	540	106	4,744	0	0	0	14,083	1,164
U. South Alabama	223	23,762	1,349	2,641	12,537	231	479	691	362	0	4,296	1,176
U. California, Merced	224	23,421	827	2,364	5,102	1,313	4,363	106	295	2,041	5,007	2,003
U. Massachusetts, Boston	225	23,131	724	924	5,321	40	1,793	3,023	2,363	0	635	8,308
U. North Texas, Denton	226	23,056	2,610	240	4,277	0	3,134	1,017	294	0	10,227	1,257
South Dakota State U.	227	22,991	0	721	14,272	593	1,312	348	771	0	4,783	191
CUNY, Hunter C.	228	21,142	1,343	251	4,334	166	4,191	7,962	502	0	191	2,202
Ohio U.	229	20,587	21	1,925	6,781	26	4,370	1,611	417	0	5,209	227
Wright State U.	230	20,529	4,576	132	7,639	61	1,011	1,249	0	54	5,696	111

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U.S. Military Academy	231	19,708	6,609	25	130	1,016	178	774	4,526	0	6,086	364
U. of the Virgin Islands	232	19,127	267	8,544	7,183	679	1,130	0	534	0	790	0
Rowan U.	233	18,613	422	136	5,977	286	1,309	964	0	134	9,274	111
U. Texas Rio Grande Valley	234	18,317	1,447	879	8,582	714	1,299	23	205	48	4,536	584
Southern Methodist U.	235	17,680	247	3,697	1,161	1,351	3,652	1,105	327	489	2,769	2,882
Eastern Virginia Medical School	236	17,616	0	0	17,616	0	0	0	0	0	0	0
Desert Research Institute	237	17,341	0	17,341	0	0	0	0	0	0	0	0
U. Nebraska, Omaha	238	17,301	3,575	15	6,620	375	99	117	1,179	4,165	988	168
U. West Florida	239	17,114	3,654	54	927	0	1,012	0	72	0	14	11,381
U. Guam	240	17,066	0	6,841	9,112	57	131	0	156	0	6	763
U. Puerto Rico, Rio Piedras	241	16,905	331	1,978	2,524	124	4,386	63	86	3,324	3,900	189
Marshall U.	242	16,369	163	170	12,099	0	1,068	0	0	0	2,375	494
U. Puerto Rico, Mayaguez	243	16,223	192	3,870	583	5	1,280	219	449	0	7,325	2,300
Kent State U.	244	16,195	445	357	5,117	215	3,722	2,223	1,185	411	553	1,967
Rutgers, State U. New Jersey, Newark	245	16,099	1,899	1,450	7,627	0	2,906	432	327	0	0	1,458
Baylor U.	246	15,856	625	873	6,263	622	3,708	680	434	0	2,307	344
California State U., Northridge	247	15,546	105	1,015	3,898	320	6,308	308	300	61	2,377	854
Louisiana State U., Health Sciences Center, Shreveport	248	15,503	0	0	15,503	0	0	0	0	0	0	0
Marquette U.	249	15,316	1,058	0	5,929	421	1,620	250	0	0	5,605	433
San Francisco State U.	250	15,276	582	1,988	7,503	205	1,106	349	1,116	845	1,174	408
U. Alaska, Anchorage	251	15,249	31	4,424	7,222	0	315	57	759	927	1,074	440
Texas A&M U.-Corpus Christi	252	15,229	301	4,463	2,912	0	1,169	0	486	34	4,257	1,607
U. Maryland Center for Environmental Science	253	15,109	0	7,586	5,997	0	141	0	312	204	0	869
South Dakota School of Mines and Technology	254	15,100	0	0	0	16	2,305	0	0	0	12,779	0
California Polytechnic State U., San Luis Obispo	255	15,084	253	1,249	3,113	2,275	1,347	0	499	0	5,436	912
Meharry Medical C.	256	15,048	65	0	14,983	0	0	0	0	0	0	0
Jackson State U.	257	15,045	486	0	4,783	21	6,788	151	4	123	1,905	784
Tuskegee U.	258	14,911	875	0	9,000	888	1,910	108	0	0	2,099	31
CUNY, Queens C.	259	14,756	313	295	10,830	172	1,488	1,225	288	0	0	145
American U.	260	14,752	184	604	252	663	3,078	81	4,239	1,244	0	4,407
Texas Tech U., Health Sciences Center	261	14,620	0	0	14,602	0	0	0	0	0	0	18
U. Texas Health Science Center, Tyler	262	14,362	0	0	14,362	0	0	0	0	0	0	0
North Carolina Central U.	263	13,709	0	185	6,112	0	4,596	0	210	63	1,395	1,148

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. South Dakota	264	13,702	138	0	10,126	0	1,877	503	0	0	859	199
Southern Illinois U., Carbondale	265	13,582	0	672	10,576	4	1,027	137	180	399	587	0
Albany Medical C.	266	13,384	0	0	13,384	0	0	0	0	0	0	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	267	12,895	142	582	1,930	9	741	215	47	76	3,994	5,159
U. Colorado Denver ^C	268	12,668	619	642	1,484	988	1,798	929	387	0	3,398	2,423
CUNY, Advanced Science Research Center	269	12,580	0	172	3,669	0	7,392	0	0	0	1,347	0
U. Hawaii, system office	270	12,511	515	11,996	0	0	0	0	0	0	0	0
Creighton U.	271	12,022	690	0	9,311	181	1,234	169	214	0	0	223
CUNY, Graduate School of Public Health and Health Policy	272	11,880	0	0	9,886	0	0	1,994	0	0	0	0
California State U., Long Beach	273	11,739	178	370	3,212	349	2,698	1,751	393	0	2,181	607
Xavier U. Louisiana	274	11,733	673	0	3,460	0	7,504	63	18	0	0	15
Prairie View A&M U.	275	11,665	103	0	5,393	0	1,881	0	199	0	3,849	240
Hampton U.	276	11,274	720	2,576	1,659	163	4,282	0	434	0	1,215	225
U. Massachusetts, Dartmouth	277	11,162	735	6,132	191	480	437	0	19	0	2,245	923
Chapman U.	278	11,098	0	258	7,450	0	1,434	1,072	158	0	82	644
U. Akron	279	11,036	43	554	851	91	4,811	29	4	0	4,632	21
Florida Institute of Technology	280	10,970	4,101	1,051	745	208	951	555	0	0	2,818	541
Tennessee State U.	281	10,859	0	120	9,474	0	0	0	0	0	1,265	0
Charles R. Drew U. of Medicine and Science	282	10,656	0	0	10,656	0	0	0	0	0	0	0
Miami U.	283	10,277	0	616	3,941	186	2,078	1,226	257	0	843	1,130
Teachers C., Columbia U.	284	10,177	1,938	0	1,589	0	0	388	6,262	0	0	0
U.S. Naval Academy	285	10,147	804	516	0	1,115	1,515	0	0	0	6,197	0
Missouri State U.	286	10,084	0	280	1,062	0	159	48	137	0	8,396	2
U. of the District of Columbia	287	9,859	255	95	1,978	502	0	0	0	0	5,725	1,304
Northern Illinois U.	288	9,840	608	805	852	31	4,712	575	103	0	2,039	115
Central Michigan U.	289	9,773	0	582	6,652	0	2,053	168	71	190	48	9
East Tennessee State U.	290	9,715	0	0	9,397	125	192	0	0	0	0	1
Oakland U.	291	9,533	949	0	3,956	77	2,522	293	0	0	1,572	164
Northeast Ohio Medical U.	292	9,400	0	0	9,121	0	0	0	250	27	2	0
Alcorn State U.	293	9,361	0	0	4,787	0	0	0	4,354	0	219	1
Nova Southeastern U.	294	9,314	0	4,514	4,574	0	0	165	0	0	0	61
Alabama A&M U.	295	9,221	363	0	5,421	76	739	195	219	0	1,861	347
Loma Linda U.	296	9,134	0	0	8,497	0	0	637	0	0	0	0

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Idaho State U.	297	9,080	544	1,460	3,644	5	647	140	55	0	2,430	155
New York Medical C.	298	9,070	0	0	9,070	0	0	0	0	0	0	0
U. Maryland, Eastern Shore	299	9,062	0	3,743	5,260	0	0	0	0	0	59	0
California State U., East Bay	300	8,997	0	249	1,224	10	580	0	319	0	0	6,615
Lincoln U., Jefferson City	301	8,988	0	28	8,695	0	0	0	47	218	0	0
Winston-Salem State U.	302	8,903	339	100	2,419	51	786	509	100	138	0	4,461
Clarkson U.	303	8,834	501	9	667	230	1,636	0	119	0	5,180	492
Illinois State U.	304	8,673	141	394	3,898	145	1,219	0	0	0	0	2,876
California State U., Los Angeles	305	8,605	241	202	980	0	4,910	8	391	0	1,414	459
U. New Orleans	306	8,270	449	1,005	193	195	771	0	674	2,136	341	2,506
Texas A&M U.-Kingsville	307	8,225	0	0	3,904	0	60	51	0	0	2,819	1,391
Tennessee Technological U.	308	8,156	2,256	13	2,304	0	446	12	32	0	2,549	544
California State U., San Marcos	309	7,986	450	0	613	9	981	875	101	3,660	504	793
Bowling Green State U.	310	7,918	1	1,443	1,712	52	1,145	0	1,042	0	42	2,481
SUNY, C. of Environmental Science and Forestry	311	7,766	212	583	5,839	0	443	0	87	30	484	88
U. North Florida	312	7,758	416	25	786	0	436	949	439	0	258	4,449
Texas Southern U.	313	7,550	99	173	4,949	94	874	572	0	0	7	782
Rosalind Franklin U. of Medicine and Science	314	7,292	0	0	6,905	0	0	387	0	0	0	0
Fort Valley State U.	315	7,265	0	79	7,103	0	83	0	0	0	0	0
U. North Carolina, Wilmington	316	7,178	214	1,541	2,495	51	615	217	832	0	182	1,031
Western U. of Health Sciences	317	7,131	0	0	6,202	0	0	0	0	0	0	929
Virginia State U.	318	7,115	0	37	3,945	206	80	76	0	0	1,407	1,364
California State U., San Bernardino	319	6,693	580	61	305	283	1,939	663	26	0	0	2,836
U. Arkansas, Little Rock	320	6,675	2,898	0	1,488	1	284	0	6	0	1,366	632
California State U., Sacramento	321	6,646	166	672	400	43	213	112	453	107	3,718	762
Florida Gulf Coast U.	322	6,482	0	1,896	1,734	47	166	79	2	0	84	2,474
Villanova U.	323	6,476	57	165	1,599	64	1,467	290	0	0	1,949	885
Western Washington U.	324	6,347	196	1,971	328	217	1,629	176	347	569	227	687
Duquesne U.	325	6,309	0	470	4,508	36	441	0	86	0	21	747
California State U., Fullerton	326	6,136	156	136	2,317	775	1,108	170	360	463	639	12
U. Minnesota, Duluth	327	6,122	5	277	4,714	104	315	167	190	0	322	28
California State U., Fresno	328	5,928	202	0	1,185	1,158	1,984	11	327	0	971	90
Clark Atlanta U.	329	5,895	231	0	2,923	321	2,379	0	0	0	41	0

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Tulsa	330	5,893	2,909	92	360	0	531	12	104	0	1,557	328
CUNY, John Jay C. of Criminal Justice	331	5,777	0	0	479	98	618	2,016	579	372	0	1,615
Louisiana Tech U.	332	5,734	314	0	1,158	326	392	140	118	0	3,120	166
Texas Christian U.	333	5,670	104	258	363	0	356	182	14	4,120	84	189
Morehouse C.	334	5,664	396	0	451	47	2,393	59	0	1,710	0	608
Montana Technological U.	335	5,600	0	1,177	335	0	309	0	0	0	3,779	0
Central State U.	336	5,576	0	124	4,108	42	954	0	0	34	314	0
Naval War C.	337	5,529	0	0	0	0	0	0	929	0	0	4,600
U.S. Army War C.	338	5,496	0	0	0	0	0	0	5,496	0	0	0
California State Polytechnic U., Pomona	339	5,407	276	1	1,717	80	1,229	20	22	0	1,298	764
Rhode Island C.	340	5,372	85	0	629	0	441	143	0	0	0	4,074
U. Colorado Colorado Springs	341	5,345	2,394	150	313	0	314	301	0	0	1,134	739
Ball State U.	342	5,302	128	0	3,735	27	497	82	166	0	0	667
U. Hawaii, Hilo	343	5,292	82	1,597	2,826	25	270	0	236	256	0	0
Wesleyan U.	344	5,267	0	470	878	281	1,542	1,189	30	0	0	877
U. Tennessee, Chattanooga	345	5,214	716	0	662	295	0	0	21	715	2,622	183
Montclair State U.	346	5,189	445	723	1,058	330	845	417	50	0	49	1,272
Tarleton State U.	347	5,055	0	219	4,308	0	0	0	141	387	0	0
California State U., Monterey Bay	348	5,051	949	1,021	2,496	154	431	0	0	0	0	0
Sam Houston State U.	349	4,936	0	118	1,532	356	189	50	804	0	167	1,720
Fordham U.	350	4,856	121	0	575	34	642	1,951	61	0	0	1,472
U. Baltimore	351	4,853	310	48	0	0	0	0	734	0	0	3,761
Kentucky State U.	352	4,743	5	0	4,615	119	0	0	0	0	0	4
U. Detroit Mercy	353	4,663	23	0	4,069	0	0	38	0	0	510	23
MGH Institute of Health Professions	354	4,628	0	0	4,628	0	0	0	0	0	0	0
CUNY, Brooklyn C.	355	4,623	251	102	698	0	1,779	1,618	0	0	0	175
U. Missouri, Saint Louis	356	4,573	22	0	3,129	161	683	124	159	0	0	295
U. Washington, Tacoma	357	4,553	421	3,103	309	137	0	0	92	19	250	222
C. Charleston	358	4,485	190	2,328	1,146	0	474	9	0	0	158	180
Middle Tennessee State U.	359	4,347	181	0	1,944	357	945	102	271	0	288	259
Northwest Indian C.	360	4,298	0	60	504	0	0	0	0	0	227	3,507
West Virginia State U.	361	4,278	2	0	4,276	0	0	0	0	0	0	0
South Carolina State U.	362	4,270	117	0	1,537	0	1,086	0	0	0	773	757

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Southern U. and A&M C., Agricultural Research and Extension Center	363	4,261	0	0	4,261	0	0	0	0	0	0	0
Western Illinois U.	364	4,032	0	0	1,811	0	84	0	154	0	1,983	0
U. Washington, Bothell	365	4,009	498	351	667	22	1,152	0	68	0	387	864
Dakota State U.	366	3,976	3,976	0	0	0	0	0	0	0	0	0
Arkansas State U., Jonesboro	367	3,932	138	0	2,317	0	706	32	96	276	367	0
National Defense U.	368	3,920	0	0	400	0	0	0	3,020	0	0	500
Barnard C.	369	3,758	101	70	1,082	0	1,411	873	68	0	0	153
DePaul U.	370	3,757	613	88	2,030	92	0	16	169	0	76	673
Citadel Military C. South Carolina	371	3,741	2,608	0	124	15	82	61	0	0	222	629
Salisbury U.	372	3,734	225	89	112	0	40	0	3	0	0	3,265
Chicago State U.	373	3,699	78	0	2,223	0	1,339	0	59	0	0	0
Hope C.	374	3,691	0	0	2,130	17	947	0	0	0	374	223
U. New England	375	3,660	0	278	3,382	0	0	0	0	0	0	0
CUNY, Lehman C.	376	3,652	0	44	302	213	2,487	0	230	0	0	376
U. Wisconsin-Superior	377	3,635	0	28	3,536	0	0	0	0	0	71	0
Langston U.	378	3,616	0	0	3,361	0	46	77	0	0	0	132
Southern U. and A&M C., Baton Rouge	379	3,595	611	0	810	87	186	0	0	0	1,851	50
Youngstown State U.	380	3,533	156	0	251	66	356	60	50	0	2,525	69
Fisk U.	381	3,486	425	0	1,196	158	1,693	0	0	0	0	14
Norfolk State U.	382	3,398	298	0	101	35	1,051	0	0	0	1,597	316
Oklahoma State U., Center for Health Sciences	383	3,366	0	0	2,421	0	0	906	0	0	0	39
Bowie State U.	384	3,351	1,169	0	1,462	0	481	0	0	0	0	239
Rutgers, State U. New Jersey, Camden	385	3,349	2,279	0	0	0	13	0	1,057	0	0	0
U. Arkansas, Pine Bluff	386	3,306	0	0	2,883	0	296	0	86	41	0	0
Kennesaw State U.	387	3,290	268	0	715	624	381	20	394	0	351	537
Gallaudet U.	388	3,287	1,587	0	946	0	59	166	256	0	0	273
Pennsylvania State U., Behrend	389	3,262	29	573	951	2	78	155	23	0	1,039	412
Southern Illinois U., Edwardsville	390	3,250	1	587	1,340	26	361	0	74	36	204	621
U. North Texas, Health Science Center	391	3,172	0	0	3,172	0	0	0	0	0	0	0
Purdue U., Northwest	392	3,171	369	0	153	0	160	0	0	93	1,846	550
California State U., Dominguez Hills	393	3,156	346	0	254	39	1,019	359	126	0	0	1,013
Western Kentucky U.	394	3,127	0	470	1,041	57	1,058	288	78	0	135	0

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
New York Institute of Technology	395	2,988	89	0	1,716	0	101	0	0	0	1,082	0
Alabama State U.	396	2,930	192	0	2,471	0	0	0	0	0	267	0
CUNY, C. Staten Island	397	2,916	119	0	1,047	157	955	597	0	0	0	41
Wellesley C.	398	2,915	437	157	859	169	157	170	571	0	395	0
U. San Diego	399	2,911	0	134	39	1,294	443	6	70	0	518	407
Sonoma State U.	400	2,889	0	1,675	452	506	28	56	0	13	0	159
James Madison U.	401	2,884	72	79	1,146	71	1,195	0	0	0	161	160
Amherst C.	402	2,862	61	251	1,269	305	797	163	16	0	0	0
Towson U.	403	2,844	909	554	618	84	493	124	27	0	0	35
Loyola Marymount U.	404	2,824	114	5	665	4	99	593	306	0	0	1,038
U. Central del Caribe	405	2,807	0	0	2,807	0	0	0	0	0	0	0
Haverford C.	406	2,722	18	31	451	30	2,070	107	15	0	0	0
Pacific U.	407	2,672	0	0	1,522	0	367	0	14	0	0	769
Hawaii Pacific U.	408	2,667	0	793	990	0	0	0	51	0	14	819
California State U., Bakersfield	409	2,665	0	47	58	1,140	105	0	23	0	302	990
Santa Clara U.	410	2,660	0	0	482	37	535	126	8	0	1,061	411
Long Island U.	411	2,652	28	262	2,084	0	172	43	0	0	0	63
Occidental C.	412	2,622	i 313	i 570	i 410	i 108	i 583	i 393	i 174	i 0	i 0	i 71
Georgia Southern U.	413	2,605	16	199	775	48	393	0	432	25	468	249
U. North Carolina, Asheville	414	2,600	289	96	996	0	672	0	0	0	0	547
Northern Kentucky U.	415	2,596	14	0	1,606	72	633	256	4	0	0	11
Fort Lewis C.	416	2,590	0	3	725	0	733	0	0	0	592	537
Appalachian State U.	417	2,567	260	132	1,137	6	434	84	277	0	42	195
Winthrop U.	418	2,542	58	10	204	0	350	0	6	0	0	1,914
Bucknell U.	419	2,539	10	0	777	148	929	0	0	8	660	7
Spelman C.	419	2,539	26	0	685	668	410	565	55	0	0	130
U. Michigan, Dearborn	421	2,537	0	0	215	130	22	0	0	131	2,030	9
CUNY, Graduate Center	422	2,535	6	3	0	88	0	154	649	389	0	1,246
Pace U.	423	2,534	727	0	178	0	38	0	0	0	529	1,062
U. of Health Sciences and Pharmacy in St. Louis	424	2,523	0	0	2,514	0	9	0	0	0	0	0
Saint Joseph's U.	425	2,520	85	0	1,405	0	456	0	176	0	0	398
Clark U.	426	2,500	11	534	621	0	719	0	615	0	0	0
St. John's U., New York	427	2,456	131	0	1,595	0	418	272	0	0	0	40

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. New Haven	428	2,447	1,215	128	131	0	120	260	529	0	64	0
Central Washington U.	429	2,429	381	1,289	42	157	517	0	4	0	25	14
California State Polytechnic U., Humboldt	430	2,421	10	139	1,216	0	32	0	827	0	197	0
Smith C.	431	2,403	284	5	866	244	315	97	0	15	426	151
Eastern Michigan U.	432	2,346	11	47	1,293	33	173	174	21	0	76	518
Saginaw Valley State U.	433	2,341	i 254	i 0	i 1,515	i 0	i 0	i 0	i 171	i 0	i 0	i 401
Texas Tech U., Health Sciences Center, El Paso	434	2,339	0	0	1,751	0	0	0	0	0	0	588
Tougaloo C.	435	2,336	i 92	i 0	i 1,207	i 91	i 537	i 111	i 60	i 0	i 0	i 238
California State U., Chico	436	2,312	0	590	314	15	155	0	15	0	636	587
Troy U.	437	2,296	0	67	117	0	1,910	0	0	0	56	146
Middlebury C.	438	2,281	152	509	643	0	547	247	150	0	0	33
Northeastern Illinois U.	439	2,224	104	54	1,447	43	0	0	8	0	7	561
U. Southern Maine	440	2,201	0	39	107	13	0	0	1,970	0	72	0
Toyota Technological Institute, Chicago	441	2,199	2,199	0	0	0	0	0	0	0	0	0
Murray State U.	442	2,176	0	131	1,439	351	240	0	0	0	0	15
Reed C.	443	2,139	i 84	i 0	i 1,105	i 83	i 492	i 102	i 55	i 0	i 0	i 218
U. Northern Iowa	444	2,132	0	0	147	0	848	0	1,137	0	0	0
West Texas A&M U.	445	2,123	144	305	268	0	218	0	0	0	915	273
Hofstra U.	446	2,118	33	222	487	188	538	0	0	0	352	298
Seton Hall U.	447	2,092	0	0	463	0	722	0	0	0	0	907
Dine C.	448	2,091	0	0	2,091	0	0	0	0	0	0	0
Texas Woman's U.	448	2,091	0	0	1,420	0	4	70	0	0	0	597
Morehead State U.	450	2,086	0	0	287	0	0	0	0	0	1,799	0
SUNY, C. of Optometry	451	2,080	0	0	2,080	0	0	0	0	0	0	0
U. Louisiana, Monroe	452	1,993	0	103	1,612	0	125	0	153	0	0	0
C. New Jersey	453	1,984	212	0	651	21	840	0	3	0	133	124
Harvey Mudd C.	454	1,956	573	0	534	168	399	0	0	45	237	0
St. Edward's U.	455	1,940	120	0	414	159	317	0	0	0	0	930
Carleton C.	456	1,914	80	1,112	87	54	245	208	121	0	0	7
Pennsylvania State U., Harrisburg	457	1,911	5	3	1,094	7	7	34	10	0	74	677
U. Nebraska, Kearney	458	1,900	0	0	1,663	0	131	0	0	0	0	106
William Paterson U.	459	1,896	0	144	468	0	0	87	619	0	0	578
CUNY, Baruch C.	460	1,894	0	0	780	486	330	223	0	0	0	75

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Savannah State U.	461	1,881	0	694	255	0	53	0	6	264	609	0
U. Central Oklahoma	462	1,869	i 127 i	0 i	758 i	54 i	200 i	52 i	85 i	0 i	392 i	201 i
Johnson C. Smith U.	463	1,868	164	0	146	2	4	0	2	0	52	1,498
Bowdoin C.	464	1,867	51	230	957	29	328	107	0	0	0	165
Grand Valley State U.	465	1,819	8	484	1,028	1	248	33	0	0	0	17
U. Oklahoma, Tulsa	466	1,804	0	0	416	0	0	0	20	0	662	706
Indiana U. Pennsylvania	467	1,797	113	229	814	0	313	73	250	5	0	0
Bates C.	468	1,785	33	41	1,491	0	127	27	66	0	0	0
Texas A&M U.-Commerce	469	1,776	93	0	409	0	891	101	0	0	0	282
CUNY, New York City C. of Technology	470	1,769	164	0	293	183	710	0	0	0	33	386
Swarthmore C.	471	1,733	55	0	820	132	486	68	0	0	51	121
U. Central Arkansas	472	1,731	509	0	583	1	273	0	116	0	0	249
Western Carolina U.	473	1,727	0	226	970	0	9	0	123	0	134	265
Christopher Newport U.	474	1,701	0	0	293	222	690	32	0	0	437	27
Yeshiva U.	475	1,695	0	0	1,013	0	682	0	0	0	0	0
U. Northern Colorado	476	1,692	0	151	634	31	15	24	445	0	0	392
Franklin and Marshall C.	477	1,680	0	2	908	19	508	31	212	0	0	0
Black Hills State U.	478	1,676	363	0	1,142	0	95	0	0	0	0	76
Elizabeth City State U.	479	1,667	348	0	802	0	0	0	0	0	0	517
Fayetteville State U.	479	1,667	233	0	437	0	165	0	56	42	127	607
CUNY, York C.	481	1,659	0	888	355	103	152	140	0	0	0	21
California State U., Channel Islands	482	1,638	62	0	342	460	77	0	2	677	1	17
Texas A&M International U.	483	1,624	0	0	355	74	186	0	527	403	66	13
U. Richmond	483	1,624	0	365	574	0	346	253	73	0	0	13
Claremont Graduate U.	485	1,610	0	0	0	74	0	37	538	0	0	961
Midwestern U.	486	1,609	0	0	1,609	0	0	0	0	0	0	0
New England C. of Optometry	486	1,609	0	0	1,609	0	0	0	0	0	0	0
Des Moines U.	488	1,589	0	444	865	0	0	0	280	0	0	0
U. Texas, Tyler	489	1,585	37	0	1,258	74	0	0	4	0	212	0
Colgate U.	490	1,570	79	501	170	113	686	0	21	0	0	0
SUNY, Geneseo	491	1,564	0	68	85	0	1,108	226	27	0	0	50
Palmer C. of Chiropractic, Davenport	492	1,550	0	0	1,550	0	0	0	0	0	0	0
U. Texas of the Permian Basin	493	1,538	0	0	797	0	0	35	197	0	509	0

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Mount Holyoke C.	494	1,511	225	0	493	146	322	325	0	0	0	0
Colby C.	495	1,466	63	349	665	28	197	0	85	0	0	79
Dillard U.	496	1,422	0	89	548	19	155	0	0	174	7	430
U. Ana G. Mendez, Gurabo	497	1,407	0	0	272	0	33	0	0	0	987	115
U. Alaska, Southeast	498	1,392	0	393	420	0	25	0	50	504	0	0
Colorado C.	499	1,371	0	440	0	44	211	0	7	0	0	669
Davidson C.	500	1,370	164	0	325	0	317	412	152	0	0	0
Roger Williams U.	501	1,351	0	314	535	0	44	45	0	0	44	369
U. of the Pacific	501	1,351	0	53	981	0	152	0	0	30	135	0
Trinity U.	503	1,345	27	90	230	38	620	312	21	0	7	0
U. Wisconsin-Oshkosh	504	1,336	0	24	511	0	327	0	0	0	252	222
Lafayette C.	505	1,300	7	0	573	36	407	46	0	0	222	9
SUNY, Buffalo State	506	1,299	3	1,061	29	139	0	0	0	0	23	44
New Mexico Highlands U.	507	1,288	184	184	184	184	184	0	184	0	0	184
Williams C.	508	1,286	47	97	614	47	273	57	30	0	0	121
Southeastern Louisiana U.	509	1,285	0	0	805	0	263	0	0	0	6	211
Furman U.	510	1,280	0	99	283	0	768	130	0	0	0	0
Utah Valley U.	510	1,280	123	140	261	82	494	0	0	0	180	0
Colorado State U., Pueblo	512	1,278	326	0	952	0	0	0	0	0	0	0
Hobart and William Smith Colleges	513	1,264	0	237	737	85	195	0	0	10	0	0
New School	514	1,261	0	131	1	0	0	646	92	0	294	97
Bryn Mawr C.	515	1,257	120	0	448	53	636	0	0	0	0	0
U. Wisconsin-Stevens Point	516	1,235	0	37	1,111	0	87	0	0	0	0	0
Butler U.	517	1,227	0	0	1,081	0	105	41	0	0	0	0
Pomona C.	518	1,217	50	108	223	287	522	8	19	0	0	0
Drake U.	519	1,211	1	0	205	108	211	0	0	0	0	686
U. Illinois, Springfield	520	1,210	0	0	28	0	14	0	839	0	0	329
Lake Superior State U.	521	1,184	0	0	1,178	0	0	0	6	0	0	0
Lamar U.	522	1,180	72	0	63	0	30	0	15	0	445	555
Clafin U.	523	1,179	387	105	458	0	102	0	64	0	63	0
Nevada State C.	524	1,167	0	82	1,085	0	0	0	0	0	0	0
Pittsburg State U.	524	1,167	0	0	518	0	27	0	22	0	600	0
U. Puerto Rico, Humacao	526	1,160	0	92	1	0	1,014	53	0	0	0	0

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Seattle U.	527	1,143	1	0	180	97	126	0	0	0	48	691
Virginia Military Institute	528	1,137	1,031	0	0	0	55	0	0	0	51	0
Coastal Carolina U.	529	1,130	133	478	195	0	111	0	0	0	159	54
Albany C. of Pharmacy and Health Sciences	530	1,110	0	0	1,110	0	0	0	0	0	0	0
Lawrence Technological U.	531	1,109	53	0	0	21	132	0	0	0	382	521
U. of the Incarnate Word	532	1,078	0	0	340	0	407	0	0	0	331	0
Claremont McKenna C.	533	1,070	24	4	272	79	385	306	0	0	0	0
California State U., Stanislaus	534	1,056	208	0	481	218	101	25	23	0	0	0
Vassar C.	535	1,052	113	2	544	80	61	135	17	0	0	100
Trinity C., Hartford	536	1,049	0	0	811	18	85	105	17	0	13	0
U. Wisconsin-Green Bay	537	1,046	39	57	582	8	80	20	24	0	199	37
Abilene Christian U.	538	1,032	0	0	0	0	905	0	0	0	29	98
Kenyon C.	539	1,021	0	0	724	18	279	0	0	0	0	0
Alfred U.	540	1,008	0	1	0	0	16	0	0	0	991	0
La Sierra U.	541	972	0	0	0	0	0	0	0	0	0	972
Milwaukee School of Engineering	542	969	65	0	0	0	0	0	0	0	904	0
U. Wisconsin-La Crosse	543	968	62	9	486	43	74	0	294	0	0	0
Touro U., California	544	964	0	0	964	0	0	0	0	0	0	0
Macalester C.	545	943	0	142	77	94	505	0	34	0	0	91
Calvin U.	546	931	44	0	274	40	246	0	28	265	33	1
U. Houston-Downtown	547	903	133	4	93	0	7	37	0	0	71	558
Indiana State U.	548	894	0	125	245	24	115	0	0	0	70	315
U. Hartford	549	886	0	0	70	30	0	26	66	0	694	0
Pepperdine U.	550	883	0	0	238	0	0	107	19	0	0	519
Stephen F. Austin State U.	551	879	0	23	602	208	0	0	0	0	0	46
Austin Peay State U.	552	870	0	206	601	0	63	0	0	0	0	0
Skidmore C.	553	861	0	157	188	14	318	106	13	0	0	65
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	554	858	0	0	858	0	0	0	0	0	0	0
U. South Carolina, Aiken	555	857	0	0	721	0	8	0	0	0	128	0
Eastern Washington U.	556	855	0	16	394	0	118	0	320	0	0	7
West Chester U. Pennsylvania	557	854	0	0	385	0	252	190	8	0	0	19
Southern Connecticut State U.	558	848	2	23	353	0	232	70	0	27	0	141

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Houston-Clear Lake	559	841	2	0	546	0	86	134	60	0	13	0
Erikson Institute	560	815	0	0	0	0	0	0	0	0	0	815
Franklin W. Olin C. of Engineering	561	809	0	0	0	0	0	0	0	0	805	4
Grambling State U.	561	809	i 0 i	0 i	0 i	0 i	483 i	0 i	0 i	0 i	0 i	326 i
CUNY, system office	563	798	8	0	38	0	0	0	0	0	718	34
Willamette U.	564	791	0	85	411	0	56	35	0	0	0	204
U. Virginia's C. Wise	565	786	447	0	110	0	23	0	50	0	156	0
U. Puget Sound	566	780	0	41	621	0	60	0	21	0	0	37
Northland C.	567	778	i 0 i	63 i	502 i	38 i	0 i	55 i	28 i	0 i	0 i	92 i
U. Puerto Rico, Cayey	568	757	0	0	30	0	59	0	0	668	0	0
SUNY, C. Brockport	569	751	0	0	529	0	179	0	15	0	0	28
Union C., Schenectady	570	750	49	158	41	36	107	0	0	0	359	0
Lewis and Clark C.	571	746	0	208	345	0	193	0	0	0	0	0
Northwestern State U. Louisiana	572	742	0	0	13	0	0	0	729	0	0	0
C. Wooster	573	737	0	155	116	68	391	0	0	0	0	7
U. North Georgia	574	734	456	62	54	0	15	0	10	0	0	137
Stockton U.	575	728	0	420	291	0	0	0	17	0	0	0
Augustana U.	576	724	0	0	403	0	306	0	0	0	0	15
Kean U.	577	715	237	1	142	0	1	7	0	0	0	327
Florida Polytechnic U.	578	706	138	0	0	0	0	0	0	0	493	75
Ithaca C.	579	703	57	13	262	122	205	0	44	0	0	0
U. Wisconsin-Eau Claire	580	681	0	35	0	11	438	197	0	0	0	0
Western New England U.	581	648	69	0	134	50	0	0	0	0	395	0
Keck Graduate Institute	582	643	0	0	643	0	0	0	0	0	0	0
Sul Ross State U.	583	623	i 49 i	59 i	290 i	20 i	76 i	20 i	33 i	0 i	0 i	76 i
Connecticut C.	584	620	48	0	152	0	229	102	23	0	0	66
East Stroudsburg U. Pennsylvania	585	598	0	0	128	0	0	0	0	0	0	470
SUNY, C. Plattsburgh	586	584	0	446	112	0	26	0	0	0	0	0
Alaska Pacific U.	587	581	0	522	20	0	0	0	0	0	0	39
Robert Morris U.	588	577	i 29 i	0 i	410 i	8 i	0 i	7 i	10 i	0 i	103 i	10 i
Minnesota State U., Mankato	589	575	5	5	458	0	29	0	78	0	0	0
Northern Michigan U.	590	571	14	141	303	0	0	34	21	0	0	58
Plymouth State U.	590	571	1	373	159	0	0	0	21	0	0	17

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. San Francisco	592	547	0	179	158	12	102	0	96	0	0	0
SUNY, Oswego	593	544	30	55	82	0	377	0	0	0	0	0
Monmouth U.	594	535	0	294	81	0	99	12	49	0	0	0
U. of St. Thomas (MN)	595	527	7	7	102	19	52	0	0	0	285	55
Central Connecticut State U.	596	511	0	0	23	0	64	0	240	0	143	41
Bentley U.	597	509	75	13	0	51	0	0	84	0	0	286
U. of Mary Washington	598	501	14	28	111	0	84	0	0	0	0	264
Edward Via C. of Osteopathic Medicine	599	482	0	0	482	0	0	0	0	0	0	0
West Virginia School of Osteopathic Medicine	600	468	0	0	468	0	0	0	0	0	0	0
Canisius C.	601	454	0	0	0	0	159	0	0	295	0	0
Manhattan C.	602	440	0	0	0	242	140	0	0	0	58	0
U. Wisconsin-Platteville	603	435	i 27	i 0	i 179	i 11	i 46	i 7	i 22	i 5	i 99	i 39
Whitman C.	604	434	0	107	103	0	194	0	30	0	0	0
Elon U.	605	428	0	0	97	84	0	162	18	0	0	67
St. Cloud State U.	606	401	9	0	81	0	0	0	0	0	0	311
Texas A&M U.-San Antonio	607	394	151	7	200	0	0	0	36	0	0	0
Marshall B. Ketchum U.	608	383	i 0	i 0	i 383	i 0	i 0	i 0	i 0	i 0	i 0	i 0
SUNY, Cobleskill	609	379	0	0	0	0	0	0	0	0	379	0
U. North Carolina, general administration	610	369	51	0	0	0	0	0	0	0	268	50
Oregon Institute of Technology	611	340	i 27	i 32	i 166	i 12	i 0	i 7	i 0	i 0	i 96	i 0
Suffolk U.	611	340	0	14	14	0	45	236	13	0	18	0
Hamilton C.	613	338	0	49	75	0	42	24	139	0	0	9
Albion C.	614	323	i 46	i 47	i 46	i 46	i 46	i 0	i 46	i 0	i 0	i 46
Purdue U., Fort Wayne	615	313	0	0	20	0	56	112	0	0	92	33
St. Catherine U.	616	300	0	0	292	0	0	0	8	0	0	0
California Lutheran U.	617	298	0	0	23	0	42	0	0	233	0	0
Azusa Pacific U.	618	282	0	0	7	0	6	269	0	0	0	0
Heidelberg U.	619	262	0	262	0	0	0	0	0	0	0	0
Grinnell C.	620	242	123	0	20	21	43	0	2	0	0	33
Framingham State U.	621	232	i 20	i 0	i 119	i 9	i 31	i 8	i 13	i 0	i 0	i 32
Pratt Institute	622	228	0	0	0	0	0	0	0	0	0	228
U. Charleston	623	217	0	0	217	0	0	0	0	0	0	0
Kettering U.	624	213	8	0	0	0	2	0	0	0	0	203

TABLE 25

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
California State U., Maritime Academy	625	192	0	51	0	0	0	0	0	0	84	57
Marymount U.	626	178	161	0	17	0	0	0	0	0	0	0
U. California, Office of the President	627	158	0	0	158	0	0	0	0	0	0	0
Eastern Connecticut State U.	628	126	0	6	36	0	0	0	0	0	0	84
Mercyhurst U.	629	82	0	0	0	0	24	0	0	40	0	18
C. of Saint Benedict	630	51 i	3 i	0 i	27 i	2 i	11 i	3 i	1 i	0 i	0 i	4 i
Babson C.	631	45	0	16	0	0	0	0	0	0	0	29
Philadelphia C. of Osteopathic Medicine	632	40	0	0	40	0	0	0	0	0	0	0
Roseman U. of Health Sciences	633	30	0	0	30	0	0	0	0	0	0	0

i = imputed.

nec = not elsewhere classified; S&E = science and engineering.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$1,983,078 thousand in federally financed R&D expenditures in FY 2022.^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.^c The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.**Note(s):**

Institutions reporting zero federal expenditures for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#). This table includes only institutions reporting \$1 million or more in total R&D expenditures in 2021. Institutions reporting less than \$1 million in total R&D expenditures in 2021 completed a shorter version of the survey form in FY 2022, and that form did not collect federally financed R&D expenditures by source and detailed field. For federally financed R&D expenditures by major field at institutions completing the shorter version of the survey, see [table 84](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
All institutions	-	53,971,468	7,978,816	2,488,278	30,288,941	2,044,072	6,035,698	1,500,988	3,634,675
Johns Hopkins U. ^b	1	2,971,816	1,476,638	12,785	844,336	426,124	38,498	1,226	172,209
U. Washington, Seattle	2	1,083,090	108,842	41,060	693,347	20,794	135,492	7,702	75,853
U. California, San Diego	3	970,696	104,632	38,141	627,145	13,781	129,565	2,511	54,921
U. Michigan, Ann Arbor	4	970,636	82,277	43,491	680,713	27,890	99,432	1,237	35,596
Georgia Institute of Technology	5	940,488	694,431	26,906	56,193	14,950	60,585	744	86,679
Columbia U. in the City of New York	6	904,346	53,738	26,945	694,702	21,796	99,333	156	7,676
Duke U.	7	901,807	62,529	16,235	769,574	3,027	37,887	848	11,707
U. Pennsylvania	8	873,318	57,657	13,728	727,643	3,635	53,123	1,296	16,236
Stanford U.	9	860,125	75,608	32,543	643,308	19,608	79,477	765	8,816
U. California, Los Angeles	10	848,138	55,336	44,212	622,820	31,788	72,776	448	20,758
U. North Carolina, Chapel Hill	11	827,158	26,622	13,674	659,640	1,804	42,302	2,599	80,517
U. Pittsburgh, Pittsburgh	12	814,647	58,347	12,668	696,411	1,959	33,465	399	11,398
U. California, San Francisco	13	780,318	49,573	1,575	713,951	258	9,500	63	5,398
U. Maryland ^c	14	750,447	130,164	26,309	355,651	73,862	59,499	27,187	77,775
U. Wisconsin-Madison	15	740,854	42,075	78,676	423,835	13,728	109,834	30,025	42,681
Yale U.	16	689,270	33,555	11,409	599,703	2,572	34,189	990	6,852
Washington U., Saint Louis	17	681,353	24,820	7,135	617,453	9,549	20,371	524	1,501
Pennsylvania State U., University Park and Hershey Medical Center	18	681,159	274,204	45,400	169,289	18,875	75,302	35,157	62,932
New York U.	19	668,381	19,381	5,322	583,692	1,572	43,497	840	14,077
Vanderbilt U. and Vanderbilt U. Medical Center	20	666,282	37,196	10,858	570,513	3,032	27,889	880	15,914
U. Minnesota, Twin Cities	21	652,384	36,190	24,107	453,718	8,267	72,227	41,976	15,899
Ohio State U.	22	636,902	45,916	29,057	383,114	9,173	61,621	43,453	64,568
Cornell U.	23	636,481	49,918	24,801	389,731	8,604	107,958	41,219	14,250
Harvard U.	24	628,683	57,929	20,978	472,585	9,545	49,923	387	17,336
Northwestern U.	25	618,771	50,435	30,065	467,367	3,872	57,278	411	9,343
Icahn School of Medicine at Mount Sinai	26	610,646	21,977	0	585,539	396	1,299	85	1,350
U. Southern California	27	601,747	122,075	10,556	397,767	3,539	46,412	77	21,321
Emory U.	28	568,149	12,007	3,772	532,883	970	13,359	691	4,467
U. Texas, Austin	29	536,296	211,424	54,041	119,022	17,385	110,937	403	23,084
Massachusetts Institute of Technology	30	531,056	135,575	82,270	148,759	40,331	106,311	0	17,810
U. Colorado Boulder	31	507,892	38,946	31,077	63,352	166,203	106,602	2,075	99,637
Texas A&M U., College Station and Health Science Center	32	505,355	52,870	50,115	133,931	10,168	137,220	46,205	74,846
U. California, Berkeley	33	468,542	48,175	45,902	166,783	74,073	100,084	3,904	29,621
U. California, Davis	34	468,468	27,617	19,800	290,032	7,974	43,464	50,132	29,449

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
U. Florida	35	467,739	47,390	17,469	249,511	11,394	58,242	45,735	37,998
U. Chicago	36	456,806	26,106	16,632	324,202	8,437	74,035	426	6,968
U. Colorado Anschutz Medical Campus ^d	37	429,949	18,448	0	395,404	0	4,081	25	11,991
U. Alabama, Birmingham	38	421,223	24,013	2,484	380,585	2,244	6,387	104	5,406
U. Illinois, Urbana-Champaign	39	420,953	62,791	90,166	83,915	10,846	117,743	24,588	30,904
Baylor C. of Medicine	40	420,054	19,239	0	358,696	16,360	4,400	15,671	5,688
Boston U.	41	413,102	20,741	6,972	329,129	10,452	35,437	310	10,061
Michigan State U.	42	381,504	16,019	127,822	104,978	3,930	63,157	33,485	32,113
Case Western Reserve U.	43	380,423	17,244	7,513	340,332	3,629	10,859	406	440
U. Arizona	44	374,936	34,437	10,616	187,114	60,760	51,132	15,395	15,482
U. Utah	45	367,040	26,133	42,094	245,834	4,027	43,706	760	4,486
Indiana U., Bloomington	46	360,300	21,934	6,152	276,691	1,293	39,770	627	13,833
Purdue U., West Lafayette	47	352,890	70,926	33,847	78,444	13,223	87,682	27,335	41,433
Rutgers, State U. New Jersey, New Brunswick	48	351,660	16,363	10,666	231,018	3,060	42,275	23,800	24,478
U. Cincinnati	49	350,392	13,541	3,287	310,961	707	13,046	56	8,794
Oregon Health and Science U.	50	346,724	10,755	32	333,732	128	1,082	0	995
U. Rochester	51	334,503	12,329	91,685	207,285	1,825	20,026	20	1,333
U. Virginia, Charlottesville	52	332,993	36,141	14,154	212,368	4,419	40,851	1,190	23,870
California Institute of Technology	53	326,401	28,973	23,564	89,631	83,886	94,888	0	5,459
Colorado State U., Fort Collins	54	316,727	100,464	20,904	57,818	10,455	33,534	44,464	49,088
U. Iowa	55	314,346	16,617	3,726	223,247	42,072	12,113	963	15,608
Arizona State U.	56	309,094	43,855	22,087	79,143	49,398	77,812	3,195	33,604
U. Texas Southwestern Medical Center	57	298,154	10,629	404	282,769	1,494	1,722	194	942
U. California, Irvine	58	291,393	19,376	19,058	185,563	5,167	49,528	395	12,306
Utah State U.	59	280,866	131,862	4,455	11,276	40,850	15,007	10,736	66,680
U. Miami	60	265,212	26,703	1,284	189,650	3,246	9,985	241	34,103
Carnegie Mellon U.	61	259,160	111,193	16,658	42,840	7,239	69,614	1,259	10,357
U. Massachusetts, Medical School	62	258,147	6,900	396	247,901	0	1,286	151	1,513
U. Kentucky	63	253,852	11,889	13,364	180,292	2,553	19,130	14,045	12,579
U. Illinois, Chicago	64	251,328	12,378	10,314	192,025	500	23,792	121	12,198
North Carolina State U.	65	250,582	32,063	28,484	51,694	2,512	56,206	51,000	28,623
Scripps Research Institute	66	242,135	2,784	124	234,754	806	3,172	0	495
Virginia Polytechnic Institute and State U.	67	240,305	56,414	21,423	48,876	5,171	51,087	22,949	34,385
U. New Mexico	68	232,774	22,576	13,826	156,055	3,851	28,587	1,694	6,185
U. Connecticut	69	230,752	22,079	6,786	125,263	2,243	42,254	8,702	23,425

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
U. Texas M. D. Anderson Cancer Center	70	225,659	12,224	0	211,709	485	918	42	281
Albert Einstein C. of Medicine	71	220,780	5,969	0	214,688	0	0	38	85
U. Georgia	72	220,343	6,816	14,581	95,248	1,413	39,153	44,862	18,270
Princeton U.	73	218,390	29,379	30,766	58,925	15,677	70,247	1,385	12,011
SUNY, U. Buffalo	74	218,231	47,799	8,111	122,689	1,344	26,828	386	11,074
Brown U.	75	215,067	19,511	6,583	149,308	4,764	28,913	110	5,878
Woods Hole Oceanographic Institution	76	211,550	44,908 i	1,661 i	1,682 i	8,406 i	130,016 i	13 i	24,864 i
U. Oklahoma, Norman and Health Science Center	77	210,994	14,075	7,212	85,136	37,076	19,652	814	47,029
U. South Florida ^e	78	206,552	12,998	2,056	126,254	2,354	15,319	210	47,361
U. Dayton	79	203,206	192,587	1,209	969	546	1,190	8	6,697
U. Kansas	80	200,117	7,049	4,572	131,767	2,955	25,253	648	27,873
U. Delaware	81	194,775	25,879	17,218	54,711	5,475	39,581	5,134	46,777
Uniformed Services U. of the Health Sciences	82	194,187	182,363	30	11,523	0	0	115	156
Oregon State U.	83	192,621	19,049	17,862	28,146	6,492	52,117	38,302	30,653
Washington State U.	84	187,580	8,251	22,296	62,684	1,454	16,555	52,115	24,225
Iowa State U.	85	187,156	11,228	35,457	28,573	3,972	33,906	52,471	21,549
U. Texas Health Science Center, Houston	86	184,205	9,674	0	167,117	535	1,532	2,692	2,655
SUNY, Stony Brook U.	87	184,154	13,272	23,900	92,030	4,578	41,201	40	9,133
U. Missouri, Columbia	88	182,432	12,797	6,915	89,116	951	16,283	27,061	29,309
Wake Forest U.	89	180,754	9,627	457	164,717	888	3,013	157	1,895
Thomas Jefferson U.	90	173,861	5,109	176	168,466	85	17	0	8
U. Hawaii, Manoa	91	169,762	35,803	5,571	49,056	11,011	30,193	11,265	26,863
Virginia Commonwealth U.	92	166,726	11,785	1,991	125,345	840	7,331	1,377	18,057
Florida State U.	93	163,744	21,806	11,990	41,010	3,160	58,432	782	26,564
Medical U. South Carolina	94	163,395	1,162	0	154,901	0	409	0	6,923
George Washington U.	95	161,867	11,839	2,967	118,969	2,367	13,198	85	12,442
U. California, Santa Barbara	96	161,241	42,985	26,239	23,064	6,825	54,025	503	7,600
Dartmouth C. and Dartmouth Hitchcock Medical Center	97	155,445	10,250	4,298	112,729	5,554	20,306	333	1,975
U. Alaska, Fairbanks	98	154,742	44,132	10,597	7,917	22,954	44,315	2,654	22,173
Medical C. Wisconsin	99	152,301	5,874	0	142,490	596	215	47	3,079
Northeastern U.	100	150,093	30,725	3,942	50,592	1,175	52,153	209	11,297
Tufts U.	101	150,081	12,255	4,042	83,882	702	13,418	16,090	19,692
U. Tennessee, Knoxville	102	149,260	27,848	55,570	12,103	4,277	22,317	17,554	9,591
Temple U.	103	143,580	9,238	3,360	113,603	636	11,239	378	5,126
Mississippi State U.	104	138,207	33,169	7,798	10,644	1,873	10,093	37,885	36,745

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
U. Alabama, Huntsville	105	132,060	80,980	869	283	33,436	7,672	267	8,553
U. New Hampshire	106	129,721	5,544	3,998	23,788	49,867	16,783	8,113	21,628
Florida International U.	107	129,683	24,093	8,389	44,561	1,948	23,519	738	26,435
U. Massachusetts, Amherst	108	129,044	18,086	7,195	42,807	3,520	36,895	7,395	13,146
Tulane U.	109	127,544	3,902	1,639	106,598	332	6,497	462	8,114
Georgetown U.	110	127,213	9,173	1,278	95,785	2,802	5,690	0	12,485
Wayne State U.	111	126,814	8,457	2,396	102,915	291	8,801	370	3,584
U. Notre Dame	112	124,411	34,222	15,024	29,289	1,667	32,276	976	10,957
U. Texas Medical Branch	113	123,467	4,274	0	116,827	1,125	775	199	267
Clemson U.	114	119,512	11,729	8,174	16,596	1,886	21,701	9,177	50,249
George Mason U.	115	119,406	59,544	1,151	17,418	8,244	15,240	252	17,557
U. Texas Health Science Center, San Antonio	116	119,071	6,283	0	108,578	176	621	0	3,413
Montana State U., Bozeman	117	118,974	38,791	5,226	23,459	7,810	13,996	16,181	13,511
U. Louisville	118	117,363	12,225	2,052	91,269	998	7,884	516	2,419
U. Vermont	119	117,163	4,170	600	79,120	1,497	10,399	16,786	4,591
U. Nebraska, Medical Center	120	114,754	8,289	0	102,014	47	860	209	3,335
U. California, Riverside	121	114,257	9,863	6,814	43,248	2,589	28,973	17,001	5,769
U. Nebraska, Lincoln	122	113,248	6,153	10,515	26,614	553	30,032	24,104	15,277
Louisiana State U., Baton Rouge	123	111,886	17,384	5,321	44,154	4,307	16,481	10,699	13,540
U. Central Florida	124	110,131	33,878	9,311	19,761	8,863	25,742	443	12,133
U. California, Santa Cruz	125	107,082	9,210	5,545	54,726	6,264	17,315	1,635	12,387
U. South Carolina, Columbia	126	106,752	9,775	9,296	58,509	4,119	15,959	717	8,377
Rice U.	127	105,345	23,480	8,841	27,122	4,431	36,776	359	4,336
Auburn U., Auburn	128	104,883	21,851	6,337	16,606	6,286	13,750	20,881	19,172
Drexel U.	129	99,399	12,246	2,861	60,693	561	15,944	391	6,703
West Virginia U.	130	97,327	4,464	13,893	43,922	4,085	12,121	10,093	8,749
U. Oregon	131	97,238	3,577	6,770	54,309	990	17,940	810	12,842
U. Arkansas for Medical Sciences	132	95,080	2,650	71	89,958	145	332	581	1,343
Rockefeller U.	133	94,693	2,287	0	90,882	64	1,370	0	90
Wichita State U.	134	93,367	68,495	485	2,077	2,752	1,994	32	17,532
U. Rhode Island	135	93,190	9,281	1,322	21,890	736	19,687	7,212	33,062
U. Houston	136	84,295	5,695	7,435	41,043	3,277	19,494	295	7,056
U. Mississippi	137	84,270	7,174	856	61,984	718	3,856	5,717	3,965
U. Maine	138	84,072	26,804	12,470	2,334	1,974	14,226	15,852	10,412
U. Nevada, Reno	139	83,631	8,127	7,660	30,941	1,863	16,817	6,167	12,056
Kansas State U.	140	81,820	3,252	8,972	15,008	909	17,249	26,145	10,285

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
Georgia State U.	141	81,641	1,792	785	54,374	1,184	10,967	502	12,037
Rush U.	142	79,647	260	0	79,068	70	11	0	238
U. Louisiana, Lafayette	143	77,110	3,084	2,361	32,725	1,041	5,882	2,279	29,738
U. Montana, Missoula	144	73,507	5,598	1,092	37,649	2,050	11,717	5,310	10,091
New Mexico Institute of Mining and Technology	145	72,594	25,843	11,177	1,052	703	8,149	97	25,573
New Mexico State U.	146	71,718	22,026	7,496	9,614	4,873	12,557	9,730	5,422
New Jersey Institute of Technology	147	71,326	10,556	1,392	10,077	3,917	11,482	311	33,591
U. Wyoming	148	68,772	1,907	15,555	15,983	1,437	20,019	6,701	7,170
U. Alabama, Tuscaloosa	149	67,986	11,677	5,613	14,699	1,619	18,453	981	14,944
Colorado School of Mines	150	66,200	11,603	24,478	3,060	3,060	15,207	638	8,154
U. Maryland, Baltimore County	151	65,368	4,748	1,956	15,597	27,592	11,427	784	3,264
Augusta U.	152	64,609	1,860	0	61,395	169	266	0	919
U. Arkansas, Fayetteville	153	64,252	8,085	6,254	10,505	1,291	17,662	14,355	6,100
U. North Dakota	154	62,737	2,523	28,294	19,368	2,507	3,911	1,919	4,215
U. Massachusetts, Lowell	155	62,195	23,720	4,470	18,400	2,414	7,699	354	5,138
U. Texas, Dallas	156	60,706	11,635	3,812	27,924	2,055	14,536	121	623
U. Texas, El Paso	157	60,387	12,604	4,206	18,064	3,569	14,445	274	7,225
U. Tennessee, Health Science Center	158	60,221	3,162	0	55,803	0	150	0	1,106
Cold Spring Harbor Laboratory	159	59,163	1,486	1,143	50,973	0	3,740	1,786	35
U. Idaho	160	56,160	945	5,004	10,548	3,258	13,493	17,483	5,429
U. Texas, Arlington	161	56,025	12,573	2,931	11,601	2,188	12,699	721	13,312
U. Texas, San Antonio	162	54,384	7,398	11,164	17,482	2,568	8,444	234	7,094
Oklahoma State U., Stillwater	163	53,885	5,213	6,002	9,918	2,981	12,305	11,972	5,494
Cleveland State U.	164	53,395	3,686	289	46,611	210	1,608	14	977
SUNY, U. Albany	165	51,492	1,228	1,300	37,732	449	6,876	384	3,523
Rensselaer Polytechnic Institute	166	50,605	12,091	10,768	11,168	2,569	11,939	0	2,070
San Diego State U.	167	50,540	4,743	1,180	31,223	1,126	9,123	336	2,809
Michigan Technological U.	168	48,766	20,345	6,477	3,848	5,115	8,279	1,556	3,146
U. Southern Mississippi	169	48,368	13,469	496	5,561	2,327	4,094	1,360	21,061
North Dakota State U.	170	45,343	5,102	737	9,492	115	8,822	14,183	6,892
Texas Tech U.	171	45,136	7,422	8,193	6,446	2,218	9,951	4,334	6,572
Naval Postgraduate School	172	44,852	42,875	737	0	528	712	0	0
Brandeis U.	173	44,205	755	1,214	35,479	163	6,030	0	564
Northern Arizona U.	174	43,453	7,687	2,146	12,399	4,351	9,016	4,501	3,353
Saint Louis U.	175	42,170	1,708	216	36,317	251	2,652	64	962
Florida A&M U.	176	41,943	915	2,652	6,195	384	4,439	9,476	17,882

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
Stevens Institute of Technology	177	41,836	28,280	1,775	2,732	722	6,403	69	1,855
Texas State U.	178	38,936	4,281	266	5,165	4,480	5,296	982	18,466
CUNY, City C.	179	38,596	2,370	2,092	13,040	2,559	10,832	19	7,684
Howard U.	180	37,331	2,972	256	26,170	251	6,299	0	1,383
U. Toledo	181	36,694	6,713	6,116	14,423	4,013	2,562	1,263	1,604
Boston C.	182	36,560	6,683	940	15,584	734	7,788	40	4,791
Lehigh U.	183	36,535	3,504	5,730	10,051	157	13,029	10	4,054
U.S. Air Force Academy	184	35,826	35,311	450	0	37	28	0	0
U. Puerto Rico, Medical Sciences Campus	185	35,050	437	0	31,698	264	1,326	30	1,295
Worcester Polytechnic Institute	186	34,004	9,100	3,184	4,566	598	11,976	318	4,262
Syracuse U.	187	33,976	2,827	2,571	13,166	176	10,467	860	3,909
William & Mary	188	33,730	2,376	2,419	1,420	222	7,968	201	19,124
Rochester Institute of Technology	189	33,373	8,788	1,921	4,984	2,836	10,243	240	4,361
Louisiana State U., Health Sciences Center, New Orleans	190	33,087	562	0	31,854	88	153	0	430
Mercer U.	191	32,504	30,267	0	2,175	25	37	0	0
Air Force Institute of Technology	192	32,479	29,403	207	0	18	65	0	2,786
SUNY, Polytechnic Institute	193	32,396	26,605	1,640	1,329	126	2,588	0	108
Boise State U.	194	32,015	4,362	3,775	6,121	1,810	11,680	1,207	3,060
Brigham Young U., Provo	195	31,636	4,401	4,777	7,088	2,096	9,814	761	2,699
Morehouse School of Medicine	196	31,339	153	0	30,358	0	752	0	76
U. Missouri, Kansas City	197	31,134	7,934	222	14,937	160	1,562	102	6,217
San Jose State U.	198	30,984	1,139	779	2,051	17,474	3,763	103	5,675
Portland State U.	199	30,922	1,971	1,262	11,223	783	7,098	749	7,836
U. North Carolina, Greensboro	200	29,822	597	39	12,098	25	4,142	922	11,999
East Carolina U.	201	29,648	2,238	734	17,064	277	5,386	178	3,771
Van Andel Research Institute	202	29,424	941	209	28,135	0	139	0	0
Indiana U.-Purdue U., Indianapolis	203	29,353	1,408	1,009	17,939	51	6,373	148	2,425
North Carolina A&T State U.	204	29,094	2,170	1,557	3,833	1,792	9,780	7,131	2,831
U. Nevada, Las Vegas	205	28,867	546	3,965	10,550	2,066	5,207	1,809	4,724
Missouri U. of Science and Technology	206	28,792	5,888	7,472	2,089	1,253	6,193	183	5,714
Florida Atlantic U.	207	28,641	6,289	700	9,579	713	4,214	2,462	4,684
Old Dominion U.	208	27,804	6,838	4,956	3,973	1,319	5,967	125	4,626
SUNY, Upstate Medical U.	209	27,737	2,427	0	24,935	0	54	42	279
Loyola U., Chicago	210	26,972	771	0	21,888	57	3,028	66	1,162
U. North Carolina, Charlotte	211	26,871	2,607	3,330	6,425	253	10,666	103	3,487
Catholic U. of America	212	26,285	366	4,180	1,720	18,342	1,428	0	249

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
U. Denver	213	26,040	354	52	17,558	150	3,284	0	4,642
Illinois Institute of Technology	214	25,963	816	5,496	12,566	386	5,027	778	894
SUNY, Downstate Health Sciences U.	215	25,081	1,149	0	23,465	0	405	0	62
SUNY, Binghamton U.	216	24,888	4,211	1,253	10,105	1	7,911	0	1,407
U. Memphis	217	24,686	2,975	397	10,562	212	5,025	189	5,326
Morgan State U.	218	24,670	3,376	564	7,400	5,622	4,075	189	3,444
Delaware State U.	219	24,361	2,236	70	7,051	565	3,443	3,919	7,077
U. Wisconsin-Milwaukee	220	24,036	513	2,009	9,430	265	9,215	358	2,246
U. Nebraska, central administration	221	23,872	19,432	174	273	0	3,642	0	351
Embry-Riddle Aeronautical U.	222	23,863	3,878	0	212	1,552	3,016	79	15,126
U. South Alabama	223	23,762	1,933	1,036	12,440	221	4,213	741	3,178
U. California, Merced	224	23,421	1,712	2,559	5,622	860	9,044	1,935	1,689
U. Massachusetts, Boston	225	23,131	625	25	9,983	600	5,160	18	6,720
U. North Texas, Denton	226	23,056	6,553	3,097	3,898	511	6,593	417	1,987
South Dakota State U.	227	22,991	1,293	460	4,562	735	3,367	9,268	3,306
CUNY, Hunter C.	228	21,142	801	833	17,604	165	1,488	0	251
Ohio U.	229	20,587	1,268	4,255	6,917	471	2,983	247	4,446
Wright State U.	230	20,529	11,960	169	6,919	214	637	75	555
U.S. Military Academy	231	19,708	19,072	25	330	0	14	0	267
U. of the Virgin Islands	232	19,127	150	0	1,523	938	8,640	4,090	3,786
Rowan U.	233	18,613	5,845	6	8,202	164	3,520	101	775
U. Texas Rio Grande Valley	234	18,317	2,199	903	7,789	17	4,780	1,624	1,005
Southern Methodist U.	235	17,680	3,541	1,431	3,473	662	6,419	5	2,149
Eastern Virginia Medical School	236	17,616	279	0	9,022	827	16	0	7,472
Desert Research Institute	237	17,341	4,027	5,524	761	1,321	2,069	958	2,681
U. Nebraska, Omaha	238	17,301	2,400	0	5,659	545	2,647	0	6,050
U. West Florida	239	17,114	4,146	153	858	0	1,035	0	10,922
U. Guam	240	17,066	2,584	0	2,901	303	5,107	3,434	2,737
U. Puerto Rico, Rio Piedras	241	16,905	294	121	3,935	1,775	9,590	714	476
Marshall U.	242	16,369	2,666	160	11,223	116	778	0	1,426
U. Puerto Rico, Mayaguez	243	16,223	987	983	950	237	3,991	351	8,724
Kent State U.	244	16,195	850	1,095	7,962	156	5,055	5	1,072
Rutgers, State U. New Jersey, Newark	245	16,099	2,208	455	8,180	0	5,008	49	199
Baylor U.	246	15,856	1,794	1,484	5,786	185	3,802	2,063	742
California State U., Northridge	247	15,546	1,302	246	7,395	1,229	4,631	31	712
Louisiana State U., Health Sciences Center, Shreveport	248	15,503	20	0	15,135	348	0	0	0

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
Marquette U.	249	15,316	1,068	1,901	7,480	122	4,047	190	508
San Francisco State U.	250	15,276	593	97	7,852	235	5,001	51	1,447
U. Alaska, Anchorage	251	15,249	1,468	112	4,253	351	3,018	127	5,920
Texas A&M U.-Corpus Christi	252	15,229	673	83	1,185	214	2,959	133	9,982
U. Maryland Center for Environmental Science	253	15,109	194	608	36	769	3,422	436	9,644
South Dakota School of Mines and Technology	254	15,100	3,369	1,845	362	966	7,732	288	538
California Polytechnic State U., San Luis Obispo	255	15,084	4,195	471	1,153	334	4,371	1,645	2,915
Meharry Medical C.	256	15,048	191	0	14,611	0	186	0	60
Jackson State U.	257	15,045	1,568	204	4,860	86	5,898	0	2,429
Tuskegee U.	258	14,911	2,188	0	3,203	80	3,313	4,193	1,934
CUNY, Queens C.	259	14,756	108	8,749	3,377	0	2,498	24	0
American U.	260	14,752	586	50	1,654	2,621	3,617	304	5,920
Texas Tech U., Health Sciences Center	261	14,620	488	0	13,608	0	423	101	0
U. Texas Health Science Center, Tyler	262	14,362	183	201	13,978	0	0	0	0
North Carolina Central U.	263	13,709	1,188	1,116	7,334	1	2,856	138	1,076
U. South Dakota	264	13,702	301	279	9,291	41	3,152	0	638
Southern Illinois U., Carbondale	265	13,582	923	228	6,131	125	1,655	1,095	3,425
Albany Medical C.	266	13,384	400	0	12,984	0	0	0	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	267	12,895	650	2,596	2,430	432	4,331	0	2,456
U. Colorado Denver ^d	268	12,668	610	210	5,461	267	3,900	55	2,165
CUNY, Advanced Science Research Center	269	12,580	5,729	239	3,557	132	2,560	259	104
U. Hawaii, system office	270	12,511	11,932	0	0	64	0	0	515
Creighton U.	271	12,022	1,171	290	9,278	151	792	42	298
CUNY, Graduate School of Public Health and Health Policy	272	11,880	0	0	10,647	0	226	0	1,007
California State U., Long Beach	273	11,739	1,059	123	6,369	34	2,200	374	1,580
Xavier U. Louisiana	274	11,733	465	0	9,707	559	990	0	12
Prairie View A&M U.	275	11,665	1,745	1,313	5	717	1,981	5,610	294
Hampton U.	276	11,274	1,448	832	1,557	4,035	3,402	0	0
U. Massachusetts, Dartmouth	277	11,162	4,058	12	771	75	2,726	3	3,517
Chapman U.	278	11,098	1,562	0	6,762	245	981	772	776
U. Akron	279	11,036	1,554	1,061	1,722	1,235	4,580	1	883
Florida Institute of Technology	280	10,970	3,709	349	773	1,597	1,260	333	2,949
Tennessee State U.	281	10,859	346	661	1,033	38	1,099	7,328	354
Charles R. Drew U. of Medicine and Science	282	10,656	731	0	9,925	0	0	0	0
Miami U.	283	10,277	873	280	4,147	235	3,372	118	1,252

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
Teachers C., Columbia U.	284	10,177	0	0	401	0	3,587	0	6,189
U.S. Naval Academy	285	10,147	9,152	305	0	72	618	0	0
Missouri State U.	286	10,084	8,287	72	120	109	507	386	603
U. of the District of Columbia	287	9,859	599	845	174	2,057	4,111	1,978	95
Northern Illinois U.	288	9,840	141	3,075	1,613	124	3,106	18	1,763
Central Michigan U.	289	9,773	44	1,651	3,482	38	1,823	2	2,733
East Tennessee State U.	290	9,715	239	0	8,690	17	378	74	317
Oakland U.	291	9,533	916	131	4,880	36	3,400	0	170
Northeast Ohio Medical U.	292	9,400	188	0	8,847	0	256	0	109
Alcorn State U.	293	9,361	71	48	287	1	129	8,824	1
Nova Southeastern U.	294	9,314	3,657	0	2,856	0	138	9	2,654
Alabama A&M U.	295	9,221	1,408	564	4,916	134	1,098	352	749
Loma Linda U.	296	9,134	1	25	7,726	1,359	0	0	23
Idaho State U.	297	9,080	48	3,304	1,662	249	3,438	56	323
New York Medical C.	298	9,070	0	314	8,756	0	0	0	0
U. Maryland, Eastern Shore	299	9,062	385	214	323	0	956	4,266	2,918
California State U., East Bay	300	8,997	0	341	144	24	1,880	594	6,014
Lincoln U., Jefferson City	301	8,988	0	0	0	0	265	8,723	0
Winston-Salem State U.	302	8,903	0	0	5,008	100	1,247	0	2,548
Clarkson U.	303	8,834	1,660	288	584	148	3,876	90	2,188
Illinois State U.	304	8,673	41	1,449	1,932	0	2,191	228	2,832
California State U., Los Angeles	305	8,605	292	102	2,636	356	4,479	54	686
U. New Orleans	306	8,270	1,152	49	87	163	947	0	5,872
Texas A&M U.-Kingsville	307	8,225	448	40	1,436	181	1,516	2,701	1,903
Tennessee Technological U.	308	8,156	301	1,319	301	164	2,884	773	2,414
California State U., San Marcos	309	7,986	1,441	0	2,063	370	2,150	22	1,940
Bowling Green State U.	310	7,918	124	488	2,218	75	2,867	237	1,909
SUNY, C. of Environmental Science and Forestry	311	7,766	415	6	176	243	1,288	1,957	3,681
U. North Florida	312	7,758	169	66	2,909	80	936	54	3,544
Texas Southern U.	313	7,550	0	0	3,443	0	1,247	0	2,860
Rosalind Franklin U. of Medicine and Science	314	7,292	431	0	6,649	0	0	0	212
Fort Valley State U.	315	7,265	0	0	80	0	641	6,131	413
U. North Carolina, Wilmington	316	7,178	393	7	648	130	2,159	0	3,841
Western U. of Health Sciences	317	7,131	2,553	0	4,153	0	14	411	0
Virginia State U.	318	7,115	1,043	169	73	157	1,735	3,811	127
California State U., San Bernardino	319	6,693	94	0	772	99	3,345	1	2,382

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
U. Arkansas, Little Rock	320	6,675	2,761	157	727	1,336	936	143	615
California State U., Sacramento	321	6,646	0	0	198	0	1,353	400	4,695
Florida Gulf Coast U.	322	6,482	15	0	2,290	64	800	5	3,308
Villanova U.	323	6,476	867	23	1,259	737	3,049	0	541
Western Washington U.	324	6,347	0	121	408	587	4,583	18	630
Duquesne U.	325	6,309	1,042	0	2,832	0	817	0	1,618
California State U., Fullerton	326	6,136	880	19	2,054	0	2,424	143	616
U. Minnesota, Duluth	327	6,122	51	344	270	4	2,292	324	2,837
California State U., Fresno	328	5,928	340	44	1,255	191	2,887	757	454
Clark Atlanta U.	329	5,895	777	81	2,681	91	2,069	196	0
U. Tulsa	330	5,893	1,659	841	323	142	1,875	145	908
CUNY, John Jay C. of Criminal Justice	331	5,777	22	0	2,201	0	819	0	2,735
Louisiana Tech U.	332	5,734	1,498	36	784	276	2,152	441	547
Texas Christian U.	333	5,670	137	258	4,579	39	436	0	221
Morehouse C.	334	5,664	0	631	1,197	0	3,170	58	608
Montana Technological U.	335	5,600	3,091	208	417	231	655	134	864
Central State U.	336	5,576	668	0	261	23	481	4,103	40
Naval War C.	337	5,529	5,529	0	0	0	0	0	0
U.S. Army War C.	338	5,496	1,399	0	477	0	151	1,755	1,714
California State Polytechnic U., Pomona	339	5,407	299	83	493	239	2,714	474	1,105
Rhode Island C.	340	5,372	85	135	2,720	0	110	0	2,322
U. Colorado Colorado Springs	341	5,345	1,510	142	549	3	3,082	0	59
Ball State U.	342	5,302	0	0	3,560	20	610	164	948
U. Hawaii, Hilo	343	5,292	262	47	806	92	600	392	3,093
Wesleyan U.	344	5,267	626	0	1,700	508	1,885	0	548
U. Tennessee, Chattanooga	345	5,214	1,149	762	128	0	2,674	22	479
Montclair State U.	346	5,189	0	0	1,469	153	2,886	5	676
Tarleton State U.	347	5,055	0	0	0	0	387	4,523	145
California State U., Monterey Bay	348	5,051	119	0	345	1,656	2,163	342	426
Sam Houston State U.	349	4,936	137	0	913	0	850	658	2,378
Fordham U.	350	4,856	356	65	2,651	0	836	44	904
U. Baltimore	351	4,853	0	36	0	10	201	0	4,606
Kentucky State U.	352	4,743	0	0	0	4	124	4,615	0
U. Detroit Mercy	353	4,663	387	0	4,164	0	112	0	0
MGH Institute of Health Professions	354	4,628	0	0	4,628	0	0	0	0
CUNY, Brooklyn C.	355	4,623	0	23	3,333	0	1,151	78	38

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
U. Missouri, Saint Louis	356	4,573	96	0	2,983	21	924	136	413
U. Washington, Tacoma	357	4,553	273	29	471	118	1,394	24	2,244
C. Charleston	358	4,485	0	0	409	2,136	1,004	157	779
Middle Tennessee State U.	359	4,347	163	49	423	169	1,409	1,230	904
Northwest Indian C.	360	4,298	0	0	849	227	881	120	2,221
West Virginia State U.	361	4,278	0	0	0	14	85	3,827	352
South Carolina State U.	362	4,270	0	845	1,321	78	1,770	139	117
Southern U. and A&M C., Agricultural Research and Extension Center	363	4,261	0	0	140	0	0	4,121	0
Western Illinois U.	364	4,032	1,983	153	154	0	37	1,650	55
U. Washington, Bothell	365	4,009	473	0	440	0	2,856	45	195
Dakota State U.	366	3,976	2,434	0	0	0	1,542	0	0
Arkansas State U., Jonesboro	367	3,932	0	113	590	9	1,632	863	725
National Defense U.	368	3,920	3,920	0	0	0	0	0	0
Barnard C.	369	3,758	0	425	1,123	70	2,140	0	0
DePaul U.	370	3,757	0	20	1,830	75	1,688	0	144
Citadel Military C. South Carolina	371	3,741	2,507	0	80	72	718	0	364
Salisbury U.	372	3,734	0	0	989	0	591	109	2,045
Chicago State U.	373	3,699	0	0	59	210	3,430	0	0
Hope C.	374	3,691	0	25	1,908	140	1,370	0	248
U. New England	375	3,660	0	107	3,296	0	176	4	77
CUNY, Lehman C.	376	3,652	69	139	1,725	231	1,483	2	3
U. Wisconsin-Superior	377	3,635	0	0	0	1	28	0	3,606
Langston U.	378	3,616	600	0	269	175	60	2,495	17
Southern U. and A&M C., Baton Rouge	379	3,595	255	172	432	163	2,492	5	76
Youngstown State U.	380	3,533	2,301	24	393	69	611	0	135
Fisk U.	381	3,486	533	19	329	50	2,199	0	356
Norfolk State U.	382	3,398	809	57	85	0	2,413	0	34
Oklahoma State U., Center for Health Sciences	383	3,366	85	0	2,759	0	24	94	404
Bowie State U.	384	3,351	319	177	1,143	525	845	103	239
Rutgers, State U. New Jersey, Camden	385	3,349	129	184	824	0	1,123	0	1,089
U. Arkansas, Pine Bluff	386	3,306	131	0	141	11	125	2,790	108
Kennesaw State U.	387	3,290	157	78	1,592	21	1,217	45	180
Gallaudet U.	388	3,287	0	0	2,167	20	795	0	305
Pennsylvania State U., Behrend	389	3,262	71	5	25	0	613	30	2,518
Southern Illinois U., Edwardsville	390	3,250	320	24	1,214	0	890	130	672
U. North Texas, Health Science Center	391	3,172	63	0	2,812	0	0	0	297

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
Purdue U., Northwest	392	3,171	495	1,193	153	31	697	66	536
California State U., Dominguez Hills	393	3,156	592	1	887	0	1,308	0	368
Western Kentucky U.	394	3,127	35	87	1,220	159	611	536	479
New York Institute of Technology	395	2,988	384	0	1,639	0	964	1	0
Alabama State U.	396	2,930	340	0	971	213	1,349	0	57
CUNY, C. Staten Island	397	2,916	57	0	1,026	52	1,662	0	119
Wellesley C.	398	2,915	0	0	1,215	390	1,310	0	0
U. San Diego	399	2,911	1,251	0	11	9	1,154	0	486
Sonoma State U.	400	2,889	92	0	7	1,499	1,061	0	230
James Madison U.	401	2,884	56	12	650	89	1,960	17	100
Amherst C.	402	2,862	0	0	602	131	2,113	16	0
Towson U.	403	2,844	1,090	0	241	29	1,053	177	254
Loyola Marymount U.	404	2,824	113	0	748	0	727	8	1,228
U. Central del Caribe	405	2,807	0	0	2,807	0	0	0	0
Haverford C.	406	2,722	1,298	0	363	261	800	0	0
Pacific U.	407	2,672	0	0	1,434	0	883	0	355
Hawaii Pacific U.	408	2,667	0	0	1,372	0	420	222	653
California State U., Bakersfield	409	2,665	0	0	0	0	661	118	1,886
Santa Clara U.	410	2,660	299	15	606	186	1,250	0	304
Long Island U.	411	2,652	0	0	1,826	0	530	256	40
Occidental C.	412	2,622	0	0	138	53	1,908	98	425
Georgia Southern U.	413	2,605	90	194	720	26	1,028	0	547
U. North Carolina, Asheville	414	2,600	0	0	1,398	34	378	196	594
Northern Kentucky U.	415	2,596	0	0	1,285	100	428	5	778
Fort Lewis C.	416	2,590	0	6	573	51	1,377	150	433
Appalachian State U.	417	2,567	151	2	258	31	1,604	173	348
Winthrop U.	418	2,542	0	0	326	0	394	0	1,822
Bucknell U.	419	2,539	46	3	638	181	1,540	6	125
Spelman C.	419	2,539	731	16	347	23	1,308	0	114
U. Michigan, Dearborn	421	2,537	53	347	641	0	1,190	0	306
CUNY, Graduate Center	422	2,535	0	0	344	0	1,865	0	326
Pace U.	423	2,534	70	529	263	0	1,672	0	0
U. of Health Sciences and Pharmacy in St. Louis	424	2,523	281	0	2,242	0	0	0	0
Saint Joseph's U.	425	2,520	165	0	1,211	0	826	0	318
Clark U.	426	2,500	5	61	471	53	1,302	197	411
St. John's U., New York	427	2,456	54	0	1,790	0	612	0	0

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
U. New Haven	428	2,447	590	41	161	50	788	0	817
Central Washington U.	429	2,429	381	0	8	564	1,067	1	408
California State Polytechnic U., Humboldt	430	2,421	0	0	23	0	337	1,256	805
Smith C.	431	2,403	50	0	699	0	1,307	0	347
Eastern Michigan U.	432	2,346	87	0	1,148	70	815	0	226
Saginaw Valley State U.	433	2,341	i 325	i 543	i 855	i 13	i 267	i 23	i 315
Texas Tech U., Health Sciences Center, El Paso	434	2,339	0	0	1,681	0	78	0	580
Tougaloo C.	435	2,336	i 163	i 51	i 787	i 34	i 1,111	i 17	i 173
California State U., Chico	436	2,312	236	0	63	0	1,474	175	364
Troy U.	437	2,296	0	0	0	0	72	88	2,136
Middlebury C.	438	2,281	54	0	1,079	65	1,036	42	5
Northeastern Illinois U.	439	2,224	0	0	1,365	0	839	20	0
U. Southern Maine	440	2,201	0	0	2,015	72	69	0	45
Toyota Technological Institute, Chicago	441	2,199	813	0	448	0	938	0	0
Murray State U.	442	2,176	0	80	280	6	1,102	29	679
Reed C.	443	2,139	i 134	i 41	i 841	i 22	i 921	i 10	i 170
U. Northern Iowa	444	2,132	617	90	544	88	637	112	44
West Texas A&M U.	445	2,123	96	739	0	0	676	268	344
Hofstra U.	446	2,118	33	0	250	0	1,799	0	36
Seton Hall U.	447	2,092	522	0	463	0	200	0	907
Dine C.	448	2,091	0	0	980	0	614	329	168
Texas Woman's U.	448	2,091	239	0	435	0	590	228	599
Morehead State U.	450	2,086	0	0	90	1,799	197	0	0
SUNY, C. of Optometry	451	2,080	0	0	2,080	0	0	0	0
U. Louisiana, Monroe	452	1,993	0	0	1,616	21	1	69	286
C. New Jersey	453	1,984	0	48	222	111	1,216	242	145
Harvey Mudd C.	454	1,956	116	0	31	0	1,801	0	8
St. Edward's U.	455	1,940	0	0	230	26	940	50	694
Carleton C.	456	1,914	0	0	208	28	1,618	0	60
Pennsylvania State U., Harrisburg	457	1,911	9	0	1,817	0	66	0	19
U. Nebraska, Kearney	458	1,900	0	0	1,168	22	533	0	177
William Paterson U.	459	1,896	0	0	621	0	174	0	1,101
CUNY, Baruch C.	460	1,894	24	298	658	7	869	0	38
Savannah State U.	461	1,881	378	216	617	0	254	0	416
U. Central Oklahoma	462	1,869	i 486	i 128	i 575	i 43	i 331	i 31	i 275
Johnson C. Smith U.	463	1,868	0	0	4	2	60	0	1,802

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
Bowdoin C.	464	1,867	0	0	732	95	911	0	129
Grand Valley State U.	465	1,819	0	0	991	64	378	18	368
U. Oklahoma, Tulsa	466	1,804	0	0	1,225	30	432	0	117
Indiana U. Pennsylvania	467	1,797	316	181	49	0	417	658	176
Bates C.	468	1,785	0	0	483	0	1,266	0	36
Texas A&M U.-Commerce	469	1,776	0	122	0	56	754	430	414
CUNY, New York City C. of Technology	470	1,769	401	0	167	2	1,199	0	0
Swarthmore C.	471	1,733	0	0	521	112	973	0	127
U. Central Arkansas	472	1,731	0	0	1,135	74	246	99	177
Western Carolina U.	473	1,727	0	0	838	9	316	157	407
Christopher Newport U.	474	1,701	78	211	62	437	721	0	192
Yeshiva U.	475	1,695	27	0	841	0	682	63	82
U. Northern Colorado	476	1,692	43	0	83	12	767	89	698
Franklin and Marshall C.	477	1,680	0	0	576	471	419	0	214
Black Hills State U.	478	1,676	0	0	1,016	0	582	0	78
Elizabeth City State U.	479	1,667	174	0	195	0	1,003	0	295
Fayetteville State U.	479	1,667	213	0	535	0	919	0	0
CUNY, York C.	481	1,659	63	557	647	42	350	0	0
California State U., Channel Islands	482	1,638	4	62	311	0	1,227	0	34
Texas A&M International U.	483	1,624	77	0	332	0	372	0	843
U. Richmond	483	1,624	0	81	137	365	843	185	13
Claremont Graduate U.	485	1,610	59	0	111	0	153	0	1,287
Midwestern U.	486	1,609	0	0	971	0	248	76	314
New England C. of Optometry	486	1,609	0	0	1,609	0	0	0	0
Des Moines U.	488	1,589	0	0	492	0	20	0	1,077
U. Texas, Tyler	489	1,585	385	0	546	0	528	9	117
Colgate U.	490	1,570	0	0	187	225	1,157	1	0
SUNY, Geneseo	491	1,564	0	507	281	78	644	50	4
Palmer C. of Chiropractic, Davenport	492	1,550	0	0	1,550	0	0	0	0
U. Texas of the Permian Basin	493	1,538	244	179	797	0	35	0	283
Mount Holyoke C.	494	1,511	0	0	393	56	910	0	152
Colby C.	495	1,466	0	0	117	19	1,096	194	40
Dillard U.	496	1,422	139	0	199	0	471	0	613
U. Ana G. Mendez, Gurabo	497	1,407	0	783	75	0	230	0	319
U. Alaska, Southeast	498	1,392	0	7	71	25	651	32	606
Colorado C.	499	1,371	0	0	0	0	868	8	495

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
Davidson C.	500	1,370	6	13	581	0	763	7	0
Roger Williams U.	501	1,351	44	0	373	0	707	41	186
U. of the Pacific	501	1,351	50	0	982	29	290	0	0
Trinity U.	503	1,345	0	0	770	30	513	16	16
U. Wisconsin-Oshkosh	504	1,336	0	0	811	0	265	0	260
Lafayette C.	505	1,300	56	62	150	49	983	0	0
SUNY, Buffalo State	506	1,299	3	23	0	0	550	15	708
New Mexico Highlands U.	507	1,288	356	30	121	66	386	110	219
Williams C.	508	1,286	81	21	380	39	629	8	128
Southeastern Louisiana U.	509	1,285	0	0	547	28	328	0	382
Furman U.	510	1,280	0	0	288	38	873	81	0
Utah Valley U.	510	1,280	0	0	95	41	1,075	39	30
Colorado State U., Pueblo	512	1,278	0	0	0	0	326	0	952
Hobart and William Smith Colleges	513	1,264	0	0	6	18	718	18	504
New School	514	1,261	0	41	197	0	774	0	249
Bryn Mawr C.	515	1,257	0	0	220	0	990	0	47
U. Wisconsin-Stevens Point	516	1,235	1	2	0	0	92	251	889
Butler U.	517	1,227	0	0	348	0	879	0	0
Pomona C.	518	1,217	84	0	403	89	641	0	0
Drake U.	519	1,211	0	99	616	105	349	42	0
U. Illinois, Springfield	520	1,210	0	0	37	14	21	28	1,110
Lake Superior State U.	521	1,184	0	0	0	0	0	0	1,184
Lamar U.	522	1,180	8	46	169	0	246	17	694
Clafin U.	523	1,179	198	450	283	0	248	0	0
Nevada State C.	524	1,167	0	0	994	0	173	0	0
Pittsburg State U.	524	1,167	0	0	243	32	49	50	793
U. Puerto Rico, Humacao	526	1,160	0	0	51	186	870	0	53
Seattle U.	527	1,143	0	0	186	0	934	23	0
Virginia Military Institute	528	1,137	1,040	0	0	29	17	38	13
Coastal Carolina U.	529	1,130	120	179	212	6	301	0	312
Albany C. of Pharmacy and Health Sciences	530	1,110	0	0	1,110	0	0	0	0
Lawrence Technological U.	531	1,109	1	520	0	0	317	0	271
U. of the Incarnate Word	532	1,078	656	0	189	0	233	0	0
Claremont McKenna C.	533	1,070	304	0	159	0	603	0	4
California State U., Stanislaus	534	1,056	0	0	181	0	664	0	211
Vassar C.	535	1,052	13	0	298	0	741	0	0

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
Trinity C., Hartford	536	1,049	0	0	781	13	255	0	0
U. Wisconsin-Green Bay	537	1,046	152 i	64 i	566 i	32 i	131 i	11 i	90 i
Abilene Christian U.	538	1,032	0	905	0	29	0	0	98
Kenyon C.	539	1,021	0	0	179	0	807	35	0
Alfred U.	540	1,008	581	233	0	16	177	0	1
La Sierra U.	541	972	0	0	0	0	0	0	972
Milwaukee School of Engineering	542	969	0	7	471	1	464	0	26
U. Wisconsin-La Crosse	543	968	22	0	103	10	203	24	606
Touro U., California	544	964	0	0	954	0	10	0	0
Macalester C.	545	943	0	0	75	29	799	16	24
Calvin U.	546	931	40	0	104	0	636	0	151
U. Houston-Downtown	547	903	37	0	98	0	139	0	629
Indiana State U.	548	894	0	104	170	38	143	0	439
U. Hartford	549	886	4	0	49	679	74	23	57
Pepperdine U.	550	883	0	0	151	0	609	0	123
Stephen F. Austin State U.	551	879	0	0	19	0	235	506	119
Austin Peay State U.	552	870	321	0	0	5	92	4	448
Skidmore C.	553	861	0	0	96	0	640	0	125
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	554	858	129	0	577	0	152	0	0
U. South Carolina, Aiken	555	857	0	136	214	0	325	10	172
Eastern Washington U.	556	855	0	217	114	0	181	0	343
West Chester U. Pennsylvania	557	854	204	0	266	33	252	18	81
Southern Connecticut State U.	558	848	0	13	365	106	240	49	75
U. Houston-Clear Lake	559	841	0	0	111	30	94	0	606
Erikson Institute	560	815	0	0	188	0	63	0	564
Franklin W. Olin C. of Engineering	561	809	16	0	56	106	540	0	91
Grambling State U.	561	809 i	55 i	0 i	0 i	0 i	428 i	0 i	326 i
CUNY, system office	563	798	0	0	0	0	798	0	0
Willamette U.	564	791	0	0	98	0	658	0	35
U. Virginia's C. Wise	565	786	0	0	108	0	621	8	49
U. Puget Sound	566	780	0	0	49	10	684	0	37
Northland C.	567	778 i	29 i	0 i	319 i	14 i	321 i	5 i	90 i
U. Puerto Rico, Cayey	568	757	0	0	670	19	68	0	0
SUNY, C. Brockport	569	751	4	0	0	70	146	5	526
Union C., Schenectady	570	750	0	0	5	29	716	0	0
Lewis and Clark C.	571	746	0	71	0	0	675	0	0

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
Northwestern State U. Louisiana	572	742	0	0	13	0	0	6	723
C. Wooster	573	737	78	0	102	0	536	14	7
U. North Georgia	574	734	480	0	0	7	247	0	0
Stockton U.	575	728	17	0	62	0	281	202	166
Augustana U.	576	724	0	0	435	59	230	0	0
Kean U.	577	715	0	0	110	0	326	0	279
Florida Polytechnic U.	578	706	19	215	122	6	291	0	53
Ithaca C.	579	703	0	0	388	28	287	0	0
U. Wisconsin-Eau Claire	580	681	0	51	298	0	330	0	2
Western New England U.	581	648	0	147	134	0	274	0	93
Keck Graduate Institute	582	643	0	0	643	0	0	0	0
Sul Ross State U.	583	623	i 98	i 31	i 159	i 23	i 124	i 104	i 84
Connecticut C.	584	620	77	0	339	0	138	0	66
East Stroudsburg U. Pennsylvania	585	598	0	0	0	0	470	62	66
SUNY, C. Plattsburgh	586	584	0	0	112	13	46	13	400
Alaska Pacific U.	587	581	0	0	0	48	326	20	187
Robert Morris U.	588	577	i 83	i 6	i 430	i 11	i 31	i 2	i 14
Minnesota State U., Mankato	589	575	91	4	25	18	214	145	78
Northern Michigan U.	590	571	0	0	34	0	178	0	359
Plymouth State U.	590	571	50	0	133	50	262	11	65
U. San Francisco	592	547	0	41	99	102	285	0	20
SUNY, Oswego	593	544	0	23	147	0	113	0	261
Monmouth U.	594	535	30	0	0	0	162	0	343
U. of St. Thomas (MN)	595	527	114	0	101	12	269	0	31
Central Connecticut State U.	596	511	0	0	43	87	29	0	352
Bentley U.	597	509	0	0	39	0	470	0	0
U. of Mary Washington	598	501	14	0	0	0	223	0	264
Edward Via C. of Osteopathic Medicine	599	482	16	0	466	0	0	0	0
West Virginia School of Osteopathic Medicine	600	468	0	0	468	0	0	0	0
Canisius C.	601	454	0	95	75	0	159	0	125
Manhattan C.	602	440	61	0	251	0	128	0	0
U. Wisconsin-Platteville	603	435	i 132	i 22	i 81	i 7	i 84	i 66	i 43
Whitman C.	604	434	5	0	0	0	429	0	0
Elon U.	605	428	48	0	235	0	145	0	0
St. Cloud State U.	606	401	9	0	1	0	288	24	79
Texas A&M U.-San Antonio	607	394	0	0	0	0	387	7	0

TABLE 26

Federally financed higher education R&D expenditures, ranked by all federal R&D expenditures, by federal agency: FY 2022

(Dollars in thousands)

Institution	Rank	All federal R&D expenditures	DOD	DOE	HHS	NASA	NSF	USDA	Other ^a
Marshall B. Ketchum U.	608	383 i	44 i	0 i	319 i	0 i	8 i	1 i	11 i
SUNY, Cobleskill	609	379	379	0	0	0	0	0	0
U. North Carolina, general administration	610	369	369	0	0	0	0	0	0
Oregon Institute of Technology	611	340	107 i	19 i	93 i	17 i	49 i	12 i	43 i
Suffolk U.	611	340	0	0	249	18	73	0	0
Hamilton C.	613	338	0	0	0	24	310	0	4
Albion C.	614	323 i	17 i	10 i	62 i	9 i	181 i	4 i	40 i
Purdue U., Fort Wayne	615	313	0	0	112	18	135	0	48
St. Catherine U.	616	300	0	0	256	0	44	0	0
California Lutheran U.	617	298	0	0	0	0	65	0	233
Azusa Pacific U.	618	282	0	0	269	13	0	0	0
Heidelberg U.	619	262	0	0	0	0	0	172	90
Grinnell C.	620	242	0	0	0	0	242	0	0
Framingham State U.	621	232 i	35 i	18 i	94 i	4 i	48 i	3 i	30 i
Pratt Institute	622	228	0	0	0	14	153	24	37
U. Charleston	623	217	0	0	217	0	0	0	0
Kettering U.	624	213	0	0	0	0	10	0	203
California State U., Maritime Academy	625	192	0	34	0	17	123	0	18
Marymount U.	626	178	0	0	17	0	161	0	0
U. California, Office of the President	627	158	0	0	0	0	0	149	9
Eastern Connecticut State U.	628	126	0	0	0	10	103	0	13
Mercyhurst U.	629	82	0	0	0	0	24	0	58
C. of Saint Benedict	630	51 i	3 i	0 i	21 i	0 i	23 i	0 i	4 i
Babson C.	631	45	0	0	0	0	29	0	16
Philadelphia C. of Osteopathic Medicine	632	40	0	0	40	0	0	0	0
Roseman U. of Health Sciences	633	30	0	0	30	0	0	0	0

i = imputed.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Includes all other agencies reported.^b Johns Hopkins University includes the Applied Physics Laboratory, with \$1,983,078 thousand in federally financed R&D expenditures in FY 2022.^c The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.^d The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical

Campus.

^e The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

Note(s):

Agency-specific rankings are available in [table 60](#) through [table 66](#). Institutions reporting zero federal expenditures for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 27

Higher education R&D expenditures funded by state and local governments, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
All institutions	-	4,907,199	76,545	218,642	2,929,174	26,951	109,478	47,240	167,433	85,366	891,234	355,136
U. Texas M. D. Anderson Cancer Center	1	297,033	0	0	277,338	8,340	2,599	4,083	4,673	0	0	0
Texas A&M U., College Station and Health Science Center	2	218,735	1,339	3,965	103,634	156	3,589	682	3,872	2,243	86,952	12,303
U. Florida	3	171,655	437	4,505	134,079	223	2,053	775	3,480	13	19,815	6,275
North Carolina State U.	4	130,707	1,805	8,608	74,352	2,373	4,341	0	1,706	6,458	27,886	3,178
Georgia Institute of Technology	5	117,204	1,952	5,058	9,568	3,896	7,988	1,831	479	0	84,066	2,366
U. Wisconsin-Madison	6	109,946	934	5,920	69,145	194	2,716	437	7,020	4,497	8,743	10,340
Arizona State U.	7	98,817	934	3,355	12,622	379	1,688	687	4,490	27,721	26,181	20,760
SUNY, Polytechnic Institute	8	97,519	0	0	0	0	0	0	0	0	97,519	0
Mississippi State U.	9	92,113	1,349	1,396	45,893	1,493	4,440	1,308	7,045	1,220	13,825	14,144
Rutgers, State U. New Jersey, New Brunswick	10	90,882	0	1,418	74,411	14	73	1,112	1,942	0	6,645	5,267
U. California, Los Angeles	11	89,554	0	1,814	77,001	24	1	594	4,421	716	3,680	1,303
Cornell U.	12	88,200	35	108	69,855	118	872	2,790	3,583	0	2,712	8,127
U. Texas Southwestern Medical Center	13	85,808	0	0	85,808	0	0	0	0	0	0	0
Virginia Polytechnic Institute and State U.	14	75,010	7,228	242	49,127	271	59	0	2,933	0	14,968	182
U. Minnesota, Twin Cities	15	73,329	490	1,992	56,522	298	387	659	1,849	250	9,167	1,715
U. California, Davis	16	71,806	204	6,865	41,507	21	340	0	1,040	0	20,867	962
Louisiana State U., Baton Rouge	17	69,770	720	1,344	53,603	228	818	59	1,806	0	10,425	767
Ohio State U.	18	66,409	11,842	96	36,608	0	0	361	1,174	268	10,899	5,161
U. Nebraska, Lincoln	19	61,070	1,382	24	50,391	1,377	625	524	318	98	5,411	920
U. California, San Diego	20	58,556	176	15,281	32,085	893	1,154	21	722	3	7,499	722
U. Georgia	21	55,206	0	2,887	48,197	0	0	66	3,027	0	161	868
Washington State U.	22	54,610	25	1,323	34,796	0	5,182	142	2,777	241	7,773	2,351
Oregon State U.	23	50,654	81	1,769	41,653	570	188	0	1,976	0	4,363	54
North Dakota State U.	24	50,066	22	7	44,469	0	172	0	1,354	1,778	2,181	83
U. Maryland ^a	25	49,950	542	780	20,819	3	105	0	694	0	17,770	9,237
U. Arkansas, Fayetteville	26	48,654	0	711	40,035	0	153	21	2,067	0	1,961	3,706
Pennsylvania State U., University Park and Hershey Medical Center	27	47,345	6	632	36,754	45	47	53	3,419	0	5,244	1,145
U. Texas Health Science Center, Houston	28	46,379	0	0	46,379	0	0	0	0	0	0	0
Michigan State U.	29	42,516	2	0	35,480	3	34	27	2,259	300	2,218	2,193
Kansas State U.	30	40,926	66	102	32,562	316	0	54	1,589	1,826	1,438	2,973
U. California, San Francisco	31	40,658	0	0	40,381	0	277	0	0	0	0	0
Purdue U., West Lafayette	32	39,511	0	0	17,242	0	6	0	441	0	16,597	5,225

TABLE 27

Higher education R&D expenditures funded by state and local governments, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. North Carolina, Chapel Hill	33	38,681	30	1,800	27,371	0	1,679	3,070	464	0	3,004	1,263
U. California, Berkeley	34	37,894	0	0	9,291	0	5,868	0	2,685	2,379	13,795	3,876
Iowa State U.	35	37,071	0	167	20,283	422	0	0	2,902	245	12,376	676
U. Idaho	36	35,703	69	1,827	26,463	0	214	0	1,231	1,694	3,385	820
U. Missouri, Columbia	37	35,573	93	0	31,790	26	0	0	2,979	0	190	495
Baylor C. of Medicine	38	35,155	0	0	35,155	0	0	0	0	0	0	0
Virginia Commonwealth U.	39	34,539	188	0	25,497	24	117	526	410	0	4,923	2,854
U. California, Office of the President	40	34,007	0	0	33,935	0	0	0	0	0	0	72
SUNY, U. Buffalo	41	33,635	432	258	22,307	6	29	3	243	0	4,556	5,801
Auburn U., Auburn	42	33,555	0	69	30,195	0	0	225	385	0	1,682	999
U. Kentucky	43	32,619	0	163	27,242	13	144	0	1,029	0	3,169	859
U. Texas, Austin	44	31,721	179	1,400	9,186	17	2,116	152	353	0	16,077	2,241
U. Arizona	45	30,993	1,880	1,860	13,515	0	2,751	153	944	4,631	4,929	330
Colorado State U., Fort Collins	46	30,749	31	1,325	24,652	100	166	69	1,949	79	1,903	475
Texas Tech U.	47	29,861	665	1,061	13,842	165	903	511	1,096	0	4,661	6,957
U. Kansas	48	29,376	0	740	3,643	0	339	249	61	0	1,013	23,331
U. Houston	49	28,999	369	2,444	4,275	233	5,400	1,675	1,295	4	8,028	5,276
U. Illinois, Urbana-Champaign	50	28,024	121	0	12,393	57	296	545	83	0	10,967	3,562
U. Texas Health Science Center, San Antonio	51	27,587	0	0	27,587	0	0	0	0	0	0	0
U. Texas, Arlington	52	27,482	2,617	2	3,692	1,283	2,187	21	16	0	14,939	2,725
U. Oklahoma, Norman and Health Science Center	53	26,614	0	987	21,194	0	118	0	1,661	0	1,803	851
U. North Dakota	54	26,441	137	261	302	0	202	60	39	60	25,314	66
U. Maryland Center for Environmental Science	55	26,071	0	23,446	1,423	0	789	0	141	271	0	1
Clemson U.	56	25,685	40	0	16,366	0	24	0	503	0	1,075	7,677
U. South Florida ^b	57	24,683	21	2,089	10,400	0	30	410	2,196	0	6,354	3,183
U. Colorado Anschutz Medical Campus ^c	58	24,575	0	0	23,987	0	0	0	0	0	54	534
Florida State U.	59	24,003	0	213	3,515	0	7,683	1,663	991	197	3,258	6,483
U. Pennsylvania	60	23,189	0	0	22,008	0	0	0	938	94	119	30
New Mexico State U.	61	23,036	0	984	20,805	0	158	0	6	2	1,081	0
Utah State U.	62	22,243	229	603	14,537	137	98	288	644	0	4,942	765
Oklahoma State U., Stillwater	63	21,322	22	528	15,046	0	120	383	1,220	355	2,153	1,495
Stanford U.	64	20,064	0	547	17,682	0	21	0	0	0	999	815
Florida International U.	65	20,013	233	1,672	1,664	0	0	7,605	1,030	1,054	1,827	4,928

TABLE 27

Higher education R&D expenditures funded by state and local governments, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Maine	66	19,449	159	4,722	4,990	0	1,452	24	380	2,542	4,599	581
U. Washington, Seattle	67	19,188	77	2,390	7,179	0	54	0	121	0	4,276	5,091
Wichita State U.	68	18,882	0	0	12,347	0	0	0	236	0	6,255	44
U. Miami	69	18,607	0	1,040	17,509	0	0	17	0	0	41	0
Montana State U., Bozeman	70	18,147	0	0	18,020	0	0	0	0	0	15	112
New York U.	71	17,982	0	0	14,765	0	0	0	17	0	1,026	2,174
U. Hawaii, Manoa	72	17,799	0	407	15,720	0	0	0	100	86	1,040	446
U. Alabama, Tuscaloosa	73	17,040	7,302	1,389	24	956	8	68	617	0	5,219	1,457
Texas Tech U., Health Sciences Center	74	16,937	0	0	15,565	0	0	0	0	0	0	1,372
U. Wisconsin-Milwaukee	75	16,504	243	3,473	2,004	4	1,590	604	1,874	1,452	2,592	2,668
South Dakota State U.	76	16,267	0	155	13,412	0	117	0	907	0	1,509	167
SUNY, Stony Brook U.	77	16,238	4	6,657	1,266	24	423	0	72	3,813	3,940	39
U. Texas, El Paso	78	15,999	330	310	6,200	165	1,387	561	326	2,025	2,435	2,260
U. Tennessee, Knoxville	79	15,785	0	39	1,630	92	1,021	10	969	4,524	7,288	212
U. Arkansas for Medical Sciences	80	15,287	0	0	15,287	0	0	0	0	0	0	0
U. California, Irvine	81	15,008	107	824	9,954	14	392	3	807	0	2,602	305
New Jersey Institute of Technology	82	14,576	0	0	12,091	0	84	0	0	0	1,417	984
Thomas Jefferson U.	83	14,252	0	0	14,252	0	0	0	0	0	0	0
SUNY, C. of Environmental Science and Forestry	84	14,020	110	290	11,981	0	67	1,000	6	0	450	116
U. Texas, Dallas	85	13,882	98	25	4,847	46	2,039	1,359	469	721	3,157	1,121
U. Texas, San Antonio	86	13,795	2,611	329	2,715	0	993	9	886	117	2,239	3,896
U. South Carolina, Columbia	87	13,021	26	0	750	38	1,028	83	5,495	0	1,046	4,555
Old Dominion U.	88	12,866	452	513	1,720	66	1,486	196	835	0	6,322	1,276
U. Nebraska, Medical Center	89	12,652	0	0	12,652	0	0	0	0	0	0	0
U. Massachusetts, Amherst	90	12,632	259	33	5,198	0	0	36	0	0	4,225	2,881
U. Southern Mississippi	91	11,944	0	2,566	2,429	0	2,242	0	440	0	0	4,267
CUNY, City C.	92	11,892	0	225	532	0	0	0	0	0	9,883	1,252
U. Delaware	93	11,552	33	1,456	5,138	0	132	0	1,091	68	3,509	125
U. Louisville	94	11,543	18	0	10,187	0	0	49	83	0	565	641
U. Southern California	95	11,421	0	906	9,149	0	0	0	401	0	281	684
U. Pittsburgh, Pittsburgh	96	10,753	47	164	9,866	0	0	0	240	2	434	0
U. Louisiana, Lafayette	97	10,541	3,096	80	2,301	70	208	20	647	1,343	2,196	580
New Mexico Institute of Mining and Technology	98	10,532	615	6,959	35	0	0	0	0	0	2,628	295

TABLE 27

Higher education R&D expenditures funded by state and local governments, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
California State U., Sacramento	99	10,203	0	1	250	2	0	3	1,620	4,594	3,691	42
Texas A&M U.-Corpus Christi	100	9,903	1	3,527	1,078	1	22	1	0	302	3,852	1,119
Wayne State U.	101	9,796	43	0	8,496	0	1	0	67	10	493	686
West Virginia U.	102	9,769	0	15	8,129	0	211	57	208	205	811	133
U. Virginia, Charlottesville	103	9,520	887	20	3,021	0	193	0	133	0	412	4,854
Wake Forest U.	104	9,209	0	0	9,198	0	0	0	0	0	11	0
U. Massachusetts, Boston	105	8,852	0	27	136	0	0	80	1,232	0	0	7,377
U. Alabama, Birmingham	106	8,816	0	0	4,874	0	657	64	21	0	52	3,148
U. California, Riverside	107	8,566	58	545	3,370	16	0	60	576	0	3,869	72
U. Central Florida	108	8,500	436	4	2,470	0	164	5	92	0	2,438	2,891
U. Texas Medical Branch	109	8,481	0	0	8,456	0	0	0	0	0	25	0
U. Memphis	110	8,365	175	1,197	966	63	34	1,023	481	0	2,872	1,554
U. Texas Health Science Center, Tyler	111	8,127	0	0	8,127	0	0	0	0	0	0	0
Temple U.	112	8,109	0	250	5,062	0	0	13	639	103	295	1,747
San Jose State U.	113	7,796	0	5,016	47	55	9	0	21	0	56	2,592
Johns Hopkins U. ^d	114	7,785	301	186	6,728	0	0	0	0	0	297	273
U. Nevada, Reno	115	7,477	72	1,546	2,698	0	258	0	0	46	2,709	148
Florida Atlantic U.	116	7,443	79	77	3,072	31	44	187	30	0	3,744	179
U. Maryland, Baltimore County	117	7,264	511	45	148	0	0	0	5,683	0	515	362
U. California, Santa Cruz	118	7,101	0	4,051	1,565	0	384	0	261	0	840	0
Rochester Institute of Technology	119	7,076	393	0	68	0	982	0	1,468	0	4,039	126
Northern Arizona U.	120	7,055	272	233	4,099	0	1,551	25	0	267	537	71
U. Illinois, Chicago	121	6,914	1,879	0	3,423	0	0	0	563	0	50	999
U. North Carolina, Wilmington	122	6,644	0	3,468	2,987	0	0	0	115	0	0	74
Case Western Reserve U.	123	6,503	126	0	6,328	0	0	0	6	0	43	0
U. New Mexico	124	6,491	0	0	4,355	0	0	0	1,756	0	165	215
Georgia State U.	125	6,415	1	113	2,594	0	28	182	1,024	0	0	2,473
Columbia U. in the City of New York	126	6,391	99	179	3,811	0	308	0	228	0	1,101	665
Texas A&M U.-Kingsville	127	6,241	0	60	4,983	0	192	0	0	0	877	129
U. California, Santa Barbara	128	6,212	110	4,463	568	0	385	0	25	0	1	660
U. Tennessee, Health Science Center	129	6,205	0	0	5,565	0	0	0	0	0	640	0
Montana Technological U.	130	6,085	18	5,912	147	0	0	0	0	0	8	0
U. Cincinnati	131	6,044	1,593	0	2,815	0	0	0	595	0	964	77

TABLE 27

Higher education R&D expenditures funded by state and local governments, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. California, Merced	132	5,992	0	554	2,186	0	5	20	92	41	2,977	117
U. Iowa	133	5,957	0	1,399	1,608	0	208	0	15	0	1,560	1,167
U. Minnesota, Duluth	134	5,928	0	44	5,434	0	2	0	1	0	404	43
George Mason U.	135	5,816	2,196	114	292	0	80	21	299	0	2,672	142
U. Wyoming	136	5,592	178	1,500	1,529	99	0	0	181	0	1,620	485
U. Rhode Island	137	5,508	0	1,583	1,869	0	0	4	107	879	390	676
U. Colorado Boulder	138	5,422	51	20	468	0	1,478	0	396	11	1,464	1,534
U. Texas Rio Grande Valley	139	5,380	0	5	4,726	0	8	122	63	0	0	456
Harvard U.	140	5,379	506	51	2,266	0	0	0	2,027	0	477	52
Rhode Island C.	141	5,301	0	0	4	0	0	0	13	0	0	5,284
SUNY, Binghamton U.	142	5,225	171	22	286	0	802	17	43	0	3,884	0
U. Alabama, Huntsville	143	5,091	1	961	67	0	22	0	9	0	706	3,325
Rice U.	144	5,071	427	0	1,663	114	853	0	291	0	1,723	0
California Institute of Technology	145	5,009	0	3,777	0	0	1,223	0	0	0	0	9
U. North Texas, Denton	146	5,007	48	60	937	0	6	6	14	0	3,936	0
Alcorn State U.	147	4,977	i 0	i 0	i 2,222	i 0	i 0	i 0	i 2,754	i 0	i 1	i 0
San Diego State U.	148	4,812	311	37	2,376	0	0	952	0	0	909	227
Rowan U.	149	4,720	0	216	3,099	0	0	91	0	0	1,314	0
Medical U. South Carolina	150	4,565	0	0	4,565	0	0	0	0	0	0	0
Oregon Institute of Technology	151	4,431	i 124	i 331	i 3,024	i 82	i 0	i 118	i 0	i 0	i 752	i 0
U. Denver	152	4,419	0	0	0	0	130	114	0	0	161	4,014
Carnegie Mellon U.	153	4,379	483	0	131	0	12	144	0	0	3,609	0
Kentucky State U.	154	4,357	0	0	4,357	0	0	0	0	0	0	0
Teachers C., Columbia U.	154	4,357	0	0	742	0	0	0	3,615	0	0	0
West Texas A&M U.	156	4,302	96	0	4,047	0	0	0	0	150	0	9
Tennessee Technological U.	157	4,256	407	0	57	0	0	0	0	0	3,792	0
California State Polytechnic U., Humboldt	158	4,248	0	0	491	0	602	0	193	152	2,605	205
U. Connecticut	159	4,242	313	17	603	0	0	167	553	0	1,738	851
Tulane U.	160	4,215	0	206	3,131	55	0	0	363	0	406	54
William & Mary	161	4,124	347	2,313	44	0	0	0	772	0	0	648
Prairie View A&M U.	162	4,037	16	0	1,654	2	19	32	42	0	48	2,224
Indiana U., Bloomington	163	3,951	0	0	2,803	0	0	0	1,050	0	0	98
U. New Hampshire	164	3,938	0	359	3,277	0	0	0	31	0	179	92

TABLE 27

Higher education R&D expenditures funded by state and local governments, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Tarleton State U.	165	3,927	369	1,815	1,194	0	6	0	0	35	47	461
North Carolina A&T State U.	166	3,899	0	0	71	0	18	0	0	0	3,625	185
Syracuse U.	167	3,890	28	0	233	0	0	0	0	0	1,913	1,716
Texas State U.	168	3,810	0	151	827	0	92	0	352	0	250	2,138
Tufts U.	169	3,780	0	139	794	0	3	176	634	0	1,777	257
Creighton U.	170	3,702	110 i	0 i	2,742 i	28 i	188 i	40 i	230 i	0 i	0 i	364 i
Icahn School of Medicine at Mount Sinai	171	3,652	0	0	3,652	0	0	0	0	0	0	0
Lamar U.	172	3,639	66	0	171	0	34	0	145	0	3,005	218
Nova Southeastern U.	173	3,571	0	3,571	0	0	0	0	0	0	0	0
CUNY, John Jay C. of Criminal Justice	174	3,516	0	0	0	0	0	5	0	0	0	3,511
Rensselaer Polytechnic Institute	175	3,485	0	0	38	0	583	0	0	0	2,630	234
Drexel U.	176	3,418	0	0	2,884	0	93	22	5	11	244	159
Salisbury U.	177	3,405	6	706	1,203	0	0	0	408	0	0	1,082
CUNY, Hunter C.	178	3,367	51	739	748	0	184	28	1,110	0	0	507
U. Utah	179	3,347	413	0	687	1	0	0	568	13	1,010	655
Arkansas State U., Jonesboro	180	3,325	136	0	2,889	0	139	0	19	0	82	60
Tuskegee U.	181	3,206	0	0	3,206	0	0	0	0	0	0	0
California Polytechnic State U., San Luis Obispo	182	3,155	19	96	1,745	35	92	150	24	42	874	78
U. North Carolina, general administration	183	3,153	852	0	250	0	0	0	0	0	1,964	87
Worcester Polytechnic Institute	184	3,041	0	0	0	0	386	0	35	0	2,619	1
Central State U.	185	3,039	0	0	3,039	0	0	0	0	0	0	0
Vanderbilt U. and Vanderbilt U. Medical Center	186	2,954	0	0	1,780	0	0	0	0	0	5	1,169
Oakland U.	187	2,911	221	0	437	0	1,020	19	0	0	1,008	206
U. Southern Maine	188	2,893	1,549	10	651	0	0	0	416	20	65	182
U. Massachusetts, Medical School	189	2,878	0	0	2,878	0	0	0	0	0	0	0
Texas Tech U., Health Sciences Center, El Paso	190	2,856	0	0	2,843	0	0	0	0	0	0	13
Boise State U.	191	2,842	742	9	537	0	822	0	66	0	608	58
Morgan State U.	192	2,835	26	0	879	0	0	0	29	0	1,790	111
Southern U. and A&M C., Agricultural Research and Extension Center	193	2,765	0	0	2,765	0	0	0	0	0	0	0
Clarkson U.	194	2,713	4	97	74	284	862	23	0	0	951	418
Fort Valley State U.	195	2,704	0	0	2,704	0	0	0	0	0	0	0
Portland State U.	196	2,635	0	39	662	0	0	29	1,206	1	417	281
U. Massachusetts, Lowell	197	2,599	0	0	106	0	545	28	306	0	1,548	66

TABLE 27

Higher education R&D expenditures funded by state and local governments, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Louisiana Tech U.	198	2,532	308	0	589	35	280	38	0	0	1,239	43
Massachusetts Institute of Technology	199	2,523	0	0	0	0	0	0	0	0	2,511	12
Lincoln U., Jefferson City	200	2,512	0	0	2,414	0	0	0	98	0	0	0
California State U., San Bernardino	201	2,445	0	0	610	0	118	949	136	0	534	98
U. Nebraska, Omaha	201	2,445	465	11	675	46	20	50	484	219	306	169
U. Colorado Denver ^C	203	2,422	46	0	1,030	0	0	0	18	0	323	1,005
Texas Woman's U.	204	2,386	2	0	683	123	420	415	301	0	0	442
Yale U.	205	2,364	0	0	2,364	0	0	0	0	0	0	0
Lehigh U.	206	2,342	0	0	51	0	0	0	0	0	2,266	25
George Washington U.	207	2,264	0	0	2,071	0	0	0	76	0	19	98
Stevens Institute of Technology	207	2,264	0	0	0	0	0	0	0	0	1,728	536
SUNY, Upstate Medical U.	209	2,261	0	0	2,261	0	0	0	0	0	0	0
Idaho State U.	210	2,223	119	301	626	2	114	50	22	254	713	22
Baylor U.	211	2,211	10	474	975	0	1	399	89	0	197	66
U. Nevada, Las Vegas	212	2,174	0	153	779	0	29	25	57	0	264	867
U. Rochester	213	2,037	0	205	815	0	964	0	0	0	0	53
San Francisco State U.	214	2,013	0	696	937	8	0	317	2	14	25	14
Virginia State U.	215	2,006	0	0	1,816	0	0	0	0	0	8	182
Miami U.	216	1,997	0	2	1,652	15	0	29	33	0	113	153
U. South Dakota	217	1,919	71	0	776	0	802	0	0	100	135	35
Marshall U.	218	1,909	0	3	806	0	76	20	0	0	272	732
Florida Gulf Coast U.	219	1,823	0	688	780	17	0	0	0	0	76	262
Northeastern U.	220	1,747	0	0	509	0	158	0	268	0	772	40
Seton Hall U.	221	1,737	0	0	0	0	0	0	0	0	0	1,737
Colorado State U., Pueblo	222	1,721	0	0	253	0	0	0	0	0	0	1,468
U. Oklahoma, Tulsa	223	1,709	0	0	392	0	0	17	0	0	438	862
U. Guam	224	1,682	0	0	1,682	0	0	0	0	0	0	0
Alfred U.	225	1,659	0	0	0	0	0	0	0	0	1,659	0
Bowling Green State U.	226	1,649	0	40	715	0	0	0	797	41	0	56
West Virginia State U.	227	1,601	0	0	1,601	0	0	0	0	0	0	0
U. Michigan, Ann Arbor	228	1,592	0	0	321	0	0	0	534	0	611	126
Rush U.	229	1,548	0	0	1,548	0	0	0	0	0	0	0
CUNY, system office	230	1,528	0	0	0	0	0	0	0	0	1,528	0

TABLE 27

Higher education R&D expenditures funded by state and local governments, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Massachusetts, Dartmouth	231	1,519	10	1,456	0	0	53	0	0	0	0	0
Florida A&M U.	232	1,510	0	119	1,017	0	0	1	0	0	51	322
U. Alaska, Fairbanks	233	1,508	1	856	457	0	0	0	18	17	159	0
South Dakota School of Mines and Technology	234	1,467	0	0	0	0	213	0	0	0	1,254	0
U. Arkansas, Pine Bluff	235	1,449	0	0	1,402	0	47	0	0	0	0	0
Colorado School of Mines	236	1,446	28	71	67	0	0	0	0	0	1,167	113
U. Baltimore	237	1,445	26	0	0	0	0	0	1,419	0	0	0
Boston C.	238	1,439	0	0	24	0	0	0	1,341	0	0	74
Scripps Research Institute	239	1,424	0	0	1,424	0	0	0	0	0	0	0
California State U., Monterey Bay	240	1,404	451	512	419	0	0	0	0	0	0	22
Villanova U.	240	1,404	0	22	6	0	0	0	0	0	1,376	0
U. Vermont	242	1,379	25	146	275	0	0	0	18	810	96	9
CUNY, Queens C.	243	1,362	0	1	1,361	0	0	0	0	0	0	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	244	1,348	0	793	0	0	0	8	65	0	212	270
Dartmouth C. and Dartmouth Hitchcock Medical Center	245	1,344	0	0	1,203	0	0	141	0	0	0	0
Loyola Marymount U.	246	1,334	0	0	0	0	0	863	309	0	0	162
Eastern Washington U.	247	1,332	0	0	0	0	0	0	1,332	0	0	0
Stephen F. Austin State U.	248	1,326	0	0	791	0	56	0	96	0	0	383
Oregon Health and Science U.	249	1,322	0	0	1,322	0	0	0	0	0	0	0
Kent State U.	250	1,308	1	0	364	42	29	124	135	121	489	3
U. Tennessee, Chattanooga	251	1,291	76	0	195	36	8	0	232	73	671	0
SUNY, U. Albany	252	1,234	0	938	201	23	0	0	0	0	62	10
U. Alaska, Anchorage	253	1,227	0	149	235	0	56	0	197	139	265	186
U. Toledo	254	1,211	0	107	270	0	79	0	0	0	304	451
Saint Joseph's U.	255	1,205	0	0	140	0	0	134	0	0	0	931
Howard U.	256	1,197	0	0	591	131	112	0	68	0	295	0
Austin Peay State U.	257	1,186	0	418	352	0	0	0	0	0	0	416
Eastern Virginia Medical School	257	1,186	0	0	1,186	0	0	0	0	0	0	0
Florida Institute of Technology	259	1,170	198	382	231	0	33	0	0	0	262	64
U. North Carolina, Charlotte	260	1,158	0	45	335	0	0	19	0	0	548	211
Texas Southern U.	261	1,150	0	0	970	0	100	0	0	0	0	80
Georgetown U.	262	1,144	0	0	355	0	0	0	536	0	0	253
Southern Methodist U.	263	1,106	0	222	17	52	0	0	0	0	62	753

TABLE 27

Higher education R&D expenditures funded by state and local governments, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
California State U., Fresno	264	1,102	0	0	407	83	4	0	88	0	436	84
U. Wisconsin-Stevens Point	265	1,074	0	204	870	0	0	0	0	0	0	0
Western Washington U.	266	1,063	0	490	1	0	29	0	10	100	209	224
U. Oregon	267	1,061	0	4	212	0	0	189	23	0	76	557
Lawrence Technological U.	268	1,037	0	0	0	0	0	0	0	0	218	819
Ohio U.	269	1,035	0	102	72	0	0	0	91	0	770	0
Brigham Young U., Provo	270	1,032	0	75	149	0	0	31	0	0	482	295
Brandeis U.	271	1,027	0	0	15	0	0	0	227	0	0	785
U. of the Virgin Islands	272	1,010	0	121	889	0	0	0	0	0	0	0
U. Puerto Rico, Medical Sciences Campus	273	1,005	0	0	1,005	0	0	0	0	0	0	0
Michigan Technological U.	274	999	0	370	0	0	3	0	12	180	434	0
U. South Alabama	275	998	0	758	32	0	0	0	0	0	208	0
Pratt Institute	276	995	0	0	0	0	0	0	0	0	0	995
New York Medical C.	277	985	0	0	985	0	0	0	0	0	0	0
California State U., Northridge	278	984	0	0	895	0	0	0	0	0	0	89
California State U., San Marcos	279	980	0	0	843	0	0	112	0	22	0	3
Hobart and William Smith Colleges	280	955	0	0	955	0	0	0	0	0	0	0
North Carolina Central U.	281	954	0	40	211	0	16	0	64	33	279	311
Coastal Carolina U.	282	948	0	857	22	0	2	0	0	0	12	55
Duquesne U.	283	928	0	0	303	0	0	0	0	0	0	625
U. of the District of Columbia	284	920	0	88	832	0	0	0	0	0	0	0
Texas A&M International U.	285	917	0	34	77	0	15	0	1	90	14	686
American U.	286	874	0	0	0	0	0	0	178	121	0	575
Western New England U.	287	869	0	0	0	0	0	0	0	0	869	0
Chapman U.	288	854	0	0	15	0	0	183	0	0	0	656
Cleveland State U.	289	848	0	0	262	0	0	42	0	207	183	154
California State Polytechnic U., Pomona	290	846	12	0	530	0	53	0	0	0	251	0
Northwestern State U. Louisiana	291	838	101	0	170	23	0	7	8	0	7	522
U. Virginia's C. Wise	292	837	4	0	2	0	0	0	10	0	26	795
SUNY, Cobleskill	293	828	0	0	0	0	0	0	0	0	828	0
Duke U.	294	802	0	0	780	0	0	0	0	0	0	22
Southern Illinois U., Carbondale	294	802	11	6	485	0	107	0	139	54	0	0
James Madison U.	296	798	267	0	99	29	1	0	1	0	283	118

TABLE 27

Higher education R&D expenditures funded by state and local governments, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Delaware State U.	330	598	0	0	598	0	0	0	0	0	0	0
Medical C. Wisconsin	331	586	0	0	586	0	0	0	0	0	0	0
Xavier U. Louisiana	332	585	23	0	493	0	69	0	0	0	0	0
California State U., Long Beach	333	572	0	18	264	0	18	0	0	0	183	89
Tennessee State U.	334	567	384	0	0	0	0	0	0	0	0	183
Southern Illinois U., Edwardsville	335	556	5	0	507	0	5	0	2	0	13	24
Wellesley C.	336	552	0	0	0	0	0	230	0	0	0	322
U. North Carolina, Asheville	337	542	0	0	211	0	0	0	0	192	0	139
Western Kentucky U.	338	531	0	0	402	0	23	0	20	0	86	0
U. Nebraska, Kearney	339	530	0	0	125	0	217	34	8	0	0	146
Kennesaw State U.	340	529	61	0	132	26	0	0	25	37	151	97
U. North Carolina, Greensboro	341	524	0	4	72	0	22	42	0	0	0	384
Emory U.	342	522	0	0	504	0	0	0	18	0	0	0
U. San Diego	343	510	0	0	5	0	0	0	6	0	11	488
Middle Tennessee State U.	344	509	0	0	69	0	0	0	1	0	0	439
Monmouth U.	345	505	0	503	2	0	0	0	0	0	0	0
U. New Haven	346	504	0	7	0	1	0	0	496	0	0	0
Pacific U.	347	498	0	0	334	0	0	0	0	0	0	164
Pennsylvania State U., Harrisburg	348	491	3	0	43	0	0	0	120	0	0	325
Utah Valley U.	349	490	0	0	58	0	317	0	0	0	115	0
Illinois State U.	350	487	0	53	155	0	117	10	0	0	66	86
U. Notre Dame	350	487	0	0	204	0	2	0	21	0	94	166
Occidental C.	352	484	0	270	54	0	93	16	51	0	0	0
Fayetteville State U.	353	479	239	0	240	0	0	0	0	0	0	0
U. Northern Iowa	354	465	0	0	99	0	13	0	323	0	0	30
U. Puerto Rico, Mayaguez	355	455	0	12	0	0	0	0	61	0	382	0
Morehouse School of Medicine	356	440	0	0	440	0	0	0	0	0	0	0
U. Washington, Tacoma	357	432	0	432	0	0	0	0	0	0	0	0
Morehead State U.	358	431	0	0	225	0	0	41	0	0	165	0
Rutgers, State U. New Jersey, Newark	359	421	0	8	312	0	0	0	32	0	0	69
Indiana U.-Purdue U., Indianapolis	360	413	0	103	83	0	0	0	120	0	71	36
U. of the Pacific	360	413	70	0	343	0	0	0	0	0	0	0
East Carolina U.	362	408	13	25	218	0	0	0	0	0	128	24

TABLE 27

Higher education R&D expenditures funded by state and local governments, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Houston-Clear Lake	362	408	4	0	343	0	1	2	5	0	0	53
U. of St. Thomas (MN)	364	407	4	0	94	0	123	0	0	0	186	0
Sonoma State U.	365	406	0	92	235	0	25	0	34	12	8	0
Pennsylvania State U., Behrend	366	405	5	133	173	0	0	0	12	0	61	21
Woods Hole Oceanographic Institution	367	398	0 i	224 i	0	0	0	0	0	0	174 i	0
U. Wisconsin-Eau Claire	368	396	0	84	12	0	300	0	0	0	0	0
Mercyhurst U.	369	387	0	0	23	0	0	0	364	0	0	0
Desert Research Institute	370	385	0	385	0	0	0	0	0	0	0	0
C. Charleston	371	383	0	56	15	0	1	0	44	0	0	267
Grand Valley State U.	372	378	0	142	81	0	12	0	0	0	64	79
Purdue U., Fort Wayne	373	371	0	0	16	0	0	0	33	0	6	316
CUNY, Advanced Science Research Center	374	365	0	70	0	0	295	0	0	0	0	0
Embry-Riddle Aeronautical U.	375	358	155	0	0	0	0	0	0	0	201	2
U. Central del Caribe	376	356	0	0	356	0	0	0	0	0	0	0
Saint Louis U.	377	355	5	34	305	0	0	0	0	0	0	11
Claremont Graduate U.	378	342	0	0	0	0	0	0	33	0	0	309
U. Wisconsin-Platteville	379	340 i	7 i	0 i	159 i	4 i	19 i	6 i	33 i	5 i	38 i	69 i
Georgia Southern U.	380	322	1	0	44	0	11	0	152	0	75	39
U. Chicago	380	322	0	0	231	0	0	0	73	0	0	18
U. Tulsa	382	320	0	11	84	0	68	5	0	0	152	0
CUNY, Graduate School of Public Health and Health Policy	383	318	0	0	318	0	0	0	0	0	0	0
Manhattan C.	384	316	0	0	0	0	0	0	0	0	266	50
East Tennessee State U.	385	315	0	0	186	0	0	0	56	0	18	55
California State U., Fullerton	386	305	15	53	223	0	14	0	0	0	0	0
Texas Christian U.	387	302	0	30	40	0	0	0	0	0	0	232
Santa Clara U.	388	299	0	0	61	0	0	0	238	0	0	0
New School	389	298	0	0	1	0	9	0	75	0	0	213
Western Carolina U.	390	297	0	23	27	0	0	0	0	0	163	84
Winston-Salem State U.	391	283	70	0	27	11	0	0	48	0	0	127
Citadel Military C. South Carolina	392	270	0	0	0	0	0	0	0	0	76	194
Azusa Pacific U.	393	266	0	0	0	0	0	252	14	0	0	0
Central Washington U.	393	266	0	8	212	0	0	0	34	0	5	7
Franklin and Marshall C.	393	266	0	0	18	0	0	10	0	0	0	238

TABLE 27

Higher education R&D expenditures funded by state and local governments, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Southeastern Louisiana U.	393	266	31	0	20	0	142	0	0	0	8	65
U. San Francisco	397	265	0	68	56	0	0	0	0	0	0	141
Youngstown State U.	398	260	0	2	13	0	0	0	0	0	245	0
California State U., Bakersfield	399	259	0	0	8	39	159	0	31	0	22	0
U. Washington, Bothell	399	259	0	0	0	0	0	0	0	0	0	259
Colorado C.	401	258	0	0	0	0	0	0	0	0	0	258
Ball State U.	402	257	0	0	68	7	0	0	116	0	0	66
Princeton U.	403	255	0	0	130	0	0	0	0	0	69	56
California State U., Stanislaus	404	243	0	0	183	0	0	0	53	0	0	7
Dakota State U.	405	236	236	0	0	0	0	0	0	0	0	0
St. Cloud State U.	406	235	0	0	170	0	0	0	29	0	0	36
Missouri U. of Science and Technology	407	227	0	0	65	0	0	0	0	0	162	0
U. Missouri, Kansas City	408	225	0	0	0	0	0	65	0	0	41	119
Texas A&M U.-Commerce	409	222	0	0	23	0	0	0	0	0	8	191
Virginia Military Institute	410	221	215	0	6	0	0	0	0	0	0	0
Charles R. Drew U. of Medicine and Science	411	220	0	0	220	0	0	0	0	0	0	0
U. Arkansas, Little Rock	411	220	24	1	2	0	6	0	86	0	101	0
Marquette U.	413	207	0	0	0	0	0	0	0	0	207	0
Elizabeth City State U.	414	206	206	0	0	0	0	0	0	0	0	0
Loyola U., Chicago	415	204	0	0	204	0	0	0	0	0	0	0
U. West Florida	416	203	29	0	109	0	0	0	0	0	0	65
Winthrop U.	417	196	0	0	0	0	0	0	153	0	0	43
U. Maryland, Eastern Shore	418	192	0	35	157	0	0	0	0	0	0	0
C. New Jersey	419	186	0	0	156	0	0	0	0	0	30	0
U. Mississippi	420	183	0	0	108	0	0	0	0	0	75	0
Kean U.	421	180	122	0	58	0	0	0	0	0	0	0
Stockton U.	421	180	0	168	0	0	0	0	12	0	0	0
Des Moines U.	423	179	0	0	72	0	36	36	0	0	0	35
Erikson Institute	424	178	0	0	0	0	0	0	0	0	0	178
Towson U.	425	177	0	0	30	0	18	22	51	0	0	56
DePaul U.	426	169	0	0	0	0	0	0	169	0	0	0
Louisiana State U., Health Sciences Center, New Orleans	427	168	0	0	168	0	0	0	0	0	0	0
New York Institute of Technology	428	167	154	0	0	0	0	0	1	0	0	12

TABLE 27

Higher education R&D expenditures funded by state and local governments, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Southern U. and A&M C., Baton Rouge	462	80	0	0	27	0	0	0	0	0	53	0
Clark U.	463	77	0	0	0	0	0	0	77	0	0	0
U. Wisconsin-Oshkosh	464	72	0	0	19	0	1	0	43	0	9	0
U. Hawaii, Hilo	465	66	0	0	0	0	0	0	66	0	0	0
U. Missouri, Saint Louis	466	61	0	0	1	0	0	0	32	0	0	28
Rutgers, State U. New Jersey, Camden	467	60	0	0	0	0	0	17	43	0	0	0
U. Puerto Rico, Rio Piedras	467	60	0	43	17	0	0	0	0	0	0	0
Central Connecticut State U.	469	58	0	0	0	0	0	7	44	0	7	0
Edward Via C. of Osteopathic Medicine	469	58	0	0	58	0	0	0	0	0	0	0
Philadelphia C. of Osteopathic Medicine	471	57	0	0	57	0	0	0	0	0	0	0
U. Houston-Downtown	471	57	0	10	0	0	0	0	0	0	0	47
Claremont McKenna C.	473	56	0	0	0	0	0	56	0	0	0	0
U. of Mary Washington	474	54	0	0	0	0	0	0	0	0	0	54
New England C. of Optometry	475	52	0	0	52	0	0	0	0	0	0	0
Seattle U.	475	52	0	0	0	0	0	0	0	0	15	37
Macalester C.	477	51	0	0	51	0	0	0	0	0	0	0
Eastern Michigan U.	478	50	0	0	0	0	0	0	28	0	0	22
Fort Lewis C.	479	48	0	0	48	0	0	0	0	0	0	0
Hawaii Pacific U.	479	48	0	17	6	0	0	0	25	0	0	0
Troy U.	479	48	0	0	31	0	0	0	0	0	0	17
Northeast Ohio Medical U.	482	47	0	0	47	0	0	0	0	0	0	0
Bowdoin C.	483	46	0	46	0	0	0	0	0	0	0	0
Ithaca C.	483	46	0	46	0	0	0	0	0	0	0	0
Mercer U.	483	46	0	0	46	0	0	0	0	0	0	0
SUNY, C. Plattsburgh	483	46	0	46	0	0	0	0	0	0	0	0
East Stroudsburg U. Pennsylvania	487	44	0	0	1	8	7	0	0	0	0	28
Reed C.	488	38	1	0	15	1	4	1	4	0	0	12
SUNY, Oswego	489	36	0	0	3	0	1	0	32	0	0	0
Northland C.	490	35	0	2	16	0	0	2	4	0	0	11
Oklahoma State U., Center for Health Sciences	490	35	0	0	34	0	0	1	0	0	0	0
Kettering U.	492	34	0	0	0	0	0	0	0	0	34	0
Marymount U.	493	31	0	0	14	0	0	0	0	0	0	17
SUNY, Downstate Health Sciences U.	493	31	0	0	31	0	0	0	0	0	0	0

TABLE 27

Higher education R&D expenditures funded by state and local governments, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Alaska, Southeast	495	28	0	9	19	0	0	0	0	0	0	0
Whitman C.	496	25	0	0	0	0	0	0	0	0	0	25
California State U., Dominguez Hills	497	23	0	0	0	23	0	0	0	0	0	0
CUNY, Baruch C.	497	23	0	0	0	0	0	0	0	0	0	23
Murray State U.	497	23	0	0	19	0	4	0	0	0	0	0
Furman U.	500	22	0	0	22	0	0	0	0	0	0	0
Louisiana State U., Health Sciences Center, Shreveport	501	21	0	0	21	0	0	0	0	0	0	0
Vassar C.	501	21	0	0	21	0	0	0	0	0	0	0
West Chester U. Pennsylvania	503	20	0	0	19	0	0	1	0	0	0	0
Pepperdine U.	504	19	0	0	0	0	0	0	0	0	0	19
Carleton C.	505	18	0	0	0	0	0	0	0	0	0	18
U. Hartford	506	17	0	0	0	0	0	0	17	0	0	0
CUNY, New York City C. of Technology	507	16	0	0	0	16	0	0	0	0	0	0
U. New England	508	15	0	15	0	0	0	0	0	0	0	0
Robert Morris U.	509	13 i	0 i	0 i	12 i	0 i	0 i	0 i	0 i	0 i	1 i	0 i
Calvin U.	510	12	0	0	0	0	0	0	10	0	2	0
Pomona C.	510	12	0	0	12	0	0	0	0	0	0	0
West Virginia School of Osteopathic Medicine	512	11	0	0	11	0	0	0	0	0	0	0
CUNY, Lehman C.	513	10	0	0	0	0	0	0	0	0	0	10
Middlebury C.	513	10	10	0	0	0	0	0	0	0	0	0
Brown U.	515	9	0	1	4	0	0	0	4	0	0	0
U. Michigan, Dearborn	515	9	0	0	0	0	0	0	0	0	9	0
SUNY, Geneseo	517	8	0	0	8	0	0	0	0	0	0	0
Savannah State U.	518	7	0	0	0	0	0	0	7	0	0	0
Swarthmore C.	519	6	0	0	0	0	0	1	0	0	0	5
Trinity U.	520	5	0	0	5	0	0	0	0	0	0	0
Alabama A&M U.	521	4	0 i	0 i	4 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i
Davidson C.	521	4	0	0	0	0	4	0	0	0	0	0
Eastern Connecticut State U.	523	3	0	1	2	0	0	0	0	0	0	0
Biola U.	524	2	0	0	0	0	0	0	0	0	2	0
Illinois Institute of Technology	524	2	0	0	2	0	0	0	0	0	0	0
Northern Kentucky U.	524	2	0	0	2	0	0	0	0	0	0	0
Central Michigan U.	527	1	0	0	0	0	0	0	1	0	0	0

TABLE 27

Higher education R&D expenditures funded by state and local governments, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Gallaudet U.	527	1	0	0	0	0	0	0	1	0	0	0

i = imputed.

nec = not elsewhere classified; S&E = science and engineering.

^a The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^b The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^c The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^d Johns Hopkins University includes the Applied Physics Laboratory, with \$597 thousand in state and local government-financed R&D expenditures in FY 2022.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 28

Higher education R&D expenditures funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
All institutions	-	24,492,663	652,629	680,423	13,333,506	248,527	1,313,681	397,720	1,253,436	482,517	3,031,767	3,098,457
U. Michigan, Ann Arbor	1	612,187	6,683	7,364	291,858	12,748	20,691	10,896	84,704	1,743	68,813	106,687
U. Pennsylvania	2	562,094	10,912	927	344,762	4,042	16,566	4,123	28,548	3,305	42,954	105,955
U. Wisconsin-Madison	3	463,759	4,818	19,927	310,309	1,132	15,936	2,522	21,444	9,466	34,724	43,481
U. California, San Francisco	4	438,949	0	0	427,360	0	11,589	0	0	0	0	0
Ohio State U.	5	424,790	4,596	2,993	296,361	2,420	15,603	4,704	12,943	20,626	43,727	20,817
Harvard U.	6	415,763	5,964	7,126	188,640	3,098	32,349	2,760	58,224	5,990	36,890	74,722
U. Minnesota, Twin Cities	7	345,240	18,775	2,847	236,161	1,388	8,678	6,803	9,774	1,967	30,866	27,981
Yale U.	8	343,754	2,094	3,472	290,882	1,284	20,831	3,879	9,334	64	9,053	2,861
U. North Carolina, Chapel Hill	9	343,102	4,492	5,724	267,503	967	9,978	14,519	12,061	234	9,747	17,877
U. Maryland ^a	10	334,100	22,554	5,021	202,334	808	20,435	881	15,392	30	36,863	29,782
U. Florida	11	327,074	4,309	4,148	254,599	523	14,453	2,081	4,149	7	25,383	17,422
Texas A&M U., College Station and Health Science Center	12	315,112	5,401	15,582	121,003	1,989	15,988	2,588	8,470	2,328	125,814	15,949
Vanderbilt U. and Vanderbilt U. Medical Center	13	301,424	982	858	189,398	560	11,232	6,972	17,845	0	22,330	51,247
New York U.	14	296,131	2,010	132	219,885	2,524	1,909	2,443	9,726	321	8,367	48,814
Baylor C. of Medicine	15	292,730	0	0	292,730	0	0	0	0	0	0	0
Michigan State U.	16	291,592	8,034	3,248	134,273	4,646	49,441	4,449	17,854	12,316	38,255	19,076
U. California, Los Angeles	17	287,147	1,495	2,981	189,110	621	7,487	2,054	30,942	18,527	11,229	22,701
Arizona State U.	18	282,983	2,928	12,302	41,006	1,386	9,847	4,864	41,639	50,695	58,125	60,191
U. Pittsburgh, Pittsburgh	19	281,033	3,275	2,174	232,423	910	10,291	3,099	1,001	6,321	17,098	4,441
Indiana U., Bloomington	20	272,216	11,051	5,756	167,868	390	10,034	4,925	27,490	11,187	4,228	29,287
Northwestern U.	21	262,434	2,187	413	158,663	564	32,018	1,551	8,940	10,449	23,726	23,923
U. Arizona	22	254,878	6,044	10,868	139,221	895	33,312	1,047	10,795	4,054	24,146	24,496
Emory U.	23	252,545	2,434	433	214,794	103	10,678	913	3,462	0	3,402	16,326
Cornell U.	24	250,308	4,827	855	155,301	354	19,288	3,255	10,870	0	29,979	25,579
U. Georgia	25	237,894	3,276	8,383	105,179	4,804	5,972	9,393	17,007	11,706	9,264	62,910
U. Texas M. D. Anderson Cancer Center	26	231,583	0	0	208,448	1,764	7,034	8,559	5,778	0	0	0
Purdue U., West Lafayette	27	227,592	5,601	2,269	105,849	1,077	11,870	2,100	6,655	791	70,847	20,533
Virginia Polytechnic Institute and State U.	28	225,690	11,457	1,558	87,533	5,081	7,845	2,035	6,758	14	95,655	7,754
Rockefeller U.	29	225,209	8,486	124	212,933	1,157	2,509	0	0	0	0	0
U. Utah	30	221,473	1,278	5,951	98,038	41	67	29	1,212	0	7,699	107,158
U. Iowa	31	220,605	1,144	1,035	164,141	160	4,485	2,347	1,967	1,885	19,656	23,785
U. Illinois, Urbana-Champaign	32	215,146	27,362	295	92,997	835	16,497	3,853	3,116	14,802	39,895	15,494

TABLE 28

Higher education R&D expenditures funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. California, San Diego	33	213,400	3,982	24,131	115,512	1,142	10,092	1,359	8,834	1,258	39,591	7,499
U. California, Davis	34	211,277	272	14,053	138,998	145	8,672	483	14,322	10,137	20,826	3,369
U. California, Berkeley	35	210,324	1,854	1,552	65,177	1,154	18,626	3,277	32,066	19,804	34,099	32,715
Pennsylvania State U., University Park and Hershey Medical Center	36	207,630	8,828	7,780	75,072	1,146	15,132	2,881	15,743	0	66,527	14,521
U. Southern California	37	201,486	2,559	3,940	160,928	80	1,958	131	9,089	0	4,039	18,762
U. Virginia, Charlottesville	38	187,912	2,897	1,260	133,211	399	4,560	1,438	6,771	790	16,094	20,492
Boston U.	39	187,662	7,413	1,914	92,153	1,404	11,966	7,573	7,227	5,526	30,665	21,821
U. Missouri, Columbia	40	181,090	1,765	475	98,717	332	2,482	2,167	3,563	983	59,352	11,254
Virginia Commonwealth U.	41	173,811	5,333	31	96,956	116	352	1,112	3,454	0	13,886	52,571
U. Alabama, Birmingham	42	172,809	1	2	155,530	0	700	3,615	3	0	7,139	5,819
Stanford U.	43	169,346	2,809	4,885	126,610	340	5,855	2,329	4,627	130	14,328	7,433
Duke U.	44	167,200	506	1,340	133,814	1,252	1,336	2,045	7,055	274	12,986	6,592
U. Texas Southwestern Medical Center	45	166,635	0	0	166,635	0	0	0	0	0	0	0
Scripps Research Institute	46	164,488	0	0	164,488	0	0	0	0	0	0	0
U. Cincinnati	47	161,967	1,528	400	107,505	840	4,480	712	3,047	333	25,946	17,176
Johns Hopkins U. ^b	48	158,738	8,063	4,925	87,185	3,571	10,969	564	302	1,755	41,336	68
Dartmouth C. and Dartmouth Hitchcock Medical Center	49	156,384	11,956	6,558	49,215	5,501	13,670	4,935	16,223	1,784	9,217	37,325
Washington U., Saint Louis	50	154,896	251	458	143,010	95	3,363	614	328	634	1,969	4,174
Florida State U.	51	152,444	5,764	6,165	27,736	4,750	16,831	6,635	13,495	4,470	13,958	52,640
U. Texas, Austin	52	151,594	7,740	24,041	35,143	4,745	18,610	1,202	5,138	2,360	38,524	14,091
Rutgers, State U. New Jersey, New Brunswick	53	149,889	2,214	11,330	89,576	3,697	12,396	2,332	4,669	2,364	9,770	11,541
U. South Florida ^c	54	146,620	4,518	7,454	51,988	2,336	5,304	4,473	12,060	948	15,475	42,064
North Carolina State U.	55	145,171	5,825	6,873	77,390	3,047	5,430	272	2,807	7,408	33,164	2,955
Auburn U., Auburn	56	143,876	3,276	2,441	46,816	3,327	9,012	2,760	2,456	1,464	38,781	33,543
U. Delaware	57	142,398	1,271	11,222	39,251	4,120	21,716	5,445	14,819	4,201	22,884	17,469
U. Oklahoma, Norman and Health Science Center	58	140,592	2,032	13,721	51,359	2,009	7,261	530	8,077	0	18,097	37,506
Louisiana State U., Baton Rouge	59	138,650	3,238	19,668	49,347	4,763	15,794	461	1,299	10,940	27,255	5,885
U. Tennessee, Knoxville	60	138,287	2,959	747	49,570	1,990	7,338	3,083	7,169	9,762	29,134	26,535
U. Kentucky	61	137,897	1,656	1,167	93,328	222	976	533	1,438	15,705	16,389	6,483
U. Nebraska, Lincoln	62	134,864	5,774	1,367	50,028	2,655	8,861	5,518	6,339	569	21,138	32,615
Iowa State U.	63	134,050	2,892	1,618	53,412	6,410	6,447	2,188	4,040	130	41,185	15,728
Icahn School of Medicine at Mount Sinai	64	132,627	0	0	132,627	0	0	0	0	0	0	0
U. Illinois, Chicago	65	131,574	2,365	356	92,557	1,993	5,263	1,496	4,885	5,164	11,845	5,650

TABLE 28

Higher education R&D expenditures funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Carnegie Mellon U.	66	123,903	36,267	0	4,747	9,033	9,866	1,222	9,295	960	36,891	15,622
SUNY, U. Buffalo	67	122,816	11,112	1,396	77,504	906	3,651	1,036	3,928	0	18,882	4,401
Texas Tech U.	68	121,050	3,513	2,563	31,309	2,895	10,077	5,465	8,225	0	19,095	37,908
Florida International U.	69	120,737	7,502	4,828	36,261	1,721	13,956	9,276	11,819	1,422	12,404	21,548
U. Kansas	70	120,620	1,163	6,000	69,676	44	2,689	2,248	626	9,663	4,523	23,988
Massachusetts Institute of Technology	71	117,128	20,029	3,430	13,146	1,083	18,250	92	3,716	2,243	50,911	4,228
U. Washington, Seattle	72	117,096	2,478	6,451	80,748	116	3,053	945	1,522	15	16,840	4,928
U. California, Irvine	73	115,832	6,439	1,485	60,096	1,668	6,066	2,979	5,511	569	19,859	11,160
Columbia U. in the City of New York	74	113,189	1,316	5,170	80,428	603	6,114	410	3,140	0	5,096	10,912
Georgia State U.	75	112,773	3,195	985	34,131	1,288	7,335	5,445	20,358	0	0	40,036
SUNY, Polytechnic Institute	76	110,878	0	0	0	0	0	0	0	0	110,878	0
U. Houston	77	107,699	2,461	3,300	13,694	2,150	43,332	4,177	1,470	0	20,631	16,484
Oklahoma State U., Stillwater	78	106,925	2,654	2,178	31,316	3,638	4,955	4,999	6,005	6,057	15,031	30,092
U. Connecticut	79	103,966	1,316	3,327	58,052	468	2,464	8,078	4,141	1,470	20,043	4,607
Washington State U.	80	103,067	2,455	2,584	55,086	166	5,284	1,374	4,568	837	15,165	15,548
Medical C. Wisconsin	81	102,906	0	0	100,736	0	0	0	0	0	2,170	0
Princeton U.	82	102,851	4,498	2,889	24,397	6,064	24,522	1,486	19,978	0	11,681	7,336
Syracuse U.	83	101,347	3,348	1,409	5,536	2,070	5,610	2,393	12,786	131	11,163	56,901
Temple U.	84	99,543	2,952	655	68,147	2,148	6,128	3,092	4,609	486	2,189	9,137
U. Miami	85	97,990	74	7,758	82,330	259	370	1,966	776	61	1,196	3,200
U. South Carolina, Columbia	86	95,360	1,526	4,812	29,418	2,557	2,332	3,032	9,492	34	10,769	31,388
Clemson U.	87	95,211	3,350	0	25,700	568	3,348	411	984	0	25,413	35,437
SUNY, Binghamton U.	88	94,515	5,151	1,498	12,607	3,127	8,109	7,039	20,718	0	17,475	18,791
U. Notre Dame	89	94,156	5,989	0	9,615	1,958	15,656	981	4,050	4,124	35,328	16,455
SUNY, Stony Brook U.	90	88,630	1,192	10,052	45,988	1,911	8,913	1,265	1,361	9,886	6,034	2,028
U. Central Florida	91	82,434	6,683	1,932	13,532	2,729	10,859	3,091	5,997	618	14,499	22,494
U. Vermont	92	82,412	2,040	1,183	48,366	1,781	1,848	2,557	6,220	414	5,012	12,991
Georgetown U.	93	81,692	1,758	0	44,893	191	3,399	474	9,124	0	0	21,853
West Virginia U.	94	79,689	323	2,023	49,834	204	3,828	580	1,764	747	17,979	2,407
U. Massachusetts, Amherst	95	79,588	7,679	1,415	27,719	834	6,528	2,303	2,629	338	19,077	11,066
U. Nevada, Reno	96	78,594	212	8,102	25,006	1,351	4,052	2,486	3,310	3,021	16,296	14,758
Wayne State U.	97	78,061	535	13	56,730	0	6,448	421	717	5,570	4,424	3,203
Medical U. South Carolina	98	76,566	0	0	76,566	0	0	0	0	0	0	0

TABLE 28

Higher education R&D expenditures funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Uniformed Services U. of the Health Sciences	99	75,736	0	0	70,433	0	0	5,303	0	0	0	0
U. Hawaii, Manoa	100	75,287	301	21,394	35,803	27	8,666	76	679	1,085	5,714	1,542
Albert Einstein C. of Medicine	101	73,665	0	0	73,665	0	0	0	0	0	0	0
U. Alabama, Tuscaloosa	102	73,435	3,500	3,152	10,421	978	1,723	2,284	9,632	58	12,017	29,670
Kansas State U.	103	72,772	1,591	569	34,801	2,264	3,417	1,164	4,249	5,533	11,933	7,251
U. Arkansas for Medical Sciences	104	71,431	0	0	71,431	0	0	0	0	0	0	0
North Dakota State U.	105	71,056	2,227	438	42,939	1,334	2,496	929	4,701	1,012	7,271	7,709
SUNY, U. Albany	106	71,042	4,613	8,657	8,992	1,997	3,971	2,874	13,776	0	2,849	23,313
U. New Mexico	107	67,949	970	419	43,055	38	1,119	1,509	4,844	6,486	6,897	2,612
George Washington U.	108	67,384	4,704	9	32,246	190	1,067	322	7,793	1,759	8,080	11,214
Colorado State U., Fort Collins	109	65,700	451	5,697	42,498	145	844	211	2,305	5,900	4,750	2,899
San Diego State U.	110	64,484	1,176	990	12,185	2,180	2,698	4,304	3,982	7,108	7,724	22,137
U. Texas, San Antonio	111	64,443	4,354	1,539	7,718	1,563	4,014	2,673	5,966	784	10,677	25,155
Thomas Jefferson U.	112	63,739	0	0	63,739	0	0	0	0	0	0	0
U. Louisville	113	63,606	0	11	46,745	385	1,872	826	739	271	5,901	6,856
Rice U.	114	63,401	2,917	1,116	5,890	1,908	8,963	1,055	10,978	131	28,503	1,940
New Jersey Institute of Technology	115	62,576	6,797	0	6,527	3,240	8,209	0	4,765	0	27,388	5,650
Georgia Institute of Technology	116	62,025	14,522	160	3,812	11	1,175	10	2,574	0	33,495	6,266
U. North Texas, Denton	117	61,728	6,337	299	11,132	0	4,885	1,982	3,633	0	8,496	24,964
U. Mississippi	118	61,653	147	66	20,543	226	3,930	1,799	4,607	623	4,020	25,692
Mississippi State U.	119	60,534	1,595	1,645	34,800	90	2,930	269	4,974	1,240	10,629	2,362
Texas State U.	120	60,338	338	4,909	11,152	163	1,685	611	6,558	1,959	6,570	26,393
U. Maine	121	60,064	1,318	9,094	13,087	634	2,633	970	1,190	6,426	17,120	7,592
U. Arkansas, Fayetteville	122	59,522	2,561	958	25,379	30	4,126	745	1,519	0	13,304	10,900
U. Nevada, Las Vegas	123	59,398	710	2,250	16,978	2,178	3,573	1,223	6,254	1,003	6,869	18,360
U. Wyoming	124	58,184	821	3,588	11,428	1,012	1,084	819	4,025	19,572	9,221	6,614
U. California, Santa Barbara	125	57,814	3,584	8,652	3,904	61	9,668	464	4,535	2,700	15,097	9,149
U. Texas Health Science Center, San Antonio	126	57,408	0	0	57,408	0	0	0	0	0	0	0
U. New Hampshire	127	56,891	859	8,621	21,164	1,040	2,628	561	3,391	0	7,288	11,339
Brown U.	128	56,819	3,251	2,101	23,734	2,686	5,436	154	6,177	1,452	5,344	6,484
George Mason U.	129	55,812	2,139	975	15,926	804	994	1,160	20,370	16	3,623	9,805
Northeastern U.	130	55,478	8,900	1,292	9,400	501	5,220	1,743	2,619	0	14,443	11,360
U. Oregon	131	55,247	1,460	602	27,879	25	4,238	1,460	1,989	2,047	412	15,135

TABLE 28

Higher education R&D expenditures funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Montana State U., Bozeman	132	55,164	807	1,661	21,045	1,344	5,133	362	1,044	5,484	8,900	9,384
U. Texas Health Science Center, Houston	133	55,120	0	0	55,120	0	0	0	0	0	0	0
California Institute of Technology	134	54,587	1,506	5,561	7,851	88	15,127	0	0	0	8,147	16,307
U. Texas Medical Branch	135	53,371	0	0	52,310	0	0	0	0	0	1,061	0
U. Rochester	136	53,315	498	298	45,952	0	2,134	1,090	124	872	2,061	286
Case Western Reserve U.	137	53,133	181	45	44,890	5	2,151	132	120	90	5,218	301
Augusta U.	138	51,995	57	0	48,891	29	64	85	689	0	0	2,180
Tulane U.	139	51,561	261	1,314	29,170	501	1,228	582	2,328	0	1,882	14,295
U. California, Riverside	140	51,532	672	4,006	35,818	326	991	430	2,306	504	3,399	3,080
U. Massachusetts, Medical School	141	49,909	0	0	49,909	0	0	0	0	0	0	0
U. Montana, Missoula	142	48,353	735	2,101	17,524	424	1,851	436	18,567	0	0	6,715
U. Colorado Anschutz Medical Campus ^d	143	47,955	0	10	47,473	0	40	11	66	0	45	310
Rensselaer Polytechnic Institute	144	47,193	4,054	689	2,770	1,693	7,910	1,191	1,421	0	22,303	5,162
U. Colorado Boulder	145	46,096	650	1,323	5,712	96	7,627	1,071	2,490	166	15,954	11,007
Oregon Health and Science U.	146	45,950	0	0	42,384	0	0	2,078	0	0	1,356	132
U. North Dakota	147	44,072	1,099	2,488	14,273	348	1,895	1,382	1,414	110	12,318	8,745
U. Louisiana, Lafayette	148	42,605	4,264	1,276	6,434	1,879	3,045	50	123	0	12,441	13,093
U. Texas, El Paso	149	41,654	1,256	1,491	7,403	1,219	2,845	1,520	1,717	675	9,354	14,174
U. Chicago	150	40,734	582	186	25,209	239	5,304	703	4,823	0	2,413	1,275
American U.	151	40,650	569	459	836	952	1,127	1,000	9,014	2,496	0	24,197
Brandeis U.	152	40,627	1,683	10	6,449	1,596	6,615	1,832	7,557	1,391	4,951	8,543
U. Nebraska, Medical Center	153	39,600	0	0	39,600	0	0	0	0	0	0	0
U. Alaska, Fairbanks	154	39,501	181	16,608	8,465	13	3,762	0	153	6,025	4,263	31
U. Massachusetts, Lowell	155	39,067	3,389	653	5,638	681	5,797	934	2,654	331	12,421	6,569
U. Texas, Arlington	156	38,339	2,603	374	6,646	293	3,667	1,085	88	0	12,469	11,114
Cold Spring Harbor Laboratory	157	36,235	0	0	36,235	0	0	0	0	0	0	0
Drexel U.	158	36,121	1,130	0	21,274	93	571	480	365	1,489	8,402	2,317
Van Andel Research Institute	159	35,812	0	0	35,812	0	0	0	0	0	0	0
U. California, Santa Cruz	160	34,599	381	6,643	5,172	38	12,136	219	2,251	182	4,739	2,838
Baylor U.	161	34,144	1,472	1,939	4,649	824	6,502	2,031	2,085	2,908	4,209	7,525
Southern Methodist U.	162	33,929	97	730	1,085	506	1,564	168	1,779	9,384	4,104	14,512
U. Memphis	163	33,900	1,491	1,319	4,822	831	1,853	4,255	3,358	1,450	3,534	10,987
U. Texas Rio Grande Valley	164	32,862	2,096	1,068	6,591	1,988	2,555	972	4,304	0	3,134	10,154

TABLE 28

Higher education R&D expenditures funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Kent State U.	165	32,748	1,162	478	5,165	1,555	3,782	1,674	4,034	661	717	13,520
U. Tennessee, Health Science Center	166	32,641	0	0	32,375	0	0	0	0	266	0	0
U. Texas, Dallas	167	32,378	2,416	217	7,324	489	2,945	1,274	644	163	11,155	5,751
Michigan Technological U.	168	32,247	2,958	3,577	1,855	1,565	2,879	446	917	147	15,164	2,739
U. Maryland, Baltimore County	169	31,743	4,129	2,917	4,305	1,605	2,335	895	5,637	815	2,799	6,306
U. Alabama, Huntsville	170	30,776	6,395	3,604	2,112	565	3,533	281	225	0	9,135	4,926
William & Mary	171	30,035	512	20,795	605	73	852	110	2,496	1,031	0	3,561
Tufts U.	172	29,719	1,105	69	17,484	92	839	1,156	2,945	410	4,477	1,142
Georgia Southern U.	173	28,826	1,087	383	5,667	1,296	1,771	952	3,459	62	2,478	11,671
Oregon State U.	174	28,792	848	3,024	19,382	10	162	42	526	339	4,450	9
Wichita State U.	175	28,618	63	0	1,171	40	591	654	544	0	15,166	10,389
Utah State U.	176	28,019	1,256	421	9,802	505	1,012	2,709	751	0	9,482	2,081
San Jose State U.	177	27,661	0	2,546	3,674	764	1,892	790	2,562	0	4,542	10,891
Indiana U.-Purdue U., Indianapolis	178	27,461	1,808	254	8,579	35	713	689	5,433	3,169	1,736	5,045
Wake Forest U.	179	26,816	91	0	23,011	296	640	243	729	0	476	1,330
Ohio U.	180	26,187	18	705	10,063	5	1,465	794	654	0	7,858	4,625
U. Massachusetts, Boston	181	25,606	1,163	1,691	2,644	501	1,142	1,881	6,629	451	423	9,081
U. Rhode Island	182	24,722	2	9,028	2,869	0	526	568	694	868	1,120	9,047
Southern Illinois U., Carbondale	183	24,670	373	750	20,533	4	663	104	931	296	1,016	0
Montclair State U.	184	24,540	1,443	951	2,372	1,055	959	4,218	3,144	0	1,067	9,331
Howard U.	185	23,130	934	0	19,019	47	964	491	255	0	1,322	98
Saint Louis U.	186	22,991	106	2,555	17,933	6	1,036	135	88	0	348	784
U. West Florida	187	20,673	1,134	22	2,176	70	257	340	2,575	819	436	12,844
U. California, Office of the President	188	20,390	0	0	11,665	0	8,725	0	0	0	0	0
Old Dominion U.	189	19,957	528	976	6,163	118	1,695	207	684	0	8,535	1,051
U. Toledo	190	19,679	127	1,826	11,530	0	2,298	154	63	0	2,540	1,141
East Carolina U.	191	19,542	113	2,138	10,449	13	504	355	433	0	319	5,218
U. Massachusetts, Dartmouth	192	18,713	1,807	4,495	2,318	937	2,556	0	131	0	6,108	361
Oakland U.	193	18,539	516	0	4,154	3	3,250	32	0	0	10,305	279
Cleveland State U.	194	18,497	0	0	3,618	473	622	528	3,700	7	2,802	6,747
Naval Postgraduate School	195	18,483	6,129	326	168	790	64	217	1,367	1,019	7,558	845
San Francisco State U.	196	18,257	1,296	1,994	4,480	1,068	2,457	1,244	1,885	473	1,224	2,136
U. Idaho	197	17,659	441	753	11,539	38	517	29	730	365	2,516	731

TABLE 28

Higher education R&D expenditures funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Missouri, Kansas City	198	17,201	1,044	48	11,615	0	308	687	97	734	1,692	976
Kennesaw State U.	199	17,003	2,955	0	4,853	442	698	69	1,177	1,103	1,045	4,661
Nova Southeastern U.	200	16,839	57	2,991	8,992	20	0	545	981	20	0	3,233
Middle Tennessee State U.	201	16,715	868	229	2,784	866	1,105	618	2,455	0	601	7,189
Marquette U.	202	16,222	457	0	4,643	398	771	597	648	0	2,702	6,006
New Mexico State U.	203	16,167	713	460	5,790	26	3,047	106	102	301	4,828	794
Rochester Institute of Technology	204	16,109	3,347	0	333	461	3,239	16	608	0	5,596	2,509
Missouri U. of Science and Technology	205	15,993	1,503	0	543	12	689	57	49	169	11,375	1,596
Louisiana Tech U.	206	15,621	1,161	0	1,791	517	1,293	82	662	0	6,002	4,113
Florida Atlantic U.	207	15,422	646	478	7,597	636	720	1,044	52	0	2,490	1,759
U. South Alabama	208	15,313	83	910	11,660	25	82	477	271	0	1,520	285
Villanova U.	209	15,309	303	378	2,096	55	1,541	726	309	0	5,307	4,594
Northern Illinois U.	210	14,986	333	235	857	9	1,426	427	4,204	0	1,358	6,137
Southern Illinois U., Edwardsville	211	14,766	65	16	6,599	41	60	0	24	0	7,647	314
Illinois State U.	212	14,540	23	41	85	14	22	31	8	0	53	14,263
Northern Arizona U.	213	14,501	973	681	9,254	5	1,975	57	59	504	571	422
North Carolina A&T State U.	214	14,445	46	0	8,306	27	39	23	0	0	4,204	1,800
U. California, Merced	215	14,279	405	1,473	2,721	450	2,348	346	1,361	506	3,233	1,436
Worcester Polytechnic Institute	216	14,261	1,571	0	1,461	1,093	1,174	0	496	0	6,618	1,848
U. South Dakota	217	14,176	241	0	6,426	117	1,428	785	693	88	450	3,948
Central Michigan U.	218	14,061	100	82	10,196	113	293	179	14	1,638	429	1,017
Long Island U.	219	13,962	114	110	7,564	414	568	1,074	678	1	0	3,439
Boston C.	220	13,949	486	2,359	1,441	24	1,939	876	1,622	0	438	4,764
Miami U.	221	13,843	462	205	3,225	118	623	1,770	338	0	2,601	4,501
Colorado School of Mines	222	13,739	127	1,143	0	104	610	0	1	0	5,059	6,695
Chapman U.	223	13,710	708	6	2,099	29	201	61	511	0	457	9,638
Louisiana State U., Health Sciences Center, New Orleans	224	13,488	0	0	13,488	0	0	0	0	0	0	0
CUNY, City C.	225	13,103	196	158	1,682	81	1,117	463	3	0	6,289	3,114
Fordham U.	226	13,005	390	0	380	178	843	370	1,304	0	0	9,540
James Madison U.	227	12,602	550	736	3,106	69	919	1,155	121	0	335	5,611
U. Wisconsin-Milwaukee	228	12,368	88	2,499	1,521	10	1,371	502	1,165	946	1,838	2,428
Air Force Institute of Technology	229	11,869	1,680	247	0	15	3,798	0	0	0	6,129	0
U. North Carolina, Charlotte	230	11,848	950	334	1,601	122	475	415	1,538	0	4,243	2,170

TABLE 28

Higher education R&D expenditures funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Boise State U.	231	11,230	955	820	2,950	277	1,232	18	841	362	2,466	1,309
Lehigh U.	232	11,162	720	127	1,406	20	1,427	73	43	43	6,710	593
Woods Hole Oceanographic Institution	233	10,972	0	9,214	0	0	0	0	0	0	1,758	0
U. Southern Mississippi	234	10,942	125	2,874	909	0	359	41	299	0	4,719	1,616
U. Minnesota, Duluth	235	10,794	128	207	8,761	75	176	25	63	0	1,024	335
SUNY, Upstate Medical U.	236	10,660	0	0	10,660	0	0	0	0	0	0	0
Tarleton State U.	237	10,533	394	560	3,602	169	406	475	892	704	638	2,693
U. Puerto Rico, Rio Piedras	238	10,458	267	565	841	62	977	0	1,068	982	235	5,461
U. New Orleans	239	10,393	949	334	760	359	1,057	470	1,046	142	1,426	3,850
U. Maryland Center for Environmental Science	240	10,222	0	10,222	0	0	0	0	0	0	0	0
California Polytechnic State U., San Luis Obispo	241	9,964	13	195	2,354	516	2,830	33	81	10	829	3,103
Loyola U., Chicago	242	9,904	83	0	8,190	56	438	186	246	0	58	647
Rush U.	243	9,884	0	0	9,884	0	0	0	0	0	0	0
California State U., Fullerton	244	9,664	707	176	1,438	459	413	223	781	960	423	4,084
Texas Tech U., Health Sciences Center	245	9,544	0	0	9,434	0	0	0	0	0	0	110
Western Michigan U. and Homer Stryker M.D. School of Medicine	246	9,489	17	464	3,688	51	448	853	98	3	2,850	1,017
Mercer U.	247	9,218	146	0	5,794	221	1,925	300	53	131	575	73
East Tennessee State U.	248	9,214	0	5	8,608	60	150	31	39	0	9	312
Texas Christian U.	249	9,201	0	0	0	189	3,430	1,583	2,449	1,550	0	0
U. North Carolina, Greensboro	250	9,054	54	0	3,260	208	937	789	444	0	0	3,362
Creighton U.	251	8,993	267	0	6,661	68	453	97	561	0	0	886
Bowling Green State U.	252	8,895	66	196	1,520	294	1,015	949	1,372	13	32	3,438
CUNY, Hunter C.	252	8,895	160	188	2,272	31	397	1,395	197	386	0	3,869
U. North Florida	254	8,817	139	54	1,487	18	637	231	478	0	1,776	3,997
Midwestern U.	255	8,714	0	0	8,714	0	0	0	0	0	0	0
Rutgers, State U. New Jersey, Newark	256	8,531	348	971	2,344	0	1,076	303	792	415	0	2,282
Louisiana State U., Health Sciences Center, Shreveport	257	8,434	0	0	8,434	0	0	0	0	0	0	0
SUNY, C. of Environmental Science and Forestry	258	8,411	66	174	7,187	0	39	600	4	0	272	69
U. Puerto Rico, Medical Sciences Campus	259	8,295	0	0	8,295	0	0	0	0	0	0	0
California State U., East Bay	260	8,232	287	129	1,086	344	315	207	1,791	0	133	3,940
Clarkson U.	261	8,116	26	6	414	245	1,219	66	27	0	4,856	1,257
Texas Tech U., Health Sciences Center, El Paso	262	8,097	0	0	7,585	0	0	0	0	0	0	512
Bryn Mawr C.	263	7,692	215	189	811	484	583	507	1,417	0	0	3,486

TABLE 28

Higher education R&D expenditures funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Loyola Marymount U.	264	7,360	189	8	1,513	9	282	257	283	37	52	4,730
Morehouse School of Medicine	265	7,155	0	0	7,155	0	0	0	0	0	0	0
Brigham Young U., Provo	266	6,962	320	68	2,331	47	199	102	111	0	1,133	2,651
U. Denver	267	6,953	34	49	761	66	1,151	1,437	583	0	626	2,246
U. North Texas, Health Science Center	268	6,615	0	0	6,615	0	0	0	0	0	0	0
Edward Via C. of Osteopathic Medicine	269	6,520	0	0	6,520	0	0	0	0	0	0	0
Marshall U.	270	6,479	38	66	4,259	0	23	0	0	0	678	1,415
Tennessee State U.	271	6,466	0	0	6,466	0	0	0	0	0	0	0
Sam Houston State U.	272	6,444	8	46	1,697	57	44	390	1,863	0	84	2,255
Florida A&M U.	273	6,256	0	112	2,901	0	31	0	20	0	203	2,989
Roseman U. of Health Sciences	274	6,158	0	0	6,147	0	0	0	0	0	0	11
U. Texas Health Science Center, Tyler	275	6,016	0	0	6,016	0	0	0	0	0	0	0
Western Washington U.	276	5,954	31	736	216	115	622	525	748	724	78	2,159
Stevens Institute of Technology	277	5,895	649	0	357	15	326	0	3	0	4,461	84
U. San Diego	278	5,842	0	51	189	230	425	23	867	0	290	3,767
California State U., Sacramento	279	5,694	23	44	487	86	190	204	1,575	316	788	1,981
U. Akron	280	5,608	1	104	435	81	2,565	232	87	0	1,723	380
Towson U.	281	5,513	293	100	1,120	181	345	388	738	0	0	2,348
U. Tennessee, Chattanooga	282	5,510	38	0	95	34	10	25	0	2,941	350	2,017
William Paterson U.	283	5,401	46	148	781	63	44	392	887	0	0	3,040
Wright State U.	284	5,368	710	99	3,541	18	181	73	0	58	643	45
Eastern Michigan U.	285	5,324	221	60	807	22	367	46	546	59	331	2,865
Texas A&M U.-Corpus Christi	286	5,287	38	2,078	848	18	81	2	39	352	552	1,279
Grinnell C.	287	5,237	108	0	212	59	747	295	1,038	0	0	2,778
U. Missouri, Saint Louis	288	5,106	77	0	1,831	13	374	104	610	740	0	1,357
Oklahoma State U., Center for Health Sciences	289	4,897	104	0	4,567	0	0	204	0	0	0	22
South Dakota State U.	290	4,841	1	67	3,417	17	134	78	112	0	910	105
California State Polytechnic U., Humboldt	291	4,784	21	256	1,145	1	225	0	750	80	2,145	161
Yeshiva U.	292	4,765	749	0	1,914	1,016	0	0	0	0	0	1,086
Florida Institute of Technology	293	4,740	920	498	261	88	638	678	0	0	1,484	173
Southern Connecticut State U.	294	4,722	114	185	607	107	443	75	447	99	0	2,645
CUNY, Queens C.	295	4,717	195	215	2,182	94	724	619	214	224	0	250
West Chester U. Pennsylvania	296	4,618	39	31	575	55	451	213	556	5	0	2,693

TABLE 28

Higher education R&D expenditures funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Clark U.	297	4,552	62	107	2,081	0	519	78	1,541	0	0	164
Kean U.	298	4,548	477	52	999	80	1,575	42	270	14	32	1,007
Rowan U.	299	4,546	0	0	573	0	0	0	0	0	3,973	0
Hofstra U.	300	4,485	63	188	567	93	173	102	471	0	148	2,680
Claremont McKenna C.	301	4,377	0	0	0	0	0	106	3,901	30	0	340
Desert Research Institute	301	4,377	0	3,563	814	0	0	0	0	0	0	0
U. Central Oklahoma	303	4,365	i 93	i 0	i 2,210	i 44	i 313	i 68	i 216	i 0	i 450	i 971
Idaho State U.	304	4,292	53	259	1,240	11	718	7	102	273	1,552	77
Rosalind Franklin U. of Medicine and Science	305	4,239	0	0	4,217	0	0	22	0	0	0	0
Catholic U. of America	306	4,211	0	0	116	0	6	504	755	0	762	2,068
Duquesne U.	307	4,043	0	245	2,330	20	179	69	41	0	23	1,136
U. Nebraska, Omaha	308	4,038	506	15	620	37	55	20	1,060	490	210	1,025
U. Tulsa	309	4,023	319	89	513	6	117	562	183	163	1,532	539
Western Kentucky U.	310	3,961	7	672	1,057	18	633	521	179	0	257	617
Portland State U.	311	3,949	31	127	1,032	1	295	18	611	308	597	929
Prairie View A&M U.	312	3,898	10	0	2,260	0	239	1	6	5	1,006	371
California State U., Fresno	313	3,854	32	2	1,772	377	661	0	231	0	428	351
SUNY, Downstate Health Sciences U.	314	3,816	0	0	3,816	0	0	0	0	0	0	0
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	315	3,799	0	0	3,799	0	0	0	0	0	0	0
Ball State U.	316	3,754	47	0	848	49	561	118	380	0	0	1,751
Wesleyan U.	317	3,652	0	152	721	201	850	174	201	16	0	1,337
CUNY, John Jay C. of Criminal Justice	318	3,492	0	0	20	8	31	111	103	52	0	3,167
Tennessee Technological U.	319	3,464	721	1	1,064	0	226	60	20	0	766	606
Delaware State U.	320	3,457	156	137	1,079	411	693	215	466	0	70	230
Des Moines U.	321	3,455	0	139	3,178	0	0	0	0	0	0	138
Salisbury U.	322	3,415	97	87	821	123	286	31	63	0	3	1,904
U. Alaska, Anchorage	323	3,392	8	545	974	0	200	0	434	191	574	466
Texas Southern U.	324	3,362	32	0	2,114	2	41	0	531	0	12	630
U. North Carolina, Wilmington	325	3,338	66	1,169	712	0	60	6	59	406	88	772
Indiana U. Pennsylvania	326	3,303	0	5	289	17	31	522	316	94	0	2,029
Reed C.	327	3,272	i 58	i 0	i 1,318	i 45	i 317	i 118	i 396	i 0	i 0	i 1,020
U. Michigan, Dearborn	328	3,259	24	0	2	29	220	42	88	0	2,449	405

TABLE 28

Higher education R&D expenditures funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Northeast Ohio Medical U.	329	3,197	0	2	3,165	0	0	0	28	1	1	0
Albany Medical C.	330	3,132	0	0	3,132	0	0	0	0	0	0	0
Appalachian State U.	331	3,129	67	315	1,169	16	539	108	103	0	195	617
Charles R. Drew U. of Medicine and Science	332	3,098	0	0	3,098	0	0	0	0	0	0	0
New School	333	3,023	1	19	85	18	1	79	769	29	423	1,599
Loma Linda U.	334	3,012	0	0	2,868	0	0	127	0	0	0	17
Grand Valley State U.	335	2,986	33	1,892	360	17	34	21	227	0	47	355
California State U., Long Beach	336	2,980	75	11	789	20	605	146	90	51	576	617
New Mexico Institute of Mining and Technology	337	2,895	119	614	15	6	59	0	0	0	2,047	35
U. Oklahoma, Tulsa	338	2,892	0	0	1,329	0	0	0	12	0	138	1,413
Texas A&M U.-Kingsville	339	2,812	0	90	2,443	0	14	0	0	66	150	49
Texas A&M U.-Commerce	340	2,783	31	0	1,587	7	105	82	46	0	40	885
U. Arkansas, Pine Bluff	341	2,737	0	0	2,000	0	170	0	28	539	0	0
Azusa Pacific U.	342	2,680	24	0	679	30	170	254	73	0	10	1,440
Philadelphia C. of Osteopathic Medicine	343	2,675	0	0	2,675	0	0	0	0	0	0	0
Pacific U.	344	2,670	66	0	1,701	15	90	4	328	0	0	466
California State U., San Bernardino	345	2,657	92	14	333	11	104	484	112	235	124	1,148
Clark Atlanta U.	346	2,647	50	0	2,414	0	177	0	0	0	0	6
Colgate U.	347	2,625	22	226	472	33	423	112	385	0	0	952
Saint Joseph's U.	348	2,609	31	0	1,436	15	601	27	101	0	0	398
Eastern Virginia Medical School	349	2,603	0	0	2,603	0	0	0	0	0	0	0
Virginia State U.	350	2,544	0	0	1,699	0	0	0	0	0	845	0
U. New England	351	2,503	0	286	2,168	0	14	7	5	0	0	23
South Dakota School of Mines and Technology	352	2,488	0	0	0	0	322	0	0	0	2,166	0
Langston U.	353	2,449	0	0	2,341	0	7	38	0	0	0	63
Gallaudet U.	354	2,396	194	0	526	2	1	1,153	520	0	0	0
Alcorn State U.	355	2,349	0	0	1,048	0	0	0	1,299	0	2	0
California State U., Monterey Bay	356	2,300	81	1,147	961	21	15	4	32	0	0	39
CUNY, Advanced Science Research Center	357	2,226	0	43	399	0	1,089	0	0	0	687	8
Montana Technological U.	358	2,221	0	1,524	60	0	66	0	0	0	571	0
DePaul U.	359	2,195	0	0	58	58	4	81	634	0	0	1,360
CUNY, Graduate School of Public Health and Health Policy	360	2,189	0	0	2,189	0	0	0	0	0	0	0
New York Institute of Technology	361	2,180	80	0	2,018	0	0	0	0	0	82	0

TABLE 28

Higher education R&D expenditures funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Amherst C.	362	2,130	76	200	243	90	102	76	374	404	0	565
Swarthmore C.	362	2,130	16	0	430	36	155	48	163	0	163	1,119
Carleton C.	364	2,055	322	90	243	318	52	9	535	0	0	486
Rutgers, State U. New Jersey, Camden	365	2,003	234	0	0	0	15	16	529	0	0	1,209
West Texas A&M U.	366	1,972	17	0	1,321	7	11	0	0	0	333	283
Hope C.	367	1,928	24	31	44	11	856	7	405	0	17	533
Williams C.	368	1,894	32	104	719	25	174	65	218	0	0	557
California State U., Bakersfield	369	1,878	0	11	7	278	58	72	207	0	116	1,129
Illinois Institute of Technology	370	1,759	321	4	303	41	232	0	0	8	836	14
Smith C.	371	1,740	43	82	496	52	124	48	118	15	124	638
U. South Carolina, Aiken	372	1,729	0	0	442	12	277	11	245	0	103	639
Central State U.	373	1,659	0	0	1,659	0	0	0	0	0	0	0
Eastern Connecticut State U.	374	1,605	9	1	243	0	7	109	399	99	0	738
Coastal Carolina U.	375	1,580	0	204	274	0	96	66	284	8	4	644
Toyota Technological Institute, Chicago	376	1,568	1,568	0	0	0	0	0	0	0	0	0
Franklin and Marshall C.	377	1,555	33	24	68	11	140	75	214	0	0	990
U. Hawaii, Hilo	378	1,533	7	173	1,154	8	43	0	36	98	0	14
Lewis and Clark C.	379	1,522	13	8	79	0	33	13	39	0	0	1,337
U. Nebraska, central administration	380	1,498	0	0	0	0	0	0	0	0	1,498	0
U. Central del Caribe	381	1,486	0	0	1,486	0	0	0	0	0	0	0
U. Nebraska, Kearney	382	1,459	105	0	544	0	255	0	10	0	0	545
Xavier U. Louisiana	383	1,452	0	0	1,452	0	0	0	0	0	0	0
California State Polytechnic U., Pomona	384	1,441	16	12	1,106	0	10	0	0	0	152	145
Jackson State U.	385	1,427	122	0	146	5	448	0	0	67	302	337
Embry-Riddle Aeronautical U.	386	1,425	330	312	57	5	48	0	0	0	600	73
CUNY, Brooklyn C.	387	1,418	10	83	101	102	203	27	17	265	0	610
Touro U., California	388	1,354	0	0	1,144	0	0	0	0	0	0	210
Pennsylvania State U., Behrend	389	1,345	0	1,011	45	0	0	31	35	0	197	26
Willamette U.	390	1,344	5	33	406	12	77	11	0	76	0	724
U. Guam	391	1,339	0	74	1,237	0	0	0	18	0	0	10
Northwest Indian C.	392	1,334	0	0	0	0	0	0	0	0	0	1,334
Purdue U., Northwest	393	1,323	11	0	489	0	18	5	0	58	249	493
Elon U.	394	1,303	25	0	181	51	45	53	175	14	16	743

TABLE 28

Higher education R&D expenditures funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Minnesota State U., Mankato	395	1,300	0	0	166	0	0	120	208	0	768	38
Saint John's U.	396	1,298	i 23 i	0 i	542 i	15 i	125 i	43 i	144 i	0 i	0 i	406 i
Connecticut C.	397	1,252	86	0	325	0	461	223	31	0	0	126
Pomona C.	398	1,238	70	164	84	11	146	78	426	0	0	259
U. Northern Colorado	399	1,224	0	46	415	46	52	56	95	0	0	514
California State U., Northridge	400	1,207	0	35	187	25	490	0	2	16	83	369
U. Central Arkansas	401	1,186	101	0	374	9	162	49	132	0	0	359
C. of Saint Benedict	402	1,177	i 20 i	0 i	492 i	14 i	113 i	39 i	131 i	0 i	0 i	368 i
Seton Hall U.	403	1,176	0	0	0	0	0	0	0	0	0	1,176
Bucknell U.	404	1,150	61	24	250	21	0	44	152	68	322	208
St. Edward's U.	404	1,150	150	0	220	50	170	100	30	0	0	430
Tuskegee U.	406	1,128	0	0	449	0	0	0	77	0	589	13
U. San Francisco	407	1,123	15	18	521	1	70	42	176	10	3	267
Trinity U.	408	1,117	45	59	178	12	160	28	170	0	51	414
Claremont Graduate U.	409	1,113	8	0	0	0	0	0	1,098	0	0	7
Vassar C.	410	1,106	20	49	186	2	172	136	275	0	0	266
Texas A&M International U.	411	1,093	1	19	82	27	42	17	208	360	47	290
Colorado C.	412	1,090	0	33	97	0	86	97	116	0	0	661
CUNY, Graduate Center	413	1,080	0	0	5	0	0	8	42	60	0	965
Furman U.	414	1,069	28	12	516	24	445	3	8	0	0	33
U. Colorado Denver ^d	415	1,063	8	5	172	0	12	81	33	0	63	689
Murray State U.	416	1,060	0	118	900	3	33	0	0	0	0	6
Hamilton C.	417	1,039	3	0	41	4	73	108	182	44	0	584
C. Charleston	418	1,032	62	70	295	24	37	61	43	0	0	440
Harvey Mudd C.	419	1,020	104	0	44	123	272	0	0	104	321	52
California State U., Dominguez Hills	420	1,001	67	15	81	10	445	76	71	0	0	236
Suffolk U.	421	996	0	0	0	0	0	0	0	0	0	996
Austin Peay State U.	422	984	3	8	618	0	26	1	0	6	0	322
Albion C.	423	977	i 17 i	56 i	384 i	13 i	93 i	0 i	116 i	0 i	0 i	298 i
U. of Health Sciences and Pharmacy in St. Louis	423	977	0	0	977	0	0	0	0	0	0	0
U. Wisconsin-La Crosse	423	977	0	10	195	0	30	5	631	4	0	102
Marymount U.	426	965	158	0	316	0	2	46	200	0	3	240
U. Virginia's C. Wise	426	965	4	0	3	0	21	0	31	0	15	891

TABLE 28

Higher education R&D expenditures funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
California State U., Los Angeles	428	943	0	0	83	0	779	13	0	0	9	59
U. Colorado Colorado Springs	429	939	106	37	66	19	114	77	229	2	156	133
Fayetteville State U.	430	898	0	0	107	0	0	0	0	0	0	791
Northern Kentucky U.	431	890	102	0	259	1	175	145	80	28	0	100
U. of the Incarnate Word	432	886	0	0	611	0	0	0	0	0	0	275
Pepperdine U.	433	885	0	0	140	29	82	67	57	131	0	379
Texas Woman's U.	434	883	1	0	366	2	160	133	11	0	0	210
Grambling State U.	435	858	0	0	0	0	494	0	0	0	0	364
Christopher Newport U.	436	855	0	0	281	3	106	12	131	0	0	322
U. Dayton	437	853	99	15	39	18	0	25	47	0	231	379
Haverford C.	438	852	14	41	339	10	78	27	90	0	0	253
West Virginia School of Osteopathic Medicine	439	850	0	0	848	0	0	0	0	0	0	2
Dillard U.	440	848	0	0	651	2	3	1	6	91	0	94
U. Wisconsin-Green Bay	441	843	18	29	487	5	39	11	38	0	135	81
U. Wisconsin-Stevens Point	442	829	0	94	646	0	31	0	0	0	50	8
U. Texas, Tyler	443	821	1	0	388	0	0	0	61	0	211	160
West Virginia State U.	444	815	0	0	815	0	0	0	0	0	0	0
Purdue U., Fort Wayne	445	814	0	0	123	60	19	148	29	57	26	352
New York Medical C.	446	813	0	0	813	0	0	0	0	0	0	0
U. Northern Iowa	447	808	5	129	91	6	60	0	506	0	0	11
C. Wooster	448	797	0	33	295	25	151	1	46	0	0	246
U. Illinois, Springfield	448	797	0	0	2	0	0	0	594	57	0	144
U. Washington, Bothell	450	786	0	0	0	11	42	0	0	0	0	733
Southeastern Louisiana U.	451	784	7	0	179	0	158	0	2	0	7	431
Marshall B. Ketchum U.	452	779	0	0	779	0	0	0	0	0	0	0
Albany C. of Pharmacy and Health Sciences	453	769	0	0	769	0	0	0	0	0	0	0
U. Texas of the Permian Basin	454	756	0	69	79	1	0	2	0	0	3	602
Missouri State U.	455	754	1	57	346	0	86	4	22	0	234	4
Northern Michigan U.	456	723	0	1	418	0	34	59	18	0	0	193
Stockton U.	457	720	0	207	0	0	0	0	513	0	0	0
U. of St. Thomas (MN)	458	715	0	0	90	0	125	116	4	0	120	260
Pace U.	459	711	15	0	382	0	9	5	10	0	0	290
SUNY, C. of Optometry	460	708	0	0	708	0	0	0	0	0	0	0

TABLE 28

Higher education R&D expenditures funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Stephen F. Austin State U.	494	511	3	7	146	33	6	2	109	0	0	205
SUNY, Geneseo	495	502	0	14	59	16	125	85	32	0	0	171
Palmer C. of Chiropractic, Davenport	496	500	0	0	500	0	0	0	0	0	0	0
U. Detroit Mercy	497	494	1	0	381	0	0	15	0	0	26	71
Seattle U.	498	471	92	0	81	46	152	0	24	0	41	35
Central Connecticut State U.	499	459	27	5	98	24	40	10	62	0	35	158
Macalester C.	499	459	12	22	27	29	81	9	210	0	0	69
Roger Williams U.	501	445	7	161	104	2	3	9	0	3	58	98
SUNY, C. Brockport	502	435	8	23	336	1	32	0	10	0	0	25
U. Puerto Rico, Cayey	503	430	0	0	0	0	2	0	0	428	0	0
California State U., Chico	504	422	0	16	292	0	6	0	17	0	73	18
CUNY, Lehman C.	505	421	9	0	33	0	30	7	15	15	0	312
U. New Haven	506	405	12	11	95	16	0	65	99	0	65	42
Saginaw Valley State U.	507	388	11	0	244	0	0	0	24	0	0	109
Dakota State U.	508	382	287	15	65	0	15	0	0	0	0	0
Virginia Military Institute	509	378	58	0	77	39	57	0	29	0	68	50
Manhattan C.	510	367	0	0	37	0	0	0	0	0	163	167
Central Washington U.	511	350	25	70	183	16	13	0	21	0	1	21
CUNY, C. Staten Island	512	342	14	3	23	5	78	19	7	35	0	158
Skidmore C.	513	337	18	31	52	0	104	26	42	0	0	64
Citadel Military C. South Carolina	514	336	7	0	80	13	102	5	25	0	62	42
SUNY, C. Plattsburgh	515	334	0	334	0	0	0	0	0	0	0	0
St. John's U., New York	516	326	17	0	176	0	91	17	5	0	0	20
U. Puerto Rico, Mayaguez	517	314	0	100	0	0	29	0	0	0	168	17
Western New England U.	517	314	0	0	128	0	0	2	0	0	184	0
Youngstown State U.	519	305	11	0	20	6	3	5	0	0	246	14
Sonoma State U.	520	298	5	53	37	5	9	17	38	5	9	120
Kettering U.	521	294	11	0	0	3	7	0	0	0	135	138
U. Puerto Rico, Humacao	522	288	0	0	0	0	288	0	0	0	0	0
Mount Holyoke C.	523	285	10	90	11	13	16	40	34	0	0	71
Bates C.	524	281	6	18	92	0	50	24	64	0	0	27
U. Wisconsin-Eau Claire	525	278	16	16	73	0	94	31	16	0	0	32
Northwestern State U. Louisiana	526	268	31	0	0	0	0	0	144	0	1	92

TABLE 28

Higher education R&D expenditures funded by institutional funds, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
CUNY, New York City C. of Technology	560	120	1	0	11	20	17	0	0	9	17	45
U. Hartford	561	117	3	0	12	4	8	8	4	0	47	31
California Lutheran U.	562	116	0	0	116	0	0	0	0	0	0	0
New England C. of Optometry	563	108	0	0	108	0	0	0	0	0	0	0
U.S. Military Academy	564	95	42	1	2	0	7	0	0	0	5	38
Monmouth U.	565	93	0	78	9	0	4	0	0	0	0	2
Rhode Island C.	566	92	0	0	0	0	0	1	0	0	0	91
U. Houston-Clear Lake	567	91	15	0	4	0	9	10	14	0	8	31
Plymouth State U.	568	84	0	37	23	0	0	0	19	5	0	0
St. Catherine U.	569	83	0	0	31	0	3	0	9	0	0	40
Colorado State U., Pueblo	570	82	0	0	0	0	0	0	0	82	0	0
U. Arkansas, Little Rock	571	80	29	0	0	0	1	0	0	0	50	0
Milwaukee School of Engineering	572	79	0	0	0	0	0	0	0	0	79	0
Mercyhurst U.	573	59	0	1	12	0	3	2	15	5	0	21
Utah Valley U.	573	59	0	0	59	0	0	0	0	0	0	0
Fort Lewis C.	575	51	3	0	13	0	4	0	0	0	31	0
Middlebury C.	576	49	0	0	49	0	0	0	0	0	0	0
Western Illinois U.	577	47	0	0	19	0	0	0	28	0	0	0
U. Alaska, Southeast	578	43	0	8	16	0	19	0	0	0	0	0
Southern U. and A&M C., Baton Rouge	579	34	0	0	0	0	0	0	0	0	34	0
Nevada State C.	580	22	0	0	22	0	0	0	0	0	0	0
Southern U. and A&M C., Agricultural Research and Extension Center	580	22	0	0	22	0	0	0	0	0	0	0
MGH Institute of Health Professions	582	20	0	0	0	0	0	0	0	0	0	20
Sonoran U. Health Sciences	582	20	0 i	0 i	20 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i
U. Maryland, Eastern Shore	582	20	0	0	20	0	0	0	0	0	0	0
Morehead State U.	585	15	0	0	5	0	10	0	0	0	0	0
U. Ana G. Mendez, Gurabo	586	12	0 i	0 i	2 i	0 i	0 i	0 i	0 i	1 i	9 i	0 i
California State U., Maritime Academy	587	10	0	0	0	0	0	0	0	0	0	10
Fisk U.	587	10	0	0	0	0	0	0	0	0	10	0
Pratt Institute	589	5	0	0	0	0	0	0	0	0	0	5
Hawaii Pacific U.	590	4	0	0	0	0	0	0	0	0	0	4

i = imputed.

nec = not elsewhere classified; S&E = science and engineering.

^a The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^b Johns Hopkins University includes the Applied Physics Laboratory, with \$57,745 thousand in institutionally financed R&D expenditures in FY 2022.

^c The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^d The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 29

Higher education R&D expenditures funded by businesses, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
All institutions	-	5,701,656	164,698	90,513	3,840,001	12,774	176,315	16,385	43,081	32,785	1,184,067	141,037
U. Texas M. D. Anderson Cancer Center	1	241,850	0	0	240,608	171	981	7	83	0	0	0
Duke U.	2	208,132	253	121	200,158	141	374	0	869	0	3,355	2,861
U. Pennsylvania	3	204,216	951	0	197,407	0	1,461	323	880	0	2,936	258
SUNY, Polytechnic Institute	4	169,101	0	0	0	0	0	0	0	0	169,101	0
Massachusetts Institute of Technology	5	165,200	26,525	3,573	10,759	979	20,834	0	3,284	9,786	67,752	21,708
Ohio State U.	6	141,894	831	26	83,362	0	2,087	46	694	318	53,919	611
Stanford U.	7	138,118	4,547	4,738	104,302	232	6,572	204	645	0	16,224	654
U. California, San Francisco	8	128,983	0	0	123,953	0	5,030	0	0	0	0	0
Washington U., Saint Louis	9	121,140	74	0	119,110	0	187	4	0	0	47	1,718
Wichita State U.	10	120,443	0	0	127	0	68	0	0	0	116,336	3,912
Johns Hopkins U. ^a	11	120,023	788	586	103,776	261	2,649	0	242	492	10,572	657
U. California, San Diego	12	106,189	127	15,290	78,581	44	701	1,948	256	229	8,835	178
U. Michigan, Ann Arbor	13	106,122	69	0	73,487	118	2,359	0	171	0	29,179	739
U. Southern California	14	91,844	884	0	86,445	0	1,265	12	724	0	1,947	567
U. California, Los Angeles	15	87,218	1,936	222	75,392	79	966	349	270	1,244	5,485	1,275
Columbia U. in the City of New York	16	83,684	2,504	1,055	75,761	0	237	126	255	0	3,422	324
Vanderbilt U. and Vanderbilt U. Medical Center	17	83,213	283	76	78,967	0	556	80	175	0	2,135	941
Georgia Institute of Technology	18	82,540	13,420	304	6,909	0	1,014	69	673	0	59,672	479
Icahn School of Medicine at Mount Sinai	19	81,384	0	0	81,384	0	0	0	0	0	0	0
U. Texas, Austin	20	76,512	2,516	8,722	12,284	682	2,079	11	1,350	34	38,637	10,197
Yale U.	21	76,240	226	0	73,845	0	530	0	6	0	1,633	0
U. Louisiana, Lafayette	22	74,657	5,319	1,222	52,686	832	510	0	61	0	7,649	6,378
U. Alabama, Birmingham	23	73,595	0	1	72,373	0	508	29	0	0	684	0
Purdue U., West Lafayette	24	69,428	2,015	76	10,998	139	8,798	18	404	83	41,426	5,471
U. California, Berkeley	25	69,062	194	46	14,112	88	8,841	172	2,446	6,461	34,783	1,919
Emory U.	26	64,536	355	72	63,490	43	198	0	0	0	378	0
Harvard U.	27	62,034	788	1,972	45,390	17	7,771	0	1,090	72	4,137	797
U. Washington, Seattle	28	61,099	1,154	70	50,376	66	731	5	40	0	8,426	231
Northwestern U.	29	59,850	1,307	0	50,263	0	1,166	0	378	1,876	4,462	398
New York U.	30	58,776	1,135	0	50,177	2,181	83	838	55	0	2,807	1,500
Cornell U.	31	55,328	1,392	0	46,260	0	748	586	138	0	2,643	3,561
North Carolina State U.	32	52,960	763	1,227	22,636	563	496	465	1,322	996	20,645	3,847

TABLE 29

Higher education R&D expenditures funded by businesses, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Colorado Anschutz Medical Campus ^b	33	52,346	0	0	52,114	0	0	48	56	0	127	1
U. Minnesota, Twin Cities	34	51,926	660	1	44,410	217	1,111	239	636	61	3,696	895
U. California, Davis	35	50,684	255	551	40,823	0	1,321	0	519	0	6,889	326
U. North Carolina, Chapel Hill	36	49,664	780	282	46,217	0	1,627	69	28	0	661	0
U. Illinois, Urbana-Champaign	37	49,272	15,048	329	9,065	32	2,992	405	15	4	19,976	1,406
U. Texas Southwestern Medical Center	38	47,282	0	0	47,282	0	0	0	0	0	0	0
U. Chicago	39	46,694	286	0	44,067	22	663	0	0	0	1,583	73
U. Cincinnati	40	45,002	12	2	39,727	0	160	0	209	530	3,996	366
Rutgers, State U. New Jersey, New Brunswick	41	44,250	1,274	1,176	34,330	4	4,273	197	1	7	2,326	662
Oregon Health and Science U.	42	43,965	0	0	43,413	0	0	0	0	0	552	0
U. Utah	43	43,073	764	709	37,418	108	617	851	139	0	2,386	81
U. California, Irvine	44	42,941	490	67	34,615	0	1,608	156	732	126	5,108	39
Carnegie Mellon U.	45	42,115	31,989	0	270	72	205	99	331	5	8,312	832
U. Wisconsin-Madison	46	40,450	936	400	30,949	0	2,259	18	170	2,033	3,480	205
U. Florida	47	39,233	252	34	32,532	0	737	363	56	0	5,209	50
Virginia Polytechnic Institute and State U.	48	37,005	188	0	4,979	588	650	167	61	0	28,971	1,401
U. Rochester	49	36,329	197	0	31,348	0	1,960	0	0	912	1,912	0
U. Pittsburgh, Pittsburgh	50	36,310	142	166	33,960	0	0	0	0	0	2,022	20
Texas A&M U., College Station and Health Science Center	51	35,535	872	1,235	6,567	10	1,637	0	105	263	19,944	4,902
U. Miami	52	35,378	2	316	34,601	0	0	0	306	0	153	0
Scripps Research Institute	53	35,318	0	0	35,318	0	0	0	0	0	0	0
Medical C. Wisconsin	54	35,121	0	0	35,121	0	0	0	0	0	0	0
U. Maryland ^c	55	34,844	989	446	27,392	0	1,266	0	1,053	108	2,982	608
Indiana U., Bloomington	56	34,091	634	92	31,742	0	1,239	12	59	53	218	42
U. Virginia, Charlottesville	57	32,511	652	0	26,854	0	422	41	78	17	4,031	416
U. Iowa	58	32,201	0	0	28,290	0	109	0	205	0	2,958	639
SUNY, U. Buffalo	59	29,723	330	8	13,779	0	148	0	0	0	15,432	26
U. Kansas	60	29,384	167	47	26,965	0	237	0	1	12	1,938	17
Baylor C. of Medicine	61	28,251	0	0	28,251	0	0	0	0	0	0	0
U. Arizona	62	27,911	75	1,136	17,958	2	2,998	46	96	20	5,307	273
Thomas Jefferson U.	63	26,469	0	0	26,469	0	0	0	0	0	0	0
Temple U.	64	26,463	0	0	24,585	0	259	9	0	0	1,483	127
Pennsylvania State U., University Park and Hershey Medical Center	65	24,121	977	666	11,498	276	1,748	34	214	0	8,242	466

TABLE 29

Higher education R&D expenditures funded by businesses, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Boston U.	66	22,525	1,811	0	16,734	7	329	167	73	0	3,254	150
Wake Forest U.	67	22,212	0	0	18,256	0	0	0	1,281	0	20	2,655
Arizona State U.	68	21,980	1,445	100	3,762	2	105	525	537	1,959	12,858	687
Medical U. South Carolina	69	20,932	0	0	20,932	0	0	0	0	0	0	0
U. Massachusetts, Medical School	70	20,870	0	0	20,870	0	0	0	0	0	0	0
U. Nebraska, Lincoln	71	19,767	49	8	13,407	20	977	0	23	155	4,755	373
Iowa State U.	72	18,924	52	16	11,426	491	219	0	3	0	6,447	270
Clemson U.	73	17,690	276	0	2,626	27	570	148	130	0	8,931	4,982
U. Missouri, Columbia	74	17,608	106	23	15,755	16	266	8	0	0	1,354	80
Princeton U.	75	17,455	2,962	2,562	1,629	322	3,297	3	957	0	5,714	9
California Institute of Technology	76	17,200	655	618	1,368	0	7,036	0	0	0	7,430	93
U. California, Santa Barbara	77	16,324	913	3,674	1,109	0	5,419	151	156	0	4,902	0
U. Notre Dame	78	16,225	732	0	543	0	456	0	29	7	13,102	1,356
Virginia Commonwealth U.	79	16,124	2	10	14,656	0	129	0	56	0	895	376
Georgetown U.	80	16,111	0	0	15,287	8	122	0	229	0	0	465
Rush U.	81	15,789	0	0	15,789	0	0	0	0	0	0	0
U. Texas Health Science Center, Houston	82	15,764	0	0	15,764	0	0	0	0	0	0	0
U. Oklahoma, Norman and Health Science Center	83	15,450	211	635	12,744	0	33	0	0	0	1,827	0
Rensselaer Polytechnic Institute	84	15,282	5,339	0	430	1,144	1,720	373	0	0	6,046	230
U. North Dakota	85	13,559	16	65	144	0	4	0	26	0	13,304	0
Louisiana State U., Baton Rouge	86	13,449	144	829	8,366	11	519	118	204	17	2,619	622
Texas Tech U.	87	13,367	189	668	4,812	123	267	603	1,319	0	3,017	2,369
U. Georgia	88	12,775	30	430	10,191	0	46	109	226	0	1,661	82
Tufts U.	89	12,765	140	5	8,116	52	20	0	663	277	3,156	336
U. South Florida ^d	90	12,463	1	31	11,416	0	76	63	47	0	780	49
Northeastern U.	91	12,107	500	14	4,456	0	2,961	344	36	0	3,635	161
U. Illinois, Chicago	92	11,917	361	0	10,465	2	0	0	110	0	729	250
U. Louisville	93	11,915	23	0	10,504	0	389	0	0	0	993	6
Colorado State U., Fort Collins	94	11,888	9	610	8,029	212	932	0	67	77	1,952	0
U. Connecticut	95	11,371	465	71	5,295	419	125	532	133	0	4,125	206
U. Colorado Boulder	96	11,316	466	868	828	102	897	0	0	6	7,948	201
U. Central Florida	97	11,278	1,845	610	477	136	4,611	42	166	0	3,260	131
Oklahoma State U., Stillwater	98	11,236	0	8	7,734	0	128	4	671	1	2,195	495

TABLE 29

Higher education R&D expenditures funded by businesses, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Arkansas for Medical Sciences	99	11,022	0	0	11,022	0	0	0	0	0	0	0
Tulane U.	100	10,974	0	30	10,707	0	141	0	0	0	96	0
Michigan State U.	101	10,942	449	17	5,337	77	580	1	0	876	2,927	678
U. Kentucky	102	10,715	112	128	8,937	5	0	94	13	0	1,386	40
U. New Hampshire	103	9,893	0	1,465	643	18	5	0	15	0	7,591	156
U. Houston	104	9,709	119	875	747	0	792	737	111	0	4,566	1,762
Colorado School of Mines	105	9,580	48	2,107	578	0	219	0	99	0	6,529	0
U. Tennessee, Knoxville	106	9,528	51	0	2,547	94	350	0	61	274	6,060	91
SUNY, Stony Brook U.	107	9,512	394	1,552	5,632	57	235	3	0	577	1,062	0
U. Texas, Dallas	108	9,499	337	161	460	35	358	0	1	0	8,088	59
U. Texas Health Science Center, San Antonio	109	9,276	0	0	9,276	0	0	0	0	0	0	0
Washington State U.	110	9,099	175	28	7,071	5	210	53	25	26	1,226	280
U. Nebraska, Medical Center	111	8,591	0	0	8,591	0	0	0	0	0	0	0
U. Massachusetts, Amherst	112	8,582	3,338	296	1,205	0	20	193	10	0	3,408	112
Syracuse U.	113	8,568	39	147	210	0	55	0	71	0	706	7,340
Auburn U., Auburn	114	8,338	54	11	2,852	0	212	171	0	0	3,093	1,945
Kansas State U.	115	8,259	57	63	5,941	54	1,217	3	21	1	902	0
Oregon State U.	116	8,037	248	0	4,202	0	158	4	0	49	3,376	0
U. California, Santa Cruz	117	7,330	956	462	1,101	0	866	163	776	45	2,888	73
U. Texas Medical Branch	118	7,267	0	0	7,267	0	0	0	0	0	0	0
Southern Illinois U., Carbondale	119	7,169	5	94	6,272	0	28	2	5	84	679	0
George Mason U.	120	6,969	139	218	368	232	7	53	2,040	0	274	3,638
Utah State U.	121	6,871	0	263	1,789	48	360	13	0	0	4,398	0
Michigan Technological U.	122	6,687	100	2,347	0	0	5	0	0	0	4,150	85
Wayne State U.	123	6,556	0	27	4,873	0	568	0	7	53	502	526
U. California, Riverside	124	6,267	331	219	2,817	1	662	0	185	0	2,052	0
U. Tulsa	125	6,130	0	0	0	0	2	72	0	0	6,056	0
SUNY, Upstate Medical U.	126	5,883	0	0	5,883	0	0	0	0	0	0	0
U. Delaware	127	5,839	280	831	850	1	742	0	62	50	2,801	222
U. Texas, San Antonio	128	5,765	392	19	946	0	981	105	606	0	507	2,209
U. Dayton	129	5,620	84	0	0	0	168	0	0	0	5,360	8
Rice U.	130	5,535	463	30	261	77	1,352	56	196	0	3,100	0
Saint Louis U.	131	5,459	49	117	5,238	0	0	0	0	0	0	55

TABLE 29

Higher education R&D expenditures funded by businesses, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
George Washington U.	132	5,048	0	0	3,868	0	0	0	341	0	357	482
West Virginia U.	133	5,016	0	20	4,507	0	66	1	23	0	382	17
Florida State U.	134	4,914	60	1,336	106	0	511	0	75	10	2,677	139
Abilene Christian U.	135	4,907	0	0	66	0	4,841	0	0	0	0	0
Case Western Reserve U.	136	4,856	65	0	2,440	0	536	0	0	0	1,808	7
U. Arkansas, Fayetteville	137	4,705	77	72	3,095	0	0	17	0	0	1,108	336
U. New Mexico	138	4,625	0	0	3,955	0	0	0	67	0	603	0
Georgia Southern U.	139	4,608	0	60	248	0	3,565	42	133	32	280	248
Missouri U. of Science and Technology	140	4,559	50	0	0	0	93	0	0	0	4,416	0
U. Massachusetts, Lowell	141	4,463	149	74	312	0	576	0	232	0	3,100	20
U. South Carolina, Columbia	142	4,322	142	0	1,719	0	0	0	24	0	2,318	119
Brown U.	143	4,247	343	47	2,265	0	115	0	33	0	1,238	206
U. Wyoming	144	4,099	98	2,973	977	0	0	0	13	0	38	0
Mercer U.	145	4,083	0	0	428	0	0	0	0	0	3,654	1
East Carolina U.	146	3,991	0	28	3,623	0	9	37	0	0	66	228
U. Tennessee, Health Science Center	147	3,958	0	0	3,958	0	0	0	0	0	0	0
Woods Hole Oceanographic Institution	148	3,874	0	3,389	0	0	0	0	0	0	485	0
U. Maine	149	3,848	0	314	1,488	0	1	0	62	0	1,971	12
Albert Einstein C. of Medicine	150	3,820	0	0	3,820	0	0	0	0	0	0	0
Cold Spring Harbor Laboratory	151	3,766	0	0	3,766	0	0	0	0	0	0	0
Ohio U.	152	3,634	50	89	252	0	0	0	2	0	3,231	10
Albany Medical C.	153	3,606	0	0	3,606	0	0	0	0	0	0	0
Brigham Young U., Provo	154	3,577	116	81	637	0	1,003	38	0	0	1,702	0
Loyola U., Chicago	155	3,527	8	0	3,519	0	0	0	0	0	0	0
Cleveland State U.	156	3,481	0	0	3,057	0	0	0	35	0	370	19
SUNY, Binghamton U.	157	3,458	405	0	72	0	309	0	520	0	2,141	11
Augusta U.	158	3,451	0	0	3,451	0	0	0	0	0	0	0
Claremont Graduate U.	159	3,384	0	0	0	0	0	0	0	0	0	3,384
U. Alaska, Fairbanks	160	3,346	0	1,031	340	0	0	0	4	1,176	795	0
U. Toledo	161	3,312	0	6	2,711	0	111	0	2	0	482	0
Worcester Polytechnic Institute	162	3,308	112	0	174	0	58	0	15	0	2,949	0
U. Puerto Rico, Medical Sciences Campus	163	3,228	0	0	3,228	0	0	0	0	0	0	0
Louisiana State U., Health Sciences Center, New Orleans	164	3,193	0	0	3,193	0	0	0	0	0	0	0

TABLE 29

Higher education R&D expenditures funded by businesses, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Mississippi State U.	165	3,170	0	63	2,082	0	212	0	3	0	810	0
Baylor U.	166	3,165	134	30	68	0	119	0	0	0	2,282	532
New York Medical C.	167	2,947	0	0	2,947	0	0	0	0	0	0	0
U. Texas, Arlington	168	2,935	164	0	298	0	259	19	0	0	1,662	533
New Mexico Institute of Mining and Technology	169	2,922	0	31	0	17	63	0	0	0	2,811	0
Howard U.	170	2,908	27	0	1,279	0	0	354	375	0	658	215
Florida International U.	171	2,800	145	53	586	0	210	133	226	0	1,434	13
Rochester Institute of Technology	172	2,789	7	0	27	0	790	0	0	0	1,960	5
U. Nevada, Reno	173	2,787	3	77	2,079	0	55	43	0	0	530	0
U. Vermont	174	2,785	0	0	2,366	82	49	0	0	0	288	0
U. Alabama, Tuscaloosa	175	2,701	0	97	25	0	14	0	841	0	1,162	562
U. Mississippi	176	2,696	0	13	2,625	0	48	0	0	0	10	0
U. North Carolina, Charlotte	177	2,689	171	25	236	0	296	52	18	0	1,501	390
Oakland U.	178	2,613	340	0	137	0	881	0	0	0	1,255	0
Stevens Institute of Technology	179	2,608	143	0	29	0	9	0	0	0	2,389	38
Milwaukee School of Engineering	180	2,485	0	0	0	0	0	0	0	0	2,485	0
New Mexico State U.	181	2,451	56	8	1,271	0	187	233	20	288	387	1
Florida Atlantic U.	182	2,431	137	0	2,128	0	50	0	0	0	116	0
Dartmouth C. and Dartmouth Hitchcock Medical Center	183	2,383	128	0	1,567	0	41	0	257	0	390	0
Drexel U.	184	2,323	29	0	1,201	0	0	0	0	0	1,043	50
U. Hawaii, Manoa	185	2,304	44	1,257	622	0	49	0	22	0	310	0
Philadelphia C. of Osteopathic Medicine	186	2,300	0	0	2,300	0	0	0	0	0	0	0
Rockefeller U.	187	2,292	0	0	2,273	0	19	0	0	0	0	0
Saint Joseph's U.	188	2,252	10	0	1,940	0	174	128	0	0	0	0
U. Akron	189	2,102	0	0	170	0	825	90	0	0	998	19
U. Michigan, Dearborn	190	2,070	0	0	0	0	0	0	0	0	2,070	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	191	2,063	0	0	307	0	0	72	1	0	1,683	0
U. Massachusetts, Boston	192	2,043	109	0	77	0	0	109	277	0	122	1,349
Texas Christian U.	193	2,028	2	0	142	0	177	8	10	0	4	1,685
California Polytechnic State U., San Luis Obispo	194	2,008	74	1	553	0	173	0	32	0	1,158	17
U. North Texas, Denton	195	1,979	98	85	810	0	514	90	0	0	365	17
U. Maryland, Baltimore County	196	1,958	799	235	102	0	647	0	0	0	122	53
U. Denver	197	1,937	0	0	13	22	0	0	88	0	1,651	163

TABLE 29

Higher education R&D expenditures funded by businesses, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Illinois Institute of Technology	231	948	0	0	199	0	101	0	0	0	613	35
U. Texas Health Science Center, Tyler	232	858	0	0	858	0	0	0	0	0	0	0
Pennsylvania State U., Behrend	233	848	0	0	24	0	403	0	0	0	421	0
Old Dominion U.	234	820	93	33	342	0	95	0	0	0	240	17
Northern Arizona U.	235	813	0	0	352	0	0	0	0	0	348	113
SUNY, C. of Environmental Science and Forestry	236	795	6 i	16 i	680 i	0 i	4 i	57 i	1 i	0 i	25 i	6 i
U. Oregon	237	782	2	28	23	0	0	241	6	0	100	382
U. California, Merced	238	768	0	0	0	0	0	0	0	0	308	460
Marquette U.	239	752	62	0	228	0	0	35	0	0	400	27
South Dakota School of Mines and Technology	240	741	0	0	0	0	10	0	0	0	731	0
SUNY, U. Albany	241	735	0	288	324	23	25	0	63	0	0	12
CUNY, Hunter C.	242	716	0	0	72	0	51	0	0	0	0	593
Louisiana Tech U.	243	713	0	0	42	0	55	0	5	0	611	0
U. Montana, Missoula	244	709	151	127	376	29	26	0	0	0	0	0
U. West Florida	245	683	15	16	43	0	0	0	590	0	0	19
U.S. Air Force Academy	246	680	60	23	0	0	135	0	0	0	460	2
CUNY, Graduate School of Public Health and Health Policy	247	658	0	0	658	0	0	0	0	0	0	0
Boston C.	248	652	30	0	129	0	246	0	131	0	0	116
Kent State U.	249	640	11	0	4	0	332	41	74	46	72	60
Portland State U.	250	636	93	0	60	0	0	0	20	0	421	42
Southern U. and A&M C., Baton Rouge	251	635	0	0	0	0	14	0	0	0	0	621
U. of Health Sciences and Pharmacy in St. Louis	251	635	0	0	635	0	0	0	0	0	0	0
Northern Illinois U.	253	634	42	179	1	0	6	0	2	0	404	0
U. Alabama, Huntsville	254	626	0	108	17	0	150	0	0	0	335	16
Appalachian State U.	255	617	0	0	556	0	0	48	8	0	0	5
Villanova U.	256	605	0	0	0	0	13	0	0	0	583	9
Morgan State U.	257	601	23	0	56	0	83	0	53	0	332	54
St. Cloud State U.	257	601	0	1	61	0	0	0	81	0	25	433
Lehigh U.	259	595	0	0	5	0	9	0	0	0	560	21
U. Colorado Colorado Springs	259	595	107	0	0	0	2	0	0	0	486	0
Rosalind Franklin U. of Medicine and Science	261	593	0	0	593	0	0	0	0	0	0	0
U. North Carolina, Greensboro	261	593	0	0	355	0	129	0	0	0	0	109
Southern Illinois U., Edwardsville	263	577	0	1	1	0	0	0	0	0	575	0

TABLE 29

Higher education R&D expenditures funded by businesses, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields		
U. Southern Mississippi	264	555	0	124	414	0	15	0	0	0	0	2		
Idaho State U.	265	547	19	72	403	0	0	0	0	0	53	0		
Boise State U.	266	536	13	7	137	0	107	0	11	0	261	0		
California State U., Long Beach	267	534	0	0	1	0	68	27	66	0	320	52		
Manhattan C.	268	518	0	0	0	0	0	0	0	0	412	106		
Santa Clara U.	268	518	0	0	0	0	19	0	0	0	475	24		
Texas Tech U., Health Sciences Center	270	508	0	0	502	0	0	0	0	0	0	6		
Georgia State U.	271	502	117	17	98	0	1	90	132	0	0	47		
U. North Texas, Health Science Center	271	502	0	0	502	0	0	0	0	0	0	0		
Sonoran U. Health Sciences	273	500	0	0	500	0	0	0	0	0	0	0		
U. New Orleans	274	483	0	0	0	0	84	0	25	0	264	110		
U.S. Military Academy	275	482	0	0	0	22	0	151	0	0	309	0		
Occidental C.	276	480	i	0	i	268	i	52	i	0	i	0	i	
Purdue U., Northwest	277	477	8	0	0	0	0	0	0	0	448	21		
Texas Tech U., Health Sciences Center, El Paso	278	475	0	0	475	0	0	0	0	0	0	0		
CUNY, City C.	279	467	43	0	0	0	227	0	0	0	197	0		
Florida Institute of Technology	280	465	70	54	49	0	19	28	0	0	245	0		
California State U., Stanislaus	281	464	0	0	388	0	0	76	0	0	0	0		
San Diego State U.	282	457	0	0	109	0	102	0	0	0	242	4		
U. Colorado Denver ^b	283	453	14	0	0	0	27	300	45	0	54	13		
North Carolina Central U.	284	434	86	1	19	0	85	0	0	88	19	136		
Toyota Technological Institute, Chicago	285	431	431	0	0	0	0	0	0	0	0	0		
American U.	286	428	0	0	0	0	0	0	0	0	0	428		
Chapman U.	287	425	0	0	424	0	0	0	0	0	0	1		
Nova Southeastern U.	288	417	0	11	321	0	0	85	0	0	0	0		
Langston U.	289	416	0	0	372	2	0	4	0	0	0	38		
Monmouth U.	290	407	0	381	18	0	0	0	0	0	0	8		
Wright State U.	290	407	0	0	333	0	2	3	0	0	57	12		
U. Houston-Clear Lake	292	399	0	0	399	0	0	0	0	0	0	0		
Marshall B. Ketchum U.	293	397	i	0	i	0	i	0	i	0	i	0	i	
Texas A&M U.-Kingsville	294	389	0	0	340	0	0	0	0	0	49	0		
Alabama A&M U.	295	386	9	i	0	i	229	i	2	i	19	i	6	i
U. Minnesota, Duluth	296	382	0	0	282	5	0	0	0	0	95	0		

TABLE 29

Higher education R&D expenditures funded by businesses, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Guam	297	375	0	22	353	0	0	0	0	0	0	0
Catholic U. of America	298	370	0	0	0	0	271	0	0	0	0	99
Bucknell U.	299	369	12	0	0	0	0	0	0	0	356	1
California State U., Fresno	300	356	0	0	333	0	0	0	5	0	18	0
U. New Haven	301	352	135	0	21	0	8	0	63	0	125	0
Western U. of Health Sciences	302	351	0	0	333	0	0	0	0	0	0	18
Morehead State U.	303	345	0	0	0	0	0	0	0	0	345	0
Franklin and Marshall C.	304	339	0	0	0	0	0	0	0	30	0	309
U. Missouri, Kansas City	305	338	0	7	280	0	0	0	0	0	51	0
Florida A&M U.	306	334	0	0	314	15	0	0	0	0	5	0
Rutgers, State U. New Jersey, Camden	307	330	60	0	23	0	142	2	83	0	0	20
Prairie View A&M U.	308	327	0	0	72	0	0	0	0	0	255	0
U. of St. Thomas (MN)	308	327	0	0	0	0	37	0	0	0	181	109
CUNY, Advanced Science Research Center	310	324	0	0	0	0	315	0	0	0	9	0
Marshall U.	311	320	0	0	275	0	45	0	0	0	0	0
Hawaii Pacific U.	312	315	0	0	315	0	0	0	0	0	0	0
Naval Postgraduate School	313	313	222	0	0	0	13	0	0	0	78	0
U. Wisconsin-Platteville	314	305	6	0	142	4	18	5	29	4	34	63
Midwestern U.	315	290	0	0	290	0	0	0	0	0	0	0
Montana Technological U.	316	282	0	53	114	0	0	0	0	0	115	0
U. Alaska, Anchorage	316	282	0	136	77	0	0	0	0	0	12	57
Arkansas State U., Jonesboro	318	271	8	0	198	0	28	0	32	0	5	0
California State U., Channel Islands	319	267	0	0	0	0	267	0	0	0	0	0
Alfred U.	320	264	0	0	0	0	0	0	0	0	264	0
Middle Tennessee State U.	321	261	1	0	151	20	65	8	12	0	0	4
North Carolina A&T State U.	321	261	40	0	8	0	0	0	0	0	178	35
DePaul U.	323	260	102	0	0	0	0	0	128	0	0	30
Tarleton State U.	324	257	0	0	80	177	0	0	0	0	0	0
Albany C. of Pharmacy and Health Sciences	325	250	0	0	250	0	0	0	0	0	0	0
Smith C.	326	248	177	0	22	0	0	0	0	0	49	0
Ball State U.	327	247	173	0	73	0	0	1	0	0	0	0
U. Wisconsin-Eau Claire	328	243	30	0	53	0	95	64	1	0	0	0
U. Puerto Rico, Rio Piedras	329	229	11	0	118	48	52	0	0	0	0	0

TABLE 29

Higher education R&D expenditures funded by businesses, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Eastern Virginia Medical School	363	148	0	0	148	0	0	0	0	0	0	0
Spelman C.	364	147	0	0	0	0	0	0	0	0	0	147
CUNY, John Jay C. of Criminal Justice	365	144	0	0	0	0	0	0	0	0	0	144
U. Northern Colorado	366	143	0	0	117	0	5	0	21	0	0	0
Babson C.	367	140	0 i	0 i	0 i	5 i	0 i	0 i	38 i	0 i	0 i	97 i
Purdue U., Fort Wayne	367	140	0	0	140	0	0	0	0	0	0	0
Texas Woman's U.	369	135	0	0	72	0	0	0	0	0	0	63
U. Texas of the Permian Basin	370	132	18	0	0	0	23	29	16	0	46	0
U. Hawaii, Hilo	371	131	0	0	131	0	0	0	0	0	0	0
California State U., Chico	372	130	0	0	14	0	5	0	0	0	111	0
U. New England	373	126	0	0	126	0	0	0	0	0	0	0
Bowling Green State U.	374	122	30	0	92	0	0	0	0	0	0	0
William Paterson U.	375	121	0	0	121	0	0	0	0	0	0	0
Tennessee Technological U.	376	117	0	0	0	0	0	0	0	0	117	0
Fayetteville State U.	377	116	0	0	0	0	0	0	53	0	0	63
California State U., Sacramento	378	115	32	13	0	0	0	0	6	0	48	16
Butler U.	379	113	0	0	103	0	10	0	0	0	0	0
Murray State U.	380	112	0	0	91	0	16	0	0	0	0	5
U. Texas, Tyler	381	111	0	0	4	0	0	0	2	0	101	4
California State Polytechnic U., Humboldt	382	110	0	0	71	0	0	0	12	0	27	0
Florida Gulf Coast U.	382	110	0	33	13	0	0	0	0	0	62	2
Oregon Institute of Technology	384	109 i	3 i	8 i	74 i	2 i	0 i	3 i	0 i	0 i	19 i	0 i
Mercyhurst U.	385	108	0	0	0	0	0	0	0	0	0	108
U. North Florida	386	107	0	0	44	10	25	0	0	0	8	20
Roseman U. of Health Sciences	387	106	0	0	106	0	0	0	0	0	0	0
U. Tennessee, Chattanooga	387	106	0	0	20	0	0	3	0	31	52	0
U. Oklahoma, Tulsa	389	104	0	0	80	0	0	0	0	0	24	0
CUNY, system office	390	99	99	0	0	0	0	0	0	0	0	0
California State U., Fullerton	391	95	0	16	48	0	0	0	9	0	0	22
Framingham State U.	391	95 i	2 i	0 i	53 i	1 i	8 i	2 i	5 i	0 i	0 i	24 i
Missouri State U.	391	95	0	0	95	0	0	0	0	0	0	0
Jackson State U.	394	93	17	0	1	0	0	0	0	0	75	0
Wesleyan U.	394	93	0	0	90	3	0	0	0	0	0	0

TABLE 29

Higher education R&D expenditures funded by businesses, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Texas A&M U.-Corpus Christi	396	90	0	83	0	0	0	0	0	0	0	7
Wellesley C.	397	89	0	5	84	0	0	0	0	0	0	0
New England C. of Optometry	398	88	0	0	88	0	0	0	0	0	0	0
U. Central Oklahoma	399	85 i	2 i	0 i	43 i	1 i	6 i	1 i	4 i	0 i	9 i	19 i
U. Washington, Bothell	399	85	0	0	0	0	0	0	0	0	0	85
Dakota State U.	401	84	84	0	0	0	0	0	0	0	0	0
Indiana State U.	401	84	0	0	79	0	0	0	0	0	0	5
CUNY, Queens C.	403	83	0	0	66	0	17	0	0	0	0	0
Kentucky State U.	403	83	0	0	83	0	0	0	0	0	0	0
Lake Superior State U.	403	83	0	0	42	0	0	0	0	0	41	0
Franklin W. Olin C. of Engineering	406	82	0	0	0	0	0	0	0	0	82	0
U. Missouri, Saint Louis	407	81	62	0	0	0	19	0	0	0	0	0
Colgate U.	408	78	0	0	0	0	78	0	0	0	0	0
Texas A&M International U.	409	73	0	0	0	0	0	0	0	0	0	73
Western Washington U.	410	68	0	0	0	0	9	20	0	0	39	0
Robert Morris U.	411	67 i	2 i	0 i	46 i	0 i	0 i	1 i	4 i	0 i	7 i	7 i
Marymount U.	412	66	31	0	35	0	0	0	0	0	0	0
Elizabeth City State U.	413	61	31	0	0	0	0	0	3	0	0	27
Southeastern Louisiana U.	413	61	0	0	18	0	43	0	0	0	0	0
Eastern Michigan U.	415	57	0	32	25	0	0	0	0	0	0	0
Central Washington U.	416	55	0	0	0	0	3	0	52	0	0	0
Western Kentucky U.	416	55	0	0	33	0	0	0	0	0	22	0
Illinois State U.	418	54	0	3	0	0	41	0	0	0	6	4
Montclair State U.	418	54	0	0	54	0	0	0	0	0	0	0
U. North Carolina, Asheville	418	54	0	0	0	0	0	0	0	54	0	0
Oklahoma State U., Center for Health Sciences	421	53	0	0	53	0	0	0	0	0	0	0
San Francisco State U.	421	53	0	0	0	0	0	0	53	0	0	0
California State U., Monterey Bay	423	50	36	0	14	0	0	0	0	0	0	0
Christopher Newport U.	424	48	0	0	48	0	0	0	0	0	0	0
U. Nebraska, Kearney	424	48	0	0	5	0	22	0	5	0	0	16
U. of the Virgin Islands	424	48	0	0	48	0	0	0	0	0	0	0
Western New England U.	427	46	0	0	44	0	0	0	0	0	2	0
Pacific U.	428	45	0	0	45	0	0	0	0	0	0	0

TABLE 29

Higher education R&D expenditures funded by businesses, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields		
U. Nebraska, Omaha	429	44	0	0	22	0	0	22	0	0	0	0		
Air Force Institute of Technology	430	43	0	0	0	0	0	0	0	0	43	0		
Youngstown State U.	431	42	0	0	0	0	0	0	0	0	42	0		
U. Louisiana, Monroe	432	41	0	0	0	0	0	0	0	0	0	41		
C. Charleston	433	40	39	0	0	0	1	0	0	0	0	0		
Sonoma State U.	433	40	0	31	9	0	0	0	0	0	0	0		
Barnard C.	435	39	0	0	39	0	0	0	0	0	0	0		
Troy U.	436	38	0	0	1	0	0	0	0	0	0	37		
U. Wisconsin-Oshkosh	437	36	0	0	34	0	2	0	0	0	0	0		
East Tennessee State U.	438	35	0	0	35	0	0	0	0	0	0	0		
Lafayette C.	439	32	0	0	0	0	0	0	5	0	2	25		
U. South Dakota	439	32	0	0	32	0	0	0	0	0	0	0		
West Chester U. Pennsylvania	439	32	0	0	0	27	0	5	0	0	0	0		
Davidson C.	442	31	0	0	0	0	31	0	0	0	0	0		
Roger Williams U.	443	30	18	12	0	0	0	0	0	0	0	0		
St. Catherine U.	443	30	0	0	30	0	0	0	0	0	0	0		
Sul Ross State U.	443	30	i	2	i	2	i	16	i	0	i	6	i	
Towson U.	443	30	2	0	28	0	0	0	0	0	0	0		
Fordham U.	447	27	0	0	0	0	3	23	0	0	0	1		
Furman U.	448	25	0	0	25	0	0	0	0	0	0	0		
Meharry Medical C.	448	25	0	0	25	0	0	0	0	0	0	0		
U. Wisconsin-Green Bay	448	25	1	i	0	i	14	i	1	i	0	i	3	i
Calvin U.	451	24	0	0	0	0	0	14	10	0	0	0		
U. Alaska, Southeast	451	24	0	0	24	0	0	0	0	0	0	0		
SUNY, C. Brockport	453	23	0	0	23	0	0	0	0	0	0	0		
Northern Kentucky U.	454	22	0	0	19	0	0	0	3	0	0	0		
Stephen F. Austin State U.	454	22	0	7	15	0	0	0	0	0	0	0		
Texas A&M U.-San Antonio	454	22	0	0	22	0	0	0	0	0	0	0		
CUNY, New York City C. of Technology	457	20	0	0	0	20	0	0	0	0	0	0		
U. of the Pacific	458	18	0	0	18	0	0	0	0	0	0	0		
U. Detroit Mercy	459	16	0	0	0	0	0	0	0	0	16	0		
Grinnell C.	460	15	0	0	0	0	0	0	15	0	0	0		
Kean U.	460	15	14	0	1	0	0	0	0	0	0	0		

TABLE 29

Higher education R&D expenditures funded by businesses, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
St. Edward's U.	460	15	0	0	0	0	0	0	0	0	0	15
Eastern Washington U.	463	13	0	1	2	2	0	0	8	0	0	0
U. North Georgia	463	13	0	0	13	0	0	0	0	0	0	0
Winthrop U.	463	13	0	0	0	0	0	0	0	0	0	13
Johnson C. Smith U.	466	12	0	0	0	0	0	0	0	0	0	12
Edward Via C. of Osteopathic Medicine	467	8	0	0	8	0	0	0	0	0	0	0
U. of the Incarnate Word	467	8	0	0	0	0	0	0	0	0	8	0
Alcorn State U.	469	7 i	0 i	0 i	3 i	0 i	0 i	0 i	4 i	0 i	0 i	0 i
Loyola Marymount U.	470	6	0	0	1	0	0	0	0	0	5	0
U. Hartford	470	6	0	0	0	0	0	0	0	0	6	0
U. of Mary Washington	470	6	0	0	0	0	0	0	0	0	0	6
Saginaw Valley State U.	473	5 i	0 i	0 i	4 i	0 i	0 i	0 i	0 i	0 i	0 i	1 i
SUNY, Buffalo State	473	5	0	0	0	0	0	0	0	0	0	5
SUNY, Cobleskill	475	4	0	0	0	0	0	0	0	0	4	0
Tennessee State U.	475	4	0	0	0	0	0	0	0	0	0	4
Texas A&M U.-Commerce	475	4	0	0	4	0	0	0	0	0	0	0
Trinity C., Hartford	475	4	4	0	0	0	0	0	0	0	0	0
U. Baltimore	475	4	0	0	0	0	0	0	4	0	0	0
U. Virginia's C. Wise	475	4	0	0	0	0	0	0	4	0	0	0
California State U., San Bernardino	481	3	0	0	3	0	0	0	0	0	0	0
Citadel Military C. South Carolina	481	3	0	0	0	0	0	0	0	0	3	0
CUNY, Brooklyn C.	481	3	0	0	3	0	0	0	0	0	0	0
Seattle U.	481	3	0	0	3	0	0	0	0	0	0	0
Stockton U.	481	3	0	3	0	0	0	0	0	0	0	0
California State U., East Bay	486	2	0	0	2	0	0	0	0	0	0	0
Harvey Mudd C.	486	2	0	0	0	0	0	0	0	0	2	0
New School	486	2	2	0	0	0	0	0	0	0	0	0
Union C., Schenectady	486	2	2	0	0	0	0	0	0	0	0	0
CUNY, C. Staten Island	490	1	0	0	0	0	1	0	0	0	0	0
Sam Houston State U.	490	1	0	0	1	0	0	0	0	0	0	0
U. Wisconsin-Stevens Point	490	1	0	0	1	0	0	0	0	0	0	0

i = imputed.

nec = not elsewhere classified; S&E = science and engineering.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$9,458 thousand in business-financed R&D expenditures in FY 2022.

^b The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^c The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
All institutions	-	5,974,155	87,070	148,997	3,799,516	45,963	263,520	88,936	482,180	63,590	407,915	586,468
U. California, San Francisco	1	251,612	0	0	243,397	0	8,215	0	0	0	0	0
U. Washington, Seattle	2	231,172	2,900	10,357	190,122	1,068	2,241	353	6,191	0	9,671	8,269
Stanford U.	3	189,536	1,978	7,517	128,265	483	12,772	2,665	6,926	31	18,356	10,543
U. California, Los Angeles	4	187,416	644	2,484	129,013	1,063	3,428	2,903	21,231	3,310	6,950	16,390
Harvard U.	5	179,073	1,355	4,471	88,359	874	11,861	723	38,478	157	6,865	25,930
U. California, Berkeley	6	169,790	9,487	781	44,176	1,182	22,473	3,310	25,525	14,837	23,884	24,135
Johns Hopkins U. ^a	7	153,334	572	361	134,538	484	2,842	107	2,146	1,593	5,304	5,387
U. Wisconsin-Madison	8	127,756	3,525	3,026	66,867	1,083	8,674	2,594	11,317	3,148	9,929	17,593
Columbia U. in the City of New York	9	121,435	1,094	14,066	69,606	1,634	2,666	541	6,017	0	4,552	21,259
U. Pennsylvania	10	120,832	633	279	89,298	888	2,626	2,860	7,670	0	4,612	11,966
Cornell U.	11	115,788	1,341	228	97,962	139	3,626	285	2,868	0	5,243	4,096
U. California, San Diego	12	111,854	214	4,055	65,292	395	15,442	838	7,135	269	14,821	3,393
New York U.	13	101,175	1,038	202	54,232	3,421	1,376	3,719	6,992	0	2,981	27,214
Massachusetts Institute of Technology	14	100,640	2,361	3,606	19,536	2,707	6,350	0	30,337	1,309	22,567	11,867
Duke U.	15	92,526	26	859	71,807	1,561	527	438	9,090	0	4,556	3,662
Washington U., Saint Louis	16	86,700	99	325	76,875	5	956	414	348	3	1,970	5,705
U. North Carolina, Chapel Hill	17	84,942	1,604	355	55,974	60	1,710	6,076	11,057	0	1,891	6,215
Boston U.	18	84,116	519	125	67,729	600	1,310	2,091	3,700	33	2,747	5,262
Yale U.	19	75,151	110	150	64,059	106	2,845	929	2,654	0	1,849	2,449
Princeton U.	20	73,840	1,696	2,009	22,366	2,942	8,655	835	28,270	0	3,158	3,909
Rutgers, State U. New Jersey, New Brunswick	21	71,821	424	964	58,452	653	1,377	1,215	2,232	42	2,193	4,269
U. Michigan, Ann Arbor	22	71,520	639	185	44,998	211	2,064	2,012	8,417	50	8,167	4,777
Emory U.	23	70,269	124	215	63,917	2	579	174	496	0	2,063	2,699
Indiana U., Bloomington	24	67,315	1,093	28	59,424	178	314	590	2,803	257	327	2,301
U. Pittsburgh, Pittsburgh	25	63,172	0	70	56,746	161	395	0	912	2,904	1,086	898
Arizona State U.	26	62,833	965	1,597	12,973	101	1,319	1,800	6,030	8,851	7,677	21,520
Georgetown U.	27	61,547	13,497	0	13,972	2,241	337	886	17,181	0	0	13,433
U. Southern California	28	58,895	1,286	2,435	32,161	68	395	99	6,581	0	1,197	14,673
U. Texas Southwestern Medical Center	29	54,435	0	0	54,435	0	0	0	0	0	0	0
California Institute of Technology	30	52,970	862	9,809	14,055	257	19,619	0	0	0	4,187	4,181
U. Maryland ^b	31	52,546	574	3,495	32,699	387	1,868	486	7,837	26	1,526	3,648
Ohio State U.	32	52,073	192	8	41,704	30	1,114	108	1,469	400	3,365	3,683

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Florida	33	51,825	196	290	45,443	120	302	302	903	0	1,310	2,959
Northwestern U.	34	51,091	43	195	35,823	361	6,081	24	1,716	1,626	2,063	3,159
Baylor C. of Medicine	35	50,815	0	0	50,815	0	0	0	0	0	0	0
Icahn School of Medicine at Mount Sinai	36	50,251	0	0	50,251	0	0	0	0	0	0	0
Scripps Research Institute	37	49,274	0	0	49,274	0	0	0	0	0	0	0
Texas A&M U., College Station and Health Science Center	38	47,156	346	2,629	15,488	243	3,935	285	1,346	6	21,038	1,840
U. Texas, Austin	39	45,893	1,689	1,834	9,139	6,570	4,637	139	3,830	62	9,044	8,949
U. Chicago	40	45,554	178	401	19,724	561	5,265	1,379	11,330	0	2,054	4,662
U. Minnesota, Twin Cities	41	45,113	175	31	35,718	608	257	1,108	2,066	452	2,153	2,545
U. Colorado Anschutz Medical Campus ^c	42	43,531	0	0	43,016	0	173	0	0	0	1	341
U. California, Davis	43	42,552	57	1,249	30,824	151	1,380	542	2,129	0	3,554	2,666
Oregon Health and Science U.	44	40,925	0	0	40,105	0	0	12	0	0	808	0
U. Cincinnati	45	38,204	15	50	34,366	83	216	15	1,657	0	571	1,231
Rockefeller U.	46	37,218	0	152	35,997	89	980	0	0	0	0	0
George Mason U.	47	35,685	771	204	1,894	112	9	283	24,608	0	269	7,535
U. Alabama, Birmingham	48	35,196	0	1	34,316	6	4	123	0	0	557	189
U. Texas M. D. Anderson Cancer Center	49	34,523	0	0	31,649	155	397	377	1,945	0	0	0
U. Illinois, Urbana-Champaign	50	33,693	1,173	5	15,933	94	4,816	422	720	436	6,533	3,561
U. California, Irvine	51	33,110	3,026	299	16,992	1,356	2,198	1,106	1,845	155	2,017	4,116
U. Virginia, Charlottesville	52	32,320	515	45	16,417	170	842	420	2,522	335	756	10,298
Rice U.	53	31,834	0	250	835	468	2,306	24	4,932	0	22,155	864
U. Utah	54	31,556	378	856	24,637	76	220	681	1,824	1,002	705	1,177
U. Illinois, Chicago	55	30,691	1,102	10	23,321	12	594	629	636	0	1,968	2,419
Pennsylvania State U., University Park and Hershey Medical Center	56	30,128	1,172	1,545	14,585	271	1,985	1,249	2,791	0	2,952	3,578
Vanderbilt U. and Vanderbilt U. Medical Center	57	29,292	288	0	23,826	68	422	570	992	0	1,620	1,506
U. Arizona	58	28,814	13	967	9,906	141	14,265	201	1,134	32	1,423	732
Brown U.	59	28,539	536	1,407	6,665	1,079	865	915	10,529	1,118	1,509	3,916
U. Texas Health Science Center, Houston	60	28,031	0	0	28,031	0	0	0	0	0	0	0
U. California, Santa Barbara	61	27,839	1,113	5,595	2,506	134	7,757	114	1,521	0	8,284	815
Medical C. Wisconsin	62	27,050	0	0	26,656	0	0	0	0	0	394	0
SUNY, U. Buffalo	63	26,045	50	120	12,560	234	74	9	1,236	0	3,015	8,747
George Washington U.	64	25,886	224	0	15,402	92	136	324	4,561	445	1,223	3,479
Georgia Institute of Technology	65	25,348	1,538	439	2,437	841	863	290	1,109	0	17,246	585

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Purdue U., West Lafayette	66	25,281	498	93	11,210	45	644	89	1,478	0	5,672	5,552
Thomas Jefferson U.	67	24,927	0	0	24,927	0	0	0	0	0	0	0
U. Texas Health Science Center, San Antonio	68	24,858	0	0	24,858	0	0	0	0	0	0	0
Colorado State U., Fort Collins	69	22,618	0	264	14,422	23	706	39	2,694	2,112	1,287	1,071
U. Miami	70	21,416	2	523	17,575	535	154	1,716	232	67	121	491
U. Notre Dame	71	21,210	614	0	7,073	96	1,022	121	2,683	897	1,426	7,278
U. Iowa	72	21,085	23	61	18,581	47	192	153	181	4	684	1,159
Wake Forest U.	73	21,022	2	0	16,790	0	46	609	490	0	116	2,969
U. Massachusetts, Medical School	74	20,992	0	0	20,992	0	0	0	0	0	0	0
Case Western Reserve U.	75	20,142	213	17	16,793	10	209	115	63	98	2,615	9
Dartmouth C. and Dartmouth Hitchcock Medical Center	76	19,943	3	315	16,482	470	500	455	438	101	597	582
Albert Einstein C. of Medicine	77	19,330	0	0	19,330	0	0	0	0	0	0	0
U. Rochester	78	18,783	59	48	15,512	1	2,601	121	156	10	274	1
Cold Spring Harbor Laboratory	79	18,736	0	0	18,736	0	0	0	0	0	0	0
Wayne State U.	80	17,750	68	21	12,637	0	754	414	106	0	1,394	2,356
Temple U.	81	17,459	54	135	11,848	21	321	710	463	0	437	3,470
U. New Mexico	82	17,427	7	26	15,129	4	0	137	1,704	39	252	129
Michigan State U.	83	17,393	7	11	5,882	509	111	174	3,753	1,782	797	4,367
U. Colorado Boulder	84	17,307	108	789	3,260	190	3,295	741	2,278	94	2,327	4,225
Texas Tech U.	85	16,426	110	264	4,667	104	392	383	1,049	0	1,321	8,136
Boston C.	86	15,649	0	1	607	16	546	1,113	1,694	0	0	11,672
Iowa State U.	87	15,284	0	35	8,062	43	134	564	146	0	6,114	186
U. Nebraska, Medical Center	88	14,617	0	0	14,617	0	0	0	0	0	0	0
Virginia Commonwealth U.	89	14,537	152	64	11,746	74	124	152	71	0	1,331	823
U. Texas, Dallas	90	14,449	833	96	3,527	40	1,632	568	622	12	4,506	2,613
Georgia State U.	91	13,940	55	241	2,251	0	503	969	2,726	0	0	7,195
Tulane U.	92	13,868	19	463	11,264	5	119	223	1,027	0	638	110
Carnegie Mellon U.	93	13,772	6,908	71	966	25	366	696	770	109	3,438	423
U. California, Santa Cruz	94	13,485	811	2,784	3,002	16	2,379	198	963	0	2,439	893
U. Kentucky	95	13,292	436	47	10,836	168	36	66	61	218	1,067	357
U. Connecticut	96	13,166	0	27	8,173	18	180	1,698	722	175	561	1,612
Washington State U.	97	13,119	7	332	7,287	8	431	115	288	215	767	3,669
Woods Hole Oceanographic Institution	98	12,807	0	11,204	0	0	0	0	0	0	1,603	0

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. South Florida ^d	99	12,424	113	321	8,788	14	0	130	1,036	262	646	1,114
U. Georgia	100	12,380	22	477	9,816	57	4	379	324	24	496	781
Teachers C., Columbia U.	101	12,335	100	0	3,579	0	0	1,177	7,425	0	0	54
U. Kansas	102	12,073	95	359	6,474	16	62	575	181	0	1,117	3,194
U. Texas Medical Branch	103	11,932	0	0	11,930	0	0	0	0	0	2	0
Northeastern U.	104	11,909	292	656	3,214	19	1,780	729	895	0	1,457	2,867
New School	105	11,860	0	42	577	0	0	239	4,066	250	2,584	4,102
Brandeis U.	106	11,813	427	0	842	214	622	41	6,149	0	0	3,518
SUNY, Stony Brook U.	107	11,750	71	906	4,741	461	1,074	175	155	2,882	1,233	52
U. Oklahoma, Norman and Health Science Center	108	11,616	0	1,078	7,214	57	96	18	246	0	693	2,214
Saint Louis U.	109	11,584	594	922	5,752	21	455	64	1,571	0	443	1,762
U. Hawaii, Manoa	110	11,546	3	6,173	3,529	16	419	94	347	470	252	243
Tufts U.	111	11,331	16	30	2,860	0	237	4	5,035	390	2,324	435
U. Missouri, Columbia	112	10,296	362	147	8,359	184	0	22	368	0	252	602
Syracuse U.	113	9,378	76	61	316	1	366	20	1,910	0	530	6,098
Medical U. South Carolina	114	9,097	0	0	9,097	0	0	0	0	0	0	0
U. Massachusetts, Amherst	115	8,646	174	81	1,846	86	442	32	530	64	4,101	1,290
U. California, Riverside	116	8,538	160	187	1,861	136	201	1,713	2,393	15	881	991
American U.	117	8,424	0	28	23	0	121	0	3,466	582	0	4,204
U. South Carolina, Columbia	118	8,292	93	67	3,420	76	0	1,387	824	0	312	2,113
U. Louisville	119	8,259	0	7	7,353	8	60	425	65	16	185	140
Kansas State U.	120	8,047	0	60	6,843	81	142	37	197	32	272	383
Rush U.	121	8,006	0	0	7,982	0	0	24	0	0	0	0
Chapman U.	122	7,989	0	22	3,155	0	179	13	2,918	0	0	1,702
Mississippi State U.	123	7,928	32	27	6,356	7	283	19	641	40	454	69
Drexel U.	124	7,882	57	0	5,700	6	40	150	425	296	986	222
Baylor U.	125	7,682	130	62	628	5	707	941	601	0	66	4,542
U. Texas Rio Grande Valley	126	7,326	0	29	6,798	4	87	2	0	0	18	388
Uniformed Services U. of the Health Sciences	127	7,317	0	0	7,317	0	0	0	0	0	0	0
New Jersey Institute of Technology	128	7,207	161	0	3,537	89	225	0	1,558	0	1,389	248
Catholic U. of America	129	7,195	0	0	0	0	0	138	1,142	0	85	5,830
Florida International U.	130	7,184	251	1,548	1,315	19	218	574	1,346	230	730	953
U. Vermont	131	7,081	93	0	5,745	345	91	257	108	0	224	218

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Tennessee, Knoxville	132	7,012	0	0	3,963	12	357	60	279	473	1,042	826
Virginia Polytechnic Institute and State U.	133	6,972	341	125	3,271	210	153	17	312	0	2,447	96
U. Texas, Arlington	134	6,948	54	16	476	20	1,036	28	0	0	3,780	1,538
Augusta U.	135	6,725	0	0	6,703	0	15	0	0	0	0	7
U. Houston	136	6,502	44	64	503	16	2,128	803	63	0	1,439	1,442
U. Arkansas for Medical Sciences	137	6,253	0	0	6,253	0	0	0	0	0	0	0
U. Nebraska, Lincoln	138	6,247	30	0	3,680	3	1	19	183	0	1,867	464
U. Tennessee, Health Science Center	139	6,232	0	0	6,232	0	0	0	0	0	0	0
High Tech High Graduate School of Ed.	140	6,203	0	0	0	0	0	0	0	0	0	6,203
U. Texas, San Antonio	141	6,123	87	5	870	0	93	0	92	4,485	61	430
Florida Atlantic U.	142	5,831	31	65	5,148	1	41	50	0	0	219	276
Texas State U.	143	5,800	35	994	512	32	218	3	266	1	136	3,603
U. Oregon	144	5,795	53	8	2,230	39	478	716	1,159	27	339	746
U. Arkansas, Fayetteville	145	5,742	65	92	1,719	0	68	0	135	0	1,719	1,944
Texas A&M U.-Kingsville	146	5,647	0	92	5,462	0	57	0	0	0	12	24
Indiana U.-Purdue U., Indianapolis	147	5,475	0	64	1,255	0	25	430	3,380	36	72	213
U. Delaware	148	5,252	138	623	1,002	22	205	277	464	0	1,568	953
U. Denver	149	5,210	8	0	617	16	261	183	846	0	14	3,265
U. New Hampshire	150	5,107	0	1,206	2,596	0	55	1	701	0	212	336
U. Central Florida	151	5,068	248	20	1,412	71	378	93	220	0	619	2,007
U. Massachusetts, Boston	152	4,958	0	1,024	763	0	138	426	1,460	0	0	1,147
Cleveland State U.	153	4,812	0	0	2,743	0	0	1	495	0	1,404	169
Clemson U.	154	4,796	48	0	3,178	10	153	1	50	0	802	554
Louisiana State U., Baton Rouge	155	4,727	0	1,051	2,116	19	420	3	153	0	864	101
Van Andel Research Institute	156	4,633	0	0	4,633	0	0	0	0	0	0	0
U. Texas Health Science Center, Tyler	157	4,509	0	0	4,509	0	0	0	0	0	0	0
Louisiana State U., Health Sciences Center, Shreveport	158	4,499	0	0	4,499	0	0	0	0	0	0	0
Desert Research Institute	159	4,381	0	1,521	2,860	0	0	0	0	0	0	0
William & Mary	160	4,212	29	221	263	20	387	71	2,452	0	0	769
Loyola U., Chicago	161	3,955	9	0	3,010	0	0	108	569	0	0	259
East Tennessee State U.	162	3,881	0	13	3,056	0	122	66	25	0	0	599
West Virginia U.	163	3,862	0	26	2,960	0	13	81	24	0	629	129
Florida State U.	164	3,723	1	261	1,277	85	197	62	244	6	115	1,475

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Morehouse School of Medicine	165	3,555	0	0	3,555	0	0	0	0	0	0	0
U. Toledo	166	3,509	0	786	2,155	9	140	27	0	0	79	313
U. Mississippi	167	3,489	0	11	2,164	6	146	213	257	0	199	493
U. Rhode Island	168	3,470	40	1,516	443	0	260	2	32	24	40	1,113
North Carolina State U.	169	3,451	37	0	2,255	21	372	0	18	63	645	40
Louisiana State U., Health Sciences Center, New Orleans	170	3,275	0	0	3,275	0	0	0	0	0	0	0
Montana State U., Bozeman	171	3,208	8	105	1,743	15	506	71	13	0	339	408
Biola U.	172	3,088	0	0	0	0	0	2,469	0	0	0	619
U. Memphis	173	3,045	4	0	457	1	34	82	1,281	75	388	723
Rutgers, State U. New Jersey, Newark	174	3,041	5	8	702	0	24	304	860	0	0	1,138
U. Washington, Bothell	175	3,007	0	0	117	0	0	0	0	0	0	2,890
SUNY, U. Albany	176	2,963	11	10	1,964	9	52	3	441	0	0	473
Texas Tech U., Health Sciences Center	176	2,963	0	0	2,888	0	0	0	0	0	0	75
U. Missouri, Saint Louis	178	2,934	23	0	856	0	0	0	787	0	0	1,268
California Polytechnic State U., San Luis Obispo	179	2,890	0	465	1,265	0	818	0	102	22	175	43
Portland State U.	180	2,882	0	0	251	0	220	23	811	0	236	1,341
Texas A&M U.-Corpus Christi	181	2,782	15	1,650	311	0	176	1	98	444	76	11
Oregon State U.	182	2,772	50	237	1,470	1	19	12	301	20	662	0
Southern Methodist U.	183	2,751	0	0	72	49	377	3	26	296	17	1,911
Oakland U.	184	2,636	192	0	687	0	774	23	26	0	643	291
U. Maryland, Baltimore County	185	2,611	330	145	215	22	201	166	380	242	187	723
U. Maine	186	2,568	0	898	580	0	45	14	364	152	219	296
South Dakota State U.	187	2,537	43	0	2,097	0	35	0	1	0	299	62
Old Dominion U.	188	2,515	80	8	425	30	84	0	24	0	1,706	158
Framingham State U.	189	2,503	60	0	1,414	29	199	43	138	0	0	620
San Diego State U.	190	2,489	28	0	1,160	104	165	204	251	0	83	494
Duquesne U.	191	2,447	0	171	1,144	0	0	176	18	0	12	926
Marquette U.	192	2,440	0	0	1,359	32	27	1	1	0	473	547
New Mexico State U.	193	2,366	0	0	86	0	2,127	0	1	20	94	38
SUNY, Upstate Medical U.	194	2,331	0	0	2,331	0	0	0	0	0	0	0
Colorado School of Mines	195	2,329	11	279	0	3	442	0	19	0	1,525	50
San Jose State U.	196	2,296	151	739	79	25	157	0	524	0	66	555
Meharry Medical C.	197	2,239	0	0	2,239	0	0	0	0	0	0	0

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. North Carolina, Asheville	198	2,234	0	0	300	22	40	0	297	298	0	1,277
U. Montana, Missoula	199	2,220	6	405	1,708	6	4	0	61	0	0	30
California State Polytechnic U., Humboldt	200	2,209	0	125	566	0	40	0	306	0	1,017	155
Brigham Young U., Provo	201	2,171	0	26	893	68	179	81	33	0	768	123
CUNY, John Jay C. of Criminal Justice	201	2,171	0	0	141	0	1	89	82	0	0	1,858
U. Wyoming	203	2,167	0	98	1,860	14	0	2	193	0	0	0
U. Texas, El Paso	204	2,151	6	0	314	6	288	103	166	0	276	992
Villanova U.	205	2,140	0	0	292	0	31	15	0	0	238	1,564
U. Massachusetts, Lowell	206	2,112	187	0	976	8	54	6	100	0	577	204
U. Nevada, Reno	207	2,018	0	0	651	25	223	103	313	0	679	24
Rensselaer Polytechnic Institute	208	2,012	7	0	612	9	181	0	0	0	1,149	54
Wellesley C.	209	2,008	0	7	90	10	57	344	559	0	0	941
Rochester Institute of Technology	210	1,998	502	0	403	7	438	0	105	0	445	98
Pepperdine U.	211	1,988	0	0	1,644	0	7	0	172	0	0	165
New York Medical C.	212	1,980	0	0	1,980	0	0	0	0	0	0	0
DePaul U.	213	1,948	21	0	0	4	9	83	1,680	0	0	151
U. California, Merced	214	1,918	113	2	645	0	45	0	673	26	161	253
Auburn U., Auburn	215	1,912	1	35	1,184	31	14	51	40	0	331	225
Howard U.	216	1,816	45	0	1,380	37	96	39	219	0	0	0
U. Maryland Center for Environmental Science	217	1,792	6	899	766	0	65	0	56	0	0	0
East Carolina U.	218	1,783	0	47	1,225	0	11	126	25	0	11	338
U. North Texas, Denton	219	1,762	31	3	575	0	223	91	12	0	54	773
Illinois State U.	220	1,752	1	0	346	39	413	448	35	0	0	470
California State U., Northridge	221	1,703	21	116	525	90	196	0	10	5	155	585
Montclair State U.	222	1,683	0	617	230	3	7	189	38	0	0	599
U. North Carolina, Wilmington	223	1,638	0	7	628	0	0	0	616	0	0	387
U. Alabama, Tuscaloosa	224	1,631	0	16	211	31	57	105	97	0	749	365
Western Washington U.	225	1,614	89	101	23	0	280	769	99	4	7	242
Philadelphia C. of Osteopathic Medicine	226	1,595	0	0	1,595	0	0	0	0	0	0	0
Clark U.	227	1,577	65	202	1,004	0	39	24	164	0	0	79
Fordham U.	228	1,523	0	0	209	0	7	223	61	0	0	1,023
SUNY, Downstate Health Sciences U.	229	1,475	0	0	1,475	0	0	0	0	0	0	0
Smith C.	230	1,440	0	33	1,317	0	14	0	34	36	0	6

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Alaska, Fairbanks	231	1,433	1	534	119	0	631	0	0	0	136	12
Worcester Polytechnic Institute	232	1,414	642	0	180	0	0	0	90	0	450	52
U. South Alabama	233	1,383	0	61	261	11	0	978	0	0	47	25
Claremont Graduate U.	234	1,381	0	0	0	0	0	464	141	0	0	776
Calvin U.	235	1,376	0	0	84	0	32	0	6	0	9	1,245
Oklahoma State U., Stillwater	236	1,351	0	0	613	26	103	37	77	0	218	277
CUNY, Graduate School of Public Health and Health Policy	237	1,340	0	0	1,340	0	0	0	0	0	0	0
CUNY, City C.	238	1,311	57	140	262	24	192	9	0	0	563	64
SUNY, Binghamton U.	239	1,306	0	0	177	7	0	153	15	0	923	31
California State U., Fresno	240	1,258	0	5	1,162	8	0	0	1	0	68	14
Loyola Marymount U.	241	1,249	0	0	129	1	2	0	174	128	0	815
Kent State U.	242	1,242	0	253	189	12	200	178	224	0	16	170
Florida Gulf Coast U.	243	1,211	0	174	72	41	41	0	0	0	0	883
CUNY, Graduate Center	244	1,208	0	0	1	0	0	73	244	1	0	889
CUNY, Hunter C.	245	1,165	2	0	441	3	15	189	18	0	0	497
U. Colorado Denver ^C	246	1,160	0	0	118	1	58	244	99	0	68	572
MGH Institute of Health Professions	247	1,157	0	0	0	0	0	0	0	0	0	1,157
Trinity U.	248	1,149	0	43	315	0	492	4	117	0	11	167
U. Oklahoma, Tulsa	249	1,120	0	0	133	0	0	0	171	0	48	768
Pratt Institute	250	1,097	0	0	0	0	0	0	0	0	0	1,097
Texas Christian U.	251	1,096	0	19	13	0	168	0	76	0	0	820
U. New Orleans	252	1,067	0	229	2	0	58	1	768	0	0	9
Lehigh U.	253	1,060	0	0	293	22	399	2	55	0	247	42
Wesleyan U.	254	1,052	0	0	142	21	219	0	24	0	0	646
California State U., East Bay	255	1,036	0	0	32	0	0	0	0	0	0	1,004
San Francisco State U.	256	990	0	310	408	7	63	7	103	92	0	0
Miami U.	257	969	0	3	438	2	0	55	90	0	208	173
U. Missouri, Kansas City	257	969	0	22	502	0	0	31	31	0	383	0
U. Tulsa	259	967	621	0	51	0	0	28	0	0	174	93
Erikson Institute	260	950	0	0	0	0	0	0	0	0	0	950
Grand Valley State U.	261	948	70	174	60	0	1	0	609	0	6	28
Loma Linda U.	262	942	0	0	838	0	0	102	0	0	0	2
Sul Ross State U.	263	941	21	54	501	10	71	15	50	0	0	219

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Wisconsin-Milwaukee	264	935	27	175	237	11	3	108	80	0	72	222
U. Hawaii, Hilo	265	931	0	0	836	0	63	0	0	0	0	32
Colorado C.	266	927	0	333	31	0	19	0	13	0	0	531
Jackson State U.	267	916	46	0	327	0	41	30	0	0	230	242
Rowan U.	268	893	0	107	455	0	122	0	0	0	202	7
U. Akron	268	893	0	1	99	19	381	201	17	0	143	32
CUNY, Advanced Science Research Center	270	888	0	80	366	0	441	0	0	0	1	0
Franklin W. Olin C. of Engineering	271	882	0	0	0	0	0	0	0	0	753	129
Boise State U.	272	876	5	0	475	2	1	21	72	0	202	98
North Dakota State U.	273	864	0	4	458	20	0	65	243	0	58	16
California State U., Long Beach	274	837	1	0	296	0	59	0	0	1	46	434
Northeast Ohio Medical U.	275	821	0	4	817	0	0	0	0	0	0	0
SUNY, C. of Environmental Science and Forestry	276	817	6 i	18 i	699 i	0 i	4 i	58 i	0 i	0 i	26 i	6 i
U. Nevada, Las Vegas	277	809	0	0	272	9	5	140	64	0	2	317
U. New Haven	278	807	1	5	70	0	0	0	551	0	75	105
Middle Tennessee State U.	279	799	0	0	2	0	0	0	788	0	0	9
Central Michigan U.	280	794	0	0	694	9	9	41	26	0	0	15
Winston-Salem State U.	281	785	10	0	120	0	48	0	607	0	0	0
North Carolina Central U.	282	776	52	8	45	0	89	0	23	75	20	464
Appalachian State U.	283	771	0	540	141	0	0	4	16	0	0	70
Northern Arizona U.	284	768	0	0	505	0	7	36	0	11	29	180
U. Idaho	285	766	0	63	304	2	41	6	4	0	275	71
Bowling Green State U.	286	758	0	0	38	2	41	251	412	4	6	4
Texas A&M International U.	287	751	0	0	17	0	32	0	7	0	0	695
Santa Clara U.	288	748	0	0	0	4	35	14	266	0	205	224
Southern Illinois U., Carbondale	289	744	0	0	604	1	0	9	103	1	26	0
U. North Dakota	290	727	0	240	97	0	0	0	0	0	341	49
Rutgers, State U. New Jersey, Camden	291	724	149	0	252	0	127	73	64	0	0	59
Rosalind Franklin U. of Medicine and Science	292	720	0	0	720	0	0	0	0	0	0	0
U. San Francisco	293	717	189	109	230	0	0	0	0	19	0	170
C. New Jersey	294	715	0	0	434	0	21	0	0	226	30	4
Canisius C.	295	706	0	0	0	0	0	0	0	706	0	0
Western U. of Health Sciences	296	704	0	0	284	0	0	0	0	0	0	420

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Albany Medical C.	297	689	0	0	689	0	0	0	0	0	0	0
U. Southern Mississippi	298	668	0	383	12	0	38	0	199	0	0	36
Missouri U. of Science and Technology	299	662	0	0	0	21	32	1	1	0	607	0
Virginia State U.	300	661	0	0	33	0	0	0	0	0	0	628
Bentley U.	301	652	0	0	652	0	0	0	0	0	0	0
Ohio U.	302	634	0	0	294	7	48	146	67	0	50	22
Hope C.	303	625	50	2	35	5	309	38	110	0	39	37
La Sierra U.	304	620	0	0	2	0	0	0	0	0	0	618
East Stroudsburg U. Pennsylvania	305	619	0	0	619	0	0	0	0	0	0	0
Nova Southeastern U.	306	616	0	437	113	0	0	51	0	0	0	15
Marshall U.	307	615	0	0	526	0	12	0	0	0	8	69
Eastern Virginia Medical School	308	612	0	0	612	0	0	0	0	0	0	0
Charles R. Drew U. of Medicine and Science	309	607	0	0	607	0	0	0	0	0	0	0
Northern Illinois U.	310	606	0	25	59	11	76	16	54	0	281	84
Florida A&M U.	311	593	0	22	460	0	0	0	40	0	66	5
Michigan Technological U.	312	591	0	314	45	6	0	1	29	0	196	0
Seton Hall U.	313	586	0	0	0	0	21	0	0	0	0	565
U. North Carolina, Greensboro	314	579	11	10	168	0	14	0	52	0	0	324
Utah State U.	315	578	18	0	455	19	0	48	0	0	38	0
U. San Diego	316	576	0	0	0	0	252	0	18	0	1	305
U. North Carolina, Charlotte	317	560	0	0	151	5	0	110	88	0	21	185
Lawrence Technological U.	318	558	0	0	0	0	11	0	0	0	80	467
Occidental C.	319	553	0	308	61	0	107	18	59	0	0	0
Kennesaw State U.	320	543	65	0	19	0	14	7	65	71	64	238
Davidson C.	321	542	15	0	224	0	0	0	224	0	0	79
Barnard C.	322	539	65	0	39	0	61	121	233	0	0	20
Stevens Institute of Technology	322	539	29	0	26	7	57	0	93	0	199	128
Skidmore C.	324	536	0	359	89	12	11	65	0	0	0	0
Texas Woman's U.	325	534	0	0	474	0	1	0	0	0	0	59
James Madison U.	326	518	72	16	83	0	127	1	103	0	29	87
Pennsylvania State U., Behrend	327	514	13	0	291	39	40	20	10	0	81	20
California State U., Sacramento	328	511	0	78	0	0	0	0	113	252	0	68
Clarkson U.	329	508	0	0	51	0	126	0	0	0	185	146

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
CUNY, Baruch C.	330	505	0	89	130	4	0	5	15	0	0	262
Prairie View A&M U.	331	502	5	0	2	3	0	0	0	112	147	233
U. Alabama, Huntsville	332	496	91	18	18	0	245	0	42	0	60	22
U. Alaska, Anchorage	333	493	9	32	171	0	6	0	94	0	13	168
U. South Dakota	333	493	0	0	490	0	0	0	0	0	3	0
U. Richmond	335	476	19	0	159	30	132	111	0	0	0	25
Western Michigan U. and Homer Stryker M.D. School of Medicine	336	473	0	0	101	15	37	0	85	0	8	227
Indiana U. Pennsylvania	337	469	0	0	242	0	0	0	0	15	0	212
U. Texas of the Permian Basin	338	466	0	0	3	0	0	0	0	0	189	274
C. Charleston	339	465	0	16	80	7	5	59	0	0	0	298
Saint Joseph's U.	340	455	0	0	278	0	166	6	0	0	0	5
California State U., Fullerton	341	442	169	33	12	0	80	11	13	0	0	124
Delaware State U.	342	440	0	0	440	0	0	0	0	0	0	0
U. Massachusetts, Dartmouth	342	440	0	177	96	0	80	0	14	0	73	0
CUNY, Queens C.	344	439	0	50	60	8	37	171	101	0	0	12
Texas Tech U., Health Sciences Center, El Paso	345	438	0	0	418	0	0	0	0	0	0	20
U. of St. Thomas (MN)	346	437	0	0	0	0	0	280	11	0	30	116
Fisk U.	347	411	6	0	0	9	233	54	0	0	0	109
Hamilton C.	348	410	0	3	0	0	12	0	16	0	0	379
U. Dayton	349	408	106	0	4	0	0	15	0	0	279	4
Monmouth U.	350	397	0	316	75	0	6	0	0	0	0	0
Claremont McKenna C.	351	390	0	0	0	84	0	10	288	0	0	8
St. John's U., New York	352	387	11	0	128	0	1	19	0	0	0	228
U. Nebraska, Omaha	352	387	234	15	45	1	6	6	76	0	0	4
Xavier U. Louisiana	354	386	0	0	381	0	5	0	0	0	0	0
Sam Houston State U.	355	382	0	32	2	0	75	22	42	0	0	209
Haverford C.	356	381	6 i	17 i	151 i	5 i	35 i	12 i	41 i	0 i	0 i	114 i
West Chester U. Pennsylvania	357	379	0	0	76	0	68	48	175	7	0	5
Northern Kentucky U.	358	378	6	0	262	0	67	4	39	0	0	0
Vassar C.	358	378	0	0	167	13	0	41	157	0	0	0
U. Puerto Rico, Rio Piedras	360	376	0	0	0	0	41	0	99	0	0	236
Ball State U.	361	372	0	0	152	0	48	18	110	0	0	44
Illinois Institute of Technology	362	371	3	0	241	9	19	0	0	0	92	7

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
St. Catherine U.	363	364	0	0	98	0	0	0	265	0	0	1
Rhode Island C.	364	362	0	0	1	0	0	50	0	0	0	311
Southern Connecticut State U.	364	362	0	0	41	0	5	0	19	196	0	101
Florida Institute of Technology	366	361	0	0	27	2	41	0	0	0	291	0
U. New England	367	360	0	83	277	0	0	0	0	0	0	0
Swarthmore C.	368	356	0	0	45	6	138	13	56	0	1	97
Yeshiva U.	369	349	0	0	349	0	0	0	0	0	0	0
Morgan State U.	370	344	7	0	21	7	0	1	0	0	246	62
Wright State U.	371	343	0	2	228	13	10	1	0	0	66	23
Reed C.	372	342	i 6	i 0	i 138	i 5	i 34	i 12	i 41	i 0	i 0	i 106
Long Island U.	373	334	0	0	142	0	27	2	160	0	0	3
Franklin and Marshall C.	374	333	0	149	0	0	98	26	0	0	0	60
Keck Graduate Institute	375	321	0	0	321	0	0	0	0	0	0	0
Creighton U.	376	320	9	i 0	i 237	i 2	i 16	i 3	i 19	i 0	i 0	i 34
Mount Holyoke C.	377	316	0	0	16	0	32	92	3	0	0	173
U. Wisconsin-Stevens Point	378	314	0	0	232	0	18	0	0	0	61	3
St. Cloud State U.	379	299	0	1	9	0	0	0	0	0	0	289
Lewis and Clark C.	380	298	0	6	121	0	20	2	38	0	0	111
Midwestern U.	381	296	0	0	296	0	0	0	0	0	0	0
Northern Michigan U.	382	291	0	0	291	0	0	0	0	0	0	0
U. Louisiana, Lafayette	383	288	0	18	15	0	0	16	2	0	237	0
U. Houston-Downtown	384	287	0	0	0	0	46	0	0	0	0	241
Tarleton State U.	385	284	0	0	55	30	91	0	0	0	0	108
Babson C.	386	281	0	i 0	i 0	i 9	i 0	i 0	i 75	i 0	i 0	i 197
U.S. Military Academy	387	280	0	0	0	0	0	0	280	0	0	0
Pace U.	388	279	161	0	47	0	53	0	0	0	0	18
CUNY, Lehman C.	389	273	0	0	0	1	0	1	28	238	0	5
Toyota Technological Institute, Chicago	390	272	272	0	0	0	0	0	0	0	0	0
New Mexico Institute of Mining and Technology	391	269	0	165	0	0	20	0	0	0	74	10
Stephen F. Austin State U.	392	267	0	25	43	0	52	0	7	0	0	140
Middlebury C.	393	263	0	4	0	0	17	0	139	0	0	103
Northland C.	394	260	i 0	i 14	i 116	i 3	i 0	i 9	i 31	i 0	i 0	i 87
U. Baltimore	395	259	0	0	0	0	0	0	259	0	0	0

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
CUNY, system office	396	252	5	0	137	0	0	88	0	22	0	0
U.S. Naval Academy	397	251	38	34	0	75	55	0	10	0	39	0
Idaho State U.	398	249	0	0	218	0	11	3	13	0	4	0
Eastern Michigan U.	399	248	0	0	100	0	0	0	37	0	0	111
Colby C.	400	243	34	8	23	3	33	64	34	0	0	44
Pacific U.	400	243	0	0	211	7	10	0	0	0	0	15
Hawaii Pacific U.	402	240	0	137	97	0	0	0	6	0	0	0
Macalester C.	403	238	5	59	3	0	36	19	8	0	0	108
Bucknell U.	404	236	0	16	45	0	72	0	52	0	32	19
Bates C.	405	235	1	6	124	1	22	3	14	0	0	64
U. Puerto Rico, Mayaguez	406	233	0	0	56	5	145	0	0	0	8	19
U. North Florida	407	232	0	0	59	0	36	0	59	0	0	78
U. Tennessee, Chattanooga	408	229	0	0	22	0	21	95	0	42	49	0
U. Illinois, Springfield	409	228	0	0	3	0	0	0	71	0	0	154
Embry-Riddle Aeronautical U.	410	225	0	32	8	0	67	0	24	0	78	16
Seattle U.	410	225	0	0	17	10	33	0	79	0	33	53
SUNY, Polytechnic Institute	412	223	0	0	0	0	0	0	0	0	83	140
U. Michigan, Dearborn	412	223	0	0	0	4	20	136	0	0	63	0
New York Institute of Technology	414	220	0	0	137	0	0	0	0	0	17	66
Towson U.	415	217	0	0	20	4	24	52	0	0	0	117
Carleton C.	416	214	0	15	0	0	4	0	19	0	0	176
Grinnell C.	417	208	39	0	0	0	0	0	15	0	0	154
Oregon Institute of Technology	418	206	6	16	140	4	0	5	0	0	35	0
U. Puerto Rico, Cayey	419	203	0	0	0	0	0	55	4	128	0	16
Hobart and William Smith Colleges	420	201	0	4	123	5	69	0	0	0	0	0
Hofstra U.	421	197	70	0	39	5	0	5	54	0	21	3
U. West Florida	421	197	0	0	56	1	0	0	24	0	0	116
North Carolina A&T State U.	423	195	0	0	22	0	0	0	0	0	8	165
Whitman C.	424	194	0	0	34	0	160	0	0	0	0	0
Purdue U., Fort Wayne	425	186	0	0	6	166	0	0	0	0	0	14
C. Wooster	426	183	16	0	18	0	7	0	121	0	0	21
Western New England U.	427	175	0	0	161	0	0	0	0	0	14	0
Bryn Mawr C.	428	174	0	0	0	8	35	1	32	0	0	98

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Wichita State U.	429	170	0	0	0	0	7	11	24	0	97	31
Furman U.	430	169	0	21	84	0	53	4	7	0	0	0
Roger Williams U.	431	165	0	0	165	0	0	0	0	0	0	0
California State U., Monterey Bay	432	164	0	22	87	0	0	0	55	0	0	0
Azusa Pacific U.	433	161	5	0	5	0	0	93	0	0	0	58
California State U., Los Angeles	433	161	0	0	56	0	67	37	0	0	0	1
CUNY, Brooklyn C.	435	160	3	37	0	5	16	4	92	0	0	3
St. Edward's U.	435	160	0	0	100	0	0	0	0	0	0	60
U. North Georgia	437	159	0	75	1	0	0	26	0	0	0	57
Christopher Newport U.	438	158	0	0	3	0	55	0	64	0	0	36
U. Arkansas, Little Rock	439	157	81	0	0	0	0	0	28	0	48	0
Williams C.	440	156	3	9	60	2	14	5	17	0	0	46
Texas A&M U.-Commerce	441	153	0	0	96	2	32	0	0	0	0	23
Eastern Washington U.	442	149	0	0	14	0	7	9	119	0	0	0
U. Northern Colorado	442	149	0	0	143	6	0	0	0	0	0	0
Albany C. of Pharmacy and Health Sciences	444	147	0	0	147	0	0	0	0	0	0	0
Tennessee Technological U.	445	146	93	0	31	0	0	5	0	0	17	0
U. of Health Sciences and Pharmacy in St. Louis	446	145	0	0	145	0	0	0	0	0	0	0
U. Central Arkansas	447	144	0	0	83	0	29	32	0	0	0	0
Sonoma State U.	448	141	0	87	15	0	0	0	0	0	0	39
Abilene Christian U.	449	140	0	0	43	0	67	0	0	12	0	18
Harvey Mudd C.	450	138	13	0	7	61	26	0	0	11	20	0
U. Louisiana, Monroe	450	138	0	0	137	0	0	0	1	0	0	0
U. Washington, Tacoma	450	138	0	0	85	0	0	0	0	0	0	53
Butler U.	453	135	0	0	5	0	14	1	0	0	0	115
Missouri State U.	453	135	0	0	76	0	46	0	13	0	0	0
CUNY, C. Staten Island	455	133	0	0	0	11	20	15	0	25	0	62
California State U., San Bernardino	456	131	0	0	0	17	0	110	4	0	0	0
Johnson C. Smith U.	456	131	24	0	0	0	0	0	0	0	0	107
William Paterson U.	456	131	0	36	9	0	80	0	0	0	0	6
U. Colorado Colorado Springs	459	130	0	0	0	2	0	0	84	5	0	39
Gallaudet U.	460	128	47	0	0	0	0	47	34	0	0	0
Purdue U., Northwest	460	128	6	0	8	0	20	4	0	30	31	29

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Amherst C.	462	127	7	12	0	7	58	19	14	10	0	0
U. Southern Maine	463	126	0	3	0	0	0	0	108	0	0	15
Kenyon C.	464	123	0	0	16	0	33	9	20	0	0	45
Pomona C.	465	122	0	0	19	3	27	0	70	0	0	3
Tennessee State U.	466	116	0	0	103	0	0	0	0	0	13	0
Mercer U.	467	112	0	0	30	0	0	0	2	0	5	75
Saginaw Valley State U.	467	112	i 3	i 0	i 71	i 0	i 0	i 0	i 7	i 0	i 0	i 31
Lafayette C.	469	110	0	0	50	0	2	0	4	0	44	10
Union C., Schenectady	470	107	0	0	10	5	14	1	35	0	19	23
Norfolk State U.	471	106	0	0	47	0	0	0	0	0	59	0
U. Minnesota, Duluth	472	105	0	0	51	0	0	6	11	0	18	19
Kentucky State U.	473	101	0	0	101	0	0	0	0	0	0	0
Pennsylvania State U., Harrisburg	473	101	0	0	1	0	1	5	0	0	63	31
Lamar U.	475	98	0	0	1	0	60	0	0	0	15	22
U. Puget Sound	476	97	0	0	42	0	40	0	6	0	0	9
U. of the Incarnate Word	477	92	0	0	21	0	71	0	0	0	0	0
Bowdoin C.	478	91	0	18	0	2	21	0	2	0	0	48
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	478	91	0	0	91	0	0	0	0	0	0	0
Austin Peay State U.	480	89	0	3	86	0	0	0	0	0	0	0
Des Moines U.	481	84	0	17	13	0	0	0	0	0	0	54
Western Carolina U.	482	83	0	1	21	0	0	0	18	0	0	43
Robert Morris U.	483	81	i 2	i 0	i 57	i 1	i 0	i 1	i 5	i 0	i 7	i 8
U. Northern Iowa	483	81	0	0	0	0	0	0	79	0	0	2
Fort Lewis C.	485	76	14	0	20	0	6	0	0	0	0	36
U. Wisconsin-Superior	485	76	0	0	4	0	0	0	63	0	0	9
SUNY, Oswego	487	74	0	0	38	0	0	28	0	8	0	0
U. of the Virgin Islands	487	74	0	64	10	0	0	0	0	0	0	0
U. Wisconsin-La Crosse	489	70	0	0	11	7	25	0	26	0	0	1
Coastal Carolina U.	490	66	0	34	6	0	0	0	0	10	0	16
Colgate U.	490	66	0	0	34	7	25	0	0	0	0	0
Naval Postgraduate School	490	66	0	0	0	0	0	0	66	0	0	0
Utah Valley U.	490	66	0	0	2	0	4	0	0	0	15	45

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Suffolk U.	494	65	0	0	5	0	0	0	34	0	0	26
CUNY, York C.	495	64	0	0	61	3	0	0	0	0	0	0
Drake U.	495	64	9	0	46	0	0	0	9	0	0	0
U. Alaska, Southeast	495	64	0	64	0	0	0	0	0	0	0	0
U. Hartford	495	64	0	0	0	0	0	0	55	0	5	4
U. Texas, Tyler	495	64	0	0	31	0	29	1	0	0	3	0
Florida Polytechnic U.	500	62	6	0	0	0	0	0	0	0	43	13
U. Houston-Clear Lake	501	61	0	0	30	0	27	0	0	0	0	4
Texas A&M U.-San Antonio	502	60	0	0	42	0	0	0	0	0	0	18
Marymount U.	503	58	0	0	12	0	0	0	0	0	0	46
Texas Southern U.	503	58	1	0	0	0	0	0	0	0	5	52
Kettering U.	505	57	0	0	0	0	3	0	0	0	54	0
SUNY, C. Plattsburgh	505	57	0	57	0	0	0	0	0	0	0	0
SUNY, C. of Optometry	507	56	0	0	56	0	0	0	0	0	0	0
South Dakota School of Mines and Technology Edward Via C. of Osteopathic Medicine	508	55	0	0	0	0	0	0	0	0	55	0
U. of the Pacific	509	53	0	0	53	0	0	0	0	0	0	0
Clark Atlanta U.	511	51	0	0	17	2	26	0	0	0	0	6
California State U., Dominguez Hills	512	50	0	0	0	0	0	0	0	0	0	50
Salisbury U.	512	50	0	0	36	0	0	3	0	0	0	11
Willamette U.	514	48	0	1	16	8	6	0	0	0	0	17
Elon U.	515	47	0	0	9	0	0	0	0	0	2	36
U. Wisconsin-Green Bay	515	47	2 i	2 i	27 i	1 i	1 i	1 i	1 i	0 i	8 i	4 i
Fayetteville State U.	517	46	0	0	0	0	0	0	46	0	0	0
Western Kentucky U.	517	46	0	0	14	0	0	0	22	0	10	0
Winthrop U.	519	45	0	0	0	0	0	0	45	0	0	0
California State U., Chico	520	44	0	0	43	0	0	0	0	0	0	1
New Mexico Highlands U.	521	43 i	2 i	3 i	23 i	0 i	3 i	0 i	2 i	0 i	0 i	10 i
SUNY, C. Brockport	521	43	0	0	43	0	0	0	0	0	0	0
Central Washington U.	523	42	0	0	0	16	8	0	17	0	1	0
Kean U.	524	41	0	0	34	0	0	0	0	0	0	7
U. of Mary Washington	525	39	0	13	26	0	0	0	0	0	0	0
California State U., Channel Islands	526	36	0	0	36	0	0	0	0	0	0	0

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Virginia's C. Wise	526	36	0	0	1	0	0	0	0	0	0	35
California Lutheran U.	528	35	0	3	32	0	0	0	0	0	0	0
U. Wisconsin-Platteville	528	35 i	0 i	0 i	17 i	0 i	2 i	1 i	4 i	0 i	5 i	6 i
Trinity C., Hartford	530	34	0	0	1	0	33	0	0	0	0	0
Alcorn State U.	531	32 i	0 i	0 i	14 i	0 i	0 i	0 i	18 i	0 i	0 i	0 i
Alfred U.	532	29	0	0	0	2	0	0	0	0	27	0
West Texas A&M U.	532	29	0	0	0	0	29	0	0	0	0	0
Arkansas State U., Jonesboro	534	28	0	0	28	0	0	0	0	0	0	0
California State U., Stanislaus	535	27	0	0	27	0	0	0	0	0	0	0
Colorado State U., Pueblo	535	27	0	0	0	0	0	0	27	0	0	0
Indiana State U.	537	26	0	4	6	0	0	0	0	0	0	16
Stockton U.	537	26	0	0	0	0	0	0	26	0	0	0
U. Wisconsin-Eau Claire	539	24	0	0	0	0	23	1	0	0	0	0
Ithaca C.	540	23	0	11	2	0	10	0	0	0	0	0
Citadel Military C. South Carolina	541	20	0	0	20	0	0	0	0	0	0	0
U. Guam	542	19	0	0	13	6	0	0	0	0	0	0
Minnesota State U., Mankato	543	18	0	3	0	0	9	0	0	0	4	2
Oklahoma State U., Center for Health Sciences	544	17	0	0	17	0	0	0	0	0	0	0
SUNY, Geneseo	544	17	0	0	0	0	1	0	5	0	0	11
Youngstown State U.	544	17	0	0	8	2	7	0	0	0	0	0
Heidelberg U.	547	15	0	15	0	0	0	0	0	0	0	0
U. Arkansas, Pine Bluff	548	14	0	0	14	0	0	0	0	0	0	0
U. North Texas, Health Science Center	548	14	0	0	14	0	0	0	0	0	0	0
California State U., Bakersfield	550	13	0	11	2	0	0	0	0	0	0	0
U. Detroit Mercy	550	13	0	0	5	0	0	0	0	0	8	0
Milwaukee School of Engineering	552	12	0	0	0	0	0	0	0	0	12	0
California State Polytechnic U., Pomona	553	11	0	0	4	0	0	0	0	0	7	0
New England C. of Optometry	553	11	0	0	11	0	0	0	0	0	0	0
Southeastern Louisiana U.	553	11	0	0	0	0	0	0	8	0	3	0
Virginia Military Institute	556	10	0	0	0	0	0	0	0	0	0	10
U. South Carolina, Aiken	557	9	0	0	2	0	7	0	0	0	0	0
West Virginia State U.	557	9	0	0	9	0	0	0	0	0	0	0
California State U., San Marcos	559	7	0	0	0	0	0	0	5	2	0	0

TABLE 30

Higher education R&D expenditures funded by nonprofit organizations, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Dakota State U.	560	6	6	0	0	0	0	0	0	0	0	0
Mercyhurst U.	560	6	0	0	5	0	0	0	1	0	0	0
Central Connecticut State U.	562	4	0	0	0	0	0	2	0	0	0	2
Morehead State U.	563	3	0	0	0	0	0	0	0	0	3	0
Southern Illinois U., Edwardsville	563	3	0	0	0	3	0	0	0	0	0	0
U. Central Oklahoma	563	3 i	0 i	0 i	3 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i
Chicago State U.	566	2	0	0	0	0	2	0	0	0	0	0
Nevada State C.	566	2	0	0	2	0	0	0	0	0	0	0
Roseman U. of Health Sciences	566	2	0	0	2	0	0	0	0	0	0	0
Alabama State U.	569	1	0	0	0	0	0	0	0	0	0	1
Georgia Southern U.	569	1	0	0	0	0	0	0	0	0	1	0
SUNY, Buffalo State	569	1	0	1	0	0	0	0	0	0	0	0

i = imputed.

nec = not elsewhere classified; S&E = science and engineering.

^a Johns Hopkins University includes the Applied Physics Laboratory, with zero in nonprofit-financed R&D expenditures in FY 2022.^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.^c The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.**Note(s):**Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).**Source(s):**

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 31

Higher education R&D expenditures funded by all other sources, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
All institutions	-	2,633,387	59,240	72,958	1,637,293	7,989	92,184	18,283	143,840	28,569	387,273	185,758
U. California, San Francisco	1	165,430	0	0	161,500	0	3,930	0	0	0	0	0
Cornell U.	2	154,252	2,187	206	132,833	13	1,817	649	1,734	0	11,097	3,716
U. Texas M. D. Anderson Cancer Center	3	151,888	0	0	149,391	476	334	991	696	0	0	0
New York U.	4	133,593	902	318	10,504	554	5,110	646	12,441	0	83,472	19,646
U. Arizona	5	106,808	221	4,632	77,765	2	13,709	233	2,159	46	6,805	1,236
U. Southern California	6	74,512	1,136	1,749	56,517	36	868	58	4,031	0	1,792	8,325
U. California, San Diego	7	72,662	8	5,425	46,696	135	2,436	554	3,422	0	11,914	2,072
Massachusetts Institute of Technology	8	72,619	7,530	816	5,726	34	1,744	0	7,483	2,709	38,728	7,849
U. Virginia, Charlottesville	9	67,402	465	225	48,899	112	1,223	349	5,195	713	1,830	8,391
U. Texas Southwestern Medical Center	10	66,688	0	0	66,688	0	0	0	0	0	0	0
Princeton U.	11	48,394	2,127	1,542	10,060	1,676	6,528	166	16,136	0	5,594	4,565
U. Washington, Seattle	12	48,063	2,090	1,458	37,610	68	299	867	410	0	4,964	297
U. Pittsburgh, Pittsburgh	13	46,083	186	248	42,735	0	182	3	246	105	1,725	653
Ohio State U.	14	41,320	3	292	34,242	266	637	165	106	597	3,918	1,094
U. Wisconsin-Madison	15	40,748	804	785	23,410	81	1,757	48	1,095	2,238	6,248	4,282
Purdue U., West Lafayette	16	39,925	695	438	14,020	59	712	576	506	240	13,957	8,722
U. California, Davis	17	39,020	214	1,076	29,988	17	423	555	624	0	5,728	395
U. California, Los Angeles	18	36,724	728	749	22,671	254	1,136	214	1,087	334	5,604	3,947
U. California, Irvine	19	36,663	2,095	712	22,189	549	1,128	1,039	1,994	0	5,443	1,514
U. Minnesota, Twin Cities	20	34,092	618	157	30,987	44	253	407	203	94	1,100	229
Texas A&M U., College Station and Health Science Center	21	30,773	163	2,102	9,545	15	3,735	107	3,078	0	11,183	845
Pennsylvania State U., University Park and Hershey Medical Center	22	29,557	5,828	402	18,569	0	946	60	1,002	0	1,800	950
U. Florida	23	28,308	17	28	24,111	2	487	98	457	0	2,631	477
U. Kentucky	24	28,142	140	14	24,742	35	65	2	205	20	1,198	1,721
Georgetown U.	25	25,513	664	0	8,744	23	1,225	81	6,634	0	0	8,142
U. California, Berkeley	26	25,423	44	109	3,932	182	5,546	411	2,690	3,078	6,342	3,089
U. Notre Dame	27	24,115	951	0	2,383	163	954	131	4,340	5,564	3,172	6,457
Tufts U.	28	23,548	175	37	13,986	178	313	137	6,484	368	1,005	865
U. Colorado Boulder	29	23,347	305	642	326	83	2,273	81	337	0	15,653	3,647
California Institute of Technology	30	21,975	799	2,386	3,458	35	3,119	0	0	0	6,399	5,779
Arizona State U.	31	21,517	432	2,056	1,835	25	206	403	5,806	3,481	2,632	4,641
Duke U.	32	20,071	172	316	15,518	0	146	313	967	0	1,495	1,144

TABLE 31

Higher education R&D expenditures funded by all other sources, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Illinois, Urbana-Champaign	33	18,821	1,575	49	6,857	125	1,216	370	435	26	7,025	1,143
West Virginia U.	34	18,418	0	249	13,627	1	37	1	181	28	2,252	2,042
Thomas Jefferson U.	35	18,396	0	0	18,396	0	0	0	0	0	0	0
Harvard U.	36	17,526	1	255	6,520	86	477	0	7,183	0	1,534	1,470
U. North Carolina, Chapel Hill	37	17,481	190	314	13,469	16	79	89	1,144	0	1,429	751
Boston U.	38	17,245	156	50	16,484	33	38	0	84	0	192	208
U. Louisville	39	16,896	0	10	13,636	0	70	45	86	20	1,274	1,755
Woods Hole Oceanographic Institution	40	15,416	0	12,725	0	0	0	0	0	0	2,691	0
Icahn School of Medicine at Mount Sinai	41	15,408	0	0	15,408	0	0	0	0	0	0	0
Michigan State U.	42	15,282	36	228	8,167	23	210	359	2,746	69	2,590	854
Oregon State U.	43	15,058	0	849	11,781	5	444	112	412	131	1,324	0
U. Nebraska, Medical Center	44	15,039	0	0	15,039	0	0	0	0	0	0	0
Tulane U.	45	14,443	0	0	14,237	0	0	0	61	0	0	145
U. Kansas	46	13,697	83	41	12,758	1	54	239	11	89	240	181
U. Cincinnati	47	13,461	0	35	10,619	3	183	0	104	0	688	1,829
Indiana U., Bloomington	48	13,436	76	53	12,599	0	187	6	362	0	108	45
U. Texas Health Science Center, Houston	49	13,134	0	0	13,134	0	0	0	0	0	0	0
George Washington U.	50	13,034	0	89	9,383	0	0	0	2,305	1	718	538
U. Colorado Anschutz Medical Campus ^a	51	13,002	0	42	12,271	0	0	0	230	0	0	459
Auburn U., Auburn	52	11,875	337	492	7,231	1	52	38	95	232	2,273	1,124
South Dakota State U.	53	11,676	0	10	10,232	0	12	0	0	0	1,421	1
Medical U. South Carolina	54	9,998	0	0	9,998	0	0	0	0	0	0	0
U. California, Riverside	55	9,975	320	345	6,962	1	436	14	104	40	1,477	276
New Jersey Institute of Technology	56	9,578	268	0	3,355	30	136	0	889	0	4,225	675
U. California, Santa Barbara	57	9,467	14	3,882	32	0	1,193	245	501	1,539	1,778	283
SUNY, U. Buffalo	58	9,259	126	0	8,954	0	0	0	175	0	0	4
Colorado State U., Fort Collins	59	9,229	44	1,696	5,233	21	231	38	171	78	1,513	204
U. Texas, El Paso	60	9,133	246	495	1,768	80	379	119	259	0	1,979	3,808
Wake Forest U.	61	9,096	0	0	8,754	0	0	0	0	0	0	342
U. Michigan, Ann Arbor	62	8,651	0	8	4,621	96	131	67	442	0	3,079	207
Dartmouth C. and Dartmouth Hitchcock Medical Center	63	8,627	785	6	6,030	34	184	162	416	0	963	47
Johns Hopkins U. ^b	64	8,616	2,002	71	3,038	46	81	0	138	57	3,089	94
U. Delaware	65	8,291	55	151	1,296	0	630	120	978	0	4,683	378

TABLE 31

Higher education R&D expenditures funded by all other sources, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Central Florida	99	4,077	318	0	775	0	840	109	229	0	1,027	779
U. Connecticut	100	4,060	0	0	3,894	1	3	145	0	0	17	0
Georgia Institute of Technology	101	3,880	1,911	80	153	0	1	0	7	0	1,724	4
U. Texas, Austin	101	3,880	129	303	535	250	191	1,052	176	74	556	614
Montana State U., Bozeman	103	3,781	785	127	755	0	315	0	205	2	1,337	255
Rutgers, State U. New Jersey, New Brunswick	104	3,729	140	307	2,118	0	282	0	11	15	679	177
SUNY, Polytechnic Institute	105	3,646	0	0	0	0	0	0	0	0	3,646	0
U. Utah	106	3,630	201	282	1,856	27	64	0	1,022	0	119	59
Brandeis U.	107	3,606	26	0	232	0	0	0	1,323	0	99	1,926
Medical C. Wisconsin	108	3,542	0	0	3,534	0	0	0	0	0	8	0
U. Idaho	109	3,392	207	12	2,385	23	175	4	212	14	170	190
U. Oklahoma, Norman and Health Science Center	110	3,390	11	1,005	470	0	4	23	375	0	1,457	45
Wayne State U.	111	3,270	0	0	2,850	0	173	12	18	0	97	120
Rensselaer Polytechnic Institute	112	3,232	102	4	228	0	1,162	289	7	0	1,298	142
Missouri U. of Science and Technology	113	3,124	11	0	17	15	82	1	0	0	2,498	500
U. Texas, San Antonio	114	3,119	303	81	609	120	500	33	56	184	586	647
Vanderbilt U. and Vanderbilt U. Medical Center	115	3,058	0	57	1,502	0	106	19	76	0	80	1,218
Baylor U.	116	2,956	11	191	561	0	680	0	35	0	0	1,478
U. Houston	117	2,922	239	234	73	82	203	29	50	0	1,111	901
William & Mary	118	2,886	24	59	38	0	65	0	839	1,045	0	816
U. Missouri, Kansas City	119	2,790	0	0	1,537	0	0	20	20	0	899	314
New School	120	2,774	0	0	11	2	0	77	1,741	329	0	614
Drexel U.	121	2,760	65	0	1,292	0	5	178	3	0	911	306
Texas A&M U.-Corpus Christi	122	2,723	0	2,677	35	0	11	0	0	0	0	0
Tuskegee U.	123	2,696	0	0	2,417	0	0	0	12	0	267	0
American U.	124	2,488	0	0	6	0	25	28	294	15	0	2,120
U. South Florida ^d	125	2,424	242	32	1,228	28	121	0	237	4	50	482
SUNY, Stony Brook U.	126	2,414	396	99	812	155	67	127	39	0	433	286
Washington U., Saint Louis	127	2,371	151	26	2,021	0	0	0	0	0	123	50
Case Western Reserve U.	128	2,332	0	0	1,824	0	34	0	43	0	413	18
SUNY, U. Albany	129	2,330	0	100	1,858	0	267	1	10	0	0	94
Williams C.	130	2,321	38	127	882	31	214	79	266	0	0	684
Teachers C., Columbia U.	131	2,263	1,121	0	84	0	0	164	891	0	0	3

TABLE 31

Higher education R&D expenditures funded by all other sources, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Emory U.	132	2,260	0	125	2,061	0	0	41	0	0	27	6
U. Nevada, Las Vegas	133	2,063	88	37	171	0	320	50	214	30	183	970
Amherst C.	134	2,058	20	802	229	20	692	20	84	33	0	158
U. Texas, Arlington	135	2,041	0	25	344	0	188	3	0	0	440	1,041
Texas Tech U., Health Sciences Center	136	2,002	0	0	1,970	0	0	0	0	0	0	32
Louisiana Tech U.	137	1,991	155	0	123	36	90	1	0	0	701	885
U. Alaska, Fairbanks	138	1,986	0	568	435	0	394	0	27	550	12	0
Florida Atlantic U.	139	1,980	168	364	1,179	31	11	79	0	0	131	17
U. Maine	140	1,930	2	453	876	0	18	20	2	32	342	185
U. New Mexico	141	1,898	0	23	1,496	0	0	0	136	0	183	60
Columbia U. in the City of New York	142	1,879	52	54	1,034	0	0	0	49	0	226	464
U. Alabama, Birmingham	143	1,841	0	0	823	0	1,018	0	0	0	0	0
California State Polytechnic U., Humboldt	144	1,840	45	343	531	0	0	0	0	27	788	106
Oakland U.	145	1,829	1,390	0	391	0	0	0	35	0	0	13
Michigan Technological U.	146	1,794	82	595	63	3	54	1	22	0	960	14
Embry-Riddle Aeronautical U.	147	1,777	31	107	80	0	840	0	29	0	678	12
U. California, Merced	148	1,769	42	61	160	100	102	21	515	24	311	433
SUNY, Upstate Medical U.	149	1,714	0	0	1,714	0	0	0	0	0	0	0
U. Chicago	150	1,695	0	0	499	0	3	0	1,055	0	65	73
Loyola U., Chicago	151	1,607	0	0	1,429	0	0	12	15	0	37	114
Western Michigan U. and Homer Stryker M.D. School of Medicine	152	1,500	0	238	54	0	1	4	185	5	768	245
SUNY, Binghamton U.	153	1,490	260	54	0	0	187	0	68	0	846	75
Albany Medical C.	154	1,486	0	0	1,486	0	0	0	0	0	0	0
Mississippi State U.	155	1,466	4	0	1,367	0	54	0	34	0	7	0
U. Wisconsin-Milwaukee	156	1,444	0	111	148	0	0	0	135	0	689	361
U. South Carolina, Columbia	157	1,415	3	68	241	0	0	0	25	0	60	1,018
U. Maryland, Baltimore County	158	1,375	100	47	0	0	32	313	95	264	438	86
Rockefeller U.	159	1,363	0	0	1,363	0	0	0	0	0	0	0
Creighton U.	160	1,283	38	0	951	10	64	13	81	0	0	126
Florida International U.	161	1,248	293	77	60	0	278	216	164	0	160	0
Howard U.	162	1,212	0	0	1,212	0	0	0	0	0	0	0
U. Arkansas, Fayetteville	163	1,205	3	234	785	0	83	18	4	0	66	12
San Jose State U.	164	1,166	0	17	0	0	3	2	0	0	229	915

TABLE 31

Higher education R&D expenditures funded by all other sources, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Sul Ross State U.	198	638	14	37	341	7	48	10	33	0	0	148
Georgia State U.	199	637	16	8	45	0	4	0	253	0	0	311
California State U., Sacramento	200	626	0	0	17	0	0	0	63	0	8	538
U. Hawaii, Manoa	201	625	0	265	14	0	100	0	156	0	17	73
U. Massachusetts, Boston	201	625	0	0	33	0	3	0	351	0	38	200
U. Mississippi	203	612	0	0	522	0	5	0	0	0	12	73
Grand Valley State U.	204	564	0	236	236	20	36	0	3	0	0	33
Claremont Graduate U.	205	552	68	0	0	0	0	94	265	0	0	125
Gallaudet U.	206	548	126	0	210	0	0	210	2	0	0	0
CUNY, Graduate Center	207	532	0	0	0	0	0	14	132	12	0	374
Haverford C.	207	532	9	26	212	6	48	16	56	0	0	159
Purdue U., Northwest	209	521	0	0	273	0	4	0	0	3	23	218
California State U., Chico	210	506	0	18	186	27	0	0	47	0	228	0
U. Missouri, Saint Louis	211	492	0	0	25	0	0	0	347	0	0	120
U. Alabama, Huntsville	212	483	0	6	83	62	0	0	0	0	332	0
Winston-Salem State U.	213	465	0	0	145	20	130	0	0	0	0	170
Yeshiva U.	213	465	0	0	465	0	0	0	0	0	0	0
Portland State U.	215	459	0	0	1	0	133	0	39	0	159	127
U. Tennessee, Chattanooga	216	458	0	0	0	0	1	283	0	1	79	94
Loma Linda U.	217	441	0	0	441	0	0	0	0	0	0	0
Augusta U.	218	438	6	0	432	0	0	0	0	0	0	0
Nova Southeastern U.	219	432	0	2	336	0	0	0	0	0	0	94
Stevens Institute of Technology	220	421	0	0	0	0	126	0	0	0	295	0
U. Alabama, Tuscaloosa	221	411	7	2	4	0	0	2	99	0	194	103
U. Central del Caribe	222	404	0	0	404	0	0	0	0	0	0	0
Ohio U.	223	388	0	26	150	0	9	0	14	0	98	91
U. Alaska, Anchorage	224	381	0	0	196	0	0	0	45	39	19	82
U. Oregon	225	377	0	49	91	0	9	2	154	0	0	72
Naval Postgraduate School	226	341	0	341	0	0	0	0	0	0	0	0
Oregon Health and Science U.	227	340	0	0	330	0	0	0	0	0	10	0
Miami U.	228	338	0	0	95	0	0	4	36	0	41	162
SUNY, Downstate Health Sciences U.	228	338	0	0	338	0	0	0	0	0	0	0
North Carolina State U.	230	332	0	22	52	43	0	0	0	19	186	10

TABLE 31

Higher education R&D expenditures funded by all other sources, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Morgan State U.	231	325	10	0	135	0	0	3	0	0	52	125
Oklahoma State U., Stillwater	232	322	0	0	131	0	0	0	3	0	46	142
East Carolina U.	233	321	0	19	189	0	0	1	11	0	35	66
Central Michigan U.	234	319	0	19	175	0	41	2	0	3	19	60
U. Oklahoma, Tulsa	235	316	0	0	1	0	0	0	0	0	58	257
U. Colorado Denver ^a	236	314	0	3	0	0	0	0	56	0	0	255
Purdue U., Fort Wayne	237	310	0	0	38	3	1	2	43	122	45	56
U. Texas Health Science Center, San Antonio	237	310	0	0	310	0	0	0	0	0	0	0
U. San Diego	239	304	0	0	0	0	117	0	125	0	0	62
U. Texas Rio Grande Valley	239	304	0	0	78	25	48	0	32	0	11	110
U. Maryland Center for Environmental Science	241	301	0	223	25	0	19	0	0	0	0	34
U. Wisconsin-Stevens Point	242	287	0	3	284	0	0	0	0	0	0	0
U.S. Military Academy	243	276	0	0	0	36	0	0	0	0	240	0
Northeastern U.	244	273	28	0	17	0	11	36	42	0	139	0
Calvin U.	245	267	6 i	3 i	40 i	5 i	30 i	3 i	6 i	24 i	11 i	139 i
Franklin and Marshall C.	245	267	0	130	7	0	89	12	15	0	0	14
U. Massachusetts, Dartmouth	245	267	0	250	15	0	0	0	0	0	2	0
U.S. Naval Academy	248	266	25	0	0	26	109	0	0	0	106	0
Clemson U.	249	264	0	0	5	0	0	0	0	0	163	96
East Tennessee State U.	250	260	0	0	260	0	0	0	0	0	0	0
Tennessee Technological U.	251	259	64	0	0	0	0	0	0	0	195	0
Hobart and William Smith Colleges	252	251	12	36	120	0	18	0	9	0	0	56
Southern Connecticut State U.	252	251	5	102	0	0	73	1	0	1	0	69
U. Toledo	254	249	0	0	209	0	0	5	0	0	35	0
Colby C.	255	248	0	0	0	0	76	0	67	0	0	105
Syracuse U.	255	248	0	0	48	0	0	0	178	0	0	22
Harvey Mudd C.	257	234	21	0	20	26	47	0	0	89	28	3
Brigham Young U., Provo	258	232	0	0	67	0	22	0	0	0	128	15
Northern Illinois U.	259	228	0	43	114	11	0	0	2	0	46	12
St. John's U., New York	259	228	1	0	165	0	0	3	0	0	0	59
U. Arkansas, Little Rock	259	228	172	0	29	0	1	0	26	0	0	0
Idaho State U.	262	224	0	0	82	0	0	0	142	0	0	0
Northern Michigan U.	263	213	14	7	146	0	9	0	0	0	0	37

TABLE 31

Higher education R&D expenditures funded by all other sources, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
South Dakota School of Mines and Technology	264	210	0	0	0	0	33	0	0	0	177	0
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	265	206	0	0	206	0	0	0	0	0	0	0
Minnesota State U., Mankato	266	203	0	0	80	0	0	0	24	0	99	0
CUNY, City C.	267	200	0	0	0	0	55	13	0	0	132	0
Cleveland State U.	268	192	0	0	15	0	14	0	0	0	163	0
U. Memphis	269	191	0	46	0	0	45	12	2	0	26	60
Saint Louis U.	270	181	38	27	98	0	0	0	0	0	0	18
U. North Dakota	270	181	0	4	43	0	0	4	0	0	104	26
Stephen F. Austin State U.	272	179	0	0	176	0	0	0	0	0	0	3
Biola U.	273	170	0	0	170	0	0	0	0	0	0	0
Clarkson U.	274	169	0	0	0	0	0	0	0	0	169	0
Bates C.	275	167	0	0	36	0	131	0	0	0	0	0
Grinnell C.	276	165	8	0	40	6	33	0	17	0	0	61
Virginia Commonwealth U.	277	161	0	0	36	0	0	0	0	0	116	9
Southern Methodist U.	278	160	0	0	90	51	14	0	0	0	0	5
Carleton C.	279	157	0	157	0	0	0	0	0	0	0	0
St. Catherine U.	280	156	0	0	86	0	30	0	40	0	0	0
U. Montana, Missoula	281	155	0	20	122	0	0	0	13	0	0	0
U. Washington, Tacoma	282	154	0	0	0	0	0	0	0	0	0	154
Indiana U.-Purdue U., Indianapolis	283	147	83	0	58	0	0	2	3	1	0	0
U. Akron	284	144	0	0	16	0	52	3	31	0	0	42
Davidson C.	285	139	0	0	0	0	0	3	136	0	0	0
Northern Arizona U.	285	139	0	14	42	0	0	0	0	0	0	83
Texas A&M U.-Kingsville	287	137	0	0	0	0	0	0	0	0	137	0
Chapman U.	288	136	0	38	5	0	0	0	22	0	0	71
U. North Texas, Health Science Center	288	136	0	0	136	0	0	0	0	0	0	0
Kennesaw State U.	290	135	89	0	0	0	0	0	0	0	8	38
Reed C.	291	131	2	0	50	2	13	5	18	0	0	41
CUNY, Advanced Science Research Center	292	124	0	0	59	0	26	0	0	0	39	0
CUNY, Lehman C.	293	123	0	0	0	0	0	0	107	0	0	16
Boise State U.	294	118	0	30	16	0	0	0	0	0	72	0
Montclair State U.	295	117	0	0	0	0	0	0	117	0	0	0

TABLE 31

Higher education R&D expenditures funded by all other sources, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Texas State U.	296	116	0	0	0	0	0	0	0	0	116	0
Sam Houston State U.	297	114	0	0	26	0	0	7	70	0	2	9
Hope C.	298	111	0	14	21	0	10	0	0	0	0	66
Clark U.	299	107	0	0	0	0	0	0	107	0	0	0
California State U., Fresno	300	105	0	0	35	0	19	0	0	0	49	2
Lake Superior State U.	301	95	0	0	95	0	0	0	0	0	0	0
CUNY, Baruch C.	302	94	0	0	0	0	0	0	10	0	0	84
Hamilton C.	303	92	0	0	0	0	0	0	0	0	0	92
U. North Carolina, Wilmington	304	89	0	0	78	0	0	0	11	0	0	0
Eastern Washington U.	305	88	0	0	0	0	0	78	10	0	0	0
Rutgers, State U. New Jersey, Newark	306	86	0	50	5	0	0	0	2	0	0	29
Furman U.	307	85	0	0	38	0	47	0	0	0	0	0
U. Baltimore	307	85	0	0	0	0	0	0	85	0	0	0
U. California, Office of the President	307	85	0	0	85	0	0	0	0	0	0	0
Franklin W. Olin C. of Engineering	310	83	0	0	0	0	0	0	0	0	83	0
U. Tulsa	310	83	0	0	0	0	0	0	0	0	83	0
SUNY, C. Brockport	312	82	0	0	79	0	0	0	3	0	0	0
U. Michigan, Dearborn	312	82	0	0	0	0	0	0	0	0	82	0
Ithaca C.	314	79	0	0	16	0	57	0	0	0	0	6
CUNY, Queens C.	315	77	0	0	73	4	0	0	0	0	0	0
Texas A&M U.-San Antonio	315	77	0	0	0	0	0	0	0	0	77	0
California State U., East Bay	317	75	0	0	69	6	0	0	0	0	0	0
Lehigh U.	317	75	0	8	0	0	0	0	0	0	67	0
U. Nebraska, Kearney	319	72	0	0	72	0	0	0	0	0	0	0
Western Illinois U.	319	72	0	0	35	0	0	0	0	0	0	37
CUNY, Hunter C.	321	63	0	19	3	0	0	17	0	0	0	24
U. of St. Thomas (MN)	321	63	0	0	0	0	3	0	0	0	60	0
Touro U., California	323	61	0	0	0	0	0	0	0	0	0	61
CUNY, C. Staten Island	324	60	0	22	0	0	36	0	2	0	0	0
Florida Gulf Coast U.	325	56	0	0	0	0	0	0	0	0	0	56
Texas Christian U.	325	56	0	0	0	0	0	54	2	0	0	0
U. Puerto Rico, Rio Piedras	327	55	0	0	0	0	0	0	17	0	0	38
California Polytechnic State U., San Luis Obispo	328	54	0	0	18	0	34	0	0	0	0	2

TABLE 31

Higher education R&D expenditures funded by all other sources, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Long Island U.	329	51	0	0	51	0	0	0	0	0	0	0
U. Washington, Bothell	329	51	39	0	0	0	0	0	0	12	0	0
U. Hawaii, Hilo	331	48	0	0	48	0	0	0	0	0	0	0
West Texas A&M U.	332	46	0	0	46	0	0	0	0	0	0	0
U. Nebraska, Omaha	333	44	30	0	0	0	0	0	8	0	6	0
Kent State U.	334	42	0	0	6	0	0	5	16	0	0	15
Trinity U.	335	41	0	2	28	0	0	0	11	0	0	0
U. Richmond	335	41	0	0	0	0	0	0	41	0	0	0
U. Southern Maine	335	41	0	0	23	0	0	0	18	0	0	0
Wichita State U.	338	39	0	0	5	0	0	6	5	0	0	23
CUNY, Graduate School of Public Health and Health Policy	339	38	0	0	38	0	0	0	0	0	0	0
Wesleyan U.	340	37	0	10	2	0	11	0	7	0	0	7
Wright State U.	341	36	0	0	0	0	0	0	0	0	22	14
Western Washington U.	342	35	0	0	32	0	0	3	0	0	0	0
Central Washington U.	343	34	0	27	0	7	0	0	0	0	0	0
DePaul U.	344	33	0	0	0	0	0	14	0	0	0	19
U. New Haven	344	33	0	0	33	0	0	0	0	0	0	0
U. Nebraska, central administration	346	32	0	0	32	0	0	0	0	0	0	0
Alabama State U.	347	31	0	0	0	0	0	0	0	0	0	31
U. Minnesota, Duluth	347	31	0	0	2	0	0	0	0	0	29	0
CUNY, New York City C. of Technology	349	30	30	0	0	0	0	0	0	0	0	0
Hawaii Pacific U.	350	28	0	0	23	0	0	0	0	0	0	5
San Francisco State U.	350	28	0	0	28	0	0	0	0	0	0	0
Texas A&M International U.	350	28	0	0	0	0	0	0	0	0	0	28
U. of Mary Washington	350	28	0	0	0	0	0	0	28	0	0	0
Robert Morris U.	354	27	1	0	16	0	0	0	2	0	3	5
St. Edward's U.	354	27	0	0	0	0	0	0	0	0	0	27
William Paterson U.	356	25	14	0	0	0	0	0	0	0	0	11
Kenyon C.	357	24	0	0	0	0	0	0	0	0	0	24
Union C., Schenectady	357	24	0	0	18	0	2	0	4	0	0	0
Vassar C.	359	23	0	0	0	0	0	0	23	0	0	0
SUNY, C. Plattsburgh	360	22	0	22	0	0	0	0	0	0	0	0
U. Iowa	361	21	0	0	13	0	0	0	0	0	8	0

TABLE 31

Higher education R&D expenditures funded by all other sources, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields					
Villanova U.	361	21	0	0	0	0	0	0	0	0	0	21					
Austin Peay State U.	363	20	0	0	0	0	0	0	0	0	0	20					
SUNY, Buffalo State	363	20	0	10	0	0	0	0	10	0	0	0					
Elon U.	365	19	0	0	0	0	0	0	0	0	0	19					
Mercyhurst U.	365	19	0	0	0	0	0	0	0	0	0	19					
U. Alaska, Southeast	365	19	0	19	0	0	0	0	0	0	0	0					
Western U. of Health Sciences	365	19	0	0	0	0	0	0	0	0	0	19					
California State U., Northridge	369	17	0	0	0	0	0	0	0	0	0	17					
Texas A&M U.-Commerce	369	17	17	0	0	0	0	0	0	0	0	0					
C. Charleston	371	16	9	0	0	0	0	0	0	0	0	7					
CUNY, Brooklyn C.	371	16	9	0	0	0	0	7	0	0	0	0					
Saginaw Valley State U.	371	16	i	0	i	0	i	11	i	0	i	4	i				
Indiana U. Pennsylvania	374	15	0	0	8	0	0	7	0	0	0	0					
North Carolina A&T State U.	375	14	0	0	0	0	0	0	0	0	14	0					
Plymouth State U.	375	14	0	14	0	0	0	0	0	0	0	0					
Rutgers, State U. New Jersey, Camden	375	14	0	0	0	0	0	0	14	0	0	0					
U. Texas, Tyler	375	14	0	0	0	0	0	0	0	0	0	14					
Indiana State U.	379	12	0	0	1	0	0	0	0	0	0	11					
Lafayette C.	379	12	0	0	0	0	0	0	12	0	0	0					
Alaska Pacific U.	381	11	0	11	0	0	0	0	0	0	0	0					
SUNY, C. of Optometry	381	11	0	0	11	0	0	0	0	0	0	0					
Delaware State U.	383	10	0	0	0	0	0	0	0	0	0	10					
Pennsylvania State U., Behrend	383	10	0	10	0	0	0	0	0	0	0	0					
Salisbury U.	383	10	0	0	10	0	0	0	0	0	0	0					
U. Wisconsin-Platteville	383	10	i	0	i	0	i	4	i	1	i	0	i	2	i	3	i
Bowdoin C.	387	9	0	0	9	0	0	0	0	0	0	0					
Colorado State U., Pueblo	387	9	0	0	9	0	0	0	0	0	0	0					
Towson U.	389	7	0	0	0	0	0	0	0	0	0	7					
California State U., Monterey Bay	390	6	0	0	0	0	0	4	2	0	0	0					
SUNY, Oswego	390	6	0	0	2	0	0	0	4	0	0	0					
U. North Texas, Denton	390	6	0	0	0	0	0	0	0	0	0	6					
U. Wisconsin-Eau Claire	390	6	0	0	0	0	4	0	0	0	0	2					
U. Wisconsin-La Crosse	390	6	0	0	6	0	0	0	0	0	0	0					

TABLE 31

Higher education R&D expenditures funded by all other sources, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. San Francisco	395	5	0	0	5	0	0	0	0	0	0	0
Citadel Military C. South Carolina	396	4	0	0	1	0	0	0	0	0	0	3
Colgate U.	396	4	0	1	0	0	3	0	0	0	0	0
Illinois State U.	396	4	0	0	4	0	0	0	0	0	0	0
Kettering U.	396	4	0	0	0	0	0	0	0	0	4	0
Central Connecticut State U.	400	3	0	0	0	0	0	0	0	0	0	3
Connecticut C.	400	3	0	0	0	0	0	0	3	0	0	0
Appalachian State U.	402	2	0	0	0	0	0	0	1	0	0	1
James Madison U.	403	1	0	0	0	1	0	0	0	0	0	0
Monmouth U.	403	1	0	0	0	0	1	0	0	0	0	0
Texas Tech U., Health Sciences Center, El Paso	403	1	0	0	1	0	0	0	0	0	0	0
U. Central Oklahoma	403	1 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	1 i

i = imputed.

nec = not elsewhere classified; S&E = science and engineering.

^a The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^b Johns Hopkins University includes the Applied Physics Laboratory, with \$5,185 thousand in R&D expenditures from all other sources in FY 2022.

^c The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 32

Higher education R&D expenditures at historically black colleges and universities, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
All HBCUs	-	633,143	463,170	51,064	91,609	7,462	14,358	5,480
Howard U.	1	67,594	37,331	1,197	23,130	2,908	1,816	1,212
Florida A&M U.	2	50,636	41,943	1,510	6,256	334	593	0
North Carolina A&T State U.	3	47,908	29,094	3,899	14,445	261	195	14
Morehouse School of Medicine	4	42,489	31,339	440	7,155	0	3,555	0
Morgan State U.	5	29,482	24,670	2,835	707	601	344	325
Delaware State U.	6	29,016	24,361	598	3,457	150	440	10
Tuskegee U.	7	21,941	14,911	3,206	1,128	0	0	2,696
Prairie View A&M U.	8	20,429	11,665	4,037	3,898	327	502	0
U. of the Virgin Islands	9	20,259	19,127	1,010	NA	48	74	0
Tennessee State U.	10	18,012	10,859	567	6,466	4	116	0
Meharry Medical C.	11	17,960	15,048	0	648	25	2,239	0
Jackson State U.	12	17,481	15,045	0	1,427	93	916	0
Alcorn State U.	13	16,726 i	9,361 i	4,977 i	2,349 i	7 i	32 i	0 i
North Carolina Central U.	14	16,600	13,709	954	NA	434	776	727
Xavier U. Louisiana	15	14,156	11,733	585	1,452	0	386	0
Virginia State U.	16	12,326	7,115	2,006	2,544	0	661	0
Texas Southern U.	17	12,120	7,550	1,150	3,362	0	58	0
Lincoln U., Jefferson City	18	11,500	8,988	2,512	NA	0	0	0
Hampton U.	19	11,462	11,274	0	188	0	0	0
U. of the District of Columbia	20	10,779	9,859	920	0	0	0	0
Winston-Salem State U.	21	10,436	8,903	283	0	0	785	465
Central State U.	22	10,274	5,576	3,039	1,659	0	0	0
Fort Valley State U.	23	9,969	7,265	2,704	0	0	0	0
Alabama A&M U.	24	9,611	9,221	4	0	386	0	0
Kentucky State U.	25	9,284	4,743	4,357	0	83	101	0
U. Maryland, Eastern Shore	26	9,274	9,062	192	20	0	0	0
Clark Atlanta U.	27	8,791	5,895	0	2,647	198	51	0
U. Arkansas, Pine Bluff	28	7,506	3,306	1,449	2,737	0	14	0
Southern U. and A&M C., Agricultural Research and Extension Center	29	7,048	4,261	2,765	22	0	0	0
West Virginia State U.	30	6,703	4,278	1,601	815	0	9	0
Langston U.	31	6,481	3,616	0	2,449	416	0	0
Morehouse C.	32	5,664	5,664	0	0	0	0	0
Southern U. and A&M C., Baton Rouge	33	4,344	3,595	80	34	635	0	0
South Carolina State U.	34	4,270 i	4,270 i	NA	NA	NA	NA	NA

TABLE 32

Higher education R&D expenditures at historically black colleges and universities, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds							
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources		
Fisk U.	35	4,000	3,486	93	10	0	411	0		
Norfolk State U.	36	3,593	3,398	89	0	0	106	0		
Bowie State U.	37	3,351	3,351	0	0	0	0	0		
Fayetteville State U.	38	3,206	1,667	479	898	116	46	0		
Alabama State U.	39	3,178	2,930	0	0	216	1	31		
Spelman C.	40	2,686	2,539	0	0	147	0	0		
Johnson C. Smith U.	41	2,685	1,868	674	0	12	131	0		
Tougaloo C.	42	2,336 i	2,336 i	0 i	0 i	0 i	0 i	0 i		
Grambling State U.	43	2,306 i	809 i	639 i	858 i	0 i	0 i	0 i		
Dillard U.	44	2,270	1,422	0	848	0	0	0		
Elizabeth City State U.	45	1,934	1,667	206	NA	61	0	0		
Savannah State U.	46	1,888	1,881	7	0	0	0	0		
Clayton U.	47	1,179	1,179	0	0	0	0	0		

i = imputed. NA = not available; data were not provided by institution.

HBCUs = historically black colleges and universities.

Note(s):

Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 33

Higher education R&D expenditures at historically black colleges and universities, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
All HBCUs	-	633,143	15,122	30,277	365,669	6,266	62,605	5,738	15,276	3,879	75,368	52,943
Howard U.	1	67,594	1,576	305	44,152	215	6,125	2,546	1,296	0	10,431	948
Florida A&M U.	2	50,636	1,208	6,499	26,175	15	1,905	108	62	62	5,752	8,850
North Carolina A&T State U.	3	47,908	1,008	0	19,160	863	2,053	156	0	0	18,186	6,482
Morehouse School of Medicine	4	42,489	0	0	42,489	0	0	0	0	0	0	0
Morgan State U.	5	29,482	605	5,672	7,898	192	2,314	36	86	0	8,375	4,304
Delaware State U.	6	29,016	185	752	15,815	652	3,965	240	1,618	0	207	5,582
Tuskegee U.	7	21,941	875	0	15,072	888	1,910	108	89	0	2,955	44
Prairie View A&M U.	8	20,429	134	0	9,381	5	2,139	33	247	117	5,305	3,068
U. of the Virgin Islands	9	20,259	267	8,729	8,130	679	1,130	0	534	0	790	0
Tennessee State U.	10	18,012	384	120	16,043	0	0	0	0	0	1,278	187
Meharry Medical C.	11	17,960	65	0	17,895	0	0	0	0	0	0	0
Jackson State U.	12	17,481	671	0	5,257	26	7,277	181	4	190	2,512	1,363
Alcorn State U.	13	16,726	0	0	8,074	0	0	0	8,429	0	222	1
North Carolina Central U.	14	16,600	138	234	6,414	0	4,976	0	319	259	2,074	2,186
Xavier U. Louisiana	15	14,156	696	0	5,786	0	7,578	63	18	0	0	15
Virginia State U.	16	12,326	0	37	7,493	206	80	76	0	0	2,260	2,174
Texas Southern U.	17	12,120	132	173	8,033	96	1,015	572	531	0	24	1,544
Lincoln U., Jefferson City	18	11,500	0	28	11,109	0	0	0	145	218	0	0
Hampton U.	19	11,462	720	2,576	1,659	163	4,282	0	434	0	1,215	413
U. of the District of Columbia	20	10,779	255	183	2,810	502	0	0	0	0	5,725	1,304
Winston-Salem State U.	21	10,436	419	100	2,711	82	964	509	755	138	0	4,758
Central State U.	22	10,274	0	124	8,806	42	954	0	0	34	314	0
Fort Valley State U.	23	9,969	0	79	9,807	0	83	0	0	0	0	0
Alabama A&M U.	24	9,611	372	0	5,654	78	758	201	237	0	1,925	386
Kentucky State U.	25	9,284	5	0	9,156	119	0	0	0	0	0	4
U. Maryland, Eastern Shore	26	9,274	0	3,778	5,437	0	0	0	0	0	59	0
Clark Atlanta U.	27	8,791	395	0	5,400	323	2,620	0	0	0	41	12
U. Arkansas, Pine Bluff	28	7,506	0	0	6,299	0	513	0	114	580	0	0
Southern U. and A&M C., Agricultural Research and Extension Center	29	7,048	0	0	7,048	0	0	0	0	0	0	0
West Virginia State U.	30	6,703	2	0	6,701	0	0	0	0	0	0	0
Langston U.	31	6,481	0	0	6,074	2	53	119	0	0	0	233
Morehouse C.	32	5,664	396	0	451	47	2,393	59	0	1,710	0	608
Southern U. and A&M C., Baton Rouge	33	4,344	611	0	837	87	200	0	0	0	1,938	671

TABLE 33

Higher education R&D expenditures at historically black colleges and universities, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
South Carolina State U.	34	4,270 i	117 i	0 i	1,537 i	0 i	1,086 i	0 i	0 i	0 i	773 i	757 i
Fisk U.	35	4,000	431	0	1,289	167	1,926	54	0	0	10	123
Norfolk State U.	36	3,593	344	0	148	35	1,051	0	0	0	1,656	359
Bowie State U.	37	3,351	1,169	0	1,462	0	481	0	0	0	0	239
Fayetteville State U.	38	3,206	472	0	784	0	165	0	155	42	127	1,461
Alabama State U.	39	3,178	192	0	2,471	0	0	0	0	0	483	32
Spelman C.	40	2,686	26	0	685	668	410	565	55	0	0	277
Johnson C. Smith U.	41	2,685	188	0	146	2	4	0	2	0	52	2,291
Tougaloo C.	42	2,336 i	92 i	0 i	1,207 i	91 i	537 i	111 i	60 i	0 i	0 i	238 i
Grambling State U.	43	2,306 i	0 i	0 i	0 i	0 i	1,345 i	0 i	0 i	0 i	0 i	961 i
Dillard U.	44	2,270	0	89	1,199	21	158	1	6	265	7	524
Elizabeth City State U.	45	1,934	585	0	802	0	0	0	3	0	0	544
Savannah State U.	46	1,888	0	694	255	0	53	0	13	264	609	0
Claflin U.	47	1,179	387	105	458	0	102	0	64	0	63	0

i = imputed.

HBCUs = historically black colleges and universities; nec = not elsewhere classified; S&E = science and engineering.

Note(s):

Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 34

Higher education R&D expenditures at high-Hispanic-enrollment institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
All HHE institutions	-	8,485,548	4,276,201	700,887	2,479,484	340,163	421,237	267,576
Texas A&M U., College Station and Health Science Center	1	1,152,666	505,355	218,735	315,112	35,535	47,156	30,773
U. Texas, Austin	2	845,896	536,296	31,721	151,594	76,512	45,893	3,880
U. Arizona	3	824,340	374,936	30,993	254,878	27,911	28,814	106,808
U. California, Irvine	4	534,947	291,393	15,008	115,832	42,941	33,110	36,663
U. Illinois, Chicago	5	440,573	251,328	6,914	131,574	11,917	30,691	8,149
U. New Mexico	6	331,164	232,774	6,491	67,949	4,625	17,427	1,898
Florida International U.	7	281,665	129,683	20,013	120,737	2,800	7,184	1,248
U. California, Santa Barbara	8	278,897	161,241	6,212	57,814	16,324	27,839	9,467
U. Houston	9	240,126	84,295	28,999	107,699	9,709	6,502	2,922
U. Texas Health Science Center, San Antonio	10	238,510	119,071	27,587	57,408	9,276	24,858	310
Texas Tech U.	11	226,729	45,136	29,861	121,050	13,367	16,426	889
U. Central Florida	12	221,488	110,131	8,500	82,434	11,278	5,068	4,077
U. Texas Medical Branch	13	204,518	123,467	8,481	53,371	7,267	11,932	0
U. California, Riverside	14	199,135	114,257	8,566	51,532	6,267	8,538	9,975
U. California, Santa Cruz	15	176,760	107,082	7,101	34,599	7,330	13,485	7,163
U. Texas, San Antonio	16	147,629	54,384	13,795	64,443	5,765	6,123	3,119
U. Texas, Arlington	17	133,770	56,025	27,482	38,339	2,935	6,948	2,041
U. Texas, El Paso	18	130,501	60,387	15,999	41,654	1,177	2,151	9,133
San Diego State U.	19	123,856	50,540	4,812	64,484	457	2,489	1,074
New Mexico State U.	20	121,472	71,718	23,036	16,167	2,451	2,366	5,734
Rush U.	21	114,874	79,647	1,548	9,884	15,789	8,006	0
Texas State U.	22	110,102	38,936	3,810	60,338	1,102	5,800	116
U. Nevada, Las Vegas	23	94,967	28,867	2,174	59,398	1,656	809	2,063
U. North Texas, Denton	24	93,538	23,056	5,007	61,728	1,979	1,762	6
New Mexico Institute of Mining and Technology	25	89,900	72,594	10,532	2,895	2,922	269	688
San Jose State U.	26	71,695	30,984	7,796	27,661	1,792	2,296	1,166
Northern Arizona U.	27	66,729	43,453	7,055	14,501	813	768	139
CUNY, City C.	28	65,569	38,596	11,892	13,103	467	1,311	200
U. Texas Rio Grande Valley	29	64,401	18,317	5,380	32,862	212	7,326	304
Florida Atlantic U.	30	61,748	28,641	7,443	15,422	2,431	5,831	1,980
U. California, Merced	31	48,147	23,421	5,992	14,279	768	1,918	1,769
U. Puerto Rico, Medical Sciences Campus	32	47,578	35,050	1,005	8,295	3,228	0	0
Texas Tech U., Health Sciences Center	33	46,574	14,620	16,937	9,544	508	2,963	2,002
San Francisco State U.	34	36,617	15,276	2,013	18,257	53	990	28

TABLE 34

Higher education R&D expenditures at high-Hispanic-enrollment institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Texas A&M U.-Corpus Christi	35	36,014	15,229	9,903	5,287	90	2,782	2,723
CUNY, Hunter C.	36	35,348	21,142	3,367	8,895	716	1,165	63
Montclair State U.	37	32,202	5,189	619	24,540	54	1,683	117
Nova Southeastern U.	38	31,189	9,314	3,571	16,839	417	616	432
Rutgers, State U. New Jersey, Newark	39	28,345	16,099	421	8,531	167	3,041	86
U. Puerto Rico, Rio Piedras	40	28,083	16,905	60	10,458	229	376	55
California State U., Sacramento	41	23,795	6,646	10,203	5,694	115	511	626
Texas A&M U.-Kingsville	42	23,451	8,225	6,241	2,812	389	5,647	137
CUNY, Queens C.	43	21,434	14,756	1,362	4,717	83	439	77
California State U., Northridge	44	19,638	15,546	984	1,207	181	1,703	17
California State U., East Bay	45	19,035	8,997	693	8,232	2	1,036	75
U. Puerto Rico, Mayaguez	46	18,274	16,223	455	314	1,049	233	0
California State U., Long Beach	47	17,807	11,739	572	2,980	534	837	1,145
California State U., Fullerton	48	16,642	6,136	305	9,664	95	442	0
CUNY, John Jay C. of Criminal Justice	49	16,233	5,777	3,516	3,492	144	2,171	1,133
California State Polytechnic U., Humboldt	50	15,612	2,421	4,248	4,784	110	2,209	1,840
Loma Linda U.	51	15,517	9,134	630	3,012	1,358	942	441
Charles R. Drew U. of Medicine and Science	52	14,581	10,656	220	3,098	0	607	0
Texas Tech U., Health Sciences Center, El Paso	53	14,206	2,339	2,856	8,097	475	438	1
California State U., Fresno	54	12,603	5,928	1,102	3,854	356	1,258	105
Sam Houston State U.	55	12,009	4,936	132	6,444	1	382	114
California State U., San Bernardino	56	11,929	6,693	2,445	2,657	3	131	0
California State U., Los Angeles	57	9,839	8,605	130	943	0	161	0
West Texas A&M U.	58	9,438	2,123	4,302	1,972	966	29	46
California State U., San Marcos	59	9,238	7,986	980	265	0	7	0
California State U., Monterey Bay	60	8,975	5,051	1,404	2,300	50	164	6
California State Polytechnic U., Pomona	61	7,909	5,407	846	1,441	204	11	0
William Paterson U.	62	7,574	1,896	0	5,401	121	131	25
Texas Woman's U.	63	6,029	2,091	2,386	883	135	534	0
CUNY, Graduate Center	64	5,509	2,535	154	1,080	0	1,208	532
Kean U.	65	5,499	715	180	4,548	15	41	0
U. Central del Caribe	66	5,053	2,807	356	1,486	0	0	404
California State U., Bakersfield	67	4,815	2,665	259	1,878	0	13	0
CUNY, Lehman C.	68	4,656	3,652	10	421	177	273	123
Texas A&M International U.	69	4,486	1,624	917	1,093	73	751	28

TABLE 34

Higher education R&D expenditures at high-Hispanic-enrollment institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
California State U., Dominguez Hills	70	4,230	3,156	23	1,001	0	50	0
California State U., Chico	71	4,177	2,312	763	422	130	44	506
Sonoma State U.	72	3,774	2,889	406	298	40	141	0
U. Texas of the Permian Basin	73	3,577	1,538	685	756	132	466	0
CUNY, C. Staten Island	74	3,545	2,916	93	342	1	133	60
St. Edward's U.	75	3,393	1,940	101	1,150	15	160	27
Azusa Pacific U.	76	3,389	282	266	2,680	0	161	0
California State U., Channel Islands	77	3,377	1,638	746	690	267	36	0
CUNY, Baruch C.	78	3,156	1,894	23	640	0	505	94
Colorado State U., Pueblo	79	3,117	1,278	1,721	82	0	27	9
Sul Ross State U.	80	2,526 i	623 i	151 i	143 i	30 i	941 i	638 i
La Sierra U.	81	2,246	972	0	654	0	620	0
Northeastern Illinois U.	82	2,224	2,224	0	0	0	0	0
U. of the Incarnate Word	83	2,064	1,078	0	886	8	92	0
California State U., Stanislaus	84	1,966	1,056	243	176	464	27	0
CUNY, New York City C. of Technology	85	1,955	1,769	16	120	20	0	30
CUNY, York C.	86	1,912	1,659	0	189	0	64	0
U. Houston-Clear Lake	87	1,800	841	408	91	399	61	0
Manhattan C.	88	1,641	440	316	367	518	0	0
U. Houston-Downtown	89	1,485	903	57	238	0	287	0
U. Puerto Rico, Humacao	90	1,448	1,160	0	288	0	0	0
U. Ana G. Mendez, Gurabo	91	1,419	1,407	0	12	0	0	0
U. Puerto Rico, Cayey	92	1,390	757	0	430	0	203	0
New Mexico Highlands U.	93	1,331 i	1,288 i	0 i	0 i	0 i	43 i	0 i
Marymount U.	94	1,298	178	31	965	66	58	0
Texas A&M U.-San Antonio	95	1,242	394	119	570	22	60	77
Nevada State C.	96	1,191	1,167	0	22	0	2	0
California Lutheran U.	97	627	298	0	116	178	35	0

i = imputed.

HHE = high Hispanic enrollment.

Note(s):

HHE institutions are those whose full-time equivalent (FTE) undergraduate student enrollment is at least 25% Hispanic, according to fall 2021 data in the Integrated Postsecondary Education Data System, directed by the National Center for Education Statistics. FTE enrollment is calculated as full-time undergraduate student enrollment plus one-third of part-time undergraduate student enrollment. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 35

Higher education R&D expenditures at high-Hispanic-enrollment institutions, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
San Francisco State U.	34	36,617	1,878	4,988	13,356	1,288	3,626	1,917	3,159	1,424	2,423	2,558
Texas A&M U.-Corpus Christi	35	36,014	355	14,478	5,184	19	1,459	4	623	1,132	8,737	4,023
CUNY, Hunter C.	36	35,348	1,556	1,197	7,870	200	4,838	9,591	1,827	386	191	7,692
Montclair State U.	37	32,202	1,888	2,393	3,830	1,388	1,811	4,824	3,543	0	1,129	11,396
Nova Southeastern U.	38	31,189	57	11,526	14,336	20	0	846	981	20	0	3,403
Rutgers, State U. New Jersey, Newark	39	28,345	2,252	2,487	10,990	0	4,099	1,039	2,024	415	0	5,039
U. Puerto Rico, Rio Piedras	40	28,083	609	2,586	3,500	234	5,456	63	1,270	4,306	4,135	5,924
California State U., Sacramento	41	23,795	221	808	1,154	131	403	319	3,830	5,269	8,253	3,407
Texas A&M U.-Kingsville	42	23,451	0	242	17,132	0	323	51	0	66	4,044	1,593
CUNY, Queens C.	43	21,434	508	561	14,572	278	2,266	2,015	603	224	0	407
California State U., Northridge	44	19,638	173	1,181	5,528	435	7,084	308	312	82	2,621	1,914
California State U., East Bay	45	19,035	287	816	2,587	377	895	207	2,148	0	133	11,585
U. Puerto Rico, Mayaguez	46	18,274	254	4,127	654	74	1,580	219	524	0	8,482	2,360
California State U., Long Beach	47	17,807	390	399	4,858	369	3,494	1,974	574	52	3,671	2,026
California State U., Fullerton	48	16,642	1,047	414	4,038	1,234	1,615	404	1,163	1,423	1,062	4,242
CUNY, John Jay C. of Criminal Justice	49	16,233	0	0	666	106	650	2,221	764	474	0	11,352
California State Polytechnic U., Humboldt	50	15,612	76	863	4,020	1	899	0	2,088	259	6,779	627
Loma Linda U.	51	15,517	0	0	14,632	0	0	866	0	0	0	19
Charles R. Drew U. of Medicine and Science	52	14,581	0	0	14,581	0	0	0	0	0	0	0
Texas Tech U., Health Sciences Center, El Paso	53	14,206	0	0	13,073	0	0	0	0	0	0	1,133
California State U., Fresno	54	12,603	234	7	4,894	1,626	2,668	11	652	0	1,970	541
Sam Houston State U.	55	12,009	8	196	3,358	413	308	469	2,785	0	253	4,219
California State U., San Bernardino	56	11,929	672	75	1,251	311	2,161	2,206	278	235	658	4,082
California State U., Los Angeles	57	9,839	241	202	1,229	0	5,776	58	391	0	1,423	519
West Texas A&M U.	58	9,438	257	305	6,054	7	258	0	0	150	1,713	694
California State U., San Marcos	59	9,238	450	123	1,456	9	981	987	121	3,730	527	854
California State U., Monterey Bay	60	8,975	1,517	2,702	3,977	175	446	8	89	0	0	61
California State Polytechnic U., Pomona	61	7,909	304	13	3,501	80	1,301	20	22	0	1,759	909
William Paterson U.	62	7,574	60	328	1,379	63	124	479	1,506	0	0	3,635
Texas Woman's U.	63	6,029	3	0	3,015	125	585	618	312	0	0	1,371
CUNY, Graduate Center	64	5,509	6	3	6	88	0	249	1,067	462	0	3,628
Kean U.	65	5,499	850	53	1,234	80	1,576	49	270	14	32	1,341
U. Central del Caribe	66	5,053	0	0	5,053	0	0	0	0	0	0	0
California State U., Bakersfield	67	4,815	0	69	75	1,457	322	72	261	0	440	2,119

TABLE 35

Higher education R&D expenditures at high-Hispanic-enrollment institutions, ranked by all R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields											
CUNY, Lehman C.	68	4,656	9	44	371	214	2,650	16	380	253	0	719											
Texas A&M International U.	69	4,486	1	53	531	101	275	17	743	853	127	1,785											
California State U., Dominguez Hills	70	4,230	413	15	335	72	1,464	435	197	0	0	1,299											
California State U., Chico	71	4,177	0	624	1,445	42	166	0	102	0	1,192	606											
Sonoma State U.	72	3,774	5	1,938	748	511	62	73	72	30	17	318											
U. Texas of the Permian Basin	73	3,577	18	77	887	1	30	70	494	0	797	1,203											
CUNY, C. Staten Island	74	3,545	133	25	1,070	173	1,097	631	9	60	0	347											
St. Edward's U.	75	3,393	270	0	734	209	571	100	30	0	0	1,479											
Azusa Pacific U.	76	3,389	29	0	691	30	176	868	87	0	10	1,498											
California State U., Channel Islands	77	3,377	69	0	1,401	568	406	8	140	696	4	85											
CUNY, Baruch C.	78	3,156	1	102	933	533	338	231	84	0	0	934											
Colorado State U., Pueblo	79	3,117	326	0	1,214	0	0	0	27	82	0	1,468											
Sul Ross State U.	80	2,526	i	92	i	168	i	1,303	i	40	i	219	i	51	i	132	i	0	i	0	i	521	i
La Sierra U.	81	2,246	0	0	7	0	1	73	0	0	0	2,165											
Northeastern Illinois U.	82	2,224	104	54	1,447	43	0	0	8	0	7	561											
U. of the Incarnate Word	83	2,064	0	0	972	0	478	0	0	0	339	275											
California State U., Stanislaus	84	1,966	215	2	1,094	218	117	114	123	0	0	83											
CUNY, New York City C. of Technology	85	1,955	195	0	304	239	727	0	0	9	50	431											
CUNY, York C.	86	1,912	0	953	429	109	172	140	0	2	0	107											
U. Houston-Clear Lake	87	1,800	21	0	1,322	0	123	146	79	0	21	88											
Manhattan C.	88	1,641	0	0	37	242	140	0	0	0	899	323											
U. Houston-Downtown	89	1,485	135	14	135	2	88	37	66	0	71	937											
U. Puerto Rico, Humacao	90	1,448	0	92	1	0	1,302	53	0	0	0	0											
U. Ana G. Mendez, Gurabo	91	1,419	0	i	0	i	274	i	0	i	33	i	0	i	0	i	1	i	996	i	115	i	
U. Puerto Rico, Cayey	92	1,390	0	0	30	0	61	55	4	1,224	0	16											
New Mexico Highlands U.	93	1,331	i	186	i	187	i	207	i	184	i	187	i	0	i	186	i	0	i	0	i	194	i
Marymount U.	94	1,298	350	0	394	0	2	46	200	0	3	303											
Texas A&M U.-San Antonio	95	1,242	239	10	348	0	0	3	36	429	104	73											
Nevada State C.	96	1,191	0	82	1,109	0	0	0	0	0	0	0											
California Lutheran U.	97	627	0	3	171	0	42	0	178	233	0	0											

i = imputed.

HHE = high Hispanic enrollment; nec = not elsewhere classified; S&E = science and engineering.

Note(s):

HHE institutions are those whose full-time equivalent (FTE) undergraduate student enrollment is at least 25% Hispanic, according to fall 2021 data in the Integrated Postsecondary Education Data System, directed by the National Center for Education Statistics. FTE enrollment is calculated as full-time undergraduate student enrollment plus one-third of part-time undergraduate student enrollment. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 36

Higher education R&D expenditures at all institutions, ranked by all non-medical school R&D expenditures: FY 2022

(Dollars in thousands)

Institution	Rank	All non-medical school R&D expenditures	All medical school R&D expenditures	All R&D expenditures
All institutions	-	61,736,180	35,944,348	97,680,528
Johns Hopkins U. ^a	1	2,576,453	843,859	3,420,312
Georgia Institute of Technology	2	1,231,485	0	1,231,485
U. Texas M. D. Anderson Cancer Center	3	1,182,536	0	1,182,536
Texas A&M U., College Station and Health Science Center	4	1,101,461	51,205	1,152,666
U. Michigan, Ann Arbor	5	1,035,272	735,436	1,770,708
U. Wisconsin-Madison	6	992,684	530,829	1,523,513
Massachusetts Institute of Technology	7	989,166	0	989,166
U. California, Berkeley	8	981,035	0	981,035
Harvard U.	9	889,932	418,526	1,308,458
Pennsylvania State U., University Park and Hershey Medical Center	10	873,565	146,375	1,019,940
U. California, San Diego	11	834,512	698,845	1,533,357
U. Minnesota, Twin Cities	12	821,611	380,473	1,202,084
U. Texas, Austin	13	800,344	45,552	845,896
Arizona State U.	14	797,224	0	797,224
U. Illinois, Urbana-Champaign	15	765,515	394	765,909
Purdue U., West Lafayette	16	754,627	0	754,627
U. Maryland ^b	17	733,875	494,675	1,228,550
Cornell U.	18	719,945	580,412	1,300,357
U. Washington, Seattle	19	715,873	843,835	1,559,708
Ohio State U.	20	692,667	670,721	1,363,388
Michigan State U.	21	660,710	98,519	759,229
U. California, Davis	22	647,841	235,966	883,807
Columbia U. in the City of New York	23	636,328	594,596	1,230,924
U. Colorado Boulder	24	611,380	0	611,380
U. North Carolina, Chapel Hill	25	597,439	763,589	1,361,028
Virginia Polytechnic Institute and State U.	26	591,861	0	591,861
U. Florida	27	588,063	497,771	1,085,834
North Carolina State U.	28	583,203	0	583,203
U. Pennsylvania	29	582,333	1,208,978	1,791,311
U. Arizona	30	557,299	267,041	824,340
U. California, Los Angeles	31	546,606	989,591	1,536,197
U. Georgia	32	545,631	0	545,631
U. Southern California	33	535,766	504,139	1,039,905
Boston U.	34	515,070	210,332	725,402
Scripps Research Institute	35	492,639	0	492,639
Vanderbilt U. and Vanderbilt U. Medical Center	36	482,229	603,994	1,086,223
California Institute of Technology	37	478,142	0	478,142
Princeton U.	38	461,185	0	461,185
Colorado State U., Fort Collins	39	456,911	0	456,911
Carnegie Mellon U.	40	449,707	0	449,707
New York U.	41	445,010	831,028	1,276,038
Stanford U.	42	419,783	964,772	1,384,555
SUNY, Polytechnic Institute	43	413,763	0	413,763
Iowa State U.	44	393,184	0	393,184
Rutgers, State U. New Jersey, New Brunswick	45	368,718	343,513	712,231
U. Utah	46	368,213	301,906	670,119
U. Delaware	47	368,107	0	368,107

TABLE 36

Higher education R&D expenditures at all institutions, ranked by all non-medical school R&D expenditures: FY 2022

(Dollars in thousands)

Institution	Rank	All non-medical school R&D expenditures	All medical school R&D expenditures	All R&D expenditures
Rockefeller U.	48	360,877	0	360,877
U. California, Irvine	49	355,839	179,108	534,947
Washington State U.	50	354,892	13,504	368,396
U. Pittsburgh, Pittsburgh	51	351,191	900,807	1,251,998
U. Missouri, Columbia	52	350,727	81,583	432,310
Emory U.	53	350,583	607,698	958,281
Utah State U.	54	344,851	0	344,851
Louisiana State U., Baton Rouge	55	344,556	0	344,556
U. Nebraska, Lincoln	56	340,260	0	340,260
U. Virginia, Charlottesville	57	325,141	337,517	662,658
U. Tennessee, Knoxville	58	324,435	0	324,435
Florida State U.	59	324,215	31,771	355,986
Auburn U., Auburn	60	304,439	0	304,439
Mississippi State U.	61	303,418	0	303,418
Oregon State U.	62	297,934	0	297,934
U. Kentucky	63	286,985	189,532	476,517
U. Notre Dame	64	280,604	0	280,604
U. Oklahoma, Norman and Health Science Center	65	280,548	128,108	408,656
U. California, Santa Barbara	66	278,897	0	278,897
Florida International U.	67	268,734	12,931	281,665
Northwestern U.	68	264,587	736,108	1,000,695
Indiana U., Bloomington	69	263,849	487,460	751,309
Clemson U.	70	263,158	0	263,158
Wichita State U.	71	261,519	0	261,519
U. Iowa	72	259,158	335,057	594,215
Duke U.	73	257,692	1,132,846	1,390,538
Woods Hole Oceanographic Institution	74	255,017	0	255,017
U. South Florida ^C	75	253,283	151,883	405,166
U. Hawaii, Manoa	76	249,777	27,546	277,323
U. Kansas	77	246,247	159,020	405,267
U. Massachusetts, Amherst	78	245,158	0	245,158
U. Connecticut	79	242,333	125,224	367,557
U. Houston	80	239,331	795	240,126
U. Illinois, Chicago	81	236,592	203,981	440,573
SUNY, U. Buffalo	82	236,011	203,698	439,709
U. New Mexico	83	235,677	95,487	331,164
Northeastern U.	84	231,607	0	231,607
George Mason U.	85	230,068	0	230,068
U. California, San Francisco	86	227,586	1,578,364	1,805,950
Texas Tech U.	87	226,729	0	226,729
Rice U.	88	216,202	0	216,202
Georgia State U.	89	215,908	0	215,908
Kansas State U.	90	212,974	0	212,974
U. Central Florida	91	212,494	8,994	221,488
U. Dayton	92	211,494	0	211,494
Virginia Commonwealth U.	93	209,897	196,001	405,898
U. Chicago	94	206,795	385,010	591,805
U. South Carolina, Columbia	95	206,536	22,626	229,162

TABLE 36

Higher education R&D expenditures at all institutions, ranked by all non-medical school R&D expenditures: FY 2022

(Dollars in thousands)

Institution	Rank	All non-medical school R&D expenditures	All medical school R&D expenditures	All R&D expenditures
U. New Hampshire	96	206,392	0	206,392
U. Louisiana, Lafayette	97	205,201	0	205,201
George Washington U.	98	204,128	71,355	275,483
U. Alaska, Fairbanks	99	202,516	0	202,516
Montana State U., Bozeman	100	200,820	0	200,820
Oklahoma State U., Stillwater	101	195,041	0	195,041
Yale U.	102	191,998	999,203	1,191,201
Dartmouth C. and Dartmouth Hitchcock Medical Center	103	191,635	152,491	344,126
Oregon Health and Science U.	104	191,624	287,602	479,226
Temple U.	105	187,806	113,589	301,395
U. Arkansas, Fayetteville	106	184,080	0	184,080
U. Alabama, Birmingham	107	182,054	531,426	713,480
U. California, Riverside	108	181,304	17,831	199,135
Tufts U.	109	180,163	51,061	231,224
U. Rochester	110	176,830	273,975	450,805
U. California, Santa Cruz	111	176,760	0	176,760
North Dakota State U.	112	174,904	0	174,904
SUNY, Stony Brook U.	113	173,643	139,055	312,698
U. Maine	114	171,931	0	171,931
U. Alabama, Huntsville	115	169,532	0	169,532
New Jersey Institute of Technology	116	167,135	0	167,135
U. Alabama, Tuscaloosa	117	163,204	0	163,204
U. Oregon	118	160,500	0	160,500
Syracuse U.	119	157,407	0	157,407
West Virginia U.	120	155,825	58,256	214,081
Brown U.	121	153,818	156,962	310,780
U. Texas Health Science Center, Houston	122	149,276	193,357	342,633
U. Colorado Anschutz Medical Campus ^d	123	148,067	463,291	611,358
U. Texas, San Antonio	124	147,629	0	147,629
U. Nevada, Reno	125	145,427	36,355	181,782
U. Wyoming	126	139,764	0	139,764
U. Texas, Arlington	127	133,770	0	133,770
Tulane U.	128	131,740	90,865	222,605
U. Texas, Dallas	129	130,914	0	130,914
SUNY, Binghamton U.	130	130,882	0	130,882
U. Texas, El Paso	131	130,501	0	130,501
Georgetown U.	132	130,263	182,957	313,220
SUNY, U. Albany	133	129,796	0	129,796
U. Rhode Island	134	129,102	0	129,102
U. Montana, Missoula	135	125,603	0	125,603
San Diego State U.	136	123,856	0	123,856
U. Cincinnati	137	123,425	491,645	615,070
Rensselaer Polytechnic Institute	138	121,809	0	121,809
New Mexico State U.	139	121,472	0	121,472
Washington U., Saint Louis	140	120,154	926,944	1,047,098
Cold Spring Harbor Laboratory	141	118,034	0	118,034
U. North Dakota	142	117,121	30,596	147,717
U. Idaho	143	115,603	0	115,603

TABLE 36

Higher education R&D expenditures at all institutions, ranked by all non-medical school R&D expenditures: FY 2022

(Dollars in thousands)

Institution	Rank	All non-medical school R&D expenditures	All medical school R&D expenditures	All R&D expenditures
Drexel U.	144	111,290	40,613	151,903
U. Massachusetts, Lowell	145	111,144	0	111,144
U. Maryland, Baltimore County	146	110,319	0	110,319
Texas State U.	147	110,102	0	110,102
U. Miami	148	105,520	333,780	439,300
U. Vermont	149	104,401	111,906	216,307
Brandeis U.	150	102,378	0	102,378
Colorado School of Mines	151	98,404	0	98,404
U. North Texas, Denton	152	93,538	0	93,538
Michigan Technological U.	153	91,084	0	91,084
U. Mississippi	154	90,057	62,846	152,903
New Mexico Institute of Mining and Technology	155	89,900	0	89,900
U. Nevada, Las Vegas	156	89,011	5,956	94,967
Uniformed Services U. of the Health Sciences	157	87,295	189,945	277,240
U. Nebraska, Medical Center	158	84,173	121,080	205,253
Cleveland State U.	159	81,225	0	81,225
Van Andel Research Institute	160	78,626	0	78,626
William & Mary	161	75,953	0	75,953
Wayne State U.	162	75,743	166,504	242,247
U. Louisville	163	74,975	154,607	229,582
Case Western Reserve U.	164	72,720	394,669	467,389
U. Southern Mississippi	165	72,477	0	72,477
San Jose State U.	166	71,695	0	71,695
U. Memphis	167	71,271	0	71,271
Boston C.	168	68,958	0	68,958
American U.	169	67,616	0	67,616
Northern Arizona U.	170	66,729	0	66,729
Baylor U.	171	66,014	0	66,014
U. Massachusetts, Boston	172	65,215	0	65,215
Old Dominion U.	173	64,877	0	64,877
Indiana U.-Purdue U., Indianapolis	174	64,162	0	64,162
Naval Postgraduate School	175	64,055	0	64,055
Rochester Institute of Technology	176	62,383	0	62,383
CUNY, City C.	177	61,090	4,479	65,569
South Dakota State U.	178	59,590	0	59,590
Southern Methodist U.	179	57,544	0	57,544
Worcester Polytechnic Institute	180	56,904	0	56,904
U. Wisconsin-Milwaukee	181	56,822	0	56,822
U. California, Office of the President	182	54,640	0	54,640
Florida Atlantic U.	183	54,013	7,735	61,748
U. Maryland Center for Environmental Science	184	53,718	0	53,718
Stevens Institute of Technology	185	53,563	0	53,563
Missouri U. of Science and Technology	186	53,357	0	53,357
Kent State U.	187	52,175	0	52,175
U. Texas Health Science Center, San Antonio	188	51,883	186,627	238,510
Lehigh U.	189	51,769	0	51,769
Medical U. South Carolina	190	51,501	233,052	284,553
Florida A&M U.	191	50,636	0	50,636
Saint Louis U.	192	49,414	33,326	82,740

TABLE 36

Higher education R&D expenditures at all institutions, ranked by all non-medical school R&D expenditures: FY 2022

(Dollars in thousands)

Institution	Rank	All non-medical school R&D expenditures	All medical school R&D expenditures	All R&D expenditures
U. California, Merced	193	48,147	0	48,147
North Carolina A&T State U.	194	47,908	0	47,908
Boise State U.	195	47,617	0	47,617
Howard U.	196	46,495	21,099	67,594
Brigham Young U., Provo	197	45,610	0	45,610
U. Denver	198	45,561	0	45,561
Mercer U.	199	44,729	5,493	50,222
Air Force Institute of Technology	200	44,391	0	44,391
U. North Carolina, Charlotte	201	43,126	0	43,126
U. Texas Rio Grande Valley	202	42,991	21,410	64,401
Portland State U.	203	41,483	0	41,483
Ohio U.	204	41,473	10,992	52,465
U. North Carolina, Greensboro	205	41,303	0	41,303
Marquette U.	206	40,638	0	40,638
U. West Florida	207	38,870	0	38,870
U. Toledo	208	38,244	26,410	64,654
Catholic U. of America	209	38,191	0	38,191
U. Missouri, Kansas City	210	37,776	14,881	52,657
Oakland U.	211	36,906	1,155	38,061
San Francisco State U.	212	36,617	0	36,617
U.S. Air Force Academy	213	36,506	0	36,506
Georgia Southern U.	214	36,362	0	36,362
Texas A&M U.-Corpus Christi	215	36,014	0	36,014
CUNY, Hunter C.	216	35,348	0	35,348
Chapman U.	217	34,212	0	34,212
U. Texas Health Science Center, Tyler	218	33,872	0	33,872
East Carolina U.	219	33,405	22,288	55,693
California Polytechnic State U., San Luis Obispo	220	33,155	0	33,155
U. Massachusetts, Dartmouth	221	33,136	0	33,136
SUNY, C. of Environmental Science and Forestry	222	32,904	0	32,904
U. Puerto Rico, Medical Sciences Campus	223	32,769	14,809	47,578
Montclair State U.	224	32,202	0	32,202
Teachers C., Columbia U.	225	30,978	0	30,978
Illinois Institute of Technology	226	29,791	0	29,791
Southern Illinois U., Carbondale	227	29,690	17,277	46,967
Morgan State U.	228	29,482	0	29,482
Delaware State U.	229	29,016	0	29,016
Miami U.	230	28,799	0	28,799
Embry-Riddle Aeronautical U.	231	28,650	0	28,650
Desert Research Institute	232	28,478	0	28,478
Rutgers, State U. New Jersey, Newark	233	28,345	0	28,345
U. Puerto Rico, Rio Piedras	234	28,083	0	28,083
Northern Illinois U.	235	27,068	0	27,068
Louisiana Tech U.	236	26,591	0	26,591
Villanova U.	237	25,955	0	25,955
Illinois State U.	238	25,510	0	25,510
U. Nebraska, central administration	239	25,402	0	25,402
U. Nebraska, Omaha	240	24,259	0	24,259
California State U., Sacramento	241	23,795	0	23,795

TABLE 36

Higher education R&D expenditures at all institutions, ranked by all non-medical school R&D expenditures: FY 2022

(Dollars in thousands)

Institution	Rank	All non-medical school R&D expenditures	All medical school R&D expenditures	All R&D expenditures
U. South Alabama	242	23,754	19,737	43,491
Texas A&M U.-Kingsville	243	23,451	0	23,451
U. Minnesota, Duluth	244	23,362	0	23,362
Western Michigan U. and Homer Stryker M.D. School of Medicine	245	23,066	4,702	27,768
Middle Tennessee State U.	246	22,631	0	22,631
Tuskegee U.	247	21,941	0	21,941
U. New Orleans	248	21,911	0	21,911
Kennesaw State U.	249	21,705	0	21,705
Clarkson U.	250	21,703	0	21,703
CUNY, Queens C.	251	21,434	0	21,434
U. Alaska, Anchorage	252	21,024	0	21,024
U.S. Military Academy	253	20,841	0	20,841
U. Guam	254	20,481	0	20,481
Fordham U.	255	20,432	0	20,432
Prairie View A&M U.	256	20,429	0	20,429
U. of the Virgin Islands	257	20,259	0	20,259
South Dakota School of Mines and Technology	258	20,061	0	20,061
Tarleton State U.	259	20,056	0	20,056
U. North Carolina, Wilmington	260	20,053	0	20,053
U. Akron	261	19,943	0	19,943
Wake Forest U.	262	19,773	249,336	269,109
California State U., Northridge	263	19,638	0	19,638
Bowling Green State U.	264	19,342	0	19,342
New School	265	19,218	0	19,218
Southern Illinois U., Edwardsville	266	19,152	0	19,152
California State U., East Bay	267	19,035	0	19,035
Rowan U.	268	18,993	10,956	29,949
U. North Florida	269	18,394	0	18,394
Texas Christian U.	270	18,326	27	18,353
U. Puerto Rico, Mayaguez	271	18,274	0	18,274
U. Colorado Denver ^d	272	18,080	0	18,080
Tennessee State U.	273	18,012	0	18,012
Wright State U.	274	17,880	9,560	27,440
California State U., Long Beach	275	17,807	0	17,807
Florida Institute of Technology	276	17,706	0	17,706
Jackson State U.	277	17,481	0	17,481
Texas Tech U., Health Sciences Center	278	17,464	29,110	46,574
U. Tulsa	279	17,416	0	17,416
Long Island U.	280	17,183	0	17,183
James Madison U.	281	17,021	0	17,021
Nova Southeastern U.	282	16,986	14,203	31,189
Alcorn State U.	283	16,726	0	16,726
California State U., Fullerton	284	16,642	0	16,642
Idaho State U.	285	16,615	0	16,615
North Carolina Central U.	286	16,600	0	16,600
CUNY, Advanced Science Research Center	287	16,507	0	16,507
CUNY, Graduate School of Public Health and Health Policy	288	16,423	0	16,423
Tennessee Technological U.	289	16,398	0	16,398

TABLE 36

Higher education R&D expenditures at all institutions, ranked by all non-medical school R&D expenditures: FY 2022

(Dollars in thousands)

Institution	Rank	All non-medical school R&D expenditures	All medical school R&D expenditures	All R&D expenditures
CUNY, John Jay C. of Criminal Justice	290	16,233	0	16,233
California State Polytechnic U., Humboldt	291	15,612	0	15,612
U. South Dakota	292	15,580	14,742	30,322
Western Washington U.	293	15,081	0	15,081
East Tennessee State U.	294	14,813	8,607	23,420
Montana Technological U.	295	14,188	0	14,188
Xavier U. Louisiana	296	14,156	0	14,156
Duquesne U.	297	13,944	0	13,944
U. Missouri, Saint Louis	298	13,247	0	13,247
U. Tennessee, Chattanooga	299	12,808	0	12,808
Loyola Marymount U.	300	12,773	0	12,773
Charles R. Drew U. of Medicine and Science	301	12,709	1,872	14,581
U. Hawaii, system office	302	12,646	0	12,646
California State U., Fresno	303	12,603	0	12,603
Virginia State U.	304	12,326	0	12,326
Texas Southern U.	305	12,120	0	12,120
Central Michigan U.	306	12,054	13,051	25,105
California State U., San Bernardino	307	11,929	0	11,929
Sam Houston State U.	308	11,891	118	12,009
Augusta U.	309	11,579	115,734	127,313
Creighton U.	310	11,516 i	16,093 i	27,609
Lincoln U., Jefferson City	311	11,500	0	11,500
Hampton U.	312	11,462	0	11,462
Marshall U.	313	11,445	14,247	25,692
Missouri State U.	314	11,162	0	11,162
Rhode Island C.	315	11,127	0	11,127
U. of the District of Columbia	316	10,779	0	10,779
U.S. Naval Academy	317	10,664	0	10,664
SUNY, Upstate Medical U.	318	10,660	39,926	50,586
Salisbury U.	319	10,614	0	10,614
Loyola U., Chicago	320	10,469	35,700	46,169
Winston-Salem State U.	321	10,436	0	10,436
Central State U.	322	10,274	0	10,274
U. San Diego	323	10,143	0	10,143
Wesleyan U.	324	10,101	0	10,101
Fort Valley State U.	325	9,969	0	9,969
Ball State U.	326	9,932	0	9,932
Florida Gulf Coast U.	327	9,896	0	9,896
California State U., Los Angeles	328	9,839	0	9,839
U. North Texas, Health Science Center	329	9,655 i	784 i	10,439
Alabama A&M U.	330	9,611	0	9,611
West Texas A&M U.	331	9,438	0	9,438
Kentucky State U.	332	9,284	0	9,284
U. Maryland, Eastern Shore	333	9,274	0	9,274
California State U., San Marcos	334	9,238	0	9,238
Bryn Mawr C.	335	9,123	0	9,123
U. Texas Medical Branch	336	9,089	195,429	204,518
Saint Joseph's U.	337	9,041	0	9,041
California State U., Monterey Bay	338	8,975	0	8,975

TABLE 36

Higher education R&D expenditures at all institutions, ranked by all non-medical school R&D expenditures: FY 2022

(Dollars in thousands)

Institution	Rank	All non-medical school R&D expenditures	All medical school R&D expenditures	All R&D expenditures
Clark U.	339	8,813	0	8,813
Clark Atlanta U.	340	8,791	0	8,791
Towson U.	341	8,788	0	8,788
Claremont Graduate U.	342	8,382	0	8,382
DePaul U.	343	8,362	0	8,362
Arkansas State U., Jonesboro	344	8,214	0	8,214
U. Washington, Bothell	345	8,197	0	8,197
U. Michigan, Dearborn	346	8,180	0	8,180
Eastern Michigan U.	347	8,025	0	8,025
U. Hawaii, Hilo	348	8,001	0	8,001
California State Polytechnic U., Pomona	349	7,909	0	7,909
U. Colorado Colorado Springs	350	7,761	0	7,761
Western Kentucky U.	351	7,720	0	7,720
Western U. of Health Sciences	352	7,652	1,377	9,029
William Paterson U.	353	7,574	0	7,574
U. Arkansas, Little Rock	354	7,530	0	7,530
U. Arkansas, Pine Bluff	355	7,506	0	7,506
Yeshiva U.	356	7,274	0	7,274
Appalachian State U.	357	7,189	0	7,189
Amherst C.	358	7,177	0	7,177
U. Texas Southwestern Medical Center	359	7,140	711,862	719,002
U. Central Oklahoma	360	7,070	0	7,070
Southern U. and A&M C., Agricultural Research and Extension Center	361	7,048	0	7,048
Louisiana State U., Health Sciences Center, New Orleans	362	6,951	47,044	53,995
West Virginia State U.	363	6,703	0	6,703
Grand Valley State U.	364	6,695	0	6,695
U. Baltimore	365	6,646	0	6,646
Hofstra U.	366	6,509	430	6,939
Langston U.	367	6,481	0	6,481
Rutgers, State U. New Jersey, Camden	368	6,480	0	6,480
C. Charleston	369	6,421	0	6,421
Purdue U., Northwest	370	6,387	0	6,387
Pennsylvania State U., Behrend	371	6,384	0	6,384
Gallaudet U.	372	6,360	0	6,360
Hope C.	373	6,355	0	6,355
Wellesley C.	374	6,326	0	6,326
Indiana U. Pennsylvania	375	6,313	0	6,313
Abilene Christian U.	376	6,310	0	6,310
Roseman U. of Health Sciences	377	6,296	0	6,296
Southern Connecticut State U.	378	6,286	0	6,286
CUNY, Brooklyn C.	379	6,220	0	6,220
High Tech High Graduate School of Ed.	380	6,203	0	6,203
Pacific U.	381	6,128	0	6,128
Texas Woman's U.	382	6,029	0	6,029
U. North Carolina, Asheville	383	5,973	0	5,973
Reed C.	384	5,922	0	5,922
West Chester U. Pennsylvania	385	5,903	0	5,903
Claremont McKenna C.	386	5,893	0	5,893
Grinnell C.	387	5,867	0	5,867

TABLE 36

Higher education R&D expenditures at all institutions, ranked by all non-medical school R&D expenditures: FY 2022

(Dollars in thousands)

Institution	Rank	All non-medical school R&D expenditures	All medical school R&D expenditures	All R&D expenditures
Smith C.	388	5,831	0	5,831
MGH Institute of Health Professions	389	5,805	0	5,805
Seton Hall U.	390	5,741	0	5,741
U. New England	391	5,684	980	6,664
Morehouse C.	392	5,664	0	5,664
Williams C.	393	5,657	0	5,657
Northwest Indian C.	394	5,632	0	5,632
U. Oklahoma, Tulsa	395	5,594	2,351	7,945
Naval War C.	396	5,529	0	5,529
CUNY, Graduate Center	397	5,509	0	5,509
Kean U.	398	5,499	0	5,499
U. Southern Maine	399	5,498	0	5,498
U.S. Army War C.	400	5,496	0	5,496
U. Washington, Tacoma	401	5,484	0	5,484
Lamar U.	402	5,304	0	5,304
Bucknell U.	403	5,259	0	5,259
U. Detroit Mercy	404	5,186	0	5,186
Midwestern U.	405	5,095	5,974	11,069
Oregon Institute of Technology	406	5,086	0	5,086
Barnard C.	407	4,988	0	4,988
Texas A&M U.-Commerce	408	4,955	0	4,955
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	409	4,954	0	4,954
Thomas Jefferson U.	410	4,925	316,719	321,644
California State U., Bakersfield	411	4,815	0	4,815
Dakota State U.	412	4,684	0	4,684
CUNY, Lehman C.	413	4,656	0	4,656
U. Wisconsin-Superior	414	4,615	0	4,615
U. New Haven	415	4,548	0	4,548
SUNY, C. of Optometry	416	4,497	0	4,497
Haverford C.	417	4,487	0	4,487
Texas A&M International U.	418	4,486	0	4,486
Toyota Technological Institute, Chicago	419	4,470	0	4,470
Franklin and Marshall C.	420	4,440	0	4,440
Citadel Military C. South Carolina	421	4,374	0	4,374
Carleton C.	422	4,358	0	4,358
Southern U. and A&M C., Baton Rouge	423	4,344	0	4,344
Colgate U.	424	4,343	0	4,343
Western Illinois U.	425	4,311	0	4,311
Loma Linda U.	426	4,301	11,216	15,517
U. of Health Sciences and Pharmacy in St. Louis	427	4,280	0	4,280
South Carolina State U.	428	4,270	0	4,270
California State U., Dominguez Hills	429	4,230	0	4,230
Santa Clara U.	430	4,225	0	4,225
Swarthmore C.	430	4,225	0	4,225
California State U., Chico	432	4,177	0	4,177
Youngstown State U.	433	4,157	0	4,157
Occidental C.	434	4,139	0	4,139
U. Nebraska, Kearney	435	4,009	0	4,009

TABLE 36

Higher education R&D expenditures at all institutions, ranked by all non-medical school R&D expenditures: FY 2022

(Dollars in thousands)

Institution	Rank	All non-medical school R&D expenditures	All medical school R&D expenditures	All R&D expenditures
Fisk U.	436	4,000	0	4,000
Philadelphia C. of Osteopathic Medicine	437	3,992	2,675	6,667
National Defense U.	438	3,920	0	3,920
Northern Kentucky U.	439	3,888	0	3,888
Rush U.	440	3,835	111,039	114,874
Pepperdine U.	441	3,775	0	3,775
Sonoma State U.	442	3,774	0	3,774
Des Moines U.	443	3,772	1,535	5,307
U. Wisconsin-Stevens Point	444	3,740	0	3,740
Coastal Carolina U.	445	3,724	0	3,724
Chicago State U.	446	3,701	0	3,701
U. Central Arkansas	447	3,684	0	3,684
Trinity U.	448	3,657	0	3,657
Colorado C.	449	3,646	0	3,646
Meharry Medical C.	450	3,637	14,323	17,960
Norfolk State U.	451	3,593	0	3,593
St. John's U., New York	452	3,592	0	3,592
U. Texas of the Permian Basin	453	3,577	0	3,577
CUNY, C. Staten Island	454	3,545	0	3,545
Milwaukee School of Engineering	454	3,545	0	3,545
Pace U.	456	3,524	0	3,524
U. North Carolina, general administration	457	3,522	0	3,522
U. Northern Iowa	458	3,486	0	3,486
Alfred U.	459	3,477	0	3,477
C. New Jersey	460	3,464	0	3,464
Winthrop U.	461	3,424	0	3,424
St. Edward's U.	462	3,393	0	3,393
Azusa Pacific U.	463	3,389	0	3,389
California State U., Channel Islands	464	3,377	0	3,377
Murray State U.	465	3,371	0	3,371
Bowie State U.	466	3,351	0	3,351
Harvey Mudd C.	467	3,350	0	3,350
U. Northern Colorado	468	3,308	0	3,308
Hawaii Pacific U.	469	3,302	0	3,302
Biola U.	470	3,260	0	3,260
U. Texas, Tyler	471	3,246	0	3,246
Hobart and William Smith Colleges	472	3,228	0	3,228
Fayetteville State U.	473	3,206	0	3,206
Texas Tech U., Health Sciences Center, El Paso	474	3,186	11,020	14,206
Stephen F. Austin State U.	475	3,184	0	3,184
Alabama State U.	476	3,178	0	3,178
Central Washington U.	477	3,176	0	3,176
Calvin U.	478	3,169	0	3,169
CUNY, Baruch C.	479	3,156	0	3,156
Austin Peay State U.	480	3,149	0	3,149
U. Louisiana, Monroe	481	3,128	0	3,128
Colorado State U., Pueblo	482	3,117	0	3,117
Lawrence Technological U.	483	3,050	0	3,050
U. Wisconsin-La Crosse	484	2,942	0	2,942

TABLE 36

Higher education R&D expenditures at all institutions, ranked by all non-medical school R&D expenditures: FY 2022

(Dollars in thousands)

Institution	Rank	All non-medical school R&D expenditures	All medical school R&D expenditures	All R&D expenditures
Pennsylvania State U., Harrisburg	485	2,927	0	2,927
CUNY, system office	486	2,900	0	2,900
Pittsburg State U.	487	2,884	0	2,884
U. Illinois, Springfield	488	2,881	0	2,881
Morehead State U.	489	2,880	0	2,880
Saginaw Valley State U.	490	2,862	0	2,862
Framingham State U.	491	2,830	0	2,830
Davidson C.	492	2,788	0	2,788
Western Carolina U.	493	2,783	0	2,783
Fort Lewis C.	494	2,765	0	2,765
Christopher Newport U.	495	2,762	0	2,762
U. Wisconsin-Green Bay	496	2,713	0	2,713
Spelman C.	497	2,686	0	2,686
Johnson C. Smith U.	498	2,685	0	2,685
U. Richmond	499	2,670	0	2,670
U. San Francisco	500	2,657	0	2,657
Furman U.	501	2,650	0	2,650
Bowdoin C.	502	2,648	0	2,648
U. Virginia's C. Wise	503	2,628	0	2,628
Middlebury C.	504	2,603	0	2,603
U. South Carolina, Aiken	505	2,595	0	2,595
Pomona C.	506	2,589	0	2,589
Vassar C.	507	2,580	0	2,580
Lewis and Clark C.	508	2,566	0	2,566
Franklin W. Olin C. of Engineering	509	2,554	0	2,554
Colby C.	510	2,530	0	2,530
Sul Ross State U.	511	2,526	0	2,526
Troy U.	512	2,517	0	2,517
U. of St. Thomas (MN)	513	2,476	0	2,476
Bates C.	514	2,468	0	2,468
Eastern Washington U.	515	2,437	0	2,437
Southeastern Louisiana U.	516	2,407	0	2,407
Tougaloo C.	517	2,336	0	2,336
Pratt Institute	518	2,325	0	2,325
Grambling State U.	519	2,306	0	2,306
Albany C. of Pharmacy and Health Sciences	520	2,276	0	2,276
Dillard U.	521	2,270	0	2,270
New York Institute of Technology	522	2,254	3,301	5,555
La Sierra U.	523	2,246	0	2,246
St. Cloud State U.	524	2,226	0	2,226
Northeastern Illinois U.	525	2,224	0	2,224
Minnesota State U., Mankato	526	2,206	0	2,206
Willamette U.	527	2,183	0	2,183
SUNY, Buffalo State	528	2,172	0	2,172
Roger Williams U.	529	2,156	0	2,156
Purdue U., Fort Wayne	530	2,134	0	2,134
Mount Holyoke C.	531	2,112	0	2,112
Dine C.	532	2,091	0	2,091
SUNY, Geneseo	532	2,091	0	2,091

TABLE 36

Higher education R&D expenditures at all institutions, ranked by all non-medical school R&D expenditures: FY 2022

(Dollars in thousands)

Institution	Rank	All non-medical school R&D expenditures	All medical school R&D expenditures	All R&D expenditures
Erikson Institute	534	2,068	0	2,068
Lafayette C.	535	2,059	0	2,059
Lake Superior State U.	536	2,056	0	2,056
Western New England U.	537	2,052	0	2,052
Palmer C. of Chiropractic, Davenport	538	2,050	0	2,050
U. Wisconsin-Oshkosh	539	1,990	0	1,990
Black Hills State U.	540	1,987	0	1,987
California State U., Stanislaus	541	1,966	0	1,966
CUNY, New York City C. of Technology	542	1,955	0	1,955
Monmouth U.	543	1,938	0	1,938
Elizabeth City State U.	544	1,934	0	1,934
CUNY, York C.	545	1,912	0	1,912
Utah Valley U.	546	1,895	0	1,895
Seattle U.	547	1,894	0	1,894
Northern Michigan U.	548	1,888	0	1,888
Savannah State U.	548	1,888	0	1,888
Hamilton C.	550	1,879	0	1,879
Connecticut C.	551	1,875	0	1,875
New England C. of Optometry	552	1,868	0	1,868
Northwestern State U. Louisiana	553	1,848	0	1,848
U. of the Pacific	554	1,835	0	1,835
Babson C.	555	1,825	0	1,825
U. Houston-Clear Lake	556	1,800	0	1,800
Elon U.	557	1,797	0	1,797
Virginia Military Institute	558	1,746	0	1,746
Eastern Connecticut State U.	559	1,734	0	1,734
Skidmore C.	559	1,734	0	1,734
U. North Georgia	559	1,734	0	1,734
Florida Polytechnic U.	562	1,725	0	1,725
C. Wooster	563	1,717	0	1,717
Butler U.	564	1,691	0	1,691
Drake U.	564	1,691	0	1,691
Macalester C.	564	1,691	0	1,691
Stockton U.	567	1,657	0	1,657
Manhattan C.	568	1,641	0	1,641
U. Wisconsin-Eau Claire	569	1,628	0	1,628
Trinity C., Hartford	570	1,620	0	1,620
Alaska Pacific U.	571	1,607	0	1,607
Rosalind Franklin U. of Medicine and Science	572	1,589	11,399	12,988
U. Alaska, Southeast	573	1,570	0	1,570
Marshall B. Ketchum U.	574	1,559	0	1,559
U. of the Incarnate Word	575	1,540	524	2,064
SUNY, C. Brockport	576	1,500	0	1,500
Northeast Ohio Medical U.	577	1,488	11,977	13,465
U. Houston-Downtown	578	1,485	0	1,485
Union C., Schenectady	579	1,479	0	1,479
U. Puerto Rico, Humacao	580	1,448	0	1,448
U. Ana G. Mendez, Gurabo	581	1,419	0	1,419
New York Medical C.	582	1,417	15,044	16,461

TABLE 36

Higher education R&D expenditures at all institutions, ranked by all non-medical school R&D expenditures: FY 2022

(Dollars in thousands)

Institution	Rank	All non-medical school R&D expenditures	All medical school R&D expenditures	All R&D expenditures
East Stroudsburg U. Pennsylvania	583	1,410	0	1,410
Suffolk U.	584	1,401	0	1,401
U. Puerto Rico, Cayey	585	1,390	0	1,390
Indiana State U.	586	1,354	0	1,354
U. Wisconsin-Platteville	587	1,349	0	1,349
New Mexico Highlands U.	588	1,331	0	1,331
Kenyon C.	589	1,330	0	1,330
Albion C.	590	1,300	0	1,300
Marymount U.	591	1,298	0	1,298
Saint John's U.	591	1,298	0	1,298
Keck Graduate Institute	593	1,282	0	1,282
Whitman C.	594	1,270	0	1,270
Northland C.	595	1,265	0	1,265
Texas A&M U.-San Antonio	596	1,242	0	1,242
U. of Mary Washington	597	1,229	0	1,229
C. of Saint Benedict	598	1,228	0	1,228
SUNY, Cobleskill	599	1,211	0	1,211
SUNY, Oswego	600	1,209	0	1,209
Nevada State C.	601	1,191	0	1,191
Heidelberg U.	602	1,184	0	1,184
Clafin U.	603	1,179	0	1,179
Bentley U.	604	1,161	0	1,161
Canisius C.	605	1,160	0	1,160
Morehouse School of Medicine	606	1,149	41,340	42,489
U. Hartford	607	1,090	0	1,090
U. Puget Sound	608	1,051	0	1,051
SUNY, C. Plattsburgh	609	1,043	0	1,043
Central Connecticut State U.	610	1,035	0	1,035
SUNY, Downstate Health Sciences U.	611	1,024	29,894	30,918
Ithaca C.	612	1,000	0	1,000
Robert Morris U.	612	1,000	0	1,000
St. Catherine U.	614	933	0	933
Kettering U.	615	816	0	816
Augustana U.	616	724	0	724
Plymouth State U.	617	669	0	669
Mercyhurst U.	618	661	0	661
Touro U., California	619	642	1,919	2,561
California Lutheran U.	620	627	0	627
California State U., Maritime Academy	621	526	0	526
Sonoran U. Health Sciences	622	520	0	520
U. Charleston	623	217	0	217
Oklahoma State U., Center for Health Sciences	624	131	8,237	8,368
Eastern Virginia Medical School	625	125	22,040	22,165
Medical C. Wisconsin	626	45	321,461	321,506
Albany Medical C.	-	0	22,297	22,297
Albert Einstein C. of Medicine	-	0	318,314	318,314
Baylor C. of Medicine	-	0	827,005	827,005
Edward Via C. of Osteopathic Medicine	-	0	7,121	7,121
Icahn School of Medicine at Mount Sinai	-	0	893,968	893,968

TABLE 36

Higher education R&D expenditures at all institutions, ranked by all non-medical school R&D expenditures: FY 2022

(Dollars in thousands)

Institution	Rank	All non-medical school R&D expenditures	All medical school R&D expenditures	All R&D expenditures
Louisiana State U., Health Sciences Center, Shreveport	-	0	29,502	29,502
U. Arkansas for Medical Sciences	-	0	205,493	205,493
U. Central del Caribe	-	0	5,053	5,053
U. Massachusetts, Medical School	-	0	358,204	358,204
U. Tennessee, Health Science Center	-	0	115,161	115,161
West Virginia School of Osteopathic Medicine	-	0	1,329	1,329

i = imputed.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$2,056,063 thousand in total R&D expenditures in FY 2022.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^d The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 37

Higher education R&D expenditures at public institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
All institutions	-	63,712,945	33,333,946	4,503,012	17,368,946	3,419,441	3,331,506	1,756,094
U. California, San Francisco	1	1,805,950	780,318	40,658	438,949	128,983	251,612	165,430
U. Michigan, Ann Arbor	2	1,770,708	970,636	1,592	612,187	106,122	71,520	8,651
U. Washington, Seattle	3	1,559,708	1,083,090	19,188	117,096	61,099	231,172	48,063
U. California, Los Angeles	4	1,536,197	848,138	89,554	287,147	87,218	187,416	36,724
U. California, San Diego	5	1,533,357	970,696	58,556	213,400	106,189	111,854	72,662
U. Wisconsin-Madison	6	1,523,513	740,854	109,946	463,759	40,450	127,756	40,748
Ohio State U.	7	1,363,388	636,902	66,409	424,790	141,894	52,073	41,320
U. North Carolina, Chapel Hill	8	1,361,028	827,158	38,681	343,102	49,664	84,942	17,481
U. Pittsburgh, Pittsburgh	9	1,251,998	814,647	10,753	281,033	36,310	63,172	46,083
Georgia Institute of Technology	10	1,231,485	940,488	117,204	62,025	82,540	25,348	3,880
U. Maryland ^a	11	1,228,550	750,447	49,950	334,100	34,844	52,546	6,663
U. Minnesota, Twin Cities	12	1,202,084	652,384	73,329	345,240	51,926	45,113	34,092
U. Texas M. D. Anderson Cancer Center	13	1,182,536	225,659	297,033	231,583	241,850	34,523	151,888
Texas A&M U., College Station and Health Science Center	14	1,152,666	505,355	218,735	315,112	35,535	47,156	30,773
U. Florida	15	1,085,834	467,739	171,655	327,074	39,233	51,825	28,308
Pennsylvania State U., University Park and Hershey Medical Center	16	1,019,940	681,159	47,345	207,630	24,121	30,128	29,557
U. California, Berkeley	17	981,035	468,542	37,894	210,324	69,062	169,790	25,423
U. California, Davis	18	883,807	468,468	71,806	211,277	50,684	42,552	39,020
U. Texas, Austin	19	845,896	536,296	31,721	151,594	76,512	45,893	3,880
U. Arizona	20	824,340	374,936	30,993	254,878	27,911	28,814	106,808
Arizona State U.	21	797,224	309,094	98,817	282,983	21,980	62,833	21,517
U. Illinois, Urbana-Champaign	22	765,909	420,953	28,024	215,146	49,272	33,693	18,821
Michigan State U.	23	759,229	381,504	42,516	291,592	10,942	17,393	15,282
Purdue U., West Lafayette	24	754,627	352,890	39,511	227,592	69,428	25,281	39,925
Indiana U., Bloomington	25	751,309	360,300	3,951	272,216	34,091	67,315	13,436
U. Texas Southwestern Medical Center	26	719,002	298,154	85,808	166,635	47,282	54,435	66,688
U. Alabama, Birmingham	27	713,480	421,223	8,816	172,809	73,595	35,196	1,841
Rutgers, State U. New Jersey, New Brunswick	28	712,231	351,660	90,882	149,889	44,250	71,821	3,729
U. Utah	29	670,119	367,040	3,347	221,473	43,073	31,556	3,630
U. Virginia, Charlottesville	30	662,658	332,993	9,520	187,912	32,511	32,320	67,402
U. Cincinnati	31	615,070	350,392	6,044	161,967	45,002	38,204	13,461
U. Colorado Boulder	32	611,380	507,892	5,422	46,096	11,316	17,307	23,347
U. Colorado Anschutz Medical Campus ^b	33	611,358	429,949	24,575	47,955	52,346	43,531	13,002
U. Iowa	34	594,215	314,346	5,957	220,605	32,201	21,085	21

TABLE 37

Higher education R&D expenditures at public institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Virginia Polytechnic Institute and State U.	35	591,861	240,305	75,010	225,690	37,005	6,972	6,879
North Carolina State U.	36	583,203	250,582	130,707	145,171	52,960	3,451	332
U. Georgia	37	545,631	220,343	55,206	237,894	12,775	12,380	7,033
U. California, Irvine	38	534,947	291,393	15,008	115,832	42,941	33,110	36,663
Oregon Health and Science U.	39	479,226	346,724	1,322	45,950	43,965	40,925	340
U. Kentucky	40	476,517	253,852	32,619	137,897	10,715	13,292	28,142
Colorado State U., Fort Collins	41	456,911	316,727	30,749	65,700	11,888	22,618	9,229
U. Illinois, Chicago	42	440,573	251,328	6,914	131,574	11,917	30,691	8,149
SUNY, U. Buffalo	43	439,709	218,231	33,635	122,816	29,723	26,045	9,259
U. Missouri, Columbia	44	432,310	182,432	35,573	181,090	17,608	10,296	5,311
SUNY, Polytechnic Institute	45	413,763	32,396	97,519	110,878	169,101	223	3,646
U. Oklahoma, Norman and Health Science Center	46	408,656	210,994	26,614	140,592	15,450	11,616	3,390
Virginia Commonwealth U.	47	405,898	166,726	34,539	173,811	16,124	14,537	161
U. Kansas	48	405,267	200,117	29,376	120,620	29,384	12,073	13,697
U. South Florida ^C	49	405,166	206,552	24,683	146,620	12,463	12,424	2,424
Iowa State U.	50	393,184	187,156	37,071	134,050	18,924	15,284	699
Washington State U.	51	368,396	187,580	54,610	103,067	9,099	13,119	921
U. Delaware	52	368,107	194,775	11,552	142,398	5,839	5,252	8,291
U. Connecticut	53	367,557	230,752	4,242	103,966	11,371	13,166	4,060
U. Massachusetts, Medical School	54	358,204	258,147	2,878	49,909	20,870	20,992	5,408
Florida State U.	55	355,986	163,744	24,003	152,444	4,914	3,723	7,158
Utah State U.	56	344,851	280,866	22,243	28,019	6,871	578	6,274
Louisiana State U., Baton Rouge	57	344,556	111,886	69,770	138,650	13,449	4,727	6,074
U. Texas Health Science Center, Houston	58	342,633	184,205	46,379	55,120	15,764	28,031	13,134
U. Nebraska, Lincoln	59	340,260	113,248	61,070	134,864	19,767	6,247	5,064
U. New Mexico	60	331,164	232,774	6,491	67,949	4,625	17,427	1,898
U. Tennessee, Knoxville	61	324,435	149,260	15,785	138,287	9,528	7,012	4,563
SUNY, Stony Brook U.	62	312,698	184,154	16,238	88,630	9,512	11,750	2,414
Auburn U., Auburn	63	304,439	104,883	33,555	143,876	8,338	1,912	11,875
Mississippi State U.	64	303,418	138,207	92,113	60,534	3,170	7,928	1,466
Temple U.	65	301,395	143,580	8,109	99,543	26,463	17,459	6,241
Oregon State U.	66	297,934	192,621	50,654	28,792	8,037	2,772	15,058
Medical U. South Carolina	67	284,553	163,395	4,565	76,566	20,932	9,097	9,998
Florida International U.	68	281,665	129,683	20,013	120,737	2,800	7,184	1,248
U. California, Santa Barbara	69	278,897	161,241	6,212	57,814	16,324	27,839	9,467

TABLE 37

Higher education R&D expenditures at public institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Hawaii, Manoa	70	277,323	169,762	17,799	75,287	2,304	11,546	625
Uniformed Services U. of the Health Sciences	71	277,240	194,187	0	75,736	0	7,317	0
Clemson U.	72	263,158	119,512	25,685	95,211	17,690	4,796	264
Wichita State U.	73	261,519	93,367	18,882	28,618	120,443	170	39
U. Massachusetts, Amherst	74	245,158	129,044	12,632	79,588	8,582	8,646	6,666
Wayne State U.	75	242,247	126,814	9,796	78,061	6,556	17,750	3,270
U. Houston	76	240,126	84,295	28,999	107,699	9,709	6,502	2,922
U. Texas Health Science Center, San Antonio	77	238,510	119,071	27,587	57,408	9,276	24,858	310
George Mason U.	78	230,068	119,406	5,816	55,812	6,969	35,685	6,380
U. Louisville	79	229,582	117,363	11,543	63,606	11,915	8,259	16,896
U. South Carolina, Columbia	80	229,162	106,752	13,021	95,360	4,322	8,292	1,415
Texas Tech U.	81	226,729	45,136	29,861	121,050	13,367	16,426	889
U. Central Florida	82	221,488	110,131	8,500	82,434	11,278	5,068	4,077
U. Vermont	83	216,307	117,163	1,379	82,412	2,785	7,081	5,487
Georgia State U.	84	215,908	81,641	6,415	112,773	502	13,940	637
West Virginia U.	85	214,081	97,327	9,769	79,689	5,016	3,862	18,418
Kansas State U.	86	212,974	81,820	40,926	72,772	8,259	8,047	1,150
U. New Hampshire	87	206,392	129,721	3,938	56,891	9,893	5,107	842
U. Arkansas for Medical Sciences	88	205,493	95,080	15,287	71,431	11,022	6,253	6,420
U. Nebraska, Medical Center	89	205,253	114,754	12,652	39,600	8,591	14,617	15,039
U. Louisiana, Lafayette	90	205,201	77,110	10,541	42,605	74,657	288	0
U. Texas Medical Branch	91	204,518	123,467	8,481	53,371	7,267	11,932	0
U. Alaska, Fairbanks	92	202,516	154,742	1,508	39,501	3,346	1,433	1,986
Montana State U., Bozeman	93	200,820	118,974	18,147	55,164	1,546	3,208	3,781
U. California, Riverside	94	199,135	114,257	8,566	51,532	6,267	8,538	9,975
Oklahoma State U., Stillwater	95	195,041	53,885	21,322	106,925	11,236	1,351	322
U. Arkansas, Fayetteville	96	184,080	64,252	48,654	59,522	4,705	5,742	1,205
U. Nevada, Reno	97	181,782	83,631	7,477	78,594	2,787	2,018	7,275
U. California, Santa Cruz	98	176,760	107,082	7,101	34,599	7,330	13,485	7,163
North Dakota State U.	99	174,904	45,343	50,066	71,056	1,507	864	6,068
U. Maine	100	171,931	84,072	19,449	60,064	3,848	2,568	1,930
U. Alabama, Huntsville	101	169,532	132,060	5,091	30,776	626	496	483
New Jersey Institute of Technology	102	167,135	71,326	14,576	62,576	1,872	7,207	9,578
U. Alabama, Tuscaloosa	103	163,204	67,986	17,040	73,435	2,701	1,631	411
U. Oregon	104	160,500	97,238	1,061	55,247	782	5,795	377

TABLE 37

Higher education R&D expenditures at public institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Mississippi	105	152,903	84,270	183	61,653	2,696	3,489	612
U. North Dakota	106	147,717	62,737	26,441	44,072	13,559	727	181
U. Texas, San Antonio	107	147,629	54,384	13,795	64,443	5,765	6,123	3,119
U. Wyoming	108	139,764	68,772	5,592	58,184	4,099	2,167	950
U. Texas, Arlington	109	133,770	56,025	27,482	38,339	2,935	6,948	2,041
U. Texas, Dallas	110	130,914	60,706	13,882	32,378	9,499	14,449	0
SUNY, Binghamton U.	111	130,882	24,888	5,225	94,515	3,458	1,306	1,490
U. Texas, El Paso	112	130,501	60,387	15,999	41,654	1,177	2,151	9,133
SUNY, U. Albany	113	129,796	51,492	1,234	71,042	735	2,963	2,330
U. Rhode Island	114	129,102	93,190	5,508	24,722	1,304	3,470	908
Augusta U.	115	127,313	64,609	95	51,995	3,451	6,725	438
U. Montana, Missoula	116	125,603	73,507	659	48,353	709	2,220	155
San Diego State U.	117	123,856	50,540	4,812	64,484	457	2,489	1,074
New Mexico State U.	118	121,472	71,718	23,036	16,167	2,451	2,366	5,734
U. Idaho	119	115,603	56,160	35,703	17,659	1,923	766	3,392
U. Tennessee, Health Science Center	120	115,161	60,221	6,205	32,641	3,958	6,232	5,904
U. Massachusetts, Lowell	121	111,144	62,195	2,599	39,067	4,463	2,112	708
U. Maryland, Baltimore County	122	110,319	65,368	7,264	31,743	1,958	2,611	1,375
Texas State U.	123	110,102	38,936	3,810	60,338	1,102	5,800	116
Colorado School of Mines	124	98,404	66,200	1,446	13,739	9,580	2,329	5,110
U. Nevada, Las Vegas	125	94,967	28,867	2,174	59,398	1,656	809	2,063
U. North Texas, Denton	126	93,538	23,056	5,007	61,728	1,979	1,762	6
Michigan Technological U.	127	91,084	48,766	999	32,247	6,687	591	1,794
New Mexico Institute of Mining and Technology	128	89,900	72,594	10,532	2,895	2,922	269	688
Cleveland State U.	129	81,225	53,395	848	18,497	3,481	4,812	192
William & Mary	130	75,953	33,730	4,124	30,035	966	4,212	2,886
U. Southern Mississippi	131	72,477	48,368	11,944	10,942	555	668	0
San Jose State U.	132	71,695	30,984	7,796	27,661	1,792	2,296	1,166
U. Memphis	133	71,271	24,686	8,365	33,900	1,084	3,045	191
Northern Arizona U.	134	66,729	43,453	7,055	14,501	813	768	139
CUNY, City C.	135	65,569	38,596	11,892	13,103	467	1,311	200
U. Massachusetts, Boston	136	65,215	23,131	8,852	25,606	2,043	4,958	625
Old Dominion U.	137	64,877	27,804	12,866	19,957	820	2,515	915
U. Toledo	138	64,654	36,694	1,211	19,679	3,312	3,509	249
U. Texas Rio Grande Valley	139	64,401	18,317	5,380	32,862	212	7,326	304

TABLE 37

Higher education R&D expenditures at public institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Indiana U.-Purdue U., Indianapolis	140	64,162	29,353	413	27,461	1,313	5,475	147
Naval Postgraduate School	141	64,055	44,852	0	18,483	313	66	341
Florida Atlantic U.	142	61,748	28,641	7,443	15,422	2,431	5,831	1,980
South Dakota State U.	143	59,590	22,991	16,267	4,841	1,278	2,537	11,676
U. Wisconsin-Milwaukee	144	56,822	24,036	16,504	12,368	1,535	935	1,444
East Carolina U.	145	55,693	29,648	408	19,542	3,991	1,783	321
U. California, Office of the President	146	54,640	158	34,007	20,390	0	0	85
Louisiana State U., Health Sciences Center, New Orleans	147	53,995	33,087	168	13,488	3,193	3,275	784
U. Maryland Center for Environmental Science	148	53,718	15,109	26,071	10,222	223	1,792	301
Missouri U. of Science and Technology	149	53,357	28,792	227	15,993	4,559	662	3,124
U. Missouri, Kansas City	150	52,657	31,134	225	17,201	338	969	2,790
Ohio U.	151	52,465	20,587	1,035	26,187	3,634	634	388
Kent State U.	152	52,175	16,195	1,308	32,748	640	1,242	42
Florida A&M U.	153	50,636	41,943	1,510	6,256	334	593	0
SUNY, Upstate Medical U.	154	50,586	27,737	2,261	10,660	5,883	2,331	1,714
U. California, Merced	155	48,147	23,421	5,992	14,279	768	1,918	1,769
North Carolina A&T State U.	156	47,908	29,094	3,899	14,445	261	195	14
Boise State U.	157	47,617	32,015	2,842	11,230	536	876	118
U. Puerto Rico, Medical Sciences Campus	158	47,578	35,050	1,005	8,295	3,228	0	0
Southern Illinois U., Carbondale	159	46,967	13,582	802	24,670	7,169	744	0
Texas Tech U., Health Sciences Center	160	46,574	14,620	16,937	9,544	508	2,963	2,002
Air Force Institute of Technology	161	44,391	32,479	0	11,869	43	0	0
U. South Alabama	162	43,491	23,762	998	15,313	1,232	1,383	803
U. North Carolina, Charlotte	163	43,126	26,871	1,158	11,848	2,689	560	0
Portland State U.	164	41,483	30,922	2,635	3,949	636	2,882	459
U. North Carolina, Greensboro	165	41,303	29,822	524	9,054	593	579	731
U. West Florida	166	38,870	17,114	203	20,673	683	197	0
Oakland U.	167	38,061	9,533	2,911	18,539	2,613	2,636	1,829
San Francisco State U.	168	36,617	15,276	2,013	18,257	53	990	28
U.S. Air Force Academy	169	36,506	35,826	0	0	680	0	0
Georgia Southern U.	170	36,362	2,605	322	28,826	4,608	1	0
Texas A&M U.-Corpus Christi	171	36,014	15,229	9,903	5,287	90	2,782	2,723
CUNY, Hunter C.	172	35,348	21,142	3,367	8,895	716	1,165	63
U. Texas Health Science Center, Tyler	173	33,872	14,362	8,127	6,016	858	4,509	0
California Polytechnic State U., San Luis Obispo	174	33,155	15,084	3,155	9,964	2,008	2,890	54

TABLE 37

Higher education R&D expenditures at public institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Massachusetts, Dartmouth	175	33,136	11,162	1,519	18,713	1,035	440	267
SUNY, C. of Environmental Science and Forestry	176	32,904	7,766	14,020	8,411	795	817	1,095
Montclair State U.	177	32,202	5,189	619	24,540	54	1,683	117
SUNY, Downstate Health Sciences U.	178	30,918	25,081	31	3,816	177	1,475	338
U. South Dakota	179	30,322	13,702	1,919	14,176	32	493	0
Rowan U.	180	29,949	18,613	4,720	4,546	1,177	893	0
Louisiana State U., Health Sciences Center, Shreveport	181	29,502	15,503	21	8,434	1,045	4,499	0
Morgan State U.	182	29,482	24,670	2,835	707	601	344	325
Delaware State U.	183	29,016	24,361	598	3,457	150	440	10
Miami U.	184	28,799	10,277	1,997	13,843	1,375	969	338
Desert Research Institute	185	28,478	17,341	385	4,377	960	4,381	1,034
Rutgers, State U. New Jersey, Newark	186	28,345	16,099	421	8,531	167	3,041	86
U. Puerto Rico, Rio Piedras	187	28,083	16,905	60	10,458	229	376	55
Western Michigan U. and Homer Stryker M.D. School of Medicine	188	27,768	12,895	1,348	9,489	2,063	473	1,500
Wright State U.	189	27,440	20,529	757	5,368	407	343	36
Northern Illinois U.	190	27,068	9,840	774	14,986	634	606	228
Louisiana Tech U.	191	26,591	5,734	2,532	15,621	713	0	1,991
Marshall U.	192	25,692	16,369	1,909	6,479	320	615	0
Illinois State U.	193	25,510	8,673	487	14,540	54	1,752	4
U. Nebraska, central administration	194	25,402	23,872	0	1,498	0	0	32
Central Michigan U.	195	25,105	9,773	1	14,061	157	794	319
U. Nebraska, Omaha	196	24,259	17,301	2,445	4,038	44	387	44
California State U., Sacramento	197	23,795	6,646	10,203	5,694	115	511	626
Texas A&M U.-Kingsville	198	23,451	8,225	6,241	2,812	389	5,647	137
East Tennessee State U.	199	23,420	9,715	315	9,214	35	3,881	260
U. Minnesota, Duluth	200	23,362	6,122	5,928	10,794	382	105	31
Middle Tennessee State U.	201	22,631	4,347	509	16,715	261	799	0
Eastern Virginia Medical School	202	22,165	17,616	1,186	2,603	148	612	0
U. New Orleans	203	21,911	8,270	788	10,393	483	1,067	910
Kennesaw State U.	204	21,705	3,290	529	17,003	205	543	135
CUNY, Queens C.	205	21,434	14,756	1,362	4,717	83	439	77
U. Alaska, Anchorage	206	21,024	15,249	1,227	3,392	282	493	381
U.S. Military Academy	207	20,841	19,708	0	95	482	280	276
U. Guam	208	20,481	17,066	1,682	1,339	375	19	0
Prairie View A&M U.	209	20,429	11,665	4,037	3,898	327	502	0

TABLE 37

Higher education R&D expenditures at public institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. of the Virgin Islands	210	20,259	19,127	1,010	NA	48	74	0
South Dakota School of Mines and Technology	211	20,061	15,100	1,467	2,488	741	55	210
Tarleton State U.	212	20,056	5,055	3,927	10,533	257	284	0
U. North Carolina, Wilmington	213	20,053	7,178	6,644	3,338	1,166	1,638	89
U. Akron	214	19,943	11,036	160	5,608	2,102	893	144
California State U., Northridge	215	19,638	15,546	984	1,207	181	1,703	17
Bowling Green State U.	216	19,342	7,918	1,649	8,895	122	758	0
Southern Illinois U., Edwardsville	217	19,152	3,250	556	14,766	577	3	0
California State U., East Bay	218	19,035	8,997	693	8,232	2	1,036	75
U. North Florida	219	18,394	7,758	746	8,817	107	232	734
U. Puerto Rico, Mayaguez	220	18,274	16,223	455	314	1,049	233	0
U. Colorado Denver ^b	221	18,080	12,668	2,422	1,063	453	1,160	314
Tennessee State U.	222	18,012	10,859	567	6,466	4	116	0
California State U., Long Beach	223	17,807	11,739	572	2,980	534	837	1,145
Jackson State U.	224	17,481	15,045	0	1,427	93	916	0
James Madison U.	225	17,021	2,884	798	12,602	218	518	1
Alcorn State U.	226	16,726	9,361	4,977	2,349	7	32	0
California State U., Fullerton	227	16,642	6,136	305	9,664	95	442	0
Idaho State U.	228	16,615	9,080	2,223	4,292	547	249	224
North Carolina Central U.	229	16,600	13,709	954	NA	434	776	727
CUNY, Advanced Science Research Center	230	16,507	12,580	365	2,226	324	888	124
CUNY, Graduate School of Public Health and Health Policy	231	16,423	11,880	318	2,189	658	1,340	38
Tennessee Technological U.	232	16,398	8,156	4,256	3,464	117	146	259
CUNY, John Jay C. of Criminal Justice	233	16,233	5,777	3,516	3,492	144	2,171	1,133
California State Polytechnic U., Humboldt	234	15,612	2,421	4,248	4,784	110	2,209	1,840
Western Washington U.	235	15,081	6,347	1,063	5,954	68	1,614	35
Texas Tech U., Health Sciences Center, El Paso	236	14,206	2,339	2,856	8,097	475	438	1
Montana Technological U.	237	14,188	5,600	6,085	2,221	282	0	0
Northeast Ohio Medical U.	238	13,465	9,400	47	3,197	0	821	0
U. Missouri, Saint Louis	239	13,247	4,573	61	5,106	81	2,934	492
U. Tennessee, Chattanooga	240	12,808	5,214	1,291	5,510	106	229	458
U. Hawaii, system office	241	12,646	12,511	0	135	0	0	0
California State U., Fresno	242	12,603	5,928	1,102	3,854	356	1,258	105
Virginia State U.	243	12,326	7,115	2,006	2,544	0	661	0
Texas Southern U.	244	12,120	7,550	1,150	3,362	0	58	0

TABLE 37

Higher education R&D expenditures at public institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Sam Houston State U.	245	12,009	4,936	132	6,444	1	382	114
California State U., San Bernardino	246	11,929	6,693	2,445	2,657	3	131	0
Lincoln U., Jefferson City	247	11,500	8,988	2,512	NA	0	0	0
Missouri State U.	248	11,162	10,084	94	754	95	135	0
Rhode Island C.	249	11,127	5,372	5,301	92	0	362	0
U. of the District of Columbia	250	10,779	9,859	920	0	0	0	0
U.S. Naval Academy	251	10,664	10,147	0	0	0	251	266
Salisbury U.	252	10,614	3,734	3,405	3,415	0	50	10
U. North Texas, Health Science Center	253	10,439	3,172	0	6,615	502	14	136
Winston-Salem State U.	254	10,436	8,903	283	0	0	785	465
Central State U.	255	10,274	5,576	3,039	1,659	0	0	0
Fort Valley State U.	256	9,969	7,265	2,704	0	0	0	0
Ball State U.	257	9,932	5,302	257	3,754	247	372	0
Florida Gulf Coast U.	258	9,896	6,482	1,823	214	110	1,211	56
California State U., Los Angeles	259	9,839	8,605	130	943	0	161	0
Alabama A&M U.	260	9,611	9,221	4	0	386	0	0
West Texas A&M U.	261	9,438	2,123	4,302	1,972	966	29	46
Kentucky State U.	262	9,284	4,743	4,357	0	83	101	0
U. Maryland, Eastern Shore	263	9,274	9,062	192	20	0	0	0
California State U., San Marcos	264	9,238	7,986	980	265	0	7	0
California State U., Monterey Bay	265	8,975	5,051	1,404	2,300	50	164	6
Towson U.	266	8,788	2,844	177	5,513	30	217	7
Oklahoma State U., Center for Health Sciences	267	8,368	3,366	35	4,897	53	17	0
Arkansas State U., Jonesboro	268	8,214	3,932	3,325	658	271	28	0
U. Washington, Bothell	269	8,197	4,009	259	786	85	3,007	51
U. Michigan, Dearborn	270	8,180	2,537	9	3,259	2,070	223	82
Eastern Michigan U.	271	8,025	2,346	50	5,324	57	248	0
U. Hawaii, Hilo	272	8,001	5,292	66	1,533	131	931	48
U. Oklahoma, Tulsa	273	7,945	1,804	1,709	2,892	104	1,120	316
California State Polytechnic U., Pomona	274	7,909	5,407	846	1,441	204	11	0
U. Colorado Colorado Springs	275	7,761	5,345	752	939	595	130	0
Western Kentucky U.	276	7,720	3,127	531	3,961	55	46	0
William Paterson U.	277	7,574	1,896	0	5,401	121	131	25
U. Arkansas, Little Rock	278	7,530	6,675	220	80	170	157	228
U. Arkansas, Pine Bluff	279	7,506	3,306	1,449	2,737	0	14	0

TABLE 37

Higher education R&D expenditures at public institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Appalachian State U.	280	7,189	2,567	103	3,129	617	771	2
U. Central Oklahoma	281	7,070 i	1,869 i	747 i	4,365 i	85 i	3 i	1 i
Southern U. and A&M C., Agricultural Research and Extension Center	282	7,048	4,261	2,765	22	0	0	0
West Virginia State U.	283	6,703	4,278	1,601	815	0	9	0
Grand Valley State U.	284	6,695	1,819	378	2,986	0	948	564
U. Baltimore	285	6,646	4,853	1,445	NA	4	259	85
Langston U.	286	6,481	3,616	0	2,449	416	0	0
Rutgers, State U. New Jersey, Camden	287	6,480	3,349	60	2,003	330	724	14
C. Charleston	288	6,421	4,485	383	1,032	40	465	16
Purdue U., Northwest	289	6,387	3,171	767	1,323	477	128	521
Pennsylvania State U., Behrend	290	6,384	3,262	405	1,345	848	514	10
Indiana U. Pennsylvania	291	6,313	1,797	729	3,303	0	469	15
Southern Connecticut State U.	292	6,286	848	103	4,722	0	362	251
CUNY, Brooklyn C.	293	6,220	4,623	0	1,418	3	160	16
Texas Woman's U.	294	6,029	2,091	2,386	883	135	534	0
U. North Carolina, Asheville	295	5,973	2,600	542	543	54	2,234	0
West Chester U. Pennsylvania	296	5,903	854	20	4,618	32	379	0
Northwest Indian C.	297	5,632	4,298	0	1,334	0	0	0
Naval War C.	298	5,529	5,529	0	0	0	0	0
CUNY, Graduate Center	299	5,509	2,535	154	1,080	0	1,208	532
Kean U.	300	5,499	715	180	4,548	15	41	0
U. Southern Maine	301	5,498	2,201	2,893	237	0	126	41
U.S. Army War C.	302	5,496 i	5,496 i	0 i	0 i	0 i	0 i	0 i
U. Washington, Tacoma	303	5,484	4,553	432	207	0	138	154
Lamar U.	304	5,304	1,180	3,639	220	167	98	0
Oregon Institute of Technology	305	5,086 i	340	4,431 i	NA	109 i	206 i	0
Texas A&M U.-Commerce	306	4,955	1,776	222	2,783	4	153	17
California State U., Bakersfield	307	4,815	2,665	259	1,878	0	13	0
Dakota State U.	308	4,684	3,976	236	382	84	6	0
CUNY, Lehman C.	309	4,656	3,652	10	421	177	273	123
U. Wisconsin-Superior	310	4,615	3,635	135	617	152	76	0
SUNY, C. of Optometry	311	4,497	2,080	0	708	1,642	56	11
Texas A&M International U.	312	4,486	1,624	917	1,093	73	751	28
Citadel Military C. South Carolina	313	4,374	3,741	270	336	3	20	4
Southern U. and A&M C., Baton Rouge	314	4,344	3,595	80	34	635	0	0

TABLE 37

Higher education R&D expenditures at public institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Western Illinois U.	315	4,311	4,032	0	47	160	0	72
South Carolina State U.	316	4,270 i	4,270 i	NA	NA	NA	NA	NA
California State U., Dominguez Hills	317	4,230	3,156	23	1,001	0	50	0
California State U., Chico	318	4,177	2,312	763	422	130	44	506
Youngstown State U.	319	4,157	3,533	260	305	42	17	0
U. Nebraska, Kearney	320	4,009	1,900	530	1,459	48	0	72
National Defense U.	321	3,920	3,920	0	0	0	0	0
Northern Kentucky U.	322	3,888	2,596	2	890	22	378	0
Sonoma State U.	323	3,774	2,889	406	298	40	141	0
U. Wisconsin-Stevens Point	324	3,740	1,235	1,074	829	1	314	287
Coastal Carolina U.	325	3,724	1,130	948	1,580	0	66	0
Chicago State U.	326	3,701	3,699	0	0	0	2	0
U. Central Arkansas	327	3,684	1,731	623	1,186	0	144	0
Norfolk State U.	328	3,593	3,398	89	0	0	106	0
U. Texas of the Permian Basin	329	3,577	1,538	685	756	132	466	0
CUNY, C. Staten Island	330	3,545	2,916	93	342	1	133	60
U. North Carolina, general administration	331	3,522	369	3,153	0	0	0	0
U. Northern Iowa	332	3,486	2,132	465	808	0	81	0
C. New Jersey	333	3,464	1,984	186	579	0	715	0
Winthrop U.	334	3,424	2,542	196	628	13	45	0
California State U., Channel Islands	335	3,377	1,638	746	690	267	36	0
Murray State U.	336	3,371	2,176	23	1,060	112	0	0
Bowie State U.	337	3,351	3,351	0	0	0	0	0
U. Northern Colorado	338	3,308	1,692	100	1,224	143	149	0
U. Texas, Tyler	339	3,246	1,585	651	821	111	64	14
Fayetteville State U.	340	3,206	1,667	479	898	116	46	0
Stephen F. Austin State U.	341	3,184	879	1,326	511	22	267	179
Alabama State U.	342	3,178	2,930	0	0	216	1	31
Central Washington U.	343	3,176	2,429	266	350	55	42	34
CUNY, Baruch C.	344	3,156	1,894	23	640	0	505	94
Austin Peay State U.	345	3,149	870	1,186	984	0	89	20
U. Louisiana, Monroe	346	3,128	1,993	748	208	41	138	0
Colorado State U., Pueblo	347	3,117	1,278	1,721	82	0	27	9
U. Wisconsin-La Crosse	348	2,942	968	694	977	227	70	6
Pennsylvania State U., Harrisburg	349	2,927	1,911	491	251	173	101	0

TABLE 37

Higher education R&D expenditures at public institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
CUNY, system office	350	2,900	798	1,528	223	99	252	0
Pittsburg State U.	351	2,884	1,167	666	NA	1,051	0	0
U. Illinois, Springfield	352	2,881	1,210	646	797	0	228	0
Morehead State U.	353	2,880	2,086	431	15	345	3	0
Saginaw Valley State U.	354	2,862 i	2,341 i	0 i	388 i	5 i	112 i	16 i
Framingham State U.	355	2,830 i	232 i	0 i	0 i	95 i	2,503 i	0 i
Western Carolina U.	356	2,783	1,727	297	519	157	83	0
Fort Lewis C.	357	2,765	2,590	48	51	0	76	0
Christopher Newport U.	358	2,762	1,701	0	855	48	158	0
U. Wisconsin-Green Bay	359	2,713	1,046	752	843	25	47	0
U. Virginia's C. Wise	360	2,628	786	837	965	4	36	0
U. South Carolina, Aiken	361	2,595	857	0	1,729	0	9	0
Sul Ross State U.	362	2,526 i	623 i	151 i	143 i	30 i	941 i	638 i
Troy U.	363	2,517	2,296	48	135	38	0	0
Eastern Washington U.	364	2,437	855	1,332	NA	13	149	88
Southeastern Louisiana U.	365	2,407	1,285	266	784	61	11	0
Grambling State U.	366	2,306 i	809 i	639 i	858 i	0 i	0 i	0 i
St. Cloud State U.	367	2,226	401	235	690	601	299	0
Northeastern Illinois U.	368	2,224	2,224	0	0	0	0	0
Minnesota State U., Mankato	369	2,206	575	110	1,300	0	18	203
SUNY, Buffalo State	370	2,172	1,299	658	189	5	1	20
Purdue U., Fort Wayne	371	2,134	313	371	814	140	186	310
Dine C.	372	2,091	2,091	0	0	0	0	0
SUNY, Geneseo	372	2,091	1,564	8	502	0	17	0
Lake Superior State U.	374	2,056	1,184	125	569	83	0	95
U. Wisconsin-Oshkosh	375	1,990	1,336	72	546	36	0	0
Black Hills State U.	376	1,987	1,676	119	192	0	0	0
California State U., Stanislaus	377	1,966	1,056	243	176	464	27	0
CUNY, New York City C. of Technology	378	1,955	1,769	16	120	20	0	30
Elizabeth City State U.	379	1,934	1,667	206	NA	61	0	0
CUNY, York C.	380	1,912	1,659	0	189	0	64	0
Utah Valley U.	381	1,895	1,280	490	59	0	66	0
Northern Michigan U.	382	1,888	571	90	723	0	291	213
Savannah State U.	382	1,888	1,881	7	0	0	0	0
Northwestern State U. Louisiana	384	1,848	742	838	268	0	0	0

TABLE 37

Higher education R&D expenditures at public institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Houston-Clear Lake	385	1,800	841	408	91	399	61	0
Virginia Military Institute	386	1,746	1,137	221	378	0	10	0
Eastern Connecticut State U.	387	1,734	126	3	1,605	0	0	0
U. North Georgia	387	1,734	734	138	690	13	159	0
Florida Polytechnic U.	389	1,725	706	144	588	225	62	0
Stockton U.	390	1,657	728	180	720	3	26	0
U. Wisconsin-Eau Claire	391	1,628	681	396	278	243	24	6
U. Alaska, Southeast	392	1,570	1,392	28	43	24	64	19
SUNY, C. Brockport	393	1,500	751	166	435	23	43	82
U. Houston-Downtown	394	1,485	903	57	238	0	287	0
U. Puerto Rico, Humacao	395	1,448	1,160	0	288	0	0	0
East Stroudsburg U. Pennsylvania	396	1,410	598	44	149	0	619	0
U. Puerto Rico, Cayey	397	1,390	757	0	430	0	203	0
Indiana State U.	398	1,354	894	128	210	84	26	12
U. Wisconsin-Platteville	399	1,349	435	340	224	305	35	10
New Mexico Highlands U.	400	1,331	1,288	0	0	0	43	0
West Virginia School of Osteopathic Medicine	401	1,329	468	11	850	0	0	0
Texas A&M U.-San Antonio	402	1,242	394	119	570	22	60	77
U. of Mary Washington	403	1,229	501	54	601	6	39	28
SUNY, Cobleskill	404	1,211	379	828	0	4	0	0
SUNY, Oswego	405	1,209	544	36	549	0	74	6
Nevada State C.	406	1,191	1,167	0	22	0	2	0
SUNY, C. Plattsburgh	407	1,043	584	46	334	0	57	22
Central Connecticut State U.	408	1,035	511	58	459	0	4	3
Plymouth State U.	409	669	571	0	84	0	0	14
California State U., Maritime Academy	410	526	192	105	10	219	0	0

i = imputed. NA = not available; data were not provided by institution.

^a The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^b The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^c The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

Note(s):

Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 38

Higher education R&D expenditures at private institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
All institutions	-	33,967,583	20,637,522	404,187	7,123,717	2,282,215	2,642,649	877,293
Johns Hopkins U. ^a	1	3,420,312	2,971,816	7,785	158,738	120,023	153,334	8,616
U. Pennsylvania	2	1,791,311	873,318	23,189	562,094	204,216	120,832	7,662
Duke U.	3	1,390,538	901,807	802	167,200	208,132	92,526	20,071
Stanford U.	4	1,384,555	860,125	20,064	169,346	138,118	189,536	7,366
Harvard U.	5	1,308,458	628,683	5,379	415,763	62,034	179,073	17,526
Cornell U.	6	1,300,357	636,481	88,200	250,308	55,328	115,788	154,252
New York U.	7	1,276,038	668,381	17,982	296,131	58,776	101,175	133,593
Columbia U. in the City of New York	8	1,230,924	904,346	6,391	113,189	83,684	121,435	1,879
Yale U.	9	1,191,201	689,270	2,364	343,754	76,240	75,151	4,422
Vanderbilt U. and Vanderbilt U. Medical Center	10	1,086,223	666,282	2,954	301,424	83,213	29,292	3,058
Washington U., Saint Louis	11	1,047,098	681,353	638	154,896	121,140	86,700	2,371
U. Southern California	12	1,039,905	601,747	11,421	201,486	91,844	58,895	74,512
Northwestern U.	13	1,000,695	618,771	783	262,434	59,850	51,091	7,766
Massachusetts Institute of Technology	14	989,166	531,056	2,523	117,128	165,200	100,640	72,619
Emory U.	15	958,281	568,149	522	252,545	64,536	70,269	2,260
Icahn School of Medicine at Mount Sinai	16	893,968	610,646	3,652	132,627	81,384	50,251	15,408
Baylor C. of Medicine	17	827,005	420,054	35,155	292,730	28,251	50,815	0
Boston U.	18	725,402	413,102	752	187,662	22,525	84,116	17,245
U. Chicago	19	591,805	456,806	322	40,734	46,694	45,554	1,695
Scripps Research Institute	20	492,639	242,135	1,424	164,488	35,318	49,274	0
California Institute of Technology	21	478,142	326,401	5,009	54,587	17,200	52,970	21,975
Case Western Reserve U.	22	467,389	380,423	6,503	53,133	4,856	20,142	2,332
Princeton U.	23	461,185	218,390	255	102,851	17,455	73,840	48,394
U. Rochester	24	450,805	334,503	2,037	53,315	36,329	18,783	5,838
Carnegie Mellon U.	25	449,707	259,160	4,379	123,903	42,115	13,772	6,378
U. Miami	26	439,300	265,212	18,607	97,990	35,378	21,416	697
Rockefeller U.	27	360,877	94,693	102	225,209	2,292	37,218	1,363
Dartmouth C. and Dartmouth Hitchcock Medical Center	28	344,126	155,445	1,344	156,384	2,383	19,943	8,627
Thomas Jefferson U.	29	321,644	173,861	14,252	63,739	26,469	24,927	18,396
Medical C. Wisconsin	30	321,506	152,301	586	102,906	35,121	27,050	3,542
Albert Einstein C. of Medicine	31	318,314	220,780	719	73,665	3,820	19,330	0
Georgetown U.	32	313,220	127,213	1,144	81,692	16,111	61,547	25,513
Brown U.	33	310,780	215,067	9	56,819	4,247	28,539	6,099

TABLE 38

Higher education R&D expenditures at private institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Notre Dame	34	280,604	124,411	487	94,156	16,225	21,210	24,115
George Washington U.	35	275,483	161,867	2,264	67,384	5,048	25,886	13,034
Wake Forest U.	36	269,109	180,754	9,209	26,816	22,212	21,022	9,096
Woods Hole Oceanographic Institution	37	255,017	211,550	398	10,972	3,874	12,807	15,416
Northeastern U.	38	231,607	150,093	1,747	55,478	12,107	11,909	273
Tufts U.	39	231,224	150,081	3,780	29,719	12,765	11,331	23,548
Tulane U.	40	222,605	127,544	4,215	51,561	10,974	13,868	14,443
Rice U.	41	216,202	105,345	5,071	63,401	5,535	31,834	5,016
U. Dayton	42	211,494	203,206	756	853	5,620	408	651
Syracuse U.	43	157,407	33,976	3,890	101,347	8,568	9,378	248
Drexel U.	44	151,903	99,399	3,418	36,121	2,323	7,882	2,760
Rensselaer Polytechnic Institute	45	121,809	50,605	3,485	47,193	15,282	2,012	3,232
Cold Spring Harbor Laboratory	46	118,034	59,163	134	36,235	3,766	18,736	0
Rush U.	47	114,874	79,647	1,548	9,884	15,789	8,006	0
Brandeis U.	48	102,378	44,205	1,027	40,627	1,100	11,813	3,606
Saint Louis U.	49	82,740	42,170	355	22,991	5,459	11,584	181
Van Andel Research Institute	50	78,626	29,424	701	35,812	227	4,633	7,829
Boston C.	51	68,958	36,560	1,439	13,949	652	15,649	709
American U.	52	67,616	14,752	874	40,650	428	8,424	2,488
Howard U.	53	67,594	37,331	1,197	23,130	2,908	1,816	1,212
Baylor U.	54	66,014	15,856	2,211	34,144	3,165	7,682	2,956
Rochester Institute of Technology	55	62,383	33,373	7,076	16,109	2,789	1,998	1,038
Southern Methodist U.	56	57,544	17,680	1,106	33,929	1,918	2,751	160
Worcester Polytechnic Institute	57	56,904	34,004	3,041	14,261	3,308	1,414	876
Stevens Institute of Technology	58	53,563	41,836	2,264	5,895	2,608	539	421
Lehigh U.	59	51,769	36,535	2,342	11,162	595	1,060	75
Mercer U.	60	50,222	32,504	46	9,218	4,083	112	4,259
Loyola U., Chicago	61	46,169	26,972	204	9,904	3,527	3,955	1,607
Brigham Young U., Provo	62	45,610	31,636	1,032	6,962	3,577	2,171	232
U. Denver	63	45,561	26,040	4,419	6,953	1,937	5,210	1,002
Morehouse School of Medicine	64	42,489	31,339	440	7,155	0	3,555	0
Marquette U.	65	40,638	15,316	207	16,222	752	2,440	5,701
Catholic U. of America	66	38,191	26,285	130	4,211	370	7,195	0
Chapman U.	67	34,212	11,098	854	13,710	425	7,989	136

TABLE 38

Higher education R&D expenditures at private institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Nova Southeastern U.	68	31,189	9,314	3,571	16,839	417	616	432
Teachers C., Columbia U.	69	30,978	10,177	4,357	NA	1,846	12,335	2,263
Illinois Institute of Technology	70	29,791	25,963	2	1,759	948	371	748
Embry-Riddle Aeronautical U.	71	28,650	23,863	358	1,425	1,002	225	1,777
Creighton U.	72	27,609	12,022	3,702	8,993	1,289	320	1,283
Villanova U.	73	25,955	6,476	1,404	15,309	605	2,140	21
Albany Medical C.	74	22,297	13,384	0	3,132	3,606	689	1,486
Tuskegee U.	75	21,941	14,911	3,206	1,128	0	0	2,696
Clarkson U.	76	21,703	8,834	2,713	8,116	1,363	508	169
Fordham U.	77	20,432	4,856	0	13,005	27	1,523	1,021
New School	78	19,218	1,261	298	3,023	2	11,860	2,774
Texas Christian U.	79	18,353	5,670	302	9,201	2,028	1,096	56
Meharry Medical C.	80	17,960	15,048	0	648	25	2,239	0
Florida Institute of Technology	81	17,706	10,970	1,170	4,740	465	361	0
U. Tulsa	82	17,416	5,893	320	4,023	6,130	967	83
Long Island U.	83	17,183	2,652	0	13,962	184	334	51
New York Medical C.	84	16,461	9,070	985	813	2,947	1,980	666
Loma Linda U.	85	15,517	9,134	630	3,012	1,358	942	441
Charles R. Drew U. of Medicine and Science	86	14,581	10,656	220	3,098	0	607	0
Xavier U. Louisiana	87	14,156	11,733	585	1,452	0	386	0
Duquesne U.	88	13,944	6,309	928	4,043	217	2,447	0
Rosalind Franklin U. of Medicine and Science	89	12,988	7,292	144	4,239	593	720	0
Loyola Marymount U.	90	12,773	2,824	1,334	7,360	6	1,249	0
Hampton U.	91	11,462	11,274	0	188	0	0	0
Midwestern U.	92	11,069	1,609	160	8,714	290	296	0
U. San Diego	93	10,143	2,911	510	5,842	0	576	304
Wesleyan U.	94	10,101	5,267	0	3,652	93	1,052	37
Bryn Mawr C.	95	9,123	1,257	0	7,692	0	174	0
Saint Joseph's U.	96	9,041	2,520	1,205	2,609	2,252	455	0
Western U. of Health Sciences	97	9,029	7,131	600	224	351	704	19
Clark U.	98	8,813	2,500	77	4,552	0	1,577	107
Clark Atlanta U.	99	8,791	5,895	0	2,647	198	51	0
Claremont Graduate U.	100	8,382	1,610	342	1,113	3,384	1,381	552
DePaul U.	101	8,362	3,757	169	2,195	260	1,948	33

TABLE 38

Higher education R&D expenditures at private institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Yeshiva U.	102	7,274	1,695	0	4,765	0	349	465
Amherst C.	103	7,177	2,862	0	2,130	0	127	2,058
Edward Via C. of Osteopathic Medicine	104	7,121	482	58	6,520	8	53	0
Hofstra U.	105	6,939	2,118	139	4,485	0	197	0
Philadelphia C. of Osteopathic Medicine	106	6,667	40	57	2,675	2,300	1,595	0
U. New England	107	6,664	3,660	15	2,503	126	360	0
Gallaudet U.	108	6,360	3,287	1	2,396	0	128	548
Hope C.	109	6,355	3,691	0	1,928	0	625	111
Wellesley C.	110	6,326	2,915	552	NA	89	2,008	762
Abilene Christian U.	111	6,310	1,032	0	231	4,907	140	0
Roseman U. of Health Sciences	112	6,296	30	0	6,158	106	2	0
High Tech High Graduate School of Ed.	113	6,203	0	0	0	0	6,203	0
Pacific U.	114	6,128	2,672	498	2,670	45	243	0
Reed C.	115	5,922 i	2,139 i	38 i	3,272 i	0 i	342 i	131 i
Claremont McKenna C.	116	5,893	1,070	56	4,377	0	390	0
Grinnell C.	117	5,867	242	0	5,237	15	208	165
Smith C.	118	5,831	2,403	0	1,740	248	1,440	0
MGH Institute of Health Professions	119	5,805	4,628	0	20	0	1,157	0
Seton Hall U.	120	5,741	2,092	1,737	1,176	150	586	0
Morehouse C.	121	5,664	5,664	0	0	0	0	0
Williams C.	122	5,657 i	1,286 i	0 i	1,894 i	0 i	156 i	2,321 i
New York Institute of Technology	123	5,555	2,988	167	2,180	0	220	0
Des Moines U.	124	5,307	1,589	179	3,455	0	84	0
Bucknell U.	125	5,259	2,539	0	1,150	369	236	965
U. Detroit Mercy	126	5,186	4,663	0	494	16	13	0
U. Central del Caribe	127	5,053	2,807	356	1,486	0	0	404
Barnard C.	128	4,988	3,758	0	652	39	539	0
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	129	4,954	858	0	3,799	0	91	206
U. New Haven	130	4,548	2,447	504	405	352	807	33
Haverford C.	131	4,487	2,722	0	852	0	381	532
Toyota Technological Institute, Chicago	132	4,470	2,199	0	1,568	431	272	0
Franklin and Marshall C.	133	4,440	1,680	266	1,555	339	333	267
Carleton C.	134	4,358	1,914	18	2,055	0	214	157
Colgate U.	135	4,343	1,570	0	2,625	78	66	4

TABLE 38

Higher education R&D expenditures at private institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. of Health Sciences and Pharmacy in St. Louis	136	4,280	2,523	0	977	635	145	0
Santa Clara U.	137	4,225	2,660	299	NA	518	748	0
Swarthmore C.	137	4,225	1,733	6	2,130	0	356	0
Occidental C.	139	4,139	2,622	i 484	NA	480	553	0
Fisk U.	140	4,000	3,486	93	10	0	411	0
Pepperdine U.	141	3,775	883	19	885	0	1,988	0
Trinity U.	142	3,657	1,345	5	1,117	0	1,149	41
Colorado C.	143	3,646	1,371	258	1,090	0	927	0
St. John's U., New York	144	3,592	2,456	0	326	195	387	228
Milwaukee School of Engineering	145	3,545	969	0	79	2,485	12	0
Pace U.	146	3,524	2,534	0	711	0	279	0
Alfred U.	147	3,477	1,008	1,659	517	264	29	0
St. Edward's U.	148	3,393	1,940	101	1,150	15	160	27
Azusa Pacific U.	149	3,389	282	266	2,680	0	161	0
Harvey Mudd C.	150	3,350	1,956	0	1,020	2	138	234
Hawaii Pacific U.	151	3,302	2,667	48	4	315	240	28
Biola U.	152	3,260	0	2	0	0	3,088	170
Hobart and William Smith Colleges	153	3,228	1,264	955	557	0	201	251
Calvin U.	154	3,169	931	12	559	24	1,376	267
Lawrence Technological U.	155	3,050	1,109	1,037	154	192	558	0
Davidson C.	156	2,788	1,370	4	702	31	542	139
Spelman C.	157	2,686	2,539	0	0	147	0	0
Johnson C. Smith U.	158	2,685	1,868	674	0	12	131	0
U. Richmond	159	2,670	1,624	0	529	0	476	41
U. San Francisco	160	2,657	547	265	1,123	0	717	5
Furman U.	161	2,650	1,280	22	1,069	25	169	85
Bowdoin C.	162	2,648	1,867	46	635	0	91	9
Middlebury C.	163	2,603	2,281	10	49	0	263	0
Pomona C.	164	2,589	1,217	12	1,238	0	122	0
Vassar C.	165	2,580	1,052	21	1,106	0	378	23
Lewis and Clark C.	166	2,566	746	0	1,522	0	298	0
Touro U., California	167	2,561	964	0	1,354	182	0	61
Franklin W. Olin C. of Engineering	168	2,554	809	0	698	82	882	83
Colby C.	169	2,530	1,466	0	573	0	243	248

TABLE 38

Higher education R&D expenditures at private institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. of St. Thomas (MN)	170	2,476	527	407	715	327	437	63
Bates C.	171	2,468	1,785	0	281	0	235	167
Tougaloo C.	172	2,336 i	2,336 i	0 i	0 i	0 i	0 i	0 i
Pratt Institute	173	2,325	228	995	5	0	1,097	0
Albany C. of Pharmacy and Health Sciences	174	2,276	1,110	0	769	250	147	0
Dillard U.	175	2,270	1,422	0	848	0	0	0
La Sierra U.	176	2,246	972	0	654	0	620	0
Willamette U.	177	2,183	791	0	1,344	0	48	0
Roger Williams U.	178	2,156	1,351	165	445	30	165	0
Mount Holyoke C.	179	2,112	1,511	0	285	0	316	0
Erikson Institute	180	2,068	815	178	125	0	950	0
U. of the Incarnate Word	181	2,064	1,078	0	886	8	92	0
Lafayette C.	182	2,059	1,300	0	605	32	110	12
Western New England U.	183	2,052	648	869	314	46	175	0
Palmer C. of Chiropractic, Davenport	184	2,050	1,550	0	500	0	0	0
Monmouth U.	185	1,938	535	505	93	407	397	1
Seattle U.	186	1,894	1,143	52	471	3	225	0
Hamilton C.	187	1,879	338	0	1,039	0	410	92
Connecticut C.	188	1,875	620	0	1,252	0	0	3
New England C. of Optometry	189	1,868	1,609	52	108	88	11	0
U. of the Pacific	190	1,835	1,351	413	NA	18	53	0
Babson C.	191	1,825	45	0	650	140	281	709
Elon U.	192	1,797	428	0	1,303	0	47	19
Skidmore C.	193	1,734	861	0	337	0	536	0
C. Wooster	194	1,717	737	0	797	0	183	0
Butler U.	195	1,691	1,227	0	216	113	135	0
Drake U.	195	1,691	1,211	89	150	177	64	0
Macalester C.	195	1,691	943	51	459	0	238	0
Manhattan C.	198	1,641	440	316	367	518	0	0
Trinity C., Hartford	199	1,620	1,049	0	533	4	34	0
Alaska Pacific U.	200	1,607	581	0	0	1,015	0	11
Marshall B. Ketchum U.	201	1,559 i	383 i	0 i	779 i	397 i	0 i	0 i
Union C., Schenectady	202	1,479	750	0	596	2	107	24
U. Ana G. Mendez, Gurabo	203	1,419	1,407	0	12	0	0	0

TABLE 38

Higher education R&D expenditures at private institutions, ranked by all R&D expenditures, by source of funds: FY 2022

(Dollars in thousands)

Institution	Rank	All R&D expenditures	Source of funds					
			Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Suffolk U.	204	1,401	340	0	996	0	65	0
Kenyon C.	205	1,330	1,021	0	162	0	123	24
Albion C.	206	1,300 i	323 i	0 i	977 i	0 i	0 i	0 i
Marymount U.	207	1,298	178	31	965	66	58	0
Saint John's U.	207	1,298 i	0 i	0 i	1,298 i	0 i	0 i	0 i
Keck Graduate Institute	209	1,282	643	0	153	165	321	0
Whitman C.	210	1,270	434	25	617	0	194	0
Northland C.	211	1,265 i	778 i	35 i	192 i	0 i	260 i	0 i
C. of Saint Benedict	212	1,228 i	51 i	0 i	1,177 i	0 i	0 i	0 i
Heidelberg U.	213	1,184	262	661	246	0	15	0
Clafin U.	214	1,179	1,179	0	0	0	0	0
Bentley U.	215	1,161	509	0	0	0	652	0
Canisius C.	216	1,160	454	0	0	0	706	0
U. Hartford	217	1,090	886	17	117	6	64	0
U. Puget Sound	218	1,051	780	0	174	0	97	0
Ithaca C.	219	1,000	703	46	149	0	23	79
Robert Morris U.	219	1,000 i	577 i	13 i	235 i	67 i	81 i	27 i
St. Catherine U.	221	933	300	0	83	30	364	156
Kettering U.	222	816	213	34	294	214	57	4
Augustana U.	223	724	724	0	0	0	0	0
Mercyhurst U.	224	661	82	387	59	108	6	19
California Lutheran U.	225	627	298	0	116	178	35	0
Sonoran U. Health Sciences	226	520	0	0	20	500	0	0
U. Charleston	227	217	217	0	0	0	0	0

i = imputed. NA = not available; data were not provided by institution.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$2,056,063 thousand in total R&D expenditures in FY 2022.**Note(s):**Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).**Source(s):**

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 39

Total and federally financed higher education R&D expenditures in the computer and information sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
All institutions	-	2,637,165	2,924,673	2,952,940	3,224,949	1,794,451	1,999,926	1,994,423	2,184,767
Johns Hopkins U. ^a	1	199,773 i	226,696 i	270,040 i	270,237 i	189,011	216,738	258,141	258,511
Carnegie Mellon U.	2	171,110	192,119	196,380	211,839	105,289	119,057	131,071	131,579
Georgia Institute of Technology	3	164,657	185,400	146,318	161,111	145,305	162,577	121,473	127,768
Massachusetts Institute of Technology	4	96,682	111,779	116,877	124,985	43,216	54,491	62,186	68,540
U. Southern California	5	124,944	121,116	115,694	112,104	118,059	115,564	110,401	106,239
U. Illinois, Urbana-Champaign	6	106,430	95,988	99,600	104,436	71,231	64,385	63,076	59,157
U. Texas, Austin	7	66,125	139,290	87,595	100,730	56,350	128,322	79,109	88,477
Pennsylvania State U., University Park and Hershey Medical Center	8	69,638	89,490	73,737	79,162	56,256	76,419	56,263	62,351
U. Maryland ^b	9	47,841	50,541	50,483	63,281	32,963	34,576	33,768	38,622
U. Alabama, Huntsville	10	29,177	36,636	48,967	60,893	28,023	35,309	45,627	54,406
Indiana U., Bloomington	11	36,195	41,892	38,843	40,488	21,764	24,346	23,657	27,634
U. North Carolina, Chapel Hill	12	23,146	26,765	32,344	39,486	19,037	20,870	27,834	32,390
Purdue U., West Lafayette	13	23,177	27,886	22,324	38,868	14,972	20,261	15,679	30,059
Columbia U. in the City of New York	14	24,725	25,101	27,763	31,786	22,935	22,817	24,889	26,721
U. Chicago	15	26,606	24,422	26,205	31,302	25,298	23,454	25,470	30,256
U. Massachusetts, Amherst	16	27,702	31,199	27,336	30,721	16,035	16,804	15,410	17,579
U. Wisconsin-Madison	17	20,372	28,241	23,678	30,295	13,735	15,975	14,687	19,278
Cornell U.	18	29,330	31,173	28,125	29,874	19,491	18,829	19,456	20,092
U. Pennsylvania	19	26,968	26,318	27,396	29,513	16,242	15,361	16,523	16,990
U. Utah	20	40,967 i	37,159 i	33,446 i	29,132	25,364	23,621	21,958	26,098
U. California, San Diego	21	28,302	30,370	46,962	28,879	13,478	16,179	18,932	24,372
U. Minnesota, Twin Cities	22	22,227	22,996	22,629	28,809	9,064	9,283	9,509	8,091
Virginia Polytechnic Institute and State U.	23	23,536	30,405	25,466	28,642	9,830	11,637	8,484	9,291
Princeton U.	24	19,725	24,160	23,518	28,066	10,723	14,612	14,768	16,783
Northeastern U.	25	19,362	21,118	21,505	27,623	15,979	17,176	16,182	17,903
U. Virginia, Charlottesville	26	20,017	26,286	24,669	27,291	14,945	20,924	20,384	21,875
Ohio State U.	27	23,393	22,869	16,691	27,225	9,151	8,892	6,904	9,761
U. Central Florida	28	29,865	29,421	32,242	26,882	18,069	18,093	21,437	17,352
U. Washington, Seattle	29	24,969	27,986	26,869	25,836	16,374	18,140	17,605	17,137
Texas A&M U., College Station and Health Science Center	30	21,800	18,504	19,178	25,705	10,724	9,988	12,013	17,584
Stanford U.	31	24,575	26,512	23,232	25,448	12,782	15,368	14,181	15,804
George Mason U.	32	31,219	23,969	24,420	25,373	28,895	21,728	19,379	19,743
U. Louisiana, Lafayette	33	11,650	11,111	16,823	25,361	2,169	1,050	3,227	12,682
U. California, Irvine	34	19,463	21,573	23,444	24,680	10,548	10,957	11,215	12,523

TABLE 39

Total and federally financed higher education R&D expenditures in the computer and information sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Harvard U.	35	15,229	15,250	20,858	21,712	12,576	11,955	11,767	13,098
U. Texas, San Antonio	36	12,132	12,064	19,203	21,484	7,721	5,470	11,594	13,737
Arizona State U.	37	21,871	22,231	22,498	21,414	11,734	15,176	14,325	14,710
North Carolina State U.	38	14,614	16,119	17,016	20,889	10,351	11,737	12,833	12,459
SUNY, U. Buffalo	39	15,899	18,747	17,679	20,493	9,268	10,894	8,770	8,443
U. Colorado Boulder	40	14,909	15,627	16,468	19,612	14,061	14,941	15,321	18,032
Louisiana State U., Baton Rouge	41	6,538	8,284	15,399	18,477	4,051	5,502	10,944	14,250
Florida International U.	42	14,911	16,175	16,708	18,348	10,990	9,863	8,929	9,924
Georgetown U.	43	3,836	18,620	19,590	18,321	2,137	3,947	3,703	2,402
U. Arizona	44	12,370	15,084	16,503	18,270	7,066	7,670	8,999	10,037
Dartmouth C. and Dartmouth Hitchcock Medical Center	45	15,753	14,889	18,556	17,794	5,230	5,114	5,783	4,922
U. Hawaii, Manoa	46	10,173	11,963	11,590	17,690	9,899	11,055	11,062	17,342
Boston U.	47	11,919	14,251	14,542	17,480	5,295	5,902	6,725	7,577
Brown U.	48	14,727	15,695	14,984	16,895	10,694	10,937	10,480	11,643
U. Michigan, Ann Arbor	49	12,983	15,180	13,922	16,789	4,804	6,046	5,841	9,398
U. Alabama, Tuscaloosa	50	12,482	12,836	12,797	16,400	4,439	4,044	4,438	5,591
Michigan State U.	51	19,013	15,783	15,996	15,978	8,474	7,631	6,720	7,450
U. Florida	52	13,569	13,006	15,238	15,896	8,507	9,016	8,849	10,685
U. Notre Dame	53	16,400	14,904	13,961	15,067	10,201	8,265	8,037	6,781
U. California, Los Angeles	54	15,867	17,480	16,186	14,755	8,724	10,302	10,475	9,952
Rensselaer Polytechnic Institute	55	11,282	14,686	13,145	14,752	5,853	4,377	5,398	5,250
New York U.	56	14,607	14,584	15,246	14,731	8,151	9,125	9,830	9,646
New Mexico Institute of Mining and Technology	57	1,169	2,780	6,732	14,645	1,062	2,748	6,668	13,911
Vanderbilt U. and Vanderbilt U. Medical Center	58	0	0	18,226	14,617	0	0	12,495	13,064
U. Maryland, Baltimore County	59	8,065	11,590	12,102	13,685	4,989	6,765	7,385	7,816
U. California, Santa Barbara	60	10,965	9,231	11,503	13,354	6,351	5,973	6,064	7,620
SUNY, Stony Brook U.	61	9,726	10,909	12,621	12,929	7,788	8,530	10,753	10,872
U. Illinois, Chicago	62	10,522	12,999	12,103	12,880	5,679	7,580	6,425	6,989
U. California, Berkeley	63	12,125	12,701	9,583	12,736	690	255	201	1,157
U. Pittsburgh, Pittsburgh	64	9,734	9,312	10,455	11,763	6,889	6,612	6,917	8,113
California Institute of Technology	65	14,405	15,072	13,508	11,363	10,511	11,277	9,772	7,541
Naval Postgraduate School	66	11,598	7,345	6,058	11,304	6,843	4,608	3,953	4,953
U. Nebraska, Lincoln	67	8,919	8,541	9,905	11,208	4,828	4,420	4,327	3,973
Rice U.	68	11,939	10,760	11,623	11,172	10,013	7,698	8,006	7,325
U. Tennessee, Knoxville ^c	69	14,744	13,906	11,725	10,765	10,706	11,049	8,756	7,689

TABLE 39

Total and federally financed higher education R&D expenditures in the computer and information sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
New Jersey Institute of Technology	70	10,619	10,325	11,575	10,764	3,885	3,428	3,448	3,214
U. Dayton	71	4,245	7,200	7,528	10,551	3,453	5,964	6,724	10,116
U. Texas, Dallas	72	8,136	9,992	8,945	10,179	4,763	6,289	6,367	6,495
Northwestern U.	73	3,035	8,441	8,957	10,117	1,459	5,024	5,873	6,580
Worcester Polytechnic Institute	74	7,301	10,150	10,707	10,044	5,023	7,300	7,405	7,543
Rochester Institute of Technology	75	6,328	8,910	8,809	9,956	3,189	5,556	5,662	5,594
U. Massachusetts, Lowell	76	7,481	7,153	7,420	9,858	4,108	4,051	4,440	6,127
U. South Florida ^d	77	7,707	9,417	11,614	9,503	3,184	2,582	2,875	4,608
Rutgers, State U. New Jersey, New Brunswick	78	5,881	6,402	6,316	9,306	4,381	4,851	3,942	5,254
U. North Texas, Denton	79	5,879	4,769	7,269	9,124	1,966	1,262	2,189	2,610
Florida State U.	80	11,557	10,349	10,320	9,004	3,787	3,969	3,710	3,159
U. North Carolina, Charlotte	81	10,468	10,163	18,214	8,681	8,286	8,343	8,282	7,560
Yale U.	82	5,996	5,969	7,379	8,675	4,245	3,666	5,107	6,245
Clemson U.	83	5,193	4,852	7,040	8,664	2,663	2,355	3,143	4,950
Washington State U.	84	8,705	8,251	8,393	8,523	3,520	4,027	4,772	5,753
Rockefeller U.	85	8,037	9,058	8,886	8,486	0	0	0	0
U. Texas, Arlington	86	7,191	7,572	6,865	8,415	2,575	2,817	2,674	2,977
Duke U.	87	5,845	6,019	5,273	8,320	5,497	5,535	4,468	7,363
George Washington U.	88	8,578	7,308	7,326	8,137	4,266	3,135	2,907	3,209
Michigan Technological U.	89	2,158	2,994	4,582	7,889	588	1,054	2,074	4,749
U. Texas, El Paso	90	5,851	7,597	6,234	7,833	4,796	5,639	4,670	5,880
SUNY, Binghamton U.	91	7,176	7,873	8,490	7,724	2,607	2,734	1,910	1,737
Mississippi State U.	92	6,944	5,189	5,546	7,546	3,822	1,749	2,269	4,566
U. California, Riverside	93	9,450	8,974	8,295	7,468	7,221	5,999	5,841	5,927
Virginia Commonwealth U.	94	1,286	2,138	6,270	7,073	1,286	1,584	1,335	1,398
U. Arkansas, Fayetteville	95	5,088	4,591	5,882	6,819	2,008	1,753	2,541	4,113
U. Memphis	96	9,482	8,486	7,957	6,795	6,188	4,277	4,492	5,111
Temple U.	97	4,560	5,901	6,327	6,734	2,818	2,496	2,571	3,381
U.S. Military Academy	98	1,687	469	2,305	6,651	1,687	469	1,878	6,609
U. Oklahoma, Norman and Health Science Center	99	1,752	3,019	4,661	6,637	1,354	1,285	2,414	4,383
U. Oregon	100	5,059	5,652	6,362	6,598	3,738	4,228	4,811	5,083
Drexel U.	101	4,298	4,105	5,655	6,589	2,827	2,885	4,413	5,308
U. Houston	102	4,819	5,599	4,352	6,539	3,033	2,546	2,337	3,307
U. Missouri, Columbia	103	4,567	4,187	6,866	6,157	3,924	3,674	5,692	3,774
SUNY, U. Albany	104	6,541	6,591	5,230	6,141	2,709	2,739	1,596	1,517

TABLE 39

Total and federally financed higher education R&D expenditures in the computer and information sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Nevada, Reno	105	7,812	7,550	6,843	6,103	2,858	3,390	3,896	5,808
U. Kentucky	106	3,165	4,054	4,011	5,913	1,639	1,554	2,223	3,569
Oregon State U.	107	8,869	8,213	7,241	5,820	7,304	6,218	6,182	4,593
Iowa State U.	108	8,296	7,666	5,844	5,782	4,152	4,815	3,093	2,838
U. California, Davis	109	7,562	7,256	5,934	5,764	5,544	5,005	4,367	4,762
U. Delaware	110	5,274	6,648	4,182	5,740	4,540	5,643	3,404	3,963
U. Georgia	111	3,731	3,760	4,121	5,509	1,453	1,105	1,258	2,085
U. California, Santa Cruz	112	4,401	5,009	5,128	5,441	1,910	2,199	2,407	2,943
Texas Tech U.	113	4,427	5,111	4,274	5,410	1,019	1,160	916	933
Georgia State U.	114	3,562	3,435	4,896	5,346	1,885	1,531	1,643	1,962
Wright State U.	115	2,986	2,034	3,531	5,329	1,684	871	2,740	4,576
Florida Institute of Technology	116	4,242	4,287	5,643	5,289	3,930	3,223	3,698	4,101
Auburn U., Auburn	117	4,368	5,006	5,127	5,174	1,505	1,740	2,151	1,506
Indiana U.-Purdue U., Indianapolis	118	3,920	5,006	4,643	5,049	2,106	3,307	2,798	2,759
Syracuse U.	119	5,571	5,081	5,582	4,858	2,621	1,266	1,557	1,367
U. West Florida	120	1,845	1,995	2,510	4,832	471	460	1,625	3,654
Stevens Institute of Technology	121	3,666	3,606	4,984	4,815	3,325	3,454	4,104	3,994
U. Nebraska, Omaha	122	3,287	3,185	2,588	4,810	2,097	1,827	1,591	3,575
U. Connecticut	123	5,103	5,575	5,294	4,766	2,815	3,194	3,271	2,672
Emory U.	124	2,427	2,345	2,841	4,730	113	323	964	1,817
Washington U., Saint Louis	125	5,504	5,467	4,575	4,634	4,583	4,675	4,167	4,059
U. South Carolina, Columbia	126	2,436	4,129	3,311	4,628	1,526	1,989	2,248	2,838
Dakota State U.	127	3,694	4,337	3,080	4,589	3,006	3,909	2,443	3,976
Toyota Technological Institute, Chicago	128	3,681	5,887	4,967	4,470	1,934	3,038	3,090	2,199
U. Kansas	129	4,004	4,416	3,652	4,418	2,285	2,887	2,269	2,910
U. New Mexico	130	3,649	3,964	3,657	4,264	2,616	2,876	2,760	3,287
U. Iowa	131	3,599	3,547	4,180	4,187	2,958	2,673	2,842	3,020
New Mexico State U.	132	2,705	4,539	4,043	4,103	2,296	3,869	3,464	3,334
Colorado State U., Fort Collins	133	4,278	4,278	3,621	4,052	3,761	3,645	3,125	3,517
Kansas State U.	134	2,923	3,511	3,898	3,900	1,637	1,844	2,377	2,185
U. Tulsa	135	2,426	3,139	3,521	3,849	1,660	2,531	2,365	2,909
U. Idaho	136	1,238	1,595	2,184	3,673	872	985	1,476	2,750
U. Cincinnati	137	1,516	2,031	3,614	3,655	70	123	205	507
U. Vermont	138	2,829	3,036	2,978	3,614	1,636	911	951	1,073
Oakland U.	139	847	1,073	1,150	3,608	500	482	613	949

TABLE 39

Total and federally financed higher education R&D expenditures in the computer and information sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Utah State U.	140	2,040	2,538	3,039	3,545	1,262	1,543	1,812	1,910
U. Texas Rio Grande Valley	141	824	1,520	1,581	3,543	205	252	188	1,447
Tennessee Technological U.	142	2,416	2,221	2,581	3,541	1,417	1,364	1,543	2,256
Kennesaw State U.	143	1,706	3,727	3,745	3,538	174	105	125	268
Air Force Institute of Technology	144	2,733	2,441	1,921	3,474	1,817	1,656	1,551	1,794
Boise State U.	145	1,454	1,761	1,686	3,448	764	1,216	1,197	1,733
Colorado School of Mines	146	2,782	3,748	3,894	3,443	2,593	3,461	3,746	3,135
Illinois Institute of Technology	147	3,005	2,988	2,647	3,307	2,760	2,708	2,355	2,983
Teachers C., Columbia U.	148	1,948	2,459	2,913	3,235	1,320	1,284	1,570	1,938
Brandeis U.	149	1,560	2,999	3,208	3,218	1,130	1,561	1,006	1,082
U. Arkansas, Little Rock	150	3,486	3,246	3,312	3,204	2,517	2,691	3,089	2,898
Case Western Reserve U.	151	50	34	2,407	3,165	50	34	1,888	2,580
Oklahoma State U., Stillwater	152	3,673	5,361	3,636	3,099	547	371	460	423
U. Rochester	152	3,657	4,021	3,608	3,099	3,167	3,383	3,190	2,345
Montana State U., Bozeman	154	1,427	1,459	2,625	3,026	1,104	1,149	1,141	1,386
North Dakota State U.	155	2,556	3,433	2,929	2,957	943	463	346	694
Missouri U. of Science and Technology	156	2,496	2,648	2,545	2,899	1,198	1,337	1,228	1,335
William & Mary	157	2,914	2,917	2,575	2,873	1,852	1,881	1,670	1,887
Florida Atlantic U.	158	2,170	2,586	2,479	2,776	1,119	1,309	1,562	1,715
Rutgers, State U. New Jersey, Camden	159	1,169	1,848	2,353	2,722	1,039	1,789	2,111	2,279
Old Dominion U.	160	2,530	2,196	2,693	2,672	1,061	874	1,196	1,430
Citadel Military C. South Carolina	161	ne	380	1,033	2,615	ne	378	1,023	2,608
U. Colorado Colorado Springs	162	928	1,035	1,965	2,607	865	1,023	1,921	2,394
Tufts U.	163	3,777	4,273	1,045	2,568	3,777	4,128	942	1,132
U. Massachusetts, Dartmouth	164	1,393	1,572	1,718	2,552	181	448	60	735
Northern Arizona U.	165	3,383	2,671	4,037	2,492	282	698	811	1,247
Embry-Riddle Aeronautical U.	166	0	526	2,136	2,417	0	406	1,697	1,888
Baylor U.	167	581	1,011	1,148	2,382	0	97	101	625
Lehigh U.	168	2,164	2,333	2,514	2,373	1,382	1,521	1,734	1,653
San Diego State U.	169	1,563	1,519	1,439	2,321	874	636	657	776
U. North Dakota	170	2,059	3,199	1,856	2,266	45	336	693	1,014
Rutgers, State U. New Jersey, Newark	171	1,970	2,269	2,013	2,252	1,849	2,269	1,984	1,899
U. Wyoming	172	342	581	1,580	2,220	336	541	971	1,123
Wayne State U.	173	1,881	2,133	2,158	2,214	1,145	1,066	1,353	1,568
U. Montana, Missoula	174	1,291	1,746	2,207	2,206	945	1,371	1,619	1,314

TABLE 39

Total and federally financed higher education R&D expenditures in the computer and information sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Maine	175	1,377	1,967	2,585	2,084	313	629	824	605
U. Massachusetts, Boston	176	1,949	1,242	2,709	1,996	781	525	716	724
Gallaudet U.	177	645	486	2,141	1,954	463	319	1,364	1,587
Louisiana Tech U.	178	1,856	2,475	1,952	1,938	385	726	396	314
Montclair State U.	179	427	535	314	1,888	235	117	107	445
San Francisco State U.	180	840	1,482	i 1,579	1,878	143	558	i 564	582
Tulane U.	181	2,312	2,257	1,873	1,713	1,438	1,803	1,472	1,433
Marquette U.	182	178	834	1,439	1,681	0	324	675	1,058
U. Miami	183	1,140	283	835	1,620	552	91	586	1,542
Kent State U.	184	1,766	1,766	1,509	1,619	396	605	456	445
Texas State U.	185	2,096	2,197	1,200	1,598	876	768	818	1,064
Howard U.	186	1,328	1,523	1,747	1,576	655	655	740	570
West Virginia U.	187	1,150	1,894	2,179	1,562	1,103	1,646	1,742	1,239
CUNY, Hunter C.	188	2,001	1,726	1,395	1,556	1,594	1,474	1,165	1,343
U. Nevada, Las Vegas	188	1,662	1,077	1,015	1,556	643	314	443	758
U. Southern Maine	190	1,283	1,190	1,422	1,553	0	0	0	0
Brigham Young U., Provo	191	1,578	1,350	929	1,533	1,440	1,199	841	1,097
Portland State U.	192	1,370	1,164	1,644	1,521	1,073	996	1,390	1,397
California State U., Monterey Bay	193	512	1,023	1,298	1,517	141	734	721	949
U. New Orleans	194	2,045	1,591	1,370	1,492	866	637	451	449
U. New Hampshire	195	883	854	1,057	1,465	526	576	567	606
U. South Alabama	196	3,355	3,846	3,722	1,432	3,256	3,705	3,560	1,349
Boston C.	197	559	599	663	1,399	335	411	402	883
U. California, Merced	198	157	194	1,134	1,387	157	116	862	827
U. New Haven	199	129	602	1,359	1,363	123	562	1,117	1,215
Virginia Military Institute	200	ne	ne	ne	1,304	ne	ne	ne	1,031
Saint Louis U.	201	655	1,164	1,345	1,221	412	578	734	429
Florida A&M U.	202	1,268	102	16	1,208	1,257	90	16	1,208
Towson U.	203	500	603	530	1,204	383	488	416	909
Bowie State U.	204	508	682	446	1,169	508	682	446	1,169
Creighton U.	205	846	i 730	i 928	i 1,153	i 432	i 396	i 493	i 690
Georgia Southern U.	206	134	65	1,045	1,104	94	16	99	16
U. Missouri, Kansas City	207	1,456	1,625	1,698	1,075	267	399	509	31
Middle Tennessee State U.	208	323	245	1,000	1,050	236	204	283	181
California State U., Fullerton	209	191	83	200	1,047	0	33	143	156

TABLE 39

Total and federally financed higher education R&D expenditures in the computer and information sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
North Carolina A&T State U.	210	1,861	1,742	1,227	1,008	1,658	1,567	1,148	922
Northern Illinois U.	211	935	661	944	983	383	332	669	608
James Madison U.	212	661	325	845	961	47	18	26	72
U. Alaska, Fairbanks	213	1,058	1,148	1,116	907	590	820	947	724
Pace U.	214	775	1,043	758	903	609	903	598	727
U. North Carolina, general administration	214	723	1,168	1,192	903	0	10	13	51
U. Alabama, Birmingham	216	827	1,502	1,356	898	751	1,356	1,250	897
Tuskegee U.	217	401	409	463	875	401	409	463	875
U.S. Naval Academy	218	1,190	1,519	774	867	1,176	1,413	684	804
Kean U.	219	ne	509	229	850	ne	417	151	237
U. Tennessee, Chattanooga	220	634	975	899	830	462	873	879	716
CUNY, City C.	221	990	1,490	778	820	656	803	552	524
Tarleton State U.	222	10	412	395	763	0	0	0	0
American U.	223	2,122	672	649	753	159	264	146	184
Yeshiva U.	224	0	0	0	749	0	0	0	0
U. Rhode Island	225	687	523	439	743	687	465	416	701
U. Nebraska, central administration	226	3,634	1,385	448	742	3,634	1,385	448	742
DePaul U.	227	1,661	1,528	1,552	736	1,515	1,448	1,396	613
Idaho State U.	228	792	820	686	735	707	651	503	544
Hampton U.	229	448	699	994	720	448	699	994	720
Harvey Mudd C.	230	730	791	645	711	516	640	512	573
Chapman U.	231	244	665	701	708	72	0	0	0
Xavier U. Louisiana	232	442	100	652	696	416	87	652	673
U. Colorado Denver ^e	233	na	na	475	687	na	na	411	619
California State U., San Bernardino	234	1,831	472	228	672	1,717	401	182	580
Jackson State U.	235	567	502	662	671	423	418	468	486
U. Southern Mississippi	236	443	144	232	662	440	114	182	537
Southern U. and A&M C., Baton Rouge	237	172	202	473	611	170	189	473	611
U. Central Arkansas	238	442	426	470	610	320	381	358	509
U. Puerto Rico, Rio Piedras	239	654	207	604	609	462	75	258	331
Morgan State U.	240	222	520	660	605	199	519	624	539
Elizabeth City State U.	241	ne	112	518	585	ne	101	466	348
U. North Florida	242	123	178	418	575	0	51	304	416
Rowan U.	243	391	482	588	540	131	256	453	422
U. Washington, Bothell	244	738	41	188	537	623	41	119	498

TABLE 39

Total and federally financed higher education R&D expenditures in the computer and information sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed					
		2019	2020	2021	2022	2019	2020	2021	2022		
Clarkson U.	245	506	517	776	531	427	421	700	501		
U. Hawaii, system office	246	0	1,715	1,327	520	0	1,694	1,313	515		
Fordham U.	247	635	390	287	511	160	164	101	121		
CUNY, Queens C.	248	155	182	294	508	73	135	253	313		
Smith C.	249	427	391	352	504	348	328	320	284		
Southern Methodist U.	250	1,412	683	205	494	318	290	127	247		
East Carolina U.	251	554	828	603	484	277	213	309	358		
Fayetteville State U.	252	220	131	584	472	220	131	334	233		
Miami U.	253	775	721	564	462	411	298	68	0		
Loyola U., Chicago	254	100	160	216	456	70	139	161	356		
U. North Georgia	254	12	37	335	456	0	37	335	456		
U. Virginia's C. Wise	256	ne	ne	1,174	455	ne	ne	1,174	447		
California State U., San Marcos	257	654	987	620	450	654	987	620	450		
U. South Dakota	257	363	799	174	450	82	665	86	138		
Wellesley C.	259	632	431	505	437	417	430	500	437		
Fisk U.	260	86	93	415	431	0	0	415	425		
U. Washington, Tacoma	261	555	696	224	421	555	696	216	421		
Winston-Salem State U.	262	0	443	590	419	0	443	251	339		
California State U., Dominguez Hills	263	243	700	620	413	239	633	547	346		
SUNY, C. of Environmental Science and Forestry	264	4	119	190	409	i	23	22	212		
Central Washington U.	265	5	58	202	406	5	0	177	381		
Carleton C.	266	291	111	68	402	73	33	40	80		
Wake Forest U.	267	81	226	266	401	81	59	145	308		
U. North Carolina, Greensboro	268	16	510	806	398	0	323	692	322		
Morehouse C.	269	914	1,141	540	396	914	1,141	540	396		
Clark Atlanta U.	270	405	183	160	395	383	166	103	231		
Purdue U., Northwest	271	919	524	863	394	883	491	836	369		
California State U., Long Beach	272	74	102	271	390	69	42	90	178		
Southern Illinois U., Carbondale	273	545	396	566	389	13	33	0	0		
Clafin U.	274	447	500	173	387	447	500	173	387		
Black Hills State U.	275	0	480	295	385	0	452	295	363		
Tennessee State U.	276	328	430	371	i	384	317	421	0	i	
U. Wisconsin-Milwaukee	277	337	116	193	376	260	93	157	0		
Alabama A&M U.	278	441	i	301	i	333	i	372	i	343	i
Villanova U.	279	498	527	413	360	131	179	148	57		

TABLE 39

Total and federally financed higher education R&D expenditures in the computer and information sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
California Polytechnic State U., San Luis Obispo	280	850	626	679	359	587	362	436	253
Texas A&M U.-Corpus Christi	281	1,008	222	313	355	850	204	258	301
Marymount U.	282	ne	ne	655	350	ne	ne	174	161
Ball State U.	283	1,236	1,263	1,079	348	365	258	22	128
Norfolk State U.	284	5,010	4,921	1,957	344	5,010	4,921	1,957	298
U. Baltimore	285	10	22	46	336	10	10	46	310
Bryn Mawr C.	286	332	691	356	335	222	226	134	120
Salisbury U.	287	351	346	303	328	174	57	101	225
Appalachian State U.	288	198	336	356	327	170	233	323	260
Colorado State U., Pueblo	289	43	0	190	326	0	0	190	326
New York Institute of Technology	290	181	188	303	323	181	132	183	89
Western Washington U.	291	93	318	383	316	93	274	343	196
Occidental C.	292	254	236	280	313	254	236	280	313
California State Polytechnic U., Pomona	293	225	653	360	304	216	607	335	276
Loyola Marymount U.	294	3	24	58	303	0	0	0	114
C. Charleston	295	280	162	322	300	235	90	242	190
Arkansas State U., Jonesboro	296	332	290	239	299	259	158	95	138
Augusta U.	297	24	61	141	291	23	28	84	228
U. North Carolina, Asheville	298	128	310	284	289	128	310	284	289
California State U., East Bay	299	ne	329	264	287	ne	61	0	0
U. North Carolina, Wilmington	300	110	210	244	280	69	130	209	214
Grinnell C.	301	416	357	201	278	124	76	77	123
CUNY, Brooklyn C.	302	388	403	314	273	342	356	290	251
St. Edward's U.	303	1,010	1,150	1,050	270	550	700	600	120
Saginaw Valley State U.	304	8	7	7	268	1	1	1	254
U. of the Virgin Islands	305	309	148	90	267	309	148	90	267
West Texas A&M U.	306	58	210	301	257	24	116	161	144
U. of the District of Columbia	307	0	79	242	255	0	79	242	255
U. Puerto Rico, Mayaguez	308	0	0	0	254	0	0	0	192
U. Mississippi	309	584	207	273	251	42	101	119	104
Barnard C.	310	1	149	260	250	0	60	107	101
California State U., Los Angeles	311	50	36	218	241	0	0	218	241
Texas A&M U.-San Antonio	312	ne	ne	ne	239	ne	ne	ne	151
U. Central Oklahoma	313	133	132	139	238	133	132	139	127
Mount Holyoke C.	314	273	141	152	235	226	140	150	225

TABLE 39

Total and federally financed higher education R&D expenditures in the computer and information sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
California State U., Fresno	315	46	117	141	234	46	75	141	202
Eastern Michigan U.	316	201	376	30	232	7	0	0	11
C. New Jersey	317	ne	194	178	221	ne	194	175	212
California State U., Sacramento	317	123	178	340	221	41	105	219	166
California State U., Stanislaus	319	290	331	186	215	290	331	186	208
Florida Polytechnic U.	320	112	241	193	210	49	64	112	138
U.S. Air Force Academy	320	640	490	150	210	640	490	150	150
U. San Francisco	322	27	60	16	204	0	0	0	0
Marshall U.	323	78	287	79	201	34	254	54	163
CUNY, New York City C. of Technology	324	210	177	172	195	204	177	156	164
Alabama State U.	325	0	0	0	192	0	0	0	192
Johnson C. Smith U.	326	395	11	196	i 188	395	11	180	i 164
New Mexico Highlands U.	327	ne	134	141	i 186	ne	134	141	i 184
Delaware State U.	328	1	358	i 334	185	0	156	i 179	29
U. Missouri, Saint Louis	329	25	833	187	184	11	3	100	22
Davidson C.	330	0	0	0	179	0	0	0	164
California State U., Northridge	331	189	201	380	173	91	201	358	105
Youngstown State U.	332	17	6	28	167	9	0	28	156
Hofstra U.	333	58	6	97	166	0	3	45	33
Illinois State U.	334	78	65	168	165	17	23	76	141
Amherst C.	335	38	25	150	i 164	0	0	35	61
Middlebury C.	336	269	117	241	162	269	117	241	152
Oregon Institute of Technology	337	41	i 37	i 134	i 160	i 0	0	20	i 27
St. John's U., New York	337	128	9	75	160	86	0	59	131
Western Michigan U. and Homer Stryker M.D. School of Medicine	339	212	145	169	159	130	131	150	142
Lamar U.	340	582	74	72	154	539	14	33	72
Reed C.	341	128	68	72	i 151	i 117	61	65	i 84
San Jose State U.	341	8	10	297	151	0	0	0	0
Mercer U.	343	115	136	140	149	0	15	16	3
Long Island U.	344	0	0	5	142	0	0	5	28
Texas A&M U.-Commerce	345	64	94	61	141	0	24	53	93
Clark U.	346	34	60	36	138	33	47	17	11
North Carolina Central U.	346	0	28	157	138	0	12	0	0
U. Houston-Downtown	348	71	95	194	135	49	86	175	133
Connecticut C.	349	56	248	168	134	24	83	65	48

TABLE 39

Total and federally financed higher education R&D expenditures in the computer and information sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Prairie View A&M U.	349	293	292	188	134	271	292	188	103
Coastal Carolina U.	351	82	56	91	133	82	56	91	133
CUNY, C. Staten Island	351	63	66	54	133	63	65	54	119
U. Minnesota, Duluth	351	283	289	242	133	111	163	136	5
Vassar C.	351	153	400	227	133	153	273	142	113
Northwestern State U. Louisiana	355	332	272	224	132	0	0	0	0
Texas Southern U.	355	250	160	136	132	225	149	106	99
U. Toledo	357	0	0	0	127	0	0	0	0
Saint Joseph's U.	358	42	136	192	126	42	118	155	85
Utah Valley U.	359	ne	ne	ne	123	ne	ne	ne	123
Northern Kentucky U.	360	62	13	34	122	0	0	3	14
Southern Connecticut State U.	361	19	11	154	121	0	0	0	2
Pomona C.	362	195	95	272	120	112	95	118	50
Williams C.	362	115	110	113	120	60	58	62	47
U. Louisville	364	309	97	71	119	112	0	14	78
South Carolina State U.	365	100	104	108	117	100	104	108	117
Bucknell U.	366	200	122	114	113	24	84	82	10
CUNY, system office	366	338	215	158	113	284	84	0	8
Indiana U. Pennsylvania	366	10	331	165	113	8	0	34	113
Grand Valley State U.	369	14	9	31	111	0	0	6	8
Texas Christian U.	370	26	126	86	106	26	101	86	104
U. Nebraska, Kearney	371	0	6	43	105	0	0	0	0
Northeastern Illinois U.	372	217	39	46	104	217	39	46	104
Oklahoma State U., Center for Health Sciences	372	89	95	99	104	0	0	0	0
Colgate U.	374	362	188	214	101	242	165	180	79
Central Michigan U.	375	2	105	87	100	0	0	0	0
Bowling Green State U.	376	295	274	192	97	110	67	22	1
Colby C.	376	37	14	94	97	36	14	78	63
Seattle U.	378	35	21	0	93	0	0	0	1
Sul Ross State U.	379	0	0	0	92	0	0	0	49
Tougaloo C.	379	0	0	0	92	0	0	0	92
Ohio U.	381	712	703	271	89	165	103	243	21
U. Hawaii, Hilo	381	0	1	94	89	0	1	91	82
Rhode Island C.	383	15	63	24	85	15	60	24	85
Framingham State U.	384	ne	0	0	82	ne	0	0	20

TABLE 39

Total and federally financed higher education R&D expenditures in the computer and information sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Chicago State U.	385	0	ne	ne	78	0	ne	ne	78
U. Denver	385	111	99	22	78	111	99	22	36
U. Wisconsin-Green Bay	387	58 i	57 i	56 i	77 i	32 i	35 i	33 i	39 i
California State Polytechnic U., Humboldt	388	87	64	85	76	0	8	27	10
Claremont Graduate U.	388	306	207	55	76	206	98	0	0
U. Wisconsin-La Crosse	388	84	68	42	76	5	36	31	62
Bentley U.	391	ne	ne	ne	75	ne	ne	ne	75
Hope C.	392	0	28	63	74	0	0	0	0
Calvin U.	393	255	59 i	66 i	73 i	10	44 i	44 i	44
Trinity U.	394	29	50	64	72	0	15	26	27
Southern Illinois U., Edwardsville	395	80	151	49	71	80	39	11	1
Swarthmore C.	395	12	15	16	71	0	6	0	55
U. of the Pacific	397	0	0	0	70	0	0	0	0
California State U., Channel Islands	398	2	0	22	69	0	0	0	62
Union C., Schenectady	398	312	7	59	69	293	3	57	49
Western New England U.	398	ne	ne	ne	69	ne	ne	ne	69
Pacific U.	401	0	0	0	66	0	0	0	0
Meharry Medical C.	402	0	0	0	65	0	0	0	65
Milwaukee School of Engineering	402	0	0	47	65	0	0	47	65
Bowdoin C.	404	16	84	81	64	13	72	74	51
Winthrop U.	404	0	0	36	64	0	0	36	58
Albion C.	406	17	1	1 i	63 i	0	0	0 i	46 i
Wichita State U.	406	0	0	0	63	0	0	0	0
William Paterson U.	408	133	125	178	60	0	0	0	0
Ithaca C.	409	ne	39	73	57	ne	39	73	57
Nova Southeastern U.	409	246	146	32	57	216	125	0	0
Lawrence Technological U.	411	31	63	54	53	31	63	54	53
U. Alaska, Anchorage	412	685	165	166	48	578	150	63	31
Haverford C.	413	86 i	101 i	39 i	47 i	52	39	16	18
Pennsylvania State U., Behrend	413	138	119	112	47	47	37	77	29
U. Wisconsin-Eau Claire	415	0	0	0	46	0	0	0	0
South Dakota State U.	416	0	13	32	44	0	0	0	0
U. Akron	416	7	1	32	44	0	0	32	43
U. Wisconsin-Platteville	416	18 i	18 i	37 i	44 i	12 i	12 i	22 i	27 i
Robert Morris U.	419	ne	ne	ne	41 i	ne	ne	ne	29 i

TABLE 39

Total and federally financed higher education R&D expenditures in the computer and information sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Bates C.	420	47	113	19	40	47	113	19	33
West Chester U. Pennsylvania	421	25	7	21	39	0	0	0	0
Southeastern Louisiana U.	422	31	29	2	38	16	5	0	0
SUNY, Oswego	422	27	84	56	38	14	52	38	30
U. Texas, Tyler	422	32	50	21	38	28	26	13	37
Lafayette C.	425	124	101	76	35	117	85	46	7
Franklin and Marshall C.	426	90	7	70	33	46	0	0	0
Azusa Pacific U.	427	12	148	92	29	0	0	9	0
Furman U.	428	22	45	53	28	9	0	0	0
Northern Michigan U.	428	0	0	37	28	0	0	37	14
Central Connecticut State U.	430	16	21	33	27	0	0	0	0
Spelman C.	431	86	34	13	26	86	34	13	26
Elon U.	432	90	36	41	25	42	0	0	0
Roger Williams U.	432	0	0	0	25	0	0	0	0
Claremont McKenna C.	434	0	0	0	24	0	0	0	24
U. Detroit Mercy	434	0	20	0	24	0	0	0	23
U. Michigan, Dearborn	434	0	11	61	24	0	0	0	0
C. of Saint Benedict	437	53 i	51 i	19 i	23 i	24 i	23 i	2 i	3 i
Saint John's U.	437	26 i	25 i	20 i	23 i	0 i	0 i	0 i	0 i
Whitman C.	439	12	0	ne	22	0	0	ne	0
U. Houston-Clear Lake	440	37	111	34	21	21	96	23	2
U. of Mary Washington	441	1	45	82	20	0	15	19	14
Drake U.	442	0	ne	1	19	0	ne	0	1
Kettering U.	442	15	22	5	19	0	0	0	8
U. Richmond	442	0	0	0	19	0	0	0	0
Montana Technological U.	445	0	0	0	18	0	0	0	0
Skidmore C.	445	1	6	14	18	0	0	0	0
U. Texas of the Permian Basin	445	ne	0	0	18	ne	0	0	0
Fort Lewis C.	448	0	0	0	17	0	0	0	0
Macalester C.	448	119	140	70	17	0	0	0	0
C. Wooster	450	0	112	14 i	16	0	0	0 i	0
St. Cloud State U.	450	116	75	233	16	86	0	182	9
East Stroudsburg U. Pennsylvania	452	ne	ne	ne	15	ne	ne	ne	0
Hobart and William Smith Colleges	453	0	0	4	13	0	0	0	0
Lewis and Clark C.	453	32	32	0	13	32	27	0	0

TABLE 39

Total and federally financed higher education R&D expenditures in the computer and information sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. of St. Thomas (MN)	455	35	17	328	11	10	17	323	7
CUNY, Lehman C.	456	0	476	81	9	0	0	0	0
Eastern Connecticut State U.	456	6	86	248	9	0	0	0	0
Trinity C., Hartford	456	3	4	9	9	0	0	0	0
Pennsylvania State U., Harrisburg	459	382	130	2	8	5	2	1	5
Sam Houston State U.	459	49	18	26	8	0	0	0	0
SUNY, C. Brockport	459	0	3	0	8	0	0	0	0
Western Kentucky U.	462	18	13	0	7	0	0	0	0
CUNY, Graduate Center	463	0	0	22	6	0	0	22	6
U. Maryland Center for Environmental Science	463	0	2	40	6	0	0	0	0
Florida Gulf Coast U.	465	145	41	13	5	27	41	13	0
Kentucky State U.	465	110	32	15	5	110	32	15	5
Minnesota State U., Mankato	465	40	0	0	5	0	0	0	5
Sonoma State U.	465	ne	8	12	5	ne	0	0	0
U. Northern Iowa	465	0	0	18	5	0	0	0	0
Willamette U.	465	0	0	0	5	0	0	0	0
Austin Peay State U.	471	11	0	1	3	0	0	0	0
Hamilton C.	471	8	89	4	3	0	0	0	0
New School	471	0	6	19	3	0	0	0	0
Stephen F. Austin State U.	471	0	0	14	3	0	0	0	0
SUNY, Buffalo State	471	0	0	0	3	0	0	0	3
Texas Woman's U.	471	15	14	11	3	15	14	11	0
U. Hartford	471	7	5	1	3	7	5	1	0
West Virginia State U.	478	0	110	2	2	0	99	2	2
CUNY, Baruch C.	479	0	46	45	1	0	46	45	0
Missouri State U.	479	2	53	42	1	2	48	15	0
Plymouth State U.	479	ne	ne	ne	1	ne	ne	ne	1
Texas A&M International U.	479	2	80	0	1	0	0	0	0
Troy U.	479	ne	5	0	1	ne	0	0	0
U. Wisconsin-Oshkosh	479	0 i	0 i	0	1	0 i	0 i	0	0
All other surveyed institutions	-	4,966	4,193	1,644	0	2,489	2,119	1,134	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

^a Johns Hopkins University includes the Applied Physics Laboratory (APL), with \$260,517 thousand imputed for total and \$250,043 thousand reported for federally financed R&D expenditures in computer and information sciences in FY 2022. Total expenditures by field for Johns Hopkins University are flagged as imputed because APL was unable to distribute a portion of institutionally funded R&D by field.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 40

Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022												
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec								
All institutions	-	3,185,919	3,281,415	3,294,584	3,690,235	668,918	1,370,650		1,211,130	439,537							
U. California, San Diego	1	180,626	201,331	185,870	187,175	2,031	46,032		139,029	83							
Woods Hole Oceanographic Institution	2	145,169	143,240	160,059	166,020	i	30,261	i	73,100	i	15,232	i					
U. Washington, Seattle	3	123,301	135,307	128,033	152,187		55,133		11,151		77,308		8,595				
U. Colorado Boulder	4	121,624	119,824	118,876	129,830		29,149		17,039		3,165		80,477				
Texas A&M U., College Station and Health Science Center	5	113,459	107,894	106,932	122,622		6,600		14,720		95,258		6,044				
U. Alaska, Fairbanks	6	69,346	72,609	95,711	121,905		12,633		67,635		40,094		1,543				
Johns Hopkins U. ^a	7	42,585	i	65,556	i	79,257	i	96,789	i	14,132	i	41,157	i	31,292	i	10,208	i
U. Oklahoma, Norman and Health Science Center	8	71,836		84,812		91,101		89,076		78,348		10,728		0		0	
U. New Hampshire	9	48,149		51,661		55,523		86,032		29,758		7,874		48,400		0	
Columbia U. in the City of New York	10	75,900		78,288		77,515		79,949		10,448		31,192		37,609		700	
U. Maryland ^b	11	52,823		58,099		61,660		78,455		15,881		54,477		2,031		6,066	
U. Hawaii, Manoa	12	82,955		71,468		73,176		78,404		2,791		15,377		57,333		2,903	
U. Wisconsin-Madison	13	58,701		65,000		65,814		68,178		39,134		17,782		0		11,262	
Arizona State U.	14	83,703		73,544		68,116		67,062		0		67,062		0		0	
U. Miami	15	48,427		50,684		50,826		59,693		43,791		0		15,294		608	
California Institute of Technology	16	37,101		43,338		43,295	i	57,033		2,689		46,166		208		7,970	
U. Texas, Austin	17	51,155		61,145		54,009		55,612		27		43,557		9,266		2,762	
U. Rhode Island	18	50,513		42,634		52,469		54,685		11		11,031		34,107		9,536	
Colorado State U., Fort Collins	19	85,500		67,642		60,073		53,708		43,583		9,147		32		946	
U. Utah	20	27,848	i	20,011	i	47,024	i	47,824		984		30,064		0		16,776	
Oregon State U.	21	40,030		39,215		43,111		46,982		1,730		9,042		24,101		12,109	
U. California, Los Angeles	22	38,106		41,594		41,818		45,869		10,230		29,608		0		6,031	
U. California, Santa Barbara	23	35,554		40,396		37,222		43,416		0		11,828		31,404		184	
U. Maryland Center for Environmental Science	24	43,867		43,554		40,621		42,407		105		3,538		38,725		39	
Harvard U.	25	43,664		43,505		38,756		38,984		7,508		9,216		451		21,809	
William & Mary	26	32,425		33,084		34,838		38,810		0		404		38,406		0	
U. California, Santa Cruz	27	26,570		29,389		31,217		35,788		0		7,990		19,192		8,606	
Pennsylvania State U., University Park and Hershey Medical Center	28	46,390		41,590		31,930		35,715		17,891		14,664		3,160		0	
U. Arizona	29	31,075		31,148		32,088		33,859		8,419		22,276		2,186		978	

TABLE 40

Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
SUNY, Stony Brook U.	30	26,282	25,334	26,694	33,444	182	6,468	26,666	128	
Louisiana State U., Baton Rouge	31	31,853	32,283	28,763	33,440	0	5,976	20,358	7,106	
U. Delaware	32	18,346	17,697	18,173	33,416	0	6,372	18,079	8,965	
U. California, Davis	33	29,166	30,153	30,603	32,940	3,999	2,947	4,885	21,109	
Stanford U.	34	17,624	20,216	21,216	30,947	0	21,779	2,787	6,381	
North Carolina State U.	35	21,691	27,010	25,579	30,854	7,990	0	6,482	16,382	
Massachusetts Institute of Technology	36	34,015	32,718	30,961	29,992	9,549	10,258	7,724	2,461	
Princeton U.	37	24,755	23,819	29,203	29,942	13,198	8,865	0	7,879	
U. Southern Mississippi	38	29,968	29,843	26,110	27,927	0	6,014	4,736	17,177	
Rutgers, State U. New Jersey, New Brunswick	39	18,036	25,634	24,326	27,807	2,820	201	24,378	408	
U. Maine	40	25,039	24,874	24,778	25,600	0	7,634	17,930	36	
Desert Research Institute	41	23,991	22,889	22,791	24,804	5,625	19,179	0	0	
U. North Carolina, Chapel Hill	42	16,922	19,242	16,879	23,339	0	5,419	12,356	5,564	
U. Alabama, Huntsville	43	16,001	17,304	17,960	23,111	21,336	1,540	207	28	
U. Southern California	44	16,850	19,983	14,323	22,308	0	9,472	12,836	0	
U. South Florida ^C	45	25,127	24,670	19,373	22,129	168	6,802	15,159	0	
U. Nevada, Reno	46	14,563	15,077	19,030	20,831	458	18,925	615	833	
U. Maryland, Baltimore County	47	13,585	15,158	15,087	20,378	9,157	8,487	2,445	289	
U. Georgia	48	23,281	20,493	17,846	19,938	0	4,813	15,125	0	
Michigan Technological U.	49	14,388	13,896	16,272	19,663	3,177	72	7,687	8,727	
U. Wyoming	50	6,755	12,944	11,251	19,400	8,056	11,115	149	80	
Florida International U.	51	14,955	16,023	16,584	18,793	6,102	1,701	10,990	0	
U. Florida	52	17,186	17,740	16,189	18,734	0	10,773	7,961	0	
Florida State U.	53	18,343	20,816	16,252	17,014	4,282	3,371	8,283	1,078	
Mississippi State U.	54	10,928	17,335	15,520	16,607	1,177	11,275	4,046	109	
San Jose State U.	55	12,777	13,747	14,857	16,303	2,376	584	12,491	852	
U. Michigan, Ann Arbor	56	15,705	14,928	15,080	15,865	0	15,865	0	0	
New Mexico Institute of Mining and Technology	57	6,791	6,729	7,309	15,847	0	15,847	0	0	
SUNY, U. Albany	58	15,833	15,523	15,605	15,821	14,414	1,407	0	0	
Georgia Institute of Technology	59	12,260	12,904	13,998	14,771	338	13,788	645	0	

TABLE 40

Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
Texas A&M U.-Corpus Christi	60	13,494	11,900	12,296	14,478	515	1,606	8,063	4,294	
George Mason U.	61	11,598	10,679	12,577	14,205	6,176	6,732	972	325	
U. Kansas	62	10,594	10,485	11,923	13,717	1,174	12,543	0	0	
U. Massachusetts, Dartmouth	63	11,550	10,917	12,196	13,329	0	0	13,329	0	
U. Minnesota, Twin Cities	64	14,391	14,715	13,634	13,095	0	13,095	0	0	
U. Hawaii, system office	65	10,531	11,853	11,591	12,125	12,125	0	0	0	
U. California, Irvine	66	11,580	12,705	13,034	11,555	112	11,443	0	0	
Nova Southeastern U.	67	8,878	11,436	10,973	11,526	0	0	11,526	0	
U. California, Riverside	68	10,774	10,855	10,303	11,310	0	2,988	0	8,322	
U. Connecticut	69	10,974	9,186	10,483	11,254	0	1,150	10,104	0	
U. Pittsburgh, Pittsburgh	70	13,185	10,875	9,952	11,232	0	2,904	0	8,328	
Texas Tech U.	71	8,213	8,913	9,282	11,018	688	5,768	0	4,562	
Washington State U.	72	10,109	9,440	8,946	10,772	1	1,676	0	9,095	
U. Houston	73	10,516	9,437	9,292	10,320	10,015	18	0	287	
U. Chicago	74	9,370	9,090	8,854	10,117	0	10,117	0	0	
Brown U.	75	4,310	5,954	7,954	9,945	13	2,042	246	7,644	
Boston C.	76	5,130	5,836	7,414	9,912	7,610	2,302	0	0	
Colorado School of Mines	77	8,238	8,916	5,713	9,411	110	8,553	0	748	
Boston U.	78	8,701	8,573	7,876	9,399	0	9,390	9	0	
Ohio State U.	79	9,030	9,158	7,979	9,228	0	9,228	0	0	
Indiana U., Bloomington	80	7,220	8,053	7,960	9,084	3,076	2,975	0	3,033	
U. Wisconsin-Milwaukee	81	6,442	7,288	7,385	9,026	2,370	560	6,096	0	
Dartmouth C. and Dartmouth Hitchcock Medical Center	82	4,359	5,241	4,607	8,933	0	8,933	0	0	
Texas State U.	83	7,349	7,357	7,338	8,853	12	2,871	0	5,970	
U. of the Virgin Islands	84	830	3,639	6,508	8,729	0	278	6,000	2,451	
Montana Technological U.	85	7,235	7,825	8,222	8,666	0	8,666	0	0	
U. California, Berkeley	86	9,429	9,845	7,857	8,644	5	8,639	0	0	
U. South Carolina, Columbia	87	988	9,378	9,609	8,202	137	0	8,065	0	
Duke U.	88	11,077	9,675	7,310	8,178	0	1,455	6,723	0	
Purdue U., West Lafayette	89	7,119	10,166	7,578	8,127	7,893	0	0	234	

TABLE 40

Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
U. New Mexico	90	7,329	6,924	6,727	7,336	338	6,976	0	22	
U. Guam	91	2,753	2,696	5,047	6,937	0	492	6,281	164	
U. North Dakota	92	6,713	6,781	6,234	6,874	6,214	660	0	0	
Washington U., Saint Louis	93	5,676	5,509	6,083	6,678	0	6,678	0	0	
U. Illinois, Urbana-Champaign	94	6,868	6,281	5,521	6,575	5,175	1,400	0	0	
Michigan State U.	95	5,244	5,435	5,695	6,532	0	6,272	0	260	
Florida A&M U.	96	5,282	5,844	5,633	6,499	0	0	6,158	341	
Cornell U.	97	6,531	8,145	6,589	6,463	59	6,120	284	0	
Yale U.	98	6,995	5,916	7,021	6,411	0	6,411	0	0	
U. Virginia, Charlottesville	99	5,352	6,040	5,356	6,392	0	0	0	6,392	
U. North Carolina, Wilmington	100	5,193	5,206	4,311	6,351	0	385	5,827	139	
U. Idaho	101	5,923	4,933	4,803	5,991	177	5,711	0	103	
U. Alabama, Tuscaloosa	102	1,000	3,062	4,302	5,895	0	2,379	3,516	0	
U. Oregon	102	4,871	6,704	6,060	5,895	0	5,319	576	0	
U. Montana, Missoula	104	6,376	5,878	6,212	5,818	0	2,126	3,692	0	
Morgan State U.	105	3,955	3,384	3,298	5,672	0	5,672	0	0	
Northern Arizona U.	106	7,984	7,408	6,790	5,396	183	3,766	9	1,438	
U. Nevada, Las Vegas	107	4,526	6,342	6,082	5,393	209	4,854	0	330	
U. Toledo	108	5,659	5,748	5,309	5,367	0	5,367	0	0	
U. Arkansas, Fayetteville	109	4,449	3,499	5,686	5,333	0	5,333	0	0	
U. Central Florida	110	4,486	4,008	3,951	5,319	5,286	0	33	0	
U. Alaska, Anchorage	111	5,186	7,339	5,735	5,286	417	3,254	1,615	0	
Montana State U., Bozeman	112	5,618	5,603	5,468	5,246	0	4,372	0	874	
West Virginia U.	113	10,049	9,625	3,965	5,177	0	4,292	0	885	
Naval Postgraduate School	114	6,339	6,566	6,591	5,148	1,566	195	2,553	834	
Northeastern U.	115	4,603	4,039	4,044	5,122	0	1,168	3,954	0	
San Francisco State U.	116	4,297	3,759	3,975	4,988	298	519	3,849	322	
Tulane U.	117	4,317	4,825	4,217	4,967	0	4,967	0	0	
Southern Methodist U.	118	6,954	6,100	5,367	4,956	0	4,956	0	0	
Iowa State U.	119	3,917	4,538	5,650	4,897	0	4,897	0	0	

TABLE 40

Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
SUNY, U. Buffalo	120	3,533	3,739	4,912	4,848	0	4,848	0	0	
U. South Alabama	121	4,222	5,011	4,466	4,841	0	217	4,624	0	
New Mexico State U.	122	3,908	5,381	5,067	4,830	189	1,861	0	2,780	
Auburn U., Auburn	123	2,690	3,460	4,008	4,791	72	3,170	92	1,457	
U. Texas, San Antonio	124	1,178	2,354	3,429	4,787	0	2,576	129	2,082	
East Carolina U.	125	3,684	4,586	4,564	4,751	0	907	3,844	0	
Rice U.	126	4,341	5,152	4,786	4,738	0	4,738	0	0	
Virginia Polytechnic Institute and State U.	127	4,185	3,068	3,534	4,652	149	4,480	0	23	
U. Texas, El Paso	128	3,168	3,426	3,757	4,565	0	4,550	0	15	
U. California, Merced	129	2,916	2,943	3,849	4,454	374	1,675	12	2,393	
U. Louisiana, Lafayette	130	3,957	5,426	6,277	4,439	0	2,697	811	931	
U. Massachusetts, Amherst	131	6,569	4,265	3,582	4,378	0	4,378	0	0	
U. Memphis	132	4,117	5,493	4,089	4,298	0	4,046	0	252	
U. Vermont	133	772	2,716	3,237	4,278	2,221	2,052	0	5	
U. Puerto Rico, Mayaguez	134	5,676	5,487	2,014	4,127	0	629	2,998	500	
Saint Louis U.	135	1,281	1,174	2,264	3,879	0	3,879	0	0	
Old Dominion U.	136	4,907	4,166	3,775	3,787	0	0	3,787	0	
U. Maryland, Eastern Shore	137	4,369	3,454	4,182	3,778	0	0	3,778	0	
U. Massachusetts, Boston	138	5,249	3,848	2,960	3,666	0	1,818	1,833	15	
Oklahoma State U., Stillwater	139	2,613	2,870	3,119	3,663	0	3,663	0	0	
U. Iowa	139	2,088	2,441	1,971	3,663	0	1,684	0	1,979	
Baylor U.	141	2,685	2,185	2,731	3,569	1,686	1,471	342	70	
U. Washington, Tacoma	142	1,827	2,089	2,838	3,535	0	0	3,535	0	
Western Washington U.	143	3,822	3,897	3,379	3,298	0	1,921	1,377	0	
U. Kentucky	144	2,331	2,966	3,356	2,948	0	2,948	0	0	
Grand Valley State U.	145	2,818	2,887	2,803	2,928	0	15	0	2,913	
Boise State U.	146	3,536	3,660	3,129	2,927	106	2,114	51	656	
Ohio U.	147	1,618	1,697	2,183	2,847	54	2,793	0	0	
Emory U.	148	1,237	1,075	2,217	2,792	0	0	0	2,792	
Florida Gulf Coast U.	149	877	1,654	2,475	2,791	0	0	2,791	0	

TABLE 40

Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
U. Rochester	150	2,765	3,104	2,536	2,724	0	2,724	0	0	
California State U., Monterey Bay	151	1,327	1,281	1,953	2,702	0	291	2,008	403	
San Diego State U.	152	2,582	2,234	2,158	2,684	0	1,392	664	628	
U. Tennessee, Knoxville ^d	153	5,557	5,322	5,062	2,609	0	2,609	0	0	
Tarleton State U.	154	3,504	3,188	3,745	2,594	0	1,202	0	1,392	
U. Puerto Rico, Rio Piedras	155	2,537	3,754	3,409	2,586	0	2,271	315	0	
Hampton U.	156	3,779	3,454	2,881	2,576	1,710	0	864	2	
CUNY, City C.	157	2,459	1,699	1,600	2,547	0	1,867	680	0	
U. Massachusetts, Lowell	158	1,977	2,177	2,614	2,493	770	1,723	0	0	
Rutgers, State U. New Jersey, Newark	159	3,313	1,485	1,873	2,487	0	2,487	0	0	
C. Charleston	160	1,212	1,048	1,156	2,470	47	1,933	490	0	
Syracuse U.	161	3,913	3,060	3,005	2,463	0	2,463	0	0	
Montclair State U.	162	1,685	1,262	1,815	2,393	0	1,860	454	79	
Georgia State U.	163	1,268	1,104	1,500	2,276	0	2,276	0	0	
U. Nebraska, Lincoln	164	3,639	2,943	2,186	2,220	0	2,220	0	0	
Rensselaer Polytechnic Institute	165	1,931	2,837	1,868	2,214	0	2,214	0	0	
Utah State U.	166	1,150	511	2,146	2,173	1,462	711	0	0	
Idaho State U.	167	1,447	1,792	1,627	2,092	0	1,502	0	590	
Western Michigan U. and Homer Stryker M.D. School of Medicine	168	1,546	1,402	1,660	2,077	0	2,077	0	0	
California Polytechnic State U., San Luis Obispo	169	1,362	1,105	1,106	2,006	0	0	2,006	0	
Florida Institute of Technology	170	2,096	2,310	3,254	1,985	671	0	1,119	195	
U. Texas Rio Grande Valley	171	2,049	1,769	1,649	1,981	0	93	1,647	241	
Sonoma State U.	172	ne	571	1,617	1,938	0	280	170	1,488	
U. Pennsylvania	173	2,455	1,760	1,929	1,856	0	1,856	0	0	
Portland State U.	174	2,090	2,212	1,818	1,826	476	1,271	79	0	
Embry-Riddle Aeronautical U.	175	818	1,336	1,200	1,823	1,823	0	0	0	
SUNY, Binghamton U.	176	2,026	1,916	1,636	1,789	0	1,789	0	0	
U. Hawaii, Hilo	177	842	894	1,195	1,770	0	1,091	635	44	
Vanderbilt U. and Vanderbilt U. Medical Center	178	1,586	1,919	1,861	1,737	0	1,737	0	0	
Pennsylvania State U., Behrend	179	1,154	250	1,249	1,727	237	27	1,463	0	

TABLE 40

Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022									
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec					
Bowling Green State U.	180	1,112	1,903	1,875	1,679	0	346	1,333	0					
U. Mississippi	181	1,726	1,151	1,306	1,614	226	950	409	29					
U. New Orleans	182	1,778	1,585	1,244	1,576	24	1,551	1	0					
U. Missouri, Columbia	183	1,335	988	1,249	1,575	0	1,543	32	0					
Coastal Carolina U.	184	1,573	1,690	1,415	1,573	328	47	1,180	18					
Monmouth U.	185	1,082	1,621	1,492	1,572	0	0	1,572	0					
Alaska Pacific U.	186	1,406	1,196	1,005	1,548	0	35	1,236	277					
Southern Illinois U., Carbondale	187	1,354	848	1,643	1,522	4	649	0	869					
Temple U.	188	1,559	2,044	2,108	1,498	0	1,498	0	0					
Northwestern U.	189	1,547	1,351	1,342	1,443	0	1,443	0	0					
Occidental C.	190	817	1,086	1,201	1,416	i	0	165	1,251	i				
Central Washington U.	191	2,110	1,525	1,204	1,394	0	1,394	0	0					
Indiana U.-Purdue U., Indianapolis	192	926	1,272	938	1,393	0	1,393	0	0					
Carleton C.	193	1,607	863	900	1,374	0	1,374	0	0					
Florida Atlantic U.	194	1,149	1,186	2,013	1,332	236	0	0	1,096					
Northern Illinois U.	195	395	553	803	1,320	66	789	0	465					
Kansas State U.	196	2,337	1,479	1,130	1,295	0	1,295	0	0					
Amherst C.	197	169	439	567	i	1,265	0	1,265	0	0				
CUNY, Hunter C.	198	1,147	1,339	1,010	1,197	0	1,197	0	0					
Heidelberg U.	199	1,222	1,125	1,725	1,184	0	0	1,184	0					
California State U., Northridge	200	1,832	2,158	731	1,181	0	468	395	318					
Western Kentucky U.	201	979	842	1,013	1,142	48	1,094	0	0					
Lehigh U.	202	1,191	1,510	1,087	1,124	0	1,082	42	0					
SUNY, C. of Environmental Science and Forestry	203	554	1,211	995	1,103	i	173	i	595	i	159	i	176	i
SUNY, Buffalo State	204	1,050	895	869	1,098	0	369	0	729					
American U.	205	482	642	1,035	1,091	0	0	0	1,091					
Kent State U.	206	942	958	1,038	1,088	6	882	134	66					
U. North Carolina, Charlotte	207	1,111	1,009	1,054	1,077	0	1,077	0	0					
Air Force Institute of Technology	208	967	742	175	1,025	1,025	0	0	0					
U. Cincinnati	209	1,143	1,171	913	993	0	993	0	0					

TABLE 40

Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
Appalachian State U.	210	583	499	357	987	732	255	0	0	
Tufts U.	211	482	472	377	982	0	797	142	43	
CUNY, York C.	212	85	527	543	953	0	953	0	0	
South Dakota State U.	212	1,933	904	801	953	0	721	0	232	
U. Illinois, Chicago	214	701	1,021	943	948	0	948	0	0	
Hawaii Pacific U.	215	324	220	289	947	0	947	0	0	
SUNY, C. Plattsburgh	216	850	824	813	905	0	125	780	0	
Duquesne U.	217	84	584	510	886	0	886	0	0	
Salisbury U.	218	1,334	891	988	882	0	784	0	98	
James Madison U.	219	1,003	753	628	870	0	817	0	53	
California State Polytechnic U., Humboldt	220	1,490	1,464	1,141	863	27	116	703	17	
U. Dayton	221	428	359	465	851	565	286	0	0	
Clark U.	222	1,787	1,890	1,197	843	92	282	278	191	
Miami U.	223	1,031	1,354	1,071	829	0	829	0	0	
California State U., East Bay	224	ne	1,029	927	816	206	76	534	0	
U. Texas, Dallas	225	907	856	598	815	0	815	0	0	
California State U., Sacramento	226	909	839	752	808	0	808	0	0	
Colorado C.	227	109	96	114	806	0	806	0	0	
North Dakota State U.	228	714	553	680	804	0	804	0	0	
New York U.	229	434	401	436	800	0	548	252	0	
Rockefeller U.	229	974	986	660	800	0	0	0	800	
Stockton U.	231	2,484	2,789	885	798	0	0	798	0	
Brigham Young U., Provo	232	567	461	853	787	0	787	0	0	
Delaware State U.	233	633	385	377	752	0	292	460	0	
Carnegie Mellon U.	234	994	448	364	736	265	425	0	46	
Colgate U.	235	511	453	677	728	0	612	0	116	
Savannah State U.	236	633	728	815	694	131	0	476	87	
U. North Texas, Denton	237	1,444	2,064	1,879	687	0	687	0	0	
Central Michigan U.	238	661	677	557	683	254	221	208	0	
U. Texas, Arlington	239	1,289	877	867	668	0	668	0	0	

TABLE 40

Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
U. New England	240	1,405	936	867	662	0	0	662	0	
U. Akron	241	192	285	467	659	0	659	0	0	
Towson U.	242	653	709	481	654	0	654	0	0	
U. Colorado Denver ^e	243	na	na	379	650	608	42	0	0	
Georgia Southern U.	244	774	719	890	642	0	395	185	62	
Austin Peay State U.	245	14	596	611	635	0	632	0	3	
Case Western Reserve U.	246	591	523	536	634	0	634	0	0	
Wesleyan U.	247	444	821	450	632	0	632	0	0	
California State U., Chico	248	140	395	426	624	0	624	0	0	
Southern Illinois U., Edwardsville	249	1,383	1,979	2,542	604	0	460	0	144	
Des Moines U.	250	82	197	459	600	0	461	139	0	
Villanova U.	251	809	826	443	565	0	478	87	0	
CUNY, Queens C.	252	427	817	402	561	0	561	0	0	
U.S. Naval Academy	253	1,079	775	649	550	0	0	550	0	
Skidmore C.	254	762	632	320	547	0	547	0	0	
U. Minnesota, Duluth	255	3,466	2,480	451	528	0	528	0	0	
Middlebury C.	256	270	240	425	513	0	307	0	206	
Roger Williams U.	257	700	730	777	506	8	0	443	55	
Rowan U.	258	451	409	397	494	0	494	0	0	
U. Alaska, Southeast	259	309	222	228	493	0	282	211	0	
Illinois State U.	260	809	788	591	491	0	477	0	14	
Plymouth State U.	261	ne	ne	ne	424	162	0	0	262	
Wright State U.	262	312	210	163	418	0	418	0	0	
California State U., Fullerton	263	420	329	229	414	0	212	202	0	
Hofstra U.	264	20	4	53	410	9	67	137	197	
California State U., Long Beach	265	125	514	226	399	0	399	0	0	
Oregon Institute of Technology	266	358	312	328	387	0	0	0	387	
Southern Connecticut State U.	267	168	253	300	386	2	51	333	0	
Colby C.	268	152	193	187	376	0	376	0	0	
U. San Francisco	269	194	106	204	374	123	77	0	174	

TABLE 40

Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
Long Island U.	270	40	345	261	372	0	372	0	0	
U. Richmond	271	49	62	218	369	0	369	0	0	
CUNY, Advanced Science Research Center	272	3	104	1,030	365	0	329	36	0	
U. Washington, Bothell	273	462	371	405	351	347	0	4	0	
Bowdoin C.	274	507	635	328	349	0	49	300	0	
U. Wisconsin-Stevens Point	275	214 i	226	368	338	0	338	0	0	
Missouri State U.	276	34	95	177	337	44	293	0	0	
Williams C.	276	205	195 i	200 i	337 i	0 i	337 i	0 i	0 i	
William Paterson U.	278	299	579	487	328	0	180	0	148	
Chapman U.	279	231	212	304	324	38	15	0	271	
Western Carolina U.	280	494	297	314	313	0	39	274	0	
Texas Christian U.	281	178	248	121	307	0	0	307	0	
Franklin and Marshall C.	282	710	232	119	305	0	240	0	65	
Howard U.	282	248	225	289	305	0	0	305	0	
West Texas A&M U.	282	434	219	688	305	0	305	0	0	
George Washington U.	285	288	436	175	288	0	9	0	279	
Hobart and William Smith Colleges	285	118	148	23	288	288	0	0	0	
U. Missouri, Kansas City	287	402	308	190	285	0	247	7	31	
Pomona C.	288	236	274	193	272	0	178	0	94	
Virginia Commonwealth U.	289	871	354	278	269	105	0	0	164	
U. Puerto Rico, Medical Sciences Campus	290	29	136	265	264	0	264	0	0	
Murray State U.	291	120	134	139	249	0	249	0	0	
Texas A&M U.-Kingsville	292	942	849	0	242	9	0	0	233	
Marshall U.	293	164	258	404	239	0	4	0	235	
Indiana U. Pennsylvania	294	497	161	33	234	0	234	0	0	
North Carolina Central U.	294	303	321	294	234	0	199	0	35	
Middle Tennessee State U.	296	500	48	126	229	0	164	0	65	
Macalester C.	297	427	390	221	223	0	223	0	0	
CUNY, Brooklyn C.	298	631 i	645	504	222	0	222	0	0	
Lewis and Clark C.	298	294	212	280	222	0	214	0	8	

TABLE 40

Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
U. North Florida	300	144	10	21	213	83	0	105	25
California State U., Los Angeles	301	0 i	0	23	202	0	202	0	0
U. Northern Colorado	301	140	296	147	202	0	202	0	0
Sam Houston State U.	303	86	72	124	196	0	118	0	78
Trinity U.	304	113	56	96	194	0	194	0	0
Wayne State U.	305	412	296	288	193	0	193	0	0
New School	306	800	537	169	192	0	0	0	192
U. Tulsa	306	112	213	202	192	0	188	0	4
Bryn Mawr C.	308	185	260	151	189	0	189	0	0
C. Wooster	309	120	59	137 i	188	0	188	0	0
New Mexico Highlands U.	310	ne	189	198 i	187 i	0 i	187 i	0 i	0 i
U. Colorado Colorado Springs	310	79	173	141	187	130	33	0	24
U. San Diego	312	185	163	226	185	0	24	161	0
U. of the District of Columbia	313	84	41	177	183	88	95	0	0
Union C., Schenectady	314	189	154	252	181	0	181	0	0
Texas Southern U.	315	140	197	79	173	0	0	0	173
Wellesley C.	316	154	161	86	169	0	169	0	0
Sul Ross State U.	317	0	22	22 i	168 i	0 i	168 i	0 i	0 i
U. Louisville	318	197	180	185	166	102	43	21	0
U. New Haven	319	152	143	93	151	81	0	70	0
Northern Michigan U.	320	155	91	101	149	0	149	0	0
Illinois Institute of Technology	321	246	398	224	146	10	136	0	0
Utah Valley U.	322	ne	ne	ne	140	0	140	0	0
Eastern Michigan U.	323	399	172	108	139	0	81	0	58
Indiana State U.	323	199	120	74	139	0	139	0	0
U. North Georgia	325	129	133	132	137	0	137	0	0
U. North Carolina, Greensboro	326	0	0	0	135	0	135	0	0
U. Wisconsin-Eau Claire	326	8	8	69	135	0	135	0	0
Furman U.	328	16	47	78	132	0	132	0	0
U. Northern Iowa	329	161	142	151	129	0	0	0	129

TABLE 40

Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
Central State U.	330	163	126	102	124	0	124	0	0	
California State U., San Marcos	331	0	47	13	123	0	0	0	123	
Whitman C.	332	52	23	ne	121	0	121	0	0	
Smith C.	333	117	36	228	120	0	120	0	0	
Tennessee State U.	333	0	297	166 i	120	0	120	0	0	
U.S. Air Force Academy	333	0	0	34	120	0	97	0	23	
Willamette U.	336	14	4	53	119	0	118	1	0	
Haverford C.	337	229 i	229 i	145 i	115 i	0 i	90 i	15 i	10 i	
U. Wisconsin-Green Bay	338	92 i	90 i	82 i	114 i	0 i	114 i	0 i	0 i	
Clarkson U.	339	4	59	172	112	0	103	9	0	
Clafin U.	340	259	37	26	105	16	89	0	0	
Albion C.	341	53	84	82 i	103 i	0 i	103 i	0 i	0 i	
U. Louisiana, Monroe	341	307	46	64	103	103	0	0	0	
CUNY, Baruch C.	343	79	198	44	102	0	0	102	0	
Winston-Salem State U.	344	0	0	0	100	0	100	0	0	
U. Denver	345	186	168	52	96	0	96	0	0	
U. North Carolina, Asheville	345	128	84	260	96	87	9	0	0	
U. Puerto Rico, Humacao	347	0	0	17	92	0	0	0	92	
U. West Florida	347	138	875	18	92	0	92	0	0	
Mount Holyoke C.	349	0	0	0	90	0	90	0	0	
Northland C.	349	ne	ne	78 i	90 i	0 i	77 i	0 i	13 i	
Dillard U.	351	0	0	87	89	0	89	0	0	
DePaul U.	352	37	91	276	88	0	63	25	0	
Nevada State C.	353	ne	ne	ne	82	0	0	0	82	
SUNY, Geneseo	353	298	239	212	82	0	82	0	0	
Ithaca C.	355	ne	6	114	80	51	16	13	0	
Fort Valley State U.	356	0	0	82	79	0	79	0	0	
SUNY, C. Brockport	356	396	353	319	79	0	79	0	0	
U. Texas of the Permian Basin	358	ne	0	0	77	0	77	0	0	
Barnard C.	359	9	60	164	76	70	6	0	0	

TABLE 40

Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
California State U., San Bernardino	360	118	87	51	75	0	73	2	0	
Troy U.	361	ne	49	31	71	0	4	67	0	
U. Colorado Anschutz Medical Campus ^e	361	na	na	212	71	71	0	0	0	
California State U., Maritime Academy	363	0	0	0	70	0	0	70	0	
California State U., Bakersfield	364	262	176	134	69	0	69	0	0	
U. Alabama, Birmingham	365	870	701	436	66	66	0	0	0	
Bates C.	366	119	119	37	65	0	65	0	0	
SUNY, Oswego	367	52	73	71	64	32	32	0	0	
U. Southern Maine	367	41	42	18	64	0	33	31	0	
Stephen F. Austin State U.	369	292	177	121	62	0	55	7	0	
Northwest Indian C.	370	1,043	43 i	52 i	60	0	0	60	0	
U. of Mary Washington	371	17	97	54	57	0	57	0	0	
U. Nebraska, Omaha	372	7	18	34	56	0	56	0	0	
Northeastern Illinois U.	373	131	50	68	54	0	54	0	0	
Kean U.	374	ne	301	61	53	0	19	0	34	
Texas A&M International U.	374	96	84	39	53	0	53	0	0	
U. of the Pacific	374	0	0	43	53	0	53	0	0	
Hamilton C.	377	72	15	1	52	0	52	0	0	
Vassar C.	378	11	0	17	51	0	51	0	0	
U. Baltimore	379	0	0	0	48	0	0	0	48	
Hope C.	380	0	20	59	47	0	47	0	0	
CUNY, Lehman C.	381	0	37	20	44	0	44	0	0	
U. Wisconsin-Oshkosh	382	126 i	126 i	126	43	0	43	0	0	
U. Puget Sound	383	ne	1	ne	42	10	1	0	31	
Bucknell U.	384	94	12 i	10	40	0	40	0	0	
Calvin U.	385	37	21 i	30 i	39 i	0 i	39 i	0 i	0 i	
Virginia State U.	386	157	0	8	37	37	0	0	0	
U. Wisconsin-La Crosse	387	31	35	18	35	0	35	0	0	
West Chester U. Pennsylvania	388	60	65	55	31	0	31	0	0	
Lincoln U., Jefferson City	389	0	0	60	28	28	0	0	0	

TABLE 40

Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
U. Wisconsin-Superior	389	25	30	11	28	0	28	0	0	
Brandeis U.	391	0	12	0	27	27	0	0	0	
U.S. Military Academy	392	111	98	2	26	0	0	0	26	
CUNY, C. Staten Island	393	0	0	0	25	0	25	0	0	
East Tennessee State U.	394	6 i	0 i	26 i	18 i	0 i	18 i	0 i	0 i	
Eastern Washington U.	395	66	58	61	17	0	17	0	0	
Babson C.	396	0 i	0 i	0 i	16 i	0 i	0 i	16 i	0 i	
California State U., Dominguez Hills	397	7	13	8	15	0	15	0	0	
Dakota State U.	397	0	18	37	15	0	15	0	0	
Suffolk U.	399	ne	28	28	14	0	14	0	0	
Tennessee Technological U.	399	74	60	24	14	0	14	0	0	
U. Houston-Downtown	399	27	94	52	14	0	4	10	0	
Bentley U.	402	ne	ne	ne	13	0	10	3	0	
California State Polytechnic U., Pomona	402	295	68	151	13	0	3	0	10	
Lafayette C.	402	0	8	5	13	0	13	0	0	
Loyola Marymount U.	402	761	489	527	13	0	5	0	8	
St. Cloud State U.	406	13	217	128	12	0	2	0	10	
Texas A&M U.-San Antonio	407	ne	ne	ne	10	0	0	0	10	
Winthrop U.	407	5	0	0	10	0	0	10	0	
Eastern Connecticut State U.	409	22	101	143	8	0	0	8	0	
Minnesota State U., Mankato	409	32	1	13	8	0	8	0	0	
California State U., Fresno	411	125	147	379	7	0	7	0	0	
U. of St. Thomas (MN)	411	15	18	222	7	0	7	0	0	
Northeast Ohio Medical U.	413	6	0	5	6	0	6	0	0	
Pennsylvania State U., Harrisburg	413	11	5	22	6	3	3	0	0	
Central Connecticut State U.	415	61	91	79	5	0	5	0	0	
Claremont McKenna C.	416	173	29	17	4	0	0	4	0	
California Lutheran U.	417	0	0	ne	3	0	0	3	0	
CUNY, Graduate Center	417	2	0	0	3	0	3	0	0	
Fort Lewis C.	417	22	56	46	3	0	0	0	3	

TABLE 40

Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
California State U., Stanislaus	420	0	1	13	2	0	2	0	0
Youngstown State U.	420	9	2	0	2	0	2	0	0
Alfred U.	422	0	1	1	1	0	0	0	1
Mercyhurst U.	422	2 i	1 i	1 i	1	0	1	0	0
U. Arkansas, Little Rock	422	0	0	0	1	0	1	0	0
All other surveyed institutions	-	15,508	8,090	2,333	0	0	0	0	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

nec = not elsewhere classified.

^a Johns Hopkins University includes the Applied Physics Laboratory (APL), with \$81,763 thousand imputed for total R&D expenditures in geosciences, atmospheric sciences, and ocean sciences in FY 2022. Total expenditures by field for Johns Hopkins University are flagged as imputed because APL was unable to distribute a portion of institutionally funded R&D by field.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^d The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
All institutions	-	2,067,218	2,108,685	2,144,257	2,478,702	528,068	875,493	785,545	289,596	
U. Washington, Seattle	1	100,000	114,555	105,493	131,461	52,098	10,364	66,250	2,749	
Woods Hole Oceanographic Institution	2	112,979	115,744	129,085	129,264	26,210	53,953	40,093	9,008	
U. Colorado Boulder	3	119,659	116,177	116,175	126,188	28,214	15,253	2,816	79,905	
U. California, San Diego	4	120,294	128,962	107,137	122,993	554	21,045	101,311	83	
U. Alaska, Fairbanks	5	50,566	54,408	76,984	102,308	10,585	62,956	28,148	619	
Texas A&M U., College Station and Health Science Center	6	86,781	82,072	81,667	97,109	5,556	6,276	81,325	3,952	
Johns Hopkins U. ^a	7	37,235	59,766	73,509	90,660	13,406	38,852	29,684	8,718	
U. New Hampshire	8	36,870	41,304	44,691	74,212	27,666	5,485	41,061	0	
U. Oklahoma, Norman and Health Science Center	9	54,007	64,742	69,382	71,650	69,024	2,626	0	0	
U. Maryland ^b	10	46,763	51,008	55,924	68,050	14,724	46,857	733	5,736	
Columbia U. in the City of New York	11	61,544	54,388	53,955	59,425	6,810	18,699	33,916	0	
U. Miami	12	36,297	39,430	44,559	50,038	37,038	0	12,393	607	
U. Hawaii, Manoa	13	58,526	47,728	45,399	48,908	1,501	11,306	33,862	2,239	
Arizona State U.	14	59,778	54,650	49,889	47,652	0	47,652	0	0	
Colorado State U., Fort Collins	15	70,266	55,722	46,601	44,116	38,327	4,878	32	879	
U. Rhode Island	16	32,874	25,349	33,815	42,342	0	3,662	31,018	7,662	
Oregon State U.	17	34,363	33,730	37,629	41,103	1,594	8,284	20,159	11,066	
U. Utah	18	15,150	11,112	30,710	40,026	984	23,881	0	15,161	
U. Wisconsin-Madison	19	36,615	35,879	35,050	38,120	25,315	7,751	0	5,054	
U. California, Los Angeles	20	24,970	27,134	31,060	37,619	8,260	27,790	0	1,569	
California Institute of Technology	21	25,436	27,071	25,067	34,882	1,792	29,600	208	3,282	
Harvard U.	22	27,835	28,723	24,827	25,109	4,245	4,089	308	16,467	
Pennsylvania State U., University Park and Hershey Medical Center	23	28,218	24,605	20,062	24,690	10,323	11,460	2,907	0	
U. Southern Mississippi	24	21,324	21,092	20,411	21,980	0	5,620	2,802	13,558	
Princeton U.	25	15,933	16,105	21,115	20,940	11,780	4,172	0	4,988	
U. California, Santa Cruz	26	12,725	15,234	15,976	20,767	0	4,597	10,431	5,739	
U. Texas, Austin	27	19,745	20,523	20,837	19,312	0	13,619	3,578	2,115	
U. Delaware	28	10,066	10,785	11,596	19,133	0	2,723	9,059	7,351	
Massachusetts Institute of Technology	29	22,382	20,477	20,764	18,567	6,985	6,466	3,912	1,204	

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
U. Alabama, Huntsville	30	12,920	14,123	14,376	18,414	16,642	1,537	207	28	
Desert Research Institute	31	16,557	15,748	16,608	17,341	3,707	13,634	0	0	
U. California, Santa Barbara	32	14,799	16,190	16,253	17,150	0	7,824	9,326	0	
U. Maryland, Baltimore County	33	10,807	12,497	12,883	16,989	8,517	7,306	881	285	
William & Mary	34	14,272	12,158	12,138	15,166	0	273	14,893	0	
U. North Carolina, Chapel Hill	35	11,158	12,873	11,575	14,864	0	4,058	6,007	4,799	
U. Arizona	36	13,372	13,625	13,788	14,396	2,529	10,662	932	273	
SUNY, Stony Brook U.	37	11,996	10,824	12,214	14,178	0	4,492	9,681	5	
North Carolina State U.	38	12,946	13,202	12,866	14,124	7,156	0	1,185	5,783	
Mississippi State U.	39	7,793	13,635	11,429	13,476	771	9,507	3,089	109	
U. Southern California	40	10,664	9,079	8,192	13,278	0	7,226	6,052	0	
Stanford U.	41	7,690	8,906	8,901	13,060	0	11,261	1,459	340	
George Mason U.	42	9,912	9,390	11,636	12,644	5,368	6,374	595	307	
Rutgers, State U. New Jersey, New Brunswick	43	11,993	16,060	12,836	12,612	1,456	33	10,834	289	
Michigan Technological U.	44	8,715	8,015	9,646	12,460	2,994	0	4,880	4,586	
U. South Florida ^c	45	10,880	10,327	9,935	12,202	168	2,299	9,735	0	
U. Hawaii, system office	46	10,531	11,673	11,375	11,996	11,996	0	0	0	
U. Wyoming	47	5,473	10,107	8,601	10,884	6,619	4,116	149	0	
Florida International U.	48	7,987	9,463	9,569	10,615	2,334	241	8,040	0	
Louisiana State U., Baton Rouge	49	7,883	8,178	7,740	10,240	0	1,389	7,591	1,260	
U. Maine	50	9,385	9,064	8,996	10,119	0	2,057	8,062	0	
U. Florida	51	9,497	8,484	8,334	9,729	0	7,278	2,451	0	
U. Chicago	52	8,639	8,514	8,384	9,530	0	9,530	0	0	
U. California, Davis	53	6,459	7,014	5,881	9,146	1,444	2,070	1,885	3,747	
U. Nevada, Reno	54	6,263	6,910	6,038	9,087	368	8,049	44	626	
Georgia Institute of Technology	55	7,822	7,862	7,744	8,730	0	8,093	637	0	
Florida State U.	56	8,123	8,871	7,904	8,711	1,246	1,846	4,806	813	
U. of the Virgin Islands	57	713	2,990	5,241	8,544	0	157	6,000	2,387	
U. Pittsburgh, Pittsburgh	58	8,568	7,374	7,431	8,410	0	1,763	0	6,647	
U. Michigan, Ann Arbor	59	8,070	8,059	7,910	8,308	0	8,308	0	0	

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
U. California, Irvine	60	9,510	9,301	9,271	8,168	0	8,168	0	0	
U. Minnesota, Twin Cities	61	8,058	7,624	8,548	8,067	0	8,067	0	0	
New Mexico Institute of Mining and Technology	62	6,235	6,328	6,427	7,855	0	7,855	0	0	
U. Connecticut	63	6,674	7,020	7,650	7,812	0	864	6,948	0	
U. Maryland Center for Environmental Science	64	8,301	8,462	7,217	7,586	0	154	7,393	39	
U. Georgia	65	6,855	6,304	7,051	7,577	0	347	7,230	0	
Boston C.	66	3,209	3,871	5,459	7,552	6,235	1,317	0	0	
Boston U.	67	5,898	6,447	6,053	7,310	0	7,310	0	0	
San Jose State U.	68	8,618	7,847	6,871	7,076	1,358	217	5,501	0	
U. New Mexico	69	6,674	6,249	6,164	6,868	338	6,508	0	22	
U. Guam	70	2,620	2,585	5,001	6,841	0	418	6,259	164	
U. Kansas	71	3,873	4,622	4,531	6,530	782	5,748	0	0	
Texas Tech U.	72	2,843	3,340	4,463	6,462	340	3,455	0	2,667	
Washington State U.	73	4,767	5,323	5,103	6,455	0	785	0	5,670	
Florida A&M U.	74	4,945	5,329	5,255	6,246	0	0	5,936	310	
Brown U.	75	2,488	3,436	5,321	6,164	13	1,034	218	4,899	
U. California, Berkeley	76	5,638	5,816	5,198	6,156	0	6,156	0	0	
U. Massachusetts, Dartmouth	77	2,297	2,680	4,040	6,132	0	0	6,132	0	
U. California, Riverside	78	4,237	4,821	4,764	6,008	0	2,275	0	3,733	
U. Illinois, Urbana-Champaign	79	5,967	5,419	4,965	5,897	4,834	1,063	0	0	
Washington U., Saint Louis	80	5,192	5,000	5,585	5,869	0	5,869	0	0	
SUNY, U. Albany	81	6,728	6,953	6,809	5,828	5,600	228	0	0	
Ohio State U.	82	6,216	6,489	5,685	5,813	0	5,813	0	0	
Duke U.	83	7,079	6,194	5,406	5,542	0	1,106	4,436	0	
Morgan State U.	84	3,955	3,351	3,298	5,512	0	5,512	0	0	
Purdue U., West Lafayette	85	3,042	4,079	3,938	5,251	5,251	0	0	0	
U. Oregon	86	4,038	5,073	5,371	5,204	0	4,683	521	0	
Cornell U.	87	4,796	6,428	4,852	5,066	22	4,921	123	0	
U. Virginia, Charlottesville	88	3,896	4,059	3,582	4,842	0	0	0	4,842	
Colorado School of Mines	89	4,981	4,424	3,708	4,590	0	4,411	0	179	

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
Nova Southeastern U.	90	3,515	5,381	5,135	4,514	0	0	4,514	0	
Naval Postgraduate School	91	5,268	6,300	6,195	4,481	1,507	195	2,524	255	
Northern Arizona U.	92	6,805	5,975	4,968	4,468	183	2,888	7	1,390	
Texas A&M U.-Corpus Christi	93	4,273	3,609	3,075	4,463	287	541	2,559	1,076	
U. Alaska, Anchorage	94	4,476	6,432	4,761	4,424	322	2,717	1,385	0	
U. Puerto Rico, Mayaguez	95	3,975	3,896	2,014	3,870	0	627	2,743	500	
U. North Dakota	96	3,056	3,730	2,794	3,816	3,609	207	0	0	
U. Maryland, Eastern Shore	97	4,369	3,454	4,182	3,743	0	0	3,743	0	
Southern Methodist U.	98	4,100	4,026	3,893	3,697	0	3,697	0	0	
U. Houston	99	2,213	2,948	3,418	3,403	3,403	0	0	0	
Montana State U., Bozeman	100	4,215	3,123	3,609	3,353	0	2,719	0	634	
Rice U.	101	1,929	2,747	2,546	3,342	0	3,342	0	0	
U. Arkansas, Fayetteville	102	3,009	2,460	3,326	3,266	0	3,266	0	0	
U. South Carolina, Columbia	103	983	3,889	3,288	3,255	0	0	3,255	0	
New Mexico State U.	104	2,797	3,870	3,286	3,216	10	779	0	2,427	
Northeastern U.	105	3,174	2,235	2,358	3,160	0	1,128	2,032	0	
Indiana U., Bloomington	106	1,630	1,602	2,420	3,155	1,293	1,365	0	497	
U. Washington, Tacoma	107	1,443	1,861	2,290	3,103	0	0	3,103	0	
U. Montana, Missoula	108	2,967	3,195	3,391	3,072	0	1,532	1,540	0	
SUNY, U. Buffalo	109	2,286	2,537	2,325	3,066	0	3,066	0	0	
U. Idaho	110	2,451	1,662	1,924	3,065	97	2,899	0	69	
Iowa State U.	111	1,776	2,890	2,725	3,061	0	3,061	0	0	
Michigan State U.	112	2,983	2,792	3,071	3,028	0	3,028	0	0	
Tulane U.	113	1,478	1,796	2,074	2,954	0	2,954	0	0	
U. Vermont	114	606	1,471	1,824	2,946	1,551	1,395	0	0	
West Virginia U.	115	6,255	6,352	1,749	2,844	0	2,728	0	116	
U. Texas, San Antonio	116	617	991	2,037	2,814	0	742	0	2,072	
Yale U.	117	3,053	2,704	2,553	2,789	0	2,789	0	0	
U. Wisconsin-Milwaukee	118	1,903	1,862	2,323	2,767	802	2	1,963	0	
Texas State U.	119	3,137	2,870	2,168	2,759	12	1,521	0	1,226	

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
U. Central Florida	120	1,654	1,768	1,498	2,753	2,753	0	0	0	
U. Toledo	121	3,474	3,227	3,371	2,642	0	2,642	0	0	
U. South Alabama	122	1,499	2,048	1,883	2,641	0	183	2,458	0	
Hampton U.	123	3,779	3,454	2,881	2,576	1,710	0	864	2	
U. Massachusetts, Amherst	124	4,021	2,803	2,117	2,553	0	2,553	0	0	
U. Nevada, Las Vegas	125	2,543	3,541	3,096	2,540	209	2,311	0	20	
Virginia Polytechnic Institute and State U.	126	2,251	1,619	1,732	2,538	98	2,422	0	18	
East Carolina U.	127	851	1,051	1,198	2,494	0	796	1,698	0	
U. California, Merced	128	1,391	1,783	1,948	2,364	239	400	12	1,713	
C. Charleston	129	1,064	857	918	2,328	47	1,840	441	0	
U. Rochester	130	2,112	2,392	2,207	2,157	0	2,157	0	0	
Boise State U.	131	2,556	2,730	2,250	2,061	91	1,382	41	547	
Old Dominion U.	132	3,290	2,793	2,096	2,057	0	0	2,057	0	
Dartmouth C. and Dartmouth Hitchcock Medical Center	133	1,234	1,203	1,085	2,054	0	2,054	0	0	
CUNY, City C.	134	2,103	1,578	1,460	2,024	0	1,468	556	0	
San Francisco State U.	135	1,442	1,755	1,773	1,988	0	145	1,713	130	
U. Puerto Rico, Rio Piedras	136	1,932	3,108	2,639	1,978	0	1,669	309	0	
Western Washington U.	137	1,153	760	1,041	1,971	0	1,282	689	0	
Emory U.	138	801	684	1,856	1,947	0	0	0	1,947	
U. Texas, El Paso	139	1,550	1,251	1,512	1,927	0	1,927	0	0	
Ohio U.	140	351	677	1,120	1,925	27	1,898	0	0	
Florida Gulf Coast U.	141	615	1,344	1,329	1,896	0	0	1,896	0	
U. Louisiana, Lafayette	142	1,089	1,050	3,772	1,843	0	1,032	811	0	
U. Tennessee, Knoxville ^d	143	3,160	2,644	2,558	1,799	0	1,799	0	0	
Auburn U., Auburn	144	1,026	1,003	1,675	1,743	60	878	77	728	
U. Memphis	145	1,605	1,887	1,590	1,724	0	1,694	0	30	
Sonoma State U.	146	ne	529	1,412	1,675	0	49	148	1,478	
U. Massachusetts, Lowell	147	1,218	1,399	1,789	1,672	642	1,030	0	0	
Portland State U.	148	1,895	1,784	1,510	1,660	392	1,189	79	0	
U. Hawaii, Hilo	149	796	871	1,157	1,597	0	1,091	470	36	

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
San Diego State U.	150	1,433	1,093	1,091	1,569	0	416	626	527
U. North Carolina, Wilmington	151	1,398	1,369	1,318	1,541	0	18	1,523	0
U. Mississippi	152	614	617	1,220	1,524	226	914	363	21
Rensselaer Polytechnic Institute	153	1,111	1,673	1,299	1,521	0	1,521	0	0
Idaho State U.	154	710	1,248	1,136	1,460	0	1,030	0	430
Rutgers, State U. New Jersey, Newark	155	2,921	1,372	1,587	1,450	0	1,450	0	0
Bowling Green State U.	156	640	1,330	1,495	1,443	0	196	1,247	0
U. Kentucky	157	862	1,466	1,652	1,429	0	1,429	0	0
Embry-Riddle Aeronautical U.	158	307	807	575	1,338	1,338	0	0	0
Central Washington U.	159	1,650	1,161	1,066	1,289	0	1,289	0	0
California Polytechnic State U., San Luis Obispo	160	1,089	963	973	1,249	0	0	1,249	0
U. Alabama, Tuscaloosa	161	499	1,168	822	1,239	0	1,239	0	0
Montana Technological U.	162	788	725	1,056	1,177	0	1,177	0	0
U. Iowa	163	636	673	348	1,168	0	1,052	0	116
Carleton C.	164	1,330	670	759	1,112	0	1,112	0	0
SUNY, Buffalo State	165	819	821	834	1,061	0	367	0	694
Florida Institute of Technology	166	612	780	1,326	1,051	458	0	398	195
California State U., Monterey Bay	167	785	867	837	1,021	0	0	960	61
California State U., Northridge	168	1,393	1,514	663	1,015	0	460	395	160
U. New Orleans	169	969	897	680	1,005	0	1,004	1	0
Lehigh U.	170	1,004	1,258	939	989	0	989	0	0
Indiana U.-Purdue U., Indianapolis	171	518	679	583	972	0	972	0	0
Oklahoma State U., Stillwater	172	554	763	801	949	0	949	0	0
U. Missouri, Columbia	173	1,252	924	729	930	0	930	0	0
U. Massachusetts, Boston	174	2,573	1,478	984	924	0	453	471	0
Georgia State U.	175	681	575	682	912	0	912	0	0
CUNY, York C.	176	85	462	472	888	0	888	0	0
U. Texas Rio Grande Valley	177	1,060	745	605	879	0	90	573	216
Baylor U.	178	607	496	408	873	289	387	181	16
Utah State U.	179	642	67	690	867	365	502	0	0

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
Syracuse U.	180	1,616	1,334	1,073	846	0	846	0	0	
Northwestern U.	181	1,003	730	782	835	0	835	0	0	
Northern Illinois U.	182	309	375	676	805	18	556	0	231	
U. Dayton	183	400	352	461	798	565	233	0	0	
Hawaii Pacific U.	184	288	183	252	793	0	793	0	0	
Air Force Institute of Technology	185	876	490	175	778	778	0	0	0	
U. Nebraska, Lincoln	186	2,140	1,331	640	776	0	776	0	0	
Vanderbilt U. and Vanderbilt U. Medical Center	187	838	966	852	746	0	746	0	0	
Montclair State U.	188	825	499	508	723	0	482	184	57	
South Dakota State U.	189	1,485	602	604	721	0	721	0	0	
Tufts U.	190	120	230	215	702	0	560	142	0	
Savannah State U.	191	633	728	815	694	131	0	476	87	
U. North Carolina, Charlotte	192	422	666	573	673	0	673	0	0	
California State U., Sacramento	193	802	716	700	672	0	672	0	0	
Southern Illinois U., Carbondale	193	557	593	772	672	3	166	0	503	
Carnegie Mellon U.	195	791	440	360	665	194	425	0	46	
U. Colorado Denver ^e	196	na	na	330	642	601	41	0	0	
Miami U.	197	521	872	496	616	0	616	0	0	
Delaware State U.	198	155	215	247	615	0	180	435	0	
American U.	199	215	216	493	604	0	0	0	604	
California State U., Chico	200	110	395	414	590	0	590	0	0	
Southern Illinois U., Edwardsville	201	562	461	546	587	0	443	0	144	
SUNY, C. of Environmental Science and Forestry	202	483	493	551	583	82	175	158	168	
Central Michigan U.	203	86	177	316	582	244	130	208	0	
U. Illinois, Chicago	203	381	567	553	582	0	582	0	0	
Western Michigan U. and Homer Stryker M.D. School of Medicine	203	433	346	453	582	0	582	0	0	
Pennsylvania State U., Behrend	206	899	104	706	573	0	5	568	0	
Case Western Reserve U.	207	567	478	493	572	0	572	0	0	
Occidental C.	208	480	630	510	570	0	77	493	0	
Towson U.	209	542	667	481	554	0	554	0	0	

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
U. Akron	209	171	202	194	554	0	554	0	0
U. Pennsylvania	211	1,255	872	749	542	0	542	0	0
Brigham Young U., Provo	212	260	122	287	537	0	537	0	0
Clark U.	213	410	306	271	534	63	127	278	66
Rockefeller U.	214	272	466	334	524	0	0	0	524
Alaska Pacific U.	215	88	83	158	522	0	35	210	277
U.S. Naval Academy	216	1,074	771	613	516	0	0	516	0
Middlebury C.	217	256	239	413	509	0	303	0	206
U. Cincinnati	218	339	304	303	506	0	506	0	0
Colgate U.	219	363	295	580	501	0	451	0	50
Kansas State U.	219	1,259	627	444	501	0	501	0	0
Grand Valley State U.	221	328	287	331	484	0	0	0	484
Coastal Carolina U.	222	862	998	509	478	323	43	112	0
Duquesne U.	223	12	290	241	470	0	470	0	0
Wesleyan U.	223	314	531	322	470	0	470	0	0
Western Kentucky U.	223	290	254	284	470	0	470	0	0
Temple U.	226	536	410	449	458	0	458	0	0
SUNY, C. Plattsburgh	227	488	391	400	446	0	46	400	0
Des Moines U.	228	77	1	285	444	0	444	0	0
Colorado C.	229	58	52	96	440	0	440	0	0
Stockton U.	230	493	578	239	420	0	0	420	0
Illinois State U.	231	263	394	381	394	0	394	0	0
U. Alaska, Southeast	232	254	145	176	393	0	281	112	0
Plymouth State U.	233	ne	ne	ne	373	111	0	0	262
California State U., Long Beach	234	73	492	220	370	0	370	0	0
U. Richmond	235	25	43	217	365	0	365	0	0
Kent State U.	236	412	439	296	357	6	299	38	14
North Dakota State U.	237	277	139	164	355	0	355	0	0
U. Washington, Bothell	238	310	371	331	351	347	0	4	0
Colby C.	239	122	175	144	349	0	349	0	0

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
Florida Atlantic U.	240	387	307	638	348	164	0	0	184	
U. Texas, Dallas	241	167	163	128	316	0	316	0	0	
Roger Williams U.	242	300	369	466	314	3	0	311	0	
Howard U.	243	248	225	289	305	0	0	305	0	
West Texas A&M U.	243	326	62	676	305	0	305	0	0	
CUNY, Queens C.	245	311	322	251	295	0	295	0	0	
Monmouth U.	246	91	109	86	294	0	0	294	0	
Missouri State U.	247	33	72	146	280	40	240	0	0	
U. New England	248	1,080	681	411	278	0	0	278	0	
U. Minnesota, Duluth	249	1,993	1,609	199	277	0	277	0	0	
U. Puerto Rico, Medical Sciences Campus	250	29	136	265	264	0	264	0	0	
Heidelberg U.	251	159	188	308	262	0	0	262	0	
Long Island U.	251	26	15	150	262	0	262	0	0	
Chapman U.	253	193	206	242	258	0	0	0	258	
Texas Christian U.	253	178	197	121	258	0	0	258	0	
Amherst C.	255	0	0	41	251	0	251	0	0	
CUNY, Hunter C.	255	160	219	162	251	0	251	0	0	
U. Texas, Arlington	255	547	322	254	251	0	251	0	0	
California State U., East Bay	258	ne	63	70	249	201	22	26	0	
U. North Texas, Denton	259	428	873	847	240	0	240	0	0	
Hobart and William Smith Colleges	260	83	127	19	237	237	0	0	0	
Bowdoin C.	261	356	493	310	230	0	44	186	0	
Indiana U. Pennsylvania	262	481	107	32	229	0	229	0	0	
Western Carolina U.	263	320	255	233	226	0	3	223	0	
Saint Louis U.	264	733	774	278	224	0	224	0	0	
Hofstra U.	265	11	3	50	222	0	1	24	197	
Tarleton State U.	266	221	428	431	219	0	219	0	0	
SUNY, Binghamton U.	267	411	196	207	215	0	215	0	0	
Lewis and Clark C.	268	201	164	278	208	0	208	0	0	
U. Missouri, Kansas City	268	224	151	96	208	0	208	0	0	

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
Austin Peay State U.	270	0	52	136	206	0	206	0	0
California State U., Los Angeles	271	0	0	23	202	0	202	0	0
Georgia Southern U.	272	207	115	253	199	0	138	61	0
George Washington U.	273	213	243	59	190	0	6	0	184
North Carolina Central U.	274	233	264	171	185	0	185	0	0
New Mexico Highlands U.	275	ne	189	198 i	184 i	0 i	184 i	0 i	0 i
U. San Francisco	276	170	67	113	179	53	61	0	65
Texas Southern U.	277	119	184	79	173	0	0	0	173
CUNY, Advanced Science Research Center	278	3	56	877	172	0	156	16	0
Marshall U.	279	100	201	233	170	0	0	0	170
Villanova U.	280	405	460	162	165	0	78	87	0
Virginia Commonwealth U.	281	516	280	200	164	0	0	0	164
Union C., Schenectady	282	125	130	198	158	0	158	0	0
Skidmore C.	283	743	577	202	157	0	157	0	0
Wellesley C.	283	154	154	77	157	0	157	0	0
C. Wooster	285	12	21	107 i	155	0	155	0	0
U. Northern Colorado	286	72	247	120	151	0	151	0	0
U. Colorado Colorado Springs	287	68	150	127	150	111	15	0	24
New York U.	288	55	133	71	148	0	148	0	0
William Paterson U.	289	211	414	309	144	0	144	0	0
Illinois Institute of Technology	290	236	356	217	142	10	132	0	0
Macalester C.	290	310	268	172	142	0	142	0	0
Northern Michigan U.	292	65	81	100	141	0	141	0	0
Utah Valley U.	293	ne	ne	ne	140	0	140	0	0
California State Polytechnic U., Humboldt	294	376	450	334	139	16	53	70	0
U. Louisville	295	106	169	171	138	102	15	21	0
California State U., Fullerton	296	189	145	94	136	0	67	69	0
Rowan U.	296	308	227	158	136	0	136	0	0
U. San Diego	298	150	152	101	134	0	0	134	0
Appalachian State U.	299	266	242	144	132	0	132	0	0

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
Wayne State U.	299	154	129	63	132	0	132	0	0
Wright State U.	299	161	127	104	132	0	132	0	0
Murray State U.	302	17	19	35	131	0	131	0	0
New School	302	373	414	143	131	0	0	0	131
U. New Haven	304	0	104	80	128	81	0	47	0
Indiana State U.	305	137	103	73	125	0	125	0	0
Central State U.	306	163	125	102	124	0	124	0	0
U. North Carolina, Greensboro	307	0	0	0	121	0	121	0	0
Tennessee State U.	308	0	297	166	120	0	120	0	0
Sam Houston State U.	309	0	0	85	118	0	118	0	0
Pomona C.	310	100	103	42	108	0	108	0	0
Whitman C.	311	3	0	ne	107	0	107	0	0
Clafin U.	312	259	37	26	105	16	89	0	0
U. Louisiana, Monroe	313	307	39	61	103	103	0	0	0
CUNY, Brooklyn C.	314	17	18	13	102	0	102	0	0
Winston-Salem State U.	315	0	0	0	100	0	100	0	0
Furman U.	316	16	7	33	99	0	99	0	0
U.S. Air Force Academy	317	0	0	34	97	0	97	0	0
Williams C.	317	104	99	105	97	0	97	0	0
U. North Carolina, Asheville	319	126	36	93	96	87	9	0	0
U. of the District of Columbia	320	84	41	82	95	0	95	0	0
U. Puerto Rico, Humacao	321	0	0	17	92	0	0	0	92
U. Tulsa	321	39	76	151	92	0	92	0	0
Trinity U.	323	28	3	14	90	0	90	0	0
Dillard U.	324	0	0	87	89	0	89	0	0
Salisbury U.	324	145	91	57	89	0	0	0	89
DePaul U.	326	22	76	246	88	0	63	25	0
Willamette U.	327	0	0	0	85	0	85	0	0
Nevada State C.	328	ne	ne	ne	82	0	0	0	82
Fort Valley State U.	329	0	0	18	79	0	79	0	0

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
James Madison U.	329	317	508	125	79	0	79	0	0
Barnard C.	331	0	45	156	70	70	0	0	0
SUNY, Geneseo	332	140	104	115	68	0	68	0	0
Troy U.	333	ne	47	31	67	0	0	67	0
Northland C.	334	ne	ne	56 i	63 i	0 i	54 i	0 i	9 i
U. Alabama, Birmingham	335	702	438	188	62	62	0	0	0
U. North Georgia	335	48	55	59	62	0	62	0	0
California State U., San Bernardino	337	110	86	51	61	0	61	0	0
Northwest Indian C.	338	1,043	43 i	52 i	60	0	0	60	0
Sul Ross State U.	339	0	0	0 i	59 i	0 i	59 i	0 i	0 i
U. Wisconsin-Green Bay	340	49 i	53 i	48 i	57 i	0 i	57 i	0 i	0 i
SUNY, Oswego	341	42	43	58	55	31	24	0	0
Northeastern Illinois U.	342	131	50	68	54	0	54	0	0
U. West Florida	342	34	322	0	54	0	54	0	0
U. of the Pacific	344	0	0	43	53	0	53	0	0
California State U., Maritime Academy	345	0	0	0	51	0	0	51	0
Hamilton C.	346	3	6	0	49	0	49	0	0
U. Baltimore	347	0	0	0	48	0	0	0	48
Albion C.	348	0	0	0 i	47 i	0 i	47 i	0 i	0 i
California State U., Bakersfield	348	147	118	40	47	0	47	0	0
Eastern Michigan U.	348	285	18	64	47	0	35	0	12
U. Denver	348	154	145	31	47	0	47	0	0
CUNY, Lehman C.	352	0	35	0	44	0	44	0	0
Bates C.	353	83	91	26	41	0	41	0	0
U. Puget Sound	353	ne	0	ne	41	10	0	0	31
U. Southern Maine	355	0	0	7	39	0	18	21	0
U. Wisconsin-Stevens Point	356	3 i	3	57	37	0	37	0	0
Virginia State U.	356	157	0	8	37	37	0	0	0
U. Wisconsin-Eau Claire	358	5	4	5	35	0	35	0	0
Oregon Institute of Technology	359	75 i	56	24 i	32 i	0 i	0 i	0 i	32 i

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
Haverford C.	360	160	103	79	31	0	16	15	0	
Lincoln U., Jefferson City	361	0	0	60	28	28	0	0	0	
U. of Mary Washington	361	16	38	29	28	0	28	0	0	
U. Wisconsin-Superior	361	25	30	11	28	0	28	0	0	
U. North Florida	364	0	0	11	25	0	0	0	25	
U.S. Military Academy	364	111	98	2	25	0	0	0	25	
U. Wisconsin-Oshkosh	366	116 i	115 i	114	24	0	24	0	0	
Southern Connecticut State U.	367	9	1	63	23	2	0	21	0	
Stephen F. Austin State U.	367	25	1	0	23	0	23	0	0	
U. Colorado Anschutz Medical Campus ^e	369	na	na	212	19	19	0	0	0	
Brandeis U.	370	0	12	0	17	17	0	0	0	
Babson C.	371	0	0	0	16	0	0	16	0	
Eastern Washington U.	371	30	58	46	16	0	16	0	0	
U. Nebraska, Omaha	373	0	0	16	15	0	15	0	0	
Suffolk U.	374	ne	28	28	14	0	14	0	0	
Bentley U.	375	ne	ne	ne	13	0	10	3	0	
Ithaca C.	375	ne	4	20	13	0	0	13	0	
Tennessee Technological U.	375	43	22	21	13	0	13	0	0	
Winthrop U.	378	5	0	0	10	0	0	10	0	
Clarkson U.	379	0	21	77	9	0	0	9	0	
U. Wisconsin-La Crosse	379	4	6	1	9	0	9	0	0	
Texas A&M U.-San Antonio	381	ne	ne	ne	7	0	0	0	7	
U. of St. Thomas (MN)	381	0	0	222	7	0	7	0	0	
Eastern Connecticut State U.	383	0	0	0	6	0	0	6	0	
Loyola Marymount U.	384	25	32	24	5	0	5	0	0	
Minnesota State U., Mankato	384	0	0	6	5	0	5	0	0	
Smith C.	384	38	0	5	5	0	5	0	0	
Claremont McKenna C.	387	173	29	17	4	0	0	4	0	
U. Houston-Downtown	387	0	82	35	4	0	4	0	0	
CUNY, Graduate Center	389	0	0	0	3	0	3	0	0	

TABLE 41

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2022 geosciences, atmospheric sciences, and ocean sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec	
Fort Lewis C.	389	10	34	24	3	0	0	0	3	
Pennsylvania State U., Harrisburg	389	5	3	22	3	3	0	0	0	
Franklin and Marshall C.	392	442	37	0	2	0	2	0	0	
Vassar C.	392	0	0	0	2	0	2	0	0	
Alfred U.	394	0	1	1	1	0	0	0	1	
California State Polytechnic U., Pomona	394	202	38	118	1	0	1	0	0	
Kean U.	394	ne	105	61	1	0	1	0	0	
All other surveyed institutions	-	11,950	7,099	2,118	0	0	0	0	0	

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

nec = not elsewhere classified.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$77,562 thousand in federally financed R&D expenditures in geosciences, atmospheric sciences, and ocean sciences in FY 2022.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^d The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
All institutions	-	48,226,684	49,614,879	52,349,524	56,498,207	3,935,731	18,161,442	31,869,957	1,012,919	1,518,158
U. California, San Francisco	1	1,529,156	1,581,411	1,639,862	1,734,339	0	2,517	1,731,822	0	0
U. Pennsylvania	2	1,125,634	1,185,719	1,243,966	1,364,745	1,000	936,939	352,904	0	73,902
Johns Hopkins U. ^a	3	1,053,401	1,047,668	1,069,865	1,179,546	0	358,980	820,566	0	0
Duke U.	4	1,018,199	990,897	1,040,786	1,174,640	0	289,829	857,681	10,004	17,126
U. California, Los Angeles	5	925,447	989,602	1,053,540	1,110,788	0	37,544	1,073,244	0	0
U. Texas M. D. Anderson Cancer Center	6	902,580	981,164	1,056,727	1,104,846	22,773	326,187	755,886	0	0
U. Pittsburgh, Pittsburgh	7	935,756	954,315	983,251	1,082,521	456	353,030	728,994	0	41
U. Washington, Seattle	8	954,062	963,264	1,013,261	1,045,014	76	322,882	679,546	25,597	16,913
Yale U.	9	912,802	944,439	1,012,626	1,044,120	0	226,285	809,589	7,514	732
U. North Carolina, Chapel Hill	10	846,630	868,276	925,380	1,020,666	0	222,099	798,512	55	0
U. Michigan, Ann Arbor	11	955,653	967,660	931,174	1,018,062	2,541	266,722	680,357	21,095	47,347
Stanford U.	12	837,068	836,401	905,150	999,214	0	265,253	695,772	1,699	36,490
U. Wisconsin-Madison	13	814,119	839,302	861,558	952,068	128,234	318,077	500,026	1,058	4,673
Washington U., Saint Louis	14	796,337	824,978	887,653	938,655	0	389,199	549,454	2	0
Cornell U.	15	789,230	822,419	833,824	929,175	114,152	356,105	429,280	21,287	8,351
U. California, San Diego	16	819,167	828,401	827,370	915,619	303	59,696	854,614	674	332
New York U.	17	630,246	643,638	771,663	909,144	0	321,462	584,887	0	2,795
Ohio State U.	18	550,461	590,076	876,239	897,954	81,771	128,503	666,812	14,700	6,168
Icahn School of Medicine at Mount Sinai	19	722,241	747,014	820,260	893,968	0	411,941	482,027	0	0
Columbia U. in the City of New York	20	727,779	744,239	797,089	893,199	0	249,393	637,456	5,324	1,026
Emory U.	21	727,296	732,893	789,831	874,729	0	228,756	628,633	0	17,340
U. Minnesota, Twin Cities	22	684,938	722,074	760,975	864,018	78,028	126,554	602,141	51,426	5,869
Vanderbilt U. and Vanderbilt U. Medical Center	23	581,939	625,549	806,323	846,605	0	194,205	651,870	0	530
Baylor C. of Medicine	24	651,920	685,641	716,976	827,005	0	400,058	426,947	0	0
U. Florida	25	689,605	688,091	706,987	797,710	228,726	148,797	400,250	19,937	0
Harvard U.	26	704,460	684,127	714,069	741,297	0	561,958	131,479	7,218	40,642
Northwestern U.	27	604,875	619,270	659,195	721,230	0	189,086	514,642	0	17,502
U. Texas Southwestern Medical Center	28	496,697	595,939	632,134	719,002	0	223,987	479,181	469	15,365
U. Southern California	29	568,194	580,982	598,925	680,873	0	398,478	262,080	0	20,315
U. Maryland ^b	30	601,632	594,114	633,517	655,867	56,383	193,170	400,555	1,889	3,870
U. Alabama, Birmingham	31	533,536	542,308	571,525	653,373	0	167,234	486,139	0	0
U. California, Davis	32	593,628	597,962	590,027	626,320	152,571	211,134	262,615	0	0

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
U. Colorado Anschutz Medical Campus ^c	33	na	na	559,348	606,860	800	14,636	591,424	0	0
Indiana U., Bloomington	34	470,583	502,210	501,125	550,148	0	137,850	402,704	0	9,594
Rutgers, State U. New Jersey, New Brunswick	35	447,552	518,906	483,265	521,311	69,581	214,943	228,112	56	8,619
U. Cincinnati	36	437,494	440,721	456,847	508,639	0	63,666	428,068	0	16,905
Scripps Research Institute	37	427,734	444,964	485,435	492,639	0	492,639	0	0	0
Boston U.	38	338,089	373,079	445,535	485,379	0	189,654	295,414	0	311
U. Arizona	39	426,393	437,147	447,584	471,046	55,219	218,490	183,399	13,933	5
Oregon Health and Science U.	40	403,495	433,917	439,212	463,631	0	24,166	300,193	802	138,470
Texas A&M U., College Station and Health Science Center	41	351,403	502,372	487,219	435,563	210,583	99,831	103,670	17,297	4,182
U. Virginia, Charlottesville	42	385,793	420,679	402,376	432,700	0	249,817	182,321	562	0
U. Iowa	43	385,909	414,459	415,734	431,761	0	132,705	295,198	0	3,858
Case Western Reserve U.	44	377,671	384,857	360,294	406,880	0	91,552	292,264	0	23,064
U. Chicago	45	299,549	302,820	336,114	384,527	0	91,684	292,843	0	0
U. Utah	46	343,744	402,001	420,965	379,462	0	27,988	351,390	84	0
U. Massachusetts, Medical School	47	281,507	279,096	347,337	358,204	0	153,954	132,752	0	71,498
U. Kentucky	48	314,547	322,077	323,030	352,400	61,281	204,821	86,296	0	2
Michigan State U.	49	353,934	319,883	317,235	347,119	128,448	117,176	71,382	13,883	16,230
Rockefeller U.	50	332,899	337,377	339,729	344,493	0	328,999	15,494	0	0
U. Texas Health Science Center, Houston	51	271,525	273,862	308,823	342,633	0	59,833	152,507	0	130,293
U. Miami	52	284,045	302,160	297,764	342,103	0	89,556	247,302	1,166	4,079
U. Georgia	53	294,353	302,667	309,153	334,447	126,469	167,001	36,409	547	4,021
U. Illinois, Chicago	54	289,366	314,296	324,053	325,514	0	77,134	241,065	7,315	0
Thomas Jefferson U.	55	170,458	171,207	200,309	321,561	0	123,144	198,417	0	0
Pennsylvania State U., University Park and Hershey Medical Center	56	266,143	291,299	291,733	319,598	85,040	105,362	118,266	10,930	0
Albert Einstein C. of Medicine	57	298,824	288,654	301,715	318,314	0	0	318,314	0	0
U. California, Irvine	58	266,485	289,422	315,900	318,016	0	130,710	187,306	0	0
Medical C. Wisconsin	59	243,500	255,783	269,290	313,888	0	98,248	215,640	0	0
U. Rochester	60	248,086	259,224	271,630	291,673	0	61,720	229,953	0	0
Colorado State U., Fort Collins	61	211,774	231,734	288,731	289,050	55,140	74,575	26,764	127,234	5,337
Medical U. South Carolina	62	295,600	272,590	277,761	284,553	0	66,799	91,364	0	126,390
U. Missouri, Columbia	63	210,550	220,890	237,728	283,404	91,367	56,404	98,322	25,941	11,370
U. California, Berkeley	64	239,459	258,228	264,394	275,739	5,372	138,783	60,240	71,344	0
U. Illinois, Urbana-Champaign	65	222,994	241,661	258,253	270,361	67,828	93,256	5,483	103,794	0

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Virginia Commonwealth U.	66	185,744	206,550	233,486	269,742	0	72,614	175,197	0	21,931
North Carolina State U.	67	244,235	240,399	237,289	262,669	122,332	123,482	0	0	16,855
Uniformed Services U. of the Health Sciences	68	406,726	316,838	366,610	257,828	0	5,696	252,132	0	0
SUNY, U. Buffalo	69	249,349	241,467	254,314	257,060	0	95,707	159,310	0	2,043
Purdue U., West Lafayette	70	237,317	243,953	237,182	254,784	135,315	27,675	91,794	0	0
Wake Forest U.	71	230,592	236,154	253,797	253,966	0	3,339	250,627	0	0
U. Texas Health Science Center, San Antonio	72	188,483	202,572	219,734	238,510	0	80,739	132,856	0	24,915
U. Kansas	73	212,241	226,786	230,059	237,780	0	46,127	172,748	3,357	15,548
U. New Mexico	74	148,618	148,158	243,730	230,657	0	27,705	200,164	2,221	567
Virginia Polytechnic Institute and State U.	75	198,424	199,798	207,204	223,775	92,790	49,745	48,844	27,874	4,522
Temple U.	76	218,527	216,388	223,136	223,126	81	36,172	101,776	0	85,097
U. Connecticut	77	165,087	157,618	175,232	220,304	13,050	105,565	89,129	5,190	7,370
Washington State U.	78	193,878	196,649	211,107	211,742	108,785	32,110	64,128	3,094	3,625
U. Arkansas for Medical Sciences	79	153,135	174,549	194,709	205,493	0	58,106	145,560	0	1,827
U. Nebraska, Medical Center	80	194,455	202,406	200,974	205,253	0	102,327	102,926	0	0
U. South Florida ^d	81	200,585	164,666	184,291	203,592	0	103,543	99,029	146	874
U. Texas Medical Branch	82	173,776	179,403	184,500	202,875	0	154,731	48,144	0	0
Georgetown U.	83	155,013	155,197	183,629	190,912	0	12,526	176,598	0	1,788
U. Louisville	84	141,409	158,677	157,735	185,107	23	71,947	99,867	51	13,219
George Washington U.	85	175,830	179,803	180,965	184,091	0	69,589	114,499	0	3
Wayne State U.	86	186,531	182,757	175,847	183,074	0	28,121	152,350	23	2,580
Tulane U.	87	152,554	161,642	164,874	179,205	0	45,028	50,018	188	83,971
U. Oklahoma, Norman and Health Science Center	88	148,621	164,967	165,745	176,123	0	50,190	125,256	0	677
Louisiana State U., Baton Rouge	89	160,443	155,187	158,608	173,539	91,647	71,438	670	9,784	0
Dartmouth C. and Dartmouth Hitchcock Medical Center	90	176,231	170,704	163,702	171,185	0	89,693	80,239	1,252	1
U. Nebraska, Lincoln	91	161,097	161,499	158,894	170,212	103,125	30,056	17,663	18,273	1,095
Oregon State U.	92	136,589	143,505	151,779	162,192	85,445	43,217	7,475	25,869	186
Iowa State U.	93	149,764	123,853	142,283	160,235	85,319	42,147	402	0	32,367
U. Vermont	94	111,873	142,081	142,622	158,896	23,593	61,287	65,313	8,703	0
U. Texas, Austin	95	117,716	130,377	148,471	156,202	75	71,830	77,108	4,167	3,022
Brown U.	96	130,419	134,751	139,126	149,795	0	60,922	49,964	0	38,909
Arizona State U.	97	101,129	103,558	111,790	141,306	0	95,701	42,576	2,543	486
Mississippi State U.	98	118,479	119,753	127,096	140,283	104,790	11,727	2,544	18,183	3,039

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
SUNY, Stony Brook U.	99	117,953	121,070	127,257	139,641	0	60,840	78,801	0	0
West Virginia U.	100	104,435	108,264	124,894	135,260	14,556	31,046	76,948	10,739	1,971
Tufts U.	101	114,635	136,826	149,664	134,584	3,836	102,498	19,825	0	8,425
Auburn U., Auburn	102	104,935	110,768	111,491	128,578	83,715	17,753	14,411	1,910	10,789
Massachusetts Institute of Technology	103	143,017	126,648	118,283	128,090	0	56,438	27,534	811	43,307
Kansas State U.	104	133,246	127,024	119,328	124,308	98,598	25,276	434	0	0
Augusta U.	105	96,123	103,554	115,862	123,587	0	45,192	73,958	0	4,437
U. Hawaii, Manoa	106	130,373	123,649	123,962	122,760	16,884	60,677	37,830	1,669	5,700
Cold Spring Harbor Laboratory	107	126,773	115,051	114,885	118,034	2,112	115,922	0	0	0
North Dakota State U.	108	104,204	101,693	106,163	115,027	92,009	4,972	7,540	10,506	0
U. Tennessee, Health Science Center	109	95,852	98,345	107,620	113,398	0	35,849	74,096	0	3,453
Princeton U.	110	95,882	91,903	95,938	112,932	0	102,181	0	10,751	0
Rush U.	111	93,701	92,494	104,999	111,165	0	11,598	99,567	0	0
U. California, Riverside	112	91,835	95,431	98,539	107,118	28,479	60,605	18,034	0	0
U. Tennessee, Knoxville ^e	113	24,065	84,619	86,080	100,488	48,003	33,638	10,264	8,583	0
California Institute of Technology	114	87,505	89,626	100,754	98,580	0	98,392	142	0	46
U. South Carolina, Columbia	115	70,689	93,409	84,069	97,376	0	19,230	78,146	0	0
U. Mississippi	116	103,882	86,130	82,916	93,555	239	26,692	65,860	0	764
U. Arkansas, Fayetteville	117	89,593	77,569	79,509	92,217	79,353	7,885	4,979	0	0
U. Louisiana, Lafayette	118	73,146	87,621	80,528	89,731	1,301	67,016	19,606	1,808	0
Drexel U.	119	93,762	89,027	96,668	87,434	0	40,343	44,108	2,983	0
Montana State U., Bozeman	120	72,765	71,440	74,897	82,986	51,177	16,954	13,878	118	859
U. Delaware	121	60,535	66,097	60,823	81,458	30,550	11,850	39,058	0	0
U. Nevada, Reno	122	64,307	71,378	78,218	78,928	8,509	39,371	20,416	8,968	1,664
Van Andel Research Institute	123	61,738	58,982	65,789	78,626	0	78,626	0	0	0
U. Idaho	124	71,656	73,933	73,435	78,351	39,305	24,647	280	14,111	8
Oklahoma State U., Stillwater	125	76,701	75,506	77,720	77,513	33,721	26,166	6,090	11,536	0
U. Massachusetts, Amherst	126	67,652	64,246	69,519	77,193	21,277	27,376	10,918	8,221	9,401
U. Montana, Missoula	127	61,959	66,817	72,501	76,032	653	23,548	31,740	20,091	0
Georgia State U.	128	70,211	66,831	65,536	73,616	488	59,500	8,380	0	5,248
Clemson U.	129	62,391	71,776	66,524	72,699	25,912	26,009	7,953	21	12,804
Florida State U.	130	61,515	64,315	61,377	67,760	125	22,715	39,431	3,922	1,567
Florida International U.	131	51,676	55,877	55,462	67,166	39	46,249	16,489	4,389	0

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
U. Oregon	132	35,644	35,936	56,791	67,072	0	44,968	118	225	21,761
Saint Louis U.	133	54,582	58,836	65,928	66,726	0	25,694	40,671	361	0
Texas Tech U.	134	52,335	49,230	55,930	65,627	34,132	18,732	7,104	5,659	0
Utah State U.	135	61,698	56,017	56,043	60,940	33,056	8,134	1,797	17,953	0
U. Colorado Boulder	136	51,990	52,074	53,211	56,184	1,690	46,086	5,076	1,596	1,736
U. New Hampshire	137	50,431	52,822	52,907	55,600	21,849	9,521	16,527	7,703	0
Louisiana State U., Health Sciences Center, New Orleans	138	40,914	43,419	44,370	53,995	0	5,544	43,024	0	5,427
New Mexico State U.	139	40,821	43,340	48,808	53,389	32,727	18,584	903	159	1,016
U. Wyoming	140	41,934	47,073	43,538	52,377	15,138	22,214	6,761	7,397	867
Cleveland State U.	141	47,567	46,618	45,321	51,438	0	48,744	1,976	0	718
SUNY, Upstate Medical U.	142	38,091	41,557	44,870	50,586	0	17,483	33,103	0	0
SUNY, U. Albany	143	101,768	60,025	52,135	49,048	0	31,346	17,702	0	0
U. Puerto Rico, Medical Sciences Campus	144	44,985	37,081	43,846	47,314	0	0	47,314	0	0
U. California, Office of the President	145	53,460	46,725	42,520	45,843	2,071	0	43,487	276	9
Texas Tech U., Health Sciences Center	146	42,959	43,102	40,567	44,961	0	21,246	23,715	0	0
South Dakota State U.	147	53,751	49,659	38,411	44,606	35,767	3,167	2,977	2,643	52
Howard U.	148	24,940	25,750	30,787	44,152	0	9,045	28,888	0	6,219
Northern Arizona U.	149	36,245	38,862	41,082	43,147	1,129	30,320	4,639	5,807	1,252
Morehouse School of Medicine	150	31,289	29,813	32,637	42,489	0	0	42,489	0	0
U. Maine	151	38,713	39,357	38,598	41,542	19,721	10,501	1,006	10,314	0
U. Houston	152	39,727	34,394	34,322	40,187	232	8,119	31,836	0	0
Loyola U., Chicago	153	33,699	35,073	38,592	39,546	0	16,600	21,885	1,061	0
Southern Illinois U., Carbondale	154	32,432	33,480	37,448	38,470	13,997	5,789	18,528	0	156
Northeastern U.	155	31,181	32,626	32,513	37,639	0	17,086	11,477	0	9,076
Georgia Institute of Technology	156	33,854	43,699	32,997	37,289	4,307	25,448	6,060	0	1,474
San Diego State U.	157	28,629	27,880	31,479	36,057	0	14,527	20,885	645	0
U. Notre Dame	158	27,517	27,750	29,599	35,522	252	35,115	155	0	0
U. North Dakota	159	28,781	31,526	31,330	35,064	0	18,631	16,433	0	0
East Carolina U.	160	35,936	33,206	28,703	34,271	156	11,180	22,935	0	0
U. Texas Health Science Center, Tyler	161	19,606	21,265	27,928	33,872	0	33,872	0	0	0
U. Missouri, Kansas City	162	16,974	20,183	17,966	33,588	739	6,669	25,516	0	664
U. Central Florida	163	34,043	29,255	30,876	33,455	0	18,380	15,074	0	1
New Jersey Institute of Technology	164	27,910	20,121	22,393	31,619	0	10,240	21,379	0	0

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
U. Nevada, Las Vegas	165	31,434	34,733	32,306	31,571	84	14,714	15,740	272	761
Florida Atlantic U.	166	25,420	28,725	27,748	31,522	28	18,712	9,696	0	3,086
U. Texas, Dallas	167	35,971	35,986	27,495	31,502	0	5,932	25,570	0	0
SUNY, Downstate Health Sciences U.	168	36,015	33,204	34,459	30,918	0	30,468	450	0	0
Brandeis U.	169	22,063	28,345	31,582	30,648	0	25,632	5,007	9	0
George Mason U.	170	16,438	33,163	47,800	30,410	352	20,571	8,513	973	1
U. Texas, El Paso	171	30,643	28,552	23,452	30,381	0	21,382	7,386	65	1,548
U. Toledo	172	27,889	27,748	25,012	30,176	5	8,546	21,521	0	104
U. California, Santa Cruz	173	26,486	27,565	28,302	30,133	3,304	26,829	0	0	0
U. Rhode Island	174	24,563	27,699	28,984	29,670	3,465	15,848	5,359	775	4,223
Louisiana State U., Health Sciences Center, Shreveport	175	26,262	25,321	24,600	29,502	0	14,437	14,239	0	826
U. Alaska, Fairbanks	176	26,416	29,409	37,477	28,235	3,606	16,875	2,018	5,709	27
SUNY, C. of Environmental Science and Forestry	177	26,495	26,083	23,850	27,321	i 3,275	i 7,202	i 1	i 16,263	i 580
U. Texas, San Antonio	178	22,455	25,911	26,419	27,073	0	22,618	2,527	0	1,928
U. Texas Rio Grande Valley	179	25,619	28,351	28,556	26,835	1,603	4,667	16,939	7	3,619
Florida A&M U.	180	21,837	21,450	23,507	26,175	11,714	113	10,961	1,259	2,128
U. South Alabama	181	40,597	36,664	31,362	25,738	0	376	19,345	0	6,017
U. Alabama, Tuscaloosa	182	8,452	8,985	14,565	22,348	0	7,565	14,749	0	34
Albany Medical C.	183	23,028	23,510	22,443	22,297	0	15,847	6,450	0	0
Eastern Virginia Medical School	184	27,064	20,870	19,415	22,165	0	12,924	9,241	0	0
Indiana U.-Purdue U., Indianapolis	185	20,263	21,874	22,890	21,631	0	6,436	14,064	0	1,131
East Tennessee State U.	186	10,721	i 10,103	i 13,835	i 21,542	i 0	i 7,172	i 14,370	i 0	i 0
Creighton U.	187	17,527	i 14,845	i 17,512	i 20,856	i 0	i 8,439	i 12,417	i 0	i 0
U. Texas, Arlington	188	18,118	18,430	19,246	20,310	0	9,659	10,059	592	0
U. California, Santa Barbara	189	34,842	30,838	29,848	19,387	0	16,733	0	2,654	0
U. Minnesota, Duluth	190	19,286	19,580	19,119	19,244	0	1,333	0	17,911	0
North Carolina A&T State U.	191	16,756	16,663	20,086	19,160	13,488	1,925	551	3,196	0
Rice U.	192	13,966	16,008	15,766	18,022	0	18,013	9	0	0
Marshall U.	193	15,738	16,302	18,296	17,965	0	6,734	11,141	0	90
Meharry Medical C.	194	18,286	13,870	15,840	17,895	0	17,895	0	0	0
Central Michigan U.	195	8,603	9,145	14,879	17,871	12	4,459	12,783	613	4
U. South Dakota	196	18,568	17,172	15,920	17,850	0	12,452	4,478	626	294
Texas State U.	197	11,304	12,417	11,708	17,849	957	11,937	1,716	0	3,239

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
U. Massachusetts, Lowell	198	8,730	12,056	12,821	17,817	0	8,776	8,896	145	0
U. North Texas, Denton	199	12,644	12,745	13,582	17,731	1,547	10,612	4,943	0	629
Ohio U.	200	15,739	15,375	16,838	17,612	0	9,040	7,780	0	792
Texas A&M U.-Kingsville	201	16,431	16,722	16,283	17,132	14,303	1,782	0	815	232
New York Medical C.	202	19,398	20,137	18,872	16,461	0	7,095	6,552	0	2,814
Tennessee State U.	203	11,924	20,557	19,491	16,043	13,897	2,132	14	0	0
Delaware State U.	204	13,791	14,368	14,196	15,815	4,163	9,339	984	1,056	273
Wichita State U.	205	2,850	2,980	14,196	15,666	0	2,150	13,516	0	0
SUNY, Binghamton U.	206	12,165	12,877	12,788	15,476	0	5,965	9,414	24	73
Carnegie Mellon U.	207	15,366	14,696	14,273	15,109	211	13,497	1,006	23	372
Tuskegee U.	208	8,427	8,145	8,136	15,072	10,130	4,912	23	7	0
Loma Linda U.	209	16,874	15,033	13,191	14,632	0	7,013	7,619	0	0
Charles R. Drew U. of Medicine and Science	210	13,739	13,682	13,228	14,581	0	0	14,581	0	0
CUNY, Queens C.	211	10,992	11,236	10,421	14,572	0	2,738	11,834	0	0
Portland State U.	212	15,844	13,547	13,784	14,531	46	8,790	1,368	4,228	99
CUNY, Graduate School of Public Health and Health Policy	213	7,882	10,899	14,025	14,429	0	784	13,645	0	0
Nova Southeastern U.	214	14,236	13,298	12,827	14,336	0	0	14,319	0	17
U. Nebraska, central administration	215	12,205	13,089	12,423	13,754	772	9,970	2,810	0	202
U. Maryland, Baltimore County	216	11,834	11,478	10,033	13,643	693	12,314	259	190	187
Marquette U.	217	13,155	11,696	12,236	13,619	155	6,042	5,317	0	2,105
San Francisco State U.	218	12,886	12,603	13,143	13,356	0	11,857	267	931	301
Northeast Ohio Medical U.	219	17,625	15,579	13,823	13,150	0	7,274	5,248	0	628
Chapman U.	220	7,139	7,307	9,497	13,148	465	5,852	6,376	353	102
Baylor U.	221	5,641	7,456	11,299	13,144	523	8,488	3,041	823	269
Texas Tech U., Health Sciences Center, El Paso	222	11,649	10,294	10,555	13,073	0	4,440	8,633	0	0
Rosalind Franklin U. of Medicine and Science	223	16,011	14,516	13,478	12,579	0	11,566	1,013	0	0
U. Guam	224	8,964	9,824	11,783	12,397	3,527	573	3,139	5,158	0
U. Southern Mississippi	225	10,316	11,248	11,218	12,031	0	9,825	2,111	0	95
Old Dominion U.	226	14,668	14,463	15,041	12,010	0	4,660	7,244	106	0
Boise State U.	227	9,858	10,616	12,908	12,000	769	8,027	2,279	884	41
Wright State U.	228	16,448	13,515	11,213	11,782	0	7,364	4,418	0	0
Syracuse U.	229	12,095	10,724	10,916	11,393	0	6,304	3,918	1,171	0
U. North Carolina, Greensboro	230	8,554	7,582	8,934	11,226	0	6,836	4,390	0	0

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Lincoln U., Jefferson City	231	4,089	5,404	7,345	11,109	10,310	0	0	799	0
Midwestern U.	232	10,343	10,479	10,957	11,069	20	6,375	4,612	0	62
Rutgers, State U. New Jersey, Newark	233	10,800	13,014	11,845	10,990	0	10,822	168	0	0
Kent State U.	234	8,388	8,335	9,034	10,845	86	7,478	3,242	5	34
U. California, Merced	235	10,943	9,333	9,742	10,814	697	5,113	4,176	0	828
U. Memphis	236	10,521	10,395	9,537	10,731	0	3,665	5,848	174	1,044
U. North Texas, Health Science Center	237	49,099	41,900	50,692	10,439	0	3,299	7,140	0	0
U. Wisconsin-Milwaukee	238	8,637	10,279	9,109	10,207	0	3,770	6,437	0	0
Rowan U.	239	11,107	11,115	10,849	10,188	0	3,758	6,119	0	311
Brigham Young U., Provo	240	9,121	9,218	9,660	10,040	2,955	5,141	1,639	0	305
Long Island U.	241	4,561	6,526	7,162	10,025	37	2,155	7,833	0	0
Fort Valley State U.	242	4,321	4,581	4,620	9,807	9,623	184	0	0	0
Miami U.	243	11,143	12,044	9,733	9,782	27	5,808	3,856	0	91
Oakland U.	244	7,041	5,653	7,887	9,762	0	4,389	2,215	0	3,158
Illinois Institute of Technology	245	11,618	9,993	9,053	9,464	933	7,268	1,198	0	65
Prairie View A&M U.	246	8,105	8,280	8,187	9,381	9,006	258	27	90	0
Tarleton State U.	247	6,594	6,429	7,521	9,239	6,683	675	763	1,118	0
Kentucky State U.	248	8,139	7,806	8,546	9,156	9,156	0	0	0	0
Lehigh U.	249	4,448	4,121	5,271	9,078	0	7,035	14	0	2,029
California Polytechnic State U., San Luis Obispo	250	8,979	7,929	6,526	9,048	4,120	844	2,181	1,387	516
U. Massachusetts, Boston	251	9,692	8,950	8,612	8,974	84	5,026	3,063	801	0
Rensselaer Polytechnic Institute	252	5,384	6,102	6,913	8,885	0	8,885	0	0	0
U. Alaska, Anchorage	253	8,863	6,857	8,381	8,875	57	5,216	2,121	1,481	0
Central State U.	254	2,923	5,451	8,134	8,806	8,310	203	0	169	124
Mercer U.	255	8,298	8,624	8,627	8,473	0	253	5,466	0	2,754
Southern Illinois U., Edwardsville	256	10,357	8,190	7,333	8,447	6,908	589	803	147	0
U. Maryland Center for Environmental Science	257	10,614	9,194	8,729	8,403	954	1,088	0	6,151	210
Duquesne U.	258	9,595	9,914	6,085	8,351	0	1,627	6,724	0	0
Boston C.	259	13,514	9,824	9,313	8,226	0	6,239	1,987	0	0
U. of the Virgin Islands	260	9,712	7,103	6,045	8,130	3,126	2,708	0	0	2,296
Alcorn State U.	261	8,664	7,918	6,826	8,074	i 7,716	0	i 358	0	0
Texas Southern U.	262	2,695	6,206	5,033	8,033	0	6,427	0	0	1,606
U. Nebraska, Omaha	263	4,020	5,892	7,208	7,982	63	1,778	6,129	10	2

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
CUNY, City C.	264	8,010	7,167	9,192	7,942	0	5,257	2,663	0	22
Morgan State U.	265	4,197	5,061	5,810	7,898	462	3,096	4,340	0	0
CUNY, Hunter C.	266	7,408	8,957	7,852	7,870	58	6,539	1,204	0	69
Virginia State U.	267	6,886	6,123	7,191	7,493	7,305	61	127	0	0
U. North Carolina, Wilmington	268	7,782	7,090	7,179	7,428	579	4,997	169	1,599	84
Edward Via C. of Osteopathic Medicine	269	7,225	7,475	6,629	7,121	0	0	7,121	0	0
Oklahoma State U., Center for Health Sciences	270	4,815	7,616	6,928	7,092	0	1,090	6,002	0	0
Southern U. and A&M C., Agricultural Research and Extension Center	271	5,448	4,475	6,164	7,048	5,614	306	803	325	0
Western U. of Health Sciences	272	3,936	4,866	5,598	7,043	577	6,309	144	0	13
Georgia Southern U.	273	2,331	1,664	7,662	6,734	103	2,483	3,584	266	298
West Virginia State U.	274	5,424	5,199	6,436	6,701	6,159	0	8	534	0
Philadelphia C. of Osteopathic Medicine	275	3,162	3,360	6,131	6,667	0	3,992	2,675	0	0
North Carolina Central U.	276	8,401	7,233	6,109	6,414	0	6,212	202	0	0
U. Arkansas, Pine Bluff	277	7,878	7,415	6,852	6,299	6,291	8	0	0	0
Roseman U. of Health Sciences	278	4,176	4,380	5,893	6,285	0	0	6,285	0	0
Idaho State U.	279	3,638	3,936	4,167	6,213	0	5,056	1,157	0	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	280	5,488	6,999	5,982	6,080	0	5,019	1,016	45	0
Langston U.	281	10,287	13,843	6,062	6,074	4,294	1,402	378	0	0
West Texas A&M U.	282	2,915	3,570	6,240	6,054	5,722	0	0	241	91
Teachers C., Columbia U.	283	4,651	4,455	5,040	6,007	0	0	0	0	6,007
U. New England	284	5,864	5,904	5,340	5,953	0	4,749	1,106	98	0
Arkansas State U., Jonesboro	285	6,659	6,636	6,436	5,942	948	4,884	77	2	31
U. Missouri, Saint Louis	286	6,824	7,254	6,118	5,842	0	1,782	4,012	48	0
San Jose State U.	287	1,133	1,542	3,655	5,838	0	3,253	2,585	0	0
Xavier U. Louisiana	288	3,255	3,929	3,511	5,786	0	398	5,388	0	0
Kennesaw State U.	289	2,275	5,740	3,073	5,744	172	5,572	0	0	0
Alabama A&M U.	290	7,546	5,142	5,412	5,654	380	1,800	3,333	141	0
U. North Carolina, Charlotte	291	5,534	4,512	4,701	5,643	0	3,805	1,838	0	0
California State U., Northridge	292	10,053	6,822	4,020	5,528	0	4,439	0	0	1,089
U. Maryland, Eastern Shore	293	721	2,572	4,310	5,437	4,453	616	347	21	0
U. Denver	294	4,388	4,889	5,347	5,422	0	5,332	0	90	0
Clark Atlanta U.	295	6,360	6,017	6,614	5,400	0	5,400	0	0	0
Jackson State U.	296	1,902	2,129	3,183	5,257	0	750	4,507	0	0

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Saint Joseph's U.	297	477	761	547	5,199	0	1,608	3,591	0	0
Texas A&M U.-Corpus Christi	298	5,669	6,975	5,422	5,184	341	3,998	92	470	283
U. Central del Caribe	299	3,953	3,931	3,831	5,053	0	0	5,053	0	0
U. Hawaii, Hilo	300	4,212	4,149	4,525	4,995	2,700	560	1,018	359	358
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	301	3,769	3,737	3,776	4,954	0	4,954	0	0	0
Middle Tennessee State U.	302	1,679	2,029	4,048	4,950	1,430	2,188	734	331	267
California State U., Fresno	303	4,404	4,306	4,197	4,894	2,925	709	1,117	0	143
Ball State U.	304	2,880	2,738	2,674	4,876	0	1,644	3,086	146	0
California State U., Long Beach	305	5,335	4,816	3,700	4,858	0	1,834	3,023	1	0
MGH Institute of Health Professions	306	3,494	3,014	2,500	4,628	0	2,428	2,200	0	0
SUNY, C. of Optometry	307	2,968	3,477	3,460	4,497	0	0	4,497	0	0
CUNY, Advanced Science Research Center	308	3,935	4,679	5,261	4,493	0	3,752	0	741	0
Illinois State U.	309	3,688	3,183	4,364	4,488	84	3,513	758	0	133
U. Detroit Mercy	310	4,796	4,337	4,096	4,455	0	3,838	617	0	0
James Madison U.	311	1,146	1,844	3,372	4,434	12	2,228	2,138	56	0
U. of Health Sciences and Pharmacy in St. Louis	312	ne	4,835	5,313	4,271	0	0	4,271	0	0
U. Wisconsin-Superior	313	2,219	2,026	2,338	4,213	0	0	0	4,213	0
Des Moines U.	314	1,406	3,637	4,192	4,128	0	3,573	363	0	192
Bowling Green State U.	315	1,268	1,766	3,158	4,077	478	1,515	1,368	716	0
California State U., Fullerton	316	2,843	2,440	2,507	4,038	81	2,598	1,345	14	0
California State Polytechnic U., Humboldt	317	7,570	7,291	5,303	4,020	174	606	99	2,993	148
Villanova U.	318	2,381	3,438	3,610	3,993	0	1,743	2,250	0	0
California State U., Monterey Bay	319	3,887	3,225	3,452	3,977	1,637	2,127	192	0	21
New York Institute of Technology	320	4,479	2,757	3,277	3,871	0	372	3,499	0	0
Montclair State U.	321	2,586	3,277	3,231	3,830	146	688	2,715	281	0
Pacific U.	322	5,294	3,852	3,186	3,813	0	454	3,019	36	304
Yeshiva U.	323	2,420	2,477	3,830	3,741	63	0	3,678	0	0
Clark U.	324	2,057	1,953	2,197	3,706	100	1,052	1,021	0	1,533
Louisiana Tech U.	325	2,565	2,510	2,242	3,703	1,089	1,249	1,365	0	0
Desert Research Institute	326	2,993	3,539	3,574	3,674	0	3,674	0	0	0
Worcester Polytechnic Institute	327	1,791	2,104	2,188	3,538	0	3,538	0	0	0
California State Polytechnic U., Pomona	328	2,983	2,656	3,557	3,501	1,748	1,753	0	0	0

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
U. Puerto Rico, Rio Piedras	329	3,728	3,617	4,283	3,500	0	3,349	151	0	0
Tennessee Technological U.	330	2,025	2,306	2,510	3,456	427	1,709	304	1,007	9
Oregon Institute of Technology	331	1,940 i	1,741 i	2,894 i	3,404 i	0 i	1,925 i	919 i	560 i	0 i
U. Central Oklahoma	332	367	366 i	382 i	3,393 i	0 i	2,255 i	1,138 i	0 i	0 i
Sam Houston State U.	333	2,297	1,730	2,688	3,358	186	2,162	1,010	0	0
U. West Florida	334	1,511	2,081	2,192	3,311	0	2,741	310	0	260
U. Wisconsin-Stevens Point	335	3,903 i	4,317	3,716	3,144	599	119	2	2,424	0
William & Mary	336	2,775	2,694	2,669	3,112	0	2,449	35	626	2
Appalachian State U.	337	1,663	1,879	1,745	3,066	254	1,906	404	276	226
Texas Woman's U.	338	2,121	2,259	3,053	3,015	0	977	2,038	0	0
Colorado School of Mines	339	2,324	2,073	3,081	2,918	188	2,627	67	31	5
U. of the District of Columbia	340	2,600	2,157	3,054	2,810	2,618	0	0	0	192
Michigan Technological U.	341	4,323	3,804	2,621	2,804	18	1,963	823	0	0
U. Colorado Denver ^C	341	na	na	4,284	2,804	29	1,076	1,635	50	14
Southern Methodist U.	343	1,533	2,144	2,221	2,765	0	2,648	0	0	117
Winston-Salem State U.	344	650	2,400	3,530	2,711	0	542	2,169	0	0
Smith C.	345	2,368	1,783	1,462	2,701	0	2,567	133	1	0
U. Alabama, Huntsville	346	2,815	3,170	2,620	2,695	24	1,508	1,159	0	4
Reed C.	347	1,588	1,573	1,629 i	2,626 i	0 i	1,319 i	1,307 i	0 i	0 i
Northern Illinois U.	348	4,306	2,319	3,011	2,620	0	839	1,628	153	0
U. Massachusetts, Dartmouth	348	2,062	1,467	1,834	2,620	0	2,225	395	0	0
Florida Gulf Coast U.	350	153	760	2,209	2,606	9	179	1,945	473	0
California State U., East Bay	351	ne	1,103	1,093	2,587	878	340	1,349	0	20
U. Louisiana, Monroe	352	1,795	2,104	1,885	2,583	34	291	2,258	0	0
Western Kentucky U.	353	3,422	2,888	2,315	2,547	462	815	1,005	0	265
Alabama State U.	354	2,577	1,989	2,265	2,471	0	1,929	0	0	542
Murray State U.	355	3,136	2,475	3,108	2,449	98	2,351	0	0	0
U. Nebraska, Kearney	356	1,810	1,953	2,021	2,409	462	910	552	485	0
U. North Florida	356	1,373	1,388	1,647	2,409	0	1,451	937	21	0
Hobart and William Smith Colleges	358	1,335	1,563	1,664	2,357	0	298	0	2,059	0
U. Oklahoma, Tulsa	359	2,328	2,633	2,096	2,351	0	0	2,351	0	0
Loyola Marymount U.	360	542	591	819	2,308	0	2,001	171	3	133
Touro U., California	361	3,543	3,539	3,475	2,290	0	1,564	0	0	726

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Albany C. of Pharmacy and Health Sciences	362	3,381	3,765	3,687	2,276	0	2,001	275	0	0
Williams C.	363	720	686	703	2,275	0	2,275	0	0	0
U. Texas, Tyler	364	1,378	1,302	1,260	2,233	318	653	1,233	29	0
Hope C.	365	477	636	1,152	2,230	0	2,209	3	0	18
Eastern Michigan U.	366	2,322	3,498	2,811	2,225	0	791	1,219	212	3
Chicago State U.	367	52	ne	ne	2,223	0	2,223	0	0	0
St. John's U., New York	368	1,763	2,324	2,197	2,213	0	856	1,357	0	0
Salisbury U.	369	2,004	2,366	2,598	2,182	0	381	1,710	91	0
Northern Kentucky U.	370	623	1,007	1,939	2,148	0	561	1,576	11	0
Texas A&M U.-Commerce	371	1,040	924	587	2,119	646	18	70	0	1,385
Dine C.	372	1,074	347	ne	2,091	329	0	1,762	0	0
DePaul U.	373	479	465	573	2,088	0	865	785	46	392
Palmer C. of Chiropractic, Davenport	374	1,650	1,900	2,233	2,050	0	0	0	0	2,050
Pepperdine U.	375	358	623	564	2,022	0	1,884	96	0	42
Lake Superior State U.	376	ne	ne	ne	1,988	0	892	0	1,001	95
Western Illinois U.	377	1,413	1,914	2,346	1,917	1,887	30	0	0	0
New England C. of Optometry	378	1,223	1,150	1,978	1,868	0	0	1,868	0	0
Saginaw Valley State U.	379	1,381	1,229	1,282	1,845	0	0	1,845	0	0
Wesleyan U.	380	1,810	909	1,469	1,833	0	1,833	0	0	0
Towson U.	381	914	836	914	1,816	0	824	839	151	2
Stephen F. Austin State U.	382	1,992	1,848	2,042	1,773	1,620	60	81	0	12
Grand Valley State U.	383	1,338	1,914	1,833	1,765	1	507	1,253	0	4
Indiana U. Pennsylvania	384	1,474	1,251	1,890	1,747	0	1,677	70	0	0
Bates C.	385	845	1,247	1,783	1,743	0	1,521	0	0	222
Amherst C.	386	1,570	1,064	1,259	1,741	0	1,741	0	0	0
Gallaudet U.	387	1,311	1,239	1,159	1,682	0	577	1,105	0	0
Missouri State U.	388	1,646	1,812	2,109	1,673	377	634	3	496	163
SUNY, Polytechnic Institute	388	1,995	1,977	2,587	1,673	0	1,529	144	0	0
Hampton U.	390	1,777	1,745	1,685	1,659	0	1,056	603	0	0
Austin Peay State U.	391	912	1,333	1,404	1,657	0	35	6	1,347	269
Rochester Institute of Technology	391	903	1,238	1,551	1,657	0	1,657	0	0	0
U. North Carolina, Asheville	393	1,271	1,559	2,045	1,605	0	53	606	0	946
U. Akron	394	1,928	1,882	1,390	1,587	0	1,303	284	0	0

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022														
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec									
Framingham State U.	395	ne	2,060	2,132	i	1,586	i	0	i	1,070	i	516	i	0	i	0	i		
Marshall B. Ketchum U.	396	1,430	i	1,357	i	1,351	i	1,559	i	0	i	0	i	1,559	i	0	i	0	i
U. Wisconsin-Green Bay	397	1,173	i	1,114	i	1,065	i	1,543	i	0	i	477	i	1,066	i	0	i	0	i
South Carolina State U.	398	1,318		1,367	i	1,416	i	1,537	i	0	i	1,321	i	216	i	0	i	0	i
C. Charleston	399	1,366		1,128		1,370		1,536		157		904		121		231		123	
U. Arkansas, Little Rock	400	2,483		2,878		1,997		1,519		17		1,502		0		0		0	
C. New Jersey	401	ne		657		856		1,502		0		1,116		199		187		0	
Pennsylvania State U., Behrend	402	124		21		593		1,484		93		532		253		606		0	
Bowie State U.	403	122		414		96		1,462		0		319		1,143		0		0	
California State U., San Marcos	404	1,950		1,888		1,120		1,456		0		1,283		30		0		143	
Northeastern Illinois U.	405	1,325		1,122		1,111		1,447		20		335		1,092		0		0	
California State U., Chico	406	1,089		1,466		1,522		1,445		1,348		63		10		0		24	
Pennsylvania State U., Harrisburg	407	187		411		1,536		1,433		43		607		783		0		0	
Hawaii Pacific U.	408	1,265		1,248		1,211		1,431		833		526		72		0		0	
Black Hills State U.	409	847		824		806		1,421		0		1,391		0		30		0	
California State U., Channel Islands	410	942		901		1,001		1,401		0		1,143		22		236		0	
U. of the Pacific	411	1,187		982		870		1,392		0		1,160		232		0		0	
William Paterson U.	412	1,040		1,210		1,051		1,379		0		821		507		2		49	
U. Northern Colorado	413	1,679		1,239		1,263		1,368		0		925		297		0		146	
Clarkson U.	414	1,163		999		1,014		1,339		0		1,235		101		0		3	
West Virginia School of Osteopathic Medicine	415	ne		1,303		1,245		1,327		0		666		659		0		2	
Western Carolina U.	416	1,095		1,128		1,484		1,326		175		332		796		23		0	
Barnard C.	417	660		692		1,008		1,322		25		1,297		0		0		0	
U. Houston-Clear Lake	417	279		347		942		1,322		0		134		351		837		0	
Florida Institute of Technology	419	1,384		667		2,175		1,313		223		949		42		35		64	
Sul Ross State U.	420	1,578		1,595		1,654	i	1,303	i	403	i	505	i	254	i	141	i	0	i
Swarthmore C.	421	755		841		824		1,295		0		1,295		0		0		0	
Fisk U.	422	4,520		3,585		1,601		1,289		0		1,289		0		0		0	
Keck Graduate Institute	423	1,474	i	1,412	i	1,350	i	1,282		0		1,282		0		0		0	
Butler U.	424	ne		ne		ne		1,276		55		583		638		0		0	
Bowdoin C.	425	1,476		1,196		1,262		1,275		0		1,275		0		0		0	
Bryn Mawr C.	426	829		705		709		1,259		0		1,132		0		127		0	
Bucknell U.	427	608		743	i	674		1,255		0		1,238		0		0		17	

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
California State U., San Bernardino	428	2,115	948	1,016	1,251	0	1,187	63	1	0
Northern Michigan U.	429	684	727	855	1,248	0	974	201	73	0
Stevens Institute of Technology	430	33	203	94	1,245	0	1,245	0	0	0
Kean U.	431	ne	183	56	1,234	43	976	138	61	16
Hofstra U.	432	472	575	1,062	1,232	6	709	292	225	0
California State U., Los Angeles	433	2,989 i	2,299	740	1,229	0	773	439	0	17
Colorado State U., Pueblo	434	1,693	1,703	1,845	1,214	0	1,115	0	99	0
Fordham U.	435	1,819	1,435	1,207	1,213	0	1,213	0	0	0
U. Central Arkansas	436	682	785	755	1,209	0	612	512	85	0
Tougaloo C.	437	1,444	1,741	1,733 i	1,207 i	0 i	1,207 i	0 i	0 i	0 i
Dillard U.	438	1,776	1,323	1,356	1,199	0	609	424	0	166
U. South Carolina, Aiken	439	625	962	657	1,165	0	1,008	157	0	0
California State U., Sacramento	440	1,324	1,328	1,446	1,154	0	452	324	378	0
Haverford C.	441	582 i	926 i	647 i	1,153 i	0 i	604 i	549 i	0 i	0 i
Purdue U., Northwest	442	615	988	974	1,120	0	47	1,073	0	0
SUNY, C. Brockport	442	846	1,197	680	1,120	0	39	26	1,055	0
American U.	444	1,854	1,886	1,148	1,117	0	661	0	0	456
Nevada State C.	445	ne	ne	ne	1,109	0	1,016	0	93	0
California State U., Stanislaus	446	910	1,169	1,232	1,094	0	1,004	90	0	0
CUNY, C. Staten Island	447	923	1,277	1,109	1,070	0	548	520	2	0
Embry-Riddle Aeronautical U.	448	92	17	0	1,064	0	26	1,020	0	18
West Chester U. Pennsylvania	449	1,598	1,072	815	1,055	0	437	618	0	0
Wellesley C.	450	1,515	1,455	1,554	1,033	0	1,033	0	0	0
Southeastern Louisiana U.	451	827	941	795	1,022	0	918	104	0	0
U. New Orleans	452	817	974	1,114	1,016	0	1,014	0	2	0
U. Tulsa	453	920	678	725	1,008	0	828	180	0	0
Franklin and Marshall C.	454	815	578	840	1,001	0	860	138	0	3
Southern Connecticut State U.	454	841	1,308	689	1,001	98	323	567	13	0
U. Tennessee, Chattanooga	456	853	1,036	878	994	0	835	159	0	0
U. of the Incarnate Word	457	836	962	1,369	972	0	303	146	0	523
U. San Francisco	458	456	308	398	970	0	640	307	19	4
Furman U.	459	412	873	348	968	0	375	75	0	518
Trinity C., Hartford	460	983	975	1,077	965	0	965	0	0	0

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
CUNY, Baruch C.	461	396	250	785	933	0	904	0	0	29
Vassar C.	462	34	197	307	918	0	897	0	21	0
U. Wisconsin-La Crosse	463	807	851	681	897	0	813	18	0	66
U. Texas of the Permian Basin	464	ne	335	983	887	0	844	43	0	0
Naval Postgraduate School	465	1,939	1,655	1,537	872	86	0	456	0	330
Southern U. and A&M C., Baton Rouge	466	430	338	492	837	27	605	120	85	0
U. Richmond	467	937	765	766	835	0	835	0	0	0
Willamette U.	468	313	181	474	833	0	832	1	0	0
Colby C.	469	812	443	382	831	0	528	0	0	303
Roger Williams U.	469	314	189	543	831	81	695	7	47	1
East Stroudsburg U. Pennsylvania	471	ne	ne	ne	828	0	0	54	86	688
U. Dayton	472	818	632	544	823	0	225	446	135	17
Minnesota State U., Mankato	473	645	548	448	813	145	437	0	0	231
Fort Lewis C.	474	640	297	416	806	112	499	32	163	0
CUNY, Brooklyn C.	475	2,429 i	2,519	1,570	802	0	630	172	0	0
Elizabeth City State U.	475	ne	435	752	802	0	628	0	174	0
U. Southern Maine	477	893	880	830	801	418	180	24	179	0
Missouri U. of Science and Technology	478	922	971	555	797	141	652	0	4	0
Kenyon C.	479	569	534	ne	788	0	753	0	35	0
Davidson C.	480	525	322	595	787	0	769	18	0	0
Fayetteville State U.	481	1,236	1,483	960	784	0	56	728	0	0
U. Washington, Bothell	481	653	558	668	784	0	254	530	0	0
U. Puget Sound	483	ne	379	ne	778	0	707	22	0	49
SUNY, Buffalo State	484	645	929	780	767	0	767	0	0	0
Trinity U.	485	452	505	461	756	0	735	21	0	0
Sonoma State U.	486	ne	456	585	748	0	349	10	389	0
St. Edward's U.	487	2,210	1,620	1,445	734	50	390	0	294	0
Northland C.	488	ne	ne	628 i	719 i	0 i	688 i	0 i	31 i	0 i
Robert Morris U.	489	ne	ne	ne	704 i	0 i	292 i	412 i	0 i	0 i
Middlebury C.	490	317	615	1,017	692	0	692	0	0	0
Azusa Pacific U.	491	995	2,002	1,022	691	0	240	451	0	0
New Mexico Institute of Mining and Technology	491	395	260	290	691	0	691	0	0	0
Spelman C.	493	536	624	633	685	242	347	96	0	0

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Colgate U.	494	726	478	507	676	0	676	0	0	0
New School	495	23	324	197	675	0	2	0	673	0
CUNY, John Jay C. of Criminal Justice	496	254	92	48	666	0	9	8	0	649
Montana Technological U.	497	1,006	708	661	656	0	656	0	0	0
U. Puerto Rico, Mayaguez	498	2,526	1,881	1,729	654	168	405	0	12	69
Bentley U.	499	ne	ne	ne	652	0	0	652	0	0
Lafayette C.	500	118	94	94	649	0	649	0	0	0
U. Wisconsin-Oshkosh	501	732 i	736 i	740	640	0	617	23	0	0
Catholic U. of America	502	2,368	2,000	1,649	637	0	607	30	0	0
Rhode Island C.	503	592	808	1,157	634	0	611	23	0	0
Christopher Newport U.	504	584	644	536	625	0	625	0	0	0
Pace U.	505	913	1,166	644	607	0	225	364	0	18
Harvey Mudd C.	506	457	520	364	605	0	605	0	0	0
U. Wisconsin-Platteville	506	389 i	396 i	514 i	605 i	203 i	224 i	116 i	62 i	0 i
Western Washington U.	508	937	958	719	600	0	455	145	0	0
Occidental C.	509	739	368	503	577 i	98 i	312 i	106 i	61 i	0 i
Texas Christian U.	510	1,932	822	570	558	26	248	284	0	0
Indiana State U.	511	852	745	465	548	0	335	213	0	0
Lewis and Clark C.	512	584	651	288	545	0	541	4	0	0
Santa Clara U.	513	667	879	545	543	0	308	0	235	0
Saint John's U.	514	140 i	133 i	470 i	542 i	0 i	208 i	317 i	17 i	0 i
St. Catherine U.	515	ne	ne	ne	537	0	42	383	0	112
Drake U.	516	260	ne	503	536	0	62	302	172	0
Texas A&M International U.	517	3,569	333	216	531	0	173	305	53	0
Pittsburg State U.	518	393	360	293	526	0	254	0	272	0
Mount Holyoke C.	519	142	359	456	520	0	425	0	75	20
Sonoran U. Health Sciences	519	230	ne	ne	520 i	0 i	208 i	312 i	0 i	0 i
C. of Saint Benedict	521	157 i	149 i	450 i	519 i	0 i	205 i	299 i	15 i	0 i
Morehead State U.	522	697	299	802	517	0	315	0	202	0
Northwest Indian C.	523	104	365 i	435 i	504	0	0	504	0	0
Coastal Carolina U.	524	305	157	386	497	0	368	11	118	0
Calvin U.	525	519	381 i	430 i	479 i	0 i	381 i	89 i	9 i	0 i
U. Alaska, Southeast	525	676	574	788	479	7	310	0	162	0

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Connecticut C.	527	348	275	232	477	0	477	0	0	0
Western New England U.	528	ne	ne	ne	467	0	333	134	0	0
Seton Hall U.	529	810	138	607	463	0	463	0	0	0
U. Washington, Tacoma	529	597	164	281	463	0	276	0	33	154
Clafin U.	531	350	857	515	458	0	382	76	0	0
Morehouse C.	532	116	120	90	451	0	263	0	0	188
Central Washington U.	533	517	449	380	437	0	266	135	36	0
Albion C.	534	118	96	94	430	0	182	248	0	0
C. Wooster	535	509	257	363	429	29	400	0	0	0
CUNY, York C.	535	377	494	142	429	0	288	139	0	2
St. Cloud State U.	537	887	441	379	417	27	348	18	17	7
Eastern Washington U.	538	564	422	436	410	0	79	114	217	0
Augustana U.	539	483	ne	546	403	0	0	403	0	0
National Defense U.	540	0	200	400	400	0	400	0	0	0
Marymount U.	541	ne	ne	624	394	0	15	379	0	0
Utah Valley U.	542	ne	ne	ne	380	0	380	0	0	0
U. Colorado Colorado Springs	543	528	845	755	379	0	332	43	0	4
CUNY, Lehman C.	544	205	256	249	371	0	335	32	0	4
Winthrop U.	545	513	501	253	352	0	314	38	0	0
U. New Haven	546	91	40	190	350	0	101	114	135	0
Texas A&M U.-San Antonio	547	ne	ne	ne	348	0	137	59	152	0
Purdue U., Fort Wayne	548	680	488	255	343	0	343	0	0	0
Pomona C.	549	296	338	288	338	0	318	0	20	0
U. Northern Iowa	550	215	306	387	337	223	104	10	0	0
California State U., Dominguez Hills	551	244	144	140	335	0	286	41	0	8
Carleton C.	552	532	334	501	330	0	246	0	84	0
Skidmore C.	553	1,221	937	1,042	329	0	111	218	0	0
Whitman C.	554	464	427	ne	325	0	284	0	41	0
CUNY, New York City C. of Technology	555	631	496	362	304	0	298	0	6	0
Ithaca C.	556	ne	459	230	303	0	190	111	2	0
Youngstown State U.	557	100	101	42	292	0	254	32	0	6
Stockton U.	558	78	195	247	291	0	62	0	202	27
Elon U.	559	367	344	288	287	0	49	238	0	0

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
U. of St. Thomas (MN)	560	471	514	182	286	0	286	0	0	0
Eastern Connecticut State U.	561	302	381	210	281	1	157	123	0	0
Seattle U.	561	248	156	33	281	8	200	73	0	0
Rutgers, State U. New Jersey, Camden	563	32	225	13	275	0	275	0	0	0
U. Ana G. Mendez, Gurabo	564	438	779	293	274	0	144	0	0	130
Claremont McKenna C.	565	338	400	274	272	0	272	0	0	0
Grinnell C.	565	363	487	423	272	0	272	0	0	0
Savannah State U.	567	320	234	268	255	0	6	155	0	94
U. North Carolina, general administration	568	311	222	534	250	0	250	0	0	0
Lamar U.	569	685	285	423	248	0	131	117	0	0
U.S. Air Force Academy	570	140	0	369	244	0	194	0	0	50
U. San Diego	571	357	217	111	233	3	169	59	0	2
Citadel Military C. South Carolina	572	ne	109	108	225	0	196	29	0	0
U. Charleston	573	ne	ne	ne	217	0	217	0	0	0
U. Michigan, Dearborn	573	313	382	226	217	0	99	118	0	0
New Mexico Highlands U.	575	ne	226	222	207	85	93	0	29	0
SUNY, Oswego	576	359	286	135	194	0	151	1	42	0
U. of Mary Washington	577	100	132	155	190	0	190	0	0	0
Abilene Christian U.	578	ne	ne	101	185	0	185	0	0	0
Monmouth U.	578	164	88	74	185	0	98	0	87	0
Northwestern State U. Louisiana	580	261	307	89	183	0	19	164	0	0
Plymouth State U.	581	ne	ne	ne	182	0	133	0	49	0
CUNY, system office	582	30	84	37	180	0	38	5	0	137
Troy U.	582	ne	290	250	180	0	41	8	115	16
California Lutheran U.	584	310	316	ne	171	0	171	0	0	0
Biola U.	585	146	150	157	170	0	170	0	0	0
U. North Georgia	586	286	91	122	169	24	26	13	106	0
Macalester C.	587	343	297	108	158	0	142	16	0	0
SUNY, Geneseo	588	233	131	108	152	0	152	0	0	0
Norfolk State U.	589	108	114	88	148	0	93	55	0	0
Johnson C. Smith U.	590	483	412	160	146	0	146	0	0	0
Union C., Schenectady	591	80	60	74	143	0	143	0	0	0
U. Wisconsin-Eau Claire	592	145	126	232	138	0	111	27	0	0

TABLE 42

Higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
U. Houston-Downtown	593	38	46	25	135	0	135	0	0	0
U.S. Military Academy	594	578	421	2,642	132	0	132	0	0	0
Colorado C.	595	307	156	260	128	0	128	0	0	0
Central Connecticut State U.	596	112	131	142	121	0	121	0	0	0
Hamilton C.	597	180	81	122	116	0	116	0	0	0
U. Virginia's C. Wise	597	ne	ne	125	116	4	0	112	0	0
SUNY, C. Plattsburgh	599	398	465	279	112	0	0	112	0	0
Virginia Military Institute	600	ne	ne	ne	83	0	83	0	0	0
U. Hartford	601	38	101	77	82	0	10	72	0	0
California State U., Bakersfield	602	316	245	197	75	29	46	0	0	0
Dakota State U.	603	7	48	80	65	65	0	0	0	0
Mercyhurst U.	604	65 i	58 i	48 i	40	0	7	10	23	0
Manhattan C.	605	91	66	49	37	0	37	0	0	0
U. Illinois, Springfield	606	8	5	6	33	0	1	31	1	0
U. Puerto Rico, Cayey	607	802 i	1,092	563	30	0	30	0	0	0
Alaska Pacific U.	608	221	38	29	20	20	0	0	0	0
Suffolk U.	609	ne	29	33	19	0	19	0	0	0
La Sierra U.	610	132	101	5	7	0	7	0	0	0
CUNY, Graduate Center	611	51	116	110	6	0	6	0	0	0
U. Puerto Rico, Humacao	612	295	255	111	1	0	1	0	0	0
All other surveyed institutions	-	620,363	566,392	32,251	0	0	0	0	0	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

nec = not elsewhere classified.

^a Johns Hopkins University includes the Applied Physics Laboratory (APL), with \$41,213 thousand in total R&D expenditures in life sciences in FY 2022. Total expenditures by field for Johns Hopkins University are flagged as imputed because APL was unable to distribute a portion of institutionally funded R&D by field.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of

the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
All institutions	-	25,435,484	26,229,693	28,446,519	30,958,717	1,265,977	10,949,628	17,494,324	480,042	768,746
Johns Hopkins U. ^a	1	706,853	714,341	765,565	844,281	0	273,011	571,270	0	0
Duke U.	2	568,773	568,232	638,716	752,563	0	242,664	493,708	5,463	10,728
U. California, San Francisco	3	632,556	634,918	645,510	737,748	0	912	736,836	0	0
U. Pennsylvania	4	582,252	577,785	644,430	707,840	41	475,926	189,554	0	42,319
U. Pittsburgh, Pittsburgh	5	585,348	590,430	628,092	706,791	336	243,501	462,914	0	40
U. Washington, Seattle	6	664,192	667,996	683,132	678,979	0	180,761	472,149	13,475	12,594
Columbia U. in the City of New York	7	539,940	562,474	611,343	662,559	0	198,164	462,070	2,148	177
Stanford U.	8	519,870	529,667	578,172	619,699	0	196,494	392,879	834	29,492
U. California, Los Angeles	9	417,741	459,909	523,747	617,601	0	23,114	594,487	0	0
Icahn School of Medicine at Mount Sinai	10	443,745	480,452	554,582	610,646	0	261,518	349,128	0	0
U. North Carolina, Chapel Hill	11	513,100	521,691	569,385	610,132	0	156,412	453,720	0	0
Yale U.	12	497,350	512,821	570,441	608,877	0	158,700	445,289	4,888	0
U. Michigan, Ann Arbor	13	548,206	547,904	549,127	602,777	3	198,644	369,878	8,300	25,952
Washington U., Saint Louis	14	476,233	489,071	528,261	597,001	0	260,132	336,869	0	0
U. California, San Diego	15	408,818	413,628	465,019	577,453	234	46,028	531,157	0	34
New York U.	16	335,764	353,092	446,533	559,581	0	202,644	355,486	0	1,451
Vanderbilt U. and Vanderbilt U. Medical Center	17	391,543	413,212	484,119	551,132	0	127,970	422,950	0	212
Emory U.	18	393,978	419,593	478,989	529,963	0	186,219	333,946	0	9,798
Northwestern U.	19	370,062	393,156	426,804	470,576	0	129,866	332,325	0	8,385
U. Minnesota, Twin Cities	20	312,158	334,529	388,235	460,220	28,656	81,077	333,708	12,711	4,068
U. Wisconsin-Madison	21	366,311	373,989	385,530	451,388	47,235	199,721	204,259	145	28
U. Colorado Anschutz Medical Campus ^b	22	na	na	361,493	427,999	800	3,917	423,282	0	0
Cornell U.	23	321,219	352,059	385,534	426,964	33,304	174,559	214,450	3,291	1,360
Baylor C. of Medicine	24	309,354	315,101	365,472	420,054	0	222,712	197,342	0	0
Harvard U.	25	423,934	401,466	411,239	410,122	0	309,766	74,495	4,176	21,685
Ohio State U.	26	289,023	321,704	350,221	405,677	32,338	83,337	280,228	6,431	3,343
U. Alabama, Birmingham	27	345,887	341,725	366,366	385,457	0	101,964	283,493	0	0
U. Maryland ^c	28	377,610	360,827	362,219	368,394	30,149	122,265	211,533	683	3,764
U. California, Davis	29	287,847	293,608	279,849	344,180	45,346	136,955	161,879	0	0
Oregon Health and Science U.	30	287,578	312,023	318,175	336,077	0	19,214	208,921	802	107,140
U. Southern California	31	304,604	321,802	328,186	335,673	0	172,487	152,381	0	10,805

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Case Western Reserve U.	32	314,870	316,948	294,556	334,605	0	75,637	245,047	0	13,921
U. Cincinnati	33	228,266	263,035	282,277	313,607	0	36,168	268,101	0	9,338
U. Florida	34	261,847	265,894	281,503	306,946	58,134	73,499	169,021	6,292	0
U. Texas Southwestern Medical Center	35	203,544	242,679	257,611	298,154	0	112,127	185,558	469	0
U. Chicago	36	212,983	231,277	260,911	294,797	0	77,479	217,318	0	0
Boston U.	37	217,748	228,882	293,731	291,846	0	124,668	167,178	0	0
Indiana U., Bloomington	38	235,383	243,023	251,142	275,712	0	86,181	188,523	0	1,008
Rutgers, State U. New Jersey, New Brunswick	39	205,955	218,451	254,944	262,424	26,439	134,409	98,452	0	3,124
U. Massachusetts, Medical School	40	197,388	192,938	248,873	258,147	0	106,862	96,374	0	54,911
Scripps Research Institute	41	267,122	243,502	272,181	242,135	0	242,135	0	0	0
Albert Einstein C. of Medicine	42	202,513	204,635	214,619	220,780	0	0	220,780	0	0
U. Iowa	43	192,564	202,824	212,393	219,128	0	85,296	133,298	0	534
U. Utah	44	164,525	202,404	218,204	216,826	0	26,785	190,041	0	0
U. Arizona	45	177,953	179,457	206,315	212,681	14,200	110,999	80,959	6,523	0
U. Virginia, Charlottesville	46	167,585	186,706	190,160	204,298	0	143,465	60,833	0	0
U. Texas M. D. Anderson Cancer Center	47	154,878	163,540	194,972	197,412	4,050	73,169	120,193	0	0
Colorado State U., Fort Collins	48	144,035	160,153	187,839	194,216	21,449	41,838	16,529	110,832	3,568
U. Rochester	49	172,698	173,198	185,919	194,048	0	50,613	143,435	0	0
U. Illinois, Chicago	50	162,930	173,236	182,440	189,578	0	42,064	146,031	1,483	0
U. Miami	51	159,479	167,153	167,201	189,491	0	75,332	109,639	976	3,544
U. Kentucky	52	146,907	154,842	166,751	187,315	12,948	111,422	62,945	0	0
U. Texas Health Science Center, Houston	53	132,647	133,624	165,139	184,205	0	40,894	76,851	0	66,460
Uniformed Services U. of the Health Sciences	54	289,658	229,498	262,204	180,078	0	3,651	176,427	0	0
Texas A&M U., College Station and Health Science Center	55	127,756	275,643	250,689	179,326	48,682	62,196	55,668	11,140	1,640
Wake Forest U.	56	163,236	164,482	186,487	177,957	0	2,632	175,325	0	0
U. California, Irvine	57	128,408	142,756	154,668	174,170	0	86,211	87,959	0	0
Thomas Jefferson U.	58	74,816	74,594	109,364	173,778	0	72,604	101,174	0	0
Medical U. South Carolina	59	153,226	153,802	162,394	163,395	0	53,320	47,538	0	62,537
Pennsylvania State U., University Park and Hershey Medical Center	60	134,964	146,249	142,063	163,120	29,943	71,191	60,184	1,802	0
U. New Mexico	61	96,789	94,977	180,991	162,667	0	22,603	138,833	688	543
Michigan State U.	62	155,127	136,029	141,436	157,980	43,210	65,574	37,431	2,567	9,198
U. Georgia	63	114,935	124,753	135,261	155,393	38,838	102,961	12,287	0	1,307
Medical C. Wisconsin	64	113,007	122,394	131,164	147,255	0	53,829	93,426	0	0

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
U. Connecticut	65	94,232	93,227	105,940	144,287	5,068	79,695	57,044	2,480	0
U. California, Berkeley	66	115,309	119,018	119,251	139,051	499	76,387	33,545	28,620	0
U. Illinois, Urbana-Champaign	67	97,918	110,331	121,883	133,116	23,940	57,463	1,814	49,899	0
U. Missouri, Columbia	68	92,664	99,475	109,626	125,007	31,511	40,162	44,542	8,792	0
U. Texas Medical Branch	69	107,395	113,827	117,490	122,912	0	92,808	30,104	0	0
SUNY, U. Buffalo	70	102,425	108,496	115,162	121,956	0	57,523	63,398	0	1,035
George Washington U.	71	114,065	117,325	122,600	121,121	0	47,496	73,625	0	0
Virginia Commonwealth U.	72	101,127	108,867	117,761	120,851	0	47,604	63,370	0	9,877
U. South Florida ^d	73	105,807	89,644	98,950	119,772	0	73,304	45,993	142	333
U. Texas Health Science Center, San Antonio	74	96,502	102,959	106,824	119,071	0	53,942	65,129	0	0
U. Kansas	75	102,440	113,305	115,370	118,264	0	31,227	84,531	2,506	0
Brown U.	76	94,797	99,779	108,063	115,907	0	44,492	42,112	0	29,303
U. Nebraska, Medical Center	77	102,604	105,158	111,042	114,754	0	72,482	42,272	0	0
Tulane U.	78	90,615	92,019	98,650	110,696	0	31,753	21,174	143	57,626
Temple U.	79	122,159	118,429	117,907	108,014	0	20,679	67,747	0	19,588
Georgetown U.	80	77,391	77,133	109,131	107,661	0	8,490	98,393	0	778
Washington State U.	81	86,617	84,222	101,065	107,093	40,797	21,086	41,980	760	2,470
U. Vermont	82	74,193	81,752	87,438	98,902	15,009	41,145	40,601	2,147	0
Wayne State U.	83	92,845	89,306	88,791	97,488	0	19,785	77,680	23	0
Dartmouth C. and Dartmouth Hitchcock Medical Center	84	94,317	94,419	98,639	96,688	0	53,746	42,037	905	0
U. Louisville	85	71,330	71,342	77,090	96,682	0	51,331	43,345	51	1,955
Purdue U., West Lafayette	86	73,576	76,677	84,604	95,465	43,025	13,382	39,058	0	0
U. Arkansas for Medical Sciences	87	63,498	70,508	83,387	95,080	0	39,773	54,269	0	1,038
Rockefeller U.	88	81,326	82,626	92,292	91,825	0	87,168	4,657	0	0
Tufts U.	89	83,149	102,746	115,629	91,344	1,993	76,869	8,512	0	3,970
U. Texas, Austin	90	70,469	70,386	84,849	89,915	21	45,637	40,012	1,474	2,771
North Carolina State U.	91	70,069	68,962	75,648	85,984	32,645	48,244	0	0	5,095
Oregon State U.	92	68,066	70,516	78,583	83,704	32,967	30,314	5,573	14,816	34
U. Oklahoma, Norman and Health Science Center	93	66,880	72,245	79,517	83,142	0	29,099	54,008	0	35
SUNY, Stony Brook U.	94	63,440	66,263	72,683	81,202	0	40,425	40,777	0	0
Massachusetts Institute of Technology	95	80,200	76,829	75,204	78,923	0	33,137	20,022	169	25,595
Virginia Polytechnic Institute and State U.	96	67,390	64,084	72,611	76,478	25,301	20,642	19,230	10,617	688
Rush U.	97	66,527	63,438	70,912	75,962	0	9,688	66,274	0	0

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
California Institute of Technology	98	60,735	65,063	67,899	71,848	0	71,660	142	0	46
Arizona State U.	99	47,334	51,775	56,184	69,108	0	50,639	18,176	293	0
U. Mississippi	100	57,460	59,546	60,201	67,593	213	21,528	45,534	0	318
U. Hawaii, Manoa	101	66,036	62,548	62,074	67,072	9,722	30,300	22,632	1,160	3,258
Iowa State U.	102	54,905	60,272	56,344	66,732	32,767	18,729	402	0	14,834
Augusta U.	103	46,970	55,685	61,727	64,015	0	31,479	31,030	0	1,506
U. South Carolina, Columbia	104	53,489	52,350	51,029	61,828	0	11,314	50,514	0	0
U. Tennessee, Health Science Center	105	42,347	48,264	56,021	60,221	0	26,143	33,996	0	82
Cold Spring Harbor Laboratory	106	73,854	62,068	56,889	59,163	2,105	57,058	0	0	0
U. California, Riverside	107	31,966	41,696	45,420	56,290	12,449	29,798	14,043	0	0
West Virginia U.	108	39,527	41,367	51,717	56,203	5,719	15,616	28,335	5,641	892
Louisiana State U., Baton Rouge	109	47,731	45,823	51,067	56,162	19,140	33,532	167	3,323	0
U. Montana, Missoula	110	40,114	45,895	51,926	55,741	188	17,390	27,998	10,165	0
Drexel U.	111	51,968	49,999	58,129	55,083	0	26,035	28,377	671	0
Princeton U.	112	55,044	53,867	54,327	54,350	0	52,108	0	2,242	0
U. Nebraska, Lincoln	113	48,939	48,702	48,961	50,024	25,352	12,972	5,667	5,987	46
Mississippi State U.	114	35,061	37,520	42,435	49,785	33,392	5,487	1,328	6,814	2,764
U. Colorado Boulder	115	42,813	42,667	43,726	45,590	998	38,408	4,142	943	1,099
U. Nevada, Reno	116	31,278	33,564	43,804	44,587	4,350	23,391	11,806	3,392	1,648
Kansas State U.	117	46,819	43,367	40,991	43,414	32,226	10,804	384	0	0
Cleveland State U.	118	38,942	40,809	38,233	41,743	0	41,712	31	0	0
U. Massachusetts, Amherst	119	36,775	36,163	37,266	40,676	11,303	17,268	7,131	4,380	594
Montana State U., Bozeman	120	33,739	33,155	36,541	40,618	18,371	12,075	10,102	70	0
Auburn U., Auburn	121	24,883	29,821	35,103	40,300	21,410	8,836	982	613	8,459
U. Tennessee, Knoxville ^e	122	11,210	30,983	32,204	39,901	10,585	20,233	4,553	4,530	0
Saint Louis U.	123	30,144	29,211	36,701	37,400	0	13,688	23,675	37	0
U. Oregon	124	29,759	29,342	29,640	36,637	0	36,500	0	137	0
U. Idaho	125	30,467	33,427	35,296	36,580	12,267	18,297	65	5,951	0
U. Wyoming	126	29,891	31,367	28,786	36,464	8,391	19,594	3,038	4,885	556
SUNY, U. Albany	127	71,179	45,162	38,544	35,709	0	21,007	14,702	0	0
U. Puerto Rico, Medical Sciences Campus	128	34,541	26,897	32,997	34,786	0	0	34,786	0	0
Georgia State U.	129	33,247	35,718	34,512	34,497	175	29,839	4,184	0	299
Florida State U.	130	31,905	34,311	30,746	34,254	99	11,397	20,449	1,484	825

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
U. Delaware	131	30,421	34,456	32,572	33,921	9,031	5,591	19,299	0	0
Louisiana State U., Health Sciences Center, New Orleans	132	31,290	31,381	34,272	33,087	0	4,173	25,397	0	3,517
Morehouse School of Medicine	133	22,461	22,500	25,181	31,339	0	0	31,339	0	0
Utah State U.	134	27,195	24,904	24,945	29,461	15,093	3,632	1,003	9,733	0
Van Andel Research Institute	135	18,259	18,538	22,231	29,424	0	29,424	0	0	0
Northern Arizona U.	136	22,912	24,039	25,641	28,895	561	19,381	3,573	4,307	1,073
U. Louisiana, Lafayette	137	18,209	19,960	26,466	28,295	10	16,403	11,791	91	0
U. New Hampshire	138	27,400	30,725	29,183	27,850	7,990	4,717	10,148	4,995	0
SUNY, Upstate Medical U.	139	22,028	23,940	24,974	27,737	0	12,585	15,152	0	0
Florida International U.	140	21,908	23,279	20,713	27,280	36	22,144	2,664	2,436	0
SUNY, Downstate Health Sciences U.	141	26,914	26,454	27,620	25,081	0	25,081	0	0	0
Clemson U.	142	18,084	21,908	20,765	24,824	9,076	9,073	1,995	0	4,680
New Mexico State U.	143	15,987	17,602	21,918	24,375	6,869	16,255	385	117	749
U. Rhode Island	144	18,557	21,040	21,298	23,613	2,339	14,387	3,547	0	3,340
Loyola U., Chicago	145	20,625	21,189	23,288	23,194	0	12,644	9,931	619	0
Oklahoma State U., Stillwater	146	17,380	17,865	21,210	22,673	7,308	10,421	808	4,136	0
Brandeis U.	147	19,823	21,616	21,506	22,663	0	19,143	3,511	9	0
Florida A&M U.	148	18,275	18,174	19,995	21,483	8,610	113	9,517	1,259	1,984
North Dakota State U.	149	17,721	17,605	22,286	21,251	11,526	3,255	5,207	1,263	0
U. Arkansas, Fayetteville	150	21,808	16,887	15,881	21,204	14,728	4,428	2,048	0	0
U. Houston	151	18,470	18,438	19,471	20,895	68	4,376	16,451	0	0
Howard U.	152	16,333	15,752	19,875	20,671	0	2,446	17,127	0	1,098
U. Maine	153	18,122	19,256	19,690	20,521	9,330	5,219	115	5,857	0
U. North Dakota	154	13,647	15,954	17,046	20,205	0	10,098	10,107	0	0
Northeastern U.	155	18,983	20,238	18,436	20,043	0	13,886	3,828	0	2,329
U. Missouri, Kansas City	156	10,630	13,054	11,443	19,654	0	4,511	14,595	0	548
San Diego State U.	157	16,844	15,009	17,106	19,519	0	4,723	14,386	410	0
U. California, Santa Cruz	158	15,946	16,914	17,564	18,720	163	18,557	0	0	0
East Carolina U.	159	12,382	12,296	13,680	18,567	0	7,170	11,397	0	0
U. Alaska, Fairbanks	160	10,218	14,391	23,554	18,419	1,683	13,094	759	2,875	8
Eastern Virginia Medical School	161	19,408	15,748	14,774	17,616	0	8,868	8,748	0	0
U. Notre Dame	162	13,259	11,155	12,920	15,704	0	15,704	0	0	0
Louisiana State U., Health Sciences Center, Shreveport	163	12,185	11,452	12,359	15,503	0	13,388	2,115	0	0

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
U. Texas, Dallas	164	13,916	16,603	13,432	15,344	0	2,814	12,530	0	0
Meharry Medical C.	165	16,443	12,573	13,784	14,983	0	14,983	0	0	0
U. Central Florida	166	11,466	12,485	15,068	14,789	0	10,111	4,678	0	0
U. Texas, El Paso	167	12,223	10,414	12,399	14,628	0	12,241	2,378	9	0
Texas Tech U., Health Sciences Center	168	11,262	12,977	12,114	14,602	0	7,988	6,614	0	0
Georgia Institute of Technology	169	15,691	22,969	11,713	14,410	0	14,130	280	0	0
U. Texas Health Science Center, Tyler	170	7,084	7,732	12,007	14,362	0	14,362	0	0	0
South Dakota State U.	171	22,888	16,767	11,133	14,272	8,851	2,030	1,842	1,549	0
U. Texas, San Antonio	172	12,135	10,733	11,786	14,215	0	12,418	994	0	803
U. Nebraska, central administration	173	11,875	12,521	12,391	13,722	772	9,938	2,810	0	202
Delaware State U.	174	8,139	8,311	9,554	13,648	3,593	8,574	276	932	273
Albany Medical C.	175	11,827	12,940	13,166	13,384	0	12,816	568	0	0
U. Toledo	176	13,213	12,830	13,665	13,301	0	2,786	10,411	0	104
U. Nevada, Las Vegas	177	12,545	14,582	13,583	13,038	84	7,450	4,878	244	382
U. South Alabama	178	12,364	12,175	13,027	12,537	0	162	11,821	0	554
Portland State U.	179	12,530	11,523	11,566	12,525	22	8,269	1,011	3,124	99
Florida Atlantic U.	180	9,452	11,087	11,315	12,398	27	6,104	5,628	0	639
Marshall U.	181	8,481	10,082	10,409	12,099	0	4,127	7,972	0	0
George Mason U.	182	9,658	8,803	10,609	11,781	274	6,316	4,658	533	0
U. Alabama, Tuscaloosa	183	3,525	4,483	6,041	11,663	0	3,941	7,688	0	34
U. California, Santa Barbara	184	16,345	12,927	12,283	11,268	0	10,601	0	667	0
Indiana U.-Purdue U., Indianapolis	185	9,805	11,548	11,825	11,144	0	5,192	5,515	0	437
CUNY, Queens C.	186	9,569	9,378	8,529	10,830	0	1,535	9,295	0	0
North Carolina A&T State U.	187	7,118	6,945	9,455	10,753	5,974	1,801	551	2,427	0
Charles R. Drew U. of Medicine and Science	188	10,427	9,863	9,945	10,656	0	0	10,656	0	0
U. Massachusetts, Lowell	189	3,898	4,573	5,842	10,577	0	4,877	5,700	0	0
Southern Illinois U., Carbondale	190	9,580	9,899	9,451	10,576	4,093	2,251	4,232	0	0
Texas Tech U.	191	6,199	4,978	5,784	10,240	4,039	3,833	954	1,414	0
U. South Dakota	192	9,660	9,733	8,496	10,126	0	9,224	600	198	104
CUNY, Graduate School of Public Health and Health Policy	193	3,933	7,444	11,244	9,886	0	784	9,102	0	0
Tennessee State U.	194	6,743	14,785	13,145	9,474	7,328	2,132	14	0	0
East Tennessee State U.	195	7,011	6,785	8,010	9,397	0	4,149	5,248	0	0
Rice U.	196	8,245	8,540	7,628	9,357	0	9,357	0	0	0

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Creighton U.	197	6,159	5,651	6,649	9,311	0	3,886	5,425	0	0
Northeast Ohio Medical U.	198	10,029	10,649	9,982	9,121	0	5,404	3,111	0	606
U. Guam	199	6,201	6,625	8,519	9,112	2,533	475	2,786	3,318	0
New York Medical C.	200	11,061	12,106	10,739	9,070	0	4,095	2,824	0	2,151
Tuskegee U.	201	6,703	6,837	6,933	9,000	4,508	4,469	23	0	0
U. Maryland, Baltimore County	202	9,297	8,644	7,736	8,873	341	8,463	35	17	17
U. Texas, Arlington	203	5,586	7,558	7,783	8,854	0	3,410	5,444	0	0
Carnegie Mellon U.	204	9,677	9,523	9,072	8,708	211	7,785	471	0	241
Lincoln U., Jefferson City	205	2,319	3,351	5,444	8,695	8,310	0	0	385	0
U. Texas Rio Grande Valley	206	8,649	7,403	7,186	8,582	1,460	2,538	4,545	0	39
Loma Linda U.	207	11,804	10,619	9,436	8,497	0	4,963	3,534	0	0
Illinois Institute of Technology	208	10,066	8,605	7,769	8,418	778	6,956	619	0	65
U. Southern Mississippi	209	6,662	7,241	7,633	8,267	0	7,840	427	0	0
Boise State U.	210	6,384	7,021	8,959	7,885	558	4,946	1,719	621	41
Wright State U.	211	9,735	8,029	7,544	7,639	0	5,195	2,444	0	0
Rutgers, State U. New Jersey, Newark	212	5,847	7,681	8,709	7,627	0	7,627	0	0	0
San Francisco State U.	213	8,950	7,959	8,039	7,503	0	7,048	48	174	233
Chapman U.	214	4,091	4,431	5,563	7,450	401	3,712	2,984	353	0
U. North Carolina, Greensboro	215	5,771	5,045	5,785	7,347	0	4,791	2,556	0	0
Lehigh U.	216	3,846	3,834	4,707	7,323	0	5,913	14	0	1,396
U. Alaska, Anchorage	217	6,313	4,779	6,170	7,222	57	4,540	1,229	1,396	0
U. of the Virgin Islands	218	8,079	5,976	5,203	7,183	2,227	2,708	0	0	2,248
Fort Valley State U.	219	4,228	4,492	4,313	7,103	6,919	184	0	0	0
Rosalind Franklin U. of Medicine and Science	220	8,765	8,421	9,041	6,905	0	6,320	585	0	0
Ohio U.	221	4,619	5,296	6,837	6,781	0	3,118	3,568	0	95
Morgan State U.	222	3,939	4,679	5,281	6,754	162	2,986	3,606	0	0
Central Michigan U.	223	4,898	4,396	4,171	6,652	0	3,810	2,537	305	0
U. Nebraska, Omaha	224	3,243	4,927	6,315	6,620	0	1,492	5,128	0	0
Baylor U.	225	2,096	3,385	5,327	6,263	372	3,866	1,479	357	189
U. Wisconsin-Milwaukee	226	4,503	5,581	5,486	6,205	0	2,203	4,002	0	0
Western U. of Health Sciences	227	2,573	4,055	5,020	6,202	453	5,747	2	0	0
North Carolina Central U.	228	8,027	6,664	5,699	6,112	0	6,112	0	0	0
Boston C.	229	11,274	7,119	7,427	6,009	0	4,556	1,453	0	0

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
U. Maryland Center for Environmental Science	230	8,003	5,850	5,603	5,997	498	781	0	4,530	188
Rowan U.	231	6,069	6,151	6,086	5,977	0	3,209	2,622	0	146
Brigham Young U., Provo	232	4,516	4,659	5,937	5,963	1,597	3,282	988	0	96
Marquette U.	233	6,572	5,298	5,446	5,929	155	3,777	1,997	0	0
SUNY, C. of Environmental Science and Forestry	234	6,664	6,831	5,510	5,839	642	1,969	0	3,204	24
CUNY, City C.	235	5,293	4,054	6,672	5,466	0	4,534	932	0	0
Alabama A&M U.	236	4,847 i	3,305 i	4,368 i	5,421 i	345 i	1,746 i	3,196 i	134 i	0 i
Prairie View A&M U.	237	5,363	5,164	5,337	5,393	5,022	255	26	90	0
U. Massachusetts, Boston	238	4,620	4,525	5,050	5,321	67	2,889	2,282	83	0
Texas State U.	239	2,579	2,260	4,329	5,297	644	4,378	0	0	275
U. Maryland, Eastern Shore	240	616	2,567	4,039	5,260	4,276	616	347	21	0
Kent State U.	241	3,094	3,056	4,224	5,117	0	3,063	2,020	1	33
U. California, Merced	242	3,916	3,874	4,426	5,102	683	2,722	1,215	0	482
Syracuse U.	243	5,223	5,108	5,223	5,050	0	3,138	1,055	857	0
New Jersey Institute of Technology	244	19,806	14,836	7,820	5,041	0	1,055	3,986	0	0
Texas Southern U.	245	1,851	3,925	3,112	4,949	0	4,253	0	0	696
Rensselaer Polytechnic Institute	246	3,609	4,483	3,934	4,807	0	4,807	0	0	0
Alcorn State U.	247	4,833	4,090	3,883	4,787	4,470 i	0 i	317 i	0 i	0 i
Jackson State U.	248	1,686	1,848	2,686	4,783	0	668	4,115	0	0
U. Minnesota, Duluth	249	4,019	4,023	3,952	4,714	0	876	0	3,838	0
MGH Institute of Health Professions	250	3,494	3,014	2,500	4,628	0	2,428	2,200	0	0
Kentucky State U.	251	4,398	4,299	3,506	4,615	4,615	0	0	0	0
Nova Southeastern U.	252	4,725	4,572	5,098	4,574	0	0	4,574	0	0
Duquesne U.	253	3,265	3,359	3,706	4,508	0	1,080	3,428	0	0
CUNY, Hunter C.	254	3,958	5,303	4,388	4,334	0	3,719	615	0	0
Tarleton State U.	255	4,293	3,534	3,983	4,308	3,942	0	0	366	0
U. North Texas, Denton	256	2,969	2,446	2,767	4,277	242	3,469	566	0	0
West Virginia State U.	257	4,282	3,540	4,117	4,276	3,734	0	8	534	0
Southern U. and A&M C., Agricultural Research and Extension Center	258	3,057	2,085	3,588	4,261	4,121	140	0	0	0
U. Memphis	259	4,013	3,520	3,928	4,155	0	1,888	2,106	152	9
Central State U.	260	1,674	2,444	3,552	4,108	3,810	203	0	82	13
U. Detroit Mercy	261	4,728	4,002	3,709	4,069	0	3,802	267	0	0
U. Denver	262	2,505	2,721	3,327	4,031	0	3,941	0	90	0

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Oakland U.	263	3,351	2,266	3,422	3,956	0	1,822	524	0	1,610
Virginia State U.	264	4,100	3,775	3,350	3,945	3,774	44	127	0	0
Miami U.	265	4,944	4,845	3,131	3,941	0	3,259	617	0	65
Texas A&M U.-Kingsville	266	5,248	5,908	4,752	3,904	2,152	1,559	0	193	0
California State U., Northridge	267	8,190	5,678	3,292	3,898	0	3,026	0	0	872
Illinois State U.	267	2,873	2,405	3,685	3,898	21	3,027	730	0	120
Ball State U.	269	1,120	1,315	1,336	3,735	0	1,036	2,654	45	0
CUNY, Advanced Science Research Center	270	3,452	4,166	4,399	3,669	0	2,942	0	727	0
Idaho State U.	271	1,624	1,949	2,035	3,644	0	3,441	203	0	0
U. Wisconsin-Superior	272	1,498	1,343	1,800	3,536	0	0	0	3,536	0
Xavier U. Louisiana	273	1,890	2,371	2,040	3,460	0	385	3,075	0	0
U. New England	274	4,189	4,383	3,453	3,382	0	2,969	395	18	0
Langston U.	275	6,300	8,473	2,873	3,361	2,341	1,020	0	0	0
U. North Carolina, Charlotte	276	2,720	2,239	2,589	3,320	0	2,572	748	0	0
California State U., Long Beach	277	4,444	3,635	2,651	3,212	0	1,306	1,905	1	0
U. North Texas, Health Science Center	278	26,489	25,461	32,464	3,172	0	772	2,400	0	0
Old Dominion U.	279	4,018	4,053	3,286	3,163	0	1,782	1,381	0	0
U. Missouri, Saint Louis	280	3,773	3,833	3,443	3,129	0	1,354	1,727	48	0
California Polytechnic State U., San Luis Obispo	281	3,672	2,989	3,178	3,113	755	632	1,340	326	60
Clark Atlanta U.	282	3,859	3,468	3,496	2,923	0	2,923	0	0	0
Texas A&M U.-Corpus Christi	283	4,889	4,521	2,899	2,912	148	2,452	0	213	99
U. Arkansas, Pine Bluff	284	3,947	3,975	3,065	2,883	2,877	6	0	0	0
U. Hawaii, Hilo	285	2,996	2,989	3,113	2,826	1,186	293	826	297	224
U. Central del Caribe	286	2,705	2,743	2,492	2,807	0	0	2,807	0	0
U. Puerto Rico, Rio Piedras	287	2,968	2,911	3,247	2,524	0	2,373	151	0	0
U. of Health Sciences and Pharmacy in St. Louis	288	ne	3,767	4,063	2,514	0	0	2,514	0	0
California State U., Monterey Bay	289	2,695	2,140	2,186	2,496	352	1,987	157	0	0
U. North Carolina, Wilmington	290	3,558	3,327	2,861	2,495	0	1,431	30	1,003	31
Alabama State U.	291	2,577	1,989	2,265	2,471	0	1,929	0	0	542
Oklahoma State U., Center for Health Sciences	292	851	2,469	1,934	2,421	0	634	1,787	0	0
Winston-Salem State U.	293	650	2,043	2,515	2,419	0	467	1,952	0	0
SUNY, Binghamton U.	294	2,526	2,273	1,649	2,334	0	1,517	817	0	0
Arkansas State U., Jonesboro	295	3,346	3,344	2,909	2,317	552	1,765	0	0	0

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
California State U., Fullerton	295	2,270	1,896	1,943	2,317	81	1,887	349	0	0
Tennessee Technological U.	297	1,092	1,282	1,621	2,304	56	1,300	233	715	0
Colorado School of Mines	298	1,799	1,784	2,479	2,233	188	1,985	60	0	0
Chicago State U.	299	52	ne	ne	2,223	0	2,223	0	0	0
Mercer U.	300	1,677	1,912	2,344	2,175	0	0	1,537	0	638
Hope C.	301	407	282	408	2,130	0	2,130	0	0	0
Dine C.	302	1,074	347	ne	2,091	329	0	1,762	0	0
Long Island U.	303	1,397	1,161	2,207	2,084	0	61	2,023	0	0
SUNY, C. of Optometry	304	1,823	1,688	2,105	2,080	0	0	2,080	0	0
San Jose State U.	305	1,005	1,268	1,047	2,038	0	1,924	114	0	0
DePaul U.	306	299	313	423	2,030	0	865	773	0	392
William & Mary	307	1,585	1,499	1,635	2,027	0	1,485	0	542	0
Wichita State U.	308	2,435	2,632	6,332	2,016	0	1,992	24	0	0
U. of the District of Columbia	309	1,083	235	1,896	1,978	1,786	0	0	0	192
Middle Tennessee State U.	310	972	1,080	1,394	1,944	841	918	21	164	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	311	2,063	2,291	1,972	1,930	0	1,766	157	7	0
Western Illinois U.	312	1,089	1,636	2,152	1,811	1,803	8	0	0	0
Texas Tech U., Health Sciences Center, El Paso	313	2,238	1,675	1,566	1,751	0	905	846	0	0
Florida Gulf Coast U.	314	73	636	954	1,734	0	45	1,689	0	0
California State Polytechnic U., Pomona	315	1,279	1,692	1,607	1,717	467	1,250	0	0	0
New York Institute of Technology	316	2,194	981	1,118	1,716	0	372	1,344	0	0
Bowling Green State U.	317	478	652	1,140	1,712	336	842	404	130	0
SUNY, Polytechnic Institute	318	1,406	1,297	1,408	1,673	0	1,529	144	0	0
U. Nebraska, Kearney	319	936	1,035	1,126	1,663	361	645	491	166	0
Hampton U.	320	1,777	1,745	1,685	1,659	0	1,056	603	0	0
U. Louisiana, Monroe	321	1,393	1,788	1,232	1,612	0	291	1,321	0	0
Midwestern U.	322	1,045	936	1,502	1,609	0	715	846	0	48
New England C. of Optometry	322	928	785	1,623	1,609	0	0	1,609	0	0
Northern Kentucky U.	324	420	552	1,374	1,606	0	368	1,238	0	0
Villanova U.	325	338	358	960	1,599	0	690	909	0	0
St. John's U., New York	326	1,284	1,375	1,541	1,595	0	769	826	0	0
Teachers C., Columbia U.	327	1,525	1,856	1,660	1,589	0	0	0	0	1,589
Worcester Polytechnic Institute	327	1,087	954	1,065	1,589	0	1,589	0	0	0

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Palmer C. of Chiropractic, Davenport	329	1,100	1,400	1,733	1,550	0	0	0	0	1,550
South Carolina State U.	330	1,318	1,367	1,416	1,537	0	1,321	216	0	0
Sam Houston State U.	331	533	637	1,212	1,532	130	837	565	0	0
Pacific U.	332	2,366	1,597	1,288	1,522	0	77	1,434	11	0
Saginaw Valley State U.	333	1,278	1,083	1,137	1,515	0	0	1,515	0	0
Bates C.	334	720	1,128	1,610	1,491	0	1,292	0	0	199
U. Arkansas, Little Rock	335	1,693	2,187	1,978	1,488	17	1,471	0	0	0
U. Colorado Denver ^b	336	na	na	1,487	1,484	29	941	450	50	14
Bowie State U.	337	122	414	96	1,462	0	319	1,143	0	0
Northeastern Illinois U.	338	1,325	1,122	1,111	1,447	20	335	1,092	0	0
Murray State U.	339	2,201	1,539	2,159	1,439	20	1,419	0	0	0
Texas Woman's U.	340	604	805	991	1,420	0	977	443	0	0
Saint Joseph's U.	341	116	460	362	1,405	0	1,035	370	0	0
Southern Illinois U., Edwardsville	342	1,171	1,232	1,631	1,340	117	457	766	0	0
Eastern Michigan U.	343	1,349	2,234	1,677	1,293	0	317	811	165	0
Amherst C.	344	757	608	527	1,269	0	1,269	0	0	0
U. Texas, Tyler	345	604	677	781	1,258	318	596	344	0	0
California State U., East Bay	346	ne	212	349	1,224	712	13	499	0	0
California State Polytechnic U., Humboldt	347	1,556	1,636	1,020	1,216	81	227	0	813	95
Tougaloo C.	348	1,444	1,741	1,733	1,207	0	1,207	0	0	0
Fisk U.	349	4,473	3,585	1,579	1,196	0	1,196	0	0	0
California State U., Fresno	350	1,010	823	698	1,185	620	548	17	0	0
Lake Superior State U.	351	ne	ne	ne	1,178	0	892	0	286	0
Southern Methodist U.	352	1,283	1,061	1,365	1,161	0	1,161	0	0	0
Louisiana Tech U.	353	608	619	562	1,158	412	210	536	0	0
C. Charleston	354	761	619	894	1,146	157	740	19	230	0
James Madison U.	354	698	618	1,031	1,146	0	1,068	34	44	0
Black Hills State U.	356	489	691	650	1,142	0	1,114	0	28	0
Appalachian State U.	357	486	465	473	1,137	119	762	59	197	0
U. Wisconsin-Stevens Point	358	1,768	2,058	1,573	1,111	402	6	0	703	0
Albany C. of Pharmacy and Health Sciences	359	1,690	1,938	1,900	1,110	0	958	152	0	0
Reed C.	360	1,031	1,180	1,252	1,105	0	718	387	0	0
Pennsylvania State U., Harrisburg	361	25	381	1,278	1,094	0	311	783	0	0

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Nevada State C.	362	ne	ne	ne	1,085	0	994	0	91	0
Barnard C.	363	356	489	897	1,082	0	1,082	0	0	0
Butler U.	364	ne	ne	ne	1,081	50	544	487	0	0
Missouri State U.	365	1,070	1,349	1,411	1,062	306	422	0	334	0
Montclair State U.	366	1,053	1,323	1,115	1,058	0	643	306	109	0
CUNY, C. Staten Island	367	177	377	849	1,047	0	527	520	0	0
Western Kentucky U.	368	1,607	1,385	889	1,041	169	310	304	0	258
Grand Valley State U.	369	845	935	784	1,028	0	273	755	0	0
Yeshiva U.	370	380	486	1,256	1,013	63	0	950	0	0
U. North Carolina, Asheville	371	590	797	953	996	0	35	481	0	480
Hawaii Pacific U.	372	1,159	1,224	1,211	990	458	520	12	0	0
U. of the Pacific	373	953	654	606	981	0	767	214	0	0
California State U., Los Angeles	374	2,205	1,747	554	980	0	597	383	0	0
Western Carolina U.	375	682	750	998	970	138	229	588	15	0
Touro U., California	376	1,540	1,546	1,375	964	0	238	0	0	726
Bowdoin C.	377	1,083	869	1,002	957	0	957	0	0	0
Colorado State U., Pueblo	378	1,220	1,108	1,248	952	0	853	0	99	0
Pennsylvania State U., Behrend	379	17	15	176	951	30	238	238	445	0
Gallaudet U.	380	408	383	372	946	0	63	883	0	0
U. West Florida	381	296	548	703	927	0	702	183	0	42
Franklin and Marshall C.	382	593	502	676	908	0	782	126	0	0
Wesleyan U.	383	954	382	581	878	0	878	0	0	0
Smith C.	384	1,017	881	775	866	0	761	105	0	0
Des Moines U.	385	657	265	554	865	0	661	187	0	17
Wellesley C.	386	1,179	1,326	1,418	859	0	859	0	0	0
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	387	191	342	376	858	0	858	0	0	0
Northern Illinois U.	388	601	401	1,088	852	0	415	306	131	0
U. Akron	389	793	837	550	851	0	655	196	0	0
Michigan Technological U.	390	1,714	1,300	859	841	0	567	274	0	0
Stevens Institute of Technology	391	33	3	83	833	0	833	0	0	0
Swarthmore C.	392	468	439	428	820	0	820	0	0	0
Indiana U. Pennsylvania	393	869	667	989	814	0	814	0	0	0

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Trinity C., Hartford	394	886	903	885	811	0	811	0	0	0
Southern U. and A&M C., Baton Rouge	395	401	336	395	810	0	605	120	85	0
Southeastern Louisiana U.	396	422	473	429	805	0	712	93	0	0
Elizabeth City State U.	397	ne	428	751	802	0	628	0	174	0
U. Texas of the Permian Basin	398	ne	328	962	797	0	797	0	0	0
U. North Florida	399	307	310	720	786	0	786	0	0	0
CUNY, Baruch C.	400	284	117	749	780	0	760	0	0	20
U. Dayton	400	676	542	529	780	0	211	434	135	0
Bucknell U.	402	245	361 i	354	777	0	777	0	0	0
Georgia Southern U.	403	1,024	681	1,414	775	0	363	239	87	86
Rochester Institute of Technology	404	594	668	763	765	0	765	0	0	0
U. Central Oklahoma	405	291	288 i	302 i	758 i	0 i	465 i	293 i	0 i	0 i
Florida Institute of Technology	406	965	423	1,574	745	204	541	0	0	0
Hobart and William Smith Colleges	407	700	730	630	737	0	217	0	520	0
Fort Lewis C.	408	538	240	353	725	112	493	32	88	0
Kenyon C.	409	484	520	ne	724	0	689	0	35	0
U. South Carolina, Aiken	410	610	870	554	721	0	721	0	0	0
Kennesaw State U.	411	722	933	636	715	0	715	0	0	0
Naval Postgraduate School	412	1,939	1,655	1,209	704	0	0	456	0	248
CUNY, Brooklyn C.	413	1,842 i	1,919	1,341	698	0	547	151	0	0
Spelman C.	414	536	624	633	685	242	347	96	0	0
Clarkson U.	415	636	496	565	667	0	667	0	0	0
U. Washington, Bothell	415	455	558	468	667	0	254	413	0	0
Colby C.	417	581	289	217	665	0	490	0	0	175
Loyola Marymount U.	417	310	261	243	665	0	665	0	0	0
U. Tennessee, Chattanooga	419	564	552	594	662	0	657	5	0	0
C. New Jersey	420	ne	328	347	651	0	631	20	0	0
Keck Graduate Institute	421	769 i	727 i	685 i	643 i	0	643	0	0	0
Middlebury C.	421	296	483	999	643	0	643	0	0	0
U. Northern Colorado	423	600	549	622	634	0	465	32	0	137
Rhode Island C.	424	555	504	1,043	629	0	607	22	0	0
Clark U.	425	1,553	1,502	898	621	52	518	0	0	51
U. Puget Sound	425	ne	223	ne	621	0	572	0	0	49

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Towson U.	427	503	374	323	618	0	490	0	128	0
Williams C.	428	413	396 i	420 i	614 i	0 i	614 i	0 i	0 i	0 i
California State U., San Marcos	429	1,011	896	311	613	0	440	30	0	143
Stephen F. Austin State U.	430	590	619	680	602	602	0	0	0	0
Austin Peay State U.	431	88	410	411	601	0	29	0	572	0
New Mexico Institute of Mining and Technology	432	387	255	244	593	0	593	0	0	0
U. Central Arkansas	433	263	357	386	583	0	405	114	64	0
U. Puerto Rico, Mayaguez	433	1,777	1,426	1,729	583	166	348	0	0	69
U. Wisconsin-Green Bay	435	452 i	490 i	487 i	582 i	0 i	206 i	376 i	0 i	0 i
Fordham U.	436	995	883	717	575	0	575	0	0	0
U. Richmond	437	708	648	604	574	0	574	0	0	0
Lafayette C.	438	80	50	55	573	0	573	0	0	0
Dillard U.	439	920	502	464	548	0	288	94	0	166
U. Houston-Clear Lake	440	9	20	478	546	0	83	0	463	0
Vassar C.	441	13	16	87	544	0	544	0	0	0
Embry-Riddle Aeronautical U.	442	92	17	0	540	0	26	514	0	0
Roger Williams U.	443	178	166	378	535	46	482	7	0	0
Harvey Mudd C.	444	323	444	316	534	0	534	0	0	0
SUNY, C. Brockport	445	360	444	213	529	0	20	0	509	0
Catholic U. of America	446	2,174	1,660	1,255	521	0	491	30	0	0
Pittsburg State U.	447	297	306	258	518	0	254	0	264	0
U. Wisconsin-Oshkosh	448	639 i	635 i	630	511	0	511	0	0	0
Northwest Indian C.	449	104	365 i	435 i	504 i	0	0	504	0	0
Northland C.	450	ne	ne	450 i	502 i	0 i	487 i	0 i	15 i	0 i
Mount Holyoke C.	451	87	333	434	493	0	418	0	75	0
Hofstra U.	452	360	308	385	487	0	483	0	4	0
U. Wisconsin-La Crosse	453	492	402	397	486	0	486	0	0	0
Edward Via C. of Osteopathic Medicine	454	749	566	537	482	0	0	482	0	0
Santa Clara U.	454	456	503	410	482	0	282	0	200	0
California State U., Stanislaus	456	514	752	702	481	0	401	80	0	0
CUNY, John Jay C. of Criminal Justice	457	156	48	48	479	0	0	0	0	479
West Virginia School of Osteopathic Medicine	458	ne	414	418	468	0	119	349	0	0
William Paterson U.	458	32	103	210	468	0	461	7	0	0

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Seton Hall U.	460	810	138	607	463	0	463	0	0	0
Clafin U.	461	350	854	505	458	0	382	76	0	0
Minnesota State U., Mankato	461	136	205	300	458	145	313	0	0	0
Sonoma State U.	463	ne	178	298	452	0	341	7	104	0
Haverford C.	464	133	109	98	451	0	325	126	0	0
Morehouse C.	464	116	120	90	451	0	263	0	0	188
Bryn Mawr C.	466	212	100	194	448	0	448	0	0	0
Fayetteville State U.	467	1,236	408	30	437	0	56	381	0	0
U. Alaska, Southeast	468	625	521	745	420	7	285	0	128	0
U. Oklahoma, Tulsa	469	496	493	260	416	0	0	416	0	0
St. Edward's U.	470	2,150	1,575	1,400	414	50	270	0	94	0
Willamette U.	471	143	35	367	411	0	411	0	0	0
Occidental C.	472	657	289	367	410	98 i	312 i	0 i	0 i	0 i
Robert Morris U.	472	ne	ne	ne	410	0 i	170 i	240 i	0 i	0 i
Texas A&M U.-Commerce	474	15	26	165	409	409	0	0	0	0
Augustana U.	475	483	ne	546	403	0	0	403	0	0
California State U., Sacramento	476	294	434	379	400	0	132	17	251	0
National Defense U.	476	0	200	400	400	0	400	0	0	0
U. Alabama, Huntsville	478	681	622	330	398	24	366	8	0	0
Eastern Washington U.	479	484	391	414	394	0	63	114	217	0
West Chester U. Pennsylvania	480	540	410	310	385	0	228	157	0	0
Marshall B. Ketchum U.	481	336 i	323 i	343 i	383 i	0 i	0 i	383 i	0 i	0 i
Texas Christian U.	482	850	228	341	363	26	209	128	0	0
U. Tulsa	483	357	295	330	360	0	360	0	0	0
CUNY, York C.	484	340	450	71	355	0	221	134	0	0
Texas A&M International U.	484	1,710	123	65	355	0	66	289	0	0
Southern Connecticut State U.	486	212	141	128	353	49	126	178	0	0
Lewis and Clark C.	487	526	538	258	345	0	345	0	0	0
California State U., Channel Islands	488	64	151	143	342	0	311	0	31	0
U. of the Incarnate Word	489	576	545	597	340	0	194	146	0	0
Montana Technological U.	490	478	339	305	335	0	335	0	0	0
Western Washington U.	491	249	243	175	328	0	328	0	0	0
Davidson C.	492	272	200	259	325	0	325	0	0	0

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
California State U., Chico	493	458	380	267	314	251	63	0	0	0
U. Colorado Colorado Springs	494	441	705	741	313	0	313	0	0	0
U. Washington, Tacoma	495	385	161	241	309	0	276	0	33	0
California State U., San Bernardino	496	1,055	435	199	305	0	304	0	1	0
Northern Michigan U.	497	184	127	163	303	0	230	0	73	0
CUNY, Lehman C.	498	0	136	146	302	0	283	19	0	0
Christopher Newport U.	499	132	160	70	293	0	293	0	0	0
CUNY, New York City C. of Technology	499	487	394	311	293	0	293	0	0	0
St. Catherine U.	501	ne	ne	ne	292	0	0	256	0	36
Stockton U.	502	50	85	247	291	0	62	0	202	27
Sul Ross State U.	503	330	463	486 i	290 i	94 i	101 i	63 i	32 i	0 i
Morehead State U.	504	601	223	782	287	0	90	0	197	0
Furman U.	505	328	356	307	283	0	283	0	0	0
Calvin U.	506	449	273 i	273 i	274 i	0	274	0	0	0
Claremont McKenna C.	507	337	396	274	272	0	272	0	0	0
U. Ana G. Mendez, Gurabo	507	347	556	230	272	0 i	143 i	0 i	0 i	129 i
West Texas A&M U.	509	313	409	236	268	88	0	0	180	0
Ithaca C.	510	ne	408	187	262	0	170	92	0	0
Utah Valley U.	511	ne	ne	ne	261	0	261	0	0	0
Savannah State U.	512	320	234	268	255	0	6	155	0	94
California State U., Dominguez Hills	513	162	81	61	254	0	254	0	0	0
American U.	514	605	531	292	252	0	252	0	0	0
Youngstown State U.	515	0	0	20	251	0	231	20	0	0
Indiana State U.	516	502	339	86	245	0	75	170	0	0
U.S. Air Force Academy	517	140	0	369	244	0	194	0	0	50
Pepperdine U.	518	303	121	282	238	0	213	25	0	0
Trinity U.	519	95	296	184	230	0	230	0	0	0
Pomona C.	520	81	180	202	223	0	223	0	0	0
U. Charleston	521	ne	ne	ne	217	0	217	0	0	0
U. Michigan, Dearborn	522	172	283	215	215	0	99	116	0	0
Drake U.	523	52	ne	123	205	0	58	40	107	0
Winthrop U.	524	359	465	103	204	0	166	38	0	0
Texas A&M U.-San Antonio	525	ne	ne	ne	200	0	48	0	152	0

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Coastal Carolina U.	526	268	157	216	195	0	109	0	86	0
U. New Orleans	527	108	148	245	193	0	191	0	2	0
U. Massachusetts, Dartmouth	528	621	253	211	191	0	191	0	0	0
Skidmore C.	529	1,070	799	873	188	0	108	80	0	0
New Mexico Highlands U.	530	ne	170	178 i	184 i	76 i	82 i	0 i	26 i	0 i
Seattle U.	531	116	86	29	180	8	103	69	0	0
U. Wisconsin-Platteville	532	118 i	117 i	145 i	179 i	56 i	65 i	42 i	16 i	0 i
Pace U.	533	477	753	298	178	0	178	0	0	0
Missouri U. of Science and Technology	534	143	130	97	172	0	172	0	0	0
Colgate U.	535	246	84	331	170	0	170	0	0	0
Oregon Institute of Technology	536	90 i	67	123 i	166 i	0 i	89 i	57 i	20 i	0 i
Plymouth State U.	537	ne	ne	ne	159	0	133	0	26	0
U. California, Office of the President	538	319	217	342	158	149	0	0	0	9
U. San Francisco	538	19	0	19	158	0	102	56	0	0
Purdue U., Northwest	540	110	176	155	153	0	47	106	0	0
Connecticut C.	541	95	48	89	152	0	152	0	0	0
U. Northern Iowa	542	122	129	48	147	103	44	0	0	0
Johnson C. Smith U.	543	362	412	160 i	146 i	0	146	0	0	0
Kean U.	544	ne	0	18	142	24	89	29	0	0
Western New England U.	545	ne	ne	ne	134	0	0	134	0	0
U. New Haven	546	30	9	45	131	0	31	96	4	0
U.S. Military Academy	547	578	295	2,574	130	0	130	0	0	0
East Stroudsburg U. Pennsylvania	548	ne	ne	ne	128	0	0	0	66	62
Citadel Military C. South Carolina	549	ne	49	77	124	0	124	0	0	0
Framingham State U.	550	ne	0	0 i	119 i	0 i	73 i	46 i	0 i	0 i
Troy U.	551	ne	269	216	117	0	2	0	115	0
C. Wooster	552	110	81	80 i	116 i	14	102	0	0	0
Salisbury U.	553	4	32	88	112	0	82	0	30	0
SUNY, C. Plattsburgh	553	373	429	279	112	0	0	112	0	0
U. of Mary Washington	555	64	85	119	111	0	111	0	0	0
U. Virginia's C. Wise	556	ne	ne	111	110	2	0	108	0	0
U. Southern Maine	557	28	94	143	107	45	55	0	7	0
Whitman C.	558	338	302	ne	103	0	89	0	14	0

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
U. of St. Thomas (MN)	559	196	242	113	102	0	102	0	0	0
Norfolk State U.	560	108	114	88	101	0	93	8	0	0
Elon U.	561	0	16	39	97	0	0	97	0	0
U. Houston-Downtown	562	0	0	0	93	0	93	0	0	0
Carleton C.	563	108	82	115	87	0	87	0	0	0
SUNY, Geneseo	564	150	58	61	85	0	85	0	0	0
SUNY, Oswego	565	218	190	72	82	0	82	0	0	0
Monmouth U.	566	0	0	16	81	0	51	0	30	0
St. Cloud State U.	566	386	126	91	81	24	56	1	0	0
Macalester C.	568	108	121	10	77	0	61	16	0	0
Hamilton C.	569	51	26	86	75	0	75	0	0	0
U. Hartford	570	38	101	77	70	0	3	67	0	0
Lamar U.	571	440	221	357	63	0	28	35	0	0
California State U., Bakersfield	572	92	70	61	58	29	29	0	0	0
U. North Georgia	573	92	91	39	54	23	26	0	5	0
Albion C.	574	0	0	0	46	0	30	16	0	0
Central Washington U.	575	206	198	128	42	0	42	0	0	0
Union C., Schenectady	576	14	13	4	41	0	41	0	0	0
Philadelphia C. of Osteopathic Medicine	577	346	422	318	40	0	40	0	0	0
U. San Diego	578	44	65	28	39	0	39	0	0	0
CUNY, system office	579	3	84	37	38	0	38	0	0	0
Eastern Connecticut State U.	580	169	177	108	36	1	35	0	0	0
Roseman U. of Health Sciences	581	37	56	53	30	0	0	30	0	0
U. Puerto Rico, Cayey	581	45	604	316	30	0	30	0	0	0
SUNY, Buffalo State	583	188	176	29	29	0	29	0	0	0
U. Illinois, Springfield	584	0	0	1	28	0	0	28	0	0
C. of Saint Benedict	585	0	0	24	27	0	16	11	0	0
California Lutheran U.	586	107	144	ne	23	0	23	0	0	0
Central Connecticut State U.	586	31	73	97	23	0	23	0	0	0
Alaska Pacific U.	588	216	38	29	20	20	0	0	0	0
Grinnell C.	588	41	29	17	20	0	20	0	0	0
Purdue U., Fort Wayne	588	122	117	44	20	0	20	0	0	0
Marymount U.	591	ne	ne	163	17	0	0	17	0	0

TABLE 43

Federally financed higher education R&D expenditures in the life sciences, ranked by all FY 2022 life sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All life sciences	Agricultural sciences	Biological and biomedical sciences	Health sciences	Natural resources and conservation	Life sciences nec
Suffolk U.	592	ne	29	33	14	0	14	0	0	0
Northwestern State U. Louisiana	593	34	1	0	13	0	0	13	0	0
Azusa Pacific U.	594	49	116	42	7	0	0	7	0	0
New School	595	0	12	35	1	0	1	0	0	0
U. Puerto Rico, Humacao	595	286	255	111	1	0	1	0	0	0
All other surveyed institutions	-	384,377	355,074	22,261	0	0	0	0	0	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

nec = not elsewhere classified.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$38,722 thousand in federally financed R&D expenditures in life sciences in FY 2022.

^b The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^c The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 44

Total and federally financed higher education R&D expenditures in the agricultural sciences and natural resources and conservation, ranked by FY 2022 agricultural sciences and natural resources conservation total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total						Federally financed					
		Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation	Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation
		2019	2020	2021	2022	2022	2022	2019	2020	2021	2022	2022	2022
All institutions	-	4,268,687	4,527,053	4,487,970	4,948,650	3,935,731	1,012,919	1,359,731	1,484,501	1,530,110	1,746,019	1,265,977	480,042
U. Florida	1	203,199	233,690	228,232	248,663	228,726	19,937	47,246	61,814	57,900	64,426	58,134	6,292
Texas A&M U., College Station and Health Science Center	2	197,366	200,508	195,660	227,880	210,583	17,297	50,436	52,021	52,146	59,822	48,682	11,140
Colorado State U., Fort Collins	3	123,760	163,384	187,752	182,374	55,140	127,234	85,722	114,462	129,050	132,281	21,449	110,832
U. Illinois, Urbana-Champaign	4	131,139	161,358	162,189	171,622	67,828	103,794	49,187	65,375	65,980	73,839	23,940	49,899
U. California, Davis	5	153,739	150,069	143,311	152,571	152,571	0	34,738	34,067	32,317	45,346	45,346	0
Michigan State U.	6	152,185	126,904	127,515	142,331	128,448	13,883	54,697	38,894	41,449	45,777	43,210	2,567
Cornell U.	7	138,182	139,521	123,927	135,439	114,152	21,287	36,625	37,466	35,393	36,595	33,304	3,291
Purdue U., West Lafayette	8	138,419	123,324	122,841	135,315	135,315	0	36,973	33,464	37,063	43,025	43,025	0
U. Minnesota, Twin Cities	9	116,791	129,207	122,668	129,454	78,028	51,426	26,814	34,793	35,744	41,367	28,656	12,711
U. Wisconsin-Madison	10	75,409	105,235	115,937	129,292	128,234	1,058	19,524	33,870	40,457	47,380	47,235	145
U. Georgia	11	100,059	122,712	114,117	127,016	126,469	547	30,966	32,666	30,083	38,838	38,838	0
Mississippi State U.	12	109,892	106,989	114,811	122,973	104,790	18,183	30,989	32,121	36,694	40,206	33,392	6,814
North Carolina State U.	13	111,537	108,002	108,416	122,332	122,332	0	17,763	19,714	23,589	32,645	32,645	0
U. Nebraska, Lincoln	14	112,979	114,382	110,667	121,398	103,125	18,273	29,816	30,018	28,104	31,339	25,352	5,987
Virginia Polytechnic Institute and State U.	15	100,295	110,301	106,619	120,664	92,790	27,874	29,316	28,411	31,754	35,918	25,301	10,617
U. Missouri, Columbia	16	86,027	84,797	99,983	117,308	91,367	25,941	22,881	24,267	29,409	40,303	31,511	8,792
Washington State U.	17	103,268	109,269	114,256	111,879	108,785	3,094	26,881	29,226	39,440	41,557	40,797	760
Oregon State U.	18	93,606	96,878	98,213	111,314	85,445	25,869	37,641	36,754	38,784	47,783	32,967	14,816
North Dakota State U.	19	82,904	87,874	92,492	102,515	92,009	10,506	9,164	10,228	13,243	12,789	11,526	1,263
Louisiana State U., Baton Rouge	20	76,202	97,776	97,527	101,431	91,647	9,784	9,992	18,499	21,161	22,463	19,140	3,323
Kansas State U.	21	85,363	95,332	92,231	98,598	98,598	0	23,652	28,326	29,741	32,226	32,226	0
Ohio State U.	22	62,584	78,240	78,004	96,471	81,771	14,700	22,364	34,209	35,592	38,769	32,338	6,431
Pennsylvania State U., University Park and Hershey Medical Center	23	96,302	101,950	88,295	95,970	85,040	10,930	37,565	39,389	26,615	31,745	29,943	1,802
Auburn U., Auburn	24	55,586	73,703	71,120	85,625	83,715	1,910	12,167	14,290	19,288	22,023	21,410	613
Iowa State U.	25	67,222	51,947	51,837	85,319	85,319	0	20,865	24,024	21,142	32,767	32,767	0
U. Arkansas, Fayetteville	26	72,044	67,999	69,390	79,353	79,353	0	13,421	13,186	11,376	14,728	14,728	0
U. California, Berkeley	27	73,608	72,606	76,411	76,716	5,372	71,344	24,607	26,274	27,098	29,119	499	28,620
Rutgers, State U. New Jersey, New Brunswick	28	55,587	77,439	64,908	69,637	69,581	56	27,297	24,468	31,252	26,439	26,439	0

TABLE 44

Total and federally financed higher education R&D expenditures in the agricultural sciences and natural resources and conservation, ranked by FY 2022 agricultural sciences and natural resources conservation total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total						Federally financed					
		Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation	Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation
		2019	2020	2021	2022	2022	2022	2019	2020	2021	2022	2022	2022
U. Arizona	29	64,228	63,861	63,062	69,152	55,219	13,933	20,132	20,111	19,584	20,723	14,200	6,523
U. Kentucky	30	62,898	69,756	63,522	61,281	61,281	0	13,561	13,703	13,036	12,948	12,948	0
U. Maryland ^a	31	65,185	54,930	54,140	58,272	56,383	1,889	31,021	24,881	24,472	30,832	30,149	683
U. Tennessee, Knoxville ^b	32	137	51,999	49,803	56,586	48,003	8,583	0	15,842	14,186	15,115	10,585	4,530
U. Idaho	33	51,993	50,957	48,205	53,416	39,305	14,111	17,193	16,228	15,947	18,218	12,267	5,951
Montana State U., Bozeman	34	40,480	40,881	44,174	51,295	51,177	118	11,189	12,020	14,586	18,441	18,371	70
Utah State U.	35	54,897	48,834	46,361	51,009	33,056	17,953	23,462	21,159	20,644	24,826	15,093	9,733
Oklahoma State U., Stillwater	36	47,191	46,936	45,875	45,257	33,721	11,536	8,452	9,060	10,370	11,444	7,308	4,136
Texas Tech U.	37	31,174	31,317	36,386	39,791	34,132	5,659	2,939	2,685	3,403	5,453	4,039	1,414
South Dakota State U.	38	39,655	41,442	32,467	38,410	35,767	2,643	13,850	11,921	7,918	10,400	8,851	1,549
New Mexico State U.	39	31,401	31,700	32,291	32,886	32,727	159	8,008	7,867	7,532	6,986	6,869	117
U. Vermont	40	16,668	23,292	27,833	32,296	23,593	8,703	7,045	10,687	14,122	17,156	15,009	2,147
U. Delaware	41	29,062	32,048	30,290	30,550	30,550	0	8,129	8,759	9,280	9,031	9,031	0
U. Maine	42	27,537	28,023	28,286	30,035	19,721	10,314	13,365	14,264	14,578	15,187	9,330	5,857
U. New Hampshire	43	22,422	25,849	23,015	29,552	21,849	7,703	9,797	13,460	12,790	12,985	7,990	4,995
U. Massachusetts, Amherst	44	18,524	23,951	24,423	29,498	21,277	8,221	9,335	13,918	14,403	15,683	11,303	4,380
U. California, Riverside	45	22,199	21,969	22,645	28,479	28,479	0	5,489	6,876	8,249	12,449	12,449	0
Clemson U.	46	24,183	23,702	21,945	25,933	25,912	21	6,713	6,920	6,629	9,076	9,076	0
U. Washington, Seattle	47	25,620	25,393	26,338	25,673	76	25,597	13,468	13,552	14,570	13,475	0	13,475
West Virginia U.	48	23,859	23,438	22,267	25,295	14,556	10,739	8,696	9,298	9,364	11,360	5,719	5,641
U. Michigan, Ann Arbor	49	23,814	24,512	20,106	23,636	2,541	21,095	9,692	10,218	6,254	8,303	3	8,300
U. Texas M. D. Anderson Cancer Center	50	0	22,868	21,748	22,773	22,773	0	0	8,112	7,306	4,050	4,050	0
U. Wyoming	51	23,815	23,104	16,213	22,535	15,138	7,397	15,768	16,085	11,557	13,276	8,391	4,885
U. Montana, Missoula	52	17,211	18,646	20,918	20,744	653	20,091	8,856	8,806	10,599	10,353	188	10,165
SUNY, C. of Environmental Science and Forestry	53	16,314	16,412	16,516	19,538	3,275	16,263	4,073	3,767	3,119	3,846	642	3,204
U. Hawaii, Manoa	54	16,788	15,802	15,585	18,553	16,884	1,669	7,688	8,710	7,780	10,882	9,722	1,160
U. Connecticut	55	12,984	11,816	14,299	18,240	13,050	5,190	4,634	5,443	5,293	7,548	5,068	2,480
U. Minnesota, Duluth	56	18,103	18,489	17,840	17,911	0	17,911	3,593	3,431	3,178	3,838	0	3,838
U. Nevada, Reno	57	12,216	14,600	13,288	17,477	8,509	8,968	4,520	6,336	6,121	7,742	4,350	3,392
North Carolina A&T State U.	58	15,671	15,051	17,606	16,684	13,488	3,196	6,070	5,490	7,280	8,401	5,974	2,427

TABLE 44

Total and federally financed higher education R&D expenditures in the agricultural sciences and natural resources and conservation, ranked by FY 2022 agricultural sciences and natural resources conservation total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total						Federally financed							
		Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation	Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation		
		2019	2020	2021	2022	2022	2022	2019	2020	2021	2022	2022	2022		
Texas A&M U.-Kingsville	59	15,316	15,336	14,955	15,118	14,303	815	4,350	4,788	3,595	2,345	2,152	193		
Southern Illinois U., Carbondale	60	10,934	11,793	13,088	13,997	13,997	0	2,946	3,684	3,720	4,093	4,093	0		
Tennessee State U.	61	9,543	14,375	16,514	13,897	13,897	0	4,697	8,783	10,168	7,328	7,328	0		
Florida A&M U.	62	11,244	10,409	9,905	12,973	11,714	1,259	8,761	8,321	7,891	9,869	8,610	1,259		
Lincoln U., Jefferson City	63	2,947	5,170	6,834	11,109	10,310	799	1,498	3,117	4,933	8,695	8,310	385		
Princeton U.	64	8,634	10,766	8,592	10,751	0	10,751	2,189	3,286	2,012	2,242	0	2,242		
Tuskegee U.	65	5,756	5,871	5,873	10,137	10,130	7	4,984	5,084	5,083	4,508	4,508	0		
Duke U.	66	9,051	10,726	10,570	10,004	0	10,004	5,576	5,691	5,392	5,463	0	5,463		
Fort Valley State U.	67	4,136	4,452	4,456	9,623	9,623	0	4,066	4,371	4,192	6,919	6,919	0		
U. Alaska, Fairbanks	68	16,511	16,163	13,087	9,315	3,606	5,709	3,161	3,534	4,183	4,558	1,683	2,875		
Kentucky State U.	69	8,139	7,806	8,546	9,156	9,156	0	4,398	4,299	3,506	4,615	4,615	0		
Prairie View A&M U.	70	7,912	7,853	7,806	9,096	9,006	90	5,178	4,747	4,989	5,112	5,022	90		
U. Guam	71	6,611	7,112	8,631	8,685	3,527	5,158	4,168	4,386	5,833	5,851	2,533	3,318		
Central State U.	72	2,871	5,313	7,851	8,479	8,310	169	1,622	2,306	3,269	3,892	3,810	82		
Tarleton State U.	73	6,470	5,716	6,607	7,801	6,683	1,118	4,293	3,519	3,983	4,308	3,942	366		
Alcorn State U.	74	8,578	7,810	6,532	7,716	7,716	0	4,752	3,983	3,626	4,470	4,470	0		
Yale U.	75	11,773	11,175	11,340	7,514	0	7,514	5,609	5,185	4,948	4,888	0	4,888		
U. Illinois, Chicago	76	7,486	10,840	9,173	7,315	0	7,315	883	1,364	1,074	1,483	0	1,483		
Virginia State U.	77	6,814	5,920	6,918	7,305	7,305	0	4,029	3,572	3,122	3,774	3,774	0		
Harvard U.	78	3,435	3,028	8,049	7,218	0	7,218	2,135	1,884	5,613	4,176	0	4,176		
U. Maryland Center for Environmental Science	79	7,704	7,161	7,518	7,105	954	6,151	6,187	4,534	4,842	5,028	498	4,530		
Southern Illinois U., Edwardsville	80	8,809	3,324	416	7,055	6,908	147	0	0	49	117	117	0		
Northern Arizona U.	81	6,576	8,781	8,626	6,936	1,129	5,807	3,163	4,431	4,387	4,868	561	4,307		
West Virginia State U.	82	3,551	4,327	6,412	6,693	6,159	534	2,576	2,792	4,093	4,268	3,734	534		
U. Arkansas, Pine Bluff	83	7,621	7,218	6,740	6,291	6,291	0	3,746	3,820	2,978	2,877	2,877	0		
West Texas A&M U.	84	2,877	3,549	6,229	5,963	5,722	241	313	409	236	268	88	180		
Southern U. and A&M C., Agricultural Research and Extension Center	85	4,541	3,515	5,104	5,939	5,614	325	3,057	2,085	3,448	4,121	4,121	0		
California Polytechnic State U., San Luis Obispo	86	4,861	4,021	3,273	5,507	4,120	1,387	807	544	700	1,081	755	326		
Columbia U. in the City of New York	87	3,793	4,151	4,370	5,324	0	5,324	1,413	1,434	1,448	2,148	0	2,148		
Delaware State U.	88	6,824	3,090	3,147	5,219	4,163	1,056	3,414	2,032	2,336	4,525	3,593	932		

TABLE 44

Total and federally financed higher education R&D expenditures in the agricultural sciences and natural resources and conservation, ranked by FY 2022 agricultural sciences and natural resources conservation total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total						Federally financed					
		Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation	Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation
		2019	2020	2021	2022	2022	2022	2019	2020	2021	2022	2022	2022
U. Maryland, Eastern Shore	89	615	2,044	3,555	4,474	4,453	21	611	2,039	3,284	4,297	4,276	21
Florida International U.	90	2,604	2,156	1,771	4,428	39	4,389	1,881	1,495	1,126	2,472	36	2,436
Georgia Institute of Technology	91	3,831	3,820	4,051	4,307	4,307	0	166	0	0	0	0	0
Langston U.	92	8,768	10,615	4,333	4,294	4,294	0	5,274	5,245	1,929	2,341	2,341	0
Portland State U.	93	3,626	3,657	3,409	4,274	46	4,228	1,921	2,260	2,002	3,146	22	3,124
U. Texas, Austin	94	1,550	2,584	3,261	4,242	75	4,167	488	1,016	1,252	1,495	21	1,474
U. Rhode Island	95	2,546	3,400	4,211	4,240	3,465	775	1,254	1,970	2,105	2,339	2,339	0
U. Wisconsin-Superior	96	2,122	2,025	2,338	4,213	0	4,213	1,401	1,342	1,800	3,536	0	3,536
Florida State U.	97	2,428	2,973	3,485	4,047	125	3,922	592	1,077	1,064	1,583	99	1,484
Tufts U.	98	1,048	5,539	1,450	3,836	3,836	0	197	2,693	1,073	1,993	1,993	0
U. Kansas	99	6,528	9,641	1,779	3,357	0	3,357	3,368	4,658	1,042	2,506	0	2,506
U. California, Santa Cruz	100	2,724	3,247	3,252	3,304	3,304	0	85	159	144	163	163	0
U. Colorado Boulder	101	839	2,585	3,523	3,286	1,690	1,596	418	1,183	1,557	1,941	998	943
California State Polytechnic U., Humboldt	102	5,983	5,673	4,142	3,167	174	2,993	1,313	1,028	866	894	81	813
U. of the Virgin Islands	103	3,751	4,392	3,490	3,126	3,126	0	2,692	3,265	2,706	2,227	2,227	0
U. Louisiana, Lafayette	104	1,647	262	944	3,109	1,301	1,808	213	122	211	101	10	91
U. Hawaii, Hilo	105	1,574	1,245	1,886	3,059	2,700	359	835	711	1,186	1,483	1,186	297
U. Wisconsin-Stevens Point	106	3,681	4,080	3,509	3,023	599	2,424	1,750	2,037	1,571	1,105	402	703
Drexel U.	107	2,650	3,361	3,579	2,983	0	2,983	105	365	492	671	0	671
Brigham Young U., Provo	108	2,583	2,559	3,186	2,955	2,955	0	1,274	1,090	1,746	1,597	1,597	0
California State U., Fresno	109	3,686	3,277	2,994	2,925	2,925	0	405	451	255	620	620	0
U. California, Santa Barbara	110	7,124	6,761	7,716	2,654	0	2,654	994	639	777	667	0	667
U. of the District of Columbia	111	2,538	2,157	2,726	2,618	2,618	0	1,083	235	1,568	1,786	1,786	0
Arizona State U.	112	764	457	550	2,543	0	2,543	6	57	164	293	0	293
U. California, Office of the President	113	2,552	2,503	2,171	2,347	2,071	276	117	94	138	149	149	0
U. New Mexico	114	4,418	3,768	2,636	2,221	0	2,221	2,810	2,230	1,168	688	0	688
U. North Carolina, Wilmington	115	2,019	1,818	1,934	2,178	579	1,599	794	846	928	1,003	0	1,003
Cold Spring Harbor Laboratory	116	1,622	1,657	2,272	2,112	2,112	0	1,535	1,581	2,207	2,105	2,105	0
Hobart and William Smith Colleges	117	1,185	1,484	1,619	2,059	0	2,059	618	691	593	520	0	520
Western Illinois U.	118	216	1,062	2,012	1,887	1,887	0	120	983	1,878	1,803	1,803	0
Middle Tennessee State U.	119	640	558	1,094	1,761	1,430	331	362	481	616	1,005	841	164

TABLE 44

Total and federally financed higher education R&D expenditures in the agricultural sciences and natural resources and conservation, ranked by FY 2022 agricultural sciences and natural resources conservation total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total						Federally financed					
		Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation	Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation
		2019	2020	2021	2022	2022	2022	2019	2020	2021	2022	2022	2022
California State Polytechnic U., Pomona	120	1,381	838	2,002	1,748	1,748	0	287	327	391	467	467	0
Stanford U.	121	3,933	1,983	1,074	1,699	0	1,699	1,197	1,161	861	834	0	834
Boise State U.	122	1,202	1,184	1,608	1,653	769	884	807	783	1,042	1,179	558	621
California State U., Monterey Bay	123	1,501	1,164	1,409	1,637	1,637	0	506	281	231	352	352	0
Stephen F. Austin State U.	124	1,804	1,695	1,882	1,620	1,620	0	589	619	680	602	602	0
U. Texas Rio Grande Valley	125	1,121	1,324	1,434	1,610	1,603	7	894	1,145	1,360	1,460	1,460	0
U. North Texas, Denton	126	213	479	2,137	1,547	1,547	0	189	136	592	242	242	0
U. Alaska, Anchorage	127	482	1,246	878	1,538	57	1,481	177	761	799	1,453	57	1,396
Tennessee Technological U.	128	1,041	1,042	1,019	1,434	427	1,007	390	412	533	771	56	715
California State U., Chico	129	759	1,224	1,233	1,348	1,348	0	166	210	156	251	251	0
Austin Peay State U.	130	176	947	1,063	1,347	0	1,347	25	361	361	572	0	572
Baylor U.	131	576	666	744	1,346	523	823	131	200	368	729	372	357
George Mason U.	132	402	800	1,437	1,325	352	973	290	269	691	807	274	533
Dartmouth C. and Dartmouth Hitchcock Medical Center	133	949	813	691	1,252	0	1,252	602	605	543	905	0	905
Bowling Green State U.	134	463	553	498	1,194	478	716	81	154	215	466	336	130
Syracuse U.	135	1,104	859	790	1,171	0	1,171	837	727	613	857	0	857
U. Miami	136	1,403	791	911	1,166	0	1,166	1,025	603	632	976	0	976
Louisiana Tech U.	137	917	841	824	1,089	1,089	0	361	350	362	412	412	0
Loyola U., Chicago	138	616	483	579	1,061	0	1,061	470	249	328	619	0	619
SUNY, C. Brockport	139	557	886	537	1,055	0	1,055	167	153	152	509	0	509
Lake Superior State U.	140	ne	ne	ne	1,001	0	1,001	ne	ne	ne	286	0	286
U. Pennsylvania	141	926	1,140	1,003	1,000	1,000	0	150	25	6	41	41	0
U. California, San Diego	142	0	0	593	977	303	674	0	0	0	234	234	0
Texas State U.	143	349	376	544	957	957	0	296	291	414	644	644	0
Arkansas State U., Jonesboro	144	1,983	1,897	1,343	950	948	2	1,237	1,159	838	552	552	0
U. Nebraska, Kearney	145	692	546	632	947	462	485	420	303	363	527	361	166
Illinois Institute of Technology	146	1,207	863	604	933	933	0	1,147	682	366	778	778	0
San Francisco State U.	147	581	942	1,017	931	0	931	146	202	204	174	0	174
U. Massachusetts, Boston	148	808	1,020	1,113	885	84	801	6	107	119	150	67	83
U. Maryland, Baltimore County	149	738	896	867	883	693	190	412	473	370	358	341	17

TABLE 44

Total and federally financed higher education R&D expenditures in the agricultural sciences and natural resources and conservation, ranked by FY 2022 agricultural sciences and natural resources conservation total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total						Federally financed					
		Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation	Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation
		2019	2020	2021	2022	2022	2022	2019	2020	2021	2022	2022	2022
California State U., East Bay	150	ne	0	0	878	878	0	ne	0	0	712	712	0
Missouri State U.	151	1,199	1,103	1,198	873	377	496	885	874	894	640	306	334
U. Houston-Clear Lake	152	0	0	808	837	0	837	0	0	440	463	0	463
Hawaii Pacific U.	153	700	654	654	833	833	0	700	654	654	458	458	0
Chapman U.	154	147	102	414	818	465	353	0	102	390	754	401	353
Massachusetts Institute of Technology	155	3,005	1,370	457	811	0	811	71	0	0	169	0	169
Texas A&M U.-Corpus Christi	155	177	464	441	811	341	470	137	309	229	361	148	213
Oregon Health and Science U.	157	0	799	838	802	0	802	0	799	744	802	0	802
U. Colorado Anschutz Medical Campus ^c	158	na	na	299	800	800	0	na	na	299	800	800	0
U. Nebraska, central administration	159	2,074	2,242	823	772	772	0	1,935	1,674	823	772	772	0
CUNY, Advanced Science Research Center	160	805	869	312	741	0	741	703	785	284	727	0	727
U. Missouri, Kansas City	161	0	0	0	739	739	0	0	0	0	0	0	0
Pennsylvania State U., Behrend	162	49	0	509	699	93	606	0	0	176	475	30	445
U. California, Merced	163	0	0	201	697	697	0	0	0	1	683	683	0
New School	164	23	54	137	673	0	673	0	0	0	0	0	0
Texas A&M U.-Commerce	165	688	723	463	646	646	0	15	18	165	409	409	0
San Diego State U.	166	683	921	10	645	0	645	278	212	8	410	0	410
U. South Dakota	167	0	191	221	626	0	626	0	0	0	198	0	198
William & Mary	167	778	453	827	626	0	626	366	294	403	542	0	542
Central Michigan U.	169	192	881	873	625	12	613	98	481	527	305	0	305
U. Southern Maine	170	750	611	591	597	418	179	12	12	66	52	45	7
U. Texas, Arlington	171	517	441	446	592	0	592	4	1	0	0	0	0
Western U. of Health Sciences	172	492	533	597	577	577	0	430	456	493	453	453	0
U. Virginia, Charlottesville	173	391	769	614	562	0	562	0	0	0	0	0	0
Oregon Institute of Technology	174	90	67	477	560	0	560	90	67	15	20	0	20
Sul Ross State U.	175	1,578	1,595	1,654	544	403	141	330	463	486	126	94	32
Appalachian State U.	176	258	630	387	530	254	276	99	56	49	316	119	197
Alabama A&M U.	177	925	630	574	521	380	141	419	285	386	479	345	134
Georgia State U.	178	592	596	638	488	488	0	54	142	200	175	175	0
Florida Gulf Coast U.	179	36	128	1,218	482	9	473	22	42	0	0	0	0
U. Texas Southwestern Medical Center	180	0	0	0	469	0	469	0	0	0	469	0	469

TABLE 44

Total and federally financed higher education R&D expenditures in the agricultural sciences and natural resources and conservation, ranked by FY 2022 agricultural sciences and natural resources conservation total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total						Federally financed																	
		Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation	Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation												
		2019	2020	2021	2022	2022	2022	2019	2020	2021	2022	2022	2022												
Morgan State U.	181	139	224	416	462	462	0	68	25	75	162	162	0												
Western Kentucky U.	181	548	581	525	462	462	0	334	430	217	169	169	0												
U. Pittsburgh, Pittsburgh	183	0	373	501	456	456	0	0	248	377	336	336	0												
Montclair State U.	184	582	649	371	427	146	281	110	75	38	109	0	109												
Sonoma State U.	185	ne	214	399	389	0	389	ne	0	117	104	0	104												
C. Charleston	186	132	100	147	388	157	231	75	58	51	387	157	230												
California State U., Sacramento	187	286	321	371	378	0	378	268	309	253	251	0	251												
Georgia Southern U.	188	120	323	467	369	103	266	73	59	167	87	0	87												
Saint Louis U.	189	0	0	207	361	0	361	0	0	0	37	0	37												
U. Nevada, Las Vegas	190	194	273	446	356	84	272	149	185	309	328	84	244												
U. Texas, Tyler	191	215	321	154	347	318	29	0	146	19	318	318	0												
St. Edward's U.	192	980	795	620	344	50	294	950	775	600	144	50	94												
Dine C.	193	330	19	ne	329	329	0	330	19	ne	329	329	0												
Fort Lewis C.	194	0	23	19	275	112	163	0	21	1	200	112	88												
Pittsburg State U.	195	100	113	176	272	0	272	11	61	142	264	0	264												
U. Wisconsin-Platteville	196	280	i	285	i	225	i	265	i	203	i	62	i	77	i	76	i	58	i	72	i	56	i	16	i
Florida Institute of Technology	197	0	0	297	258	223	35	0	0	213	204	204	0	0											
U. Notre Dame	198	993	424	222	252	252	0	0	0	0	0	0	0	0											
Spelman C.	199	0	0	0	242	242	0	0	0	0	242	242	0	0											
U. Mississippi	200	0	96	191	239	239	0	0	96	177	213	213	0	0											
California State U., Channel Islands	201	157	194	41	236	0	236	64	151	2	31	0	31												
Santa Clara U.	202	409	300	155	235	0	235	198	37	50	200	0	200												
Carnegie Mellon U.	203	774	476	256	234	211	23	685	427	256	211	211	0	0											
U. Houston	204	153	295	453	232	232	0	153	284	343	68	68	0	0											
Hofstra U.	205	34	191	113	231	6	225	0	0	27	4	0	4												
U. Oregon	206	778	483	531	225	0	225	659	406	363	137	0	137												
U. Northern Iowa	207	152	201	219	223	223	0	78	94	48	103	103	0	0											
Colorado School of Mines	208	288	392	366	219	188	31	288	146	310	188	188	0	0											
Eastern Washington U.	209	281	176	237	217	0	217	281	176	220	217	0	217												
Eastern Michigan U.	210	85	274	269	212	0	212	46	58	137	165	0	165												
Morehead State U.	211	10	88	74	202	0	202	0	12	61	197	0	197												

TABLE 44

Total and federally financed higher education R&D expenditures in the agricultural sciences and natural resources and conservation, ranked by FY 2022 agricultural sciences and natural resources conservation total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total						Federally financed					
		Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation	Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation
		2019	2020	2021	2022	2022	2022	2019	2020	2021	2022	2022	2022
Stockton U.	211	0	46	152	202	0	202	0	46	152	202	0	202
Western Carolina U.	213	116	75	136	198	175	23	98	63	106	153	138	15
Tulane U.	214	384	133	159	188	0	188	130	94	110	143	0	143
C. New Jersey	215	ne	0	24	187	0	187	ne	0	0	0	0	0
Sam Houston State U.	216	289	330	526	186	186	0	283	258	343	130	130	0
U. Puerto Rico, Mayaguez	217	1,301	814	864	180	168	12	838	508	864	166	166	0
Elizabeth City State U.	218	ne	0	0	174	0	174	ne	0	0	174	0	174
U. Memphis	218	26	232	183	174	0	174	0	0	0	152	0	152
Drake U.	220	114	ne	124	172	0	172	0	ne	70	107	0	107
Kennesaw State U.	220	19	16	146	172	172	0	19	0	0	0	0	0
U. Alaska, Southeast	222	224	187	65	169	7	162	173	139	35	135	7	128
Occidental C.	223	179	90	138	159	98	61	179	90	88	98	98	0
East Carolina U.	224	0	79	164	156	156	0	0	9	0	0	0	0
Marquette U.	225	92	84	88	155	155	0	92	84	88	155	155	0
Northern Illinois U.	226	0	29	119	153	0	153	0	25	106	131	0	131
Texas A&M U.-San Antonio	227	ne	ne	ne	152	0	152	ne	ne	ne	152	0	152
Towson U.	228	76	10	32	151	0	151	76	0	0	128	0	128
Ball State U.	229	79	155	96	146	0	146	0	28	1	45	0	45
U. South Florida ^d	229	0	0	303	146	0	146	0	0	272	142	0	142
Minnesota State U., Mankato	231	0	205	0	145	145	0	0	205	0	145	145	0
Missouri U. of Science and Technology	231	0	0	0	145	141	4	0	0	0	0	0	0
U. Massachusetts, Lowell	231	457	725	264	145	0	145	0	0	0	0	0	0
U. Dayton	234	237	199	171	135	0	135	212	165	171	135	0	135
U. New Haven	234	14	0	58	135	0	135	6	0	9	4	0	4
U. North Georgia	236	106	8	10	130	24	106	16	8	8	28	23	5
Roger Williams U.	237	33	6	20	128	81	47	0	0	11	46	46	0
Bryn Mawr C.	238	0	65	0	127	0	127	0	0	0	0	0	0
Coastal Carolina U.	239	0	0	70	118	0	118	0	0	0	86	0	86
Troy U.	240	ne	112	186	115	0	115	ne	112	179	115	0	115
New Mexico Highlands U.	241	ne	55	58	114	85	29	ne	55	58	102	76	26
Southern U. and A&M C., Baton Rouge	242	210	208	212	112	27	85	210	208	117	85	0	85

TABLE 44

Total and federally financed higher education R&D expenditures in the agricultural sciences and natural resources and conservation, ranked by FY 2022 agricultural sciences and natural resources conservation total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total						Federally financed					
		Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation	Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation
		2019	2020	2021	2022	2022	2022	2019	2020	2021	2022	2022	2022
Southern Connecticut State U.	243	71	44	105	111	98	13	68	22	58	49	49	0
Old Dominion U.	244	8	267	271	106	0	106	8	0	0	0	0	0
Kean U.	245	ne	0	0	104	43	61	ne	0	0	24	24	0
Clark U.	246	724	808	306	100	100	0	711	797	215	52	52	0
Colorado State U., Pueblo	247	470	0	0	99	0	99	0	0	0	99	0	99
Murray State U.	248	88	76	146	98	98	0	52	43	42	20	20	0
U. New England	248	85	82	58	98	0	98	27	28	20	18	0	18
California State U., Fullerton	250	416	338	200	95	81	14	340	299	174	81	81	0
Nevada State C.	251	ne	ne	ne	93	0	93	ne	ne	ne	91	0	91
Kent State U.	252	93	35	61	91	86	5	0	3	48	1	0	1
Salisbury U.	252	1	0	97	91	0	91	0	0	0	30	0	30
U. Denver	254	251	298	70	90	0	90	221	280	54	90	0	90
Monmouth U.	255	93	3	39	87	0	87	0	0	16	30	0	30
East Stroudsburg U. Pennsylvania	256	ne	ne	ne	86	0	86	ne	ne	ne	66	0	66
Naval Postgraduate School	256	0	0	0	86	86	0	0	0	0	0	0	0
U. Central Arkansas	258	0	0	0	85	0	85	0	0	0	64	0	64
Carleton C.	259	0	78	0	84	0	84	0	0	0	0	0	0
Illinois State U.	259	50	184	179	84	84	0	30	29	138	21	21	0
U. Utah	259	0 i	0 i	363 i	84	0	84	0	0	17	0	0	0
Temple U.	262	194	30	47	81	81	0	194	0	0	0	0	0
U. Colorado Denver ^C	263	na	na	106	79	29	50	na	na	106	79	29	50
Mount Holyoke C.	264	0	0	58	75	0	75	0	0	58	75	0	75
U. Louisville	265	4	109	87	74	23	51	0	0	18	51	0	51
Northern Michigan U.	266	0	97	90	73	0	73	0	97	90	73	0	73
U. Nebraska, Omaha	266	19	115	71	73	63	10	4	0	0	0	0	0
James Madison U.	268	80	105	77	68	12	56	69	85	60	44	0	44
Dakota State U.	269	7	0	80	65	65	0	0	0	80	0	0	0
U. Texas, El Paso	269	1,457	921	116	65	0	65	658	392	61	9	0	9
Yeshiva U.	271	0	0	0	63	63	0	0	0	0	63	63	0
CUNY, Hunter C.	272	0	0	0	58	58	0	0	0	0	0	0	0
Butler U.	273	ne	ne	ne	55	55	0	ne	ne	ne	50	50	0

TABLE 44

Total and federally financed higher education R&D expenditures in the agricultural sciences and natural resources and conservation, ranked by FY 2022 agricultural sciences and natural resources conservation total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total						Federally financed					
		Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation	Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation
		2019	2020	2021	2022	2022	2022	2019	2020	2021	2022	2022	2022
U. North Carolina, Chapel Hill	273	38	17	0	55	0	55	0	0	0	0	0	0
Texas A&M International U.	275	66	104	23	53	0	53	12	0	0	0	0	0
Plymouth State U.	276	ne	ne	ne	49	0	49	ne	ne	ne	26	0	26
U. Missouri, Saint Louis	277	411	229	108	48	0	48	202	217	108	48	0	48
DePaul U.	278	19	1	0	46	0	46	1	0	0	0	0	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	279	27	4	4	45	0	45	1	0	0	7	0	7
St. Cloud State U.	280	10	4	85	44	27	17	0	0	85	24	24	0
Pennsylvania State U., Harrisburg	281	89	2	21	43	43	0	5	2	21	0	0	0
SUNY, Oswego	282	0	0	0	42	0	42	0	0	0	0	0	0
Whitman C.	283	0	0	ne	41	0	41	0	0	ne	14	0	14
Long Island U.	284	0	0	0	37	37	0	0	0	0	0	0	0
Central Washington U.	285	0	21	13	36	0	36	0	19	6	0	0	0
Pacific U.	285	569	48	24	36	0	36	13	0	0	11	0	11
Kenyon C.	287	0	0	ne	35	0	35	0	0	ne	35	0	35
U. Louisiana, Monroe	288	34	29	28	34	34	0	0	0	0	0	0	0
U. Washington, Tacoma	289	563	163	38	33	0	33	385	161	38	33	0	33
Northland C.	290	ne	ne	26 i	31 i	0 i	31 i	ne	ne	13 i	15 i	0 i	15 i
Black Hills State U.	291	0	38	6	30	0	30	0	31	2	28	0	28
C. Wooster	292	26	15	24 i	29	29	0	26	5	10 i	14	14	0
California State U., Bakersfield	292	0	0	8	29	29	0	0	0	8	29	29	0
Florida Atlantic U.	294	249	73	0	28	28	0	249	67	0	27	27	0
Miami U.	295	48	42	26	27	27	0	0	0	0	0	0	0
Texas Christian U.	296	57	47	43	26	26	0	0	47	25	26	26	0
Barnard C.	297	21	67	135	25	25	0	10	57	135	0	0	0
SUNY, Binghamton U.	298	109	66	50	24	0	24	0	0	0	0	0	0
U. Alabama, Huntsville	298	0	2	9	24	24	0	0	0	9	24	24	0
Mercyhurst U.	300	37 i	33 i	28 i	23	0	23	0 i	0 i	0 i	0	0	0
Wayne State U.	300	0	0	0	23	0	23	0	0	0	23	0	23
U. North Florida	302	0	0	0	21	0	21	0	0	0	0	0	0
Vassar C.	302	0	0	21	21	0	21	0	0	0	0	0	0

TABLE 44

Total and federally financed higher education R&D expenditures in the agricultural sciences and natural resources and conservation, ranked by FY 2022 agricultural sciences and natural resources conservation total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total						Federally financed							
		Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation	Agricultural sciences and natural resources conservation				Agricultural sciences	Natural resources and conservation		
		2019	2020	2021	2022	2022	2022	2019	2020	2021	2022	2022	2022		
Alaska Pacific U.	304	71	38	29	20	20	0	71	38	29	20	20	0		
Midwestern U.	304	6	33	22	20	20	0	6	33	22	0	0	0		
Northeastern Illinois U.	304	0	0	27	20	20	0	0	0	27	20	20	0		
Pomona C.	304	0	0	0	20	0	20	0	0	0	0	0	0		
U. San Francisco	308	31	37	32	19	0	19	0	0	0	0	0	0		
Michigan Technological U.	309	209	0	0	18	18	0	0	0	0	0	0	0		
Saint John's U.	310	0 i	0 i	15 i	17 i	0 i	17 i	0 i	0 i	0 i	0 i	0 i	0 i		
U. Arkansas, Little Rock	310	23	10	19	17	17	0	21	9	2	17	17	0		
C. of Saint Benedict	312	0 i	0 i	13 i	15 i	0 i	15 i	0 i	0 i	0 i	0 i	0 i	0 i		
Northern Kentucky U.	313	17	17	0	11	0	11	0	0	0	0	0	0		
Brandeis U.	314	0	0	0	9	0	9	0	0	0	9	0	9		
Calvin U.	314	0	5 i	7 i	9 i	0 i	9 i	0	0	0	0	0	0		
Seattle U.	316	0	0	4	8	8	0	0	0	4	8	8	0		
CUNY, New York City C. of Technology	317	0	0	0	6	0	6	0	0	0	0	0	0		
U. Toledo	318	338	26	35	5	5	0	311	19	0	0	0	0		
U. Virginia's C. Wise	319	ne	ne	0	4	4	0	ne	ne	0	2	2	0		
Loyola Marymount U.	320	0	28	40	3	0	3	0	28	0	0	0	0		
U. San Diego	320	0	0	0	3	3	0	0	0	0	0	0	0		
CUNY, C. Staten Island	322	0	0	0	2	0	2	0	0	0	0	0	0		
Ithaca C.	322	ne	0	0	2	0	2	ne	0	0	0	0	0		
U. New Orleans	322	0	0	30	2	0	2	0	0	30	2	0	2		
Washington U., Saint Louis	322	0	0	0	2	0	2	0	0	0	0	0	0		
William Paterson U.	322	0	22	11	2	0	2	0	22	0	0	0	0		
California State U., Long Beach	327	0	0	0	1	0	1	0	0	0	1	0	1		
California State U., San Bernardino	327	509	400	121	1	0	1	447	346	106	1	0	1		
Eastern Connecticut State U.	327	1	0	5	1	1	0	0	0	1	1	1	0		
Grand Valley State U.	327	0	0	0	1	1	0	0	0	0	0	0	0		
Smith C.	327	0	0	11	1	0	1	0	0	9	0	0	0		
U. Illinois, Springfield	327	4	4	3	1	0	1	0	0	0	0	0	0		
All other surveyed institutions	-	64,322	4,342	1,400	0	0	0	24,007	2,447	313	0	0	0		

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

^a The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^b The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^c The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
All institutions	-	15,390,991	15,766,819	16,566,463	18,161,442	9,261,749	9,337,678	10,006,403	10,949,628
U. Pennsylvania	1	743,835	780,497	835,864	936,939	390,906	390,309	434,661	475,926
Harvard U.	2	536,371	534,656	539,289	561,958	337,304	325,366	308,919	309,766
Scripps Research Institute	3	427,734	444,964	485,435	492,639	267,122	243,502	272,181	242,135
Icahn School of Medicine at Mount Sinai	4	359,149	359,900	391,642	411,941	198,767	208,188	235,660	261,518
Baylor C. of Medicine	5	298,881	311,546	345,012	400,058	171,688	166,676	196,635	222,712
U. Southern California	6	140,622	132,168	117,462	398,478	93,324	91,893	82,518	172,487
Washington U., Saint Louis	7	354,062	359,856	389,457	389,199	211,425	216,565	237,968	260,132
Johns Hopkins U. ^a	8	326,327	311,295	350,122	358,980	228,297	221,384	269,831	273,011
Cornell U.	9	314,443	311,954	317,690	356,105	146,718	153,222	164,967	174,559
U. Pittsburgh, Pittsburgh	10	294,582	294,183	304,345	353,030	189,292	189,410	206,387	243,501
Rockefeller U.	11	318,581	322,734	325,035	328,999	75,507	78,153	87,220	87,168
U. Texas M. D. Anderson Cancer Center	12	289,848	304,198	320,834	326,187	74,738	64,702	73,202	73,169
U. Washington, Seattle	13	257,677	260,831	286,353	322,882	152,127	153,375	168,960	180,761
New York U.	14	250,281	250,446	297,690	321,462	138,450	147,771	177,500	202,644
U. Wisconsin-Madison	15	261,715	277,654	273,356	318,077	161,268	162,347	159,456	199,721
Duke U.	16	237,097	245,327	291,851	289,829	189,808	195,787	236,697	242,664
U. Michigan, Ann Arbor	17	258,013	266,507	262,263	266,722	176,626	180,703	185,914	198,644
Stanford U.	18	189,727	228,842	242,245	265,253	150,221	179,023	185,954	196,494
U. Virginia, Charlottesville	19	212,843	230,231	229,238	249,817	118,802	128,995	130,255	143,465
Columbia U. in the City of New York	20	196,254	206,509	226,903	249,393	158,280	168,917	186,401	198,164
Emory U.	21	187,084	182,193	203,597	228,756	148,788	144,201	161,290	186,219
Yale U.	22	208,829	206,929	222,114	226,285	141,401	140,048	150,159	158,700
U. Texas Southwestern Medical Center	23	177,357	214,795	219,742	223,987	75,227	88,551	100,990	112,127
U. North Carolina, Chapel Hill	24	165,804	167,907	191,773	222,099	125,292	123,492	143,283	156,412
U. Arizona	25	200,691	212,741	221,774	218,490	96,689	101,105	115,658	110,999
Rutgers, State U. New Jersey, New Brunswick	26	91,356	113,712	90,875	214,943	52,365	57,418	54,432	134,409
U. California, Davis	27	224,044	218,316	199,310	211,134	140,036	136,739	120,744	136,955
U. Kentucky	28	178,030	175,026	181,729	204,821	92,761	93,567	101,455	111,422
Vanderbilt U. and Vanderbilt U. Medical Center	29	172,681	183,620	206,202	194,205	102,998	109,381	121,941	127,970
U. Maryland ^b	30	152,853	166,254	183,621	193,170	104,187	114,209	116,912	122,265
Boston U.	31	150,669	163,939	168,310	189,654	98,855	110,627	112,638	124,668
Northwestern U.	32	141,523	153,629	166,594	189,086	92,458	99,378	115,175	129,866
U. Alabama, Birmingham	33	137,196	132,963	132,380	167,234	99,731	98,997	100,726	101,964
U. Georgia	34	140,018	143,796	156,208	167,001	72,403	78,657	90,936	102,961

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Texas Medical Branch	35	130,473	137,316	139,580	154,731	79,850	86,048	85,905	92,808
U. Massachusetts, Medical School	36	134,842	137,103	145,417	153,954	98,979	96,954	100,459	106,862
U. Florida	37	143,488	125,655	134,050	148,797	70,530	61,336	66,696	73,499
U. California, Berkeley	38	104,849	130,392	129,502	138,783	57,666	67,501	65,808	76,387
Indiana U., Bloomington	39	116,176	124,207	122,903	137,850	79,405	80,025	82,191	86,181
U. Iowa	40	122,729	126,870	134,116	132,705	73,711	78,419	80,979	85,296
U. California, Irvine	41	103,711	114,449	125,642	130,710	61,632	64,157	75,077	86,211
Ohio State U.	42	76,202	83,715	92,910	128,503	51,272	58,581	65,420	83,337
U. Minnesota, Twin Cities	43	101,129	111,883	118,493	126,554	55,639	63,674	75,180	81,077
North Carolina State U.	44	120,567	120,671	119,614	123,482	44,058	42,625	47,017	48,244
Thomas Jefferson U.	45	73,544	74,942	83,083	123,144	42,959	42,244	49,473	72,604
Michigan State U.	46	119,653	117,715	117,739	117,176	60,584	61,131	62,624	65,574
Cold Spring Harbor Laboratory	47	125,151	113,394	112,613	115,922	72,319	60,487	54,682	57,058
U. Connecticut	48	69,141	75,806	79,715	105,565	46,453	49,480	52,731	79,695
Pennsylvania State U., University Park and Hershey Medical Center	49	84,873	98,382	112,135	105,362	51,335	56,971	63,659	71,191
U. South Florida ^c	50	115,159	90,898	93,020	103,543	85,703	64,867	64,801	73,304
Tufts U.	51	80,921	92,119	91,403	102,498	58,033	69,674	71,168	76,869
U. Nebraska, Medical Center	52	103,618	105,620	99,830	102,327	70,813	70,536	71,474	72,482
Princeton U.	53	87,248	81,137	87,346	102,181	52,855	50,581	52,315	52,108
Texas A&M U., College Station and Health Science Center	54	72,472	77,408	97,519	99,831	46,051	50,356	55,631	62,196
California Institute of Technology	55	84,558	89,580	100,578	98,392	60,603	65,017	67,730	71,660
Medical C. Wisconsin	56	80,531	83,882	83,895	98,248	45,066	47,297	49,607	53,829
SUNY, U. Buffalo	57	82,365	88,070	95,200	95,707	42,370	47,604	51,230	57,523
Arizona State U.	58	67,597	63,293	73,598	95,701	31,588	35,741	40,918	50,639
U. Illinois, Urbana-Champaign	59	66,393	77,458	91,434	93,256	39,824	44,234	54,744	57,463
U. Chicago	60	86,619	83,295	82,092	91,684	66,862	67,334	66,653	77,479
Case Western Reserve U.	61	77,957	82,470	86,328	91,552	65,059	69,339	71,246	75,637
Dartmouth C. and Dartmouth Hitchcock Medical Center	62	90,029	84,528	83,974	89,693	48,255	49,057	53,355	53,746
U. Miami	63	67,787	78,338	75,792	89,556	56,865	64,201	62,744	75,332
U. Texas Health Science Center, San Antonio	64	62,855	67,851	74,729	80,739	42,261	49,214	48,445	53,942
Van Andel Research Institute	65	61,738	58,982	65,789	78,626	18,259	18,538	22,231	29,424
U. Illinois, Chicago	66	74,126	81,071	77,533	77,134	45,838	42,919	41,820	42,064
Colorado State U., Fort Collins	67	40,348	39,769	67,310	74,575	25,346	23,865	37,530	41,838
Virginia Commonwealth U.	68	50,240	53,656	72,971	72,614	39,483	40,720	47,612	47,604
U. Louisville	69	55,219	60,608	66,095	71,947	39,225	39,447	44,936	51,331

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Texas, Austin	70	58,063	62,802	72,413	71,830	39,470	38,317	44,438	45,637
Louisiana State U., Baton Rouge	71	57,732	56,483	60,515	71,438	28,862	26,797	29,672	33,532
George Washington U.	72	54,126	52,902	58,491	69,589	35,141	33,137	39,381	47,496
U. Louisiana, Lafayette	73	16,539	68,528	60,760	67,016	5,706	11,539	16,125	16,403
Medical U. South Carolina	74	67,708	62,475	64,300	66,799	51,154	49,032	51,796	53,320
U. Cincinnati	75	58,504	62,270	60,204	63,666	30,186	35,074	34,328	36,168
U. Rochester	76	53,241	54,066	56,944	61,720	43,634	44,908	48,117	50,613
U. Vermont	77	46,795	54,565	51,579	61,287	35,346	37,701	35,980	41,145
Brown U.	78	51,017	57,280	57,160	60,922	37,878	41,143	43,126	44,492
SUNY, Stony Brook U.	79	60,050	61,121	64,217	60,840	37,657	39,569	40,518	40,425
U. Hawaii, Manoa	80	54,997	53,100	52,760	60,677	18,542	16,953	19,052	30,300
U. California, Riverside	81	58,738	60,674	60,318	60,605	19,808	25,037	24,845	29,798
U. Texas Health Science Center, Houston	82	55,055	54,213	54,224	59,833	38,689	35,502	36,466	40,894
U. California, San Diego	83	64,858	62,532	63,846	59,696	36,228	36,347	45,133	46,028
Georgia State U.	84	48,140	50,131	52,370	59,500	23,302	24,615	26,909	29,839
U. Arkansas for Medical Sciences	85	52,686	67,447	64,136	58,106	32,967	38,357	34,745	39,773
Massachusetts Institute of Technology	86	82,262	67,446	60,795	56,438	44,519	42,112	37,649	33,137
U. Missouri, Columbia	87	55,276	50,323	51,630	56,404	41,455	39,472	35,810	40,162
U. Oklahoma, Norman and Health Science Center	88	37,322	43,605	48,670	50,190	23,109	28,155	32,725	29,099
Virginia Polytechnic Institute and State U.	89	46,123	40,276	46,515	49,745	18,532	15,769	18,558	20,642
Cleveland State U.	90	40,075	43,464	41,447	48,744	35,061	40,320	37,018	41,712
Florida International U.	91	33,053	39,760	37,940	46,249	16,837	19,181	17,524	22,144
U. Kansas	92	62,491	62,277	46,912	46,127	38,434	38,670	30,741	31,227
U. Colorado Boulder	93	41,686	41,081	42,368	46,086	35,165	34,958	36,680	38,408
Augusta U.	94	36,815	40,513	41,967	45,192	24,358	29,605	29,845	31,479
Tulane U.	95	30,686	39,053	36,099	45,028	22,410	26,219	25,730	31,753
U. Oregon	96	34,751	33,631	37,907	44,968	28,993	28,932	28,980	36,500
Oregon State U.	97	34,305	38,938	44,339	43,217	24,413	27,860	32,710	30,314
Iowa State U.	98	56,405	39,072	42,898	42,147	26,626	18,255	17,834	18,729
Drexel U.	99	41,484	38,200	39,937	40,343	25,535	24,521	26,987	26,035
U. Nevada, Reno	100	32,985	36,791	43,521	39,371	17,099	18,123	25,242	23,391
U. California, Los Angeles	101	38,154	34,022	33,765	37,544	24,564	22,266	21,562	23,114
Temple U.	102	47,651	43,913	44,630	36,172	34,253	34,298	29,114	20,679
U. Tennessee, Health Science Center	103	18,079	22,245	29,655	35,849	14,535	19,859	23,001	26,143
U. Notre Dame	104	26,385	27,095	29,214	35,115	13,259	11,155	12,920	15,704

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Texas Health Science Center, Tyler	105	19,606	21,265	27,928	33,872	7,084	7,732	12,007	14,362
U. Tennessee, Knoxville ^d	106	17,425	22,643	26,252	33,638	8,087	10,968	13,709	20,233
Washington State U.	107	41,122	35,845	34,771	32,110	25,006	21,674	23,178	21,086
SUNY, U. Albany	108	32,595	27,543	29,137	31,346	19,522	17,227	18,406	21,007
West Virginia U.	109	18,919	25,158	30,824	31,046	9,967	12,150	16,135	15,616
SUNY, Downstate Health Sciences U.	110	35,422	32,389	33,935	30,468	26,744	26,171	27,284	25,081
Northern Arizona U.	111	26,194	23,741	25,623	30,320	18,081	15,010	17,143	19,381
U. Nebraska, Lincoln	112	29,626	30,234	31,798	30,056	11,404	12,887	14,643	12,972
Wayne State U.	113	30,203	24,007	26,291	28,121	18,330	14,506	16,595	19,785
U. Utah	114	16,890	40,013	44,662	27,988	10,592	24,860	28,068	26,785
U. New Mexico	115	30,297	28,740	27,380	27,705	25,369	23,802	22,646	22,603
Purdue U., West Lafayette	116	25,238	34,790	25,488	27,675	12,048	13,534	13,625	13,382
U. Massachusetts, Amherst	117	24,678	25,906	25,498	27,376	14,835	15,754	16,284	17,268
U. California, Santa Cruz	118	23,762	24,318	25,050	26,829	15,861	16,755	17,420	18,557
U. Mississippi	119	33,394	15,866	22,359	26,692	26,331	11,028	19,215	21,528
Oklahoma State U., Stillwater	120	19,934	19,956	25,945	26,166	7,680	7,699	10,218	10,421
Clemson U.	121	25,381	28,361	24,231	26,009	8,049	8,494	7,601	9,073
Saint Louis U.	122	25,209	27,623	28,234	25,694	13,370	13,489	13,620	13,688
Brandeis U.	123	22,063	26,272	28,082	25,632	19,823	20,298	20,128	19,143
Georgia Institute of Technology	124	24,989	18,410	21,357	25,448	15,498	9,186	11,572	14,130
Kansas State U.	125	30,002	30,940	26,459	25,276	13,583	14,289	10,615	10,804
U. Idaho	126	19,378	22,764	25,070	24,647	13,092	17,044	19,286	18,297
Oregon Health and Science U.	127	150,395	26,551	21,651	24,166	122,388	20,651	17,330	19,214
U. Montana, Missoula	128	20,283	22,464	21,407	23,548	11,575	15,437	14,945	17,390
Florida State U.	129	24,383	22,836	21,063	22,715	13,487	12,479	10,937	11,397
U. Texas, San Antonio	130	20,972	23,733	23,479	22,618	11,309	9,925	10,784	12,418
U. Wyoming	131	13,913	14,659	15,284	22,214	11,223	13,246	14,012	19,594
U. Texas, El Paso	132	20,446	16,280	16,281	21,382	9,607	8,015	10,380	12,241
Texas Tech U., Health Sciences Center	133	20,207	21,528	20,394	21,246	7,666	9,477	8,118	7,988
George Mason U.	134	9,520	25,142	37,805	20,571	6,580	5,178	5,399	6,316
U. South Carolina, Columbia	135	13,120	21,174	14,237	19,230	10,225	10,663	9,864	11,314
Texas Tech U.	136	14,796	12,709	14,152	18,732	2,663	1,723	1,621	3,833
Florida Atlantic U.	137	13,061	16,997	18,879	18,712	3,616	6,357	6,611	6,104
U. North Dakota	138	16,722	17,478	17,556	18,631	7,707	8,147	9,103	10,098
New Mexico State U.	139	7,688	9,867	15,045	18,584	6,605	8,253	13,212	16,255

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Central Florida	140	13,148	15,378	15,562	18,380	8,324	10,063	10,666	10,111
Rice U.	141	13,966	16,008	15,766	18,013	8,245	8,540	7,628	9,357
Meharry Medical C.	142	18,286	13,870	15,840	17,895	16,443	12,573	13,784	14,983
Auburn U., Auburn	143	13,317	15,224	14,099	17,753	5,412	5,918	5,996	8,836
SUNY, Upstate Medical U.	144	15,003	14,671	16,959	17,483	11,886	10,783	12,320	12,585
Northeastern U.	145	14,380	14,718	13,919	17,086	10,474	12,023	11,399	13,886
Montana State U., Bozeman	146	19,659	19,994	18,017	16,954	14,355	14,059	12,653	12,075
U. Alaska, Fairbanks	147	7,064	12,603	24,022	16,875	4,540	10,426	19,159	13,094
U. California, Santa Barbara	148	27,718	24,077	22,132	16,733	15,351	12,288	11,506	10,601
Loyola U., Chicago	149	14,788	15,804	16,741	16,600	10,413	11,042	12,636	12,644
U. Rhode Island	150	13,997	18,161	17,614	15,848	11,877	15,256	15,150	14,387
Albany Medical C.	151	16,236	17,150	16,121	15,847	11,220	12,263	12,700	12,816
U. Nevada, Las Vegas	152	10,027	12,763	12,969	14,714	6,140	8,177	7,772	7,450
U. Colorado Anschutz Medical Campus ^e	153	na	na	8,948	14,636	na	na	4,008	3,917
San Diego State U.	154	12,720	14,602	15,520	14,527	5,833	6,374	5,985	4,723
Louisiana State U., Health Sciences Center, Shreveport	155	11,230	10,644	10,898	14,437	9,918	9,794	10,192	13,388
Carnegie Mellon U.	156	12,103	12,566	12,858	13,497	7,540	8,344	8,160	7,785
Eastern Virginia Medical School	157	8,746	9,968	9,234	12,924	6,015	6,821	6,620	8,868
Georgetown U.	158	14,202	14,827	12,828	12,526	10,309	9,790	8,536	8,490
U. South Dakota	159	16,612	15,109	13,982	12,452	9,315	9,131	7,905	9,224
U. Maryland, Baltimore County	160	8,282	9,422	8,953	12,314	7,244	7,913	7,243	8,463
Texas State U.	161	6,761	7,213	10,644	11,937	1,230	1,103	3,400	4,378
San Francisco State U.	162	12,038	11,246	11,694	11,857	8,627	7,490	7,566	7,048
U. Delaware	163	4,551	5,344	5,050	11,850	3,234	4,094	3,996	5,591
Mississippi State U.	164	6,814	10,917	7,744	11,727	3,890	5,110	2,552	5,487
Rush U.	165	18,302	13,822	12,283	11,598	17,357	12,252	10,059	9,688
Rosalind Franklin U. of Medicine and Science	166	14,625	12,825	11,434	11,566	8,135	7,651	7,942	6,320
East Carolina U.	167	3,075	2,842	10,397	11,180	1,419	1,150	5,749	7,170
Rutgers, State U. New Jersey, Newark	168	10,800	12,676	9,197	10,822	5,847	7,681	7,225	7,627
U. North Texas, Denton	169	10,319	10,805	7,908	10,612	2,780	2,197	1,789	3,469
U. Maine	170	10,759	10,949	9,846	10,501	4,757	4,992	5,112	5,219
New Jersey Institute of Technology	171	3,051	2,459	4,038	10,240	1,384	1,109	966	1,055
U. Nebraska, central administration	172	6,872	9,514	9,291	9,970	6,872	9,514	9,259	9,938
U. Southern Mississippi	173	7,545	8,948	8,983	9,825	6,035	6,633	7,130	7,840
U. Texas, Arlington	174	7,903	8,478	8,816	9,659	2,074	2,515	2,923	3,410

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. New Hampshire	175	12,981	11,697	10,279	9,521	8,470	7,420	4,781	4,717
Delaware State U.	176	6,582	8,501	8,804	9,339	4,555	5,974	6,867	8,574
Howard U.	177	5,089	5,312	6,350	9,045	2,174	1,798	2,527	2,446
Ohio U.	178	6,676	7,691	8,765	9,040	2,113	2,603	3,462	3,118
Rensselaer Polytechnic Institute	179	5,384	6,102	6,913	8,885	3,609	4,483	3,934	4,807
Portland State U.	180	2,702	7,666	9,159	8,790	2,389	7,166	8,523	8,269
U. Massachusetts, Lowell	181	5,331	5,523	5,652	8,776	2,953	3,156	2,921	4,877
U. Toledo	182	5,834	5,710	6,944	8,546	2,867	2,730	3,292	2,786
Baylor U.	183	2,938	4,523	7,708	8,488	867	1,930	3,462	3,866
Creighton U.	184	7,033	5,976	7,059	8,439	2,648	2,430	2,775	3,886
Utah State U.	185	5,064	4,657	7,716	8,134	2,335	1,868	2,911	3,632
U. Houston	186	12,863	12,625	14,588	8,119	8,037	7,235	8,294	4,376
Boise State U.	187	7,701	8,089	9,570	8,027	4,907	5,371	6,566	4,946
U. Arkansas, Fayetteville	188	6,498	6,357	6,294	7,885	2,770	2,880	3,154	4,428
U. Alabama, Tuscaloosa	189	3,536	3,602	5,585	7,565	1,911	2,119	2,864	3,941
Kent State U.	190	5,919	6,330	6,047	7,478	2,895	2,624	2,715	3,063
Wright State U.	191	8,443	7,780	6,556	7,364	5,665	4,918	4,572	5,195
Northeast Ohio Medical U.	192	8,481	8,678	8,853	7,274	6,336	7,209	7,210	5,404
Illinois Institute of Technology	193	8,645	8,046	6,978	7,268	8,004	7,375	6,735	6,956
SUNY, C. of Environmental Science and Forestry	194	10,119	9,281	6,857	7,202	2,591	3,064	2,389	1,969
East Tennessee State U.	195	7,316	5,949	8,912	7,172	5,555	4,219	6,103	4,149
New York Medical C.	196	7,813	7,391	7,406	7,095	4,652	4,316	4,088	4,095
Lehigh U.	197	4,448	4,073	4,088	7,035	3,846	3,834	3,767	5,913
Loma Linda U.	198	7,979	7,141	6,302	7,013	6,681	6,011	5,341	4,963
U. North Carolina, Greensboro	199	4,561	4,352	5,376	6,836	3,347	3,013	3,761	4,791
Marshall U.	200	4,753	3,800	4,893	6,734	2,263	1,964	2,694	4,127
U. Missouri, Kansas City	201	5,054	5,780	5,265	6,669	3,044	3,943	4,016	4,511
CUNY, Hunter C.	202	7,166	8,550	7,167	6,539	3,720	5,050	4,080	3,719
Indiana U.-Purdue U., Indianapolis	203	5,449	7,136	7,420	6,436	4,190	5,851	6,086	5,192
Texas Southern U.	204	2,695	4,513	4,073	6,427	1,851	3,247	2,518	4,253
Midwestern U.	205	6,387	6,539	6,633	6,375	548	448	775	715
Western U. of Health Sciences	206	2,921	4,010	4,966	6,309	2,102	3,585	4,511	5,747
Syracuse U.	207	7,738	7,080	7,028	6,304	3,545	3,734	3,858	3,138
Boston C.	208	12,312	8,248	7,705	6,239	10,395	6,057	6,232	4,556
North Carolina Central U.	209	7,314	6,873	6,036	6,212	7,084	6,362	5,698	6,112

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Marquette U.	210	7,863	5,871	5,143	6,042	5,003	3,443	2,967	3,777
SUNY, Binghamton U.	211	4,529	4,595	5,382	5,965	910	954	752	1,517
U. Texas, Dallas	212	3,900	6,377	5,280	5,932	2,314	3,035	2,713	2,814
Chapman U.	213	4,414	4,374	4,588	5,852	2,504	2,519	2,796	3,712
Miami U.	214	6,078	5,852	3,528	5,808	4,578	3,760	1,968	3,259
Southern Illinois U., Carbondale	215	4,686	4,876	6,268	5,789	2,197	2,290	1,824	2,251
Uniformed Services U. of the Health Sciences	216	1,512	1,525	7,192	5,696	916	902	5,079	3,651
Kennesaw State U.	217	1,431	4,759	2,202	5,572	653	618	609	715
Louisiana State U., Health Sciences Center, New Orleans	218	18,839	19,533	20,165	5,544	16,081	16,359	17,760	4,173
Clark Atlanta U.	219	6,360	6,017	6,614	5,400	3,859	3,468	3,496	2,923
U. Denver	220	4,137	4,591	5,277	5,332	2,284	2,441	3,273	3,941
CUNY, City C.	221	3,655	2,752	6,634	5,257	2,864	2,012	5,275	4,534
U. Alaska, Anchorage	222	4,874	4,665	6,250	5,216	3,907	3,606	5,164	4,540
Brigham Young U., Provo	223	5,135	5,643	5,012	5,141	2,742	3,131	3,353	3,282
U. California, Merced	224	8,620	7,563	5,096	5,113	3,282	3,335	2,895	2,722
Idaho State U.	225	2,198	2,459	2,965	5,056	1,272	1,666	1,847	3,441
U. Massachusetts, Boston	226	5,118	4,610	4,438	5,026	3,211	2,827	2,827	2,889
Western Michigan U. and Homer Stryker M.D. School of Medicine	227	4,532	5,859	5,315	5,019	1,962	2,015	1,855	1,766
U. North Carolina, Wilmington	228	5,604	4,791	4,712	4,997	2,656	2,330	1,804	1,431
North Dakota State U.	229	3,364	5,106	6,187	4,972	1,854	2,235	4,056	3,255
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	230	3,624	3,587	3,660	4,954	148	297	354	858
Tuskegee U.	231	2,230	2,274	2,263	4,912	1,719	1,753	1,850	4,469
Arkansas State U., Jonesboro	232	4,648	4,707	5,057	4,884	2,109	2,185	2,071	1,765
U. New England	233	3,909	3,742	3,916	4,749	2,818	2,927	2,715	2,969
U. Texas Rio Grande Valley	234	4,472	4,093	3,447	4,667	2,684	2,225	1,879	2,538
Old Dominion U.	235	9,952	9,611	8,798	4,660	1,929	1,867	1,749	1,782
Central Michigan U.	236	4,997	3,874	3,225	4,459	3,754	3,071	2,740	3,810
Texas Tech U., Health Sciences Center, El Paso	237	2,793	2,280	3,288	4,440	841	486	549	905
California State U., Northridge	238	3,232	3,875	3,633	4,439	2,346	2,980	2,938	3,026
Oakland U.	239	3,678	3,323	3,703	4,389	1,598	1,664	1,710	1,822
Texas A&M U.-Corpus Christi	240	5,218	6,377	4,643	3,998	4,676	4,191	2,629	2,452
Philadelphia C. of Osteopathic Medicine	241	794	945	3,294	3,992	346	422	318	40
U. Detroit Mercy	242	4,729	4,019	3,743	3,838	4,682	3,984	3,709	3,802
U. North Carolina, Charlotte	243	3,110	2,608	3,066	3,805	1,992	1,676	2,035	2,572
U. Wisconsin-Milwaukee	244	2,772	4,150	3,765	3,770	1,832	2,489	2,132	2,203

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Rowan U.	245	4,311	3,264	3,796	3,758	3,160	2,705	3,249	3,209
CUNY, Advanced Science Research Center	246	3,130	3,733	4,949	3,752	2,749	3,304	4,115	2,942
Desert Research Institute	247	2,993	3,539	3,574	3,674	188	43	33	0
U. Memphis	248	5,032	4,754	3,805	3,665	2,960	2,339	2,036	1,888
Des Moines U.	249	1,377	2,809	3,670	3,573	647	4	423	661
Worcester Polytechnic Institute	250	1,791	2,104	2,188	3,538	1,087	954	1,065	1,589
Illinois State U.	251	2,992	2,008	2,936	3,513	2,500	1,692	2,649	3,027
U. Puerto Rico, Rio Piedras	252	3,657	3,590	4,234	3,349	2,897	2,884	3,234	2,373
Wake Forest U.	253	3,042	3,538	3,260	3,339	1,856	2,459	2,321	2,632
U. North Texas, Health Science Center	254	20,989	13,197	14,592	3,299	8,378	6,661	8,634	772
San Jose State U.	255	1,130	1,542	2,431	3,253	1,002	1,268	1,047	1,924
South Dakota State U.	256	3,648	3,689	2,785	3,167	1,901	1,813	1,284	2,030
Morgan State U.	257	3,643	2,906	2,121	3,096	3,552	2,890	2,121	2,986
U. West Florida	258	1,337	1,690	2,018	2,741	218	409	679	702
CUNY, Queens C.	259	1,052	1,250	1,599	2,738	831	1,054	1,155	1,535
U. of the Virgin Islands	260	0	1,554	1,913	2,708	0	1,554	1,913	2,708
Southern Methodist U.	261	1,533	2,144	1,978	2,648	1,283	1,061	1,365	1,161
Colorado School of Mines	262	1,948	1,549	2,458	2,627	1,423	1,513	1,927	1,985
California State U., Fullerton	263	1,799	1,395	1,770	2,598	1,519	1,262	1,577	1,887
Smith C.	264	2,338	1,657	1,305	2,567	1,017	867	687	761
U. California, San Francisco	265	2,267	2,358	2,520	2,517	750	681	433	912
Georgia Southern U.	266	452	5	2,442	2,483	129	5	338	363
William & Mary	267	1,997	2,241	1,823	2,449	1,219	1,205	1,232	1,485
MGH Institute of Health Professions	268	1,537	1,427	1,300	2,428	1,537	1,427	1,300	2,428
Murray State U.	269	3,048	2,399	2,962	2,351	2,149	1,496	2,117	1,419
Williams C.	270	610	582	602	2,275	413	396	420	614
U. Central Oklahoma	271	303	303	316	2,255	231	229	240	465
James Madison U.	272	771	1,099	1,865	2,228	629	533	952	1,068
U. Massachusetts, Dartmouth	273	1,956	1,390	1,725	2,225	621	253	211	191
Chicago State U.	274	52	ne	ne	2,223	52	ne	ne	2,223
Hope C.	275	477	629	1,130	2,209	407	282	408	2,130
Middle Tennessee State U.	276	1,005	1,359	2,096	2,188	610	599	766	918
Sam Houston State U.	277	1,994	1,382	2,145	2,162	250	379	869	837
Long Island U.	278	25	621	734	2,155	16	58	30	61
Wichita State U.	279	2,793	2,959	2,705	2,150	2,435	2,623	2,395	1,992

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed						
		2019	2020	2021	2022	2019	2020	2021	2022			
Tennessee State U.	280	1,133	2,425	2,958	i	2,132	934	2,266	2,958	i	2,132	
California State U., Monterey Bay	281	2,116	2,006	1,861		2,127	1,993	1,859	1,817		1,987	
Albany C. of Pharmacy and Health Sciences	282	3,033	2,732	3,562		2,001	1,476	1,111	1,856		958	
Loyola Marymount U.	282	488	407	637		2,001	272	233	243		665	
Michigan Technological U.	284	2,654	2,392	1,772		1,963	1,085	901	672		567	
Alabama State U.	285	1,860	1,747	2,265		1,929	1,860	1,747	2,265		1,929	
North Carolina A&T State U.	286	1,085	1,612	1,491		1,925	1,048	1,455	1,186		1,801	
Oregon Institute of Technology	286	845	i	765	i	1,637	i	1,925	i	0	i	0
Appalachian State U.	288	1,339	840	1,089		1,906	387	345	371		762	
Pepperdine U.	289	329	597	398		1,884	303	121	282		213	
California State U., Long Beach	290	2,389	2,110	1,201		1,834	2,109	1,849	947		1,306	
Wesleyan U.	291	1,810	909	1,469		1,833	954	382	581		878	
Alabama A&M U.	292	2,231	i	1,521	i	1,649	i	1,800	i	1,618	i	1,104
Texas A&M U.-Kingsville	293	1,115	1,386	1,328		1,782	898	1,120	1,157		1,559	
U. Missouri, Saint Louis	293	1,667	1,567	1,869		1,782	1,214	1,025	1,238		1,354	
U. Nebraska, Omaha	295	1,165	2,254	1,034		1,778	1,020	2,192	952		1,492	
California State Polytechnic U., Pomona	296	1,602	1,818	1,555		1,753	992	1,365	1,216		1,250	
Villanova U.	297	1,780	2,133	2,053		1,743	338	333	562		690	
Amherst C.	298	1,419	1,064	1,259	i	1,741	606	608	527		1,269	
Tennessee Technological U.	299	972	1,167	1,325		1,709	702	870	1,010		1,300	
Indiana U. Pennsylvania	300	1,345	1,107	1,831		1,677	869	667	989		814	
Rochester Institute of Technology	301	903	1,238	1,551		1,657	594	668	763		765	
Ball State U.	302	1,569	1,412	1,536		1,644	666	689	727		1,036	
Duquesne U.	303	3,645	3,648	1,239		1,627	1,176	1,178	849		1,080	
Saint Joseph's U.	304	434	726	517		1,608	116	460	362		1,035	
Touro U., California	305	2,557	2,514	2,637		1,564	581	521	537		238	
SUNY, Polytechnic Institute	306	1,995	1,977	2,412		1,529	1,406	1,297	1,233		1,529	
Bates C.	307	792	1,166	1,660		1,521	719	1,095	1,511		1,292	
Bowling Green State U.	308	696	909	1,125		1,515	330	376	631		842	
U. Alabama, Huntsville	309	1,928	2,046	1,411		1,508	675	583	300		366	
U. Arkansas, Little Rock	310	2,380	2,833	1,957		1,502	1,619	2,143	1,955		1,471	
U. North Florida	311	741	907	1,243		1,451	307	310	720		786	
Langston U.	312	1,264	1,650	510		1,402	1,026	1,650	510		1,020	
Black Hills State U.	313	818	783	800		1,391	462	658	648		1,114	
U. Minnesota, Duluth	314	1,182	1,090	1,279		1,333	426	592	774		876	

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed				
		2019	2020	2021	2022	2019	2020	2021	2022	
South Carolina State U.	315	1,133	1,175	i 1,217	i 1,321	1,133	1,175	i 1,217	i 1,321	i
Reed C.	316	1,588	1,573	i 1,629	i 1,319	i 1,031	1,180	1,252	i 718	i
U. Akron	317	1,915	1,699	1,180	1,303	793	694	397	655	
Barnard C.	318	602	625	873	1,297	309	432	762	1,082	
Swarthmore C.	319	755	841	824	1,295	468	439	428	820	
Fisk U.	320	4,520	3,427	1,601	1,289	4,473	3,427	1,579	1,196	
California State U., San Marcos	321	1,439	1,451	978	1,283	639	642	197	440	
Keck Graduate Institute	322	1,474	i 1,412	i 1,350	i 1,282	i 769	i 727	i 685	i 643	
Bowdoin C.	323	1,206	1,196	1,262	1,275	940	869	1,002	957	
Louisiana Tech U.	324	750	753	749	1,249	180	232	194	210	
Stevens Institute of Technology	325	0	0	94	1,245	0	0	83	833	
Bucknell U.	326	608	743	i 674	1,238	245	361	i 354	777	
Clarkson U.	327	765	902	920	1,235	417	442	565	667	
Fordham U.	328	1,819	1,435	1,207	1,213	995	883	717	575	
Tougaloo C.	329	274	503	501	i 1,207	i 274	503	501	i 1,207	i
California State U., San Bernardino	330	1,549	539	882	1,187	603	89	93	304	
U. of the Pacific	331	803	641	687	1,160	674	326	434	767	
California State U., Channel Islands	332	779	707	807	1,143	0	0	0	311	
Bryn Mawr C.	333	781	640	709	1,132	212	100	194	448	
C. New Jersey	334	ne	649	819	1,116	ne	328	347	631	
Colorado State U., Pueblo	335	1,223	1,676	1,845	1,115	1,220	1,081	1,248	853	
Oklahoma State U., Center for Health Sciences	336	425	452	531	1,090	3	0	70	634	
U. Maryland Center for Environmental Science	337	2,402	1,978	1,035	1,088	1,702	1,261	682	781	
U. Colorado Denver ^e	338	na	na	1,012	1,076	na	na	942	941	
Framingham State U.	339	ne	0	0	i 1,070	i ne	0	0	i 73	i
Hampton U.	340	794	783	872	1,056	794	783	872	1,056	
Clark U.	341	1,288	1,134	1,059	1,052	827	705	649	518	
Wellesley C.	342	1,330	1,454	1,554	1,033	1,021	1,326	1,418	859	
Nevada State C.	343	ne	ne	ne	1,016	ne	ne	ne	994	
U. New Orleans	344	817	974	1,074	1,014	108	148	215	191	
U. South Carolina, Aiken	345	0	962	657	1,008	0	870	554	721	
California State U., Stanislaus	346	836	1,163	1,222	1,004	449	752	702	401	
Texas Woman's U.	347	636	562	251	977	325	430	123	977	
Kean U.	348	ne	63	0	976	ne	0	0	89	
Northern Michigan U.	349	364	430	644	974	34	30	73	230	

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Trinity C., Hartford	350	777	908	1,062	965	745	861	884	811
Florida Institute of Technology	351	1,384	667	875	949	965	423	538	541
U. Northern Colorado	352	999	896	963	925	377	389	457	465
Southeastern Louisiana U.	353	689	793	637	918	304	337	290	712
U. Nebraska, Kearney	354	842	775	995	910	469	405	545	645
C. Charleston	355	1,009	882	1,147	904	661	561	843	740
CUNY, Baruch C.	355	357	250	777	904	264	117	749	760
Vassar C.	357	34	197	172	897	13	16	87	544
Lake Superior State U.	358	ne	ne	ne	892	ne	ne	ne	892
DePaul U.	359	332	296	371	865	267	264	281	865
Franklin and Marshall C.	360	745	572	677	860	593	502	584	782
St. John's U., New York	361	837	998	1,045	856	745	819	898	769
California Polytechnic State U., San Luis Obispo	362	1,227	1,009	707	844	658	609	464	632
U. Texas of the Permian Basin	362	ne	328	962	844	ne	328	962	797
Northern Illinois U.	364	695	436	1,232	839	390	176	646	415
U. Richmond	365	937	765	766	835	708	648	604	574
U. Tennessee, Chattanooga	365	749	843	746	835	564	552	594	657
Willamette U.	367	278	169	472	832	143	35	367	411
U. Tulsa	368	785	500	607	828	357	267	330	360
Towson U.	369	626	531	450	824	414	361	305	490
William Paterson U.	370	442	512	571	821	32	81	201	461
Western Kentucky U.	371	1,530	1,307	924	815	893	706	354	310
U. Wisconsin-La Crosse	372	703	667	603	813	475	402	397	486
Eastern Michigan U.	373	1,065	1,350	1,037	791	504	763	467	317
CUNY, Graduate School of Public Health and Health Policy	374	413	688	492	784	413	688	492	784
California State U., Los Angeles	375	2,424	1,949	476	773	1,715	1,512	319	597
Davidson C.	376	507	322	595	769	272	200	259	325
SUNY, Buffalo State	377	645	929	780	767	188	176	29	29
Kenyon C.	378	569	534	ne	753	484	520	ne	689
Jackson State U.	379	1,021	1,045	691	750	831	804	591	668
Trinity U.	380	452	499	455	735	95	296	184	230
California State U., Fresno	381	614	449	448	709	596	362	440	548
Hofstra U.	381	412	337	590	709	360	308	358	483
U. Puget Sound	383	ne	357	ne	707	ne	223	ne	572
Roger Williams U.	384	246	177	521	695	178	166	367	482

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Middlebury C.	385	317	506	1,017	692	296	374	999	643
New Mexico Institute of Mining and Technology	386	395	260	290	691	387	255	244	593
Montclair State U.	387	1,152	1,422	1,125	688	810	948	861	643
Northland C.	387	ne	ne	602	688	ne	ne	437	487
Colgate U.	389	726	478	507	676	246	84	331	170
Tarleton State U.	390	9	249	415	675	0	15	0	0
West Virginia School of Osteopathic Medicine	391	ne	629	522	666	ne	52	59	119
American U.	392	1,225	1,235	719	661	505	476	282	252
Montana Technological U.	393	1,006	708	661	656	478	339	305	335
U. Texas, Tyler	394	470	541	774	653	261	259	540	596
Missouri U. of Science and Technology	395	921	970	553	652	143	130	97	172
Lafayette C.	396	82	87	93	649	80	50	55	573
U. San Francisco	397	88	65	81	640	19	0	19	102
Missouri State U.	398	442	651	850	634	185	475	517	422
CUNY, Brooklyn C.	399	1,727	1,792	1,505	630	1,308	1,363	1,341	547
Elizabeth City State U.	400	ne	435	751	628	ne	428	751	628
Christopher Newport U.	401	584	644	536	625	132	160	70	293
U. Wisconsin-Oshkosh	402	728	731	735	617	639	635	630	511
U. Maryland, Eastern Shore	403	0	269	120	616	0	269	120	616
U. Central Arkansas	404	412	398	462	612	205	242	303	405
Rhode Island C.	405	528	540	1,041	611	510	504	1,021	607
Dillard U.	406	1,270	1,099	470	609	414	500	70	288
Catholic U. of America	407	1,633	1,333	1,157	607	1,633	1,228	968	491
Pennsylvania State U., Harrisburg	407	36	82	248	607	20	76	18	311
California State Polytechnic U., Humboldt	409	1,059	1,302	1,028	606	174	552	151	227
Harvey Mudd C.	410	457	520	364	605	323	444	316	534
Southern U. and A&M C., Baton Rouge	410	210	128	261	605	183	128	261	605
Haverford C.	412	582	926	313	604	133	109	95	325
Southern Illinois U., Edwardsville	413	208	1,047	2,023	589	123	271	467	457
Butler U.	414	ne	ne	ne	583	ne	ne	ne	544
Gallaudet U.	415	818	853	525	577	0	0	0	63
U. Guam	416	208	291	411	573	196	205	323	475
Northern Kentucky U.	417	450	458	562	561	282	257	330	368
U. Hawaii, Hilo	418	1,754	1,548	996	560	1,437	1,145	657	293
CUNY, C. Staten Island	419	295	554	407	548	177	377	347	527

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Winston-Salem State U.	420	449	684	189	542	449	677	189	467
Lewis and Clark C.	421	584	651	288	541	526	538	258	345
Pennsylvania State U., Behrend	422	75	21	55	532	17	15	0	238
Colby C.	423	639	304	270	528	538	243	186	490
Hawaii Pacific U.	424	560	594	557	526	459	570	557	520
Grand Valley State U.	425	542	667	625	507	318	262	303	273
Sul Ross State U.	426	0	0	0	505	0	0	0	101
Fort Lewis C.	427	289	231	352	499	241	187	352	493
Connecticut C.	428	348	275	232	477	95	48	89	152
U. Wisconsin-Green Bay	428	315	306	335	477	151	164	172	206
Seton Hall U.	430	810	138	607	463	810	138	607	463
Western Washington U.	431	718	721	548	455	249	243	175	328
Pacific U.	432	259	160	121	454	15	25	76	77
California State U., Sacramento	433	682	682	735	452	17	125	126	132
Minnesota State U., Mankato	434	187	63	329	437	136	0	300	313
West Chester U. Pennsylvania	434	659	459	350	437	414	337	240	228
Mount Holyoke C.	436	142	359	398	425	87	333	376	418
U. Puerto Rico, Mayaguez	437	1,225	1,067	865	405	939	918	865	348
C. Wooster	438	483	242	339	400	84	76	70	102
National Defense U.	438	0	200	400	400	0	200	400	400
Xavier U. Louisiana	440	765	1,070	378	398	710	987	354	385
St. Edward's U.	441	1,010	825	825	390	1,000	800	800	270
Clafin U.	442	350	857	492	382	350	854	482	382
Calvin U.	443	503	329	355	381	449	273	273	274
Salisbury U.	443	396	366	381	381	4	32	88	82
Utah Valley U.	445	ne	ne	ne	380	ne	ne	ne	261
U. South Alabama	446	403	87	232	376	211	41	133	162
Furman U.	447	254	335	309	375	236	309	281	283
New York Institute of Technology	448	294	283	227	372	294	283	227	372
Coastal Carolina U.	449	305	98	173	368	268	98	75	109
Sonoma State U.	450	ne	197	170	349	ne	161	169	341
St. Cloud State U.	451	833	349	270	348	386	126	6	56
Spelman C.	452	478	604	484	347	478	604	484	347
Purdue U., Fort Wayne	453	665	483	252	343	122	117	44	20
California State U., East Bay	454	ne	439	478	340	ne	58	57	13

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed					
		2019	2020	2021	2022	2019	2020	2021	2022		
CUNY, Lehman C.	455	0	255	181	335	0	136	78	283		
Indiana State U.	455	709	690	456	335	450	327	78	75		
Northeastern Illinois U.	455	328	249	351	335	328	249	351	335		
Western New England U.	458	ne	ne	ne	333	ne	ne	ne	0		
U. Colorado Colorado Springs	459	510	716	728	332	441	651	718	313		
Western Carolina U.	459	358	279	421	332	91	66	205	229		
Southern Connecticut State U.	461	98	357	132	323	0	17	16	126		
Bowie State U.	462	122	414	96	319	122	414	96	319		
Pomona C.	463	296	338	288	318	81	180	202	223		
Morehead State U.	464	682	211	728	315	601	211	721	90		
Winthrop U.	465	254	100	240	314	100	64	103	166		
Occidental C.	466	560	278	279	312	i	478	199	279	312	i
U. Alaska, Southeast	467	368	374	723	310	368	369	710	285		
Santa Clara U.	468	252	576	386	308	252	463	356	282		
Southern U. and A&M C., Agricultural Research and Extension Center	469	489	298	295	306	0	0	140	140		
U. of the Incarnate Word	470	197	327	268	303	56	14	81	194		
CUNY, New York City C. of Technology	471	631	496	362	298	487	394	311	293		
Hobart and William Smith Colleges	471	150	79	45	298	82	39	37	217		
Robert Morris U.	473	ne	ne	ne	292	i	ne	ne	ne	170	i
U. Louisiana, Monroe	474	326	410	298	291	305	409	298	291		
CUNY, York C.	475	359	485	129	288	340	450	71	221		
California State U., Dominguez Hills	476	213	110	0	286	162	81	0	254		
U. of St. Thomas (MN)	476	471	514	182	286	196	242	113	102		
Whitman C.	478	464	427	ne	284	338	302	ne	89		
U. Washington, Tacoma	479	24	1	203	276	0	0	203	276		
Rutgers, State U. New Jersey, Camden	480	25	225	13	275	0	0	0	0		
Claremont McKenna C.	481	337	396	274	272	337	396	274	272		
Grinnell C.	481	363	487	423	272	41	29	17	20		
Central Washington U.	483	517	428	336	266	206	179	122	42		
Morehouse C.	484	98	120	90	263	98	120	90	263		
Prairie View A&M U.	485	193	379	353	258	185	369	320	255		
Pittsburg State U.	486	243	178	110	254	236	178	109	254		
U. Washington, Bothell	486	314	0	493	254	252	0	323	254		
Youngstown State U.	486	69	74	14	254	0	0	0	231		
Mercer U.	489	239	235	250	253	0	0	0	0		

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. North Carolina, general administration	490	263	0	522	250	0	0	0	0
Texas Christian U.	491	215	311	138	248	0	57	138	209
Carleton C.	492	532	256	501	246	108	82	115	87
Azusa Pacific U.	493	259	126	174	240	0	0	0	0
Pace U.	494	532	431	296	225	476	386	288	178
U. Dayton	494	168	217	163	225	145	205	163	211
U. Wisconsin-Platteville	496	109	i 111	i 191	i 224	i 41	i 41	i 53	i 65
U. Charleston	497	ne	ne	ne	217	ne	ne	ne	217
Saint John's U.	498	109	i 104	i 180	i 208	i 0	i 0	i 0	i 0
Sonoran U. Health Sciences	498	0	ne	ne	208	i 0	ne	ne	0
C. of Saint Benedict	500	122	i 116	i 178	i 205	i 0	i 0	i 14	i 16
Central State U.	501	46	59	164	203	46	59	164	203
Seattle U.	502	248	156	29	200	116	86	25	103
Citadel Military C. South Carolina	503	ne	75	103	196	ne	49	77	124
U.S. Air Force Academy	504	140	0	317	194	140	0	317	194
Ithaca C.	505	ne	138	128	190	ne	132	109	170
U. of Mary Washington	505	100	132	155	190	64	85	119	111
Abilene Christian U.	507	ne	ne	101	185	ne	ne	0	0
Fort Valley State U.	508	185	129	164	184	162	121	121	184
Albion C.	509	98	76	74	i 182	i 0	0	i 0	i 30
U. Southern Maine	510	143	195	180	180	16	60	63	55
Florida Gulf Coast U.	511	51	0	94	179	0	0	62	45
Texas A&M International U.	512	64	9	185	173	0	0	65	66
California Lutheran U.	513	206	257	ne	171	107	144	ne	23
Biola U.	514	146	i 150	i 157	i 170	i 0	i 0	i 0	0
U. San Diego	515	106	92	37	169	22	31	19	39
Eastern Connecticut State U.	516	300	376	205	157	169	177	107	35
SUNY, Geneseo	517	233	131	108	152	150	58	61	85
SUNY, Oswego	518	354	281	129	151	218	190	72	82
Johnson C. Smith U.	519	137	0	160	i 146	132	0	160	i 146
U. Ana G. Mendez, Gurabo	520	337	648	175	144	i 309	446	120	143
Union C., Schenectady	521	80	45	64	143	14	13	4	41
Macalester C.	522	343	297	108	142	108	121	10	61
Texas A&M U.-San Antonio	523	ne	ne	ne	137	ne	ne	ne	48
U. Houston-Downtown	524	37	46	25	135	0	0	0	93

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Houston-Clear Lake	525	52	44	42	134	9	20	38	83
Plymouth State U.	526	ne	ne	ne	133	ne	ne	ne	133
U.S. Military Academy	527	430	421	1,318	132	430	295	1,250	130
Lamar U.	528	122	55	23	131	0	27	0	28
Colorado C.	529	117	121	144	128	12	20	1	0
Central Connecticut State U.	530	112	131	142	121	31	73	97	23
U. Wisconsin-Stevens Point	531	202 i	214	205	119	2 i	2	2	6
Hamilton C.	532	180	81	122	116	51	26	86	75
Florida A&M U.	533	153	67	29	113	97	61	29	113
Skidmore C.	534	150	85	351	111	122	69	330	108
U. Wisconsin-Eau Claire	534	86	80	174	111	35	30	42	0
U. Northern Iowa	536	63	104	164	104	44	35	0	44
U. New Haven	537	74	35	121	101	24	9	25	31
U. Michigan, Dearborn	538	152	121	75	99	69	112	75	99
Monmouth U.	539	56	85	35	98	0	0	0	51
New Mexico Highlands U.	540	ne	171	164 i	93 i	ne	115	120 i	82 i
Norfolk State U.	540	108	114	88	93	108	114	88	93
Virginia Military Institute	542	ne	ne	ne	83	ne	ne	ne	0
Eastern Washington U.	543	66	186	193	79	0	155	188	63
California State U., Chico	544	310	184	111	63	282	170	111	63
Drake U.	545	31	ne	17	62	10	ne	8	58
Stockton U.	545	78	105	0	62	50	39	0	62
Virginia State U.	547	15	24	83	61	15	24	38	44
Stephen F. Austin State U.	548	75	57	80	60	0	0	0	0
Fayetteville State U.	549	328	408	30	56	328	408	30	56
U. North Carolina, Asheville	550	505	493	322	53	75	73	14	35
Elon U.	551	79	140	108	49	0	0	39	0
Purdue U., Northwest	552	52	18	29	47	39	5	28	47
California State U., Bakersfield	553	295	223	189	46	92	70	53	29
St. Catherine U.	554	ne	ne	ne	42	ne	ne	ne	0
Troy U.	555	ne	176	62	41	ne	157	37	2
SUNY, C. Brockport	556	263	299	67	39	193	291	61	20
CUNY, system office	557	30	84	37	38	3	84	37	38
Manhattan C.	558	82	56	49	37	0	0	0	0
Austin Peay State U.	559	705	60	50	35	35	49	50	29

TABLE 45

Total and federally financed higher education R&D expenditures in the biological and biomedical sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Puerto Rico, Cayey	560	404 i	601	392	30	0	237	145	30
Western Illinois U.	560	1,195	852	334	30	969	653	274	8
Embry-Riddle Aeronautical U.	562	0	0	0	26	0	0	0	26
U. North Georgia	562	52	16	31	26	2	16	31	26
Northwestern State U. Louisiana	564	50	131	7	19	0	0	0	0
Suffolk U.	564	ne	29	33	19	ne	29	33	14
Texas A&M U.-Commerce	566	265	144	31	18	0	8	0	0
Marymount U.	567	ne	ne	93	15	ne	ne	0	0
U. Hartford	568	0	0	0	10	0	0	0	3
CUNY, John Jay C. of Criminal Justice	569	132	49	43	9	113	39	43	0
U. Arkansas, Pine Bluff	570	174	74	0	8	136	58	0	6
La Sierra U.	571	132	101	5	7	32	4	0	0
Mercyhurst U.	571	12 i	10 i	8 i	7	0 i	0 i	0 i	0
CUNY, Graduate Center	573	51	116	110	6	46	87	92	0
Savannah State U.	573	183	22	3	6	183	22	3	6
New School	575	0	0	40	2	0	0	27	1
U. Illinois, Springfield	576	0	1	2	1	0	0	0	0
U. Puerto Rico, Humacao	576	284	229	86	1	284	229	86	1
All other surveyed institutions	-	28,434	20,424	5,773	0	16,309	9,776	4,093	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

^a Johns Hopkins University includes the Applied Physics Laboratory (APL), with \$30,143 thousand imputed for total and \$28,856 thousand reported for federally financed R&D expenditures in biological and biomedical sciences in FY 2022. Total expenditures by field for Johns Hopkins University are flagged as imputed because APL was unable to distribute a portion of institutionally funded R&D by field.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^d The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):
National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 46

Total and federally financed higher education R&D expenditures in the health sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
All institutions	-	27,265,024	27,991,752	29,859,263	31,869,957	14,173,029	14,705,799	16,130,097	17,494,324
U. California, San Francisco	1	1,526,889	1,579,053	1,637,342	1,731,822	631,806	634,237	645,077	736,836
U. California, Los Angeles	2	887,293	955,580	1,019,775	1,073,244	393,177	437,643	502,185	594,487
Duke U.	3	749,965	717,323	721,730	857,681	355,135	353,311	383,958	493,708
U. California, San Diego	4	754,309	765,869	762,778	854,614	372,590	377,281	419,886	531,157
Johns Hopkins U. ^a	5	727,074 i	736,373 i	719,743 i	820,566 i	478,556	492,957	495,734	571,270
Yale U.	6	691,959	726,089	779,001	809,589	350,340	367,588	415,334	445,289
U. North Carolina, Chapel Hill	7	680,788	700,352	733,607	798,512	387,808	398,199	426,102	453,720
U. Texas M. D. Anderson Cancer Center	8	612,732	654,098	714,145	755,886	80,140	90,726	114,464	120,193
U. Pittsburgh, Pittsburgh	9	641,144	659,733	678,383	728,994	396,027	400,747	421,306	462,914
Stanford U.	10	614,159	572,268	622,630	695,772	349,539	323,047	359,980	392,879
U. Michigan, Ann Arbor	11	632,969	622,140	604,587	680,357	339,982	333,024	333,812	369,878
U. Washington, Seattle	12	655,372	660,692	685,723	679,546	486,924	489,241	488,597	472,149
Ohio State U.	13	406,318	422,365	700,303	666,812	211,721	225,112	245,788	280,228
Vanderbilt U. and Vanderbilt U. Medical Center	14	408,035	441,313	599,247	651,870	287,597	303,327	361,743	422,950
Columbia U. in the City of New York	15	524,495	531,123	563,787	637,456	379,363	391,314	422,968	462,070
Emory U.	16	524,939	535,117	571,627	628,633	236,157	264,862	307,719	333,946
U. Minnesota, Twin Cities	17	461,261	474,705	514,691	602,141	225,592	231,480	274,027	333,708
U. Colorado Anschutz Medical Campus ^b	18	na	na	550,101	591,424	na	na	357,186	423,282
New York U.	19	377,195	389,211	469,714	584,887	196,303	203,772	267,032	355,486
Washington U., Saint Louis	20	442,275	465,122	498,196	549,454	264,808	272,506	290,293	336,869
Northwestern U.	21	446,421	451,059	474,272	514,642	270,784	287,948	302,805	332,325
U. Wisconsin-Madison	22	472,274	451,868	467,332	500,026	185,312	177,594	185,553	204,259
U. Alabama, Birmingham	23	396,340	409,345	439,145	486,139	246,156	242,728	265,640	283,493
Icahn School of Medicine at Mount Sinai	24	363,092	387,114	428,618	482,027	244,978	272,264	318,922	349,128
U. Texas Southwestern Medical Center	25	310,308	377,001	408,377	479,181	128,317	154,128	156,620	185,558
Cornell U.	26	336,554	370,944	384,742	429,280	137,876	161,371	185,010	214,450
U. Cincinnati	27	362,786	363,772	380,364	428,068	191,320	223,432	239,842	268,101
Baylor C. of Medicine	28	353,039	374,095	371,964	426,947	137,666	148,425	168,837	197,342
Indiana U., Bloomington	29	341,217	367,228	369,296	402,704	154,864	162,496	168,420	188,523
U. Maryland ^c	30	378,537	366,476	390,634	400,555	237,875	215,647	215,882	211,533
U. Florida	31	342,498	327,963	344,705	400,250	143,967	142,251	156,907	169,021
U. Pennsylvania	32	301,611	326,566	329,713	352,904	153,088	153,364	171,402	189,554
U. Utah	33	321,728 i	361,988 i	369,765 i	351,390	151,742	177,544	186,207	190,041
Albert Einstein C. of Medicine	34	298,824	288,654	301,715	318,314	202,513	204,635	214,619	220,780

TABLE 46

Total and federally financed higher education R&D expenditures in the health sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Oregon Health and Science U.	35	177,687	265,157	278,801	300,193	134,016	184,045	195,006	208,921
Boston U.	36	187,252	208,709	276,870	295,414	118,893	118,255	181,093	167,178
U. Iowa	37	260,702	284,636	278,735	295,198	118,355	123,855	130,852	133,298
U. Chicago	38	212,930	219,525	254,022	292,843	146,121	163,943	194,258	217,318
Case Western Reserve U.	39	284,229	283,260	252,185	292,264	237,106	231,431	206,937	245,047
U. California, Davis	40	215,845	229,577	247,406	262,615	113,073	122,802	126,788	161,879
U. Southern California	41	408,849	427,949	468,905	262,080	198,583	215,128	235,884	152,381
Uniformed Services U. of the Health Sciences	42	405,214	315,313	359,418	252,132	288,742	228,596	257,125	176,427
Wake Forest U.	43	227,411	232,490	250,518	250,627	161,380	162,023	184,166	175,325
U. Miami	44	210,762	218,739	215,596	247,302	97,927	98,788	98,956	109,639
U. Illinois, Chicago	45	207,754	222,385	237,347	241,065	116,209	128,953	139,546	146,031
U. Rochester	46	194,845	205,158	214,686	229,953	129,064	128,290	137,802	143,435
Rutgers, State U. New Jersey, New Brunswick	47	294,976	319,113	319,883	228,112	122,619	131,115	165,473	98,452
Medical C. Wisconsin	48	162,969	171,901	185,395	215,640	67,941	75,097	81,557	93,426
U. New Mexico	49	113,308	115,028	213,149	200,164	68,059	68,385	156,667	138,833
Thomas Jefferson U.	50	96,914	96,265	117,226	198,417	31,857	32,350	59,891	101,174
U. California, Irvine	51	162,497	174,686	190,252	187,306	66,776	78,599	79,591	87,959
U. Arizona	52	161,471	160,542	162,748	183,399	61,132	58,241	71,073	80,959
U. Virginia, Charlottesville	53	172,559	189,679	172,524	182,321	48,783	57,711	59,905	60,833
Georgetown U.	54	136,787	138,679	167,962	176,598	64,256	66,199	99,766	98,393
Virginia Commonwealth U.	55	121,490	137,007	140,319	175,197	51,872	57,194	60,154	63,370
U. Kansas	56	142,295	154,245	168,897	172,748	59,800	69,398	83,587	84,531
SUNY, U. Buffalo	57	164,551	150,541	154,302	159,310	58,617	59,728	62,571	63,398
U. Texas Health Science Center, Houston	58	114,095	118,123	138,943	152,507	51,093	53,123	72,125	76,851
Wayne State U.	59	153,084	154,653	146,425	152,350	74,502	74,025	72,186	77,680
U. Arkansas for Medical Sciences	60	99,586	105,955	122,965	145,560	30,247	31,804	47,652	54,269
U. Texas Health Science Center, San Antonio	61	104,703	112,594	126,181	132,856	54,241	53,745	58,379	65,129
U. Massachusetts, Medical School	62	92,702	94,555	100,911	132,752	62,020	61,778	62,856	96,374
Harvard U.	63	137,745	122,619	133,571	131,479	62,263	54,439	74,024	74,495
U. Oklahoma, Norman and Health Science Center	64	107,128	119,319	116,506	125,256	41,090	43,535	46,790	54,008
Pennsylvania State U., University Park and Hershey Medical Center	65	84,968	90,967	91,303	118,266	46,064	49,889	51,789	60,184
George Washington U.	66	121,699	126,901	122,447	114,499	78,924	84,188	83,219	73,625
Texas A&M U., College Station and Health Science Center	67	77,896	220,948	188,730	103,670	29,277	171,384	139,429	55,668
U. Nebraska, Medical Center	68	90,837	96,786	101,144	102,926	31,791	34,622	39,568	42,272
Temple U.	69	95,903	93,790	94,116	101,776	63,267	58,687	62,141	67,747

TABLE 46

Total and federally financed higher education R&D expenditures in the health sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Louisville	70	82,529	91,134	87,611	99,867	29,886	28,362	29,156	43,345
Rush U.	71	75,399	78,672	92,716	99,567	49,170	51,186	60,853	66,274
U. South Florida ^d	72	83,200	72,093	90,274	99,029	20,003	24,754	33,784	45,993
U. Missouri, Columbia	73	62,918	78,021	79,594	98,322	28,328	35,673	44,407	44,542
Purdue U., West Lafayette	74	73,660	85,839	88,853	91,794	24,555	29,679	33,916	39,058
Medical U. South Carolina	75	99,495	86,364	93,409	91,364	43,635	44,041	48,670	47,538
U. Connecticut	76	76,662	64,335	74,770	89,129	43,145	38,304	47,916	57,044
U. Kentucky	77	73,619	77,295	77,779	86,296	40,585	47,572	52,260	62,945
Dartmouth C. and Dartmouth Hitchcock Medical Center	78	80,692	83,046	78,745	80,239	43,999	43,926	44,449	42,037
SUNY, Stony Brook U.	79	57,903	59,949	63,040	78,801	25,783	26,694	32,165	40,777
U. South Carolina, Columbia	80	52,099	72,233	69,832	78,146	39,967	41,687	41,165	50,514
U. Texas, Austin	81	56,232	62,010	69,548	77,108	29,182	28,826	36,365	40,012
West Virginia U.	82	60,670	58,047	69,644	76,948	20,341	18,908	24,940	28,335
U. Tennessee, Health Science Center	83	74,555	72,349	74,246	74,096	27,654	28,260	33,007	33,996
Augusta U.	84	56,610	60,177	69,850	73,958	22,378	25,747	30,933	31,030
Michigan State U.	85	65,910	60,154	57,339	71,382	32,480	27,534	28,328	37,431
U. Mississippi	86	60,209	67,047	56,848	65,860	29,781	46,807	39,086	45,534
U. Vermont	87	48,324	64,224	63,210	65,313	31,802	33,364	37,336	40,601
Washington State U.	88	47,568	49,070	59,282	64,128	34,114	32,030	36,732	41,980
U. California, Berkeley	89	61,002	55,230	58,481	60,240	33,036	25,243	26,345	33,545
Tulane U.	90	36,399	41,445	46,935	50,018	14,594	16,346	21,498	21,174
Brown U.	91	45,463	41,744	46,024	49,964	34,347	31,743	37,100	42,112
Virginia Polytechnic Institute and State U.	92	49,883	47,236	51,942	48,844	19,397	19,730	21,979	19,230
U. Texas Medical Branch	93	43,303	42,087	44,920	48,144	27,545	27,779	31,585	30,104
U. Puerto Rico, Medical Sciences Campus	94	44,985	37,081	43,846	47,314	34,541	26,897	32,997	34,786
Drexel U.	95	49,628	47,466	53,152	44,108	26,328	25,113	30,650	28,377
U. California, Office of the President	96	50,092	40,585	40,336	43,487	202	123	191	0
Louisiana State U., Health Sciences Center, New Orleans	97	20,974	23,192	23,148	43,024	14,317	14,392	15,847	25,397
Arizona State U.	98	31,611	39,268	37,201	42,576	15,503	15,960	15,101	18,176
Morehouse School of Medicine	99	31,289	29,813	32,637	42,489	22,461	22,500	25,181	31,339
Saint Louis U.	100	29,373	31,213	37,487	40,671	16,774	15,722	23,081	23,675
Florida State U.	101	32,890	37,353	35,745	39,431	17,293	19,862	17,927	20,449
U. Delaware	102	26,922	28,705	25,483	39,058	19,058	21,603	19,296	19,299
U. Hawaii, Manoa	103	52,177	47,531	45,709	37,830	36,629	32,477	28,587	22,632
U. Georgia	104	50,860	32,872	35,774	36,409	10,985	12,548	13,291	12,287

TABLE 46

Total and federally financed higher education R&D expenditures in the health sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
SUNY, Upstate Medical U.	105	22,363	26,810	27,911	33,103	9,786	13,081	12,654	15,152
U. Houston	106	20,004	21,435	19,265	31,836	10,244	10,906	10,820	16,451
U. Montana, Missoula	107	24,465	25,707	30,176	31,740	19,683	21,652	26,382	27,998
Howard U.	108	17,872	18,156	21,927	28,888	13,134	12,922	16,300	17,127
Massachusetts Institute of Technology	109	19,499	20,529	21,012	27,534	14,181	14,516	16,015	20,022
Colorado State U., Fort Collins	110	37,787	24,849	28,615	26,764	24,560	19,151	17,382	16,529
U. Texas, Dallas	111	31,036	29,609	22,215	25,570	11,546	13,568	10,719	12,530
U. Missouri, Kansas City	112	11,919	14,403	12,701	25,516	7,586	9,111	7,427	14,595
Texas Tech U., Health Sciences Center	113	22,752	21,574	20,173	23,715	3,596	3,500	3,996	6,614
East Carolina U.	114	32,861	30,285	18,142	22,935	10,963	11,137	7,931	11,397
Loyola U., Chicago	115	17,674	18,529	21,272	21,885	9,742	9,898	10,324	9,931
U. Toledo	116	20,923	20,743	17,417	21,521	9,880	9,989	10,253	10,411
New Jersey Institute of Technology	117	24,859	17,662	18,355	21,379	18,422	13,727	6,854	3,986
San Diego State U.	118	15,226	12,357	15,949	20,885	10,733	8,423	11,113	14,386
U. Nevada, Reno	119	18,515	19,029	20,341	20,416	9,170	8,277	11,439	11,806
Tufts U.	120	19,295	31,949	48,230	19,825	14,964	25,561	38,262	8,512
U. Louisiana, Lafayette	121	51,140	18,497	18,818	19,606	12,290	8,299	10,130	11,791
U. South Alabama	122	13,406	18,893	23,884	19,345	8,150	11,871	12,509	11,821
Southern Illinois U., Carbondale	123	16,778	16,628	17,958	18,528	4,437	3,925	3,907	4,232
U. California, Riverside	124	10,797	12,788	15,576	18,034	6,568	9,783	12,326	14,043
SUNY, U. Albany	125	68,363	32,478	22,998	17,702	51,657	27,935	20,138	14,702
U. Nebraska, Lincoln	126	18,492	16,883	16,429	17,663	7,719	5,797	6,214	5,667
U. Texas Rio Grande Valley	127	17,789	19,143	19,785	16,939	4,808	3,852	3,884	4,545
U. New Hampshire	128	14,712	15,276	18,883	16,527	9,133	9,845	11,612	10,148
Florida International U.	129	16,019	13,961	15,751	16,489	3,190	2,603	2,063	2,664
U. North Dakota	130	12,059	14,048	13,774	16,433	5,940	7,807	7,943	10,107
U. Nevada, Las Vegas	131	20,056	21,019	18,321	15,740	6,120	5,767	4,992	4,878
Rockefeller U.	132	14,318	14,643	14,694	15,494	5,819	4,473	5,072	4,657
U. Central Florida	133	17,034	13,876	15,294	15,074	2,848	2,422	4,402	4,678
U. Alabama, Tuscaloosa	134	4,869	5,383	8,980	14,749	1,589	2,364	3,177	7,688
Charles R. Drew U. of Medicine and Science	135	13,739	13,682	13,228	14,581	10,427	9,863	9,945	10,656
Auburn U., Auburn	136	28,160	10,995	15,343	14,411	1,615	1,657	1,261	982
East Tennessee State U.	137	3,405	4,145	4,923	14,370	1,456	2,564	1,907	5,248
Nova Southeastern U.	138	14,236	13,298	12,827	14,319	4,725	4,572	5,098	4,574
Louisiana State U., Health Sciences Center, Shreveport	139	14,390	13,911	12,906	14,239	2,267	1,658	2,167	2,115

TABLE 46

Total and federally financed higher education R&D expenditures in the health sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Indiana U.-Purdue U., Indianapolis	140	14,273	14,127	14,909	14,064	5,579	5,576	5,645	5,515
Montana State U., Bozeman	141	11,971	10,030	12,186	13,878	8,195	7,076	9,302	10,102
CUNY, Graduate School of Public Health and Health Policy	142	7,388	10,057	13,481	13,645	3,439	6,602	10,700	9,102
Wichita State U.	143	57	21	11,491	13,516	0	9	3,937	24
Central Michigan U.	144	2,910	4,390	10,781	12,783	1,046	844	904	2,537
Creighton U.	145	10,406	8,797	10,453	12,417	3,497	3,209	3,874	5,425
CUNY, Queens C.	146	0	9,978	8,822	11,834	0	8,321	7,374	9,295
Northeastern U.	147	10,429	10,384	10,371	11,477	4,454	4,591	4,148	3,828
Marshall U.	148	10,844	12,186	13,300	11,141	6,218	8,118	7,715	7,972
Florida A&M U.	149	7,880	8,427	10,567	10,961	6,874	7,301	9,150	9,517
U. Massachusetts, Amherst	150	19,940	10,047	9,953	10,918	12,576	6,464	6,288	7,131
U. Tennessee, Knoxville ^e	151	6,503	9,977	10,025	10,264	3,123	4,173	4,309	4,553
U. Texas, Arlington	152	9,698	9,511	9,984	10,059	3,508	5,042	4,860	5,444
Florida Atlantic U.	153	7,432	7,865	8,431	9,696	3,572	3,380	4,374	5,628
SUNY, Binghamton U.	154	7,085	8,035	7,345	9,414	1,490	1,319	897	817
Eastern Virginia Medical School	155	18,318	10,902	10,181	9,241	13,393	8,927	8,154	8,748
U. Massachusetts, Lowell	156	2,942	5,198	6,255	8,896	945	1,417	2,921	5,700
Texas Tech U., Health Sciences Center, El Paso	157	8,856	8,014	7,267	8,633	1,397	1,189	1,017	846
George Mason U.	158	6,467	7,187	8,558	8,513	2,767	3,326	4,519	4,658
Georgia State U.	159	11,424	13,803	10,926	8,380	9,780	10,882	7,260	4,184
Clemson U.	160	5,822	7,465	7,534	7,953	1,387	1,847	2,070	1,995
Long Island U.	161	4,536	5,905	6,428	7,833	1,381	1,103	2,177	2,023
Ohio U.	162	7,681	7,158	7,371	7,780	2,215	2,501	3,302	3,568
Loma Linda U.	163	8,895	7,892	6,889	7,619	5,123	4,608	4,095	3,534
North Dakota State U.	164	17,936	8,713	7,484	7,540	6,703	5,142	4,987	5,207
Oregon State U.	165	8,154	7,447	8,767	7,475	5,839	5,837	7,005	5,573
U. Texas, El Paso	166	7,504	6,503	5,638	7,386	1,958	2,007	1,958	2,378
Old Dominion U.	167	4,708	4,585	5,972	7,244	2,081	2,186	1,537	1,381
U. North Texas, Health Science Center Edward Via C. of Osteopathic Medicine	168	28,110	28,703	36,100	7,140	18,111	18,800	23,830	2,400
Texas Tech U.	169	7,225	7,474	6,629	7,121	749	565	537	482
Texas Tech U.	170	6,365	5,204	5,392	7,104	597	570	760	954
U. Wyoming	171	4,206	2,320	3,903	6,761	2,900	2,026	3,205	3,038
Duquesne U.	172	5,950	6,266	4,846	6,724	2,089	2,181	2,857	3,428
New York Medical C.	173	11,126	7,585	7,563	6,552	6,143	3,010	3,308	2,824
Albany Medical C.	174	6,792	6,360	6,322	6,450	607	677	466	568

TABLE 46

Total and federally financed higher education R&D expenditures in the health sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Wisconsin-Milwaukee	175	5,839	6,129	5,344	6,437	2,671	3,092	3,354	4,002
Chapman U.	176	2,578	2,761	4,337	6,376	1,587	1,810	2,377	2,984
Roseman U. of Health Sciences	177	4,176	4,380	5,893	6,285	37	56	53	30
U. Nebraska, Omaha	178	2,599	3,445	6,071	6,129	1,989	2,658	5,331	5,128
Rowan U.	179	6,652	7,836	6,962	6,119	2,909	3,446	2,798	2,622
Oklahoma State U., Stillwater	180	9,576	8,614	5,881	6,090	1,248	1,106	603	808
Georgia Institute of Technology	181	4,846	20,316	6,213	6,060	0	13,779	141	280
Oklahoma State U., Center for Health Sciences	182	4,390	7,164	6,397	6,002	848	2,469	1,864	1,787
U. Memphis	183	5,463	5,192	5,201	5,848	1,053	1,139	1,812	2,106
U. Illinois, Urbana-Champaign	184	25,462	2,845	4,630	5,483	8,907	722	1,159	1,814
Mercer U.	185	5,294	5,307	5,592	5,466	1,233	1,457	1,892	1,537
Xavier U. Louisiana	186	2,490	2,859	3,133	5,388	1,180	1,384	1,686	3,075
U. Rhode Island	187	2,944	2,397	3,849	5,359	1,847	2,339	2,771	3,547
Marquette U.	188	4,461	4,570	5,545	5,317	1,477	1,771	2,391	1,997
Northeast Ohio Medical U.	189	9,108	6,717	4,451	5,248	3,673	3,274	2,274	3,111
U. Colorado Boulder	190	5,714	5,377	4,708	5,076	3,747	3,939	3,515	4,142
U. Central del Caribe	191	3,953	3,931	3,831	5,053	2,705	2,743	2,492	2,807
Brandeis U.	192	0	2,047	3,490	5,007	0	1,318	1,378	3,511
U. Arkansas, Fayetteville	193	11,026	3,213	3,825	4,979	5,617	821	1,351	2,048
U. North Texas, Denton	194	1,866	1,354	3,360	4,943	0	48	209	566
Northern Arizona U.	195	2,807	5,180	5,522	4,639	1,178	3,702	3,033	3,573
Midwestern U.	196	3,950	3,907	4,302	4,612	491	455	705	846
Jackson State U.	197	881	1,084	2,492	4,507	855	1,044	2,095	4,115
SUNY, C. of Optometry	198	2,968	3,477	3,460	4,497	1,823	1,688	2,105	2,080
U. South Dakota	199	1,631	1,743	1,576	4,478	328	504	546	600
Wright State U.	200	8,004	5,732	4,651	4,418	4,070	3,109	2,968	2,444
U. North Carolina, Greensboro	201	3,993	3,230	3,206	4,390	2,424	2,032	1,672	2,556
Morgan State U.	202	6	1,931	3,273	4,340	0	1,764	3,085	3,606
U. of Health Sciences and Pharmacy in St. Louis	203	ne	4,835	5,313	4,271	ne	3,767	4,063	2,514
U. California, Merced	204	2,323	1,770	3,956	4,176	634	539	1,109	1,215
U. Missouri, Saint Louis	205	4,746	5,458	4,141	4,012	2,357	2,591	2,097	1,727
Syracuse U.	206	3,253	2,785	3,098	3,918	841	647	752	1,055
Miami U.	207	4,422	5,586	5,813	3,856	365	1,085	1,133	617
Yeshiva U.	208	2,420	2,477	3,830	3,678	380	486	1,256	950
Saint Joseph's U.	209	43	35	30	3,591	0	0	0	370

TABLE 46

Total and federally financed higher education R&D expenditures in the health sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Georgia Southern U.	210	1,507	1,173	4,105	3,584	774	570	493	239
New York Institute of Technology	211	4,185	2,474	3,050	3,499	1,900	698	891	1,344
Alabama A&M U.	212	4,390 i	2,991 i	3,189 i	3,333 i	2,810 i	1,916 i	2,575 i	3,196 i
Kent State U.	213	2,281	1,965	2,924	3,242	110	424	1,459	2,020
U. Guam	214	2,145	2,408	2,741	3,139	1,837	2,034	2,363	2,786
Ball State U.	215	1,232	1,171	1,042	3,086	454	598	608	2,654
U. Massachusetts, Boston	216	3,766	3,320	3,061	3,063	1,403	1,591	2,104	2,282
Baylor U.	217	2,127	2,267	2,782	3,041	1,098	1,255	1,446	1,479
California State U., Long Beach	218	2,873	2,704	2,499	3,023	2,262	1,784	1,704	1,905
Pacific U.	219	4,463	3,202	2,745	3,019	2,338	1,572	1,212	1,434
South Dakota State U.	220	4,896	2,684	2,361	2,977	1,947	1,596	1,482	1,842
U. Nebraska, central administration	221	3,259	1,333	2,309	2,810	3,068	1,333	2,309	2,810
Montclair State U.	222	852	1,206	1,735	2,715	133	300	216	306
Philadelphia C. of Osteopathic Medicine	223	2,368	2,415	2,837	2,675	0	0	0	0
CUNY, City C.	224	4,355	4,387	2,112	2,663	2,429	2,024	1,236	932
San Jose State U.	225	3	0	1,224	2,585	3	0	0	114
Mississippi State U.	226	1,535	1,738	1,887	2,544	135	206	734	1,328
U. Texas, San Antonio	227	1,483	2,014	1,961	2,527	826	808	928	994
U. Oklahoma, Tulsa	228	2,325	2,633	2,096	2,351	496	493	260	416
Boise State U.	229	955	1,343	1,723	2,279	670	867	1,345	1,719
U. Louisiana, Monroe	230	1,435	1,665	1,559	2,258	1,088	1,379	934	1,321
Villanova U.	231	601	1,305	1,557	2,250	0	25	398	909
Oakland U.	232	1,805	1,603	1,402	2,215	215	69	232	524
MGH Institute of Health Professions	233	1,957	1,587	1,200	2,200	1,957	1,587	1,200	2,200
California Polytechnic State U., San Luis Obispo	234	2,891	2,899	2,546	2,181	2,207	1,836	2,014	1,340
Winston-Salem State U.	235	201	1,716	3,341	2,169	201	1,366	2,326	1,952
James Madison U.	236	295	631	1,429	2,138	0	0	19	34
U. Alaska, Anchorage	237	1,268	129	830	2,121	1,116	0	157	1,229
U. Southern Mississippi	238	2,771	2,300	2,235	2,111	627	608	503	427
Texas Woman's U.	239	1,435	1,669	2,802	2,038	229	347	868	443
U. Alaska, Fairbanks	240	2,751	431	362	2,018	2,517	431	212	759
Boston C.	241	1,202	1,576	1,608	1,987	879	1,062	1,195	1,453
Cleveland State U.	242	6,578	2,797	3,312	1,976	3,819	433	1,215	31
Florida Gulf Coast U.	243	66	632	897	1,945	51	594	892	1,689
New England C. of Optometry	244	1,223	1,150	1,978	1,868	928	785	1,623	1,609

TABLE 46

Total and federally financed higher education R&D expenditures in the health sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed											
		2019	2020	2021	2022	2019	2020	2021	2022								
Saginaw Valley State U.	245	1,296	1,145	1,199	i	1,845	i	1,278	1,083	1,137	i	1,515	i				
U. North Carolina, Charlotte	246	2,424	1,904	1,635		1,838		728	563	554		748					
Utah State U.	247	1,737	2,526	1,966		1,797		1,398	1,877	1,390		1,003					
Dine C.	248	734	328	ne		1,762		734	328	ne		1,762					
Texas State U.	249	1,957	2,257	0		1,716		457	354	0		0					
Salisbury U.	250	1,607	1,995	2,120		1,710		0	0	0		0					
Brigham Young U., Provo	251	1,354	946	1,349		1,639		482	392	768		988					
U. Colorado Denver ^b	252	na	na	3,149		1,635		na	na	422		450					
Northern Illinois U.	253	3,604	1,854	1,660		1,628		211	200	336		306					
Northern Kentucky U.	254	156	532	1,377		1,576		138	295	1,044		1,238					
Marshall B. Ketchum U.	255	1,430	i	1,357	i	1,351	i	1,559	i	336	i	323	i	343	i	383	i
Bowling Green State U.	256	109	304	1,535		1,368		67	122	294		404					
Portland State U.	256	9,112	2,224	1,184		1,368		7,816	2,097	1,009		1,011					
Louisiana Tech U.	258	462	449	370		1,365		67	37	6		536					
St. John's U., New York	259	926	1,326	1,152		1,357		539	556	643		826					
California State U., East Bay	260	ne	629	615		1,349		ne	154	292		499					
California State U., Fullerton	261	553	707	537		1,345		336	335	192		349					
Reed C.	262	0	0	0	i	1,307	i	0	0	0	i	387	i				
Grand Valley State U.	263	741	1,216	1,205		1,253		527	673	481		755					
U. Texas, Tyler	264	693	440	332		1,233		343	272	222		344					
Eastern Michigan U.	265	1,165	1,872	1,406		1,219		799	1,413	1,073		811					
CUNY, Hunter C.	266	242	407	685		1,204		238	253	308		615					
Illinois Institute of Technology	267	1,696	1,023	1,465		1,198		847	487	662		619					
U. Alabama, Huntsville	268	887	1,122	1,179		1,159		6	39	0		8					
Idaho State U.	269	1,237	1,477	1,202		1,157		352	283	188		203					
Bowie State U.	270	0	0	0		1,143		0	0	0		1,143					
U. Central Oklahoma	271	64	63	i	66	i	1,138	i	60	59	i	62	i	293	i		
California State U., Fresno	272	104	572	752		1,117		9	10	0		17					
U. New England	273	1,870	2,080	1,366		1,106		1,344	1,428	718		395					
Gallaudet U.	274	409	384	630		1,105		388	383	368		883					
Northeastern Illinois U.	275	997	873	724		1,092		997	873	724		1,092					
Purdue U., Northwest	276	563	920	945		1,073		71	131	127		106					
U. Wisconsin-Green Bay	277	684	i	649	i	730	i	1,066	i	262	i	284	i	315	i	376	i
Clark U.	278	0	0	0		1,021		0	0	0		0					
Embry-Riddle Aeronautical U.	279	0	0	0		1,020		0	0	0		514					

TABLE 46

Total and federally financed higher education R&D expenditures in the health sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Hawaii, Hilo	280	746	851	1,263	1,018	591	631	918	826
Western Michigan U. and Homer Stryker M.D. School of Medicine	281	929	1,136	663	1,016	100	276	117	157
Rosalind Franklin U. of Medicine and Science	282	1,386	1,691	1,893	1,013	630	770	948	585
Sam Houston State U.	283	14	18	17	1,010	0	0	0	565
Carnegie Mellon U.	284	1,191	824	895	1,006	885	493	407	471
U. Maine	284	417	385	466	1,006	0	0	0	115
Western Kentucky U.	286	1,134	686	665	1,005	170	0	180	304
Delaware State U.	287	265	2,777 i	2,245	984	170	305 i	351	276
U. North Florida	288	632	481	404	937	0	0	0	0
Oregon Institute of Technology	289	859 i	777 i	780 i	919 i	0 i	0	42 i	57 i
New Mexico State U.	290	628	449	492	903	536	397	434	385
Towson U.	291	212	295	432	839	13	13	18	0
Michigan Technological U.	292	1,460	1,390	849	823	629	399	187	274
Southern Illinois U., Edwardsville	293	1,066	3,799	4,878	803	1,048	961	1,115	766
Southern U. and A&M C., Agricultural Research and Extension Center	293	418	662	765	803	0	0	0	0
Western Carolina U.	295	621	774	927	796	493	621	687	588
DePaul U.	296	27	79	60	785	1	0	0	773
Pennsylvania State U., Harrisburg	297	62	327	1,267	783	0	303	1,239	783
Tarleton State U.	298	115	350	482	763	0	0	0	0
Illinois State U.	299	646	991	1,249	758	343	684	898	730
Middle Tennessee State U.	300	34	112	667	734	0	0	12	21
Fayetteville State U.	301	368	1,075	930	728	368	0	0	381
Louisiana State U., Baton Rouge	302	26,509	928	566	670	8,877	527	234	167
West Virginia School of Osteopathic Medicine	303	ne	669	721	659	ne	362	359	349
Bentley U.	304	ne	ne	ne	652	ne	ne	ne	0
Butler U.	305	ne	ne	ne	638	ne	ne	ne	487
West Chester U. Pennsylvania	306	939	613	465	618	126	73	70	157
U. Detroit Mercy	307	67	318	353	617	46	18	0	267
U. North Carolina, Asheville	308	515	718	1,014	606	486	667	939	481
Hampton U.	309	983	962	813	603	983	962	813	603
Southern Connecticut State U.	310	672	907	452	567	144	102	54	178
U. Nebraska, Kearney	311	276	632	394	552	47	327	218	491
North Carolina A&T State U.	312	0	0	989	551	0	0	989	551
Haverford C.	313	0 i	0 i	334 i	549 i	0	0	3	126
U. Washington, Bothell	314	251	297	175	530	203	297	145	413

TABLE 46

Total and federally financed higher education R&D expenditures in the health sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
CUNY, C. Staten Island	315	628	723	690	520	0	0	502	520
Framingham State U.	316	ne	2,060	2,132 i	516 i	ne	0	0 i	46 i
U. Central Arkansas	317	270	386	293	512	58	115	83	114
William Paterson U.	318	598	650	414	507	0	0	9	7
Northwest Indian C.	319	0	365 i	435 i	504	0	365 i	435 i	504
Naval Postgraduate School	320	55	200	270	456	55	200	270	456
Azusa Pacific U.	321	736	1,876	848	451	49	116	42	7
SUNY, Downstate Health Sciences U.	322	593	815	524	450	170	283	336	0
U. Dayton	323	413	216	210	446	319	172	195	434
California State U., Los Angeles	324	522 i	257	264	439	490	235	235	383
Kansas State U.	325	17,881	752	638	434	9,584	752	635	384
Dillard U.	326	506	224	534	424	506	2	181	94
Robert Morris U.	327	ne	ne	ne	412 i	ne	ne	ne	240 i
Appalachian State U.	328	45	409	269	404	0	64	53	59
Augustana U.	329	483	ne	546	403	483	ne	546	403
Iowa State U.	330	26,137	15,103	19,767	402	7,414	5,715	6,315	402
U. Massachusetts, Dartmouth	331	106	77	109	395	0	0	0	0
St. Catherine U.	332	ne	ne	ne	383	ne	ne	ne	256
Marymount U.	333	ne	ne	531	379	ne	ne	163	17
Langston U.	334	255	1,578	1,219	378	0	1,578	434	0
Pace U.	335	366	378	342	364	1	19	10	0
Des Moines U.	336	29	567	316 i	363	10	0	120 i	187
Alcorn State U.	337	86	108	294	358 i	81	107	257	317 i
U. Houston-Clear Lake	338	0	0	92	351	0	0	0	0
U. Maryland, Eastern Shore	339	106	259	635	347	5	259	635	347
California State U., Sacramento	340	356	325	340	324	9	0	0	17
Saint John's U.	341	13 i	12 i	275 i	317 i	0 i	0 i	0 i	0 i
Sonoran U. Health Sciences	342	230	ne	ne	312 i	0	ne	ne	0
U. West Florida	343	88	109	45	310	0	28	11	183
U. San Francisco	344	321	195	284	307	0	0	0	56
Texas A&M International U.	345	3,439	220	8	305	1,698	123	0	289
Tennessee Technological U.	346	0	96	143	304	0	0	78	233
Drake U.	347	115	ne	362	302	42	ne	45	40
C. of Saint Benedict	348	15 i	14 i	259 i	299 i	0 i	0 i	10 i	11 i
U. Northern Colorado	349	634	311	156	297	179	128	35	32

TABLE 46

Total and federally financed higher education R&D expenditures in the health sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Hofstra U.	350	26	47	359	292	0	0	0	0
Texas Christian U.	351	1,527	464	389	284	844	124	178	128
U. Akron	351	13	183	210	284	0	143	153	196
U. Idaho	353	169	121	97	280	87	93	29	65
Albany C. of Pharmacy and Health Sciences	354	348	1,033	125	275	214	827	44	152
San Francisco State U.	355	184	190	205	267	94	42	42	48
U. Maryland, Baltimore County	356	2,446	934	22	259	1,400	142	4	35
Sul Ross State U.	357	0	0	0	254	0	0	0	63
Pennsylvania State U., Behrend	358	0	0	29	253	0	0	0	238
Albion C.	359	0	0	0	248	0	0	0	16
Elon U.	360	268	45	180	238	0	16	0	97
U. of the Pacific	361	381	341	183	232	278	328	172	214
Skidmore C.	362	1,071	852	691	218	948	730	543	80
South Carolina State U.	363	185	192	199	216	185	192	199	216
Indiana State U.	364	133	55	9	213	42	12	8	170
North Carolina Central U.	365	1,087	360	73	202	943	302	1	0
Northern Michigan U.	366	320	200	121	201	150	0	0	0
C. New Jersey	367	ne	8	13	199	ne	0	0	20
California State U., Monterey Bay	368	262	49	182	192	196	0	138	157
U. Tulsa	369	135	178	118	180	0	28	0	0
CUNY, Brooklyn C.	370	636	660	65	172	534	556	0	151
Loyola Marymount U.	371	13	6	127	171	0	0	0	0
U. North Carolina, Wilmington	372	159	481	533	169	108	151	129	30
Rutgers, State U. New Jersey, Newark	373	0	338	2,648	168	0	0	1,484	0
Northwestern State U. Louisiana	374	211	176	82	164	34	1	0	13
U. Tennessee, Chattanooga	375	104	193	132	159	0	0	0	5
U. South Carolina, Aiken	376	0	0	0	157	0	0	0	0
Savannah State U.	377	92	152	178	155	92	152	178	155
U. Notre Dame	377	139	231	163	155	0	0	0	0
U. Puerto Rico, Rio Piedras	379	71	27	49	151	71	27	13	151
U. of the Incarnate Word	380	520	531	546	146	520	531	516	146
Western Washington U.	381	0	0	171	145	0	0	0	0
SUNY, Polytechnic Institute	382	0	0	175	144	0	0	175	144
Western U. of Health Sciences	382	446	323	35	144	41	14	16	2
California Institute of Technology	384	2,815	46	128	142	0	46	123	142

TABLE 46

Total and federally financed higher education R&D expenditures in the health sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
CUNY, York C.	385	8	9	5	139	0	0	0	134
Franklin and Marshall C.	386	58	6	163	138	0	0	92	126
Kean U.	386	ne	120	16	138	ne	0	0	29
Central Washington U.	388	0	0	31	135	0	0	0	0
Western New England U.	389	ne	ne	ne	134	ne	ne	ne	134
Smith C.	390	17	126	146	133	0	14	79	105
Virginia State U.	391	9	179	190	127	9	179	190	127
Eastern Connecticut State U.	392	1	5	0	123	0	0	0	0
C. Charleston	393	225	146	76	121	25	0	0	19
Southern U. and A&M C., Baton Rouge	394	10	2	19	120	8	0	17	120
U. Michigan, Dearborn	395	143	261	151	118	103	171	140	116
U. Oregon	395	115	1,004	817	118	107	4	297	0
Lamar U.	397	563	36	32	117	440	0	0	35
U. Wisconsin-Platteville	398	0 i	0 i	98 i	116 i	0 i	0 i	34 i	42 i
Eastern Washington U.	399	14	0	6	114	0	0	6	114
U. New Haven	399	3	5	11	114	0	0	11	96
SUNY, C. Plattsburgh	401	306	465	279	112	281	429	279	112
U. Virginia's C. Wise	401	ne	ne	0	112	ne	ne	0	108
Ithaca C.	403	ne	303	95	111	ne	276	78	92
Occidental C.	404	0	0	86	106 i	0	0	0	0 i
Southeastern Louisiana U.	405	138	148	158	104	118	136	139	93
Clarkson U.	406	398	97	93	101	219	54	0	0
California State Polytechnic U., Humboldt	407	396	246	129	99	0	0	0	0
Pepperdine U.	408	11	18	161	96	0	0	0	25
Spelman C.	408	58	20	149	96	58	20	149	96
Texas A&M U.-Corpus Christi	410	33	22	162	92	0	0	0	0
California State U., Stanislaus	411	9	6	10	90	0	0	0	80
Calvin U.	412	16	47 i	68 i	89 i	0	0 i	0 i	0
Stephen F. Austin State U.	413	97	92	79	81	1	0	0	0
Arkansas State U., Jonesboro	414	28	32	36	77	0	0	0	0
Clafin U.	415	0	0	23	76	0	0	23	76
Furman U.	416	52	72	39	75	52	39	26	0
Seattle U.	417	0	0	0	73	0	0	0	69
Hawaii Pacific U.	418	5	0	0	72	0	0	0	12
U. Hartford	418	0	101	77	72	0	101	77	67

TABLE 46

Total and federally financed higher education R&D expenditures in the health sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Indiana U. Pennsylvania	420	129	144	59	70	0	0	0	0
Texas A&M U.-Commerce	420	87	47	86	70	0	0	0	0
Colorado School of Mines	422	88	132	257	67	88	125	242	60
California State U., San Bernardino	423	57	9	11	63	5	0	0	0
Texas A&M U.-San Antonio	424	ne	ne	ne	59	ne	ne	ne	0
U. San Diego	424	219	121	74	59	22	34	9	0
Norfolk State U.	426	0	0	0	55	0	0	0	8
East Stroudsburg U. Pennsylvania	427	ne	ne	ne	54	ne	ne	ne	0
U. Colorado Colorado Springs	428	18	62	0	43	0	0	0	0
U. Texas of the Permian Basin	428	ne	0	8	43	ne	0	0	0
Florida Institute of Technology	430	0	0	588	42	0	0	460	0
California State U., Dominguez Hills	431	24	21	64	41	0	0	0	0
Winthrop U.	432	259	401	13	38	259	401	0	38
William & Mary	433	0	0	19	35	0	0	0	0
CUNY, Lehman C.	434	0	1	68	32	0	0	68	19
Fort Lewis C.	434	0	11	25	32	0	0	0	32
Youngstown State U.	434	31	27	28	32	0	0	20	20
U. Illinois, Springfield	437	4	0	1	31	0	0	1	28
California State U., San Marcos	438	372	324	128	30	372	254	100	30
Catholic U. of America	438	735	667	444	30	541	432	287	30
Citadel Military C. South Carolina	440	ne	34	5	29	ne	0	0	0
Prairie View A&M U.	441	0	48	28	27	0	48	28	26
U. Wisconsin-Eau Claire	441	49	46	58	27	0	0	0	0
SUNY, C. Brockport	443	26	12	76	26	0	0	0	0
U. Southern Maine	444	0	74	59	24	0	22	14	0
Rhode Island C.	445	64	268	116	23	45	0	22	22
Tuskegee U.	445	0	0	0	23	0	0	0	23
U. Wisconsin-Oshkosh	445	4 i	5 i	5	23	0 i	0 i	0	0
California State U., Channel Islands	448	6	0	153	22	0	0	141	0
U. Puget Sound	448	ne	20	ne	22	ne	0	ne	0
Trinity U.	450	0	6	6	21	0	0	0	0
Davidson C.	451	0	0	0	18	0	0	0	0
St. Cloud State U.	451	36	78	16	18	0	0	0	1
U. Wisconsin-La Crosse	451	8	22	12	18	0	0	0	0
Macalester C.	454	0	0	0	16	0	0	0	16

TABLE 46

Total and federally financed higher education R&D expenditures in the health sciences, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Lehigh U.	455	0	0	0	14	0	0	0	14
Tennessee State U.	455	167	630	19 i	14	43	609	19 i	14
U. North Georgia	457	128	67	2	13	74	67	0	0
Coastal Carolina U.	458	0	0	2	11	0	0	0	0
California State U., Chico	459	1	0	35	10	0	0	0	0
Mercyhurst U.	459	16 i	15 i	12 i	10	0 i	0 i	0 i	0
Sonoma State U.	459	ne	45	16	10	ne	17	12	7
U. Northern Iowa	459	0	1	4	10	0	0	0	0
Rice U.	463	0	0	0	9	0	0	0	0
CUNY, John Jay C. of Criminal Justice	464	81	28	5	8	2	2	5	0
Troy U.	464	ne	2	2	8	ne	0	0	0
West Virginia State U.	464	113	0	24	8	80	0	24	8
Roger Williams U.	467	0	0	0	7	0	0	0	7
Austin Peay State U.	468	3	3	1	6	0	0	0	0
CUNY, system office	469	0	0	0	5	0	0	0	0
Lewis and Clark C.	470	0	0	0	4	0	0	0	0
Hope C.	471	0	7	22	3	0	0	0	0
Missouri State U.	471	3	0	0	3	0	0	0	0
U. Wisconsin-Stevens Point	473	20 i	23	2	2	16 i	19	0	0
SUNY, C. of Environmental Science and Forestry	474	0	0	0	1 i	0	0	0	0
SUNY, Oswego	474	5	5	6	1	0	0	0	0
Willamette U.	474	33	12	2	1	0	0	0	0
All other surveyed institutions	-	541,327	550,347	30,801	0	350,942	349,521	22,103	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

^a Johns Hopkins University includes the Applied Physics Laboratory (APL), with \$11,070 thousand imputed for total and \$9,866 thousand reported for federally financed R&D expenditures in health sciences in FY 2022. Total expenditures by field for Johns Hopkins University are flagged as imputed because APL was unable to distribute a portion of institutionally funded R&D by field.

^b The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^c The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of

the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 47

Total and federally financed higher education R&D expenditures in mathematics and statistics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
All institutions	-	769,019	800,583	772,890	879,526	466,994	485,550	475,602	537,322
Johns Hopkins U. ^a	1	85,874 i	105,774 i	117,429 i	141,477 i	83,057	102,890	113,772	137,115
Harvard U.	2	22,127	20,038	19,503	22,230	18,465	17,747	16,848	18,155
New York U.	3	12,002	13,465	16,998	20,916	7,105	8,861	10,981	12,236
U. Texas M. D. Anderson Cancer Center	4	20,358	21,622	18,914	20,403	7,403	8,853	7,789	9,497
U. Michigan, Ann Arbor	5	18,478	18,648	17,937	20,129	5,874	5,771	5,490	6,956
Iowa State U.	6	16,551	17,062	16,101	19,927	7,940	10,785	9,537	12,540
U. Texas, Austin	7	17,222	20,290	17,349	18,319	7,122	8,882	5,691	6,055
North Carolina State U.	8	20,296	20,164	20,392	17,531	12,331	11,947	11,908	11,484
Pennsylvania State U., University Park and Hershey Medical Center	9	25,057	17,706	14,090	17,140	16,418	13,702	12,668	15,402
Princeton U.	10	11,703	13,550	11,672	15,763	5,639	5,657	4,877	4,759
Brown U.	11	13,225	12,204	10,903	14,835	9,615	9,117	8,558	10,971
Carnegie Mellon U.	12	12,385	12,000	12,464	14,435	3,402	3,183	3,452	5,305
Virginia Polytechnic Institute and State U.	13	5,031	6,776	8,107	12,917	2,355	3,308	4,368	6,692
Michigan State U.	14	11,394	12,494	11,152	11,990	5,481	5,790	5,596	6,732
Rutgers, State U. New Jersey, New Brunswick	15	9,036	9,493	9,673	10,013	7,363	6,214	6,239	5,645
Massachusetts Institute of Technology	16	11,774	10,434	9,015	9,676	6,786	5,091	5,009	4,873
U. California, Los Angeles	17	13,118	13,161	12,110	9,537	10,515	10,440	9,562	7,496
U. California, Berkeley	18	8,177	8,263	8,067	9,474	5,689	6,251	6,122	6,868
Duke U.	19	10,319	9,842	8,922	9,125	7,549	6,554	6,364	6,171
Dartmouth C. and Dartmouth Hitchcock Medical Center	20	5,149	5,848	6,932	8,959	706	1,030	1,326	2,954
U. Pennsylvania	21	7,432	6,817	8,637	8,921	3,193	2,744	3,206	3,991
Georgia Institute of Technology	22	8,058	8,826	8,614	8,634	4,042	4,104	3,808	3,886
U. Minnesota, Twin Cities	23	9,822	8,994	8,555	7,615	6,349	5,141	5,674	5,060
U. California, Irvine	24	5,442	7,106	6,314	7,424	2,698	4,069	3,305	3,837
Florida State U.	25	6,202	7,128	6,567	7,277	1,515	2,096	1,894	2,385
U. Washington, Seattle	26	6,102	7,120	5,778	7,095	5,346	6,115	5,223	5,777
U. Wisconsin-Madison	27	6,405	6,675	6,394	7,005	3,592	4,286	4,406	4,515
Rice U.	28	9,477	9,363	7,349	6,937	4,099	3,742	3,934	4,359
Texas A&M U., College Station and Health Science Center	29	8,700	8,768	6,729	6,898	5,726	5,223	4,925	4,485
SUNY, Stony Brook U.	30	6,652	7,629	7,407	6,847	4,756	5,006	4,824	4,239
Louisiana State U., Baton Rouge	31	2,419	2,701	2,077	6,720	1,808	2,241	1,656	1,691
Stanford U.	32	4,836	7,036	6,070	6,408	4,200	6,338	5,209	5,353
U. California, San Diego	33	5,466	4,857	5,639	6,383	2,624	2,456	2,995	3,774
Tufts U.	34	1,811	3,409	7,181	6,353	1,253	2,852	6,640	6,031

TABLE 47

Total and federally financed higher education R&D expenditures in mathematics and statistics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Utah	35	3,722	4,065	3,708	6,083	2,176	2,452	2,200	5,830
U. Houston	36	3,083	3,596	3,497	5,858	2,485	3,015	2,743	3,377
U. Georgia	37	7,666	6,690	5,845	5,701	2,301	1,545	1,096	837
U. Delaware	38	2,227	1,887	1,384	5,684	1,743	1,565	1,204	1,541
Ohio State U.	39	6,415	5,881	4,793	5,660	5,053	3,945	3,309	2,944
U. North Carolina, Chapel Hill	40	3,049	6,729	5,489	5,464	2,652	5,390	4,735	4,421
U. Nebraska, Lincoln	41	5,390	5,526	4,791	5,411	1,321	1,254	658	1,343
U. Chicago	42	6,987	4,726	4,653	5,395	5,781	4,078	3,972	4,573
U. Notre Dame	43	5,663	5,257	4,751	5,031	3,129	3,063	2,661	2,814
Boston U.	44	5,236	5,199	5,039	4,935	3,158	2,947	3,218	2,891
New Jersey Institute of Technology	45	4,400	5,591	4,949	4,727	1,808	1,726	1,549	1,368
U. Maryland ^b	46	4,685	5,356	3,760	4,538	3,868	3,660	3,035	3,340
Columbia U. in the City of New York	47	5,725	4,118	2,951	4,427	4,347	3,054	2,190	2,190
U. California, Davis	48	4,162	4,455	4,698	4,392	3,249	3,471	3,678	4,058
U. Illinois, Chicago	49	4,386	4,109	4,021	4,213	2,357	2,407	1,989	2,206
Oklahoma State U., Stillwater	50	4,585	4,213	4,276	4,176	675	569	472	512
U. Arizona	51	2,449	3,098	3,347	4,105	1,942	2,295	2,783	3,065
U. South Carolina, Columbia	52	2,100	2,113	1,558	4,101	1,217	1,185	1,267	1,430
U. Pittsburgh, Pittsburgh	53	4,442	4,169	2,891	4,042	2,775	2,777	1,861	2,971
San Diego State U.	54	4,061	3,899	3,883	3,896	1,274	907	1,157	1,612
Auburn U., Auburn	55	3,706	3,736	3,471	3,875	335	332	395	516
Texas Tech U.	56	3,590	3,402	3,678	3,793	324	239	210	506
U. Illinois, Urbana-Champaign	57	5,071	5,346	3,612	3,729	3,446	2,719	2,092	2,586
Rensselaer Polytechnic Institute	58	2,258	2,808	2,944	3,658	1,469	1,480	991	812
Yale U.	59	3,831	4,703	3,589	3,632	2,260	2,556	1,871	2,242
U. Colorado Boulder	60	2,711	2,659	2,857	3,616	2,626	2,555	2,601	3,145
U. Central Florida	61	3,144	3,197	3,269	3,609	518	780	603	673
George Mason U.	62	1,981	1,941	2,493	3,606	737	1,008	1,529	2,458
Arizona State U.	63	6,367	5,942	4,121	3,418	2,914	2,728	2,396	1,525
U. Massachusetts, Amherst	64	3,636	3,361	3,218	3,351	2,244	2,093	2,290	2,326
Cornell U.	65	3,341	3,323	2,467	3,287	2,268	2,519	2,047	2,663
SUNY, Binghamton U.	66	2,468	2,830	3,133	3,211	99	85	85	77
U. South Florida ^c	67	2,685	3,165	3,055	3,192	622	948	709	814
U. Vermont	68	612	2,154	3,153	3,132	395	247	322	473
Worcester Polytechnic Institute	69	1,253	1,404	1,880	3,090	946	799	1,375	1,987

TABLE 47

Total and federally financed higher education R&D expenditures in mathematics and statistics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Temple U.	70	1,262	3,213	2,547	3,063	884	923	667	894
U. Tennessee, Knoxville ^d	71	3,390	3,181	2,938	3,044	974	642	599	856
Colorado State U., Fort Collins	72	4,392	4,190	2,980	3,006	4,041	3,768	2,573	2,505
Kansas State U.	73	3,416	3,246	2,708	2,956	386	230	158	241
U. Louisiana, Lafayette	74	3,226	2,117	3,119	2,939	48	91	235	158
Naval Postgraduate School	75	2,394	2,824	2,435	2,859	1,718	1,867	1,941	2,069
Montana State U., Bozeman	76	1,565	2,536	2,527	2,852	1,371	1,281	1,403	1,493
California Polytechnic State U., San Luis Obispo	77	1,711	2,841	2,668	2,826	1,387	2,430	2,147	2,275
U. Texas Rio Grande Valley	78	1,881	2,174	2,194	2,731	151	196	345	714
Purdue U., West Lafayette	79	3,185	2,671	2,742	2,727	2,081	1,609	1,513	1,407
U. Connecticut	80	2,362	2,344	2,119	2,616	1,370	1,361	1,268	1,710
U. Virginia, Charlottesville	81	1,698	1,593	1,710	2,552	1,138	1,125	1,320	1,871
U. Oklahoma, Norman and Health Science Center	82	477	2,018	2,274	2,495	390	361	402	429
Georgetown U.	83	24	1,765	2,606	2,463	24	0	180	0
U. Texas, Arlington	84	2,276	2,053	2,350	2,443	798	748	863	847
U. Texas, El Paso	85	1,466	2,927	2,412	2,413	1,104	1,270	827	943
U. Alabama, Tuscaloosa	86	179	262	1,174	2,367	154	226	243	402
Rochester Institute of Technology	87	1,750	2,040	2,178	2,356	1,257	1,503	1,605	1,886
Indiana U., Bloomington	88	1,773	1,780	1,678	2,329	987	1,299	1,260	1,761
U. Florida	89	2,346	1,726	1,757	2,303	1,497	985	1,013	1,435
Syracuse U.	90	3,001	2,528	2,572	2,279	542	300	457	208
SUNY, U. Albany	91	1,443	1,774	1,400	2,264	197	196	344	212
U. Nevada, Las Vegas	92	1,471	2,347	2,624	2,224	14	15	48	37
Northwestern U.	93	2,461	2,275	1,490	2,215	1,675	1,580	1,005	1,290
U. California, Riverside	94	2,251	1,682	1,994	2,207	1,588	1,120	1,520	1,727
Florida International U.	95	1,394	1,470	1,915	2,201	111	138	520	461
Brandeis U.	96	677	2,042	1,885	2,092	424	401	513	282
U. Texas, San Antonio	97	586	1,529	1,554	2,075	135	115	116	392
Georgia State U.	98	2,045	1,973	2,091	2,033	1,020	1,148	1,009	745
Southern Methodist U.	99	1,486	1,291	1,736	2,009	1,037	961	1,199	1,351
SUNY, U. Buffalo	100	1,083	1,067	1,730	1,926	583	597	653	780
Clemson U.	101	3,052	2,607	1,870	1,919	1,808	1,548	1,384	1,314
U. Maryland, Baltimore County	102	592	729	428	1,893	371	368	228	266
U. California, Merced	103	2,299	3,047	2,139	1,863	1,587	2,472	1,466	1,313
Kent State U.	104	1,637	1,309	1,385	1,824	268	300	212	215

TABLE 47

Total and federally financed higher education R&D expenditures in mathematics and statistics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Mississippi State U.	105	1,310	1,959	1,880	1,721	172	172	238	131
Michigan Technological U.	106	2,085	2,260	1,942	1,720	216	359	226	146
U. Missouri, Columbia	107	1,308	1,279	1,377	1,666	1,094	1,017	952	1,098
U. Wyoming	108	1,499	1,276	1,306	1,661	1,426	1,155	1,258	536
U. Nevada, Reno	109	2,609	2,341	1,777	1,640	894	805	468	264
California State U., Fresno	110	214	412	490	1,626	182	287	444	1,158
American U.	111	1,319	1,559	1,538	1,615	340	370	563	663
Oregon State U.	112	2,074	1,595	1,247	1,601	1,515	1,108	712	1,015
Washington U., Saint Louis	113	639	959	840	1,584	613	902	821	1,484
U. Kentucky	114	1,685	1,336	1,512	1,582	1,430	1,088	1,180	1,139
Boise State U.	115	582	1,137	1,475	1,550	393	904	1,203	1,271
U. Cincinnati	116	1,949	1,422	1,320	1,549	1,060	665	620	623
U. San Diego	117	274	225	643	1,524	241	141	481	1,294
U. New Hampshire	118	291	404	1,239	1,481	251	339	352	423
California State U., Bakersfield	119	2,952	3,173	2,321	1,457	2,190	2,451	1,827	1,140
Baylor U.	120	1,104	933	877	1,451	253	284	408	622
U. Texas, Dallas	121	1,063	1,155	1,363	1,429	683	668	930	819
Vanderbilt U. and Vanderbilt U. Medical Center	122	1,211	1,689	1,317	1,421	685	902	621	793
U. Massachusetts, Dartmouth	123	1,026	717	1,497	1,417	831	239	380	480
Rockefeller U.	124	1,602	1,612	1,433	1,405	331	306	111	159
Florida Atlantic U.	125	883	1,268	1,026	1,403	363	519	643	704
U. Southern California	126	1,500	1,617	1,472	1,392	1,077	1,264	1,227	1,208
Montclair State U.	127	952	726	785	1,388	425	327	317	330
Emory U.	128	2,715	2,357	1,693	1,385	1,975	1,926	1,540	1,237
North Dakota State U.	129	714	1,120	1,501	1,357	0	150	84	3
Georgia Southern U.	130	57	67	1,405	1,344	11	30	67	48
Texas State U.	131	908	1,038	1,057	1,343	680	799	875	1,148
U. California, Santa Barbara	132	1,711	1,416	1,416	1,335	1,035	944	852	1,140
San Francisco State U.	133	1,023	1,227	1,326	1,288	309	253	256	205
U. Miami	134	581	1,420	843	1,257	239	301	356	463
U. Oregon	135	908	906	694	1,249	792	853	641	1,185
Middle Tennessee State U.	136	169	39	1,187	1,243	0	0	316	357
California State U., Fullerton	137	29	11	212	1,234	0	0	127	775
U.S. Naval Academy	138	936	1,013	993	1,216	636	799	847	1,115
Portland State U.	139	933	1,115	947	1,192	745	794	942	1,191

TABLE 47

Total and federally financed higher education R&D expenditures in mathematics and statistics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
San Jose State U.	140	0	0	751	1,157	0	0	276	313
U. Memphis	141	892	1,241	1,250	1,138	298	493	240	243
Kennesaw State U.	142	1,523	107	287	1,114	5	4	57	624
Northeastern U.	143	780	878	1,210	1,107	649	685	721	587
Tulane U.	144	814	581	518	1,083	374	441	381	522
U.S. Military Academy	145	116	0	1,259	1,074	116	0	456	1,016
California Institute of Technology	146	1,534	1,387	1,039	i 1,063	816	755	605	683
Yeshiva U.	147	0	0	0	1,016	0	0	0	0
Colorado School of Mines	148	404	583	682	1,012	397	571	645	905
U. Colorado Denver ^e	149	na	na	1,122	989	na	na	1,119	988
U. Montana, Missoula	150	1,256	1,187	878	983	704	734	405	524
Boston C.	151	1,015	1,289	1,079	951	960	1,064	908	911
Utah State U.	152	736	846	720	943	301	268	174	232
Virginia Commonwealth U.	153	890	793	698	931	625	609	529	717
Louisiana Tech U.	154	726	771	999	914	168	238	314	326
Marquette U.	155	1,863	1,734	1,110	892	1,300	1,217	684	421
Tuskegee U.	156	1,216	1,240	1,146	888	1,216	1,240	1,146	888
North Carolina A&T State U.	157	872	818	797	863	800	748	763	836
Old Dominion U.	158	7,507	1,239	1,097	857	4,318	952	865	643
U. North Carolina, Charlotte	159	902	1,029	782	803	568	820	673	676
U. New Mexico	160	1,638	1,422	1,229	801	1,542	1,337	1,197	759
Clarkson U.	161	1,046	780	868	784	724	571	524	230
George Washington U.	162	1,709	926	725	781	1,129	631	555	499
Brigham Young U., Provo	163	614	348	483	769	562	331	466	654
U. Massachusetts, Lowell	164	636	663	754	767	0	0	60	78
Drexel U.	165	497	546	620	729	429	452	550	630
U. Iowa	166	710	624	406	690	398	340	273	483
U. Kansas	167	999	672	543	682	924	649	508	621
U. of the Virgin Islands	168	740	694	439	679	740	694	439	679
Spelman C.	169	202	48	96	668	202	48	96	668
U. Louisville	170	67	494	697	661	51	84	311	268
U. Maine	171	1,115	845	657	660	59	65	18	26
South Dakota State U.	172	488	401	433	657	259	262	302	593
U. Alabama, Huntsville	173	627	726	709	655	44	2	15	28
Delaware State U.	174	834	3	i 3	652	455	3	i 3	241

TABLE 47

Total and federally financed higher education R&D expenditures in mathematics and statistics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. North Carolina, Greensboro	175	210	215	308	609	170	167	213	392
U. New Orleans	176	204	389	482	603	18	0	131	195
California State U., Channel Islands	177	341	181	348	568	283	171	268	460
Bryn Mawr C.	178	460	561	599	545	73	114	121	53
U. Massachusetts, Boston	179	298	449	486	541	40	14	70	40
CUNY, Baruch C.	180	175	325	211	533	155	321	203	486
Cleveland State U.	181	823	784	642	521	283	232	183	48
Case Western Reserve U.	182	558	355	697	520	485	325	458	505
Sonoma State U.	183	ne	141	235	511	ne	91	226	506
Washington State U.	184	475	447	535	509	249	289	356	328
Wesleyan U.	185	553	533	402	506	472	390	327	281
U. of the District of Columbia	186	629	277	447	502	629	277	447	502
U. Mississippi	187	1,236	216	358	500	71	47	201	268
U. Nebraska, Omaha	188	333	200	468	459	219	162	366	375
U.S. Air Force Academy	189	0	0	0	451	0	0	0	451
East Carolina U.	190	11	75	7	439	0	0	0	426
California State U., Northridge	191	786	980	685	435	777	901	628	320
West Virginia U.	192	625	482	579	432	493	369	374	227
Illinois Institute of Technology	193	211	405	381	429	210	389	312	379
Amherst C.	194	267	340	316	422	163	225	187	305
Long Island U.	195	0	457	372	414	0	0	0	0
Sam Houston State U.	196	368	338	444	413	345	319	417	356
U. Hawaii, Manoa	197	466	515	439	409	399	457	410	366
Rowan U.	198	37	0	225	397	37	0	202	286
William & Mary	199	601	438	371	395	510	242	329	302
Wake Forest U.	200	408	529	161	381	158	134	70	85
Harvey Mudd C.	201	219	174	111	378	151	113	33	168
California State U., East Bay	202	ne	896	364	377	ne	0	58	10
Tarleton State U.	203	192	450	342	376	26	2	0	0
Carleton C.	204	216	196	173	372	0	41	17	54
California State U., Long Beach	205	621	691	446	369	601	673	446	349
U. Tennessee, Chattanooga	206	335	189	206	365	49	81	147	295
Stevens Institute of Technology	207	237	37	56	355	0	0	42	333
Murray State U.	208	62	198	309	354	61	198	306	351
Bowling Green State U.	209	341	532	160	348	123	140	82	52

TABLE 47

Total and federally financed higher education R&D expenditures in mathematics and statistics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. California, Santa Cruz	209	303	236	156	348	267	161	139	294
U. North Dakota	209	383	434	372	348	0	0	0	0
Miami U.	212	376	310	427	346	192	139	269	186
James Madison U.	213	312	159	345	335	154	104	15	71
Western Washington U.	214	499	347	375	332	222	217	227	217
Clark Atlanta U.	215	128	194	286	323	128	157	265	321
California State U., San Bernardino	216	681	633	466	311	666	427	184	283
Pomona C.	217	270	129	162	301	202	82	135	287
Creighton U.	218	237 i	204 i	239 i	298 i	118 i	108 i	129 i	181 i
Florida Institute of Technology	218	345	188	286	298	92	71	132	208
Smith C.	220	296	182	120	296	211	121	111	244
Lehigh U.	221	187	228	140	289	143	194	127	247
Hofstra U.	222	12	4	85	286	0	0	0	188
CUNY, Queens C.	223	302	228	251	278	255	160	221	172
Towson U.	224	84	179	191	269	0	50	94	84
U. South Alabama	225	31	80	163	267	17	79	162	231
U. Alabama, Birmingham	226	876	916	383	263	844	875	362	257
U. Denver	227	123	120	80	243	92	68	37	139
Manhattan C.	228	0	147	239	242	0	147	217	242
Stephen F. Austin State U.	229	642	129	109	241	640	128	93	208
CUNY, New York City C. of Technology	230	694	409	50	239	138	0	0	183
U. Puerto Rico, Rio Piedras	231	172	145	178	234	166	102	120	124
Purdue U., Fort Wayne	232	50	69	8	229	22	19	5	0
Christopher Newport U.	233	0	7	180	225	0	0	172	222
Mercer U.	234	194	224	219	221	0	0	0	0
Missouri U. of Science and Technology	234	440	222	252	221	373	218	250	173
CUNY, City C.	236	579	389	158	220	509	313	125	115
California State U., Stanislaus	237	160	194	253	218	160	194	253	218
Howard U.	238	222	230	198	215	0	0	0	0
CUNY, Lehman C.	239	26	271	343	214	0	259	328	213
Fordham U.	240	242	173	140	212	58	66	70	34
St. Edward's U.	241	470	645	645	209	450	600	600	159
Wayne State U.	242	1,393	1,716	1,093	208	1,269	1,184	499	208
Virginia State U.	243	1,333	645	217	206	1,010	645	217	206
CUNY, Hunter C.	244	95	174	217	200	43	114	183	166

TABLE 47

Total and federally financed higher education R&D expenditures in mathematics and statistics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Illinois State U.	245	296	229	215	198	185	119	119	145
Central Washington U.	246	154	104	169	196	112	52	149	157
Morgan State U.	247	328	134	146	192	284	105	129	185
Saint Louis U.	247	56	280	190	192	38	266	170	165
U. Akron	249	178	82	161	191	119	60	117	91
Texas Christian U.	250	169	2	0	189	52	2	0	0
East Tennessee State U.	251	19	149	50	185	16	123	37	125
New Mexico Highlands U.	252	ne	0	0	184	ne	0	0	184
U. Minnesota, Duluth	252	236	152	274	184	142	108	210	104
U. Alaska, Fairbanks	254	507	346	191	181	507	321	165	168
Wellesley C.	255	109	255	263	179	0	240	262	169
Indiana U.-Purdue U., Indianapolis	256	610	601	404	177	519	460	365	142
California State U., Monterey Bay	257	0	234	12	175	0	148	12	154
U. Rochester	257	213	201	214	175	194	185	210	174
Swarthmore C.	259	171	103	136	174	109	63	79	132
U. Missouri, Saint Louis	259	211	265	407	174	135	235	371	161
CUNY, C. Staten Island	261	470	691	391	173	222	513	308	157
Bucknell U.	262	418	113	110	169	222	106	104	148
Fisk U.	263	0	12	415	167	0	12	407	158
Air Force Institute of Technology	264	1,313	658	828	164	691	497	197	149
New Mexico State U.	264	41	188	116	164	8	151	77	138
Claremont McKenna C.	266	74	85	103	163	64	78	103	79
Hampton U.	266	217	226	344	163	217	226	344	163
U. Michigan, Dearborn	266	228	155	190	163	139	110	149	130
Mount Holyoke C.	269	370	147	62	159	347	147	57	146
DePaul U.	270	0	0	2	154	0	0	0	92
Colgate U.	271	50	84	153	153	0	56	65	113
Seattle U.	271	206	184	93	153	177	159	90	97
SUNY, Buffalo State	273	0	91	112	139	0	91	112	139
U. Washington, Tacoma	274	0	47	25	137	0	47	25	137
Reed C.	275	370	223	229	136	121	151	160	83
Elon U.	276	161	0	87	135	78	0	11	84
California State U., Sacramento	277	41	94	116	131	5	0	34	43
U. Idaho	278	213	205	194	128	108	120	142	65
Wichita State U.	279	105	105	419	127	95	72	139	87

TABLE 47

Total and federally financed higher education R&D expenditures in mathematics and statistics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed										
		2019	2020	2021	2022	2019	2020	2021	2022							
Texas Woman's U.	280	68	23	1	125	0	0	0	0							
Macalester C.	281	23	138	100	123	15	96	100	94							
Salisbury U.	281	0	113	123	123	0	0	0	0							
Central Michigan U.	283	183	120	141	122	125	52	1	0							
Ithaca C.	283	ne	64	74	122	ne	64	74	122							
Kentucky State U.	285	3	125	193	119	3	125	193	119							
U. Southern Mississippi	285	96	195	0	119	96	195	0	119							
Villanova U.	285	186	60	116	119	144	2	28	64							
U. South Dakota	288	181	160	189	117	0	0	0	0							
Embry-Riddle Aeronautical U.	289	33	84	110	111	0	23	62	106							
Augusta U.	290	23	13	44	110	23	13	44	81							
CUNY, York C.	291	17	0	12	109	0	0	0	103							
Drake U.	291	44	ne	28	109	37	ne	27	108							
Occidental C.	293	38	58	97	108	38	58	97	108							
CUNY, Brooklyn C.	294	212	i	221	68	107	211	i	220	65	0					
Southern Connecticut State U.	294	142	35	187	107	0	0	0	0							
CUNY, John Jay C. of Criminal Justice	296	5	5	12	106	0	5	12	98							
U. Central Oklahoma	296	126	126	i	132	i	106	i	94	93	i	98	i	54	i	
Florida Gulf Coast U.	298	17	232	0	105	0	149	0	47							
Williams C.	298	419	401	i	411	i	105	i	236	227	i	241	i	47	i	
Texas A&M International U.	300	8	1	91	101	0	0	64	74							
Oregon Institute of Technology	301	85	i	77	i	84	i	100	i	0	i	0	9	i	12	i
Texas Southern U.	302	144	187	167	96	144	187	167	94							
Vassar C.	303	428	357	307	95	424	350	301	80							
C. Wooster	304	63	104	70	i	93	62	55	47	i	68					
Wright State U.	305	153	145	90	92	116	72	67	61							
Tougaloo C.	306	0	0	0	i	91	i	0	0	0	i	91	i			
Hobart and William Smith Colleges	307	80	83	6	90	78	83	5	85							
Loyola U., Chicago	307	405	188	81	90	345	164	67	34							
CUNY, Graduate Center	309	34	23	332	88	34	23	332	88							
Southern U. and A&M C., Baton Rouge	310	39	5	68	87	9	0	50	87							
Davidson C.	311	74	142	79	86	12	61	6	0							
Grinnell C.	311	798	407	108	86	89	72	63	21							
Ball State U.	313	140	51	27	83	38	35	16	27							
U. Northern Colorado	313	672	181	135	83	570	117	91	31							

TABLE 47

Total and federally financed higher education R&D expenditures in mathematics and statistics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Utah Valley U.	315	ne	ne	ne	82	ne	ne	ne	82
West Chester U. Pennsylvania	315	340	196	103	82	80	60	0	0
Winston-Salem State U.	315	45	5	0	82	45	0	0	51
California State Polytechnic U., Pomona	318	42	138	20	80	33	102	20	80
Kean U.	318	ne	0	0	80	ne	0	0	0
Oakland U.	318	73	34	55	80	28	34	55	77
Alabama A&M U.	321	123 i	83 i	70 i	78 i	84 i	56 i	61 i	76 i
New Mexico Institute of Mining and Technology	322	155	53	3	77	155	50	0	54
Western Kentucky U.	323	55	27	9	75	48	11	4	57
Western Michigan U. and Homer Stryker M.D. School of Medicine	323	73	40	21	75	1	9	9	9
Claremont Graduate U.	325	3	70	111	74	0	70	111	74
U. Puerto Rico, Mayaguez	325	176	45	87	74	137	25	87	5
U. Texas, Tyler	325	95	22	9	74	76	20	2	74
Youngstown State U.	325	12	6	3	74	0	1	0	66
Northern Kentucky U.	329	0	81	65	73	0	71	59	72
California State U., Dominguez Hills	330	76	116	125	72	21	53	61	39
U. West Florida	331	45	313	81	71	0	0	0	0
Southern Illinois U., Edwardsville	332	263	817	185	70	199	212	33	26
Union C., Schenectady	333	18	33	6	64	0	13	0	36
U. Guam	334	28	0	87	63	28	0	81	57
William Paterson U.	334	257	185	68	63	0	0	0	0
Northern Illinois U.	336	129	76	40	62	52	24	31	31
Albion C.	337	16	31	30 i	59 i	0	0	0 i	46 i
U. Arkansas, Fayetteville	337	286	97	60	59	148	71	34	29
U. Wisconsin-La Crosse	337	107	112	84	59	87	77	70	43
Calvin U.	340	32	49 i	53 i	57 i	32	40 i	40 i	40
Duquesne U.	340	255	233	71	57	131	120	49	36
Babson C.	342	0 i	0 i	0 i	56 i	0	0	0	0
Eastern Michigan U.	343	143	216	174	55	105	37	78	33
Bentley U.	344	ne	ne	ne	51	ne	ne	ne	51
Haverford C.	344	63 i	127 i	28 i	51 i	29	65	12	30
U. North Carolina, Wilmington	344	83	105	51	51	80	48	20	51
Trinity U.	347	53	84	41	50	39	68	37	38
Western New England U.	347	ne	ne	ne	50	ne	ne	ne	50
Morehouse C.	349	256	166	949	47	256	166	949	47

TABLE 47

Total and federally financed higher education R&D expenditures in mathematics and statistics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Kenyon C.	350	31	16	ne	45	0	0	ne	18
Colorado C.	351	38	23	18	44	15	0	0	44
Northland C.	351	ne	ne	40 i	44 i	ne	ne	35 i	38 i
Northeastern Illinois U.	353	60	53	71	43	60	53	71	43
California State U., Chico	354	61	57	41	42	61	10	0	15
Central State U.	354	44	37	69	42	44	37	69	42
Lafayette C.	356	119	69	24	41	102	56	13	36
Pennsylvania State U., Behrend	356	94	21	174	41	18	15	166	2
Santa Clara U.	356	6	22	39	41	0	20	15	37
Bowdoin C.	359	71	29	10	40	58	24	5	29
Sul Ross State U.	359	0	0	1 i	40 i	0	0	0 i	20 i
Framingham State U.	361	ne	0	0 i	39 i	ne	0	0 i	9 i
Virginia Military Institute	361	ne	ne	ne	39	ne	ne	ne	0
Grand Valley State U.	363	299	166	53	38	234	94	23	1
Ohio U.	363	101	90	53	38	67	76	25	26
U. Toledo	363	49	49	3	38	29	36	0	29
Colby C.	366	32	30	3	36	0	10	0	28
U. Richmond	366	90	106	114	36	43	21	0	0
Norfolk State U.	368	58	48	29	35	58	48	29	35
U. Hartford	369	183	131	100	34	183	131	100	30
Hope C.	370	10	68	30	33	2	58	23	17
U. Hawaii, Hilo	370	944	1,126	998	33	759	863	753	25
U. Washington, Bothell	370	20	31	0	33	20	31	0	22
C. Charleston	373	146	81	61	31	36	0	0	0
Trinity C., Hartford	373	28	68	64	31	0	52	54	18
Azusa Pacific U.	375	42	64	125	30	18	0	0	0
Franklin and Marshall C.	375	255	52	50	30	126	22	47	19
Chapman U.	377	0	1	16	29	0	0	0	0
Pepperdine U.	377	22	32	26	29	0	0	0	0
Citadel Military C. South Carolina	379	ne	3	8	28	ne	0	0	15
U. North Florida	379	43	70	19	28	0	0	0	0
Jackson State U.	381	68	97	44	26	47	84	39	21
Skidmore C.	381	20	12	0	26	7	0	0	14
U. Wisconsin-Milwaukee	383	1,794	4,792	707	25	1,500	3,820	0	0
Central Connecticut State U.	384	24	17	25	24	0	0	0	0

TABLE 47

Total and federally financed higher education R&D expenditures in mathematics and statistics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Furman U.	384	0	0	0	24	0	0	0	0
Indiana State U.	384	27	23	37	24	27	23	37	24
Northwestern State U. Louisiana	387	19	19	12	23	0	0	0	0
U. Wisconsin-Platteville	387	20 i	21 i	19 i	23 i	8 i	8 i	9 i	11 i
Appalachian State U.	389	41	90	29	22	0	5	0	6
C. New Jersey	389	ne	6	10	22	ne	4	10	21
Pacific U.	389	57	42	46	22	0	9	3	0
U. North Carolina, Asheville	389	6	0	0	22	0	0	0	0
Dillard U.	393	0	0	0	21	0	0	0	19
Lawrence Technological U.	393	53	0	9	21	53	0	9	21
U. Colorado Colorado Springs	393	67	11	0	21	66	11	0	0
U. Wisconsin-Green Bay	393	18 i	18 i	15 i	21 i	8 i	9 i	7 i	8 i
New School	397	0	0	56	20	0	0	0	0
Nova Southeastern U.	397	0	0	0	20	0	0	0	0
Willamette U.	397	11	10	10	20	0	0	0	0
Texas A&M U.-Corpus Christi	400	47	21	6	19	0	0	0	0
U. of St. Thomas (MN)	400	37	43	28	19	17	40	28	19
Idaho State U.	402	0	0	2	18	0	0	0	5
U. Dayton	402	0	4	3	18	0	0	0	0
Indiana U. Pennsylvania	404	20	26	4	17	0	0	0	0
U. New Haven	404	0	4	0	17	0	0	0	0
C. of Saint Benedict	406	18 i	17 i	14 i	16 i	0 i	0 i	2 i	2 i
South Dakota School of Mines and Technology	406	141	339	216	16	126	339	216	16
SUNY, Geneseo	406	106	41	3	16	60	35	0	0
Florida A&M U.	409	0	0	4	15	0	0	0	0
Saint John's U.	409	17 i	16 i	13 i	15 i	0 i	0 i	0 i	0 i
Saint Joseph's U.	409	17	6	8	15	0	0	0	0
Loyola Marymount U.	412	124	187	134	14	74	117	70	4
U. San Francisco	413	14	25	16	13	1	16	15	12
U. Southern Maine	413	0	0	11	13	0	0	11	13
U. South Carolina, Aiken	415	0	0	3	12	0	0	0	0
Robert Morris U.	416	ne	ne	ne	11 i	ne	ne	ne	8 i
U. Wisconsin-Eau Claire	416	105	82	102	11	41	35	49	11
U. Central Arkansas	418	45	24	35	10	10	15	16	1
California State U., San Marcos	419	711	82	0	9	711	82	0	9

TABLE 47

Total and federally financed higher education R&D expenditures in mathematics and statistics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Florida Polytechnic U.	419	8	0	0	9	0	0	0	0
Southern Illinois U., Carbondale	419	31	278	14	9	14	0	5	4
Texas A&M U.-Commerce	419	13	26	34	9	0	0	0	0
East Stroudsburg U. Pennsylvania	423	ne	ne	ne	8	ne	ne	ne	0
Winthrop U.	423	1	0	6	8	0	0	0	0
Pennsylvania State U., Harrisburg	425	32	0	4	7	2	0	2	7
West Texas A&M U.	425	52	1	1	7	50	0	0	0
U. Northern Iowa	427	4	1	1	6	0	0	0	0
U. Tulsa	427	36	4	3	6	0	0	0	0
Northern Arizona U.	429	0	0	0	5	0	0	0	0
Prairie View A&M U.	429	7	145	81	5	0	0	81	0
Hamilton C.	431	12	18	10	4	0	0	0	0
Troy U.	431	ne	6	0	4	ne	4	0	0
U. Puget Sound	431	ne	4	ne	4	ne	0	ne	0
Kettering U.	434	7	2	2	3	0	0	0	0
Alfred U.	435	0	0	0	2	0	0	0	0
Eastern Washington U.	435	2	15	1	2	2	15	0	0
Gallaudet U.	435	3	3	1	2	0	0	1	0
Johnson C. Smith U.	435	0	0	2 ⁱ	2	0	0	2 ⁱ	2
Langston U.	435	2	2	0	2	2	2	0	0
Roger Williams U.	435	13	30	0	2	10	13	0	0
U. Houston-Downtown	435	75	10	19	2	72	9	17	0
Bates C.	442	30	16	2	1	11	8	0	0
California State Polytechnic U., Humboldt	442	0	10	8	1	0	0	0	0
SUNY, C. Brockport	442	7	5	1	1	0	0	0	0
U. Arkansas, Little Rock	442	7	0	0	1	0	0	0	1
U. Texas of the Permian Basin	442	ne	0	0	1	ne	0	0	0
All other surveyed institutions	-	4,753	4,925	2,025	0	2,838	2,755	1,477	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

^a Johns Hopkins University includes the Applied Physics Laboratory (APL), with \$137,994 thousand imputed for total and \$134,341 thousand reported for federally financed R&D expenditures in mathematics and statistics in FY 2022. Total expenditures by field for Johns Hopkins University are flagged as imputed because APL was unable to distribute a portion of institutionally funded R&D by field.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of

the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^d The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 48

Higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
All institutions	-	5,550,678	5,672,442	5,737,169	6,167,583	813,900	2,126,741	286,461	2,669,076	271,405
Johns Hopkins U. ^a	1	323,619 i	390,245 i	338,454 i	317,282 i	31,863 i	25,673 i	4,402 i	234,921 i	20,423 i
California Institute of Technology	2	188,041	217,581	212,265 i	227,465	64,902	36,223	25,614	100,726	0
U. California, Berkeley	3	130,895	141,434	156,896	196,281	98,376	49,390	104	37,089	11,322
Michigan State U.	4	151,159	154,318	167,520	183,514	69	15,669	0	167,776	0
Massachusetts Institute of Technology	5	136,601	153,044	170,494	174,813	37,890	35,819	6,436	68,994	25,674
U. Colorado Boulder	6	107,416	115,340	120,677	143,342	43,602	12,345	0	79,823	7,572
U. Arizona	7	139,315	149,138	140,655	142,519	123,039	9,869	3,663	5,890	58
Cornell U.	8	122,968	121,218	120,151	120,697	11,667	30,250	3,515	51,692	23,573
Harvard U.	9	94,515	100,654	109,606	118,530	12,087	37,601	52	66,873	1,917
U. Rochester	10	111,388	101,004	99,556	112,275	0	6,758	0	105,517	0
U. Maryland ^b	11	102,720	105,718	101,322	110,607	40,049	8,290	4,780	45,925	11,563
Stanford U.	12	95,084	94,954	98,672	101,529	4,101	29,681	16,916	48,088	2,743
Princeton U.	13	88,235	94,815	99,326	101,461	29,410	28,604	4,663	37,325	1,459
U. California, San Diego	14	85,322	94,124	86,893	97,804	3,159	33,116	0	58,691	2,838
U. Wisconsin-Madison	15	75,231	83,687	87,587	97,161	6,382	36,183	0	33,045	21,551
U. Texas, Austin	16	81,357	81,380	85,250	93,232	13,903	20,895	34,726	23,264	444
Northwestern U.	17	82,072	78,168	83,618	90,194	6,681	40,697	18,052	19,886	4,878
U. Illinois, Urbana-Champaign	18	69,531	72,360	78,698	77,419	7,833	30,955	0	38,628	3
Pennsylvania State U., University Park and Hershey Medical Center	19	99,485	94,201	89,035	73,580	14,227	15,578	22,202	21,573	0
U. California, Santa Barbara	20	65,929	58,534	54,435	72,934	3,921	8,424	19,301	32,704	8,584
U. California, San Francisco	21	65,942	69,662	69,817	71,611	0	70,707	0	904	0
U. Chicago	22	52,656	51,122	55,032	70,483	13,872	31,158	5,118	19,896	439
U. Pennsylvania	23	60,150	58,157	59,246	67,341	1,664	25,511	15,712	24,454	0
Florida State U.	24	61,706	68,454	63,481	65,661	664	20,685	3,682	40,478	152
U. Michigan, Ann Arbor	25	61,017	60,824	66,041	65,018	6,216	32,418	0	26,384	0
U. Washington, Seattle	26	58,166	60,477	58,664	62,596	9,529	25,922	2,162	21,238	3,745
U. Houston	27	43,378	50,164	52,230	60,462	0	50,262	0	9,044	1,156
Yale U.	28	62,247	56,046	56,847	57,627	5,324	23,376	0	28,927	0
Texas A&M U., College Station and Health Science Center	29	55,920	54,574	56,029	56,540	4,023	25,693	5,896	19,252	1,676
U. California, Los Angeles	30	60,067	54,697	56,624	55,159	0	21,680	0	30,682	2,797
U. Iowa	31	24,300	23,226	32,013	55,128	486	6,339	0	48,303	0
Columbia U. in the City of New York	32	35,369	37,384	46,386	52,767	7,985	17,944	5,800	21,038	0
U. Delaware	33	27,410	25,192	26,015	50,077	2,938	19,259	15,899	11,981	0

TABLE 48

Higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Purdue U., West Lafayette	34	38,081	42,370	42,663	49,938	0	30,984	0	18,954	0
U. North Carolina, Chapel Hill	35	37,055	39,979	38,809	49,368	1,923	31,221	0	10,374	5,850
U. Notre Dame	36	45,062	44,855	47,332	47,516	0	29,610	0	17,906	0
Ohio State U.	37	46,223	57,083	40,010	47,143	6,351	13,382	1,979	25,431	0
SUNY, Stony Brook U.	38	41,679	41,224	43,101	45,541	1,943	13,302	0	30,296	0
U. Minnesota, Twin Cities	39	45,573	43,946	41,812	42,715	2,409	19,860	0	20,446	0
U. California, Irvine	40	40,872	40,964	38,794	40,171	0	21,156	0	18,914	101
U. Florida	41	26,341	25,532	28,005	39,928	2,050	22,973	0	14,892	13
U. Central Florida	42	30,415	34,493	37,144	39,361	0	4,808	0	34,327	226
Boston U.	43	30,805	30,909	35,094	38,445	3,237	17,896	0	17,312	0
U. California, Santa Cruz	44	32,576	36,262	35,606	37,808	19,752	11,059	0	6,876	121
U. California, Davis	45	26,589	26,495	27,906	35,319	0	15,996	0	11,138	8,185
Georgia Institute of Technology	46	38,229	34,215	33,914	33,858	0	22,397	0	11,461	0
Florida International U.	47	24,968	27,354	27,997	33,613	0	28,705	0	4,440	468
Rutgers, State U. New Jersey, New Brunswick	48	29,660	25,703	23,111	32,108	2,559	7,903	3,749	15,686	2,211
Rice U.	49	34,759	33,656	33,015	31,638	1,307	13,489	1,191	15,651	0
Indiana U., Bloomington	50	31,099	33,608	30,322	31,360	1,512	18,778	0	11,070	0
Louisiana State U., Baton Rouge	51	23,944	22,366	23,438	30,594	0	12,606	0	17,419	569
U. Pittsburgh, Pittsburgh	52	30,196	27,652	27,919	30,591	4,175	15,366	0	11,050	0
Iowa State U.	53	40,040	27,216	26,696	30,440	0	14,302	0	16,138	0
U. Nebraska, Lincoln	54	26,100	25,853	26,365	29,612	0	10,884	489	18,237	2
Vanderbilt U. and Vanderbilt U. Medical Center	55	28,951	28,017	30,077	28,937	0	17,734	0	11,203	0
Emory U.	56	23,150	22,505	25,676	28,576	0	24,772	0	3,804	0
Arizona State U.	57	26,050	25,619	26,742	27,777	0	10,253	0	15,121	2,403
U. Virginia, Charlottesville	58	26,742	27,628	27,304	27,721	3,875	12,214	0	11,632	0
North Carolina State U.	59	22,753	23,464	28,455	27,486	0	12,623	0	11,091	3,772
Northeastern U.	60	19,445	20,709	24,279	27,207	0	9,761	0	16,743	703
New York U.	61	26,098	26,698	26,417	26,391	0	13,103	0	13,288	0
Washington U., Saint Louis	62	24,852	23,401	24,320	25,954	0	12,044	7,406	6,504	0
Washington State U.	63	32,628	24,243	26,256	25,553	191	12,821	2,887	9,653	1
Dartmouth C. and Dartmouth Hitchcock Medical Center	64	18,757	21,219	26,312	24,806	0	11,434	45	13,327	0
Carnegie Mellon U.	65	19,508	21,580	21,109	23,841	347	10,492	1,204	11,547	251
Virginia Polytechnic Institute and State U.	66	26,835	24,214	24,374	23,394	19	13,810	1,292	7,798	475
Catholic U. of America	67	17,660	17,669	19,708	23,353	0	18	0	19,597	3,738

TABLE 48

Higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
U. Hawaii, Manoa	68	27,285	29,491	26,381	23,293	17,659	1,488	0	4,063	83
U. Massachusetts, Amherst	69	31,623	28,757	22,250	23,286	5,117	9,387	0	8,782	0
Duke U.	70	21,176	22,396	22,131	23,281	0	12,672	0	10,609	0
U. Tennessee, Knoxville ^c	71	25,677	21,239	20,809	23,139	0	8,643	0	14,496	0
U. Illinois, Chicago	72	14,456	15,752	17,718	21,497	0	10,467	0	11,030	0
Wayne State U.	73	20,013	16,895	19,885	20,880	0	13,568	0	4,872	2,440
U. Maryland, Baltimore County	74	17,039	18,278	19,202	20,806	12,573	2,934	613	4,686	0
Montana State U., Bozeman	75	15,021	17,990	23,329	19,778	0	8,821	0	10,957	0
U. Texas M. D. Anderson Cancer Center	76	19,017	19,060	17,572	19,651	0	0	0	19,651	0
U. Texas, Arlington	77	15,590	17,257	16,864	18,905	0	5,006	0	12,897	1,002
U. Oklahoma, Norman and Health Science Center	78	15,362	18,739	16,497	18,730	0	10,525	0	8,205	0
U. Utah	79	54,131 i	30,170 i	30,441 i	18,579	9,145	9,434	0	0	0
Brown U.	80	19,259	17,745	17,072	18,299	0	6,019	0	9,155	3,125
Georgia State U.	81	17,836	19,395	17,588	18,277	5,246	8,645	0	4,220	166
U. Massachusetts, Lowell	82	17,976	19,144	18,308	18,186	0	5,369	0	12,817	0
U. California, Riverside	83	16,166	17,037	17,559	17,938	0	10,604	0	7,334	0
U. Alabama, Huntsville	84	12,963	13,353	15,071	17,852	13,777	1,023	0	2,957	95
U. Southern California	85	20,109	23,644	21,413	17,696	6,221	11,475	0	0	0
Temple U.	86	16,205	18,447	17,979	17,215	0	7,756	0	6,046	3,413
New Jersey Institute of Technology	87	15,338	16,781	15,415	17,202	8,500	3,690	846	4,166	0
Auburn U., Auburn	88	13,220	15,247	15,214	17,011	500	7,242	213	8,907	149
Brandeis U.	89	9,838	13,701	12,459	16,778	3,826	6,801	313	5,693	145
U. Texas, Dallas	90	15,515	17,759	16,444	16,709	3,762	6,100	0	4,911	1,936
U. Kansas	91	8,686	7,502	15,492	16,123	746	11,717	0	3,660	0
Rensselaer Polytechnic Institute	92	15,038	12,143	12,251	15,894	0	7,599	702	4,177	3,416
Texas Tech U.	93	14,408	15,103	15,784	15,739	0	8,441	559	6,739	0
U. Oregon	94	14,773	12,984	13,881	15,315	0	6,752	1,916	3,502	3,145
Georgetown U.	95	7,281	9,151	10,525	15,192	0	3,761	0	9,852	1,579
Rochester Institute of Technology	96	18,059	13,830	12,388	14,979	0	494	0	4,681	9,804
Colorado State U., Fort Collins	97	14,464	11,356	12,947	14,885	0	9,951	1,050	3,551	333
Kansas State U.	98	14,413	12,583	12,736	14,709	0	3,367	0	11,342	0
SUNY, Binghamton U.	99	14,920	18,586	14,568	14,636	0	10,066	0	4,570	0
Syracuse U.	100	15,894	13,905	13,926	14,286	0	4,893	0	9,393	0
U. Southern Mississippi	101	15,682	13,422	14,672	14,071	0	11,978	0	0	2,093

TABLE 48

Higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
U. Alaska, Fairbanks	102	13,534	15,551	16,441	13,832	13,488	67	0	263	14
New Mexico State U.	103	25,535	26,366	20,108	13,339	7,373	2,181	0	1,792	1,993
West Virginia U.	104	14,339	12,678	12,431	13,067	2,332	5,184	0	5,551	0
Colorado School of Mines	105	8,796	11,346	10,812	12,923	116	3,703	2,818	5,455	831
Boston C.	106	9,572	9,306	11,863	12,202	0	8,931	0	3,271	0
U. Texas, San Antonio	107	10,617	11,234	11,547	12,128	0	8,005	0	4,123	0
Mississippi State U.	108	11,312	10,381	10,755	12,061	384	5,159	2,196	4,123	199
SUNY, U. Buffalo	109	11,644	11,161	13,431	11,990	0	9,376	4	2,610	0
Air Force Institute of Technology	110	8,478	7,796	15,999	11,934	0	0	0	11,934	0
Clemson U.	111	11,401	10,823	10,139	11,923	0	4,367	342	6,199	1,015
U. Mississippi	112	14,617	11,652	10,803	11,784	0	3,218	0	8,566	0
Baylor U.	113	6,891	6,993	8,289	11,717	38	7,587	70	3,786	236
U. Toledo	114	7,438	7,445	10,594	11,637	1,641	3,783	0	6,033	180
CUNY, City C.	115	9,935	9,591	8,709	11,590	0	5,494	0	4,153	1,943
U. Connecticut	116	16,829	18,546	17,682	11,245	0	5,492	0	5,753	0
Tufts U.	117	11,377	15,438	9,212	11,206	236	8,074	0	2,686	210
U. South Florida ^d	118	14,060	11,433	9,900	10,866	0	5,933	0	4,127	806
U. Arkansas, Fayetteville	119	9,454	9,791	8,111	10,739	0	5,361	0	5,378	0
Case Western Reserve U.	120	10,756	8,063	9,007	10,694	200	2,992	4,424	1,940	1,138
U. Nevada, Reno	121	10,153	9,566	8,025	10,640	1,179	5,281	0	3,720	460
U. Cincinnati	122	9,641	8,874	9,189	10,335	0	7,085	0	3,250	0
U. Georgia	123	13,275	11,295	10,896	10,161	361	6,900	0	2,900	0
U. New Mexico	124	7,148	8,063	7,087	10,115	1,916	3,250	0	4,943	6
U. Wisconsin-Milwaukee	125	11,076	8,699	10,970	10,084	6,715	1,556	0	1,813	0
U. Texas, El Paso	126	7,587	6,775	9,092	10,021	0	6,399	0	3,622	0
CUNY, Advanced Science Research Center	127	2,983	4,154	6,107	9,558	0	2,563	0	6,640	355
U. Missouri, Columbia	128	10,286	9,173	8,722	9,469	0	6,050	221	3,198	0
North Dakota State U.	129	6,903	6,502	10,077	9,362	0	6,880	1,459	1,023	0
U. Kentucky	130	8,173	8,553	8,722	9,118	0	5,609	0	3,509	0
U. Nevada, Las Vegas	131	9,099	9,692	10,589	9,030	354	3,601	0	5,075	0
U. North Texas, Denton	132	7,586	9,275	8,710	8,762	0	5,788	0	2,974	0
U. California, Office of the President	133	7,973	8,123	7,905	8,725	8,725	0	0	0	0
U. Akron	134	9,643	8,576	6,703	8,690	0	8,686	0	4	0
Oklahoma State U., Stillwater	135	8,458	9,784	8,824	8,685	0	4,588	0	4,097	0

TABLE 48

Higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Oakland U.	136	4,650	4,821	5,596	8,447	0	4,597	0	3,850	0
Old Dominion U.	137	7,547	7,028	7,021	8,410	0	3,241	0	5,169	0
Kent State U.	138	7,744	8,381	9,048	8,065	88	2,155	2,652	2,666	504
U. Montana, Missoula	139	7,749	7,592	8,615	7,724	49	2,183	0	283	5,209
Xavier U. Louisiana	140	5,879	7,186	8,440	7,578	0	7,491	0	87	0
U. Alabama, Tuscaloosa	141	5,815	6,471	7,991	7,524	198	4,643	0	2,683	0
San Diego State U.	142	6,333	6,402	6,681	7,435	835	5,180	0	1,420	0
Northern Arizona U.	143	5,643	7,064	8,120	7,427	3,946	287	573	633	1,988
SUNY, U. Albany	144	7,811	7,719	6,791	7,299	0	4,520	0	2,779	0
Jackson State U.	145	9,159	9,903	8,231	7,277	0	5,322	0	1,955	0
California State U., Northridge	146	3,225	5,407	7,447	7,084	360	514	0	1,605	4,605
U. California, Merced	147	7,307	7,593	5,753	6,863	0	3,759	0	2,663	441
Boise State U.	148	3,358	3,788	5,881	6,848	339	1,379	4,788	342	0
George Washington U.	149	7,634	8,313	7,033	6,840	0	2,735	0	4,105	0
Brigham Young U., Provo	150	5,854	5,268	6,357	6,726	0	3,638	502	2,586	0
U. Maine	151	7,628	6,427	6,803	6,427	0	762	0	5,637	28
William & Mary	152	6,554	5,781	5,985	6,411	0	990	0	5,421	0
Oregon State U.	153	6,247	4,814	4,727	6,297	85	2,537	729	2,856	90
U. Alabama, Birmingham	154	5,961	4,678	9,885	6,282	0	1,560	1,570	3,152	0
Northern Illinois U.	155	6,106	5,560	5,454	6,220	0	2,789	0	3,431	0
George Mason U.	156	6,295	5,586	4,786	6,154	2,702	1,211	1,416	671	154
Howard U.	157	5,277	5,308	5,720	6,125	0	5,348	0	777	0
U. Miami	158	5,567	5,150	5,000	5,939	0	1,605	0	4,334	0
Ohio U.	159	4,501	5,370	5,520	5,892	0	1,055	0	4,837	0
Embry-Riddle Aeronautical U.	160	2,332	2,744	3,853	5,852	0	0	0	1,508	4,344
Abilene Christian U.	161	ne	ne	4,209	5,831	0	85	0	5,746	0
California State U., Los Angeles	162	6,385	5,241	5,165	5,776	0	5,055	0	721	0
Georgia Southern U.	163	692	5,465	5,400	5,740	131	1,691	3,496	421	1
Rockefeller U.	164	7,577	7,184	6,835	5,693	0	4,727	0	966	0
Southern Methodist U.	165	3,591	3,847	4,598	5,607	0	2,480	0	3,127	0
U. Puerto Rico, Rio Piedras	166	5,127	4,429	4,886	5,456	0	3,842	0	1,614	0
Utah State U.	167	6,756	6,606	5,111	5,408	0	3,098	0	2,275	35
California Polytechnic State U., San Luis Obispo	168	7,589	5,672	4,953	5,294	0	622	0	2,142	2,530
U. North Carolina, Greensboro	169	3,521	3,505	4,250	5,251	0	2,756	2,021	0	474

TABLE 48

Higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Lehigh U.	170	3,396	3,495	3,642	5,157	0	2,679	0	2,478	0
Texas State U.	171	2,741	2,208	3,421	5,123	0	2,217	1,476	1,064	366
U. New Hampshire	172	3,521	4,425	4,957	5,090	0	1,966	0	3,124	0
North Carolina Central U.	173	2,774	3,027	3,257	4,976	0	481	0	4,495	0
CUNY, Hunter C.	174	4,739	4,197	5,489	4,838	0	3,392	0	1,446	0
U. South Carolina, Columbia	175	7,007	5,437	6,928	4,761	0	899	0	2,613	1,249
Naval Postgraduate School	176	8,797	9,161	5,927	4,745	0	379	148	2,751	1,467
Michigan Technological U.	177	3,722	4,094	4,085	4,600	0	2,382	0	2,218	0
Tulane U.	178	6,448	5,720	5,018	4,579	0	2,304	0	2,275	0
San Jose State U.	179	2,041	2,445	3,437	4,464	0	2,077	0	1,728	659
U. Denver	180	4,083	4,913	3,977	4,420	0	2,670	0	1,750	0
U. Vermont	181	3,235	4,877	4,354	4,354	140	2,951	0	1,199	64
American U.	182	5,167	4,714	4,404	4,351	0	983	0	3,368	0
Hampton U.	183	4,044	3,142	3,409	4,282	0	657	0	3,625	0
Texas Christian U.	184	690	695	398	4,131	0	732	0	1,612	1,787
U. Rhode Island	185	3,194	3,869	3,328	4,119	0	2,246	0	102	1,771
U. South Dakota	186	5,059	4,054	3,713	4,107	0	2,380	0	1,727	0
Rutgers, State U. New Jersey, Newark	187	1,978	2,384	2,667	4,099	0	2,414	0	1,685	0
U. Texas Rio Grande Valley	188	4,499	5,148	4,338	3,997	1,708	762	71	1,280	176
Delaware State U.	189	4,306	2,210	2,304	3,965	235	328	425	2,640	337
U. Louisiana, Lafayette	190	1,369	3,546	6,453	3,957	68	1,327	0	1,826	736
Clarkson U.	191	2,498	2,217	2,414	3,918	0	2,867	0	629	422
U. Louisville	192	3,058	2,954	3,254	3,872	52	2,879	187	297	457
Missouri U. of Science and Technology	193	3,463	6,107	4,478	3,734	0	2,572	0	1,162	0
Illinois Institute of Technology	194	3,609	3,143	3,483	3,705	0	353	0	3,352	0
U. North Dakota	195	3,607	3,489	2,964	3,641	0	2,972	0	669	0
San Francisco State U.	196	3,088	3,208	3,418	3,626	663	1,708	95	1,134	26
Saint Louis U.	197	2,384	1,942	2,131	3,579	0	3,510	0	69	0
California State U., Long Beach	198	4,363	2,670	2,723	3,494	284	3,191	1	0	18
Worcester Polytechnic Institute	199	4,991	2,773	3,852	3,487	0	1,523	0	1,964	0
U. North Carolina, Charlotte	200	4,389	4,003	3,367	3,345	0	1,335	0	2,010	0
U. Massachusetts, Dartmouth	201	1,755	2,116	2,650	3,290	0	2,435	0	843	12
Virginia Commonwealth U.	202	3,469	3,499	3,396	3,282	0	1,734	0	1,548	0
U. Massachusetts, Boston	203	3,363	3,584	4,174	3,076	0	1,923	0	1,153	0

TABLE 48

Higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Villanova U.	204	2,743	3,573	3,095	3,052	534	1,719	0	799	0
U. Memphis	205	2,157	3,014	3,372	3,012	84	2,043	21	404	460
South Dakota School of Mines and Technology	206	1,602	1,425	1,824	2,883	0	1,174	0	1,709	0
Indiana U.-Purdue U., Indianapolis	207	2,396	2,306	2,748	2,736	0	1,744	0	990	2
Miami U.	208	1,046	1,329	3,940	2,701	0	2,267	0	434	0
California State U., Fresno	209	1,157	1,127	1,307	2,668	0	2,043	0	418	207
CUNY, Lehman C.	210	1,624	2,208	2,062	2,650	696	1,954	0	0	0
U. Wyoming	211	1,825	1,248	1,808	2,625	241	1,894	0	467	23
Wesleyan U.	212	2,876	2,383	2,137	2,622	336	1,377	0	909	0
Clark Atlanta U.	213	1,265	1,649	1,616	2,620	0	2,432	0	188	0
Western Washington U.	214	1,183	1,323	2,191	2,569	286	1,790	493	0	0
Marquette U.	215	2,517	2,681	3,903	2,539	0	2,127	0	412	0
Portland State U.	216	2,911	2,326	1,977	2,410	0	2,161	0	249	0
Central Michigan U.	217	2,908	2,508	1,891	2,396	207	630	0	1,558	1
Morehouse C.	218	1,704	1,517	1,831	2,393	0	463	0	277	1,653
Florida Atlantic U.	219	2,794	3,147	2,726	2,364	75	1,628	0	561	100
Morgan State U.	220	34	411	774	2,314	0	920	0	1,394	0
U.S. Air Force Academy	221	2,933	2,714	2,398	2,310	661	74	0	1,150	425
Drexel U.	222	2,793	2,437	2,074	2,306	0	610	0	1,696	0
CUNY, Queens C.	223	1,446	1,444	1,815	2,266	0	1,698	0	568	0
James Madison U.	224	1,295	1,337	1,825	2,256	149	938	0	893	276
Haverford C.	225	2,039 i	2,581 i	2,342 i	2,231 i	285 i	393 i	1,329 i	224 i	0 i
Bowling Green State U.	226	2,362	2,326	2,345	2,201	0	1,758	95	348	0
U. New Orleans	227	2,144	2,398	2,652	2,181	0	1,468	0	713	0
U. Idaho	228	2,030	1,539	1,646	2,177	1,045	719	17	396	0
California State U., San Bernardino	229	1,219	1,569	1,992	2,161	0	1,994	112	55	0
Prairie View A&M U.	230	1,082	1,353	1,348	2,139	0	1,708	43	388	0
Hope C.	231	1,843	1,315	2,032	2,122	0	1,338	0	534	250
Middle Tennessee State U.	232	417	596	2,967	2,115	53	1,713	0	349	0
Louisiana Tech U.	233	1,843	1,775	2,342	2,110	0	1,094	0	1,016	0
North Carolina A&T State U.	234	1,889	1,638	1,158	2,053	0	757	0	1,296	0
Creighton U.	235	1,691 i	1,463 i	1,621 i	2,020 i	0 i	816 i	0 i	1,204 i	0 i
CUNY, Brooklyn C.	236	1,067 i	1,105	1,325	1,998	0	1,798	0	200	0
Wake Forest U.	237	3,071	2,196	2,236	1,996	0	685	224	1,087	0

TABLE 48

Higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Fisk U.	238	0	212	1,645	1,926	0	116	527	1,283	0
Mercer U.	239	2,189	2,038	1,878	1,925	0	1,830	0	95	0
Troy U.	240	ne	1,216	1,102	1,916	0	0	1,916	0	0
Tuskegee U.	241	163	166	169	1,910	0	97	1,792	21	0
Florida A&M U.	242	3,488	1,410	1,346	1,905	0	14	0	1,891	0
U. Colorado Denver ^e	243	na	na	1,574	1,895	0	1,187	0	708	0
Southern Illinois U., Carbondale	244	1,619	2,013	2,052	1,825	0	1,393	0	432	0
Chapman U.	245	1,816	2,062	1,314	1,814	0	385	0	135	1,294
Illinois State U.	246	886	567	1,171	1,812	0	920	0	222	670
Montclair State U.	247	260	589	737	1,811	45	1,645	0	121	0
New Mexico Institute of Mining and Technology	248	1,970	1,361	1,151	1,798	0	149	0	1,649	0
Stevens Institute of Technology	249	2,045	1,834	2,066	1,775	0	127	272	1,376	0
East Carolina U.	250	2,177	2,168	1,814	1,740	0	1,266	0	474	0
Western Kentucky U.	251	1,845	1,785	1,205	1,714	226	888	0	600	0
Wichita State U.	252	947	1,114	1,438	1,703	0	1,125	0	578	0
Loyola U., Chicago	253	1,286	763	1,026	1,691	0	1,316	0	375	0
Florida Institute of Technology	254	2,078	2,777	3,547	1,682	163	218	0	1,051	250
U.S. Naval Academy	255	2,794	2,144	1,604	1,679	0	839	0	840	0
Amherst C.	256	2,374	1,534	1,203	1,649	160	743	0	746	0
California State U., Fullerton	257	1,180	1,254	1,343	1,615	562	440	83	530	0
South Dakota State U.	258	2,951	1,974	1,943	1,610	0	1,562	0	48	0
U. Puerto Rico, Mayaguez	259	1,172	1,347	1,002	1,580	0	1,166	0	414	0
Kean U.	260	ne	39	18	1,576	0	1,576	0	0	0
Barnard C.	261	1,004	885	1,319	1,541	695	846	0	0	0
Fordham U.	262	868	747	1,067	1,532	0	1,532	0	0	0
Idaho State U.	263	3,709	1,372	1,847	1,490	0	364	17	1,109	0
Rowan U.	264	1,190	664	1,524	1,483	0	605	0	689	189
California State U., Dominguez Hills	265	821	556	418	1,464	0	608	0	856	0
Texas A&M U.-Corpus Christi	266	1,362	1,437	1,089	1,459	0	261	25	12	1,161
Saint Joseph's U.	267	508	194	137	1,397	0	1,280	0	117	0
Grambling State U.	268	845	852	1,238	1,345	0	826	0	257	262
Chicago State U.	269	842	ne	ne	1,341	0	690	0	651	0
Furman U.	270	983	925	1,114	1,313	0	1,252	0	61	0
U. Puerto Rico, Humacao	271	852	1,090	1,083	1,302	0	50	678	574	0

TABLE 48

Higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
California State Polytechnic U., Pomona	272	693	1,395	1,150	1,301	985	289	0	27	0
Clark U.	273	889	1,648	1,386	1,277	0	543	0	734	0
U. Missouri, Kansas City	273	2,026	1,680	1,451	1,277	193	333	0	624	127
Trinity U.	275	1,369	1,230	1,165	1,272	3	1,126	0	143	0
U. West Florida	276	696	1,202	1,356	1,269	0	146	0	0	1,123
Bryn Mawr C.	277	1,057	1,423	1,119	1,254	0	599	0	655	0
Wright State U.	278	1,757	1,774	1,465	1,253	0	91	0	888	274
U. San Diego	279	1,300	1,496	1,377	1,237	0	375	0	862	0
SUNY, Geneseo	280	902	785	1,197	1,234	0	483	0	751	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	281	1,221	1,309	1,148	1,227	0	588	0	639	0
Marshall U.	282	684	1,030	295	1,224	0	1,198	0	26	0
Colgate U.	283	769	618	884	1,215	60	738	0	417	0
U. Washington, Bothell	284	256	156	681	1,194	0	0	0	1,152	42
U. North Florida	285	524	682	608	1,134	0	684	0	450	0
U. of the Virgin Islands	286	15	908	1,069	1,130	0	0	0	0	1,130
Ball State U.	287	993	834	826	1,106	0	970	0	98	38
CUNY, C. Staten Island	288	1,657	860	525	1,097	0	637	0	96	364
Kennesaw State U.	289	1,169	1,019	1,133	1,096	0	935	0	161	0
South Carolina State U.	290	930	965	1,000	1,086	195	0	0	205	686
U. Missouri, Saint Louis	291	2,636	1,910	2,345	1,076	29	991	0	56	0
Norfolk State U.	292	819	726	763	1,051	0	0	0	1,051	0
Bucknell U.	293	538	872	816	1,038	102	706	0	230	0
Cleveland State U.	294	1,372	1,547	976	1,030	0	628	0	402	0
Texas A&M U.-Commerce	295	883	939	995	1,028	0	175	0	853	0
Texas Southern U.	296	211	1,204	1,168	1,015	0	725	0	208	82
U. Maryland Center for Environmental Science	297	289	541	519	1,014	0	875	0	74	65
Appalachian State U.	298	262	408	591	1,013	0	372	0	611	30
California State U., San Marcos	299	901	1,667	1,063	981	0	23	0	482	476
Winston-Salem State U.	300	320	554	956	964	0	704	0	160	100
Central State U.	301	63	6	67	954	0	954	0	0	0
U. Wisconsin-Eau Claire	301	930	814	1,041	954	23	400	349	0	182
C. New Jersey	303	ne	366	423	923	0	169	0	754	0
U. Northern Iowa	304	1,289	911	966	921	0	747	0	174	0
California State Polytechnic U., Humboldt	305	201	193	90	899	0	74	0	825	0

TABLE 48

Higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
California State U., East Bay	306	ne	939	1,215	895	135	364	0	396	0
Arkansas State U., Jonesboro	307	988	876	665	886	0	885	1	0	0
Towson U.	308	787	476	723	880	119	455	0	306	0
Occidental C.	309	424	414	762	877 i	0 i	606 i	0 i	129 i	142 i
U. Dayton	310	1,247	868	910	876	0	344	220	312	0
Northern Kentucky U.	311	701	778	671	875	0	707	0	168	0
Reed C.	312	623	886	866 i	860 i	0 i	587 i	0 i	273 i	0 i
Christopher Newport U.	313	758	829	731	851	0	48	0	803	0
Franklin and Marshall C.	314	722	539	660	835	65	564	0	206	0
Grinnell C.	315	1,012	742	691	823	166	611	0	46	0
Utah Valley U.	316	ne	ne	ne	815	0	495	0	320	0
Swarthmore C.	317	946	734	891	779	166	423	0	190	0
West Chester U. Pennsylvania	318	504	425	466	771	238	79	0	454	0
Long Island U.	319	198	784	996	767	0	616	0	151	0
Alabama A&M U.	320	932 i	636 i	681 i	758 i	0 i	344 i	0 i	414 i	0 i
Southern Connecticut State U.	321	430	846	576	753	244	219	0	224	66
Harvey Mudd C.	322	526	543	531	744	0	155	0	589	0
Fort Lewis C.	323	1	470	835	743	0	38	705	0	0
Seton Hall U.	323	0	401	396	743	0	592	0	151	0
CUNY, New York City C. of Technology	325	350	212	331	727	0	187	0	540	0
U. North Carolina, Asheville	326	680	958	558	718	30	218	0	0	470
U. Tulsa	326	585	424	403	718	0	376	0	342	0
Hofstra U.	328	48	10	141	711	79	606	0	22	4
Pomona C.	329	519	872	347	695	63	403	0	229	0
Connecticut C.	330	902	350	271	690	0	678	0	12	0
Yeshiva U.	331	0	286	253	682	0	0	0	682	0
U. North Carolina, Wilmington	332	597	375	435	675	0	140	0	0	535
Williams C.	332	1,312	1,245 i	1,237 i	675 i	47 i	442 i	0 i	186 i	0 i
Tennessee Technological U.	334	1,289	1,178	879	672	0	201	0	471	0
CUNY, John Jay C. of Criminal Justice	335	222	507	235	650	0	191	0	26	433
Duquesne U.	336	2,581	2,326	615	629	0	506	0	123	0
U. Nebraska, Kearney	337	652	320	657	625	0	468	0	157	0
Macalester C.	338	435	377	451	622	177	421	0	24	0
Southeastern Louisiana U.	339	106	326	247	606	0	388	0	218	0

TABLE 48

Higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Santa Clara U.	340	423	487	516	589	0	426	0	163	0
Texas Woman's U.	341	155	204	7	585	0	581	0	0	4
U. Alaska, Anchorage	342	16	184	1,160	577	275	260	0	42	0
U. Central Oklahoma	343	701	696 i	729 i	572 i	0 i	302 i	0 i	270 i	0 i
St. Edward's U.	344	456	1,074	1,101	571	0	391	0	180	0
U. Colorado Anschutz Medical Campus ^e	345	na	na	391	566	0	0	0	566	0
Middlebury C.	346	459	429	648	564	82	286	0	196	0
SUNY, C. of Environmental Science and Forestry	347	257	294	404	561 i	180 i	309 i	0 i	0 i	72 i
U. South Alabama	347	471	433	626	561	0	454	0	107	0
C. Wooster	349	568	235	414 i	549	0	422	0	127	0
Central Washington U.	350	229	306	285	541	0	41	0	500	0
Eastern Michigan U.	351	491	690	211	540	68	348	90	34	0
Tougaloo C.	352	849	361	359 i	537 i	0 i	340 i	0 i	197 i	0 i
Davidson C.	353	352	242	451	531	0	266	0	261	4
Pennsylvania State U., Behrend	354	151	44	282	521	0	70	416	35	0
U. Richmond	355	450	430	454	519	0	431	0	88	0
C. Charleston	356	923	700	983	518	255	54	0	209	0
U. Arkansas, Pine Bluff	357	448	540	1,175	513	0	513	0	0	0
St. John's U., New York	358	273	405	345	510	0	497	0	13	0
Tarleton State U.	359	303	263	359	503	0	365	0	138	0
U. Minnesota, Duluth	360	1,065	840	624	493	0	285	0	208	0
Whitman C.	361	460	356	ne	486	0	440	0	46	0
Lafayette C.	362	379	388	286	483	0	248	0	235	0
Bowie State U.	363	246	272	438	481	304	0	0	0	177
U. of the Incarnate Word	364	418	226	298	478	0	299	0	179	0
Pacific U.	365	962	120	299	467	0	431	0	36	0
U. Central Arkansas	366	665	585	568	465	0	265	0	200	0
East Tennessee State U.	367	368 i	439 i	240 i	464 i	289 i	126 i	0 i	49 i	0 i
U. Colorado Colorado Springs	368	217	270	310	457	0	219	0	185	53
Indiana U. Pennsylvania	369	269	425	364	456	0	238	0	218	0
Smith C.	370	499	321	495	453	9	342	0	102	0
SUNY, Oswego	371	388	314	328	450	0	439	0	11	0
California State U., Monterey Bay	372	65	0	57	446	0	446	0	0	0
Winthrop U.	373	443	317	382	444	0	444	0	0	0

TABLE 48

Higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Rhode Island C.	374	132	361	320	441	0	0	0	0	441
Skidmore C.	375	334	363	689	433	0	433	0	0	0
Southern Illinois U., Edwardsville	376	586	911	1,374	426	0	165	0	261	0
Spelman C.	377	595	713	523	410	0	391	0	19	0
California State U., Channel Islands	378	57	39	301	406	0	406	0	0	0
California State U., Sacramento	379	344	296	238	403	0	133	0	270	0
U. Wisconsin-Oshkosh	380	284 i	288 i	292	398	22	360	0	16	0
Claremont McKenna C.	381	144	144	136	385	0	81	0	304	0
Loyola Marymount U.	382	423	233	269	383	0	383	0	0	0
Bowdoin C.	383	364	239	288	376	0	236	0	106	34
U. Hawaii, Hilo	383	164	217	66	376	91	119	0	166	0
Montana Technological U.	385	62	123	216	375	0	375	0	0	0
Mount Holyoke C.	386	1,037	496	550	370	177	23	0	156	14
Youngstown State U.	387	135	346	335	366	162	204	0	0	0
Kenyon C.	388	444	300	ne	362	0	32	0	330	0
Calvin U.	389	462	304 i	331 i	358 i	49 i	298 i	0 i	11 i	0 i
Colby C.	390	397	391	245	345	19	287	0	39	0
U. of St. Thomas (MN)	391	360	235	168	340	0	319	0	21	0
CUNY, Baruch C.	392	375	297	256	338	0	32	0	306	0
Grand Valley State U.	393	276	374	247	331	0	305	0	26	0
Bates C.	394	531	405	413	330	93	78	0	159	0
Salisbury U.	395	534	212	440	326	0	278	0	48	0
Texas A&M U.-Kingsville	396	196	164	213	323	0	319	0	4	0
California State U., Bakersfield	397	420	91	447	322	0	322	0	0	0
Colorado C.	398	102	75	154	316	0	263	0	53	0
Seattle U.	399	157	165	86	311	0	105	0	206	0
Sam Houston State U.	400	550	481	503	308	0	168	0	140	0
Augustana U.	401	358	ne	457	306	0	141	0	165	0
Carleton C.	402	723	704	531	301	25	183	0	93	0
Hobart and William Smith Colleges	403	263	175	152	300	0	102	0	188	10
U. Wisconsin-La Crosse	404	298	416	476	299	0	194	0	105	0
Rutgers, State U. New Jersey, Camden	405	80	354	41	297	0	269	0	28	0
Murray State U.	406	358	185	201	293	0	240	0	53	0
U. Arkansas, Little Rock	407	926	1,105	685	292	0	279	0	13	0

TABLE 48

Higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
U. South Carolina, Aiken	407	0	51	9	292	0	292	0	0	0
Ithaca C.	409	ne	378	379	291	32	161	0	98	0
Missouri State U.	409	386	418	345	291	103	65	0	123	0
Texas A&M International U.	411	4	42	154	275	0	155	77	43	0
Augusta U.	412	48	29	172	266	0	266	0	0	0
U. Michigan, Dearborn	413	217	135	169	262	0	0	0	0	262
West Texas A&M U.	414	127	211	200	258	0	258	0	0	0
U. Louisiana, Monroe	415	75	55	17	247	0	247	0	0	0
Lewis and Clark C.	416	268	749	249	246	0	180	0	66	0
Union C., Schenectady	417	609	268	185	244	34	108	0	102	0
Framingham State U.	418	ne	247	258 i	238 i	0 i	238 i	0 i	0 i	0 i
Vassar C.	419	172	250	178	233	0	219	0	14	0
Drake U.	420	130	ne	221	220	0	9	0	211	0
Sul Ross State U.	421	0	0	0 i	219 i	0 i	219 i	0 i	0 i	0 i
Wellesley C.	422	1,426	391	327	214	0	208	0	0	6
SUNY, C. Brockport	423	48	74	103	211	77	38	0	96	0
Coastal Carolina U.	424	0	0	88	209	0	55	0	154	0
Florida Gulf Coast U.	425	138	397	197	207	0	207	0	0	0
Purdue U., Northwest	426	115	207	110	202	0	202	0	0	0
Southern U. and A&M C., Baton Rouge	427	1,167	735	583	200	0	132	0	68	0
New Mexico Highlands U.	428	ne	541	568 i	187 i	0 i	104 i	0 i	83 i	0 i
U.S. Military Academy	429	35	814	338	185	0	30	0	155	0
Citadel Military C. South Carolina	430	ne	119	76	184	0	104	0	80	0
U. Nebraska, Omaha	431	169	62	76	180	0	26	0	154	0
Azusa Pacific U.	432	179	205	207	176	0	111	0	65	0
CUNY, York C.	433	883	568	192	172	5	167	0	0	0
U. San Francisco	433	83	72	144	172	102	55	0	15	0
California State U., Chico	435	186	182	172	166	0	59	2	105	0
Fayetteville State U.	436	200	260	147	165	0	0	0	0	165
Canisius C.	437	191	ne	173	159	0	0	0	0	159
Dillard U.	438	606	975	252	158	0	0	3	155	0
U. Wisconsin-Green Bay	439	127 i	125 i	112 i	156 i	0 i	77 i	0 i	79 i	0 i
Butler U.	440	ne	ne	ne	154	0	154	0	0	0
U. of the Pacific	441	431	307	223	152	29	123	0	0	0

TABLE 48

Higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Lawrence Technological U.	442	9	6	55	148	0	0	0	143	5
Trinity C., Hartford	443	159	50	113	147	0	143	0	3	1
Manhattan C.	444	55	71	112	140	0	140	0	0	0
Albion C.	445	380	422	435 i	139 i	0 i	99 i	0 i	40 i	0 i
Willamette U.	445	363	269	179	139	0	60	0	19	60
U. Wisconsin-Stevens Point	447	92 i	105	61	136	5	124	0	7	0
U. Guam	448	0	0	86	131	131	0	0	0	0
Indiana State U.	449	155	160	89	130	0	26	0	104	0
U. New Haven	450	576	285	323	128	0	8	120	0	0
Hamilton C.	451	198	208	193	127	0	99	0	9	19
Eastern Washington U.	452	152	66	63	125	0	0	0	118	7
Saint John's U.	452	139 i	132 i	108 i	125 i	0 i	88 i	0 i	37 i	0 i
C. of Saint Benedict	454	176 i	167 i	108 i	124 i	0 i	87 i	1 i	36 i	0 i
Lamar U.	454	188	80	115	124	0	71	0	53	0
William Paterson U.	454	264	361	140	124	0	98	0	0	26
U. Houston-Clear Lake	457	520	403	236	123	0	0	0	0	123
U. Puget Sound	457	ne	252	ne	123	0	85	0	7	31
California State U., Stanislaus	459	25	17	84	117	0	108	0	9	0
U. of Mary Washington	459	48	62	100	117	0	78	0	39	0
Stephen F. Austin State U.	461	85	36	29	114	0	112	0	2	0
Virginia Military Institute	462	ne	ne	ne	112	0	95	0	17	0
Monmouth U.	463	18	19	44	110	0	11	0	99	0
Central Connecticut State U.	464	118	82	73	104	0	101	0	3	0
Clafin U.	465	508	258	129	102	0	75	0	27	0
Black Hills State U.	466	407	116	103	101	0	0	0	101	0
New York Institute of Technology	466	0	0	3	101	0	0	0	101	0
Pace U.	468	199	138	226	100	0	93	0	0	7
U. Wisconsin-Platteville	469	99 i	101 i	82 i	98 i	0 i	51 i	0 i	47 i	0 i
Austin Peay State U.	470	232	15	50	89	0	0	0	26	63
Pepperdine U.	470	88	56	111	89	0	68	0	21	0
U. Houston-Downtown	472	77	72	382	88	46	35	0	0	7
Western Illinois U.	473	57	78	68	84	0	47	0	37	0
Fort Valley State U.	474	104	72	76	83	0	83	0	0	0
Virginia State U.	475	0	0	0	80	0	80	0	0	0

TABLE 48

Higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Purdue U., Fort Wayne	476	101	126	92	76	0	61	0	15	0
U. Northern Colorado	477	110	122	149	72	0	15	0	57	0
Sonoma State U.	478	ne	203	289	62	0	62	0	0	0
U. Puerto Rico, Cayey	479	140	203	127	61	0	2	0	59	0
Gallaudet U.	480	26	5	92	60	0	0	0	60	0
Langston U.	481	37	109	28	53	0	0	0	0	53
Savannah State U.	481	63	50	34	53	0	53	0	0	0
Roger Williams U.	483	154	101	2	47	0	17	0	30	0
Elon U.	484	89	83	59	45	0	26	0	19	0
Suffolk U.	484	ne	100	70	45	0	45	0	0	0
U. Alaska, Southeast	486	0	55	67	44	44	0	0	0	0
U. Virginia's C. Wise	486	ne	ne	20	44	0	23	0	0	21
Northern Michigan U.	488	24	35	10	43	0	42	0	1	0
California Lutheran U.	489	91	112	ne	42	0	42	0	0	0
U. Tennessee, Chattanooga	490	35	52	22	40	0	40	0	0	0
Minnesota State U., Mankato	491	127	52	29	39	18	21	0	0	0
Des Moines U.	492	0	0	40 i	36	0	0	0	0	36
St. Catherine U.	493	ne	ne	ne	33	0	3	0	30	0
U. Ana G. Mendez, Gurabo	493	1,061	362	142	33 i	0 i	33 i	0 i	0 i	0 i
U. Texas of the Permian Basin	495	ne	24	30	30	0	6	0	0	24
Kettering U.	496	211	648	77	29	0	0	0	29	0
U. Texas, Tyler	496	44	33	46	29	0	29	0	0	0
Mercyhurst U.	498	148 i	108 i	68 i	27	0	0	0	27	0
Pittsburg State U.	498	30	22	24	27	0	27	0	0	0
SUNY, C. Plattsburgh	500	376	126	137	26	0	13	0	13	0
Lake Superior State U.	501	ne	ne	ne	21	0	21	0	0	0
St. Cloud State U.	502	12	15	13	19	0	5	0	14	0
Alfred U.	503	13	7	5	16	16	0	0	0	0
Dakota State U.	504	5	0	58	15	0	0	0	15	0
U. North Georgia	504	68	91	2	15	2	13	0	0	0
U. Illinois, Springfield	506	12	14	20	14	0	14	0	0	0
U. New England	506	23	26	19	14	0	14	0	0	0
DePaul U.	508	229	305	258	13	0	13	0	0	0
Morehead State U.	509	0	0	5	10	0	10	0	0	0

TABLE 48

Higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
New School	509	0	0	0	10	0	0	0	0	10
U. of Health Sciences and Pharmacy in St. Louis	511	ne	0	0	9	0	0	0	9	0
Western Carolina U.	511	342	253	45	9	9	0	0	0	0
Pennsylvania State U., Harrisburg	513	38	0	0	8	0	7	0	1	0
U. Hartford	513	0	0	0	8	0	4	0	4	0
East Stroudsburg U. Pennsylvania	515	ne	ne	ne	7	0	7	0	0	0
Eastern Connecticut State U.	515	10	0	5	7	0	4	0	0	3
Florida Polytechnic U.	517	68	76	71	4	0	4	0	0	0
Johnson C. Smith U.	517	66	300	4 i	4	0	4	0	0	0
Marymount U.	519	ne	ne	88	2	0	2	0	0	0
La Sierra U.	520	1	1	1	1	0	0	0	1	0
All other surveyed institutions	-	11,526	8,925	3,851	0	0	0	0	0	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

nec = not elsewhere classified.

^a Johns Hopkins University includes the Applied Physics Laboratory (APL), with \$280,919 thousand imputed for total R&D expenditures in physical sciences in FY 2022. Total expenditures by field for Johns Hopkins University are flagged as imputed because APL was unable to distribute a portion of institutionally funded R&D by field.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
All institutions	-	3,691,494	3,790,504	3,847,941	4,212,405	581,652	1,322,328	195,404	1,941,833	171,188
Johns Hopkins U. ^a	1	306,572	372,067	321,641	300,741	29,841	22,992	3,789	225,387	18,732
California Institute of Technology	2	156,658	178,896	160,456	181,341	60,288	21,863	18,440	80,750	0
U. California, Berkeley	3	86,349	84,023	90,707	134,927	79,537	28,472	0	22,296	4,622
Michigan State U.	4	95,267	100,092	122,143	133,138	68	8,837	0	124,233	0
U. Colorado Boulder	5	99,527	106,414	111,234	127,772	41,580	9,696	0	69,385	7,111
Massachusetts Institute of Technology	6	94,635	105,097	114,108	127,635	34,855	22,375	2,798	53,744	13,863
U. Rochester	7	106,520	94,572	92,680	103,745	0	5,306	0	98,439	0
Cornell U.	8	95,625	96,374	93,608	94,346	7,166	22,442	1,670	40,260	22,808
U. Maryland ^b	9	82,395	81,584	83,425	86,830	38,182	5,326	4,271	29,928	9,123
U. Arizona	10	74,823	77,135	73,148	75,484	63,239	6,142	1,671	4,432	0
Stanford U.	11	71,817	68,199	72,190	74,962	2,876	26,211	9,504	33,960	2,411
U. California, San Diego	12	47,019	49,002	54,485	67,979	170	27,997	0	38,163	1,649
Harvard U.	13	53,614	55,363	59,262	66,072	6,151	20,608	0	37,997	1,316
U. Wisconsin-Madison	14	52,807	58,512	60,580	65,819	1,983	23,999	0	24,029	15,808
U. Texas, Austin	15	53,535	56,570	59,786	65,599	6,851	8,569	34,701	15,478	0
U. Chicago	16	43,322	43,904	47,425	59,248	11,387	26,860	4,290	16,277	434
Princeton U.	17	54,879	60,336	56,283	58,459	20,960	13,432	0	23,951	116
U. Washington, Seattle	18	49,064	52,913	52,053	56,218	8,036	23,761	1,140	19,998	3,283
Pennsylvania State U., University Park and Hershey Medical Center	19	56,943	54,776	53,869	53,722	10,174	13,319	12,886	17,343	0
U. Illinois, Urbana-Champaign	20	48,539	49,164	49,944	51,602	5,414	18,398	0	27,787	3
Northwestern U.	21	49,120	46,669	49,661	50,617	2,219	22,536	13,457	10,229	2,176
U. Iowa	22	21,267	18,913	28,692	50,134	458	4,215	0	45,461	0
U. California, Santa Barbara	23	38,560	36,695	34,841	48,512	2,093	5,850	13,827	19,648	7,094
U. Pennsylvania	24	38,518	38,206	39,630	46,353	0	17,415	11,925	17,013	0
Columbia U. in the City of New York	25	29,085	31,519	40,994	43,442	7,437	14,752	5,216	16,037	0
U. California, San Francisco	26	38,491	41,413	37,312	42,570	0	42,570	0	0	0
U. California, Los Angeles	27	39,856	37,430	36,246	42,141	0	17,355	0	24,786	0
Florida State U.	28	35,376	42,211	37,224	40,242	432	11,140	3,438	25,129	103
U. Michigan, Ann Arbor	29	37,944	35,572	38,670	39,773	3,277	20,011	0	16,485	0
SUNY, Stony Brook U.	30	32,009	30,902	33,285	34,829	1,925	10,457	0	22,447	0
U. North Carolina, Chapel Hill	31	24,236	27,083	25,924	34,295	1,202	22,796	0	7,468	2,829
Yale U.	32	33,736	28,840	29,641	33,421	850	16,105	0	16,466	0
U. Minnesota, Twin Cities	33	33,493	32,576	32,702	32,029	1,603	13,989	0	16,437	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
U. Notre Dame	34	29,077	28,853	29,976	29,426	0	18,107	0	11,319	0
U. California, Irvine	35	27,916	26,725	24,451	28,779	0	15,716	0	13,063	0
Purdue U., West Lafayette	36	20,328	21,579	24,204	27,908	0	16,510	0	11,398	0
Ohio State U.	37	35,564	44,079	30,584	27,702	2,700	6,883	65	18,054	0
Texas A&M U., College Station and Health Science Center	38	21,954	21,208	22,946	27,656	1,361	11,112	2,727	11,657	799
U. Delaware	39	21,923	19,931	21,099	26,652	1,175	9,278	11,411	4,788	0
Boston U.	40	19,469	20,726	23,002	24,802	1,890	10,572	0	12,340	0
Iowa State U.	41	25,466	17,815	20,463	23,640	0	11,116	0	12,524	0
U. California, Davis	42	17,554	17,230	17,078	23,183	0	12,099	0	8,529	2,555
Catholic U. of America	43	16,992	17,261	18,569	23,076	0	12	0	19,597	3,467
Georgia Institute of Technology	44	25,844	22,417	22,213	22,817	0	15,762	0	7,055	0
U. Central Florida	45	18,300	18,837	20,915	22,509	0	2,548	0	19,961	0
U. Florida	46	15,416	16,445	17,471	21,896	1,048	9,638	0	11,210	0
Washington U., Saint Louis	47	18,746	18,393	20,017	21,448	0	8,850	6,479	6,119	0
Duke U.	48	18,436	19,178	19,826	20,898	0	11,135	0	9,763	0
U. Virginia, Charlottesville	49	17,967	19,333	20,408	20,481	2,855	7,895	0	9,731	0
U. Pittsburgh, Pittsburgh	50	18,857	17,786	16,509	19,723	1,096	10,128	0	8,499	0
Indiana U., Bloomington	51	20,230	21,233	19,340	19,586	529	11,725	0	7,332	0
U. California, Santa Cruz	52	15,755	17,723	16,115	19,002	5,462	8,006	0	5,534	0
U. Nebraska, Lincoln	53	18,047	15,583	15,445	18,966	0	7,271	0	11,693	2
Florida International U.	54	9,893	11,642	14,476	18,951	0	16,674	0	2,262	15
Rice U.	55	17,279	16,313	17,271	18,067	1,162	6,657	5	10,243	0
New York U.	56	19,720	18,606	19,664	17,913	0	10,225	0	7,688	0
U. Utah	57	31,461	19,006	19,543	17,611	8,609	9,002	0	0	0
U. Maryland, Baltimore County	58	14,774	17,092	17,339	17,591	11,891	1,987	92	3,621	0
Emory U.	59	15,695	15,380	18,181	17,121	0	14,402	0	2,719	0
Northeastern U.	60	12,859	13,194	16,081	17,077	0	7,517	0	9,555	5
North Carolina State U.	61	13,392	13,657	15,032	16,847	0	7,854	0	7,960	1,033
Vanderbilt U. and Vanderbilt U. Medical Center	62	14,537	15,195	15,636	16,621	0	9,796	0	6,825	0
U. Massachusetts, Amherst	63	16,405	18,261	15,054	16,202	3,960	6,492	0	5,750	0
U. California, Riverside	64	12,908	14,276	14,667	15,648	0	9,452	0	6,196	0
U. Illinois, Chicago	65	9,941	10,533	12,875	15,452	0	6,233	0	9,219	0
Virginia Polytechnic Institute and State U.	66	14,250	13,854	13,944	14,686	14	9,174	82	5,300	116
Arizona State U.	67	11,735	12,385	14,065	14,612	0	4,492	0	10,119	1

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Washington State U.	68	18,436	14,813	16,946	14,433	189	5,918	1,052	7,274	0
U. Hawaii, Manoa	69	17,498	19,021	16,519	14,059	9,283	1,205	0	3,488	83
U. Tennessee, Knoxville ^c	70	16,674	12,121	11,804	13,906	0	4,331	0	9,575	0
U. Alabama, Huntsville	71	9,213	9,595	10,716	13,902	11,925	165	0	1,722	90
Montana State U., Bozeman	72	9,841	10,794	16,551	13,784	0	5,469	0	8,315	0
Rutgers, State U. New Jersey, New Brunswick	73	17,535	12,991	13,160	13,707	1,067	3,264	1,695	7,519	162
Carnegie Mellon U.	74	10,233	11,165	11,139	13,327	347	5,091	1,107	6,575	207
U. Southern California	75	12,667	13,605	13,175	13,210	5,716	7,494	0	0	0
Wayne State U.	76	11,130	9,101	12,051	12,936	0	9,016	0	3,356	564
Louisiana State U., Baton Rouge	77	12,967	13,295	13,940	12,932	0	4,636	0	8,020	276
U. Kansas	78	7,110	6,488	12,448	12,742	726	9,108	0	2,908	0
Colorado State U., Fort Collins	79	10,106	7,884	10,355	12,006	0	7,643	977	3,053	333
Brown U.	80	14,103	11,133	11,410	11,868	0	3,763	0	5,729	2,376
U. Texas, Arlington	81	7,459	8,422	8,778	11,568	0	2,520	0	9,048	0
U. Southern Mississippi	82	9,357	8,527	11,564	11,417	0	11,271	0	0	146
Colorado School of Mines	83	7,404	9,353	9,963	11,243	116	3,293	2,783	4,850	201
U. Oklahoma, Norman and Health Science Center	84	12,491	11,446	8,751	11,218	0	6,981	0	4,237	0
U. Massachusetts, Lowell	85	8,207	11,202	11,048	11,112	0	1,527	0	9,585	0
U. Oregon	86	8,572	9,034	9,747	10,590	0	5,429	305	2,556	2,300
Dartmouth C. and Dartmouth Hitchcock Medical Center	87	6,303	7,751	9,181	10,411	0	4,388	0	6,023	0
Georgia State U.	88	11,524	13,754	10,035	10,406	3,052	4,929	0	2,425	0
Temple U.	89	11,881	10,820	10,707	10,386	0	4,372	0	3,258	2,756
Georgetown U.	90	5,133	7,424	8,304	10,109	0	2,764	0	7,318	27
CUNY, City C.	91	6,681	7,007	7,213	9,999	0	4,496	0	3,771	1,732
Kansas State U.	92	9,827	8,746	9,082	9,933	0	1,834	0	8,099	0
Tufts U.	93	2,102	6,118	8,268	9,794	93	7,192	0	2,509	0
U. Texas, Dallas	94	7,812	9,295	9,314	9,735	3,359	3,448	0	2,928	0
Boston C.	95	7,406	7,098	8,597	9,471	0	7,144	0	2,327	0
Brandeis U.	96	7,777	7,218	6,779	9,444	3,517	4,076	274	1,577	0
Rochester Institute of Technology	97	8,077	7,787	8,426	9,087	0	304	0	2,990	5,793
U. Alaska, Fairbanks	98	9,634	9,919	11,116	9,045	8,958	67	0	6	14
U. Toledo	99	4,915	5,136	7,627	9,009	726	3,024	0	5,259	0
U. New Mexico	100	6,320	7,146	6,179	8,996	1,842	2,785	0	4,363	6
West Virginia U.	101	9,683	8,805	8,900	8,912	1,512	3,118	0	4,282	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
U. Houston	102	6,147	6,336	6,931	8,607	0	5,173	0	3,255	179
New Jersey Institute of Technology	103	8,044	8,354	8,145	8,524	6,192	757	0	1,575	0
U. Connecticut	104	6,696	8,124	7,346	8,473	0	4,189	0	4,284	0
U. Texas M. D. Anderson Cancer Center	105	7,922	8,114	8,179	8,306	0	0	0	8,306	0
Syracuse U.	106	9,127	7,140	8,073	8,255	0	2,465	0	5,790	0
Air Force Institute of Technology	107	4,457	4,973	8,037	8,136	0	0	0	8,136	0
SUNY, U. Buffalo	108	7,714	7,195	8,075	8,088	0	6,337	0	1,751	0
U. Kentucky	109	6,607	6,785	7,061	7,897	0	4,657	0	3,240	0
Clemson U.	110	6,692	6,157	6,037	7,828	0	3,076	0	4,752	0
New Mexico State U.	111	18,114	18,373	14,524	7,819	3,873	783	0	1,355	1,808
Case Western Reserve U.	112	8,213	7,203	7,538	7,764	198	2,285	3,586	1,695	0
Auburn U., Auburn	113	6,107	6,866	6,649	7,721	413	2,214	178	4,791	125
U. Mississippi	114	9,706	7,993	7,712	7,655	0	1,945	0	5,710	0
Xavier U. Louisiana	115	5,797	7,077	8,325	7,504	0	7,426	0	78	0
CUNY, Advanced Science Research Center	116	2,115	3,018	4,719	7,392	0	1,760	0	5,277	355
U. Wisconsin-Milwaukee	117	7,884	5,010	7,800	7,058	5,333	572	0	1,153	0
Jackson State U.	118	8,463	9,305	7,625	6,788	0	5,101	0	1,687	0
U. Missouri, Columbia	119	6,686	7,654	6,710	6,664	0	4,739	0	1,925	0
North Dakota State U.	120	3,546	2,853	6,937	6,438	0	5,516	481	441	0
U. Arkansas, Fayetteville	121	4,313	4,452	4,371	6,309	0	2,586	0	3,723	0
California State U., Northridge	122	3,063	4,750	6,665	6,308	339	283	0	1,574	4,112
U. Montana, Missoula	123	5,718	5,428	6,313	5,843	49	1,560	0	125	4,109
U. Nevada, Reno	124	4,815	4,702	4,912	5,829	0	3,227	0	2,602	0
U. Alabama, Tuscaloosa	125	4,785	4,720	4,913	5,722	198	2,995	0	2,529	0
George Washington U.	126	5,610	5,366	4,872	5,637	0	1,968	0	3,669	0
U. Texas, San Antonio	127	4,195	4,702	5,338	5,547	0	3,062	0	2,485	0
U. Miami	128	4,645	4,172	4,482	5,415	0	1,355	0	4,060	0
U. South Florida ^d	129	5,648	5,306	4,803	5,335	0	2,369	0	2,196	770
Oregon State U.	130	4,888	4,523	4,453	5,326	84	1,595	726	2,831	90
Brigham Young U., Provo	131	4,833	4,133	4,414	5,323	0	2,836	0	2,487	0
U. Cincinnati	132	4,724	4,041	4,501	5,296	0	3,145	0	2,151	0
SUNY, Binghamton U.	133	6,111	7,642	5,541	5,229	0	4,076	0	1,153	0
U. Texas, El Paso	134	4,384	4,257	4,537	5,077	0	3,402	0	1,675	0
George Mason U.	135	4,738	4,656	3,561	5,050	2,612	746	1,147	434	111

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Old Dominion U.	136	5,260	4,601	4,475	5,033	0	1,609	0	3,424	0
Howard U.	137	4,548	4,381	4,733	4,953	0	4,288	0	665	0
William & Mary	138	4,249	4,428	4,140	4,946	0	655	0	4,291	0
California State U., Los Angeles	139	4,917	4,255	4,085	4,910	0	4,219	0	691	0
U. Nevada, Las Vegas	140	4,521	4,073	4,170	4,861	354	2,869	0	1,638	0
U. Akron	141	3,992	4,238	4,026	4,811	0	4,811	0	0	0
Embry-Riddle Aeronautical U.	142	1,623	1,859	2,482	4,744	0	0	0	512	4,232
Northern Illinois U.	143	4,280	3,713	3,668	4,712	0	1,879	0	2,833	0
Boise State U.	144	2,420	2,678	4,976	4,686	307	209	3,907	263	0
Naval Postgraduate School	145	7,594	8,513	5,658	4,668	0	379	148	2,674	1,467
North Carolina Central U.	146	2,729	2,888	2,990	4,596	0	345	0	4,251	0
San Diego State U.	147	3,377	2,992	2,931	4,461	327	3,490	0	644	0
U. Puerto Rico, Rio Piedras	148	3,804	3,427	4,104	4,386	0	3,384	0	1,002	0
Ohio U.	149	2,605	3,467	4,143	4,370	0	647	0	3,723	0
U. California, Merced	150	4,304	4,891	2,865	4,363	0	2,372	0	1,571	420
Rensselaer Polytechnic Institute	151	4,304	4,184	4,033	4,338	0	3,057	0	1,281	0
Hampton U.	152	4,044	3,142	3,409	4,282	0	657	0	3,625	0
CUNY, Hunter C.	153	3,024	3,552	4,840	4,191	0	3,002	0	1,189	0
U. North Carolina, Greensboro	154	3,019	2,612	2,761	4,149	0	2,207	1,942	0	0
Mississippi State U.	155	3,630	2,267	2,399	4,142	57	1,419	1,270	1,396	0
U. Georgia	156	6,362	4,815	4,936	4,090	330	2,971	0	789	0
Texas Tech U.	157	4,426	4,217	4,067	4,026	0	2,315	320	1,391	0
Northern Arizona U.	158	2,688	3,147	3,885	3,894	2,769	99	193	369	464
Utah State U.	159	4,133	3,982	3,395	3,837	0	2,204	0	1,633	0
Kent State U.	160	3,062	3,715	3,843	3,722	87	1,065	597	1,717	256
Baylor U.	161	2,033	2,110	2,661	3,708	19	2,103	0	1,586	0
Southern Methodist U.	162	2,499	2,855	3,420	3,652	0	1,216	0	2,436	0
U. Alabama, Birmingham	163	4,929	3,934	4,292	3,395	0	933	0	2,462	0
Oklahoma State U., Stillwater	164	3,135	2,870	2,640	3,379	0	1,536	0	1,843	0
Lehigh U.	165	2,157	2,166	2,534	3,322	0	1,702	0	1,620	0
Delaware State U.	166	1,615	1,595	1,833	3,172	235	0	425	2,175	337
U. North Texas, Denton	167	2,588	2,329	2,696	3,134	0	2,139	0	995	0
Tulane U.	168	3,533	3,343	3,041	3,091	0	1,444	0	1,647	0
American U.	169	2,922	3,401	3,136	3,078	0	324	0	2,754	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Illinois Institute of Technology	170	3,253	2,734	2,909	3,072	0	188	0	2,884	0
SUNY, U. Albany	171	3,545	3,917	3,663	2,984	0	2,388	0	596	0
Texas State U.	172	2,235	1,798	2,774	2,960	0	2,038	0	922	0
Rutgers, State U. New Jersey, Newark	173	1,444	1,436	2,020	2,906	0	1,979	0	927	0
U. Denver	174	2,869	3,373	2,532	2,877	0	1,891	0	986	0
Missouri U. of Science and Technology	175	2,082	4,591	2,652	2,838	0	2,243	0	595	0
California State U., Long Beach	176	4,062	2,502	2,574	2,698	277	2,420	1	0	0
U. Rhode Island	176	2,269	2,579	2,203	2,698	0	1,629	0	86	983
U. North Carolina, Charlotte	178	2,977	2,878	2,577	2,574	0	1,057	0	1,517	0
Virginia Commonwealth U.	179	2,425	2,194	2,348	2,560	0	1,370	0	1,190	0
Oakland U.	180	1,679	1,852	2,062	2,522	0	1,206	0	1,316	0
CUNY, Lehman C.	181	1,495	2,021	1,964	2,487	559	1,928	0	0	0
U. New Hampshire	182	1,859	3,335	2,355	2,402	0	825	0	1,577	0
Morehouse C.	183	1,704	1,517	1,831	2,393	0	463	0	277	1,653
Clark Atlanta U.	184	1,135	1,422	1,407	2,379	0	2,195	0	184	0
San Jose State U.	185	1,765	2,035	2,129	2,376	0	1,146	0	1,198	32
South Dakota School of Mines and Technology	186	1,583	1,384	1,504	2,305	0	834	0	1,471	0
U. Vermont	187	1,925	2,710	2,061	2,302	0	1,649	0	653	0
U. Maine	188	2,654	1,868	2,289	2,278	0	41	0	2,237	0
Morgan State U.	189	30	393	759	2,225	0	920	0	1,305	0
Rockefeller U.	190	2,637	2,882	3,581	2,185	0	1,998	0	187	0
U.S. Air Force Academy	191	2,933	2,714	2,348	2,175	661	54	0	1,110	350
Saint Louis U.	192	944	1,302	1,237	2,088	0	2,081	0	7	0
Miami U.	193	167	408	2,638	2,078	0	1,815	0	263	0
Haverford C.	194	1,862	2,259	2,216	2,070	277	286	1,329	178	0
Central Michigan U.	195	2,318	2,044	1,814	2,053	202	314	0	1,537	0
Indiana U.-Purdue U., Indianapolis	196	1,186	1,374	1,871	1,998	0	1,086	0	912	0
North Carolina A&T State U.	197	1,517	1,163	1,125	1,996	0	727	0	1,269	0
California State U., Fresno	198	823	868	1,192	1,984	0	1,557	0	345	82
California State U., San Bernardino	199	1,153	1,448	1,809	1,939	0	1,781	112	46	0
Troy U.	200	ne	1,216	1,094	1,910	0	0	1,910	0	0
Tuskegee U.	200	163	166	169	1,910	0	97	1,792	21	0
Prairie View A&M U.	202	407	489	807	1,881	0	1,708	43	130	0
U. South Dakota	203	2,205	1,968	1,754	1,877	0	623	0	1,254	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Florida A&M U.	204	3,358	1,366	1,344	1,874	0	13	0	1,861	0
Worcester Polytechnic Institute	205	2,006	1,603	2,171	1,869	0	925	0	944	0
U. Colorado Denver ^e	206	na	na	1,561	1,798	0	1,090	0	708	0
U. Massachusetts, Boston	207	1,745	2,239	2,420	1,793	0	1,343	0	450	0
CUNY, Brooklyn C.	208	812 i	845	1,297	1,779	0	1,613	0	166	0
Portland State U.	209	2,356	1,937	1,462	1,762	0	1,524	0	238	0
Fisk U.	210	0	212	1,525	1,693	0	116	527	1,050	0
Michigan Technological U.	211	728	1,282	1,248	1,659	0	1,095	0	564	0
New Mexico Institute of Mining and Technology	212	1,928	1,348	1,139	1,645	0	102	0	1,543	0
Clarkson U.	213	652	767	422	1,636	0	1,188	0	157	291
Western Washington U.	214	820	989	1,321	1,629	247	1,196	186	0	0
Marquette U.	215	1,305	1,649	2,614	1,620	0	1,324	0	296	0
Drexel U.	216	1,611	1,582	1,429	1,597	0	284	0	1,313	0
Wesleyan U.	217	1,784	1,540	1,429	1,542	215	819	0	508	0
U. Wyoming	218	1,750	1,206	1,748	1,541	241	814	0	463	23
U. North Dakota	219	977	739	703	1,540	0	1,398	0	142	0
U.S. Naval Academy	220	2,654	2,096	1,499	1,515	0	746	0	769	0
Florida Atlantic U.	221	1,253	1,317	1,135	1,498	75	926	0	460	37
CUNY, Queens C.	222	1,141	1,041	1,475	1,488	0	1,135	0	353	0
U. Louisville	223	1,827	1,446	1,406	1,481	48	1,124	187	68	54
Villanova U.	224	1,141	1,658	1,412	1,467	449	390	0	628	0
Chapman U.	225	824	1,655	936	1,434	0	342	0	95	997
Barnard C.	226	928	805	1,246	1,411	675	736	0	0	0
U. South Carolina, Columbia	227	3,103	2,264	1,467	1,401	0	0	0	1,401	0
California Polytechnic State U., San Luis Obispo	228	1,124	1,202	932	1,347	0	385	0	962	0
Chicago State U.	229	842	ne	ne	1,339	0	688	0	651	0
South Dakota State U.	230	1,266	1,058	1,448	1,312	0	1,267	0	45	0
Wake Forest U.	231	1,741	1,499	1,470	1,310	0	436	0	874	0
Rowan U.	232	887	407	1,404	1,309	0	462	0	658	189
U. Texas Rio Grande Valley	233	1,865	2,215	1,083	1,299	331	0	51	917	0
U. Puerto Rico, Mayaguez	234	832	904	687	1,280	0	913	0	367	0
Stevens Institute of Technology	235	1,960	1,648	1,500	1,257	0	69	0	1,188	0
Loyola U., Chicago	236	913	610	716	1,253	0	903	0	350	0
Creighton U.	237	878 i	806 i	881 i	1,234 i	0 i	434 i	0 i	800 i	0 i

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
California State Polytechnic U., Pomona	238	673	1,393	1,105	1,229	977	225	0	27	0
U. Idaho	239	1,249	771	831	1,224	939	112	10	163	0
Illinois State U.	240	690	511	923	1,219	0	835	0	219	165
East Carolina U.	241	821	1,135	1,387	1,216	0	946	0	270	0
James Madison U.	242	653	531	919	1,195	149	554	0	223	269
Texas A&M U.-Corpus Christi	243	1,062	1,250	808	1,169	0	46	0	0	1,123
U. Washington, Bothell	244	215	156	681	1,152	0	0	0	1,152	0
Bowling Green State U.	245	1,238	1,331	1,402	1,145	0	843	61	241	0
U. of the Virgin Islands	246	0	908	1,069	1,130	0	0	0	0	1,130
California State U., Fullerton	247	897	1,003	1,058	1,108	562	138	83	325	0
SUNY, Geneseo	247	663	624	888	1,108	0	460	0	648	0
San Francisco State U.	249	1,223	1,206	1,218	1,106	173	413	95	425	0
South Carolina State U.	250	930	965	1,000	1,086	195	0	0	205	686
Marshall U.	251	462	99	155	1,068	0	1,065	0	3	0
Western Kentucky U.	252	1,013	1,072	717	1,058	202	462	0	394	0
Norfolk State U.	253	819	726	763	1,051	0	0	0	1,051	0
Wichita State U.	254	851	912	853	1,037	0	665	0	372	0
Southern Illinois U., Carbondale	255	1,020	1,270	1,081	1,027	0	721	0	306	0
California State U., Dominguez Hills	256	635	393	317	1,019	0	426	0	593	0
U. Memphis	257	1,039	1,100	1,309	1,018	84	625	21	0	288
U. Puerto Rico, Humacao	258	494	922	899	1,014	0	50	678	286	0
U. West Florida	259	373	1,049	1,014	1,012	0	0	0	0	1,012
Wright State U.	260	1,362	1,369	1,268	1,011	0	49	0	689	273
California State U., San Marcos	261	901	1,667	1,060	981	0	23	0	482	476
U. Missouri, Kansas City	262	1,407	1,102	1,104	969	191	223	0	428	127
CUNY, C. Staten Island	263	1,310	770	478	955	0	537	0	57	361
Central State U.	264	63	6	67	954	0	954	0	0	0
Florida Institute of Technology	265	1,268	2,109	2,448	951	163	48	0	490	250
Hope C.	266	824	648	1,276	947	0	618	0	329	0
Middle Tennessee State U.	267	142	412	1,769	945	53	744	0	148	0
Bucknell U.	268	247	604	592	929	102	633	0	194	0
Abilene Christian U.	269	ne	ne	712	905	0	0	0	905	0
Texas A&M U.-Commerce	270	667	746	834	891	0	150	0	741	0
Texas Southern U.	271	179	1,069	1,036	874	0	703	0	97	74

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
U. Northern Iowa	272	1,016	796	894	848	0	680	0	168	0
Montclair State U.	273	121	263	466	845	45	762	0	38	0
C. New Jersey	274	ne	354	351	840	0	110	0	730	0
Amherst C.	275	1,124	892	476	797	119	88	0	590	0
Winston-Salem State U.	276	320	496	871	786	0	586	0	100	100
U. New Orleans	277	1,052	782	1,171	771	0	393	0	378	0
Furman U.	278	558	358	523	768	0	767	0	1	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	279	723	844	838	741	0	348	0	393	0
Alabama A&M U.	280	705 i	481 i	596 i	739 i	0 i	334 i	0 i	405 i	0 i
Fort Lewis C.	281	0	435	786	733	0	32	701	0	0
Seton Hall U.	282	0	401	396	722	0	571	0	151	0
Clark U.	283	384	747	717	719	0	250	0	469	0
CUNY, New York City C. of Technology	284	315	200	319	710	0	187	0	523	0
Arkansas State U., Jonesboro	285	787	753	537	706	0	706	0	0	0
Christopher Newport U.	286	534	571	546	690	0	43	0	647	0
Colgate U.	287	278	248	259	686	7	500	0	179	0
U. Missouri, Saint Louis	288	1,896	1,229	1,007	683	21	606	0	56	0
Yeshiva U.	289	0	286	253	682	0	0	0	682	0
U. Dayton	290	1,175	849	820	680	0	148	220	312	0
U. North Carolina, Asheville	291	418	687	443	672	23	179	0	0	470
Idaho State U.	292	2,191	889	1,034	647	0	187	17	443	0
Fordham U.	293	107	294	251	642	0	642	0	0	0
Bryn Mawr C.	294	471	388	325	636	0	268	0	368	0
Northern Kentucky U.	295	448	514	401	633	0	532	0	101	0
Trinity U.	296	495	604	586	620	3	520	0	97	0
CUNY, John Jay C. of Criminal Justice	297	222	405	235	618	0	185	0	0	433
U. North Carolina, Wilmington	298	512	336	419	615	0	99	0	0	516
Occidental C.	299	177	340	522	583 i	0 i	512 i	0 i	71 i	0 i
California State U., East Bay	300	ne	444	543	580	135	248	0	197	0
Middlebury C.	301	410	388	644	547	65	286	0	196	0
Hofstra U.	302	38	4	2	538	0	538	0	0	0
Tougaloo C.	303	849	361	359 i	537 i	0 i	340 i	0 i	197 i	0 i
Santa Clara U.	304	394	445	454	535	0	397	0	138	0
U. Tulsa	305	202	114	125	531	0	243	0	288	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Pomona C.	306	250	490	263	522	43	305	0	174	0
Central Washington U.	307	182	255	213	517	0	20	0	497	0
Franklin and Marshall C.	308	279	350	415	508	49	318	0	141	0
Macalester C.	309	322	149	335	505	153	352	0	0	0
Ball State U.	310	578	315	449	497	0	458	0	39	0
Utah Valley U.	311	ne	ne	ne	494	0	178	0	316	0
Towson U.	312	564	187	300	493	63	184	0	246	0
Reed C.	313	81	150	159	492	0	312	0	180	0
Swarthmore C.	314	550	366	655	486	132	244	0	110	0
Grambling State U.	315	476	356	436	483	0	428	0	55	0
Bowie State U.	316	246	272	438	481	304	0	0	0	177
U. South Alabama	317	355	363	499	479	0	373	0	106	0
C. Charleston	318	787	573	847	474	255	29	0	190	0
Saint Joseph's U.	319	0	0	0	456	0	456	0	0	0
Tennessee Technological U.	320	1,042	914	672	446	0	128	0	318	0
SUNY, C. of Environmental Science and Forestry	321	52	136	303	443	127	263	0	0	53
U. San Diego	321	928	837	658	443	0	171	0	272	0
Duquesne U.	323	725	664	426	441	0	358	0	83	0
Rhode Island C.	323	120	356	320	441	0	0	0	0	441
U. Wisconsin-Eau Claire	325	504	456	641	438	0	351	87	0	0
U. Massachusetts, Dartmouth	326	216	275	485	437	0	363	0	74	0
U. North Florida	327	348	374	352	436	0	258	0	178	0
Appalachian State U.	328	211	172	171	434	0	43	0	391	0
California State U., Monterey Bay	329	65	0	57	431	0	431	0	0	0
St. John's U., New York	330	221	325	304	418	0	418	0	0	0
Spelman C.	331	595	713	523	410	0	391	0	19	0
Lafayette C.	332	333	299	231	407	0	201	0	206	0
U. of the Incarnate Word	332	372	176	298	407	0	228	0	179	0
Harvey Mudd C.	334	160	297	257	399	0	55	0	344	0
Cleveland State U.	335	488	716	313	394	0	225	0	169	0
Georgia Southern U.	336	164	607	580	393	47	324	0	22	0
Louisiana Tech U.	337	403	323	378	392	0	178	0	214	0
C. Wooster	338	251	126	271	391	0	331	0	60	0
Claremont McKenna C.	339	140	144	136	385	0	81	0	304	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Kennesaw State U.	340	721	558	427	381	0	220	0	161	0
SUNY, Oswego	341	266	182	228	377	0	377	0	0	0
Pacific U.	342	283	29	233	367	0	346	0	21	0
Southern Illinois U., Edwardsville	343	390	231	315	361	0	100	0	261	0
Texas Christian U.	344	341	388	321	356	0	136	0	220	0
Youngstown State U.	344	105	327	321	356	162	194	0	0	0
U. Colorado Anschutz Medical Campus ^e	346	na	na	344	353	0	0	0	353	0
Winthrop U.	347	256	231	316	350	0	350	0	0	0
U. Richmond	348	187	286	280	346	0	265	0	81	0
CUNY, Baruch C.	349	330	296	253	330	0	32	0	298	0
Bowdoin C.	350	177	184	252	328	0	202	0	106	20
U. Wisconsin-Oshkosh	351	225 i	224 i	222	327	0	316	0	11	0
Mount Holyoke C.	352	894	471	434	322	167	0	0	155	0
Skidmore C.	353	150	250	557	318	0	318	0	0	0
Davidson C.	354	232	157	245	317	0	107	0	210	0
St. Edward's U.	354	400	994	1,021	317	0	271	0	46	0
Smith C.	356	389	264	334	315	0	234	0	81	0
U. Alaska, Anchorage	356	16	154	1,010	315	179	94	0	42	0
U. Minnesota, Duluth	356	498	303	337	315	0	163	0	152	0
U. Colorado Colorado Springs	359	68	69	131	314	0	149	0	112	53
Indiana U. Pennsylvania	360	128	268	255	313	0	132	0	181	0
Montana Technological U.	361	54	97	133	309	0	309	0	0	0
Augustana U.	362	301	ne	457	306	0	141	0	165	0
U. Arkansas, Pine Bluff	363	352	418	895	296	0	296	0	0	0
U. Arkansas, Little Rock	364	616	828	590	284	0	271	0	13	0
Kenyon C.	365	292	194	ne	279	0	0	0	279	0
U. Central Arkansas	366	576	490	375	273	0	141	0	132	0
Williams C.	366	263	253 i	268 i	273 i	30 i	154 i	0 i	89 i	0 i
U. Hawaii, Hilo	368	128	214	64	270	0	111	0	159	0
Southeastern Louisiana U.	369	35	179	145	263	0	145	0	118	0
West Chester U. Pennsylvania	370	84	73	135	252	33	17	0	202	0
Grand Valley State U.	371	246	350	172	248	0	247	0	1	0
Calvin U.	372	388	245 i	245 i	246	43	203	0	0	0
Carleton C.	373	210	248	230	245	11	157	0	77	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Murray State U.	374	328	155	141	240	0	205	0	35	0
Southern Connecticut State U.	375	246	579	333	232	219	0	0	13	0
Connecticut C.	376	384	113	97	229	0	229	0	0	0
West Texas A&M U.	377	75	166	169	218	0	218	0	0	0
California State U., Sacramento	378	199	196	130	213	0	63	0	150	0
Colorado C.	379	14	15	4	211	0	178	0	33	0
Drake U.	379	118	ne	200	211	0	0	0	211	0
Ithaca C.	381	ne	301	246	205	28	135	0	42	0
U. Central Oklahoma	382	657	651 i	683 i	200 i	0 i	111 i	0 i	89 i	0 i
Colby C.	383	297	299	184	197	19	147	0	31	0
Hobart and William Smith Colleges	384	186	132	104	195	0	6	0	179	10
U. Louisiana, Lafayette	385	336	208	3,392	194	68	63	0	63	0
Whitman C.	385	347	241	ne	194	0	191	0	3	0
Lewis and Clark C.	387	153	494	110	193	0	127	0	66	0
East Tennessee State U.	388	249	315	134	192	168	0	0	24	0
Sam Houston State U.	389	420	414	298	189	0	77	0	112	0
Augusta U.	390	0	0	0	187	0	187	0	0	0
Southern U. and A&M C., Baton Rouge	391	646	466	292	186	0	118	0	68	0
Texas A&M International U.	391	0	38	101	186	0	66	77	43	0
New Mexico Highlands U.	393	ne	541	568 i	184 i	0 i	102 i	0 i	82 i	0 i
SUNY, C. Brockport	394	6	41	54	179	70	30	0	79	0
U.S. Military Academy	395	35	814	338	178	0	23	0	155	0
Eastern Michigan U.	396	185	126	98	173	61	25	87	0	0
Long Island U.	397	171	51	123	172	0	96	0	76	0
Florida Gulf Coast U.	398	116	344	106	166	0	166	0	0	0
Fayetteville State U.	399	200	260	147	165	0	0	0	0	165
Purdue U., Northwest	400	111	168	102	160	0	160	0	0	0
Canisius C.	401	191	ne	173	159	0	0	0	0	159
Missouri State U.	401	336	380	258	159	71	0	0	88	0
Wellesley C.	403	1,109	251	286	157	0	157	0	0	0
California State U., Chico	404	166	150	166	155	0	51	0	104	0
Dillard U.	404	122	662	252	155	0	0	0	155	0
CUNY, York C.	406	862	510	186	152	0	152	0	0	0
U. of the Pacific	406	422	307	223	152	29	123	0	0	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
U. Maryland Center for Environmental Science	408	80	174	256	141	0	67	0	74	0
Manhattan C.	409	55	71	112	140	0	140	0	0	0
Lawrence Technological U.	410	0	6	48	132	0	0	0	132	0
U. Guam	411	0	0	86	131	131	0	0	0	0
U. Nebraska, Kearney	411	248	142	130	131	0	74	0	57	0
Bates C.	413	340	318	227	127	78	49	0	0	0
Seattle U.	414	50	58	79	126	0	0	0	126	0
U. Louisiana, Monroe	415	67	55	10	125	0	125	0	0	0
U. New Haven	416	300	142	216	120	0	0	120	0	0
Eastern Washington U.	417	152	66	62	118	0	0	0	118	0
Indiana State U.	418	155	160	86	115	0	11	0	104	0
Coastal Carolina U.	419	0	0	60	111	0	0	0	111	0
Union C., Schenectady	420	522	222	122	107	29	56	0	22	0
Butler U.	421	ne	ne	ne	105	0	105	0	0	0
California State U., Bakersfield	421	313	29	159	105	0	105	0	0	0
Clafin U.	423	508	258	129	102	0	75	0	27	0
U. San Francisco	423	0	0	84	102	102	0	0	0	0
California State U., Stanislaus	425	0	0	60	101	0	101	0	0	0
New York Institute of Technology	425	0	0	3	101	0	0	0	101	0
Loyola Marymount U.	427	132	140	104	99	0	99	0	0	0
Monmouth U.	427	0	0	15	99	0	0	0	99	0
U. Nebraska, Omaha	427	130	0	47	99	0	0	0	99	0
Black Hills State U.	430	371	91	103	95	0	0	0	95	0
U. Wisconsin-Stevens Point	431	73 i	85	14	87	0	86	0	1	0
U. Houston-Clear Lake	432	476	377	208	86	0	0	0	0	86
Trinity C., Hartford	433	92	5	86	85	0	85	0	0	0
U. of Mary Washington	434	48	54	75	84	0	56	0	28	0
Western Illinois U.	434	36	60	63	84	0	47	0	37	0
Fort Valley State U.	436	104	72	76	83	0	83	0	0	0
Citadel Military C. South Carolina	437	ne	0	7	82	0	9	0	73	0
U. Wisconsin-Green Bay	438	66 i	72 i	66 i	80 i	0 i	36 i	0 i	44 i	0 i
Virginia State U.	438	0	0	0	80	0	80	0	0	0
Pennsylvania State U., Behrend	440	33	31	138	78	0	32	11	35	0
California State U., Channel Islands	441	54	0	73	77	0	77	0	0	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
Sul Ross State U.	442	0	0	0	76	0	76	0	0	0
U. Wisconsin-La Crosse	443	113	205	323	74	0	1	0	73	0
Central Connecticut State U.	444	78	60	41	64	0	64	0	0	0
Austin Peay State U.	445	207	13	50	63	0	0	0	0	63
Vassar C.	446	168	160	138	61	0	61	0	0	0
Texas A&M U.-Kingsville	447	129	108	87	60	0	60	0	0	0
U. Puget Sound	447	ne	174	ne	60	0	60	0	0	0
Gallaudet U.	449	22	0	92	59	0	0	0	59	0
U. Puerto Rico, Cayey	449	140	185	127	59	0	2	0	57	0
Purdue U., Fort Wayne	451	101	123	82	56	0	56	0	0	0
Willamette U.	451	194	66	83	56	0	0	0	0	56
Virginia Military Institute	453	ne	ne	ne	55	0	55	0	0	0
Savannah State U.	454	63	50	34	53	0	53	0	0	0
U. of St. Thomas (MN)	455	61	90	70	52	0	52	0	0	0
Albion C.	456	180	272	289	46	0	29	0	17	0
Langston U.	456	29	109	26	46	0	0	0	0	46
U. Wisconsin-Platteville	456	36	36	37	46	0	26	0	20	0
Suffolk U.	459	ne	97	69	45	0	45	0	0	0
Roger Williams U.	460	139	98	0	44	0	14	0	30	0
Grinnell C.	461	44	410	124	43	36	7	0	0	0
California Lutheran U.	462	36	59	ne	42	0	42	0	0	0
Hamilton C.	462	12	3	8	42	0	33	0	9	0
Salisbury U.	464	335	21	148	40	0	40	0	0	0
Pace U.	465	47	0	0	38	0	31	0	0	7
U. Ana G. Mendez, Gurabo	466	29	25	29	33	0	33	0	0	0
California State Polytechnic U., Humboldt	467	48	76	7	32	0	0	0	32	0
Framingham State U.	468	ne	169	177	31	0	31	0	0	0
Lamar U.	469	101	20	49	30	0	0	0	30	0
Minnesota State U., Mankato	470	94	2	9	29	18	11	0	0	0
Sonoma State U.	471	ne	123	209	28	0	28	0	0	0
Pittsburg State U.	472	30	22	24	27	0	27	0	0	0
SUNY, C. Plattsburgh	473	259	110	107	26	0	13	0	13	0
U. Alaska, Southeast	474	0	30	47	25	25	0	0	0	0
Mercyhurst U.	475	143	104	64	24	0	0	0	24	0

TABLE 49

Federally financed higher education R&D expenditures in the physical sciences, ranked by all FY 2022 physical sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All physical sciences	Astronomy and astrophysics	Chemistry	Materials science	Physics	Physical sciences nec
U. Virginia's C. Wise	476	ne	ne	18	23	0	23	0	0	0
U. Michigan, Dearborn	477	107	26	6	22	0	0	0	0	22
Alfred U.	478	13	7	5	16	16	0	0	0	0
U. North Georgia	479	52	0	2	15	2	13	0	0	0
U. Northern Colorado	479	20	19	83	15	0	3	0	12	0
U. Illinois, Springfield	481	12	12	15	14	0	14	0	0	0
Rutgers, State U. New Jersey, Camden	482	0	0	0	13	0	13	0	0	0
C. of Saint Benedict	483	21 i	20 i	10 i	11 i	0 i	7 i	1 i	3 i	0 i
U. of Health Sciences and Pharmacy in St. Louis	484	ne	0	0	9	0	0	0	9	0
Western Carolina U.	484	172	118	0	9	9	0	0	0	0
U. South Carolina, Aiken	486	0	8	4	8	0	8	0	0	0
Pennsylvania State U., Harrisburg	487	5	0	0	7	0	7	0	0	0
U. Houston-Downtown	487	0	0	88	7	0	0	0	0	7
Azusa Pacific U.	489	28	12	9	6	0	6	0	0	0
Johnson C. Smith U.	490	66	300	4 i	4	0	4	0	0	0
Texas Woman's U.	490	0	49	7	4	0	0	0	0	4
Kettering U.	492	116	305	14	2	0	0	0	2	0
Kean U.	493	ne	0	0	1	0	1	0	0	0
All other surveyed institutions	-	8,513	6,754	3,019	0	0	0	0	0	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

nec = not elsewhere classified.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$270,143 thousand in federally financed R&D expenditures in physical sciences in FY 2022.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 50

Total and federally financed higher education R&D expenditures in chemistry, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
All institutions	-	1,965,378	1,928,978	1,996,074	2,126,741	1,182,601	1,167,364	1,235,822	1,322,328
U. California, San Francisco	1	65,572	68,745	68,492	70,707	38,487	41,413	37,311	42,570
U. Houston	2	34,730	40,835	43,502	50,262	2,298	2,981	3,476	5,173
U. California, Berkeley	3	30,743	36,326	41,402	49,390	15,560	17,414	21,494	28,472
Northwestern U.	4	40,651	35,130	36,484	40,697	25,466	22,766	25,004	22,536
Harvard U.	5	34,683	33,675	37,078	37,601	20,722	19,149	22,149	20,608
California Institute of Technology	6	42,498	40,638	37,366	36,223	28,469	26,664	22,573	21,863
U. Wisconsin-Madison	7	26,369	31,441	33,896	36,183	17,502	19,249	22,131	23,999
Massachusetts Institute of Technology	8	31,179	32,375	37,408	35,819	18,377	19,258	22,959	22,375
U. California, San Diego	9	32,067	27,429	27,339	33,116	21,472	16,704	21,719	27,997
U. Michigan, Ann Arbor	10	29,977	31,361	33,006	32,418	19,168	18,164	19,179	20,011
U. North Carolina, Chapel Hill	11	24,143	22,546	23,102	31,221	16,280	15,780	16,230	22,796
U. Chicago	12	23,963	24,631	24,034	31,158	19,011	20,747	20,993	26,860
Purdue U., West Lafayette	13	22,763	22,953	26,272	30,984	11,830	12,344	14,122	16,510
U. Illinois, Urbana-Champaign	14	35,411	34,642	35,360	30,955	21,926	21,367	20,905	18,398
Cornell U.	15	26,542	27,423	27,978	30,250	19,679	21,016	19,666	22,442
Stanford U.	16	25,306	25,478	27,849	29,681	22,382	22,802	25,419	26,211
U. Notre Dame	17	28,342	29,216	30,859	29,610	17,970	18,246	19,720	18,107
Florida International U.	18	17,688	18,412	22,439	28,705	6,744	7,623	12,085	16,674
Princeton U.	19	22,317	25,095	29,163	28,604	11,066	13,611	13,984	13,432
U. Washington, Seattle	20	22,113	24,008	23,508	25,922	19,183	21,802	21,211	23,761
Texas A&M U., College Station and Health Science Center	21	24,066	24,507	23,182	25,693	7,711	8,781	8,988	11,112
Johns Hopkins U. ^a	22	24,180	25,946	24,078	25,673	22,678	24,462	22,938	22,992
U. Pennsylvania	23	20,121	21,246	23,124	25,511	12,441	13,345	15,115	17,415
Emory U.	24	20,261	19,048	20,841	24,772	13,433	12,627	15,197	14,402
Yale U.	25	23,452	21,309	21,464	23,376	14,079	10,663	12,340	16,105
U. Florida	26	12,084	10,773	12,984	22,973	6,722	6,769	7,415	9,638
Georgia Institute of Technology	27	25,802	22,323	22,555	22,397	17,973	15,235	15,425	15,762
U. California, Los Angeles	28	23,711	19,842	24,038	21,680	16,506	14,839	16,178	17,355
U. California, Irvine	29	22,169	21,988	18,924	21,156	16,378	15,738	12,676	15,716
U. Texas, Austin	30	15,321	16,470	18,584	20,895	7,452	8,614	7,913	8,569
Florida State U.	31	20,708	23,225	20,686	20,685	11,289	12,958	11,182	11,140
U. Minnesota, Twin Cities	32	21,094	22,061	20,661	19,860	14,112	14,721	15,439	13,989
U. Delaware	33	9,124	8,146	9,404	19,259	7,107	6,472	7,732	9,278
Indiana U., Bloomington	34	19,039	19,430	17,500	18,778	12,357	11,206	10,812	11,725

TABLE 50

Total and federally financed higher education R&D expenditures in chemistry, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Columbia U. in the City of New York	35	11,749	11,983	16,528	17,944	8,577	9,611	14,024	14,752
Boston U.	36	13,712	14,230	17,695	17,896	8,686	9,210	11,004	10,572
Vanderbilt U. and Vanderbilt U. Medical Center	37	12,997	13,559	16,401	17,734	5,760	7,056	9,126	9,796
U. California, Davis	38	13,683	13,607	14,017	15,996	9,783	9,896	9,954	12,099
Michigan State U.	39	10,320	11,806	12,568	15,669	5,939	7,154	8,166	8,837
Pennsylvania State U., University Park and Hershey Medical Center	40	18,532	17,696	16,923	15,578	11,300	10,176	13,617	13,319
U. Pittsburgh, Pittsburgh	41	17,222	16,058	15,518	15,366	11,279	10,893	9,776	10,128
Iowa State U.	42	12,549	12,374	11,950	14,302	7,048	8,055	9,139	11,116
Virginia Polytechnic Institute and State U.	43	16,338	14,242	14,389	13,810	9,475	8,991	8,643	9,174
Wayne State U.	44	12,192	10,163	12,458	13,568	7,853	6,426	8,355	9,016
Rice U.	45	16,975	16,251	15,332	13,489	6,163	5,909	7,002	6,657
Ohio State U.	46	18,579	28,972	15,540	13,382	14,421	23,166	12,211	6,883
SUNY, Stony Brook U.	47	12,052	12,396	13,646	13,302	9,174	9,555	10,030	10,457
New York U.	48	14,483	13,753	14,156	13,103	12,540	11,679	12,181	10,225
Washington State U.	49	10,768	8,512	13,478	12,821	7,003	5,986	7,937	5,918
Duke U.	50	10,711	9,809	11,536	12,672	8,841	8,398	10,066	11,135
North Carolina State U.	51	10,796	11,821	16,108	12,623	5,718	6,645	7,120	7,854
Louisiana State U., Baton Rouge	52	8,558	8,252	10,020	12,606	4,312	3,955	5,423	4,636
U. Colorado Boulder	53	9,650	9,041	9,383	12,345	6,877	6,537	7,132	9,696
U. Virginia, Charlottesville	54	11,511	11,980	12,853	12,214	6,674	6,608	8,676	7,895
Washington U., Saint Louis	55	14,244	12,722	11,696	12,044	9,548	8,606	8,809	8,850
U. Southern Mississippi	56	13,266	11,328	12,382	11,978	9,050	8,520	11,026	11,271
U. Kansas	57	5,932	4,499	11,480	11,717	4,395	3,664	9,348	9,108
U. Southern California	58	14,258	14,232	12,687	11,475	7,884	7,570	6,787	7,494
Dartmouth C. and Dartmouth Hitchcock Medical Center	59	8,125	9,198	12,008	11,434	2,471	3,074	3,880	4,388
U. California, Santa Cruz	60	10,719	10,478	10,689	11,059	7,835	7,886	7,556	8,006
U. Nebraska, Lincoln	61	9,916	11,631	10,659	10,884	6,911	6,237	6,867	7,271
U. California, Riverside	62	9,249	9,260	9,556	10,604	7,019	7,396	8,133	9,452
U. Oklahoma, Norman and Health Science Center	63	11,836	12,342	10,051	10,525	9,760	8,392	5,844	6,981
Carnegie Mellon U.	64	8,868	9,207	8,696	10,492	3,818	4,095	3,985	5,091
U. Illinois, Chicago	65	8,664	7,868	9,326	10,467	5,362	4,659	6,060	6,233
Arizona State U.	66	14,026	13,030	11,762	10,253	5,870	5,739	5,232	4,492
SUNY, Binghamton U.	67	10,839	11,900	10,445	10,066	4,990	5,324	3,922	4,076
Colorado State U., Fort Collins	68	10,311	8,042	8,806	9,951	7,684	5,324	6,716	7,643
U. Arizona	69	13,060	14,511	15,246	9,869	7,735	8,089	7,395	6,142

TABLE 50

Total and federally financed higher education R&D expenditures in chemistry, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Northeastern U.	70	7,067	7,636	8,833	9,761	4,258	4,811	6,872	7,517
U. Utah	71	40,326 ⁱ	18,018 ⁱ	19,435 ⁱ	9,434	24,189	11,546	12,874	9,002
U. Massachusetts, Amherst	72	19,452	14,992	10,139	9,387	8,431	10,044	6,635	6,492
SUNY, U. Buffalo	73	7,311	7,461	10,122	9,376	4,716	4,783	5,756	6,337
Boston C.	74	7,188	7,492	8,543	8,931	5,597	5,627	6,600	7,144
Montana State U., Bozeman	75	7,838	8,796	13,389	8,821	5,448	5,606	9,290	5,469
U. Akron	76	9,571	8,576	6,703	8,686	3,992	4,238	4,026	4,811
Georgia State U.	77	8,366	9,304	9,032	8,645	5,085	6,834	5,193	4,929
U. Tennessee, Knoxville ^b	78	7,780	6,816	6,532	8,643	3,649	3,170	2,699	4,331
Texas Tech U.	79	7,368	7,136	7,686	8,441	2,760	2,780	2,622	2,315
U. California, Santa Barbara	80	17,290	9,166	8,346	8,424	10,287	6,268	6,502	5,850
U. Maryland ^c	81	9,888	10,389	9,419	8,290	7,246	6,777	6,858	5,326
Tufts U.	82	5,517	10,325	7,178	8,074	645	4,517	6,470	7,192
U. Texas, San Antonio	83	6,843	6,980	7,037	8,005	1,732	1,685	2,248	3,062
Rutgers, State U. New Jersey, New Brunswick	84	7,258	6,321	5,579	7,903	2,680	2,557	3,276	3,264
Temple U.	85	7,522	9,606	9,251	7,756	5,636	5,786	5,501	4,372
Rensselaer Polytechnic Institute	86	6,393	5,704	6,355	7,599	2,391	3,033	2,793	3,057
Baylor U.	87	3,877	3,921	5,111	7,587	785	945	1,464	2,103
Xavier U. Louisiana	88	5,878	7,186	8,440	7,491	5,796	7,077	8,325	7,426
Auburn U., Auburn	89	6,440	7,222	5,463	7,242	1,833	1,737	1,645	2,214
U. Cincinnati	90	5,968	5,796	5,987	7,085	2,241	2,005	2,173	3,145
U. Georgia	91	10,042	8,005	8,057	6,900	5,325	3,628	4,109	2,971
North Dakota State U.	92	3,713	3,106	3,801	6,880	1,889	1,349	2,245	5,516
Brandeis U.	93	2,287	4,239	4,505	6,801	1,819	1,679	2,257	4,076
U. Rochester	94	5,111	5,309	5,705	6,758	4,115	4,136	4,519	5,306
U. Oregon	95	5,867	4,910	6,477	6,752	3,621	3,937	4,686	5,429
U. Texas, El Paso	96	6,519	4,620	6,291	6,399	3,736	3,233	2,978	3,402
U. Iowa	97	4,659	5,415	5,342	6,339	3,607	3,681	4,065	4,215
U. Texas, Dallas	98	4,093	5,614	6,253	6,100	2,499	3,148	3,247	3,448
U. Missouri, Columbia	99	4,266	5,730	5,501	6,050	4,142	5,168	4,640	4,739
Brown U.	100	5,250	5,201	5,495	6,019	3,932	3,416	3,552	3,763
U. South Florida ^d	101	8,838	6,507	5,647	5,933	2,686	2,520	2,365	2,369
U. North Texas, Denton	102	4,069	5,586	5,451	5,788	1,143	1,107	1,596	2,139
U. Kentucky	103	5,236	4,802	5,598	5,609	4,073	3,669	4,627	4,657
CUNY, City C.	104	6,308	5,164	4,978	5,494	4,502	3,803	3,808	4,496

TABLE 50

Total and federally financed higher education R&D expenditures in chemistry, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Connecticut	105	4,713	5,868	4,998	5,492	3,005	3,515	3,316	4,189
U. Massachusetts, Lowell	106	4,105	4,475	5,555	5,369	469	1,064	1,387	1,527
U. Arkansas, Fayetteville	107	6,084	5,478	4,668	5,361	2,548	2,160	2,301	2,586
Howard U.	108	4,558	4,546	5,000	5,348	3,989	3,769	4,150	4,288
Jackson State U.	109	7,573	8,452	7,071	5,322	7,017	7,991	6,614	5,101
U. Nevada, Reno	110	4,373	3,903	3,935	5,281	2,004	1,534	2,370	3,227
West Virginia U.	111	5,632	4,868	4,509	5,184	3,616	3,040	2,965	3,118
San Diego State U.	112	4,203	4,075	4,386	5,180	2,655	2,297	2,214	3,490
Mississippi State U.	113	6,348	6,041	4,790	5,159	1,206	1,111	1,175	1,419
California State U., Los Angeles	114	5,640	4,602	4,770	5,055	4,197	3,633	3,691	4,219
U. Texas, Arlington	115	5,243	5,740	5,631	5,006	1,432	1,807	2,204	2,520
Syracuse U.	116	4,454	4,276	4,742	4,893	1,316	1,370	2,036	2,465
U. Central Florida	117	4,148	4,614	4,027	4,808	1,635	1,876	1,645	2,548
Rockefeller U.	118	4,970	4,720	5,530	4,727	2,287	2,299	3,233	1,998
U. Alabama, Tuscaloosa	119	3,315	2,937	3,853	4,643	2,435	2,148	2,222	2,995
Oakland U.	120	2,281	2,521	2,777	4,597	720	966	854	1,206
Oklahoma State U., Stillwater	121	4,804	5,180	4,341	4,588	1,971	1,513	1,179	1,536
SUNY, U. Albany	122	5,655	5,292	4,814	4,520	3,266	3,384	3,054	2,388
Clemson U.	123	5,030	4,327	3,121	4,367	2,985	2,337	1,749	3,076
U. Puerto Rico, Rio Piedras	124	2,488	2,776	2,967	3,842	2,217	2,360	2,650	3,384
U. Toledo	125	2,703	1,935	3,069	3,783	1,713	1,367	2,290	3,024
Georgetown U.	126	2,958	3,318	2,694	3,761	2,194	2,661	2,185	2,764
U. California, Merced	127	3,653	2,630	2,919	3,759	2,250	2,041	1,588	2,372
Colorado School of Mines	128	2,839	2,691	3,333	3,703	2,379	2,198	3,022	3,293
New Jersey Institute of Technology	129	3,128	3,891	2,846	3,690	553	939	836	757
Brigham Young U., Provo	130	3,158	3,234	4,020	3,638	2,617	2,457	2,487	2,836
U. Nevada, Las Vegas	131	4,910	5,140	5,482	3,601	2,991	2,828	2,582	2,869
Saint Louis U.	132	2,179	1,786	2,120	3,510	877	1,235	1,226	2,081
CUNY, Hunter C.	133	3,027	3,003	4,412	3,392	1,810	2,579	3,842	3,002
Kansas State U.	134	5,535	4,374	3,977	3,367	3,641	2,739	2,466	1,834
U. New Mexico	135	2,112	2,704	2,174	3,250	1,716	2,243	1,882	2,785
Old Dominion U.	136	2,838	2,297	2,470	3,241	1,654	1,091	1,123	1,609
U. Mississippi	137	6,256	3,994	3,235	3,218	3,890	2,225	2,022	1,945
California State U., Long Beach	138	3,453	2,474	2,188	3,191	3,327	2,328	2,059	2,420
Utah State U.	139	3,158	3,101	2,926	3,098	1,710	1,636	1,974	2,204

TABLE 50

Total and federally financed higher education R&D expenditures in chemistry, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Case Western Reserve U.	140	3,471	2,955	2,785	2,992	2,735	2,291	2,191	2,285
U. North Dakota	141	2,720	2,212	2,152	2,972	881	610	672	1,398
U. Vermont	142	2,438	2,415	3,250	2,951	1,279	1,327	1,445	1,649
U. Maryland, Baltimore County	143	1,714	1,558	2,106	2,934	824	1,233	1,723	1,987
U. Louisville	144	1,824	1,820	1,813	2,879	1,116	1,012	1,049	1,124
Clarkson U.	145	2,300	1,829	945	2,867	504	523	283	1,188
Northern Illinois U.	146	1,283	1,536	1,579	2,789	969	1,146	1,208	1,879
U. North Carolina, Greensboro	147	2,612	2,028	2,216	2,756	2,301	1,494	1,647	2,207
George Washington U.	148	3,526	3,976	3,281	2,735	2,256	1,769	1,974	1,968
Lehigh U.	149	2,201	2,147	2,065	2,679	1,312	1,298	1,432	1,702
U. Denver	150	2,818	3,314	2,647	2,670	2,110	2,435	1,834	1,891
Missouri U. of Science and Technology	151	2,446	2,315	2,605	2,572	1,462	1,833	1,769	2,243
CUNY, Advanced Science Research Center	152	478	1,376	1,617	2,563	430	922	1,160	1,760
Oregon State U.	153	3,811	2,788	2,652	2,537	3,214	2,560	2,444	1,595
Southern Methodist U.	154	1,691	1,469	2,094	2,480	798	921	1,154	1,216
U. Massachusetts, Dartmouth	155	1,314	1,601	1,934	2,435	152	200	444	363
Clark Atlanta U.	156	804	978	1,139	2,432	680	760	951	2,195
Rutgers, State U. New Jersey, Newark	157	1,869	1,976	2,296	2,414	1,412	1,175	1,704	1,979
Michigan Technological U.	158	1,507	1,925	1,867	2,382	288	642	695	1,095
U. South Dakota	159	2,741	2,499	2,022	2,380	756	992	726	623
Tulane U.	160	3,121	2,734	2,227	2,304	1,939	1,372	1,293	1,444
Miami U.	161	847	1,185	3,798	2,267	14	292	2,543	1,815
U. Rhode Island	162	2,020	2,081	1,957	2,246	1,682	1,726	1,344	1,629
Texas State U.	163	1,296	1,141	1,791	2,217	870	976	1,647	2,038
U. Montana, Missoula	164	3,363	2,782	2,554	2,183	2,351	1,783	1,655	1,560
New Mexico State U.	165	5,931	5,296	2,141	2,181	4,397	3,699	612	783
Portland State U.	166	2,667	1,782	1,646	2,161	2,222	1,467	1,145	1,524
Kent State U.	167	2,087	2,091	2,387	2,155	591	968	1,102	1,065
Marquette U.	168	2,202	2,361	3,476	2,127	1,222	1,424	2,323	1,324
San Jose State U.	169	1,541	1,787	2,097	2,077	1,310	1,420	1,303	1,146
California State U., Fresno	170	703	748	1,129	2,043	482	616	1,014	1,557
U. Memphis	170	1,579	2,143	2,347	2,043	809	667	733	625
California State U., San Bernardino	172	23	4	1,706	1,994	0	3	1,579	1,781
U. New Hampshire	173	1,625	1,428	1,808	1,966	740	818	655	825
CUNY, Lehman C.	174	1,495	1,698	1,567	1,954	1,495	1,612	1,551	1,928

TABLE 50

Total and federally financed higher education R&D expenditures in chemistry, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Massachusetts, Boston	175	1,983	2,370	2,695	1,923	1,193	1,706	1,796	1,343
U. Wyoming	176	933	554	625	1,894	915	554	614	814
Mercer U.	177	2,106	1,951	1,786	1,830	0	0	0	0
CUNY, Brooklyn C.	178	760	i 789	1,127	1,798	699	i 727	1,120	1,613
Western Washington U.	179	898	1,037	1,218	1,790	544	743	846	1,196
Bowling Green State U.	180	1,769	1,477	1,561	1,758	1,005	741	753	843
Indiana U.-Purdue U., Indianapolis	181	1,832	1,783	2,262	1,744	816	919	1,385	1,086
Virginia Commonwealth U.	182	2,383	2,250	2,017	1,734	1,442	1,293	1,356	1,370
Villanova U.	183	1,565	2,371	1,884	1,719	272	834	540	390
Middle Tennessee State U.	184	386	345	2,632	1,713	124	185	1,670	744
Prairie View A&M U.	185	299	421	623	1,708	182	392	622	1,708
San Francisco State U.	185	1,418	1,735	i 1,871	1,708	171	405	i 409	413
CUNY, Queens C.	187	893	955	1,289	1,698	846	870	1,197	1,135
Georgia Southern U.	188	444	1,476	1,951	1,691	118	534	523	324
Montclair State U.	189	245	507	689	1,645	106	224	437	762
Florida Atlantic U.	190	2,184	1,772	1,668	1,628	968	836	694	926
U. Miami	191	1,102	1,437	1,318	1,605	604	1,011	1,129	1,355
Kean U.	192	ne	39	0	1,576	ne	0	0	1
South Dakota State U.	193	2,898	1,941	1,857	1,562	1,213	1,026	1,365	1,267
U. Alabama, Birmingham	194	2,177	1,018	2,415	1,560	1,880	925	1,082	933
U. Wisconsin-Milwaukee	195	2,749	2,173	1,679	1,556	1,275	750	497	572
Fordham U.	196	333	747	1,067	1,532	107	294	251	642
Worcester Polytechnic Institute	197	1,722	1,422	1,613	1,523	1,481	1,021	1,035	925
U. Hawaii, Manoa	198	1,876	2,401	1,722	1,488	1,366	1,732	1,204	1,205
U. New Orleans	199	1,387	1,595	1,903	1,468	447	231	702	393
Southern Illinois U., Carbondale	200	901	1,318	1,441	1,393	592	934	824	721
Boise State U.	201	1,182	857	745	1,379	619	509	440	209
Wesleyan U.	202	960	776	827	1,377	395	487	525	819
Hope C.	203	520	615	1,238	1,338	226	204	752	618
U. North Carolina, Charlotte	204	1,585	1,261	1,610	1,335	1,207	977	1,267	1,057
U. Louisiana, Lafayette	205	162	1,256	1,029	1,327	160	158	82	63
Loyola U., Chicago	206	1,250	711	860	1,316	913	610	570	903
Saint Joseph's U.	207	208	128	105	1,280	0	0	0	456
East Carolina U.	208	1,586	1,354	1,193	1,266	688	830	986	946
Furman U.	209	981	913	1,105	1,252	556	357	522	767

TABLE 50

Total and federally financed higher education R&D expenditures in chemistry, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
George Mason U.	210	621	304	1,062	1,211	79	125	447	746
Marshall U.	211	679	1,019	273	1,198	462	99	143	1,065
U. Colorado Denver ^e	212	na	na	1,157	1,187	na	na	1,144	1,090
South Dakota School of Mines and Technology	213	504	732	681	1,174	485	691	639	834
U. Puerto Rico, Mayaguez	214	792	980	616	1,166	545	612	394	913
Trinity U.	215	1,175	1,012	1,026	1,126	452	543	471	520
Wichita State U.	216	715	945	1,095	1,125	656	756	593	665
Louisiana Tech U.	217	732	711	1,051	1,094	86	71	146	178
Ohio U.	218	492	1,399	1,432	1,055	219	582	1,073	647
U. Alabama, Huntsville	219	1,466	1,300	1,165	1,023	262	218	219	165
U. Missouri, Saint Louis	220	2,412	1,764	2,255	991	1,741	1,131	951	606
William & Mary	221	766	501	494	990	497	379	366	655
American U.	222	1,864	847	790	983	190	196	160	324
Ball State U.	223	963	801	667	970	576	315	428	458
Central State U.	224	63	6	16	954	63	6	16	954
James Madison U.	225	1,123	766	941	938	481	168	397	554
Kennesaw State U.	226	980	731	880	935	621	393	267	220
Illinois State U.	227	702	338	891	920	545	291	709	835
Morgan State U.	227	0	177	389	920	0	175	385	920
U. South Carolina, Columbia	229	1,394	724	2,682	899	1	0	0	0
Western Kentucky U.	230	1,287	1,360	772	888	664	783	401	462
Arkansas State U., Jonesboro	231	922	840	647	885	740	720	523	706
U. Maryland Center for Environmental Science	232	234	416	413	875	25	102	195	67
Barnard C.	233	606	341	495	846	561	276	432	736
U.S. Naval Academy	234	1,324	927	603	839	1,284	903	602	746
Grambling State U.	235	493	468	756	826	424	349	386	428
Creighton U.	236	734	626	670	816	302	277	310	434
U. Maine	237	2,171	1,160	1,157	762	810	220	128	41
U. Texas Rio Grande Valley	237	1,272	1,669	617	762	602	1,061	63	0
North Carolina A&T State U.	239	626	522	248	757	306	114	248	727
U. Northern Iowa	240	1,271	825	841	747	1,002	710	777	680
Amherst C.	241	1,062	782	580	743	21	289	35	88
Colgate U.	242	570	432	426	738	225	226	161	500
Texas Christian U.	243	306	377	168	732	106	213	167	136
Texas Southern U.	244	144	927	801	725	114	881	801	703

TABLE 50

Total and federally financed higher education R&D expenditures in chemistry, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Idaho	245	1,068	613	683	719	501	51	127	112
Northern Kentucky U.	246	369	431	497	707	258	251	353	532
Bucknell U.	247	265	494	456	706	80	298	292	633
Winston-Salem State U.	248	193	437	673	704	193	410	590	586
Chicago State U.	249	842	ne	ne	690	842	ne	ne	688
Wake Forest U.	250	1,370	575	1,010	685	397	396	534	436
U. North Florida	251	345	485	446	684	248	286	252	258
Connecticut C.	252	902	350	271	678	384	113	97	229
Hampton U.	253	0	0	0	657	0	0	0	657
CUNY, C. Staten Island	254	880	311	282	637	651	228	239	537
Central Michigan U.	255	257	31	52	630	68	0	0	314
Cleveland State U.	256	733	761	549	628	211	307	122	225
California Polytechnic State U., San Luis Obispo	257	385	456	460	622	198	265	274	385
Long Island U.	258	20	675	845	616	0	0	69	96
Grinnell C.	259	626	625	341	611	22	352	5	7
Drexel U.	260	1,130	902	735	610	308	305	310	284
California State U., Dominguez Hills	261	781	531	418	608	603	390	317	426
Hofstra U.	262	6	4	6	606	0	0	0	538
Occidental C.	262	170	181	535	606	151	140	458	512
Rowan U.	264	614	388	676	605	422	213	613	462
Bryn Mawr C.	265	422	758	657	599	136	130	68	268
Seton Hall U.	266	0	401	396	592	0	401	396	571
Western Michigan U. and Homer Stryker M.D. School of Medicine	267	650	649	611	588	258	335	396	348
Reed C.	268	222	757	738	587	49	109	116	312
Texas Woman's U.	269	0	0	0	581	0	0	0	0
Franklin and Marshall C.	270	533	406	444	564	187	254	292	318
Clark U.	271	539	594	317	543	204	161	74	250
California State U., Northridge	272	366	666	406	514	315	612	274	283
U. Arkansas, Pine Bluff	273	448	540	1,175	513	352	418	895	296
Duquesne U.	274	2,446	2,204	569	506	669	621	392	358
St. John's U., New York	275	251	329	344	497	221	325	304	418
Utah Valley U.	276	ne	ne	ne	495	ne	ne	ne	178
Rochester Institute of Technology	277	651	522	492	494	395	382	246	304
SUNY, Geneseo	278	59	102	269	483	0	82	256	460
North Carolina Central U.	279	120	149	656	481	75	54	634	345

TABLE 50

Total and federally financed higher education R&D expenditures in chemistry, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Nebraska, Kearney	280	493	281	630	468	146	118	130	74
Morehouse C.	281	116	177	298	463	116	177	298	463
Towson U.	282	218	246	420	455	110	120	168	184
U. South Alabama	283	471	407	589	454	355	338	464	373
California State U., Monterey Bay	284	65	0	57	446	65	0	57	431
Winthrop U.	285	287	150	161	444	100	64	95	350
Williams C.	286	165	156	152	442	0	0	0	154
California State U., Fullerton	287	213	166	159	440	7	0	6	138
Whitman C.	287	392	246	ne	440	301	164	ne	191
SUNY, Oswego	289	385	291	282	439	266	182	228	377
Skidmore C.	290	256	314	647	433	115	209	523	318
Pacific U.	291	189	71	268	431	114	0	207	346
U. Richmond	291	318	318	363	431	88	188	202	265
Santa Clara U.	293	337	342	368	426	313	315	310	397
Swarthmore C.	294	552	231	475	423	222	155	331	244
C. Wooster	295	389	160	311	422	151	91	229	331
Macalester C.	296	296	206	179	421	272	118	163	352
California State U., Channel Islands	297	57	39	301	406	54	0	73	77
Pomona C.	298	304	446	112	403	132	212	64	305
U. Wisconsin-Eau Claire	299	463	457	577	400	388	355	500	351
Haverford C.	300	315	394	357	393	201	187	273	286
Spelman C.	301	595	713	523	391	595	713	523	391
St. Edward's U.	301	272	750	865	391	250	735	850	271
Southeastern Louisiana U.	303	81	213	140	388	28	135	107	145
Chapman U.	304	584	370	247	385	334	362	157	342
Loyola Marymount U.	305	369	231	218	383	132	140	104	99
Naval Postgraduate School	306	104	348	422	379	104	234	422	379
U. Tulsa	307	317	261	196	376	21	43	22	243
Montana Technological U.	308	62	123	216	375	54	97	133	309
U. San Diego	308	727	578	498	375	575	341	256	171
Appalachian State U.	310	108	226	124	372	78	74	5	43
Tarleton State U.	311	227	257	357	365	0	0	0	0
California State U., East Bay	312	ne	296	359	364	ne	164	242	248
Idaho State U.	312	583	564	959	364	505	429	628	187
U. Wisconsin-Oshkosh	314	259	261	262	360	225	224	222	316

TABLE 50

Total and federally financed higher education R&D expenditures in chemistry, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Illinois Institute of Technology	315	293	319	334	353	281	296	257	188
Eastern Michigan U.	316	176	410	97	348	0	1	28	25
Alabama A&M U.	317	447 i	305 i	314 i	344 i	325 i	222 i	269 i	334 i
U. Dayton	317	8	8	194	344	0	0	108	148
Smith C.	319	242	217	246	342	151	167	97	234
Tougaloo C.	320	849	280	278 i	340 i	849	280	278 i	340 i
U. Missouri, Kansas City	321	347	591	353	333	182	273	236	223
Delaware State U.	322	590	240 i	276	328	457	240 i	276	0
California State U., Bakersfield	323	94	91	447	322	0	29	159	105
Texas A&M U.-Kingsville	324	148	163	180	319	83	108	87	60
U. of St. Thomas (MN)	324	338	94	126	319	42	49	58	52
SUNY, C. of Environmental Science and Forestry	326	243	94	155	309 i	42	47	115	263
Grand Valley State U.	327	243	364	244	305	219	341	172	247
U. Central Oklahoma	328	140	139 i	146 i	302 i	140	139 i	146 i	111 i
U. of the Incarnate Word	329	224	226	238	299	178	176	238	228
Calvin U.	330	325	252 i	275 i	298 i	265	202 i	202 i	203
U. South Carolina, Aiken	331	0	51	6	292	0	8	4	8
California State Polytechnic U., Pomona	332	17	110	205	289	17	108	160	225
Colby C.	333	330	302	180	287	260	225	143	147
Northern Arizona U.	333	1,387	799	780	287	271	324	270	99
Middlebury C.	335	245	253	201	286	213	238	201	286
U. Minnesota, Duluth	336	828	717	374	285	302	286	162	163
U. Arkansas, Little Rock	337	896	1,088	685	279	614	828	590	271
Salisbury U.	338	521	169	392	278	335	21	148	40
Rutgers, State U. New Jersey, Camden	339	74	322	39	269	0	0	0	13
Augusta U.	340	48	29	172	266	0	0	0	187
Davidson C.	340	282	154	162	266	225	112	138	107
U. Central Arkansas	342	476	505	298	265	440	414	184	141
Colorado C.	343	83	38	107	263	0	0	0	178
Texas A&M U.-Corpus Christi	344	645	181	268	261	414	107	59	46
U. Alaska, Anchorage	345	15	59	984	260	15	59	898	94
West Texas A&M U.	346	121	211	200	258	71	166	169	218
Lafayette C.	347	176	156	75	248	151	94	37	201
U. Louisiana, Monroe	348	75	55	17	247	67	55	10	125
Murray State U.	349	337	165	195	240	328	155	141	205

TABLE 50

Total and federally financed higher education R&D expenditures in chemistry, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Framingham State U.	350	ne	247	258 i	238 i	ne	169	177 i	31 i
Indiana U. Pennsylvania	350	143	207	175	238	46	93	84	132
Bowdoin C.	352	79	77	177	236	71	43	158	202
Southern Connecticut State U.	353	98	118	38	219	0	0	0	0
Sul Ross State U.	353	0	0	0 i	219 i	0	0	0 i	76 i
U. Colorado Colorado Springs	353	0	0	57	219	0	0	57	149
Vassar C.	353	38	18	57	219	38	13	49	61
Florida Institute of Technology	357	448	469	466	218	180	154	204	48
U. North Carolina, Asheville	357	13	180	86	218	0	146	33	179
Wellesley C.	359	487	283	277	208	367	251	263	157
Florida Gulf Coast U.	360	22	257	197	207	0	204	106	166
Youngstown State U.	361	101	182	171	204	87	166	158	194
Purdue U., Northwest	362	115	207	110	202	111	168	102	160
Tennessee Technological U.	363	653	583	374	201	498	426	270	128
U. Wisconsin-La Crosse	364	249	228	144	194	69	54	0	1
CUNY, John Jay C. of Criminal Justice	365	158	220	165	191	158	167	165	185
CUNY, New York City C. of Technology	366	1	0	5	187	1	0	5	187
Carleton C.	367	382	488	244	183	114	142	110	157
Lewis and Clark C.	368	127	151	194	180	45	53	55	127
Texas A&M U.-Commerce	369	240	129	212	175	136	58	156	150
C. New Jersey	370	ne	54	184	169	ne	48	118	110
Sam Houston State U.	371	472	407	333	168	351	342	151	77
CUNY, York C.	372	448	331	61	167	437	329	61	152
Southern Illinois U., Edwardsville	373	502	911	849	165	306	231	193	100
Ithaca C.	374	ne	76	172	161	ne	70	101	135
Harvey Mudd C.	375	217	259	169	155	88	201	109	55
Texas A&M International U.	375	1	0	112	155	0	0	64	66
Butler U.	377	ne	ne	ne	154	ne	ne	ne	105
New Mexico Institute of Mining and Technology	378	450	287	167	149	450	287	167	102
U. West Florida	379	166	88	515	146	0	0	392	0
Trinity C., Hartford	380	154	46	112	143	92	5	86	85
Augustana U.	381	158	ne	159	141	153	ne	159	141
Manhattan C.	382	55	71	112	140	55	71	112	140
U. North Carolina, Wilmington	382	458	208	126	140	374	169	110	99
California State U., Sacramento	384	183	89	62	133	102	44	5	63

TABLE 50

Total and federally financed higher education R&D expenditures in chemistry, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Southern U. and A&M C., Baton Rouge	385	451	101	133	132	73	39	65	118
Stevens Institute of Technology	386	0	10	548	127	0	0	258	69
East Tennessee State U.	387	78 i	91 i	59 i	126 i	11	27	1	0
U. Wisconsin-Stevens Point	388	55 i	62	45	124	36 i	42	7	86
U. of the Pacific	389	257	144	91	123	257	144	91	123
U. Hawaii, Hilo	390	17	179	32	119	12	178	31	111
Fisk U.	391	0	0	160	116	0	0	158	116
Stephen F. Austin State U.	392	85	33	28	112	0	0	0	0
Azusa Pacific U.	393	98	137	129	111	0	12	9	6
California State U., Stanislaus	394	20	12	72	108	0	0	60	101
Union C., Schenectady	394	408	38	150	108	352	21	96	56
Seattle U.	396	84	86	2	105	0	0	0	0
Citadel Military C. South Carolina	397	ne	23	52	104	ne	0	0	9
New Mexico Highlands U.	397	ne	541	568 i	104 i	ne	541	568 i	102 i
Hobart and William Smith Colleges	399	92	30	31	102	17	0	0	6
Central Connecticut State U.	400	101	78	66	101	78	60	41	64
Albion C.	401	123	204	207 i	99 i	0	92	98 i	29 i
Hamilton C.	401	82	164	73	99	0	0	0	33
William Paterson U.	403	229	267	116	98	0	0	0	0
Tuskegee U.	404	131	134	134	97	131	134	134	97
Virginia Military Institute	405	ne	ne	ne	95	ne	ne	ne	55
Pace U.	406	152	138	226	93	0	0	0	31
Wright State U.	407	384	390	222	91	183	221	153	49
Saint John's U.	408	104 i	99 i	76 i	88 i	0 i	0 i	0 i	0 i
C. of Saint Benedict	409	137 i	130 i	75 i	87 i	21 i	20 i	6 i	7 i
Abilene Christian U.	410	ne	ne	0	85	ne	ne	0	0
U. Puget Sound	410	ne	156	ne	85	ne	124	ne	60
Fort Valley State U.	412	104	72	76	83	104	72	76	83
Claremont McKenna C.	413	144	85	56	81	140	85	56	81
Virginia State U.	414	0	0	0	80	0	0	0	80
West Chester U. Pennsylvania	415	262	255	162	79	62	35	56	17
Bates C.	416	209	211	238	78	166	185	190	49
U. of Mary Washington	416	32	57	68	78	32	49	50	56
U. Wisconsin-Green Bay	418	63 i	62 i	55 i	77 i	30 i	33 i	30 i	36 i
Clafin U.	419	501	208	104	75	501	208	104	75

TABLE 50

Total and federally financed higher education R&D expenditures in chemistry, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
California State Polytechnic U., Humboldt	420	48	39	64	74	0	0	0	0
U.S. Air Force Academy	420	330	0	552	74	330	0	552	54
Lamar U.	422	128	54	66	71	73	20	0	0
Pennsylvania State U., Behrend	423	76	22	61	70	17	16	26	32
Pepperdine U.	424	77	54	101	68	0	0	0	0
U. Alaska, Fairbanks	425	75	57	87	67	48	57	87	67
Missouri State U.	426	7	22	27	65	7	20	0	0
Sonoma State U.	427	ne	88	268	62	ne	8	188	28
Purdue U., Fort Wayne	428	101	123	82	61	101	123	82	56
Willamette U.	429	271	161	86	60	149	62	4	0
California State U., Chico	430	30	26	10	59	16	6	4	51
Coastal Carolina U.	431	0	0	20	55	0	0	0	0
U. San Francisco	431	55	45	56	55	0	0	0	0
C. Charleston	433	200	131	57	54	154	88	26	29
Savannah State U.	434	63	0	34	53	63	0	34	53
U. Wisconsin-Platteville	435	99 i	101 i	43 i	51 i	36 i	36 i	21 i	26 i
U. Puerto Rico, Humacao	436	157	200	81	50	104	192	71	50
Christopher Newport U.	437	102	63	26	48	64	53	20	43
Western Illinois U.	438	38	39	52	47	17	21	47	47
Suffolk U.	439	ne	97	69	45	ne	97	69	45
California Lutheran U.	440	81	95	ne	42	36	59	ne	42
Northern Michigan U.	440	24	9	7	42	0	0	0	0
Central Washington U.	442	51	197	256	41	12	152	186	20
U. Tennessee, Chattanooga	443	35	52	22	40	0	0	0	0
Fort Lewis C.	444	1	44	394	38	0	9	345	32
SUNY, C. Brockport	444	33	69	66	38	0	39	19	30
U. Houston-Downtown	446	77	72	139	35	0	0	65	0
U. Ana G. Mendez, Gurabo	447	1,007	362	142	33 i	29	25	29	33 i
CUNY, Baruch C.	448	0	21	0	32	0	21	0	32
Kenyon C.	448	34	9	ne	32	0	0	ne	0
U.S. Military Academy	450	0	419	150	30	0	419	150	23
U. Texas, Tyler	451	44	33	46	29	0	0	0	0
Pittsburg State U.	452	28	19	24	27	28	19	24	27
Elon U.	453	40	39	38	26	0	0	0	0
Indiana State U.	453	62	39	33	26	62	39	30	11

TABLE 50

Total and federally financed higher education R&D expenditures in chemistry, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Nebraska, Omaha	453	2	2	3	26	0	0	0	0
California State U., San Marcos	456	118	61	33	23	118	61	33	23
Mount Holyoke C.	456	210	114	28	23	183	111	18	0
U. Virginia's C. Wise	456	ne	ne	18	23	ne	ne	18	23
Lake Superior State U.	459	ne	ne	ne	21	ne	ne	ne	0
Minnesota State U., Mankato	459	51	48	17	21	18	0	0	11
Catholic U. of America	461	551	659	101	18	481	523	84	12
Roger Williams U.	462	15	3	2	17	0	0	0	14
U. Northern Colorado	463	71	53	82	15	0	0	61	3
Florida A&M U.	464	25	39	23	14	21	39	23	13
U. Illinois, Springfield	464	12	14	20	14	12	12	15	14
U. New England	464	23	20	17	14	0	0	0	0
DePaul U.	467	42	38	47	13	1	2	24	0
SUNY, C. Plattsburgh	467	7	0	72	13	0	0	66	13
U. North Georgia	467	64	0	0	13	52	0	0	13
Monmouth U.	470	18	19	29	11	0	0	0	0
Morehead State U.	471	0	0	0	10	0	0	0	0
Drake U.	472	13	ne	0	9	9	ne	0	0
U. New Haven	473	264	122	49	8	1	0	0	0
East Stroudsburg U. Pennsylvania	474	ne	ne	ne	7	ne	ne	ne	0
Pennsylvania State U., Harrisburg	474	0	0	0	7	0	0	0	7
U. Texas of the Permian Basin	476	ne	0	0	6	ne	0	0	0
St. Cloud State U.	477	1	3	4	5	0	0	0	0
Eastern Connecticut State U.	478	10	0	4	4	0	0	0	0
Florida Polytechnic U.	478	0	17	42	4	0	0	0	0
Johnson C. Smith U.	478	66	300	4 i	4	66	300	4 i	4
U. Hartford	478	0	0	0	4	0	0	0	0
St. Catherine U.	482	ne	ne	ne	3	ne	ne	ne	0
Marymount U.	483	ne	ne	0	2	ne	ne	0	0
U. Puerto Rico, Cayey	483	83	155	65	2	83	137	65	2
All other surveyed institutions	-	7,830	5,467	2,658	0	5,680	3,897	1,680	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

^a Johns Hopkins University includes the Applied Physics Laboratory (APL), with \$14,118 thousand imputed for total and \$12,413 thousand reported for federally financed R&D expenditures in chemistry in FY 2022. Total expenditures by field for Johns Hopkins University are flagged as imputed because APL was unable to distribute a portion of institutionally funded R&D by field.

^b The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^c The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 51

Total and federally financed higher education R&D expenditures in physics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
All institutions	-	2,327,059	2,435,368	2,463,514	2,669,076	1,657,808	1,735,971	1,767,295	1,941,833
Johns Hopkins U. ^a	1	183,818 i	232,583 i	223,991 i	234,921 i	176,299	222,997	215,073	225,387
Michigan State U.	2	140,832	142,473	154,887	167,776	89,321	92,899	113,913	124,233
U. Rochester	3	106,277	95,695	93,851	105,517	102,405	90,436	88,161	98,439
California Institute of Technology	4	84,599	106,237	100,714 i	100,726	72,782	92,720	78,185	80,750
U. Colorado Boulder	5	66,848	69,967	70,498	79,823	62,321	64,624	64,351	69,385
Massachusetts Institute of Technology	6	43,880	48,695	57,207	68,994	33,496	38,758	45,000	53,744
Harvard U.	7	43,696	49,146	59,910	66,873	25,671	29,457	31,258	37,997
U. California, San Diego	8	52,798	66,169	56,983	58,691	25,547	32,298	32,711	38,163
Cornell U.	9	50,551	48,658	53,686	51,692	39,904	37,180	43,263	40,260
U. Iowa	10	18,463	17,099	26,404	48,303	16,600	14,623	24,381	45,461
Stanford U.	11	49,051	48,826	47,667	48,088	35,992	32,816	32,299	33,960
U. Maryland ^b	12	47,394	46,013	42,274	45,925	34,664	29,752	31,173	29,928
Florida State U.	13	39,877	41,870	38,309	40,478	23,281	26,260	22,154	25,129
U. Illinois, Urbana-Champaign	14	24,104	27,506	33,961	38,628	19,128	20,032	22,415	27,787
Princeton U.	15	38,060	40,161	35,249	37,325	25,639	28,224	23,204	23,951
U. California, Berkeley	16	29,261	32,085	33,755	37,089	17,665	17,480	18,480	22,296
U. Central Florida	17	26,198	29,759	33,116	34,327	16,665	16,961	19,270	19,961
U. Wisconsin-Madison	18	27,643	24,984	26,135	33,045	19,614	17,822	18,846	24,029
U. California, Santa Barbara	19	16,998	23,427	26,695	32,704	8,294	13,661	16,106	19,648
U. California, Los Angeles	20	34,460	33,263	30,227	30,682	23,350	22,591	20,068	24,786
SUNY, Stony Brook U.	21	27,697	26,615	26,964	30,296	21,289	19,742	20,764	22,447
Yale U.	22	32,019	27,884	29,911	28,927	17,859	16,547	16,119	16,466
U. Michigan, Ann Arbor	23	24,752	23,596	27,204	26,384	14,747	13,625	16,183	16,485
Ohio State U.	24	22,458	21,007	19,719	25,431	17,794	17,224	16,003	18,054
U. Pennsylvania	25	23,806	21,371	20,728	24,454	15,939	14,450	14,568	17,013
U. Texas, Austin	26	23,553	26,463	23,011	23,264	13,519	18,638	14,953	15,478
Pennsylvania State U., University Park and Hershey Medical Center	27	26,674	26,281	20,314	21,573	18,349	16,969	17,473	17,343
U. Washington, Seattle	28	19,123	19,281	18,479	21,238	17,410	17,789	17,655	19,998
Columbia U. in the City of New York	29	11,102	12,331	17,403	21,038	8,586	9,642	15,103	16,037
U. Minnesota, Twin Cities	30	22,848	19,948	19,162	20,446	18,504	16,693	15,816	16,437
U. Chicago	31	12,617	12,688	15,752	19,896	10,463	10,586	13,574	16,277
Northwestern U.	32	17,918	15,418	19,296	19,886	10,063	8,508	8,746	10,229
U. Texas M. D. Anderson Cancer Center	33	19,017	19,060	17,572	19,651	7,922	8,114	8,179	8,306
Catholic U. of America	34	11,192	12,213	13,988	19,597	10,760	11,952	13,555	19,597

TABLE 51

Total and federally financed higher education R&D expenditures in physics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Texas A&M U., College Station and Health Science Center	35	21,835	17,848	16,238	19,252	12,329	9,751	10,514	11,657
Purdue U., West Lafayette	36	15,318	19,417	16,391	18,954	8,498	9,235	10,082	11,398
U. California, Irvine	37	18,441	18,770	19,684	18,914	11,538	10,987	11,775	13,063
U. Nebraska, Lincoln	38	15,908	13,795	15,300	18,237	11,136	9,346	8,578	11,693
U. Notre Dame	39	16,720	15,639	16,473	17,906	11,107	10,607	10,256	11,319
Louisiana State U., Baton Rouge	40	14,926	13,851	12,979	17,419	8,553	9,293	8,305	8,020
Boston U.	41	14,758	14,002	15,143	17,312	9,580	9,963	10,572	12,340
Northeastern U.	42	11,698	12,711	15,248	16,743	7,954	8,026	9,014	9,555
Iowa State U.	43	16,586	14,842	14,746	16,138	10,808	9,760	11,324	12,524
Rutgers, State U. New Jersey, New Brunswick	44	11,380	12,903	13,193	15,686	7,578	6,212	6,736	7,519
Rice U.	45	16,234	16,107	14,466	15,651	9,712	9,200	8,273	10,243
Arizona State U.	46	11,934	12,338	14,980	15,121	5,865	6,395	8,833	10,119
U. Florida	47	11,707	13,128	13,180	14,892	8,198	9,258	9,375	11,210
U. Tennessee, Knoxville ^c	48	17,897	14,423	14,277	14,496	13,025	8,951	9,105	9,575
Dartmouth C. and Dartmouth Hitchcock Medical Center	49	10,632	12,021	14,279	13,327	3,832	4,677	5,301	6,023
New York U.	50	11,615	12,945	12,261	13,288	7,180	6,927	7,483	7,688
U. Texas, Arlington	51	9,378	10,782	10,373	12,897	6,027	6,615	6,574	9,048
U. Massachusetts, Lowell	52	13,871	14,669	12,753	12,817	7,738	10,138	9,661	9,585
U. Delaware	53	5,499	5,429	4,523	11,981	4,630	4,452	3,576	4,788
Air Force Institute of Technology	54	8,478	7,796	15,999	11,934	4,457	4,973	8,037	8,136
U. Virginia, Charlottesville	55	11,930	12,224	10,671	11,632	8,914	10,220	8,967	9,731
Carnegie Mellon U.	56	9,879	11,458	11,111	11,547	5,753	6,254	6,000	6,575
Georgia Institute of Technology	57	12,427	11,892	11,359	11,461	7,871	7,182	6,788	7,055
Kansas State U.	58	8,878	8,209	8,759	11,342	6,186	6,007	6,616	8,099
Vanderbilt U. and Vanderbilt U. Medical Center	59	15,954	14,458	13,676	11,203	8,777	8,139	6,510	6,825
U. California, Davis	60	10,672	10,195	9,032	11,138	7,553	7,160	6,595	8,529
North Carolina State U.	61	11,957	11,615	12,217	11,091	7,674	7,012	7,912	7,960
Indiana U., Bloomington	62	10,702	12,816	11,417	11,070	7,561	9,644	8,075	7,332
U. Pittsburgh, Pittsburgh	63	9,772	8,507	8,706	11,050	6,844	6,176	5,927	8,499
U. Illinois, Chicago	64	5,792	7,884	8,392	11,030	4,579	5,874	6,815	9,219
Montana State U., Bozeman	65	7,183	9,194	9,940	10,957	4,393	5,188	7,261	8,315
Duke U.	66	10,465	12,587	10,595	10,609	9,595	10,780	9,760	9,763
U. North Carolina, Chapel Hill	67	8,412	10,472	10,003	10,374	6,000	8,065	7,344	7,468
Georgetown U.	68	3,921	5,833	7,444	9,852	2,939	4,763	6,119	7,318
Washington State U.	69	16,288	12,549	10,978	9,653	7,330	6,837	8,560	7,274

TABLE 51

Total and federally financed higher education R&D expenditures in physics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Syracuse U.	70	11,440	9,629	9,184	9,393	7,811	5,770	6,037	5,790
Brown U.	71	7,636	7,968	8,542	9,155	4,358	3,718	5,221	5,729
U. Houston	72	7,839	8,637	7,385	9,044	3,366	2,775	2,809	3,255
Auburn U., Auburn	73	6,710	7,842	9,147	8,907	4,225	5,012	4,549	4,791
U. Massachusetts, Amherst	74	7,403	8,927	7,995	8,782	4,709	4,976	5,267	5,750
U. Mississippi	75	8,361	7,658	7,568	8,566	5,816	5,768	5,690	5,710
U. Oklahoma, Norman and Health Science Center	76	3,526	6,397	6,446	8,205	2,731	3,054	2,907	4,237
Virginia Polytechnic Institute and State U.	77	7,909	7,831	7,913	7,798	4,538	4,788	5,196	5,300
U. California, Riverside	78	6,917	7,777	8,003	7,334	5,889	6,880	6,534	6,196
U. California, Santa Cruz	79	7,057	6,991	6,919	6,876	5,048	4,865	4,666	5,534
Texas Tech U.	80	6,641	7,419	7,553	6,739	1,656	1,215	1,141	1,391
CUNY, Advanced Science Research Center	81	1,640	2,778	4,490	6,640	1,252	2,096	3,559	5,277
Washington U., Saint Louis	82	5,476	5,060	5,680	6,504	4,827	4,606	5,255	6,119
Clemson U.	83	5,861	5,747	5,915	6,199	3,703	3,820	4,288	4,752
Temple U.	84	5,717	6,708	6,242	6,046	4,069	3,720	3,387	3,258
U. Toledo	85	4,115	4,645	6,700	6,033	2,724	3,237	4,768	5,259
U. Arizona	86	8,970	9,230	9,072	5,890	5,354	5,464	5,685	4,432
U. Connecticut	87	6,330	6,034	5,482	5,753	3,691	4,609	4,030	4,284
Abilene Christian U.	88	ne	ne	4,209	5,746	ne	ne	712	905
Brandeis U.	89	7,551	9,118	7,813	5,693	5,958	5,523	4,522	1,577
U. Maine	90	5,457	5,267	5,645	5,637	1,844	1,648	2,161	2,237
West Virginia U.	91	8,707	7,810	4,887	5,551	6,067	5,765	3,757	4,282
Colorado School of Mines	92	4,841	5,398	5,336	5,455	4,336	5,059	4,957	4,850
William & Mary	93	5,788	5,280	5,491	5,421	3,752	4,049	3,774	4,291
U. Arkansas, Fayetteville	94	3,370	4,313	3,443	5,378	1,765	2,292	2,070	3,723
Old Dominion U.	95	4,709	4,731	4,551	5,169	3,606	3,510	3,352	3,424
U. Nevada, Las Vegas	96	3,765	3,807	4,851	5,075	1,321	982	1,428	1,638
U. New Mexico	97	3,989	4,272	4,044	4,943	3,620	3,846	3,524	4,363
U. Texas, Dallas	98	2,216	5,219	4,550	4,911	1,749	2,914	2,588	2,928
Wayne State U.	99	4,317	3,654	4,254	4,872	2,614	2,469	3,071	3,356
Ohio U.	100	3,859	3,971	4,088	4,837	2,386	2,885	3,070	3,723
U. Maryland, Baltimore County	101	2,742	2,753	2,869	4,686	2,261	2,300	2,570	3,621
Rochester Institute of Technology	102	3,369	3,504	3,585	4,681	2,219	2,160	2,165	2,990
SUNY, Binghamton U.	103	3,930	6,624	4,123	4,570	1,121	2,318	1,619	1,153
North Carolina Central U.	104	1,881	2,878	2,601	4,495	1,881	2,834	2,356	4,251

TABLE 51

Total and federally financed higher education R&D expenditures in physics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Florida International U.	105	5,911	8,185	5,218	4,440	3,113	3,976	2,345	2,262
U. Miami	106	4,465	3,713	3,682	4,334	4,041	3,161	3,353	4,060
Georgia State U.	107	4,948	5,727	4,705	4,220	4,548	5,143	2,893	2,425
Rensselaer Polytechnic Institute	108	4,936	2,554	2,883	4,177	1,913	1,151	1,240	1,281
New Jersey Institute of Technology	109	4,090	4,366	4,153	4,166	1,511	1,542	1,640	1,575
CUNY, City C.	110	3,207	3,361	3,553	4,153	2,179	2,626	3,228	3,771
U. South Florida ^d	111	4,440	4,213	3,623	4,127	2,225	2,114	1,867	2,196
Mississippi State U.	112	4,710	3,475	3,675	4,123	2,424	1,138	1,022	1,396
U. Texas, San Antonio	112	3,774	4,254	4,510	4,123	2,463	3,017	3,090	2,485
George Washington U.	114	4,108	4,334	3,752	4,105	3,354	3,597	2,898	3,669
Oklahoma State U., Stillwater	115	3,654	4,604	4,483	4,097	1,164	1,357	1,461	1,843
U. Hawaii, Manoa	116	4,040	4,021	4,291	4,063	3,914	3,792	3,763	3,488
Oakland U.	117	2,343	2,300	2,819	3,850	933	886	1,208	1,316
Emory U.	118	2,882	3,433	4,835	3,804	2,262	2,729	2,984	2,719
Baylor U.	119	2,866	2,968	2,955	3,786	1,213	1,136	1,158	1,586
U. Nevada, Reno	120	3,942	4,235	2,947	3,720	2,118	2,590	2,399	2,602
U. Kansas	121	2,269	2,108	3,264	3,660	2,233	1,983	2,365	2,908
Hampton U.	122	4,044	3,142	3,409	3,625	4,044	3,142	3,409	3,625
U. Texas, El Paso	123	1,068	2,155	2,801	3,622	648	1,024	1,559	1,675
Colorado State U., Fort Collins	124	2,837	2,855	2,956	3,551	2,140	2,101	2,460	3,053
U. Kentucky	125	2,937	3,751	3,124	3,509	2,534	3,116	2,434	3,240
U. Oregon	126	7,523	7,248	3,462	3,502	4,467	4,826	2,937	2,556
Northern Illinois U.	127	4,823	4,024	3,875	3,431	3,311	2,567	2,460	2,833
American U.	128	3,303	3,867	3,614	3,368	2,732	3,205	2,976	2,754
Illinois Institute of Technology	129	2,772	2,476	3,110	3,352	2,453	2,125	2,613	2,884
Boston C.	130	2,384	1,814	3,320	3,271	1,809	1,471	1,997	2,327
U. Cincinnati	131	3,673	3,078	3,202	3,250	2,483	2,036	2,328	2,151
U. Missouri, Columbia	132	6,020	3,443	3,221	3,198	2,544	2,486	2,070	1,925
U. Alabama, Birmingham	133	2,419	2,491	2,339	3,152	2,140	2,214	2,093	2,462
Southern Methodist U.	134	1,900	2,378	2,504	3,127	1,701	1,934	2,266	2,436
U. New Hampshire	135	1,717	2,672	2,786	3,124	1,119	2,283	1,461	1,577
U. North Texas, Denton	136	3,517	3,689	3,205	2,974	1,445	1,222	1,099	995
U. Alabama, Huntsville	137	1,724	1,767	2,284	2,957	741	886	1,172	1,722
U. Georgia	138	1,053	2,701	2,499	2,900	722	792	516	789
Oregon State U.	139	1,204	1,310	1,564	2,856	1,112	1,304	1,554	2,831

TABLE 51

Total and federally financed higher education R&D expenditures in physics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
SUNY, U. Albany	140	2,156	2,427	1,977	2,779	279	533	609	596
Naval Postgraduate School	141	6,126	6,244	4,070	2,751	5,302	6,178	3,899	2,674
Tufts U.	142	234	1,621	1,872	2,686	216	1,587	1,798	2,509
U. Alabama, Tuscaloosa	143	2,437	3,530	4,005	2,683	2,287	2,568	2,558	2,529
Kent State U.	144	2,205	2,591	2,378	2,666	1,355	1,617	1,282	1,717
U. California, Merced	145	2,190	3,101	2,344	2,663	1,387	2,119	871	1,571
Delaware State U.	146	3,716	1,313	1,340	2,640	1,158	873	1,003	2,175
U. South Carolina, Columbia	147	2,203	3,777	3,050	2,613	1,774	2,264	1,467	1,401
SUNY, U. Buffalo	148	4,236	3,526	3,283	2,610	2,998	2,412	2,319	1,751
Brigham Young U., Provo	149	2,696	2,034	2,337	2,586	2,216	1,676	1,927	2,487
Lehigh U.	150	1,195	1,348	1,577	2,478	845	868	1,102	1,620
Tulane U.	151	3,327	2,986	2,791	2,275	1,594	1,971	1,748	1,647
Utah State U.	151	2,318	2,462	2,172	2,275	1,586	1,661	1,421	1,633
Michigan Technological U.	153	2,215	2,169	2,218	2,218	440	640	553	564
California Polytechnic State U., San Luis Obispo	154	2,783	2,494	1,757	2,142	926	937	658	962
U. North Carolina, Charlotte	155	2,804	2,742	1,757	2,010	1,770	1,901	1,310	1,517
Worcester Polytechnic Institute	156	3,269	1,351	2,239	1,964	525	582	1,136	944
Jackson State U.	157	1,586	1,451	1,160	1,955	1,446	1,314	1,011	1,687
Case Western Reserve U.	158	2,476	1,767	1,702	1,940	2,170	1,610	1,476	1,695
Florida A&M U.	159	3,463	1,371	1,323	1,891	3,337	1,327	1,321	1,861
U. Louisiana, Lafayette	160	460	1,283	3,442	1,826	22	44	2,011	63
U. Wisconsin-Milwaukee	161	8,327	6,526	3,324	1,813	6,609	4,260	1,985	1,153
New Mexico State U.	162	1,762	1,386	1,675	1,792	1,532	1,132	1,322	1,355
U. Denver	163	1,147	1,456	1,230	1,750	641	795	598	986
San Jose State U.	164	461	626	1,301	1,728	455	615	822	1,198
U. South Dakota	165	2,089	1,555	1,691	1,727	1,313	976	1,028	1,254
South Dakota School of Mines and Technology	166	1,098	693	1,143	1,709	1,098	693	865	1,471
Drexel U.	167	1,663	258	1,339	1,696	1,303	0	1,119	1,313
Rutgers, State U. New Jersey, Newark	168	109	408	371	1,685	32	261	316	927
New Mexico Institute of Mining and Technology	169	1,520	1,074	984	1,649	1,478	1,061	972	1,543
U. Puerto Rico, Rio Piedras	170	2,639	1,653	1,919	1,614	1,587	1,067	1,454	1,002
Texas Christian U.	171	149	299	173	1,612	0	175	154	220
California State U., Northridge	172	2,397	2,567	1,525	1,605	2,312	2,373	1,508	1,574
Central Michigan U.	173	2,527	2,366	1,651	1,558	2,168	1,943	1,627	1,537
Virginia Commonwealth U.	174	1,086	1,249	1,379	1,548	983	901	992	1,190

TABLE 51

Total and federally financed higher education R&D expenditures in physics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Embry-Riddle Aeronautical U.	175	724	1,787	2,244	1,508	490	902	873	512
CUNY, Hunter C.	176	1,625	1,194	1,015	1,446	1,186	973	954	1,189
San Diego State U.	177	1,422	1,561	1,594	1,420	507	440	517	644
Morgan State U.	178	34	234	385	1,394	30	218	374	1,305
Stevens Institute of Technology	179	2,045	1,824	1,518	1,376	1,960	1,648	1,242	1,188
North Carolina A&T State U.	180	1,263	1,116	910	1,296	1,211	1,049	877	1,269
Fisk U.	181	0	200	1,022	1,283	0	200	904	1,050
U. Texas Rio Grande Valley	182	285	595	807	1,280	283	594	683	917
Creighton U.	183	957 i	837 i	951 i	1,204 i	576 i	529 i	571 i	800 i
U. Vermont	184	793	2,441	1,104	1,199	646	1,383	616	653
Missouri U. of Science and Technology	185	1,017	3,792	1,873	1,162	620	2,758	883	595
U. Massachusetts, Boston	186	1,380	1,214	1,479	1,153	552	533	624	450
U. Washington, Bothell	187	256	156	681	1,152	215	156	681	1,152
U.S. Air Force Academy	188	2,603	2,714	1,846	1,150	2,603	2,714	1,796	1,110
San Francisco State U.	189	1,300	883 i	927	1,134	958	493 i	498	425
Idaho State U.	190	3,126	742	885	1,109	1,686	394	403	443
Wake Forest U.	191	1,680	1,366	1,080	1,087	1,344	1,103	936	874
Texas State U.	192	1,421	735	1,251	1,064	1,365	734	1,127	922
Florida Institute of Technology	193	650	1,364	2,513	1,051	428	1,193	1,887	490
Norfolk State U.	193	311	650	732	1,051	311	650	732	1,051
North Dakota State U.	195	764	732	970	1,023	288	197	514	441
Louisiana Tech U.	196	1,034	980	1,055	1,016	317	252	232	214
Indiana U.-Purdue U., Indianapolis	197	418	507	486	990	370	455	486	912
Rockefeller U.	198	2,607	2,464	1,305	966	350	583	348	187
Wesleyan U.	199	1,366	1,130	909	909	1,037	791	597	508
U. California, San Francisco	200	370	917	1,325	904	4	0	1	0
James Madison U.	201	126	298	516	893	126	182	266	223
Wright State U.	202	1,373	1,250	975	888	1,179	1,014	847	689
U. San Diego	203	573	918	879	862	353	496	402	272
California State U., Dominguez Hills	204	40	25	0	856	32	3	0	593
Texas A&M U.-Commerce	205	643	810	783	853	531	688	678	741
U. Massachusetts, Dartmouth	206	441	499	716	843	64	75	41	74
U.S. Naval Academy	207	1,468	1,217	1,001	840	1,370	1,193	897	769
California State Polytechnic U., Humboldt	208	115	144	14	825	48	76	7	32
Christopher Newport U.	209	656	766	705	803	470	518	526	647

TABLE 51

Total and federally financed higher education R&D expenditures in physics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Villanova U.	210	436	520	492	799	239	306	273	628
Howard U.	211	719	762	720	777	559	612	583	665
C. New Jersey	212	ne	312	239	754	ne	306	233	730
SUNY, Geneseo	213	843	683	928	751	663	542	632	648
Amherst C.	214	1,312	705	570	746	1,103	603	434	590
Clark U.	215	350	1,054	1,069	734	180	586	643	469
California State U., Los Angeles	216	745	639	395	721	720	622	394	691
U. New Orleans	217	757	803	749	713	605	551	469	378
U. Colorado Denver ^e	218	na	na	417	708	na	na	417	708
Rowan U.	219	576	276	752	689	465	194	695	658
Yeshiva U.	220	0	286	253	682	0	286	253	682
George Mason U.	221	445	842	646	671	311	700	466	434
U. North Dakota	222	887	1,123	812	669	96	129	31	142
Bryn Mawr C.	223	635	462	462	655	335	55	257	368
Chicago State U.	224	0	ne	ne	651	0	ne	ne	651
Western Michigan U. and Homer Stryker M.D. School of Medicine	225	571	660	537	639	465	509	442	393
Northern Arizona U.	226	538	941	858	633	212	352	373	369
Clarkson U.	227	198	388	1,005	629	148	244	139	157
U. Missouri, Kansas City	228	1,368	894	897	624	1,019	726	667	428
Appalachian State U.	229	87	115	320	611	73	98	166	391
Western Kentucky U.	230	553	425	433	600	349	289	316	394
Harvey Mudd C.	231	309	284	362	589	72	96	148	344
Wichita State U.	232	229	0	0	578	195	0	0	372
U. Puerto Rico, Humacao	233	695	0	419	574	390	0	245	286
CUNY, Queens C.	234	553	458	423	568	295	171	278	353
U. Colorado Anschutz Medical Campus ^e	235	na	na	391	566	na	na	344	353
Florida Atlantic U.	236	560	991	849	561	285	481	404	460
CUNY, New York City C. of Technology	237	347	212	326	540	314	200	314	523
Hope C.	238	614	560	615	534	598	444	524	329
California State U., Fullerton	239	392	481	448	530	315	396	316	325
Central Washington U.	240	178	109	29	500	170	103	27	497
California State U., San Marcos	241	225	841	339	482	225	841	336	482
East Carolina U.	242	591	814	621	474	133	305	401	270
Tennessee Technological U.	243	635	594	504	471	544	488	402	318
U. Wyoming	244	892	679	549	467	835	652	511	463

TABLE 51

Total and federally financed higher education R&D expenditures in physics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
West Chester U. Pennsylvania	245	149	98	238	454	0	0	55	202
U. North Florida	246	179	197	162	450	100	88	100	178
Miami U.	247	199	142	142	434	153	116	95	263
Southern Illinois U., Carbondale	248	378	327	537	432	269	243	257	306
Georgia Southern U.	249	190	120	415	421	34	47	32	22
California State U., Fresno	250	341	283	178	418	341	252	178	345
Colgate U.	251	133	147	389	417	34	19	82	179
Alabama A&M U.	252	485 i	331 i	367 i	414 i	380 i	259 i	327 i	405 i
U. Puerto Rico, Mayaguez	252	380	367	386	414	287	292	293	367
Marquette U.	254	315	320	427	412	83	225	291	296
U. Memphis	255	578	791	770	404	230	353	341	0
Cleveland State U.	256	639	786	427	402	277	409	191	169
California State U., East Bay	257	ne	584	539	396	ne	221	301	197
U. Idaho	257	326	245	246	396	188	160	160	163
Prairie View A&M U.	259	783	932	692	388	225	97	185	130
Loyola U., Chicago	260	36	52	166	375	0	0	146	350
Middle Tennessee State U.	261	13	0	292	349	0	0	56	148
Bowling Green State U.	262	593	849	784	348	233	590	649	241
Boise State U.	263	256	202	131	342	214	94	79	263
U. Tulsa	263	268	163	207	342	181	71	103	288
Kenyon C.	265	410	291	ne	330	292	194	ne	279
Utah Valley U.	266	ne	ne	ne	320	ne	ne	ne	316
U. Dayton	267	539	438	511	312	525	428	507	312
CUNY, Baruch C.	268	375	276	256	306	330	275	253	298
Towson U.	268	446	191	278	306	401	50	115	246
Claremont McKenna C.	270	0	59	59	304	0	59	59	304
U. Louisville	271	291	426	702	297	105	57	81	68
U. Montana, Missoula	272	244	260	231	283	117	77	117	125
Morehouse C.	273	213	216	146	277	213	216	146	277
Reed C.	274	401	129	128 i	273 i	32	41	43 i	180 i
California State U., Sacramento	275	161	207	176	270	97	152	125	150
U. Central Oklahoma	275	561	557 i	583 i	270 i	517	512 i	537 i	89 i
U. Alaska, Fairbanks	277	0	0	0	263	0	0	0	6
Davidson C.	278	70	45	107	261	7	45	107	210
Southern Illinois U., Edwardsville	278	84	0	525	261	84	0	122	261

TABLE 51

Total and federally financed higher education R&D expenditures in physics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed											
		2019	2020	2021	2022	2019	2020	2021	2022								
Grambling State U.	280	129	65	238	257	i	52	7	50	55	i						
Portland State U.	281	195	418	317	249		85	344	303	238							
Lafayette C.	282	183	227	211	235		182	205	194	206							
Bucknell U.	283	167	87	i	85		230	167	87	i	85	194					
Pomona C.	284	40	103		167		229	0	0	139	174						
Haverford C.	285	91	i	147	i	87	i	224	i	37	49	51	178				
Southern Connecticut State U.	285	92		13		91		224		53	0	0	13				
Illinois State U.	287	184		229		280		222		145	220	214	219				
Indiana U. Pennsylvania	288	126		218		189		218		82	175	171	181				
Southeastern Louisiana U.	288	25		113		107		218		7	44	38	118				
Drake U.	290	117		ne		221		211		109	ne	200	211				
C. Charleston	291	103		135		223		209		49	72	118	190				
Texas Southern U.	292	67		277		199		208		65	188	95	97				
U. Minnesota, Duluth	292	237		123		250		208		196	17	175	152				
Franklin and Marshall C.	294	122		78		156		206		54	48	96	141				
Seattle U.	294	73		79		84		206		50	58	79	126				
South Carolina State U.	296	175		182	i	189	i	205	i	175	182	i	189	i	205	i	
CUNY, Brooklyn C.	297	187	i	193		198		200		113	i	118	177	166			
U. Central Arkansas	297	149		80		255		200		136		76	176	132			
Tougaloo C.	299	0		81		81	i	197	i	0		81	81	i	197	i	
Middlebury C.	300	114		19		276		196		104		0	276	196			
Swarthmore C.	301	246		353		236		190		199		139	162	110			
Clark Atlanta U.	302	461		671		477		188		455		662	456	184			
Hobart and William Smith Colleges	302	122		95		116		188		120		82	99	179			
Williams C.	304	329		315	i	323	i	186	i	189		182	i	193	i	89	i
U. Colorado Colorado Springs	305	203		145		185		185		54		22	25	112			
St. Edward's U.	306	164		55		52		180		150		55	52	46			
U. of the Incarnate Word	307	0		0		60		179		0		0	60	179			
U. Northern Iowa	308	18		86		125		174		14		86	117	168			
Northern Kentucky U.	309	242		270		159		168		174		203	33	101			
U. Hawaii, Hilo	310	103		36		34		166		103		36	33	159			
Augustana U.	311	200		ne		298		165		148		ne	298	165			
Santa Clara U.	312	86		145		148		163		81		130	144	138			
Kennesaw State U.	313	189		288		253		161		100		165	160	161			
Winston-Salem State U.	314	0		86		0		160		0		86	0	100			

TABLE 51

Total and federally financed higher education R&D expenditures in physics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Bates C.	315	282	155	175	159	141	94	37	0
U. Nebraska, Kearney	316	65	17	16	157	8	9	0	57
Mount Holyoke C.	317	0	22	364	156	0	0	342	155
Dillard U.	318	606	959	205	155	122	646	205	155
U.S. Military Academy	318	35	269	144	155	35	269	144	155
Coastal Carolina U.	320	0	0	68	154	0	0	60	111
U. Nebraska, Omaha	320	167	58	73	154	130	0	47	99
Long Island U.	322	178	109	151	151	171	51	54	76
Seton Hall U.	322	0	0	0	151	0	0	0	151
Lawrence Technological U.	324	0	6	54	143	0	6	48	132
Trinity U.	324	194	218	139	143	43	61	115	97
Sam Houston State U.	326	78	74	170	140	69	72	147	112
Tarleton State U.	327	0	0	0	138	0	0	0	0
Chapman U.	328	55	81	88	135	0	71	86	95
Occidental C.	329	23	103	111	129	23	70	64	71
C. Wooster	330	179	75	103	127	100	35	42	60
Duquesne U.	331	135	122	46	123	56	43	34	83
Missouri State U.	331	296	305	208	123	278	289	184	88
Montclair State U.	333	0	43	19	121	0	0	0	38
Eastern Washington U.	334	34	66	63	118	34	66	62	118
Saint Joseph's U.	335	300	66	32	117	0	0	0	0
U. South Alabama	336	0	26	37	107	0	25	35	106
Bowdoin C.	337	250	131	79	106	89	125	78	106
California State U., Chico	338	156	150	162	105	150	144	162	104
U. Wisconsin-La Crosse	338	49	188	252	105	44	151	243	73
Indiana State U.	340	93	121	56	104	93	121	56	104
Smith C.	341	173	102	220	102	160	95	212	81
U. Rhode Island	341	95	100	20	102	85	79	20	86
Union C., Schenectady	341	201	110	6	102	170	81	6	22
Black Hills State U.	344	363	116	94	101	331	91	94	95
New York Institute of Technology	344	0	0	3	101	0	0	3	101
Monmouth U.	346	0	0	15	99	0	0	15	99
Ball State U.	347	22	9	65	98	2	0	21	39
Ithaca C.	347	ne	22	47	98	ne	0	13	42
CUNY, C. Staten Island	349	777	542	242	96	659	542	239	57

TABLE 51

Total and federally financed higher education R&D expenditures in physics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
SUNY, C. Brockport	349	15	5	11	96	6	2	11	79
Mercer U.	351	83	87	92	95	0	0	0	0
Carleton C.	352	219	84	250	93	2	84	101	77
U. Richmond	353	132	112	91	88	99	98	78	81
Xavier U. Louisiana	354	0	0	0	87	0	0	0	78
New Mexico Highlands U.	355	ne	0	0 i	83 i	ne	0	0 i	82 i
Citadel Military C. South Carolina	356	ne	0	24	80	ne	0	7	73
U. Wisconsin-Green Bay	357	64 i	63 i	57 i	79 i	36 i	39 i	36 i	44 i
U. Maryland Center for Environmental Science	358	55	72	61	74	55	72	61	74
Saint Louis U.	359	205	156	11	69	67	67	11	7
Southern U. and A&M C., Baton Rouge	360	716	634	450	68	573	427	227	68
Lewis and Clark C.	361	141	598	55	66	108	441	55	66
Azusa Pacific U.	362	81	68	78	65	28	0	0	0
Furman U.	363	2	12	9	61	2	1	1	1
Gallaudet U.	364	0	0	92	60	0	0	92	59
U. Puerto Rico, Cayey	365	57	48	62	59	57	48	62	57
U. Northern Colorado	366	19	50	24	57	0	0	0	12
U. Missouri, Saint Louis	367	17	3	39	56	14	0	28	56
California State U., San Bernardino	368	5	0	80	55	0	0	62	46
Colorado C.	369	19	37	47	53	14	15	4	33
Lamar U.	369	24	26	49	53	0	0	49	30
Murray State U.	369	21	20	6	53	0	0	0	35
East Tennessee State U.	372	171 i	227 i	49 i	49 i	140	188	36	24
Salisbury U.	373	13	43	48	48	0	0	0	0
South Dakota State U.	373	53	33	86	48	53	32	83	45
U. Wisconsin-Platteville	375	0 i	0 i	39 i	47 i	0 i	0 i	16 i	20 i
Grinnell C.	376	364	58	231	46	0	0	0	0
Whitman C.	376	55	104	ne	46	40	77	ne	3
Texas A&M International U.	378	3	38	37	43	0	38	37	43
U. Alaska, Anchorage	379	0	0	32	42	0	0	32	42
Albion C.	380	69	84	86 i	40 i	50	50	53 i	17 i
Colby C.	381	67	89	65	39	37	74	41	31
U. of Mary Washington	381	16	5	32	39	16	5	25	28
Saint John's U.	383	35 i	33 i	32 i	37 i	0 i	0 i	0 i	0 i
Western Illinois U.	383	19	39	16	37	19	39	16	37

TABLE 51

Total and federally financed higher education R&D expenditures in physics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
C. of Saint Benedict	385	39 i	37 i	32 i	36 i	0 i	0 i	3 i	3 i
Pacific U.	385	223	41	21	36	169	21	16	21
Pennsylvania State U., Behrend	387	75	22	17	35	16	15	17	35
Eastern Michigan U.	388	40	114	13	34	24	31	9	0
Roger Williams U.	389	0	0	0	30	0	0	0	30
St. Catherine U.	389	ne	ne	ne	30	ne	ne	ne	0
Kettering U.	391	62	285	24	29	27	241	14	2
Rutgers, State U. New Jersey, Camden	392	6	32	2	28	0	0	0	0
California State Polytechnic U., Pomona	393	0	89	40	27	0	89	40	27
Clafin U.	393	7	50	25	27	7	50	25	27
Mercyhurst U.	393	148 i	108 i	68 i	27	143 i	104 i	64 i	24
Austin Peay State U.	396	47	13	50	26	36	13	50	0
CUNY, John Jay C. of Criminal Justice	396	0	238	0	26	0	238	0	0
Grand Valley State U.	396	33	10	3	26	27	9	0	1
Marshall U.	396	5	11	22	26	0	0	12	3
Macalester C.	400	139	171	272	24	50	31	172	0
Hofstra U.	401	4	2	16	22	0	0	0	0
Pepperdine U.	402	11	2	10	21	0	0	0	0
Tuskegee U.	402	32	32	35	21	32	32	35	21
U. of St. Thomas (MN)	402	22	61	42	21	19	41	12	0
Elon U.	405	49	27	21	19	0	0	0	0
Spelman C.	405	0	0	0	19	0	0	0	19
Willamette U.	405	77	108	5	19	45	4	0	0
Virginia Military Institute	408	ne	ne	ne	17	ne	ne	ne	0
U. Wisconsin-Oshkosh	409	25 i	27 i	30	16	0 i	0 i	0	11
Dakota State U.	410	5	0	58	15	0	0	48	0
Purdue U., Fort Wayne	410	0	3	10	15	0	0	0	0
U. San Francisco	410	28	27	4	15	0	0	0	0
St. Cloud State U.	413	11	11	9	14	2	3	0	0
Vassar C.	413	113	232	121	14	109	147	89	0
St. John's U., New York	415	22	76	1	13	0	0	0	0
SUNY, C. Plattsburgh	415	369	126	65	13	259	110	41	13
U. Arkansas, Little Rock	415	0	0	0	13	0	0	0	13
Connecticut C.	418	0	0	0	12	0	0	0	0
Texas A&M U.-Corpus Christi	418	19	0	0	12	19	0	0	0

TABLE 51

Total and federally financed higher education R&D expenditures in physics, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Calvin U.	420	137	6 i	8 i	11 i	123	0 i	0 i	0
SUNY, Oswego	420	3	23	46	11	0	0	0	0
California State U., Stanislaus	422	5	5	12	9	0	0	0	0
Hamilton C.	422	116	44	40	9	12	3	8	9
U. of Health Sciences and Pharmacy in St. Louis	422	ne	0	0	9	ne	0	0	9
U. Puget Sound	425	ne	96	ne	7	ne	50	ne	0
U. Wisconsin-Stevens Point	425	37 i	43	16	7	37 i	43	7	1
Texas A&M U.-Kingsville	427	48	1	33	4	46	0	0	0
U. Akron	427	72	0	0	4	0	0	0	0
U. Hartford	427	0	0	0	4	0	0	0	0
Central Connecticut State U.	430	17	4	7	3	0	0	0	0
Trinity C., Hartford	430	5	4	1	3	0	0	0	0
Stephen F. Austin State U.	432	0	3	1	2	0	0	0	0
La Sierra U.	433	1	1	1	1	0	0	0	0
Northern Michigan U.	433	0	26	3	1	0	0	0	0
Pennsylvania State U., Harrisburg	433	0	0	0	1	0	0	0	0
All other surveyed institutions	-	9,118	10,172	18,504	0	6,457	8,458	13,646	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

^a Johns Hopkins University includes the Applied Physics Laboratory (APL), with \$223,313 thousand imputed for total and \$217,077 thousand reported for federally financed R&D expenditures in physics in FY 2022. Total expenditures by field for Johns Hopkins University are flagged as imputed because APL was unable to distribute a portion of institutionally funded R&D by field.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 52

Total and federally financed higher education R&D expenditures in psychology, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
All institutions	-	1,328,432	1,364,798	1,329,505	1,443,894	790,261	808,930	812,390	875,330
U. North Carolina, Chapel Hill	1	46,808	41,741	43,348	49,297	27,887	23,840	24,136	25,474
Florida International U.	2	29,269	34,642	34,345	37,185	14,279	18,163	17,520	19,381
U. Georgia	3	24,590	25,773	27,865	30,933	13,105	15,401	17,784	20,630
New York U.	4	30,002	28,468	27,209	30,932	24,420	22,886	22,255	23,286
Pennsylvania State U., University Park and Hershey Medical Center	5	38,984	40,599	29,685	30,225	28,216	26,894	26,302	25,948
U. Minnesota, Twin Cities	6	34,448	31,954	29,408	29,392	25,727	24,430	20,743	20,176
U. Connecticut	7	18,641	21,553	22,130	26,385	11,570	13,270	13,692	15,765
Boston U.	8	21,872	20,413	22,092	24,237	14,224	12,411	13,117	14,406
U. Oregon	9	15,658	17,505	19,455	21,629	13,714	15,759	16,939	19,021
U. Michigan, Ann Arbor	10	19,157	20,413	18,255	20,806	6,704	6,479	6,813	7,831
Uniformed Services U. of the Health Sciences	11	10,574	7,672	17,880	19,412	8,150	5,704	13,369	14,109
U. Texas M. D. Anderson Cancer Center	12	17,247	16,860	17,939	19,296	3,601	3,013	2,854	5,279
U. California, San Diego	13	18,932	20,113	18,645	19,075	12,280	13,624	13,008	14,355
San Diego State U.	14	14,071	20,222	18,729	18,073	9,047	13,516	12,013	12,573
Florida State U.	15	15,866	17,715	16,829	17,992	9,145	9,763	8,887	9,390
U. Houston	16	12,218	13,999	13,601	17,383	9,647	9,765	9,784	9,962
San Jose State U.	17	20,152	19,670	18,930	17,046	19,428	19,256	18,043	16,209
U. California, Los Angeles	18	17,044	19,087	17,464	17,022	11,104	13,035	10,897	10,908
U. California, Berkeley	19	17,955	19,329	16,892	16,945	8,122	9,515	9,164	9,775
U. Pittsburgh, Pittsburgh	20	14,154	17,680	16,966	16,203	11,591	14,586	14,484	13,101
U. Miami	21	11,163	13,896	14,808	16,155	7,514	10,048	10,170	12,402
U. Pennsylvania	22	14,222	15,854	15,250	16,035	7,085	9,563	9,265	8,545
Arizona State U.	23	18,986	17,645	14,623	15,720	10,145	9,253	7,599	7,441
Stanford U.	24	20,091	18,866	16,587	15,648	11,686	10,782	10,678	10,450
Dartmouth C. and Dartmouth Hitchcock Medical Center	25	10,892	13,239	11,670	15,457	6,723	9,013	9,477	9,764
Vanderbilt U. and Vanderbilt U. Medical Center	26	15,490	15,682	15,687	15,372	8,303	7,496	7,238	7,731
U. Nebraska, Lincoln	27	10,968	12,761	13,881	15,053	5,671	5,396	7,108	8,760
U. Florida	28	10,208	10,922	12,597	14,968	6,412	7,199	9,487	11,349
U. Colorado Boulder	29	13,092	11,982	13,610	13,945	10,775	10,667	11,879	12,052
Michigan State U.	30	17,834	16,399	13,042	13,643	9,257	8,921	7,758	8,633
Indiana U., Bloomington	31	14,744	13,021	13,211	13,583	7,756	6,822	6,621	8,050
Temple U.	32	8,832	11,418	11,427	13,248	6,473	6,930	7,574	9,394
U. Illinois, Urbana-Champaign	33	14,473	16,086	15,063	13,192	8,307	10,020	9,182	7,597
U. Delaware	34	5,486	7,485	7,990	12,949	4,086	5,755	6,801	7,107

TABLE 52

Total and federally financed higher education R&D expenditures in psychology, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Cornell U.	35	12,682	11,516	11,273	11,971	5,101	4,826	4,359	4,406
SUNY, Binghamton U.	36	11,007	12,263	10,640	11,896	4,231	3,526	4,331	4,687
Yale U.	37	13,211	9,684	10,453	11,550	6,775	5,983	6,256	6,698
U. Kansas	38	17,811	16,106	11,469	11,416	6,360	5,579	8,056	8,105
U. California, Irvine	39	8,961	11,448	10,898	11,147	2,623	2,909	3,507	5,864
U. Texas, Austin	40	12,544	10,435	10,293	11,067	9,942	7,422	8,001	8,511
Ohio State U.	41	7,861	7,542	8,139	10,892	6,154	5,681	6,411	5,508
Virginia Commonwealth U.	42	11,299	10,743	10,533	10,807	9,805	9,648	8,904	9,017
Carnegie Mellon U.	43	10,601	11,507	10,631	10,640	9,163	9,841	8,940	8,479
Northeastern U.	44	7,738	8,863	9,695	10,494	6,361	6,922	7,113	7,642
U. Washington, Seattle	45	9,552	8,802	11,269	10,431	7,693	7,112	9,989	8,261
Rutgers, State U. New Jersey, New Brunswick	46	7,700	8,256	6,145	10,418	2,785	3,961	3,028	5,562
U. Iowa	47	8,086	8,817	10,981	10,399	6,336	7,028	8,543	7,899
Georgia State U.	48	7,333	8,952	9,692	10,364	2,741	4,236	3,131	3,678
U. Wisconsin-Madison	49	12,498	12,090	10,944	10,208	7,166	7,467	6,299	4,589
U. South Carolina, Columbia	50	8,025	11,498	8,759	9,997	5,639	5,018	4,653	5,495
U. Maryland ^a	51	9,617	9,288	8,600	9,885	7,917	7,725	7,813	8,513
U. Alabama, Birmingham	52	4,933	5,164	5,695	9,755	4,353	4,434	4,971	5,924
CUNY, Hunter C.	53	15,915	14,507	12,382	9,591	12,178	12,455	10,035	7,962
U. Central Florida	54	5,230	10,357	9,231	9,368	2,320	7,142	5,719	6,028
U. Cincinnati	55	1,746	1,667	4,278	8,721	1,114	1,068	2,875	7,994
Brown U.	56	6,801	7,889	8,598	8,605	6,658	7,262	7,644	7,525
Purdue U., West Lafayette	57	6,192	7,176	8,342	8,597	4,017	4,932	6,095	5,814
Texas Tech U.	58	9,824	10,670	8,762	8,234	912	882	1,232	1,267
U. Massachusetts, Amherst	59	9,195	7,836	8,004	8,227	5,672	5,429	5,747	5,574
U. Chicago	60	7,744	8,006	6,041	7,883	5,466	5,959	4,837	5,801
Johns Hopkins U. ^b	61	4,995	5,918	6,201	7,744	4,191	5,066	5,471	7,073
Texas A&M U., College Station and Health Science Center	62	3,538	5,248	6,546	7,635	1,508	2,550	3,233	3,973
Duke U.	63	11,226	8,953	6,923	7,467	8,855	6,104	4,657	4,671
U. South Florida ^c	64	4,305	4,710	6,927	7,280	1,094	928	1,692	2,204
U. Denver	65	5,002	5,870	6,659	7,261	3,602	4,092	4,978	5,527
Washington U., Saint Louis	66	6,129	6,052	6,121	7,209	5,167	4,887	4,997	6,177
Oklahoma State U., Stillwater	67	9,018	9,085	6,926	6,977	2,440	2,900	2,316	1,554
U. Memphis	68	6,101	5,455	5,431	6,817	1,019	1,164	1,632	1,445
U. Utah	69	18,431	11,198	7,255	6,805	9,100	4,900	4,196	5,244

TABLE 52

Total and federally financed higher education R&D expenditures in psychology, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
SUNY, Stony Brook U.	70	4,703	4,946	5,557	6,579	3,043	3,725	4,112	5,009
U. Arizona	71	2,670	2,900	4,255	6,573	1,610	1,971	2,381	4,893
U. Virginia, Charlottesville	72	9,245	10,335	7,565	6,549	4,411	4,395	4,677	4,301
U. New Mexico	73	6,938	6,827	6,321	6,521	5,079	5,505	4,765	4,875
U. Missouri, Columbia	74	8,771	7,898	5,836	6,487	7,321	6,323	4,219	4,290
U. Rochester	75	5,573	5,576	5,135	6,367	4,610	4,341	4,328	5,112
Harvard U.	76	6,829	5,099	4,200	6,355	3,436	2,242	1,867	2,872
U. Nevada, Reno	77	5,429	5,430	6,422	6,146	3,400	2,469	3,647	3,413
U. Notre Dame	78	4,887	5,450	4,454	5,922	3,138	3,845	3,684	4,689
U. Texas, Dallas	79	751	789	4,130	5,601	4	20	1,853	2,400
Utah State U.	80	3,787	4,698	5,331	5,562	1,630	2,430	2,420	2,319
U. Massachusetts, Boston	81	4,622	4,361	4,292	5,519	2,604	2,198	2,031	3,023
U. California, Riverside	82	4,923	2,950	3,791	5,411	2,997	2,189	2,457	3,194
U. Alabama, Tuscaloosa	83	2,931	3,030	5,384	5,349	1,406	1,329	2,362	2,890
U. Vermont	84	1,773	3,084	3,694	5,186	1,310	1,641	1,531	2,277
Columbia U. in the City of New York	85	4,552	5,234	4,637	5,168	3,758	4,286	3,688	4,091
Tufts U.	86	1,739	2,420	5,486	5,146	1,351	2,074	4,976	3,673
Virginia Polytechnic Institute and State U.	87	4,286	4,899	4,169	5,111	2,046	2,338	1,868	2,800
U. Southern California	88	9,153	14,234	9,837	5,103	5,846	4,913	4,508	4,803
U. Kentucky	89	4,047	3,537	4,185	5,066	2,678	2,882	3,379	4,371
U. Tennessee, Knoxville ^d	90	4,382	5,465	4,744	4,977	1,444	1,882	1,475	1,794
U. Texas, El Paso	91	10,393	5,285	4,407	4,911	1,874	1,603	1,627	2,608
Montclair State U.	92	927	2,060	3,099	4,824	251	174	236	417
Rice U.	93	3,821	4,798	5,772	4,805	2,524	3,320	4,283	3,670
Emory U.	94	5,399	4,817	5,215	4,796	4,279	3,989	4,218	3,668
Princeton U.	95	6,482	9,240	5,441	4,568	3,443	5,239	2,116	2,078
Kansas State U.	96	6,005	5,215	4,287	4,337	4,576	3,998	3,115	3,079
U. Wisconsin-Milwaukee	97	3,909	4,404	3,800	4,294	2,893	3,125	2,731	2,884
Kent State U.	98	4,410	4,776	4,536	4,245	2,342	2,684	2,467	2,223
Northwestern U.	99	4,157	3,706	3,352	4,231	2,469	2,438	2,528	2,653
Indiana U.-Purdue U., Indianapolis	100	4,165	4,667	4,030	4,196	3,443	4,047	3,422	3,075
Boston C.	101	3,837	4,452	4,588	4,174	2,284	2,343	2,314	2,185
Georgia Institute of Technology	102	3,550	3,943	3,782	4,126	1,505	1,899	1,944	1,926
SUNY, U. Buffalo	103	4,752	5,113	5,677	4,111	3,371	3,537	3,854	3,063
Baylor U.	104	906	2,726	3,692	4,051	143	384	313	680

TABLE 52

Total and federally financed higher education R&D expenditures in psychology, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Rensselaer Polytechnic Institute	105	3,151	4,479	4,036	3,954	2,406	2,676	2,075	2,101
SUNY, U. Albany	106	4,389	4,982	3,748	3,901	927	1,148	1,227	1,023
Washington State U.	107	3,190	3,875	5,000	3,860	1,003	1,813	3,271	2,176
Iowa State U.	108	9,858	3,786	3,595	3,852	3,913	890	733	1,100
Auburn U., Auburn	109	2,457	2,824	3,137	3,848	396	659	510	603
George Mason U.	110	3,143	3,196	3,029	3,809	2,162	1,696	1,495	2,292
Brandeis U.	111	2,485	4,459	4,546	3,793	2,086	3,125	3,004	1,920
U. Texas, San Antonio	112	1,262	4,716	2,835	3,738	662	2,836	753	918
Syracuse U.	113	4,426	3,771	3,916	3,719	1,996	1,585	1,695	1,306
Rush U.	114	2,566	1,944	2,399	3,709	2,414	1,905	2,367	3,685
U. Illinois, Chicago	115	4,352	3,621	2,928	3,620	2,901	2,253	1,587	1,465
U. Rhode Island	116	1,483	2,059	3,222	3,552	514	705	1,752	2,978
U. North Carolina, Greensboro	117	3,471	2,805	3,539	3,551	2,073	2,188	2,403	2,668
U. California, Davis	118	2,740	3,022	3,177	3,509	1,626	1,153	1,495	1,929
Colorado State U., Fort Collins	119	3,860	3,255	3,755	3,476	3,357	3,000	3,335	3,119
Miami U.	120	1,368	1,685	1,510	3,279	819	1,212	998	1,226
U. California, Santa Barbara	121	5,299	4,929	3,457	3,276	3,927	3,807	2,266	2,302
Clemson U.	122	460	633	1,587	3,225	235	416	928	2,665
U. North Texas, Denton	123	4,375	4,489	2,719	3,186	1,592	900	583	1,017
George Washington U.	124	2,457	3,074	3,071	3,090	1,658	2,257	2,282	2,444
Drexel U.	125	3,555	2,852	2,435	3,077	2,436	1,979	1,824	2,247
U. Oklahoma, Norman and Health Science Center	125	1,395	1,608	2,599	3,077	1,250	987	2,212	2,506
Georgetown U.	127	2,741	2,615	949	2,719	1,456	1,358	949	1,278
Wayne State U.	128	1,584	1,464	2,542	2,572	761	802	1,602	1,725
Fordham U.	129	2,095	1,632	2,116	2,567	1,768	1,365	1,883	1,951
Ohio U.	130	2,031	1,827	1,792	2,551	1,254	1,224	1,048	1,611
Howard U.	131	1,968	1,878	2,214	2,546	1,335	1,280	1,510	1,662
Florida Atlantic U.	132	2,391	2,306	1,771	2,486	1,358	1,167	1,036	1,126
Biola U.	133	2,114 i	2,171 i	2,274 i	2,469	0 i	0 i	0 i	0
U. Louisville	134	1,662	2,050	1,757	2,457	619	725	707	1,112
North Dakota State U.	135	3,077	2,798	2,283	2,354	1,232	1,078	986	1,349
CUNY, John Jay C. of Criminal Justice	136	2,082	3,546	933	2,221	688	1,821	109	2,016
U. South Alabama	137	253	311	561	2,217	133	39	310	691
California State U., San Bernardino	138	2,708	1,775	2,299	2,206	383	594	820	663
Oregon Health and Science U.	139	0	53	60	2,090	0	0	0	0

TABLE 52

Total and federally financed higher education R&D expenditures in psychology, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed					
		2019	2020	2021	2022	2019	2020	2021	2022		
Tulane U.	140	2,342	1,942	1,771	2,081	1,248	1,589	1,202	1,276		
U. Mississippi	141	1,140	620	889	2,037	0	0	0	25		
CUNY, Queens C.	142	1,327	1,222	1,082	2,015	1,207	1,087	878	1,225		
Mississippi State U.	142	1,480	2,044	1,836	2,015	514	491	278	419		
CUNY, Graduate School of Public Health and Health Policy	144	1,639	1,278	1,010	1,994	1,639	1,278	1,010	1,994		
California State U., Long Beach	145	1,660	1,465	1,431	1,974	1,425	1,410	1,411	1,751		
U. Nevada, Las Vegas	146	2,982	3,767	3,738	1,959	454	240	3	521		
San Francisco State U.	147	1,329	1,496	i	1,617	1,917	302	301	i	304	349
U. Maryland, Baltimore County	148	2,046	1,973	1,491	1,891	1,374	1,219	1,015	517		
Texas Christian U.	149	632	189	206	1,827	532	114	179	182		
SUNY, C. of Environmental Science and Forestry	150	0	180	1,531	1,793	i	0	0	0	0	
North Carolina State U.	151	3,071	2,479	2,523	1,739	1,754	1,236	1,060	1,002		
Teachers C., Columbia U.	152	1,760	1,387	878	1,729	942	618	593	388		
U. Massachusetts, Lowell	153	1,719	1,746	1,743	1,726	862	921	907	758		
Loyola Marymount U.	154	1,441	1,515	1,604	1,713	436	447	623	593		
U. North Dakota	155	1,135	1,506	1,713	1,682	149	268	325	236		
CUNY, Brooklyn C.	156	1,218	i	1,264	1,723	1,656	i	1,027	1,328	1,618	
West Virginia U.	157	2,041	1,773	2,304	1,638	1,380	1,195	1,531	918		
Gallaudet U.	158	1,117	988	1,715	1,576	179	137	158	166		
U. Colorado Denver ^e	159	na	na	1,179	1,554	na	na	706	929		
Case Western Reserve U.	160	1,812	1,155	1,654	1,539	613	670	897	1,292		
Old Dominion U.	161	1,126	1,419	1,381	1,526	724	828	913	1,123		
Portland State U.	162	1,400	1,766	1,257	1,497	1,297	1,652	1,176	1,427		
Western Washington U.	163	1,038	1,213	1,497	1,493	124	127	112	176		
U. Texas, Arlington	164	1,660	1,329	1,568	1,404	105	84	194	248		
Wright State U.	165	2,736	1,525	1,194	1,388	2,436	1,303	975	1,249		
Wesleyan U.	166	991	871	1,002	1,363	687	692	782	1,189		
U. Missouri, Kansas City	167	1,257	1,064	646	1,359	435	288	117	556		
East Carolina U.	168	1,039	1,321	974	1,336	288	690	612	817		
Chapman U.	169	0	888	1,161	1,329	0	842	1,023	1,072		
U. Arkansas, Fayetteville	170	782	707	994	1,294	222	135	241	493		
U. South Dakota	171	582	687	1,150	1,288	66	80	461	503		
Southern Methodist U.	172	1,093	1,457	1,273	1,276	481	1,150	1,132	1,105		
Florida Institute of Technology	173	1,813	1,652	1,371	1,261	728	537	305	555		
CUNY, City C.	174	953	693	15	1,260	735	579	0	775		

TABLE 52

Total and federally financed higher education R&D expenditures in psychology, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Maine	175	852	1,183	1,108	1,217	67	243	135	189
Bowling Green State U.	176	991	1,444	979	1,200	303	167	22	0
U. North Florida	177	52	96	249	1,180	0	0	201	949
James Madison U.	178	146	1,379	1,345	1,156	0	0	0	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	179	181	191	302	1,152	29	88	177	215
Long Island U.	180	45	1,189	950	1,119	41	50	53	43
U. Texas Rio Grande Valley	180	635	917	1,181	1,119	22	0	0	23
Loyola U., Chicago	182	1,007	1,105	1,288	1,115	832	935	1,048	809
Oklahoma State U., Center for Health Sciences	183	126	373	624	1,111	39	87	338	906
American U.	184	2,564	2,248	1,063	1,109	1,084	702	127	81
U. North Carolina, Charlotte	185	635	711	750	1,100	115	284	328	504
U. New Hampshire	186	1,869	877	1,279	1,086	1,517	601	534	409
Catholic U. of America	187	294	347	520	1,064	190	237	324	422
Rowan U.	188	291	504	739	1,055	194	397	686	964
New School	189	1,726	1,249	635	1,041	1,318	444	318	646
Rutgers, State U. New Jersey, Newark	190	2,169	2,132	1,139	1,039	1,608	1,293	483	432
Wake Forest U.	191	1,041	847	812	1,035	22	86	69	183
Villanova U.	192	1,244	1,141	900	1,031	254	444	273	290
Barnard C.	193	1,359	1,343	1,043	1,030	1,260	1,198	960	873
Oregon State U.	194	1,318	1,115	1,035	1,024	1,179	947	706	854
Wichita State U.	195	399	543	478	1,023	263	375	207	352
Northern Illinois U.	196	1,034	1,057	947	1,018	704	732	849	575
Georgia Southern U.	197	14	27	1,069	994	0	0	0	0
Marquette U.	198	1,371	1,140	1,223	991	363	202	185	250
California State U., San Marcos	199	1,041	1,261	1,150	987	698	967	924	875
Wellesley C.	200	0	229	899	954	0	229	254	170
U.S. Military Academy	201	28	120	387	925	28	12	0	774
Lehigh U.	202	448	561	398	911	376	396	306	836
Texas State U.	203	232	223	272	908	138	94	193	294
U. Wyoming	204	236	664	412	883	229	664	47	62
Azusa Pacific U.	205	742	885	844	868	23	0	146	269
Loma Linda U.	206	747	672	597	866	744	670	595	637
Nova Southeastern U.	207	552	596	353	846	455	374	153	165
Louisiana State U., Baton Rouge	208	1,119	902	750	832	213	180	159	187
Western Kentucky U.	209	749	672	757	809	158	176	275	288

TABLE 52

Total and federally financed higher education R&D expenditures in psychology, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Massachusetts Institute of Technology	210	517	484	478	803	325	277	430	711
Cleveland State U.	211	644	653	762	751	69	69	96	180
Indiana U. Pennsylvania	212	428	630	490	728	104	113	50	73
Middle Tennessee State U.	212	0	58	652	728	0	58	72	102
U. Montana, Missoula	214	840	791	933	716	416	327	467	279
Michigan Technological U.	215	455	551	546	697	141	130	106	249
U. California, Santa Cruz	216	721	487	868	682	316	98	19	98
U. Tulsa	217	796	604	472	679	38	7	72	12
Montana State U., Bozeman	218	235	359	415	673	98	114	84	240
CUNY, C. Staten Island	219	389	342	352	631	340	284	310	597
U. New Orleans	220	335	497	523	622	0	0	0	0
Texas Woman's U.	221	587	488	695	618	58	0	0	70
Claremont Graduate U.	222	969	966	300	595	584	284	123	37
Towson U.	223	104	192	213	586	0	71	106	124
U. Akron	224	338	328	226	581	49	57	43	29
New Mexico Institute of Mining and Technology	225	0	0	0	572	0	0	0	572
Texas Southern U.	225	0	0	425	572	0	0	425	572
Spelman C.	227	526	588	568	565	526	588	568	565
Winston-Salem State U.	228	0	252	356	509	0	252	356	509
Bryn Mawr C.	229	628	295	327	508	67	0	0	0
U. California, Merced	230	1,284	1,712	424	493	44	204	58	106
Illinois State U.	231	18	20	50	489	0	0	0	0
Davidson C.	232	351	975	691	482	244	758	522	412
New Mexico State U.	233	268	276	422	480	196	229	198	140
William Paterson U.	234	1,136	944	485	479	286	70	93	87
Claremont McKenna C.	235	65	157	113	478	16	94	107	306
Tarleton State U.	236	65	294	368	475	0	0	0	0
Sam Houston State U.	237	308	602	631	469	60	211	144	50
Mount Holyoke C.	238	572	584	519	457	369	298	384	325
West Chester U. Pennsylvania	238	295	205	253	457	0	32	41	190
U. Hawaii, Manoa	240	279	441	414	455	226	315	237	285
Occidental C.	241	178	65	393	443	0	9	352	393
U. Richmond	242	206	316	354	438	58	231	236	253
California State U., Dominguez Hills	243	114	95	360	435	78	63	292	359
Saint Louis U.	243	333	393	233	435	317	300	165	236

TABLE 52

Total and federally financed higher education R&D expenditures in psychology, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
South Dakota State U.	245	223	192	600	426	122	145	499	348
U. Dayton	246	43	33	118	414	0	0	80	374
Rosalind Franklin U. of Medicine and Science	247	115	85	327	409	100	83	316	387
U. Tennessee, Chattanooga	248	115	242	246	406	22	78	0	0
Northern Kentucky U.	249	596	437	459	405	354	277	308	256
California State U., Fullerton	250	92	106	272	404	60	66	139	170
Brigham Young U., Provo	251	488	298	382	400	339	219	222	148
U. of St. Thomas (MN)	252	66	210	328	396	4	16	0	0
Central Michigan U.	253	413	497	486	390	250	309	125	168
U. Colorado Colorado Springs	254	591	226	259	378	571	226	256	301
Oakland U.	255	467	184	377	367	360	173	321	293
St. John's U., New York	256	55	126	79	357	22	41	27	272
William & Mary	257	191	320	367	351	123	234	255	170
U. Alabama, Huntsville	258	183	218	233	349	0	0	0	68
Trinity U.	259	348	328	313	344	221	209	231	312
U. Toledo	259	107	452	365	344	0	50	153	158
U. West Florida	261	59	142	424	340	0	113	78	0
Creighton U.	262	303 i	259 i	279 i	337 i	126 i	116 i	121 i	169 i
Connecticut C.	263	0	208	166	325	0	70	64	102
U. New Haven	263	54	22	232	325	51	22	232	260
California State U., Sacramento	265	298	310	330	319	109	90	54	112
U. Colorado Anschutz Medical Campus ^e	266	na	na	20	313	na	na	20	254
Vassar C.	267	100	221	269	312	68	196	216	135
SUNY, Geneseo	268	262	208	219	311	121	102	112	226
California State U., Northridge	269	419	473	255	308	419	455	231	308
Mercer U.	270	253	258	270	300	0	0	0	0
Grinnell C.	271	149	173	20	295	0	0	0	0
Saint Joseph's U.	271	472	457	349	295	39	54	20	0
U. Wisconsin-Eau Claire	273	203	173	245	293	157	122	172	197
Amherst C.	274	83	101	201 i	278	29	50	109	163
Purdue U., Fort Wayne	275	97	168	233	262	71	104	123	112
Louisiana Tech U.	276	474	571	616	261	73	92	298	140
Naval Postgraduate School	277	0	0	151	257	0	0	40	40
Southern Illinois U., Carbondale	278	27	223	381	252	13	114	239	137
CUNY, Graduate Center	279	633	576	682	249	342	297	370	154

TABLE 52

Total and federally financed higher education R&D expenditures in psychology, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Middlebury C.	280	205	245	181	247	205	245	180	247
Duquesne U.	281	115	414	160	245	4	0	0	0
Appalachian State U.	282	52	344	307	244	44	91	124	84
Delaware State U.	283	0	1,348	1,144	240	0	290	333	25
Reed C.	284	209	473	464	238	47	91	97	102
Suffolk U.	285	ne	584	438	236	ne	584	438	236
CUNY, Baruch C.	286	133	230	279	231	124	220	227	223
U. Missouri, Saint Louis	287	317	140	241	228	81	48	55	124
U. North Carolina, Wilmington	288	314	183	214	223	297	179	212	217
Eastern Michigan U.	289	94	183	183	220	0	0	0	174
Ball State U.	290	338	214	183	219	76	64	80	82
U. Puerto Rico, Mayaguez	290	0	0	0	219	0	0	0	219
Carleton C.	292	145	86	234	217	145	86	226	208
Elon U.	293	159	108	132	215	76	43	54	162
U. Nebraska, Omaha	293	471	405	456	215	409	348	371	117
California State U., East Bay	295	ne	410	405	207	ne	26	66	0
Pennsylvania State U., Behrend	296	46	11	254	206	1	0	104	155
Williams C.	296	91	85	83	206	0	0	0	57
Alabama A&M U.	298	256	174	184	201	185	126	157	195
Idaho State U.	299	656	318	266	200	590	247	266	140
U. Minnesota, Duluth	300	1	25	20	198	0	0	0	167
Skidmore C.	301	423	325	146	197	291	201	107	106
DePaul U.	302	2,812	3,343	2,415	194	2,373	2,974	2,166	16
Rhode Island C.	302	51	171	115	194	17	155	83	143
Augusta U.	304	0	101	155	183	0	68	88	98
California Polytechnic State U., San Luis Obispo	304	90	185	157	183	3	0	0	0
Texas A&M U.-Commerce	304	334	374	191	183	98	164	30	101
Jackson State U.	307	69	25	174	181	69	25	144	151
Northern Arizona U.	308	750	725	396	178	480	589	181	60
U. Michigan, Dearborn	308	82	112	154	178	0	0	0	0
Pepperdine U.	310	220	229	248	174	79	103	100	107
Haverford C.	311	147	173	77	162	103	93	34	107
Rochester Institute of Technology	312	22	60	110	159	11	43	99	143
North Carolina A&T State U.	313	24	30	236	156	0	12	236	133
Franklin and Marshall C.	314	197	68	80	154	0	12	9	31

TABLE 52

Total and federally financed higher education R&D expenditures in psychology, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Missouri U. of Science and Technology	314	190	173	134	154	7	134	91	95
Southern Connecticut State U.	316	378	366	332	146	251	164	80	70
U. Houston-Clear Lake	316	209	145	136	146	167	109	111	134
Smith C.	318	521	226	195	145	421	164	133	97
CUNY, York C.	319	48	0	159	140	42	0	159	140
Santa Clara U.	319	26	10	0	140	12	8	0	126
U. Southern Mississippi	321	0	0	118	139	0	0	118	98
Furman U.	322	182	25	178	137	182	0	165	130
Oregon Institute of Technology	323	135 i	122 i	113 i	133 i	0 i	0	5 i	7 i
U. Central Oklahoma	323	0	0 i	0 i	133 i	0	0 i	0 i	52 i
Hamilton C.	325	155	100	69	132	0	0	0	24
Swarthmore C.	326	85	117	110	130	0	64	53	68
C. Charleston	327	65	42	36	129	0	0	0	9
Bowdoin C.	328	0	180	125	126	0	158	123	107
U. Idaho	329	135	320	189	125	83	199	101	59
Minnesota State U., Mankato	330	0	59	298	120	0	59	90	0
Langston U.	331	0	0	0	119	0	0	0	77
Trinity C., Hartford	332	48	0	295	118	0	0	281	105
California State U., Stanislaus	333	11	13	218	114	0	4	118	25
Colgate U.	334	270	74	63	112	26	0	0	0
Kennesaw State U.	334	71	38	231	112	0	11	13	20
Tougaloo C.	336	0	0	0 i	111 i	0	0	0 i	111 i
Eastern Connecticut State U.	337	215	141	28	109	0	0	0	0
Florida A&M U.	338	248	242	212	108	225	242	207	107
Rutgers, State U. New Jersey, Camden	338	46	97	26	108	0	0	0	0
Tuskegee U.	338	0	0	0	108	0	0	0	108
Hofstra U.	341	19	15	109	107	0	0	0	0
Clark U.	342	829	622	223	102	136	93	50	0
Boise State U.	343	293	171	127	101	199	154	105	62
St. Edward's U.	344	24	20	20	100	0	0	0	0
Colorado C.	345	84	115	23	97	0	0	0	0
East Tennessee State U.	345	2,381 i	2,755 i	3,057 i	97 i	161	40	14	0
Northern Michigan U.	347	183	201	69	93	9	157	49	34
Colorado School of Mines	348	0	0	0	90	0	0	0	90
Clarkson U.	349	22	86	113	89	0	0	7	0

TABLE 52

Total and federally financed higher education R&D expenditures in psychology, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
CUNY, system office	350	0	0	49	88	0	0	0	0
Eastern Washington U.	351	47	47	39	87	0	0	0	0
Pomona C.	352	143	248	286	86	0	35	122	8
U. Louisiana, Lafayette	352	5,326	327	151	86	0	0	0	0
Bucknell U.	354	152	154	129	83	41	0	0	0
Lafayette C.	355	123	155	88	81	99	116	70	46
U. Central Arkansas	355	82	93	87	81	0	0	0	0
Colby C.	357	100	97	72	80	15	0	0	0
U. Northern Colorado	357	242	178	81	80	193	140	55	24
Florida Gulf Coast U.	359	0	0	10	79	0	0	3	79
Tennessee Technological U.	360	12	175	80	77	0	0	0	12
Whitman C.	360	12	25	ne	77	0	0	ne	0
Virginia State U.	362	0	0	95	76	0	0	95	76
La Sierra U.	363	80	78	0	73	0	0	0	0
Sonoma State U.	363	ne	10	58	73	ne	0	53	56
California State U., Bakersfield	365	191	504	524	72	0	372	317	0
Northland C.	365	ne	ne	63	72	ne	ne	49	55
U. Texas of the Permian Basin	367	ne	7	23	70	ne	6	18	35
Citadel Military C. South Carolina	368	ne	32	16	66	ne	30	15	61
Coastal Carolina U.	368	82	0	7	66	82	0	0	0
Pennsylvania State U., Harrisburg	368	58	0	444	66	18	0	59	34
Youngstown State U.	371	63	12	55	65	61	12	54	60
U. Puerto Rico, Rio Piedras	372	14	0	7	63	13	0	7	63
Xavier U. Louisiana	372	47	55	0	63	47	28	0	63
Morehouse C.	374	61	42	59	59	61	42	59	59
U. Alaska, Fairbanks	374	0	367	0	59	0	367	0	59
California State U., Los Angeles	376	93	110	103	58	0	25	0	8
U. Alaska, Anchorage	377	177	181	277	57	177	181	261	57
U. Puerto Rico, Cayey	378	0	53	0	55	0	0	0	0
Bates C.	379	154	173	101	54	147	154	78	27
Fisk U.	379	0	0	60	54	0	0	0	0
Grand Valley State U.	379	47	63	52	54	10	37	29	33
Roger Williams U.	379	204	203	116	54	201	198	111	45
Framingham State U.	383	ne	10	11	53	ne	10	11	8
U. Detroit Mercy	383	124	135	53	53	121	124	42	38

TABLE 52

Total and federally financed higher education R&D expenditures in psychology, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
U. Puerto Rico, Humacao	383	48	101	110	53	48	101	110	53
Missouri State U.	386	0	28	34	52	0	24	28	48
Sul Ross State U.	387	0	0	0	51	0	0	0	20
Texas A&M U.-Kingsville	387	113	98	51	51	107	86	48	51
Kean U.	389	ne	0	16	49	ne	0	0	7
Butler U.	390	ne	ne	ne	48	ne	ne	ne	41
Marymount U.	391	ne	ne	89	46	ne	ne	0	0
Willamette U.	391	107	126	39	46	95	121	36	35
Hope C.	393	236	242	177	45	0	0	0	0
Christopher Newport U.	394	44	50	54	44	44	37	43	32
Arkansas State U., Jonesboro	395	23	55	62	43	18	35	40	32
Saint John's U.	395	25	23	37	43	0	0	0	0
SUNY, Oswego	395	8	13	2	43	0	0	0	0
U. Wisconsin-Green Bay	395	36	34	31	43	17	18	17	20
C. of Saint Benedict	399	28	27	37	42	0	0	3	3
U. San Francisco	399	39	39	28	42	0	0	0	0
Calvin U.	401	0	22	31	41	0	0	0	0
Morehead State U.	401	109	4	0	41	109	0	0	0
Union C., Schenectady	403	56	0	24	38	0	0	0	0
U. Houston-Downtown	404	0	0	0	37	0	0	0	37
Des Moines U.	405	0	0	40	36	0	0	0	0
Morgan State U.	405	62	83	9	36	61	82	0	6
Salisbury U.	407	60	19	13	34	0	0	0	0
U. Hartford	407	0	0	51	34	0	0	0	26
U. Nebraska, Kearney	407	53	30	127	34	19	19	30	0
Prairie View A&M U.	410	851	536	292	33	0	0	0	0
Kenyon C.	411	0	29	ne	32	0	0	ne	0
U. San Diego	412	223	190	149	29	186	106	18	6
Macalester C.	413	41	41	23	28	0	0	0	0
U. North Georgia	414	0	10	0	26	0	0	0	0
C. New Jersey	415	ne	7	10	25	ne	0	0	0
U. Wisconsin-Platteville	416	26	28	20	23	6	6	6	7
California State Polytechnic U., Pomona	417	0	0	19	20	0	0	19	20
Marshall U.	417	0	0	3	20	0	0	0	0
U. Wisconsin-Oshkosh	417	35	38	41	20	0	0	0	0

TABLE 52

Total and federally financed higher education R&D expenditures in psychology, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Central Connecticut State U.	420	12	8	14	19	0	0	0	0
Texas A&M International U.	421	100	34	53	17	0	0	0	0
U. Oklahoma, Tulsa	421	0	0	28	17	0	0	0	0
CUNY, Lehman C.	423	0	1	0	16	0	0	0	0
U. Wisconsin-La Crosse	423	26	10	7	16	0	0	0	0
Lewis and Clark C.	425	87	69	29	15	0	0	0	0
Monmouth U.	426	0	0	12	12	0	0	12	12
California State U., Fresno	427	103	34	116	11	80	34	116	11
Robert Morris U.	427	ne	ne	ne	11	ne	ne	ne	7
U. South Carolina, Aiken	427	0	20	3	11	0	0	0	0
Abilene Christian U.	430	ne	ne	21	10	ne	ne	0	0
Purdue U., Northwest	431	8	39	22	9	0	0	0	0
California State U., Channel Islands	432	10	0	4	8	0	0	0	0
California State U., Monterey Bay	432	290	0	0	8	0	0	0	0
Northwestern State U. Louisiana	434	6	0	0	7	0	0	0	0
U. New England	434	35	6	2	7	0	0	0	0
Drake U.	436	16	ne	0	6	0	ne	0	0
Hobart and William Smith Colleges	437	11	7	7	5	0	0	0	0
Pace U.	437	10	16	7	5	0	0	0	0
U. Puget Sound	437	ne	5	ne	5	ne	0	ne	0
Pacific U.	440	0	2	0	4	0	0	0	0
Texas A&M U.-Corpus Christi	440	12	0	0	4	0	0	0	0
St. Cloud State U.	442	7	8	0	3	0	0	0	0
Texas A&M U.-San Antonio	442	ne	ne	ne	3	ne	ne	ne	0
Troy U.	442	ne	3	1	3	ne	0	0	0
Winthrop U.	442	0	0	44	3	0	0	43	0
Ithaca C.	446	ne	7	2	2	ne	0	0	0
Mercyhurst U.	446	3	3	2	2	0	0	0	0
Stephen F. Austin State U.	446	2	10	2	2	0	0	0	0
U. Texas, Tyler	446	37	110	214	2	0	0	0	0
Western New England U.	446	ne	ne	ne	2	ne	ne	ne	0
Austin Peay State U.	451	0	3	0	1	0	0	0	0
C. Wooster	451	21	38	1	1	21	0	0	0
Dillard U.	451	0	0	0	1	0	0	0	0
All other surveyed institutions	-	6,376	4,828	2,406	0	3,983	2,688	1,407	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

^a The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^b Johns Hopkins University includes the Applied Physics Laboratory (APL), with zero imputed for total and zero reported for federally financed R&D expenditures in psychology in FY 2022. Total expenditures by field for Johns Hopkins University are flagged as imputed because APL was unable to distribute a portion of institutionally funded R&D by field.

^c The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^d The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 53

Higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
All institutions	-	2,805,654	2,951,369	2,827,648	3,165,440	132,764	667,707	488,480	616,142	1,260,347
U. Michigan, Ann Arbor	1	191,336	187,421	175,698	189,167	5,723	33,300	29,770	27,767	92,607
Harvard U.	2	141,321	142,484	136,543	144,801	2,537	32,074	36,713	6,062	67,415
Arizona State U.	3	86,570	83,980	73,205	80,307	15,618	8,692	19,345	5,788	30,864
U. North Carolina, Chapel Hill	4	108,095	82,154	67,325	77,515	365	309	5,653	60,260	10,928
U. Southern California	5	52,212	59,926	75,520	75,558	416	27,359	492	611	46,680
U. California, Berkeley	6	61,374	60,568	56,908	73,560	347	32,985	15,580	5,935	18,713
Princeton U.	7	58,918	57,913	57,323	72,862	227	15,755	32,212	18,334	6,334
U. California, Los Angeles	8	58,050	60,591	62,413	68,872	0	469	4,168	12,805	51,430
U. Wisconsin-Madison	9	48,019	59,239	63,043	65,924	1,513	9,483	8,183	7,258	39,487
George Mason U.	10	57,278	65,405	48,250	61,667	251	44,433	1,673	3,435	11,875
U. Maryland ^a	11	66,691	64,636	58,423	56,249	995	1,672	4,854	5,437	43,291
Massachusetts Institute of Technology	12	46,532	51,477	47,850	54,104	0	36,854	3,387	64	13,799
U. Pennsylvania	13	49,088	51,374	46,021	53,759	1,484	5,988	3,393	22,405	20,489
Michigan State U.	14	27,037	50,407	45,620	43,672	1,418	16,870	3,160	3,579	18,645
Pennsylvania State U., University Park and Hershey Medical Center	15	27,943	27,842	27,130	41,275	559	6,662	1,822	32,232	0
Indiana U., Bloomington	16	44,681	47,426	40,800	40,995	3,010	2,938	13,160	5,808	16,079
Duke U.	17	34,532	36,760	36,432	40,627	1,361	3,997	1,118	12,180	21,971
U. Minnesota, Twin Cities	18	35,278	31,218	33,248	40,045	404	7,083	3,973	26,450	2,135
Brown U.	19	24,887	30,782	32,799	39,703	188	1,004	1,658	1,161	35,692
Georgetown U.	20	37,195	35,933	32,030	38,879	0	1,212	32,341	99	5,227
New York U.	21	31,003	30,676	29,601	38,528	14	1,898	10,309	10,074	16,233
U. California, Davis	22	27,167	28,486	30,951	38,078	0	12,148	7,975	1,457	16,498
Georgia State U.	23	23,970	24,697	33,767	37,729	592	9,849	2,545	11,256	13,487
U. Georgia	24	20,857	23,737	28,411	33,930	1,787	17,805	1,654	2,424	10,260
U. California, San Diego	25	20,178	19,942	22,940	31,031	2,431	4,992	9,660	6,137	7,811
U. South Florida ^b	26	30,138	31,616	33,907	30,394	2,105	762	1,824	2,339	23,364
Texas A&M U., College Station and Health Science Center	27	30,686	29,389	28,965	29,994	2,058	7,403	6,627	2,030	11,876
Ohio State U.	28	17,776	18,486	17,017	28,605	1,036	6,821	3,213	8,147	9,388
U. Chicago	29	21,578	23,750	22,088	26,781	185	8,546	1,268	1,832	14,950
Mississippi State U.	30	41,008	32,157	25,601	25,716	701	941	1,101	3,760	19,213
George Washington U.	31	27,686	25,348	23,621	25,553	1,186	2,374	306	4,288	17,399
Northwestern U.	32	16,211	18,762	21,988	24,515	951	8,819	641	275	13,829

TABLE 53

Higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
Cornell U.	33	29,183	25,622	22,269	23,814	376	2,387	2,539	5,005	13,507
U. Delaware	34	12,868	12,936	13,326	22,727	0	3,587	2,303	5,000	11,837
U. Texas, Austin	35	20,467	20,650	23,660	22,612	1,451	117	577	15,821	4,646
U. Arizona	36	19,450	17,689	18,628	22,491	3,965	3,345	779	4,859	9,543
Brandeis U.	37	18,222	25,117	22,854	22,375	643	464	562	5,450	15,256
SUNY, Binghamton U.	38	13,250	16,907	19,706	22,172	2,768	7,242	2,271	4,724	5,167
Rice U.	39	20,720	19,959	21,092	21,779	496	498	12,303	7,453	1,029
Vanderbilt U. and Vanderbilt U. Medical Center	40	6,861	7,187	8,539	21,601	2,306	3,824	8,098	615	6,758
Florida International U.	41	16,551	17,828	19,172	20,526	0	2,922	1,749	1,311	14,544
U. Montana, Missoula	42	16,775	17,493	20,948	20,418	1,203	4,801	305	239	13,870
Teachers C., Columbia U.	43	15,875	13,869	15,472	19,950	0	18,060	0	0	1,890
U. South Carolina, Columbia	44	13,440	15,131	17,832	19,583	3,474	0	1,313	9,745	5,051
Dartmouth C. and Dartmouth Hitchcock Medical Center	45	17,928	20,370	23,175	19,335	926	1,035	910	14,452	2,012
Tufts U.	46	14,063	12,852	15,859	19,308	1,317	2,215	339	9	15,428
Syracuse U.	47	12,954	14,165	14,920	19,097	1,197	3,110	5,932	3,478	5,380
Stanford U.	48	24,038	24,770	22,559	18,390	230	4,880	5,731	547	7,002
U. Texas M. D. Anderson Cancer Center	49	10,294	12,591	13,819	18,340	0	0	0	18,340	0
U. Virginia, Charlottesville	50	13,457	16,948	18,063	17,920	409	1,920	5,795	3,822	5,974
U. Maryland, Baltimore County	51	13,139	11,597	14,413	17,891	117	924	744	955	15,151
Florida State U.	52	18,519	19,446	18,501	17,838	463	2,851	3,666	2,094	8,764
American U.	53	20,802	20,632	16,428	17,191	0	2,440	7,506	960	6,285
U. Florida	54	13,849	13,552	16,015	16,987	1,454	6,072	3,052	239	6,170
U. Utah	55	3,776 i	14,837 i	6,254 i	16,524	44	198	662	11,402	4,218
U. Washington, Seattle	56	16,437	15,458	13,491	16,490	36	55	7,330	5,988	3,081
SUNY, U. Albany	57	20,704	20,551	12,288	16,133	1,739	2,462	9,361	2,246	325
U. New Hampshire	58	8,621	11,344	13,329	15,906	264	1,569	1,644	3,173	9,256
U. Colorado Boulder	59	18,635	16,443	14,018	15,231	371	436	674	9,757	3,993
Colorado State U., Fort Collins	60	12,649	14,787	11,988	15,024	3,361	1,826	3,561	1,486	4,790
Purdue U., West Lafayette	61	10,040	21,150	14,611	14,770	689	12,639	570	872	0
Virginia Polytechnic Institute and State U.	62	11,273	13,082	11,574	14,507	0	6,429	421	2,482	5,175
Yale U.	63	14,401	15,994	14,055	13,840	1,733	5,996	1,915	3,200	996
U. Oklahoma, Norman and Health Science Center	64	17,363	25,818	11,396	13,702	2,608	1,522	2,828	401	6,343
U. New Mexico	65	10,707	10,624	10,544	13,611	1,077	1,156	82	4,940	6,356
U. California, Irvine	66	13,071	12,741	12,606	13,324	1,260	592	3,820	934	6,718

TABLE 53

Higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
Columbia U. in the City of New York	67	19,050	14,784	11,332	13,157	0	0	2,168	6,536	4,453
U. Alabama, Tuscaloosa	68	5,328	4,595	9,556	12,938	1,024	4,077	762	2,989	4,086
U. Notre Dame	69	9,450	8,860	10,334	12,729	196	4,801	5,061	934	1,737
Carnegie Mellon U.	70	14,307	12,461	12,392	12,720	0	1,221	173	169	11,157
Washington State U.	71	13,079	12,338	15,147	12,699	734	5,272	485	536	5,672
Georgia Institute of Technology	72	5,773	33,645	7,467	12,596	0	5,043	82	2,174	5,297
Texas Tech U.	73	10,463	11,877	11,235	12,411	0	6,254	1,131	1,462	3,564
U. Massachusetts, Boston	74	12,035	12,734	12,178	12,312	702	110	3,039	5,119	3,342
Boston U.	75	7,962	7,931	9,041	12,084	540	3,772	451	784	6,537
Rutgers, State U. New Jersey, New Brunswick	76	7,779	7,005	7,351	11,158	546	3,265	2,050	2,211	3,086
Indiana U.-Purdue U., Indianapolis	77	13,123	15,556	11,605	11,122	53	156	4,541	4,347	2,025
U. California, Santa Barbara	78	7,450	7,631	8,231	10,473	0	477	49	107	9,840
U. Texas, San Antonio	79	6,674	9,447	9,393	10,456	1,190	941	822	2,101	5,402
U. Nebraska, Lincoln	80	13,140	14,322	11,920	10,339	15	1,691	1,346	5,949	1,338
Iowa State U.	81	3,741	6,923	10,196	10,305	0	4,507	555	4,890	353
Texas State U.	82	4,217	4,907	4,437	10,265	2,500	0	6	2,233	5,526
William & Mary	83	10,227	10,623	9,878	10,114	1,037	13	8,401	394	269
Kansas State U.	84	4,159	10,750	9,633	10,049	0	6,090	893	1,016	2,050
U. Tennessee, Knoxville ^c	85	12,661	12,171	10,596	9,813	2,019	4,283	1,275	910	1,326
Oklahoma State U., Stillwater	86	5,425	6,251	5,445	9,806	0	5,142	1,101	1,300	2,263
U. Connecticut	87	8,455	6,645	6,705	9,724	688	3,536	1,667	2,943	890
U. Cincinnati	88	12,083	11,291	11,451	9,610	175	0	1,193	2,436	5,806
North Carolina State U.	89	8,403	9,826	10,768	9,396	0	6,338	228	2,830	0
Northeastern U.	90	11,540	11,615	13,062	9,361	0	848	1,549	4,151	2,813
Boston C.	91	11,141	11,862	10,756	9,261	0	430	152	3,791	4,888
Johns Hopkins U. ^d	92	8,923	6,221	5,305	9,118	217	244	168	6,482	2,007
U. Illinois, Chicago	93	6,741	7,905	8,351	8,851	176	858	195	224	7,398
U. Missouri, Columbia	94	2,840	3,957	6,665	8,731	235	1,651	451	308	6,086
Alcorn State U.	95	5,428	5,659	7,181	8,429	0	8,429	0	0	0
U. Memphis	96	4,052	7,750	7,319	8,068	466	743	335	2,068	4,456
U. Vermont	97	1,356	4,492	6,052	8,023	639	4,384	1,505	770	725
U. Central Florida	98	13,274	7,374	6,935	8,004	996	1,491	1,708	1,593	2,216
North Dakota State U.	99	9,396	15,215	6,686	7,856	0	5,988	18	1,279	571

TABLE 53

Higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
New Jersey Institute of Technology	100	0	8,315	6,602	7,277	0	7,277	0	0	0
U. Massachusetts, Amherst	101	6,118	4,819	5,623	7,235	537	1,681	621	1,461	2,935
Temple U.	102	3,214	6,746	7,649	7,110	348	927	1,126	687	4,022
U. Nevada, Las Vegas	103	6,344	6,306	6,536	7,012	883	3,624	814	766	925
Tulane U.	104	5,241	6,876	6,935	6,996	529	3,880	805	1,419	363
U. Arkansas, Fayetteville	105	4,375	7,186	4,212	6,866	605	362	2,740	734	2,425
Clemson U.	106	5,991	6,680	6,298	6,858	0	127	86	1,610	5,035
U. California, Riverside	107	4,568	5,132	5,224	6,764	0	51	97	1,544	5,072
New School	108	3,802	3,790	5,293	6,743	144	2,984	609	1,234	1,772
U. Illinois, Urbana-Champaign	109	6,846	5,846	5,604	6,718	709	1,488	794	221	3,506
U. Massachusetts, Lowell	110	4,635	5,924	6,915	6,681	0	278	619	3,008	2,776
SUNY, U. Buffalo	111	9,937	6,356	8,687	6,573	4,448	0	457	1,668	0
Oregon State U.	112	5,550	6,696	5,713	6,357	0	2,198	0	1,050	3,109
Naval Postgraduate School	113	4,608	6,040	6,669	6,114	0	637	2,742	383	2,352
U. Nevada, Reno	114	7,113	7,053	7,637	5,985	1,449	1,842	942	922	830
U. Idaho	115	2,108	5,076	4,453	5,960	94	3,525	145	955	1,241
U. Wisconsin-Milwaukee	116	4,973	6,710	6,531	5,843	2,669	970	521	1,457	226
U. California, Santa Cruz	117	6,908	5,724	5,411	5,793	0	607	340	1,050	3,796
Kent State U.	118	5,031	4,793	4,930	5,668	376	823	563	1,288	2,618
U.S. Army War C.	119	2,146	ne	4,662	5,496	0	0	0	0	5,496
San Diego State U.	120	5,054	5,106	4,876	5,482	615	909	727	710	2,521
U. Wyoming	121	477	535	1,086	5,421	1,119	1,643	8	67	2,584
U. Kentucky	122	765	3,696	4,075	5,072	119	3,160	256	1,151	386
U. Mississippi	123	5,469	2,317	1,777	5,018	0	126	1,134	1,814	1,944
U.S. Military Academy	124	78	284	4,179	4,806	0	3,593	125	39	1,049
Cleveland State U.	125	6,170	6,265	5,902	4,782	0	129	208	0	4,445
Emory U.	126	2,005	3,352	3,979	4,780	0	2,445	825	1,399	111
Louisiana State U., Baton Rouge	127	3,704	4,888	4,537	4,752	0	2,297	242	314	1,899
U. Oregon	128	3,790	8,911	3,797	4,723	408	400	693	198	3,024
Virginia Commonwealth U.	129	1,251	1,701	4,959	4,628	0	284	4,344	0	0
U. Texas Rio Grande Valley	130	3,575	3,660	3,534	4,604	239	1,275	804	455	1,831
U. Pittsburgh, Pittsburgh	131	4,662	4,990	4,070	4,587	158	480	991	334	2,624
U. Louisiana, Lafayette	132	406	97	3,919	4,463	205	2,102	2,106	16	34
Northern Illinois U.	133	4,014	4,982	4,024	4,365	122	0	4,128	3	112

TABLE 53

Higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
Claremont McKenna C.	134	4,997	4,545	3,532	4,189	0	728	1,493	0	1,968
Georgia Southern U.	135	308	113	3,743	4,176	249	943	514	584	1,886
U. North Texas, Denton	136	5,413	7,541	4,057	3,953	0	733	1,274	871	1,075
Portland State U.	137	5,018	3,882	4,338	3,900	896	85	178	1,025	1,716
Auburn U., Auburn	138	5,387	6,902	6,228	3,856	134	139	1,678	834	1,071
U. Houston	139	2,714	1,536	2,404	3,842	0	367	2,480	325	670
California State U., Sacramento	140	7,331	7,680	6,544	3,830	275	474	210	1,940	931
U. Iowa	141	7,575	6,875	6,010	3,682	28	356	501	621	2,176
Bowling Green State U.	142	3,683	3,333	3,631	3,623	0	227	373	1,067	1,956
Chapman U.	143	3,068	2,714	3,253	3,609	0	376	2,842	197	194
Montclair State U.	144	1,123	2,138	1,378	3,543	265	566	754	368	1,590
U. Denver	145	3,739	2,092	1,678	3,542	65	0	3,230	57	190
Middle Tennessee State U.	146	1,325	1,583	3,668	3,527	585	1,467	975	244	256
U. Texas, El Paso	147	3,951	4,161	4,964	3,365	145	269	1,265	1,539	147
U. West Florida	148	7,858	4,237	3,779	3,261	0	412	0	0	2,849
San Jose State U.	149	247	190	2,940	3,260	174	394	353	677	1,662
Baylor U.	150	1,920	1,945	1,420	3,244	380	599	113	364	1,788
West Virginia U.	151	2,356	3,590	3,681	3,216	17	846	320	346	1,687
San Francisco State U.	152	3,629	3,648	3,892	3,159	121	230	25	384	2,399
National Defense U.	153	2,155	2,383	2,186	3,020	0	0	3,020	0	0
U. California, Merced	154	3,065	2,988	1,816	2,936	166	220	637	1,510	403
U. Nebraska, Omaha	155	2,475	1,856	2,324	2,807	15	11	219	245	2,317
U. New Orleans	156	2,646	3,341	3,079	2,787	553	301	98	79	1,756
Sam Houston State U.	157	2,465	2,444	1,970	2,785	0	0	3	320	2,462
DePaul U.	158	23	22	43	2,780	0	144	62	1,074	1,500
U. Kansas	159	7,043	6,450	1,918	2,768	894	292	403	699	480
U. Rhode Island	160	2,432	2,377	1,417	2,746	0	388	69	287	2,002
U. Southern Maine	161	3,431	2,963	2,867	2,619	0	88	0	66	2,465
Rochester Institute of Technology	162	2,623	2,584	2,603	2,590	0	8	318	18	2,246
Texas Christian U.	163	591	319	74	2,551	0	211	22	883	1,435
Wake Forest U.	164	901	460	689	2,534	0	410	335	1,789	0
U. North Carolina, Charlotte	165	3,658	3,973	2,947	2,519	97	125	737	421	1,139
Clark U.	166	3,694	3,575	2,711	2,504	0	1,359	3	46	1,096
U. Baltimore	167	3,392	3,367	2,824	2,501	0	2,203	0	0	298

TABLE 53

Higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
SUNY, Stony Brook U.	168	2,775	2,881	2,776	2,472	524	410	501	336	701
Boise State U.	169	4,232	3,200	2,554	2,458	137	179	558	81	1,503
U. Hawaii, Manoa	170	4,828	4,851	3,481	2,407	123	141	0	71	2,072
Old Dominion U.	171	2,279	2,482	1,659	2,345	0	288	381	257	1,419
U. Texas, Dallas	172	2,480	2,166	2,666	2,262	0	412	922	529	399
U. Maine	173	2,293	2,274	2,316	2,169	337	74	277	259	1,222
California State U., East Bay	174	ne	677	1,530	2,148	55	974	1	512	606
Southern Methodist U.	175	1,595	326	529	2,132	1,087	613	421	11	0
U. Southern Mississippi	176	5,373	3,645	2,134	2,114	0	0	0	0	2,114
California State Polytechnic U., Humboldt	177	308	616	1,385	2,088	1,321	17	0	545	205
Claremont Graduate U.	178	1,356	3,122	2,815	2,075	0	11	0	0	2,064
U. Northern Iowa	179	1,924	1,510	1,657	2,045	0	29	0	0	2,016
Rutgers, State U. New Jersey, Newark	180	1,052	1,678	672	2,024	0	0	216	33	1,775
U. Illinois, Springfield	181	1,699	2,838	2,260	1,978	0	0	3	0	1,975
Saint Louis U.	182	272	448	1,380	1,974	0	1,402	66	327	179
Montana State U., Bozeman	183	582	1,126	2,194	1,946	0	0	416	416	1,114
U. Missouri, Saint Louis	184	2,831	2,265	1,882	1,935	0	148	79	11	1,697
Utah State U.	185	1,591	2,601	2,417	1,911	114	1,175	70	539	13
U. Miami	186	2,294	1,812	463	1,907	0	5	0	459	1,443
Catholic U. of America	187	402	502	651	1,897	0	0	370	1,527	0
Drexel U.	188	3,028	2,854	2,271	1,870	0	5	137	86	1,642
Worcester Polytechnic Institute	189	1,457	1,760	1,515	1,854	0	0	0	0	1,854
Rensselaer Polytechnic Institute	190	451	1,175	1,535	1,829	0	671	0	0	1,158
CUNY, Hunter C.	191	1,468	3,051	2,509	1,827	540	215	0	1,072	0
South Dakota State U.	192	1,600	1,967	1,772	1,791	0	947	15	236	593
Rutgers, State U. New Jersey, Camden	193	562	733	1,339	1,790	0	1	13	248	1,528
Eastern Washington U.	194	1,126	1,613	1,318	1,789	0	0	0	0	1,789
U. New Haven	195	3,030	2,107	1,499	1,738	0	5	0	527	1,206
U. North Carolina, Wilmington	196	390	709	1,183	1,683	14	129	4	72	1,464
Kennesaw State U.	197	2,664	2,096	2,554	1,661	35	952	151	303	220
Washington U., Saint Louis	198	1,259	1,191	1,374	1,631	460	10	831	175	155
Delaware State U.	199	169	639	528	1,618	0	299	0	888	431
U. North Dakota	199	1,739	1,616	1,577	1,618	23	630	283	235	447
Wayne State U.	201	3,342	3,289	3,585	1,575	104	185	144	406	736

TABLE 53

Higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
U. Alaska, Anchorage	202	2,233	3,306	3,020	1,529	26	449	137	118	799
Fordham U.	203	964	1,095	662	1,519	0	535	0	376	608
William Paterson U.	204	1,295	1,568	1,591	1,506	0	392	150	783	181
Bryn Mawr C.	205	1,480	1,573	1,542	1,449	314	143	198	201	593
Michigan Technological U.	206	1,386	1,260	1,279	1,438	0	0	0	0	1,438
U. Wisconsin-La Crosse	207	945	1,024	1,487	1,383	0	716	34	3	630
Southern Illinois U., Carbondale	208	1,249	954	996	1,358	0	9	634	377	338
Howard U.	209	843	827	952	1,296	0	676	158	462	0
U. Puerto Rico, Rio Piedras	210	1,333	1,119	1,185	1,270	0	17	75	0	1,178
Ohio U.	211	1,377	960	897	1,245	0	14	0	81	1,150
East Carolina U.	212	1,976	1,886	2,319	1,226	193	298	59	325	351
Western Washington U.	213	817	690	818	1,204	33	109	170	269	623
Loyola U., Chicago	214	700	800	1,139	1,189	32	13	48	761	335
Creighton U.	215	1,135 i	933 i	1,068 i	1,186 i	26 i	221 i	235 i	188 i	516 i
U. Alaska, Fairbanks	216	1,162	1,810	1,248	1,184	412	50	36	0	686
California State U., Fullerton	217	212	110	342	1,163	101	264	42	389	367
Wellesley C.	218	1,240	1,402	722	1,133	0	520	32	0	581
U. Louisville	219	2,342	1,593	1,330	1,130	88	19	186	218	619
U. Alabama, Huntsville	220	2,325	1,717	820	1,113	0	773	213	127	0
Grinnell C.	221	917	755	686	1,087	320	272	316	179	0
U. San Diego	222	614	289	209	1,086	76	81	163	175	591
Loyola Marymount U.	223	868	1,285	1,724	1,072	0	501	41	487	43
CUNY, Graduate Center	224	3,090	2,238	1,325	1,067	63	90	607	307	0
U. North Florida	225	788	633	277	1,040	0	39	19	565	417
Tarleton State U.	226	145	639	778	1,033	0	0	157	659	217
U. North Carolina, Greensboro	226	728	747	1,155	1,033	56	391	71	347	168
Nova Southeastern U.	228	22	0	0	981	0	473	93	22	393
Naval War C.	229	679	724	794	929	0	0	929	0	0
Northwestern State U. Louisiana	230	657	738	919	881	0	0	0	0	881
Brigham Young U., Provo	231	1,052	924	927	880	31	136	632	30	51
Marquette U.	232	784	1,008	431	871	0	14	462	314	81
U. Colorado Colorado Springs	233	39	124	36	861	89	2	0	1	769
Grand Valley State U.	234	964	657	1,178	839	0	7	2	35	795
Long Island U.	235	2	847	906	838	0	51	504	159	124

TABLE 53

Higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
Wichita State U.	236	44	36	380	817	9	586	52	114	56
Towson U.	237	198	264	238	816	44	242	81	107	342
Gallaudet U.	238	82	173	1,006	813	0	0	0	793	20
Case Western Reserve U.	239	3,170	4,386	5,880	790	88	0	0	163	539
Louisiana Tech U.	240	706	726	1,136	785	0	0	114	0	671
Miami U.	241	471	582	1,444	782	0	181	80	56	465
Ball State U.	242	1,381	1,662	1,473	772	264	201	36	145	126
CUNY, John Jay C. of Criminal Justice	243	349	210	569	764	6	28	513	217	0
Winston-Salem State U.	244	453	724	1,458	755	0	755	0	0	0
Texas A&M International U.	245	17	59	914	743	6	0	0	2	735
West Chester U. Pennsylvania	246	958	892	524	739	19	601	13	10	96
California Polytechnic State U., San Luis Obispo	247	256	675	930	738	0	542	126	49	21
Colorado School of Mines	248	571	1,403	1,220	696	59	553	0	0	84
U. South Dakota	249	373	504	316	693	120	0	573	0	0
Augusta U.	250	178	128	41	689	0	39	0	0	650
New Mexico State U.	251	653	469	570	679	191	380	68	1	39
Carleton C.	252	432	464	577	675	411	3	0	258	3
California State U., Fresno	253	700	456	165	652	0	0	442	41	169
U. Colorado Denver ^e	254	na	na	359	638	135	81	21	172	229
U. Rochester	255	219	279	343	634	123	0	335	0	176
U. South Alabama	256	628	586	515	633	0	0	0	127	506
Eastern Michigan U.	257	752	1,039	892	632	113	24	146	189	160
Texas A&M U.-Corpus Christi	258	77	151	464	623	0	136	1	451	35
CUNY, Queens C.	259	696	477	579	603	93	108	25	357	20
U. Northern Colorado	260	314	346	534	597	30	0	3	123	441
Indiana U. Pennsylvania	261	939	842	303	579	288	22	0	170	99
California State U., Long Beach	262	723	625	645	574	74	40	14	2	444
Stockton U.	263	49	140	114	568	0	0	0	568	0
U. of the Virgin Islands	264	1	228	248	534	0	310	0	0	224
Texas Southern U.	265	0	490	845	531	0	0	0	0	531
Williams C.	265	873	827	812	531	57	127	124	59	164
Hofstra U.	267	103	64	1,032	525	25	0	140	237	123
U. Puerto Rico, Mayaguez	268	96	233	93	524	0	198	0	0	326

TABLE 53

Higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
Davidson C.	269	247	161	456	523	34	0	49	317	123
Hope C.	270	0	673	639	515	0	105	19	15	376
Pomona C.	270	580	620	330	515	19	195	99	9	193
Reed C.	272	322	439	422 i	514 i	56 i	123 i	117 i	59 i	159 i
Santa Clara U.	273	135	116	102	512	8	0	468	36	0
U. Maryland Center for Environmental Science	274	219	216	326	509	0	284	0	169	56
U. Alabama, Birmingham	275	803	246	317	494	0	0	0	311	183
U. Texas of the Permian Basin	275	ne	320	380	494	0	419	0	0	75
Amherst C.	277	879	488	530 i	488	52	52	92	12	280
Babson C.	278	0 i	0 i	0 i	483 i	0 i	129 i	128 i	60 i	166 i
Western Michigan U. and Homer Stryker M.D. School of Medicine	279	844	169	245	481	2	20	15	227	217
Barnard C.	280	432	293	320	474	167	139	30	34	104
Salisbury U.	280	581	485	488	474	0	439	0	0	35
Vassar C.	282	111	128	193	472	1	163	24	243	41
Southern Connecticut State U.	283	289	505	400	466	100	196	89	26	55
U. Colorado Anschutz Medical Campus ^e	284	na	na	352	449	0	0	0	349	100
Franklin and Marshall C.	285	297	440	376	441	21	20	48	48	304
Lehigh U.	286	86	95	212	439	0	294	0	143	2
Hampton U.	287	1,604	710	1,041	434	0	0	0	0	434
Colgate U.	288	440	268	309	406	25	176	126	79	0
Appalachian State U.	289	226	585	265	405	44	220	13	111	17
Eastern Connecticut State U.	290	198	2	3	399	226	7	0	1	165
California State U., Los Angeles	291	1,659 i	1,570	1,131	391	0	0	0	0	391
CUNY, Lehman C.	292	739	180	213	380	8	2	7	363	0
Mercyhurst U.	292	620 i	539 i	461 i	380	5 i	0	0	7	368
U. North Carolina, Asheville	294	1	2	0	354	0	0	0	0	354
Central Connecticut State U.	295	504	519	541	346	0	2	10	14	320
Northern Arizona U.	296	724	419	167	345	31	240	51	3	20
Pacific U.	297	294	90	236	342	0	14	1	327	0
U. Central Oklahoma	297	0	0 i	0 i	342 i	0 i	166 i	0 i	0 i	176 i
U. Hawaii, Hilo	299	348	207	179	338	7	0	0	0	331
Hamilton C.	300	216	274	322	337	84	39	177	17	20
Idaho State U.	301	279	240	213	334	289	0	17	28	0

TABLE 53

Higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
Occidental C.	301	8	190	287	334 i	0 i	0 i	0 i	126 i	208 i
Bucknell U.	303	119	149 i	126	322	3	41	13	66	199
St. Catherine U.	303	ne	ne	ne	322	0	322	0	0	0
North Carolina Central U.	305	662	415	250	319	0	0	0	0	319
Trinity U.	305	718	501	411	319	0	204	56	0	59
Colby C.	307	111	222	150	316	91	151	40	31	3
California State U., Northridge	308	695	559	393	312	0	0	0	0	312
Texas Woman's U.	308	50	200	83	312	0	0	0	0	312
Minnesota State U., Mankato	310	349	121	0	310	18	0	0	3	289
Villanova U.	311	752	656	433	309	0	96	189	24	0
Western Kentucky U.	312	207	106	189	299	16	0	98	167	18
Middlebury C.	313	137	65	353	289	54	112	10	0	113
U. Tulsa	314	92	243	174	287	283	0	0	2	2
Coastal Carolina U.	315	0	0	0	284	1	6	169	0	108
Des Moines U.	316	155	561	180 i	280	192	0	0	88	0
Winthrop U.	316	184	371	642	280	45	0	235	0	0
California State U., San Bernardino	318	534	320	208	278	15	6	0	35	222
Northeast Ohio Medical U.	318	88	40	23	278	232	0	0	22	24
Saint Joseph's U.	320	172	194	165	277	0	0	12	11	254
U. San Francisco	321	300	397	148	272	7	19	4	141	101
Kean U.	322	ne	44	0	270	5	4	97	24	140
Western Carolina U.	323	215	292	290	267	236	0	26	0	5
U. Minnesota, Duluth	324	123	82	154	265	6	0	18	0	241
Wesleyan U.	325	1,040	454	136	262	13	61	151	27	10
California State U., Bakersfield	326	391	264	146	261	31	0	8	78	144
Florida Atlantic U.	326	142	210	153	261	0	0	0	0	261
U. Tennessee, Chattanooga	328	88	68	21	253	0	0	19	192	42
Macalester C.	329	194	182	160	252	0	26	121	7	98
U. Central Arkansas	329	5	43	2	252	0	74	0	0	178
Pepperdine U.	331	71	213	503	248	0	169	19	53	7
Prairie View A&M U.	332	0	213	17	247	0	102	0	66	79
U. South Carolina, Aiken	333	0	6	0	245	0	0	0	245	0
Alabama A&M U.	334	437 i	298 i	258 i	237 i	0 i	0 i	29 i	76 i	132 i
James Madison U.	335	61	37	150	225	0	0	164	61	0

TABLE 53

Higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
Swarthmore C.	336	339	274	194	219	0	92	33	94	0
St. Cloud State U.	337	278	206	393	217	5	54	56	46	56
Stephen F. Austin State U.	338	213	250	203	212	7	2	0	96	107
Saginaw Valley State U.	339	124	106	105 i	203 i	0 i	0 i	149 i	0 i	54 i
U. Oklahoma, Tulsa	339	126	142	19	203	0	0	183	0	20
Haverford C.	341	178 i	336 i	146 i	202 i	27 i	50 i	44 i	17 i	64 i
Marymount U.	342	ne	ne	356	200	0	0	0	4	196
California State U., Dominguez Hills	343	58	186	314	197	0	0	0	176	21
Christopher Newport U.	344	0	148	216	195	20	35	77	0	63
Elon U.	345	209	274	264	193	18	48	40	30	57
Arkansas State U., Jonesboro	346	36	148	267	187	0	185	0	0	2
New Mexico Highlands U.	347	ne	0	0 i	186 i	24 i	0 i	111 i	27 i	24 i
Western Illinois U.	348	201	199	199	182	0	0	0	182	0
California Lutheran U.	349	77	16	ne	178	0	161	0	0	17
U. Guam	350	256	154	205	174	0	0	0	174	0
U. Toledo	350	257	378	47	174	0	0	17	143	14
Missouri State U.	352	367	357	263	172	0	0	0	170	2
C. Wooster	353	283	18	151 i	167	114	18	18	9	8
U. Massachusetts, Dartmouth	354	848	499	42	164	0	1	0	0	163
Albion C.	355	102	176	171 i	162 i	18 i	38 i	35 i	19 i	52 i
Trinity C., Hartford	356	272	163	117	161	26	28	89	3	15
Lamar U.	357	0	20	0	160	0	0	45	115	0
Framingham State U.	358	ne	0	0 i	156 i	0 i	38 i	21 i	41 i	56 i
Fayetteville State U.	359	151	111	293	155	0	53	0	0	102
U. Louisiana, Monroe	360	182	144	169	154	0	0	0	0	154
Smith C.	361	549	151	93	152	14	68	38	32	0
Missouri U. of Science and Technology	362	134	61	69	149	0	149	0	0	0
U. Missouri, Kansas City	363	878	907	180	148	0	60	17	26	45
U. North Georgia	363	50	0	5	148	0	0	148	0	0
Clarkson U.	365	83	74	42	146	0	0	13	8	125
U. Arkansas, Little Rock	365	116	27	93	146	0	0	0	34	112
Duquesne U.	367	21	6	46	145	0	0	1	144	0
Lincoln U., Jefferson City	367	112	92	120	145	0	145	0	0	0
Bates C.	369	308	161	173	144	56	21	21	30	16

TABLE 53

Higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
Pennsylvania State U., Harrisburg	369	1,477	1,178	258	144	0	0	86	48	10
Saint John's U.	369	202 i	192 i	125 i	144 i	9 i	38 i	33 i	13 i	51 i
U. Hartford	372	0	0	55	142	0	0	4	72	66
California State U., Channel Islands	373	68	45	22	140	1	0	0	15	124
U. Akron	374	154	95	54	139	71	29	31	0	8
Colorado C.	375	413	363	117	136	21	50	31	34	0
C. of Saint Benedict	376	68 i	65 i	114 i	132 i	9 i	35 i	30 i	12 i	46 i
Sul Ross State U.	376	774	451	466 i	132 i	20 i	0 i	32 i	34 i	46 i
U. Richmond	378	579	394	211	131	0	67	51	13	0
Central Washington U.	379	119	116	88	128	104	0	20	0	4
Northern Kentucky U.	380	43	95	98	126	0	0	75	12	39
U. Texas, Arlington	381	160	104	79	124	0	0	58	15	51
Union C., Schenectady	381	72	111	31	124	30	40	47	7	0
California State U., Stanislaus	383	39	44	70	123	24	0	0	16	83
California State U., San Marcos	384	990	884	680	121	5	0	0	0	116
East Tennessee State U.	385	406 i	88 i	46 i	120 i	0 i	0 i	0 i	120 i	0 i
Lafayette C.	386	54	119	85	117	14	36	38	0	29
U. Arkansas, Pine Bluff	387	0	0	0	114	0	0	0	114	0
Central Michigan U.	388	215	169	152	112	12	3	0	77	20
CUNY, Brooklyn C.	389	238 i	243	169	109	9	2	0	98	0
U. Wisconsin-Platteville	389	62 i	63 i	93 i	109 i	0 i	0 i	27 i	25 i	57 i
Purdue U., Fort Wayne	391	24	22	108	105	1	0	0	0	104
Seattle U.	392	162	200	176	103	0	0	0	0	103
California State U., Chico	393	453	426	237	102	0	23	26	0	53
Southern Illinois U., Edwardsville	394	315	286	334	100	74	0	0	0	26
SUNY, C. of Environmental Science and Forestry	395	330	110	22	98 i	0 i	0 i	0 i	70 i	28 i
U. Washington, Tacoma	396	36	124	175	97	0	0	0	0	97
U. Wisconsin-Green Bay	396	79 i	73 i	64 i	97 i	4 i	21 i	14 i	19 i	39 i
Stevens Institute of Technology	398	0	0	0	96	0	0	0	1	95
U. Virginia's C. Wise	399	ne	ne	27	95	0	9	0	67	19
U. Wisconsin-Oshkosh	400	63 i	69 i	75	93	15	77	0	1	0
Illinois Institute of Technology	401	254	100	13	91	0	0	0	0	91
SUNY, Buffalo State	402	260	250	174	90	0	0	0	0	90
California State U., Monterey Bay	403	111	0	47	89	0	0	0	89	0

TABLE 53

Higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
Mercer U.	403	57	81	105	89	0	36	0	53	0
Tuskegee U.	403	4,803	4,907	5,828	89	0	0	0	0	89
U. Michigan, Dearborn	406	245	114	62	88	0	0	0	51	37
Azusa Pacific U.	407	701	274	171	87	0	0	27	1	59
C. Charleston	407	162	113	48	87	0	0	25	62	0
Morgan State U.	409	3	98	160	86	0	0	0	82	4
Northland C.	409	ne	ne	72 i	86 i	0 i	0 i	0 i	24 i	62 i
Bentley U.	411	ne	ne	ne	84	0	0	0	0	84
CUNY, Baruch C.	411	728	897	677	84	3	60	16	5	0
Hawaii Pacific U.	413	350	215	232	82	0	25	51	6	0
Pennsylvania State U., Behrend	414	53	15	43	80	0	62	0	18	0
U. Houston-Clear Lake	415	63	120	51	79	0	0	0	0	79
Lewis and Clark C.	416	5	20	11	77	9	19	20	3	26
Sonoma State U.	417	ne	40	51	72	2	35	8	10	17
Whitman C.	418	39	34	ne	70	1	10	13	46	0
U. Washington, Bothell	419	35	0	0	68	0	0	0	0	68
U. Texas, Tyler	420	45	19	27	67	0	6	51	10	0
Embry-Riddle Aeronautical U.	421	394	714	476	66	0	0	0	0	66
U. Houston-Downtown	421	143	247	128	66	0	0	7	50	9
Clafin U.	423	0	75	107	64	0	64	0	0	0
SUNY, Geneseo	423	157	124	108	64	6	0	21	9	28
U. Wisconsin-Superior	425	0	230	42	63	3	0	0	60	0
Calvin U.	426	105	46 i	54 i	62 i	0 i	31 i	7 i	2 i	22 i
Florida A&M U.	426	5	21	5	62	0	0	55	2	5
Oakland U.	428	312	45	161	61	0	0	34	27	0
Bowdoin C.	429	243	191	18	60	8	5	14	33	0
Tougaloo C.	429	0	0	0 i	60 i	0 i	26 i	17 i	17 i	0 i
Chicago State U.	431	0	ne	ne	59	0	0	0	0	59
Connecticut C.	432	588	517	407	57	0	0	34	0	23
SUNY, Oswego	433	48	77	71	56	9	0	47	0	0
Skidmore C.	434	163	41	58	55	31	14	6	4	0
Spelman C.	434	43	129	53	55	0	55	0	0	0
Ithaca C.	436	ne	176	94	54	11	0	5	25	13
Tennessee Technological U.	437	24	55	87	52	0	0	13	39	0

TABLE 53

Higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
U. Alaska, Southeast	438	0	0	9	50	0	0	0	50	0
Youngstown State U.	438	39	32	33	50	0	0	0	0	50
Monmouth U.	440	30	1	45	49	49	0	0	0	0
Suffolk U.	441	ne	0	0	47	0	0	0	47	0
U. Dayton	441	109	38	15	47	0	7	21	15	4
Texas A&M U.-Commerce	443	66	139	99	46	0	0	11	20	15
Illinois State U.	444	796	2,276	1,105	43	0	0	43	0	0
Plymouth State U.	445	ne	ne	ne	40	0	0	0	0	40
Troy U.	445	ne	20	10	40	0	0	14	0	26
Northern Michigan U.	447	0	109	55	39	21	0	0	2	16
U. of Mary Washington	447	90	73	40	39	0	0	0	39	0
Mount Holyoke C.	449	295	168	106	37	0	21	8	6	2
Texas A&M U.-San Antonio	450	ne	ne	ne	36	36	0	0	0	0
U. Puget Sound	450	ne	182	ne	36	0	0	27	3	6
Robert Morris U.	452	ne	ne	ne	35	0	0	11	0	24
Kenyon C.	453	24	17	ne	34	15	5	9	5	0
Florida Polytechnic U.	454	4	31	73	33	0	33	0	0	0
C. New Jersey	455	ne	54	1	31	0	0	1	3	27
St. Edward's U.	456	366	340	50	30	0	0	30	0	0
Virginia Military Institute	457	ne	ne	ne	29	0	11	0	0	18
SUNY, C. Brockport	458	70	81	6	28	17	3	2	3	3
Colorado State U., Pueblo	459	7	0	6	27	0	0	0	27	0
Citadel Military C. South Carolina	460	ne	16	6	25	0	0	5	0	20
U. Nebraska, Kearney	461	76	104	19	23	0	5	5	0	13
California State Polytechnic U., Pomona	462	0	39	9	22	22	0	0	0	0
Pittsburg State U.	462	100	132	163	22	0	22	0	0	0
Hobart and William Smith Colleges	464	39	31	30	21	0	9	2	7	3
Xavier U. Louisiana	465	0	0	0	18	0	0	18	0	0
U. Wisconsin-Eau Claire	466	77	72	88	17	0	0	0	0	17
Butler U.	467	ne	ne	ne	15	6	0	0	3	6
Furman U.	467	13	164	5	15	0	5	0	10	0
U. of St. Thomas (MN)	467	4	34	3	15	0	15	0	0	0
Rhode Island C.	470	19	35	13	13	13	0	0	0	0
Savannah State U.	470	167	0	0	13	0	0	0	0	13

TABLE 53

Higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
Pace U.	472	52	192	5	10	0	0	3	0	7
Southeastern Louisiana U.	472	176	264	11	10	0	10	0	0	0
U.S. Naval Academy	472	0	0	8	10	0	10	0	0	0
CUNY, C. Staten Island	475	14	4	21	9	5	0	0	4	0
Drake U.	475	35	ne	31	9	0	0	0	9	0
Northeastern Illinois U.	477	82	48	40	8	0	8	0	0	0
Abilene Christian U.	478	ne	ne	11	6	0	0	6	0	0
Dillard U.	478	348	189	38	6	0	0	6	0	0
Lake Superior State U.	478	ne	ne	ne	6	0	0	0	6	0
St. John's U., New York	481	31	0	0	5	0	0	0	5	0
U. New England	481	19	9	0	5	0	0	0	3	2
Jackson State U.	483	325	201	73	4	0	0	4	0	0
U. Puerto Rico, Cayey	483	150	i	460	171	4	4	0	0	0
CUNY, City C.	485	42	6	16	3	3	0	0	0	0
Elizabeth City State U.	485	ne	0	0	3	0	0	0	0	3
East Stroudsburg U. Pennsylvania	487	ne	ne	ne	2	0	0	1	0	1
Florida Gulf Coast U.	487	81	118	8	2	0	2	0	0	0
Johnson C. Smith U.	487	0	0	2	i	2	0	0	0	2
New York Institute of Technology	490	0	70	31	1	0	0	0	0	1
All other surveyed institutions	-	11,797	8,808	5,280	0	0	0	0	0	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

nec = not elsewhere classified.

^a The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^b The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^c The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^d Johns Hopkins University includes the Applied Physics Laboratory (APL), with \$5,873 thousand imputed for total R&D expenditures in social sciences in FY 2022. Total expenditures by field for Johns Hopkins University are flagged as imputed because APL was unable to distribute a portion of institutionally funded R&D by field.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 54

Federally financed higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
All institutions	-	938,439	963,498	949,863	1,075,470	40,119	194,381	95,363	272,683	472,924
U. Michigan, Ann Arbor	1	91,183	89,211	85,904	94,899	709	24,206	14,229	17,002	38,753
U. Southern California	2	25,317	28,212	41,252	54,732	13	23,700	187	133	30,699
U. North Carolina, Chapel Hill	3	84,279	56,291	43,473	52,761	94	134	2,111	46,133	4,289
Harvard U.	4	25,188	27,768	32,441	37,799	15	5,010	1,096	1,292	30,386
U. Maryland ^a	5	38,235	36,918	35,980	30,603	873	541	1,631	2,362	25,196
U. Minnesota, Twin Cities	6	17,160	15,486	18,265	25,517	156	2,802	736	21,434	389
U. Wisconsin-Madison	7	19,987	24,863	26,100	24,878	19	2,094	1,774	2,667	18,324
Brown U.	8	13,087	17,975	20,519	22,828	0	95	0	560	22,173
Duke U.	9	19,689	20,611	21,294	22,646	985	2,005	835	11,113	7,708
Arizona State U.	10	22,385	21,158	19,939	21,805	3,314	1,572	3,210	2,606	11,103
U. California, Davis	11	10,773	12,384	13,706	19,444	0	5,912	3,671	986	8,875
Pennsylvania State U., University Park and Hershey Medical Center	12	11,862	12,255	10,718	18,106	123	3,962	575	13,446	0
Michigan State U.	13	9,867	23,664	20,456	17,060	58	7,993	79	1,147	7,783
U. South Florida ^b	14	14,684	14,278	15,894	14,818	338	0	140	811	13,529
U. Pennsylvania	15	14,723	16,651	12,742	14,697	315	695	378	11,541	1,768
Georgia State U.	16	3,784	5,873	10,424	13,236	60	881	63	5,208	7,024
U. Georgia	17	5,083	6,118	9,262	13,225	396	10,135	45	33	2,616
Northwestern U.	18	6,433	8,526	11,898	13,131	230	5,521	118	0	7,262
Texas A&M U., College Station and Health Science Center	19	9,649	8,838	11,023	13,123	757	3,494	1,662	769	6,441
Mississippi State U.	20	18,611	17,297	10,795	13,019	138	487	0	1,785	10,609
Ohio State U.	21	8,342	10,746	9,443	12,219	394	3,318	273	3,935	4,299
U. Texas, Austin	22	9,604	10,339	12,928	11,765	1,085	89	105	8,377	2,109
U. Utah	23	1,897	8,098	3,396	11,759	14	80	585	8,050	3,030
U. New Hampshire	24	3,890	6,208	8,913	11,473	1	502	135	1,920	8,915
U. California, Los Angeles	25	9,826	9,105	7,673	10,921	0	18	50	2,192	8,661
U. California, San Diego	26	3,367	2,924	5,282	10,662	1,721	1,753	1,800	4,529	859
George Washington U.	27	8,306	8,955	8,227	10,477	614	775	24	2,790	6,274
U. Colorado Boulder	28	13,373	11,527	9,168	9,730	301	330	41	6,743	2,315
U. Chicago	29	9,073	10,380	13,190	9,500	183	2,029	146	1,541	5,601
New York U.	30	5,936	5,450	6,585	9,297	0	453	890	4,306	3,648
Massachusetts Institute of Technology	31	5,668	6,424	5,534	9,284	0	4,315	354	11	4,604
Indiana U., Bloomington	32	10,425	9,654	9,435	9,231	205	481	4,183	1,850	2,512

TABLE 54

Federally financed higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
George Mason U.	33	3,999	6,074	7,601	9,194	0	0	114	584	8,496
U. Washington, Seattle	34	6,874	6,333	6,899	8,206	36	43	2,264	5,130	733
U. California, Berkeley	35	6,390	5,489	5,495	8,148	64	4,061	679	533	2,811
U. Florida	36	4,981	4,981	5,584	7,942	653	2,042	1,951	78	3,218
Colorado State U., Fort Collins	37	7,399	8,715	6,894	7,838	3,054	822	355	1,029	2,578
Georgia Institute of Technology	38	2,412	21,373	3,055	7,754	0	4,182	82	448	3,042
Princeton U.	39	5,606	5,802	6,743	7,521	52	660	2,946	3,806	57
U. Arizona	40	6,362	6,264	6,333	7,363	2,131	48	448	1,141	3,595
Brandeis U.	41	9,093	6,882	7,957	6,922	33	383	9	2,341	4,156
Johns Hopkins U. ^c	42	7,453	4,910	2,726	6,290	206	26	0	5,984	74
Teachers C., Columbia U.	43	4,267	3,856	4,698	6,262	0	5,683	0	0	579
U. Maryland, Baltimore County	44	7,192	5,801	5,898	6,096	0	0	0	364	5,732
Stanford U.	45	5,655	5,291	5,926	6,084	161	1,877	1,674	477	1,895
Florida International U.	46	4,506	2,885	4,126	5,941	0	346	329	86	5,180
Northeastern U.	47	3,542	4,688	8,200	5,501	0	795	594	2,175	1,937
U.S. Army War C.	48	2,146 i	ne	4,662 i	5,496 i	0 i	0 i	0 i	0 i	5,496 i
U. Delaware	49	6,373	6,459	5,713	5,313	0	1,138	0	968	3,207
Purdue U., West Lafayette	50	1,732	5,955	4,550	5,286	213	4,206	273	594	0
Clemson U.	51	3,458	3,840	4,781	5,191	0	15	48	1,316	3,812
Georgetown U.	52	6,863	6,531	6,531	5,175	0	0	3,691	2	1,482
U. Texas M. D. Anderson Cancer Center	53	2,352	2,968	3,279	5,165	0	0	0	5,165	0
U. New Mexico	54	4,231	4,420	3,915	5,104	711	629	0	949	2,815
Washington State U.	55	3,496	4,140	7,120	4,994	341	1,575	2	52	3,024
Naval Postgraduate School	56	3,663	4,623	5,622	4,681	0	53	2,231	383	2,014
Cornell U.	57	9,839	7,441	5,374	4,621	66	1,066	345	1,992	1,152
U.S. Military Academy	58	78	19	919	4,526	0	3,593	125	39	769
Alcorn State U.	59	2,377	2,807	3,532	4,354 i	0 i	4,354 i	0 i	0 i	0 i
Virginia Polytechnic Institute and State U.	60	3,667	4,272	3,156	4,265	0	2,619	306	572	768
American U.	61	7,055	6,887	3,675	4,239	0	106	395	413	3,325
U. Connecticut	62	3,749	3,621	3,562	4,175	188	1,598	155	1,610	624
Syracuse U.	63	2,989	3,007	3,260	4,152	18	0	2,071	432	1,631
U. Cincinnati	64	2,068	2,376	2,660	3,998	96	0	199	988	2,715
Boston C.	65	2,549	3,307	3,631	3,829	0	98	83	3,110	538

TABLE 54

Federally financed higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
U. Idaho	66	1,625	3,073	2,779	3,775	0	2,100	135	699	841
Kansas State U.	67	720	4,175	3,447	3,760	0	2,723	110	388	539
U. California, Santa Barbara	68	816	1,238	1,686	3,735	0	0	0	0	3,735
U. South Carolina, Columbia	69	6,019	2,770	2,405	3,723	1,102	0	32	1,423	1,166
U. Louisiana, Lafayette	70	270	0	3,730	3,630	205	1,375	2,050	0	0
Tufts U.	71	2,609	1,200	2,961	3,547	232	138	0	0	3,177
North Carolina State U.	72	3,151	3,537	4,445	3,543	0	1,812	29	1,702	0
William & Mary	73	4,521	5,018	4,366	3,481	58	0	3,200	0	223
Columbia U. in the City of New York	74	2,951	3,357	2,513	3,468	0	0	28	2,476	964
U. Massachusetts, Lowell	75	2,212	3,021	4,000	3,389	0	0	144	1,868	1,377
U. Nebraska, Lincoln	76	6,886	6,959	5,443	3,378	0	549	20	2,564	245
U. Oklahoma, Norman and Health Science Center	77	9,485	13,505	3,475	3,343	519	65	1,700	19	1,040
U. Virginia, Charlottesville	78	2,098	3,246	3,713	3,221	209	302	0	197	2,513
Tulane U.	79	1,331	2,175	2,598	3,217	143	2,173	0	830	71
Iowa State U.	80	708	1,186	5,410	3,208	0	508	21	2,334	345
U. Massachusetts, Amherst	81	1,563	2,031	1,889	3,198	270	856	363	989	720
Oregon State U.	82	2,723	3,220	3,251	3,142	0	617	0	627	1,898
U. Arkansas, Fayetteville	83	704	1,364	1,300	3,141	247	138	2,348	408	0
National Defense U.	84	2,155	2,383	2,186	3,020	0	0	3,020	0	0
U. Texas, San Antonio	85	1,572	1,596	1,848	2,850	323	0	17	317	2,193
U. Memphis	86	423	973	2,072	2,800	0	0	53	1,239	1,508
Texas State U.	87	3,217	3,931	3,212	2,781	500	0	0	132	2,149
U. Illinois, Chicago	88	1,397	1,549	2,396	2,530	0	289	0	0	2,241
Vanderbilt U. and Vanderbilt U. Medical Center	89	2,126	2,189	2,959	2,513	232	1	1,866	58	356
U. California, Irvine	90	1,510	1,829	2,142	2,435	347	143	885	164	896
Florida State U.	91	1,564	1,463	2,050	2,402	113	17	303	265	1,704
U. Massachusetts, Boston	92	3,176	3,481	3,169	2,363	170	13	0	1,744	436
U. Illinois, Urbana-Champaign	93	2,950	2,192	2,343	2,349	314	40	314	145	1,536
U. Kentucky	94	418	1,146	1,628	2,326	53	849	238	1,096	90
Rutgers, State U. New Jersey, New Brunswick	95	727	1,308	2,003	2,303	110	1,238	316	35	604
Carnegie Mellon U.	96	5,919	4,678	3,225	2,218	0	492	0	84	1,642
U. Pittsburgh, Pittsburgh	97	2,594	2,348	2,223	2,188	95	190	516	205	1,182
Indiana U.-Purdue U., Indianapolis	98	3,599	3,263	2,395	2,156	0	48	1,632	33	443
Dartmouth C. and Dartmouth Hitchcock Medical Center	99	622	835	1,196	2,001	412	119	236	183	1,051

TABLE 54

Federally financed higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
U. Nevada, Reno	100	2,342	2,237	2,017	1,996	495	1,283	49	33	136
U. Southern Maine	101	2,236	2,034	1,827	1,970	0	0	0	0	1,970
Rice U.	102	701	1,719	2,229	1,896	230	343	146	989	188
U. Kansas	103	4,167	4,390	1,319	1,888	568	56	313	599	352
Yale U.	104	1,398	1,833	2,083	1,846	336	814	14	576	106
SUNY, U. Albany	105	5,428	5,008	1,902	1,843	385	52	1,076	71	259
Oklahoma State U., Stillwater	106	505	343	363	1,830	0	1,137	50	119	524
U. Rhode Island	107	1,154	1,518	1,129	1,817	0	344	10	0	1,463
U. Montana, Missoula	108	2,055	1,795	2,719	1,773	535	1,075	0	163	0
U. Missouri, Columbia	109	345	450	576	1,770	51	335	225	60	1,099
U. Denver	110	1,945	1,944	1,549	1,707	25	0	1,484	8	190
U. Wisconsin-Milwaukee	111	1,418	2,273	2,243	1,654	483	223	182	594	172
U. Alabama, Tuscaloosa	112	2,035	1,549	1,711	1,652	328	18	0	43	1,263
U. Notre Dame	113	1,568	1,391	1,611	1,606	52	485	942	93	34
U. Vermont	114	1,002	272	667	1,533	59	1,356	0	0	118
Boise State U.	115	3,032	1,884	1,566	1,468	38	30	113	2	1,285
U. Oregon	116	1,807	1,893	1,468	1,392	59	150	279	26	878
Temple U.	117	1,476	1,614	1,486	1,380	0	9	174	31	1,166
U. Iowa	118	2,976	2,393	2,309	1,314	18	0	32	460	804
U. Central Florida	119	5,111	640	951	1,300	262	0	454	309	275
Louisiana State U., Baton Rouge	120	1,157	1,272	1,363	1,268	0	79	12	192	985
U. Tennessee, Knoxville ^d	121	2,236	1,645	1,597	1,231	466	474	27	0	264
Portland State U.	122	1,518	1,476	1,663	1,213	710	10	118	160	215
San Diego State U.	122	912	997	848	1,213	182	0	0	78	953
U. California, Riverside	124	836	917	914	1,200	0	25	1	334	840
Kent State U.	125	896	949	930	1,185	0	5	0	311	869
U. Nebraska, Omaha	126	874	453	915	1,179	0	5	139	0	1,035
U. Southern Mississippi	127	4,522	2,799	1,200	1,176	0	0	0	0	1,176
Worcester Polytechnic Institute	128	1,347	1,580	1,091	1,163	0	0	0	0	1,163
Delaware State U.	129	168	99	114	1,152	0	44	0	677	431
U. Northern Iowa	130	1,205	867	1,036	1,137	0	9	0	0	1,128
San Francisco State U.	131	1,256	1,316	1,329	1,116	88	95	0	86	847
U. Hawaii, Manoa	132	1,684	1,606	1,545	1,103	86	35	0	0	982

TABLE 54

Federally financed higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
Drexel U.	133	1,905	1,057	792	1,072	0	0	34	33	1,005
U. California, Santa Cruz	134	1,069	667	665	1,071	0	257	27	49	738
Rutgers, State U. New Jersey, Camden	135	57	79	669	1,057	0	0	0	120	937
Bowling Green State U.	136	986	868	991	1,042	0	100	0	639	303
West Virginia U.	137	663	1,272	1,301	1,016	0	87	242	66	621
U. Wyoming	138	405	295	589	1,009	643	309	0	13	44
Boston U.	139	1,333	1,052	869	1,000	125	380	0	113	382
SUNY, U. Buffalo	140	2,000	1,433	1,104	991	598	0	0	393	0
U. Alaska, Fairbanks	141	941	1,538	1,163	982	412	50	8	0	512
Washington U., Saint Louis	142	532	443	629	955	367	0	496	0	92
Naval War C.	143	679	724	794	929	0	0	929	0	0
U. Texas, El Paso	144	2,076	1,054	925	897	62	48	113	624	50
Auburn U., Auburn	145	2,837	2,573	2,819	880	79	3	41	268	489
U. North Carolina, Charlotte	146	1,984	2,252	1,401	875	39	107	187	377	165
U. Houston	147	569	478	412	853	0	0	649	203	1
SUNY, Stony Brook U.	148	868	804	462	845	209	120	35	170	311
U. Illinois, Springfield	149	954	959	1,040	839	0	0	0	0	839
U. Alabama, Huntsville	150	1,851	1,449	597	837	0	684	153	0	0
U. North Carolina, Wilmington	151	0	260	778	832	0	2	0	0	830
California State Polytechnic U., Humboldt	152	107	76	379	827	827	0	0	0	0
SUNY, Binghamton U.	153	1,285	1,045	826	808	342	0	0	0	466
North Dakota State U.	154	4,226	4,244	450	805	0	411	18	332	44
Emory U.	155	418	916	905	804	0	57	147	600	0
Sam Houston State U.	155	958	863	316	804	0	0	0	279	525
Old Dominion U.	157	783	1,001	644	791	0	0	187	112	492
South Dakota State U.	158	585	879	665	771	0	395	0	234	142
U. Alaska, Anchorage	159	896	1,564	1,625	759	26	254	0	0	479
East Carolina U.	160	450	832	1,071	757	107	160	19	249	222
Brigham Young U., Provo	161	839	688	753	736	31	82	552	23	48
U. Baltimore	162	1,265	969	757	734	0	677	0	0	57
Northwestern State U. Louisiana	163	545	597	738	729	0	0	0	0	729
Texas Tech U.	164	117	470	98	722	0	467	0	42	213
Montana State U., Bozeman	165	310	289	910	684	0	0	62	92	530
U. New Orleans	166	708	795	500	674	380	0	0	0	294

TABLE 54

Federally financed higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
Wayne State U.	167	405	474	845	660	19	98	128	259	156
CUNY, Graduate Center	168	2,033	1,334	589	649	48	89	344	168	0
Virginia Commonwealth U.	169	127	305	520	637	0	160	477	0	0
William Paterson U.	170	97	485	628	619	0	57	0	562	0
Clark U.	171	973	655	801	615	0	447	0	38	130
U. Miami	172	235	451	462	592	0	0	0	389	203
CUNY, John Jay C. of Criminal Justice	173	14	0	289	579	0	0	438	141	0
Colorado School of Mines	174	353	850	1,097	577	59	518	0	0	0
Wellesley C.	175	588	761	327	571	0	160	0	0	411
Case Western Reserve U.	176	1,821	3,051	3,291	558	86	0	0	74	398
Cleveland State U.	177	164	353	265	552	0	0	0	0	552
Claremont Graduate U.	178	624	351	392	538	0	0	0	0	538
U. of the Virgin Islands	179	1	228	248	534	0	310	0	0	224
New Mexico State U.	180	459	341	451	530	152	322	55	1	0
U. New Haven	181	1,797	363	298	529	0	0	0	467	62
Texas A&M International U.	182	0	0	632	527	0	0	0	0	527
U. Texas, Dallas	183	563	577	824	526	0	72	132	21	301
CUNY, Hunter C.	184	231	521	502	502	307	195	0	0	0
California Polytechnic State U., San Luis Obispo	185	146	481	483	499	0	445	0	33	21
Utah State U.	186	955	1,241	919	495	0	401	0	82	12
Texas A&M U.-Corpus Christi	187	37	58	265	486	0	36	0	450	0
U. Alabama, Birmingham	188	720	201	303	470	0	0	0	308	162
U. North Carolina, Greensboro	189	494	244	503	463	17	269	0	177	0
Michigan Technological U.	190	519	440	495	458	0	0	0	0	458
California State U., Sacramento	191	132	113	63	453	67	219	2	96	69
U. Puerto Rico, Mayaguez	192	40	163	30	449	0	198	0	0	251
U. Northern Colorado	193	63	161	391	445	14	0	0	50	381
U. North Florida	194	228	128	13	439	0	0	0	359	80
Baylor U.	195	83	60	27	434	1	6	0	0	427
Hampton U.	195	1,604	710	1,041	434	0	0	0	0	434
Georgia Southern U.	197	21	9	73	432	37	0	0	106	289
U. Nevada, Las Vegas	198	238	249	189	423	69	0	34	55	265
Ohio U.	199	140	169	292	417	0	0	0	16	401
Rensselaer Polytechnic Institute	200	186	101	196	401	0	30	0	0	371

TABLE 54

Federally financed higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
Kennesaw State U.	201	11	11	409	394	0	0	0	229	165
California State U., Long Beach	202	394	363	515	393	60	39	0	0	294
California State U., Los Angeles	203	1,250	1,245	959	391	0	0	0	0	391
U. Colorado Denver ^e	204	na	na	292	387	135	22	0	125	105
Rochester Institute of Technology	205	931	557	489	385	0	0	295	1	89
Howard U.	206	257	251	340	379	0	35	0	344	0
U. South Alabama	207	292	326	274	362	0	0	0	100	262
California State U., Fullerton	208	1	33	55	360	6	0	0	0	354
Loyola U., Chicago	209	121	240	544	359	3	0	0	21	335
U. Rochester	210	175	234	318	354	112	0	116	0	126
Western Washington U.	211	241	173	188	347	24	0	0	84	239
Lehigh U.	212	0	0	160	341	0	287	0	54	0
California State U., Fresno	213	327	275	157	327	0	0	316	0	11
Rutgers, State U. New Jersey, Newark	213	394	574	108	327	0	0	143	2	182
Southern Methodist U.	213	356	113	77	327	327	0	0	0	0
Eastern Washington U.	216	129	562	250	320	0	0	0	0	320
California State U., East Bay	217	ne	171	345	319	25	0	0	276	18
Saint Louis U.	218	177	183	160	315	0	0	0	243	72
U. Maryland Center for Environmental Science	219	73	59	166	312	0	143	0	169	0
Loyola Marymount U.	220	5	0	275	306	0	303	0	0	3
California State U., Northridge	221	352	464	383	300	0	0	0	0	300
U. California, Merced	222	462	405	129	295	0	0	0	3	292
U. North Texas, Denton	223	388	202	291	294	0	0	0	120	174
U. Wisconsin-La Crosse	223	74	83	73	294	0	210	0	0	84
CUNY, Queens C.	225	306	85	172	288	68	0	0	220	0
Northern Arizona U.	226	540	212	126	286	17	205	50	0	14
Des Moines U.	227	71	159	180	280	192	0	0	88	0
Appalachian State U.	228	121	167	78	277	27	182	0	51	17
Middle Tennessee State U.	229	15	66	164	271	150	0	0	0	121
Miami U.	230	265	388	722	257	0	0	0	0	257
Gallaudet U.	231	0	56	142	256	0	0	0	238	18
Indiana U. Pennsylvania	232	183	64	72	250	250	0	0	0	0
Northeast Ohio Medical U.	232	78	35	17	250	232	0	0	18	0

TABLE 54

Federally financed higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
Central Connecticut State U.	234	80	206	225	240	0	0	0	0	240
U. Hawaii, Hilo	235	130	116	109	236	7	0	0	0	229
CUNY, Lehman C.	236	686	163	168	230	0	0	0	230	0
Alabama A&M U.	237	223 i	152 i	177 i	219 i	0 i	0 i	25 i	72 i	122 i
Creighton U.	238	141 i	129 i	153 i	214 i	3 i	27 i	17 i	39 i	128 i
Franklin and Marshall C.	239	94	279	216	212	0	0	0	8	204
North Carolina Central U.	240	457	126	12	210	0	0	0	0	210
U. Texas Rio Grande Valley	241	196	10	0	205	0	0	0	168	37
Prairie View A&M U.	242	0	0	17	199	0	102	0	18	79
U. Texas of the Permian Basin	243	ne	320	360	197	0	172	0	0	25
U. Minnesota, Duluth	244	0	7	107	190	0	0	0	0	190
New Mexico Highlands U.	245	ne	0	0 i	184 i	24 i	0 i	111 i	26 i	23 i
Southern Illinois U., Carbondale	246	183	94	115	180	0	0	24	156	0
Florida Atlantic U.	247	111	126	105	179	0	0	0	0	179
Saint Joseph's U.	248	64	143	115	176	0	0	0	0	176
Occidental C.	249	8	5	156	174 i	0 i	0 i	0 i	20 i	154 i
Saginaw Valley State U.	250	28	12	13 i	171 i	0 i	0 i	142 i	0 i	29 i
U. Maine	250	394	121	222	171	0	0	0	71	100
DePaul U.	252	10	6	0	169	0	52	0	117	0
Ball State U.	253	430	303	196	166	80	0	0	2	84
U. Missouri, Saint Louis	254	863	492	323	159	0	64	7	0	88
Chapman U.	255	179	136	109	158	0	0	0	124	34
U. Louisville	256	1,128	783	379	157	15	19	60	35	28
U. Guam	257	255	154	171	156	0	0	0	156	0
U. Mississippi	258	86	179	115	154	0	0	0	137	17
Western Illinois U.	258	0	0	168	154	0	0	0	154	0
San Jose State U.	260	36	80	790	153	16	0	0	0	137
U. Louisiana, Monroe	260	182	143	162	153	0	0	0	0	153
Davidson C.	262	135	78	80	152	34	0	0	118	0
Middlebury C.	263	122	65	162	150	0	76	10	0	64
Tarleton State U.	264	92	0	0	141	0	0	0	0	141
Hamilton C.	265	22	26	105	139	7	0	132	0	0
U. North Dakota	265	151	66	22	139	0	7	0	116	16
Missouri State U.	267	290	263	198	137	0	0	0	135	2

TABLE 54

Federally financed higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
California State U., Dominguez Hills	268	0	137	250	126	0	0	0	126	0
Western Carolina U.	269	207	198	154	123	118	0	0	0	5
Carleton C.	270	25	76	106	121	68	0	0	53	0
Clarkson U.	271	28	16	0	119	0	0	0	0	119
Louisiana Tech U.	272	403	420	169	118	0	0	89	0	29
U. Central Arkansas	273	0	0	0	116	0	0	0	0	116
U. Toledo	274	109	212	21	109	0	0	0	95	14
U. Tulsa	275	75	145	71	104	104	0	0	0	0
Northern Illinois U.	276	154	202	177	103	90	0	13	0	0
California State U., San Marcos	277	898	757	565	101	0	0	0	0	101
Winston-Salem State U.	278	453	0	197	100	0	100	0	0	0
Missouri U. of Science and Technology	279	63	32	49	99	0	99	0	0	0
U. Colorado Anschutz Medical Campus ^e	280	na	na	73	97	0	0	0	0	97
Arkansas State U., Jonesboro	281	34	52	153	96	0	96	0	0	0
U. San Francisco	281	0	65	24	96	0	0	0	0	96
New School	283	0	0	42	92	85	7	0	0	0
U. Washington, Tacoma	283	36	75	44	92	0	0	0	0	92
Illinois Institute of Technology	285	131	88	13	91	0	0	0	0	91
SUNY, C. of Environmental Science and Forestry	286	172	25	13	87	0	0	0	68	19
Duquesne U.	287	0	0	13	86	0	0	0	86	0
U. Arkansas, Pine Bluff	287	0	0	0	86	0	0	0	86	0
U. Puerto Rico, Rio Piedras	287	332	127	60	86	0	0	60	0	26
Colby C.	290	7	0	0	85	32	53	0	0	0
U. Central Oklahoma	290	0	0	0	85	0	70	0	0	15
Bentley U.	292	ne	ne	ne	84	0	0	0	0	84
Minnesota State U., Mankato	293	304	15	0	78	0	0	0	0	78
Western Kentucky U.	293	10	11	55	78	0	0	0	78	0
Southern Illinois U., Edwardsville	295	24	19	56	74	74	0	0	0	0
U. Richmond	296	524	359	185	73	0	26	47	0	0
U. West Florida	297	36	0	4	72	0	72	0	0	0
Central Michigan U.	298	120	130	111	71	0	0	0	69	2
U. San Diego	299	312	61	19	70	0	0	0	0	70
Barnard C.	300	91	61	56	68	8	29	0	21	10

TABLE 54

Federally financed higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
U. Washington, Bothell	300	0	0	0	68	0	0	0	0	68
Bates C.	302	259	73	119	66	29	7	14	16	0
U. Hartford	302	0	0	3	66	0	0	0	0	66
New Jersey Institute of Technology	304	0	283	76	65	0	65	0	0	0
Clafin U.	305	0	75	107	64	0	64	0	0	0
Fordham U.	306	83	62	91	61	0	37	0	24	0
Tougaloo C.	307	0	0	0	60	0	26	17	17	0
U. Houston-Clear Lake	307	45	30	45	60	0	0	0	0	60
Chicago State U.	309	0	ne	ne	59	0	0	0	0	59
Fayetteville State U.	310	151	0	180	56	0	0	0	0	56
Idaho State U.	311	197	218	63	55	42	0	0	13	0
Reed C.	311	26	2	2	55	7	13	8	8	19
Spelman C.	311	43	129	53	55	0	55	0	0	0
Hawaii Pacific U.	314	341	193	193	51	0	0	51	0	0
Montclair State U.	315	140	63	62	50	0	0	0	0	50
U. Alaska, Southeast	315	0	0	0	50	0	0	0	50	0
U. Virginia's C. Wise	315	ne	ne	4	50	0	2	0	48	0
Youngstown State U.	315	36	32	33	50	0	0	0	0	50
Monmouth U.	319	29	1	45	49	49	0	0	0	0
Lincoln U., Jefferson City	320	1	4	21	47	0	47	0	0	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	320	330	83	27	47	0	0	0	47	0
Albion C.	322	0	0	0	46	6	11	7	6	16
Ithaca C.	323	ne	165	85	44	8	0	0	24	12
Texas A&M U.-San Antonio	324	ne	ne	ne	36	36	0	0	0	0
Macalester C.	325	50	13	0	34	0	16	0	0	18
Mercer U.	325	0	20	46	34	0	34	0	0	0
Wake Forest U.	325	38	12	24	34	0	0	0	34	0
Sul Ross State U.	328	9	18	19	33	4	0	20	5	4
Tennessee Technological U.	329	0	0	12	32	0	0	0	32	0
Wesleyan U.	330	0	24	11	30	0	0	30	0	0
Whitman C.	330	13	15	ne	30	0	0	0	30	0
Williams C.	330	55	53	56	30	4	7	5	4	10
Calvin U.	333	0	28	28	28	0	28	0	0	0
Northland C.	333	ne	ne	25	28	0	0	0	13	15

TABLE 54

Federally financed higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
SUNY, Geneseo	335	50	27	11	27	0	0	0	0	27
Towson U.	335	149	162	23	27	25	0	0	2	0
California State U., San Bernardino	337	128	183	18	26	1	0	0	13	12
U. Wisconsin-Green Bay	338	21 i	23 i	20 i	24 i	1 i	4 i	2 i	6 i	11 i
California State U., Bakersfield	339	50	25	12	23	0	0	0	0	23
California State U., Stanislaus	339	0	3	35	23	5	0	0	0	18
Connecticut C.	339	249	169	124	23	0	0	0	0	23
Pennsylvania State U., Behrend	339	1	4	37	23	0	5	0	18	0
California State Polytechnic U., Pomona	343	0	0	0	22	22	0	0	0	0
Pittsburg State U.	343	0	99	163	22	0	22	0	0	0
U. Wisconsin-Platteville	343	18 i	18 i	18 i	22 i	0 i	0 i	10 i	4 i	8 i
Colgate U.	346	47	10	25	21	0	0	0	21	0
Eastern Michigan U.	346	31	3	31	21	0	0	0	0	21
Northern Michigan U.	346	0	53	17	21	21	0	0	0	0
Plymouth State U.	346	ne	ne	ne	21	0	0	0	0	21
Trinity U.	346	0	0	0	21	0	16	0	0	5
U. Puget Sound	346	ne	0	ne	21	0	0	21	0	0
U. Tennessee, Chattanooga	346	70	16	8	21	0	0	0	21	0
U. Oklahoma, Tulsa	353	0	0	0	20	0	0	0	0	20
U. Texas, Arlington	353	75	43	7	20	0	0	20	0	0
Pepperdine U.	355	17	37	28	19	0	0	0	19	0
Pomona C.	355	116	138	48	19	0	0	19	0	0
U. Massachusetts, Dartmouth	355	115	1	16	19	0	1	0	0	18
Elon U.	358	0	22	21	18	18	0	0	0	0
Xavier U. Louisiana	358	0	0	0	18	0	0	18	0	0
Stockton U.	360	0	0	0	17	0	0	0	17	0
Trinity C., Hartford	360	80	46	41	17	17	0	0	0	0
Vassar C.	360	83	60	34	17	0	0	17	0	0
Amherst C.	363	45	0	0	16	0	16	0	0	0
California State U., Chico	364	371	385	91	15	0	0	0	0	15
Haverford C.	364	0	12	0	15	15	0	0	0	0
Lamar U.	364	0	10	0	15	0	0	0	15	0
SUNY, C. Brockport	364	33	35	2	15	14	0	1	0	0
Pacific U.	368	82	84	4	14	0	14	0	0	0

TABLE 54

Federally financed higher education R&D expenditures in the social sciences, ranked by all FY 2022 social sciences: FYs 2019–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2019	2020	2021	2022					
					All social sciences	Anthropology	Economics	Political science and government	Sociology, demography, and population studies	Social sciences nec
Texas Christian U.	368	232	121	28	14	0	0	0	10	4
Framingham State U.	370	ne	0	0 i	13 i	0 i	5 i	5 i	2 i	1 i
Skidmore C.	370	0	0	0	13	13	0	0	0	0
Suffolk U.	370	ne	0	0	13	0	0	0	13	0
Pennsylvania State U., Harrisburg	373	5	7	16	10	0	0	0	0	10
Robert Morris U.	373	ne	ne	ne	10 i	0 i	0 i	1 i	0 i	9 i
U. North Georgia	373	30	0	0	10	0	0	10	0	0
Northeastern Illinois U.	376	82	48	40	8	0	8	0	0	0
Santa Clara U.	376	110	89	63	8	8	0	0	0	0
St. Catherine U.	376	ne	ne	ne	8	0	8	0	0	0
West Chester U. Pennsylvania	376	0	0	0	8	0	0	0	0	8
Wichita State U.	376	26	17	9	8	1	0	0	0	7
Colorado C.	381	0	4	0	7	7	0	0	0	0
Lake Superior State U.	382	ne	ne	ne	6	0	0	0	6	0
Savannah State U.	382	167	0	0	6	0	0	0	0	6
U. Arkansas, Little Rock	382	64	4	73	6	0	0	0	6	0
Winthrop U.	382	14	1	164	6	0	0	6	0	0
Central Washington U.	386	0	1	0	4	1	0	0	0	3
Jackson State U.	386	106	34	67	4	0	0	4	0	0
Morgan State U.	386	0	40	115	4	0	0	0	0	4
Northern Kentucky U.	386	1	1	10	4	0	0	0	4	0
U. Akron	386	56	19	6	4	4	0	0	0	0
U. Texas, Tyler	386	34	4	18	4	0	0	0	4	0
C. New Jersey	392	ne	0	0	3	0	0	0	3	0
Salisbury U.	392	0	3	22	3	0	3	0	0	0
California State U., Channel Islands	394	22	0	0	2	0	0	0	0	2
Florida A&M U.	394	0	0	0	2	0	0	0	2	0
Florida Gulf Coast U.	394	57	78	5	2	0	2	0	0	0
Grinnell C.	394	28	30	28	2	0	0	0	2	0
Johnson C. Smith U.	394	0	0	2 i	2	0	0	0	0	2
C. of Saint Benedict	399	0 i	0 i	1 i	1 i	1 i	0 i	0 i	0 i	0 i
All other surveyed institutions	-	11,348	8,199	5,327	0	0	0	0	0	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

nec = not elsewhere classified.

^a The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^b The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^c Johns Hopkins University includes the Applied Physics Laboratory, with \$5,733 thousand in federally financed R&D expenditures in social sciences in FY 2022.

^d The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 55

Total and federally financed higher education R&D expenditures in engineering, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
All institutions	-	13,214,142	13,702,434	14,291,729	15,596,634	7,667,876	8,119,848	8,713,515	9,694,378
Johns Hopkins U. ^a	1	1,147,335 i	1,205,632 i	1,237,980 i	1,324,646 i	1,100,587	1,154,993	1,183,154	1,264,048
Georgia Institute of Technology	2	664,695	695,176	839,071	935,632	506,061	537,693	666,235	739,429
SUNY, Polytechnic Institute	3	350,793	353,542	462,562	411,929	36,816	26,696	24,019	30,702
Texas A&M U., College Station and Health Science Center	4	321,373	357,559	385,656	402,999	77,456	95,138	123,286	138,068
Massachusetts Institute of Technology	5	450,915	419,636	382,569	397,946	230,312	213,108	193,246	215,477
Pennsylvania State U., University Park and Hershey Medical Center	6	350,391	367,730	378,667	385,594	258,324	277,345	284,244	300,829
U. Texas, Austin	7	249,788	259,935	279,730	319,719	160,506	175,426	194,110	216,881
Purdue U., West Lafayette	8	270,525	280,592	285,469	312,394	111,292	122,469	137,052	163,895
U. Michigan, Ann Arbor	9	291,887	283,329	279,682	299,254	175,137	176,141	180,607	189,405
Virginia Polytechnic Institute and State U.	10	258,213	263,711	246,965	260,158	104,138	107,677	108,080	114,336
Utah State U.	11	202,345	226,616	247,332	259,482	183,794	206,998	228,986	239,736
U. Illinois, Urbana-Champaign	12	201,028	203,564	216,233	228,786	130,075	131,529	139,887	144,390
Wichita State U.	13	109,248	134,848	157,430	226,111	22,954	46,023	64,692	88,257
Ohio State U.	14	177,518	175,109	163,509	219,388	85,547	85,038	88,435	103,560
U. California, San Diego	15	172,919	182,495	177,564	212,583	88,846	97,602	100,212	129,923
U. California, Berkeley	16	200,122	209,293	199,711	206,541	81,194	79,645	78,026	93,638
U. Dayton	17	157,016	153,082	180,158	195,856	146,841	145,508	171,865	189,150
Arizona State U.	18	152,395	155,015	145,574	192,681	72,655	80,121	73,746	85,208
U. Colorado Boulder	19	152,391	160,423	177,604	191,531	92,099	105,890	132,769	148,185
U. Washington, Seattle	20	155,076	152,919	157,622	172,004	108,560	114,031	119,758	127,827
North Carolina State U.	21	174,590	174,740	172,900	171,162	91,264	94,592	91,430	88,636
U. Maryland ^b	22	158,814	153,109	154,163	164,304	86,168	86,398	95,898	104,247
U. Wisconsin-Madison	23	126,587	133,600	131,709	148,673	68,617	73,412	75,104	85,549
Stanford U.	24	134,585	130,950	136,251	142,213	79,988	81,391	89,861	89,919
Carnegie Mellon U.	25	95,496	102,955	112,597	138,117	49,854	56,175	63,083	84,680
U. Florida	26	107,598	119,066	122,704	134,339	60,844	62,573	72,191	79,991
Iowa State U.	27	104,798	109,473	123,428	132,475	43,241	62,369	62,113	66,024
U. Minnesota, Twin Cities	28	120,976	120,929	121,637	131,042	71,695	74,167	78,808	84,060
Cornell U.	29	110,545	123,703	118,621	125,320	63,696	69,870	72,771	73,646
U. Delaware	30	66,447	74,258	90,327	123,997	47,975	53,448	68,504	88,552
New York U.	31	99,711	100,207	99,307	119,160	14,986	15,445	18,633	20,507
U. Tennessee, Knoxville ^c	32	116,528	128,542	128,579	115,464	67,165	66,562	66,556	70,892
U. California, Davis	33	92,277	97,951	102,370	114,118	37,549	37,203	43,175	56,254
Rice U.	34	77,299	91,913	100,872	110,648	37,781	42,085	46,799	53,851

TABLE 55

Total and federally financed higher education R&D expenditures in engineering, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
SUNY, U. Buffalo	35	95,040	112,843	100,194	109,870	50,811	61,140	66,790	67,985
U. Pennsylvania	36	78,444	82,299	88,937	106,282	39,422	44,542	49,526	54,427
U. Notre Dame	37	89,702	84,478	90,572	103,773	40,258	41,771	42,501	50,651
Duke U.	38	100,379	95,657	94,483	102,748	72,560	73,605	74,308	80,356
Clemson U.	39	76,739	76,971	90,038	98,733	39,395	38,214	46,693	62,349
U. California, Los Angeles	40	95,797	93,520	93,906	98,403	52,488	49,163	53,761	65,455
U. California, Santa Barbara	41	67,395	87,681	86,303	97,329	33,589	43,340	44,958	67,267
Harvard U.	42	95,651	97,884	92,782	96,920	45,835	52,801	50,918	47,017
Auburn U., Auburn	43	59,742	70,593	78,720	93,219	25,694	28,796	40,288	47,059
Northeastern U.	44	79,836	89,954	92,723	92,855	61,116	66,614	69,550	72,409
Boston U.	45	78,154	85,651	79,757	91,643	45,017	53,265	48,537	54,675
Woods Hole Oceanographic Institution	46	83,974	84,333	101,989	88,997	72,016	75,442	93,266	82,286
Northwestern U.	47	80,413	77,150	80,735	88,008	47,948	49,383	55,739	56,993
Columbia U. in the City of New York	48	72,596	72,758	75,457	87,884	59,672	62,020	64,962	73,487
U. Arizona	49	75,555	79,463	72,158	84,682	35,880	34,459	34,360	42,072
U. North Dakota	50	54,760	52,511	86,578	84,614	28,684	20,330	35,155	33,233
New Jersey Institute of Technology	51	78,455	85,445	82,240	83,738	53,994	53,702	50,822	48,863
Michigan State U.	52	79,638	82,690	79,360	81,143	29,787	31,431	31,314	34,356
Princeton U.	53	65,000	67,014	67,231	78,831	41,480	40,829	44,201	52,615
Vanderbilt U. and Vanderbilt U. Medical Center	54	94,340	94,674	86,541	78,534	52,742	52,373	43,570	52,364
U. Missouri, Columbia	55	48,028	53,343	56,685	78,494	14,331	16,905	15,905	17,346
U. California, Irvine	56	55,995	59,695	65,454	75,898	24,021	27,421	29,315	40,869
Mississippi State U.	57	60,183	69,220	67,472	73,980	33,935	45,520	44,188	48,255
U. Connecticut	58	44,044	46,751	54,185	68,902	26,390	30,450	37,988	42,418
U. Maine	59	32,368	37,127	46,986	68,261	13,614	18,038	27,452	44,010
U. Massachusetts, Amherst	60	49,745	58,804	60,065	67,776	26,896	28,635	32,063	35,204
U. Pittsburgh, Pittsburgh	61	46,075	53,586	56,681	65,936	31,347	36,623	37,749	43,571
U. Virginia, Charlottesville	62	83,072	72,602	62,271	65,604	43,878	41,454	37,143	42,481
U. Houston	63	51,806	55,210	56,555	64,026	23,838	24,929	26,599	28,251
U. Southern California	64	76,180	78,005	78,179	63,694	52,737	55,089	51,948	54,438
Rensselaer Polytechnic Institute	65	59,831	70,156	67,810	63,146	28,307	28,960	31,832	29,720
U. Texas, Arlington	66	54,450	59,395	58,154	61,467	22,053	22,163	23,581	28,177
U. Kentucky	67	50,743	46,976	52,361	61,287	28,999	26,818	33,001	38,078
Colorado School of Mines	68	44,195	46,694	54,062	60,371	31,066	33,432	37,909	42,745
U. Central Florida	69	62,258	59,627	57,620	59,060	33,413	34,825	36,318	37,217

TABLE 55

Total and federally financed higher education R&D expenditures in engineering, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Oregon State U.	70	49,587	50,900	52,731	58,552	36,090	35,946	38,914	44,377
Florida State U.	71	56,352	56,493	52,153	58,212	39,126	38,126	34,492	37,798
Rutgers, State U. New Jersey, New Brunswick	72	92,937	55,880	51,289	57,490	35,917	40,629	35,691	35,877
George Mason U.	73	36,101	52,423	49,826	57,196	31,276	45,977	44,086	50,246
U. Nebraska, Lincoln	74	53,932	51,685	53,927	56,068	20,375	21,149	21,450	22,395
U. California, Santa Cruz	75	39,111	41,752	49,576	55,542	25,568	22,817	33,002	43,539
Montana State U., Bozeman	76	36,521	38,833	51,785	54,188	25,349	28,753	39,190	42,936
Louisiana State U., Baton Rouge	77	45,803	40,084	39,104	53,974	11,587	10,268	11,014	12,249
U. Alabama, Huntsville	78	40,733	51,198	55,510	53,958	31,957	42,499	44,780	43,390
New Mexico Institute of Mining and Technology	79	14,043	13,084	13,002	53,897	13,004	11,869	10,164	45,940
California Institute of Technology	80	46,972	51,693	51,630 i	51,975	24,690	26,324	24,011	25,812
U. Texas, Dallas	81	48,666	50,812	50,646	51,310	19,512	21,594	24,793	24,404
U. South Florida ^d	82	45,508	37,162	50,547	50,859	22,743	18,073	26,183	27,554
U. Alabama, Tuscaloosa	83	31,845	33,019	43,941	49,885	16,390	19,679	25,859	30,544
U. Iowa	84	50,377	48,433	47,722	49,233	21,473	20,687	23,116	24,367
Florida International U.	85	35,138	39,826	41,740	48,549	19,899	21,747	23,801	31,994
Michigan Technological U.	86	47,435	45,263	46,733	48,400	21,801	23,332	26,289	27,496
Colorado State U., Fort Collins	87	42,609	42,839	41,575	47,833	31,135	30,860	30,424	36,428
U. Utah	88	55,478 i	57,608 i	48,225 i	47,060	32,365	34,915	29,330	35,141
U. Cincinnati	89	46,889	43,098	42,434	46,955	12,015	11,447	12,970	14,790
Texas Tech U.	90	44,057	42,856	41,962	46,952	14,017	14,399	15,359	18,858
Washington State U.	91	39,578	39,533	48,031	45,571	18,943	20,360	23,129	20,359
U. New Mexico	92	37,950	42,739	41,317	45,191	30,449	34,153	33,001	37,091
U. Oklahoma, Norman and Health Science Center	93	26,569	36,643	39,785	44,727	13,783	15,069	15,235	20,850
U. Massachusetts, Lowell	94	33,128	35,847	36,339	44,358	13,443	14,870	18,884	26,414
West Virginia U.	95	42,516	40,786	39,855	43,972	19,835	15,930	18,042	21,919
Stevens Institute of Technology	96	25,832	33,103	33,983	43,702	18,945	23,906	26,766	34,630
Missouri U. of Science and Technology	97	37,912	36,447	43,470	43,119	17,811	16,411	21,797	24,061
U. Chicago	98	23,773	24,468	30,018	41,866	17,275	20,168	25,909	35,751
Case Western Reserve U.	99	41,228	37,911	39,079	41,783	29,335	27,954	30,483	31,686
U. Texas, El Paso	100	26,586	25,172	26,599	40,798	11,995	11,812	15,602	26,326
U. Arkansas, Fayetteville	101	34,590	37,758	37,818	40,691	14,659	18,074	17,980	22,533
New Mexico State U.	102	25,892	25,030	29,884	40,367	17,202	15,583	19,957	29,723
U. Illinois, Chicago	103	28,226	31,496	35,675	39,656	14,707	17,537	21,610	24,287
U. North Carolina, Chapel Hill	104	31,825	30,774	30,935	39,242	19,251	17,813	19,983	22,510

TABLE 55

Total and federally financed higher education R&D expenditures in engineering, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
SUNY, Stony Brook U.	105	28,632	30,180	28,344	38,670	15,637	15,329	17,613	25,968
Drexel U.	106	31,330	31,230	32,665	38,649	20,443	19,772	20,821	27,063
Mercer U.	107	32,624	37,450	40,439	38,452	25,358	29,625	31,923	29,959
Yale U.	108	36,591	36,806	35,778	36,714	24,674	24,172	23,578	23,926
Dartmouth C. and Dartmouth Hitchcock Medical Center	109	31,110	31,140	33,559	36,219	21,279	21,064	24,126	25,052
Oklahoma State U., Stillwater	110	32,947	33,983	35,094	36,217	11,962	11,969	15,319	16,574
CUNY, City C.	111	28,337	23,140	34,710	36,189	16,998	15,704	18,078	19,125
U. South Carolina, Columbia	112	31,748	37,747	36,222	35,508	16,076	13,921	16,470	21,003
SUNY, Binghamton U.	113	30,434	32,668	39,529	33,595	6,356	6,526	7,463	8,326
U.S. Air Force Academy	114	28,489	29,812	29,132	33,169	28,489	29,812	28,914	32,709
U. California, Riverside	115	29,020	31,937	34,888	32,758	16,217	17,034	18,541	21,080
Tufts U.	116	31,630	26,662	24,017	32,535	26,143	20,397	19,362	19,796
U. Nevada, Reno	117	23,568	23,939	27,769	32,454	8,785	9,664	11,419	11,896
U. Louisiana, Lafayette	118	28,397	27,878	30,295	32,259	4,247	3,557	6,909	9,736
Worcester Polytechnic Institute	119	21,029	23,758	27,108	31,514	11,735	13,084	16,095	18,401
U. Alabama, Birmingham	120	47,555	53,030	46,844	30,637	37,724	44,243	43,477	22,205
Virginia Commonwealth U.	121	26,072	29,811	32,233	30,592	9,482	11,779	9,924	9,441
Kansas State U.	122	27,439	28,155	27,743	29,980	12,503	12,530	13,810	15,266
Brown U.	123	23,448	23,965	23,587	29,569	17,289	17,138	15,963	18,304
Lehigh U.	124	23,447	24,054	25,835	28,948	15,374	16,205	16,976	19,098
U. Wyoming	125	19,550	20,317	24,675	28,379	6,075	4,640	7,391	17,026
Old Dominion U.	126	19,294	25,869	25,811	28,288	8,179	11,802	9,683	11,184
Washington U., Saint Louis	127	23,090	23,821	26,574	28,151	18,895	19,552	22,291	24,042
Air Force Institute of Technology	128	20,525	23,947	26,780	27,794	14,015	15,238	17,065	21,622
U. New Hampshire	129	23,861	23,457	22,509	25,040	12,286	11,466	8,984	9,665
U. Hawaii, Manoa	130	17,089	25,423	23,966	24,574	10,777	17,536	16,553	17,241
U. Texas, San Antonio	131	19,928	22,922	21,499	24,403	5,949	5,961	7,346	10,333
George Washington U.	132	21,712	22,682	22,749	23,736	14,597	15,091	15,052	13,339
U. Louisville	133	16,302	18,105	20,965	23,630	8,248	9,077	11,844	14,712
U. North Texas, Denton	134	15,773	15,205	18,285	23,078	5,962	3,805	7,232	10,227
Rochester Institute of Technology	135	20,264	20,910	20,874	22,869	8,136	7,965	10,659	10,560
U. Georgia	136	18,444	19,273	20,289	22,379	6,292	7,208	8,139	10,503
U. Rochester	137	14,872	16,116	16,780	22,179	11,814	12,764	14,213	17,031
U. Kansas	138	20,869	19,830	21,363	22,075	14,177	13,829	12,206	13,244
Syracuse U.	139	25,412	24,272	24,698	21,602	7,616	7,696	8,013	7,290

TABLE 55

Total and federally financed higher education R&D expenditures in engineering, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Naval Postgraduate School	140	22,498	22,933	24,254	21,556	20,124	20,145	20,798	13,920
North Dakota State U.	141	12,030	14,007	13,963	20,187	3,254	3,085	4,341	10,191
Brigham Young U., Provo	142	14,001	15,943	20,162	19,599	9,188	11,438	15,694	15,386
North Carolina A&T State U.	143	11,766	10,393	11,616	18,186	9,713	8,664	9,071	10,157
U. Alaska, Fairbanks	144	14,922	17,843	17,314	17,869	9,090	11,998	11,355	12,504
Ohio U.	145	19,502	16,291	16,645	17,216	5,252	4,454	5,340	5,209
South Dakota School of Mines and Technology	146	11,226	12,677	13,658	17,162	7,570	8,887	9,834	12,779
Florida Atlantic U.	147	11,450	10,574	17,064	16,449	7,007	6,955	11,045	9,749
Emory U.	148	9,614	11,349	11,488	16,415	6,256	8,676	8,356	10,545
Embry-Riddle Aeronautical U.	149	8,374	12,015	11,279	16,049	6,291	7,943	9,272	14,083
Rowan U.	150	8,447	11,784	11,570	15,432	4,229	7,616	8,035	9,274
U. North Carolina, Charlotte	151	16,000	19,781	15,643	15,096	7,845	8,853	9,381	8,783
Oakland U.	152	3,836	1,041	4,437	14,783	720	233	953	1,572
Boise State U.	153	11,688	13,956	14,918	14,758	6,377	8,245	9,596	11,149
Cleveland State U.	154	17,278	16,225	12,371	14,519	11,036	11,055	7,748	9,597
San Diego State U.	155	8,197	7,934	10,715	14,048	3,801	3,851	4,553	5,043
U. Idaho	156	17,497	17,035	12,944	13,720	8,525	8,376	6,705	7,063
Wayne State U.	157	14,634	12,806	11,675	13,632	6,640	5,947	5,695	6,722
Oregon Health and Science U.	158	12,134	12,856	13,526	13,373	10,649	9,549	10,841	10,647
U. Nevada, Las Vegas	159	15,736	12,729	10,667	12,665	6,161	4,946	4,037	5,031
Illinois Institute of Technology	160	15,241	11,934	13,737	12,502	12,061	9,230	11,070	10,795
Clarkson U.	161	10,889	9,363	10,113	12,446	5,883	4,584	4,577	5,180
U. Missouri, Kansas City	162	7,089	8,351	9,174	12,219	5,349	6,902	7,506	9,153
Indiana U., Bloomington	163	11,265	14,373	13,012	12,030	4,864	6,314	5,752	7,149
U. California, Merced	164	13,852	15,191	13,854	11,997	4,652	5,760	4,627	5,007
U. Toledo	165	11,256	10,023	10,299	11,957	6,062	5,921	7,574	8,517
U. Rhode Island	166	10,632	10,182	10,766	11,931	7,329	6,939	7,962	9,997
U. Memphis	167	9,464	10,741	9,464	11,825	2,489	2,513	2,275	4,518
Louisiana Tech U.	168	11,513	11,459	11,257	11,673	4,263	4,582	4,117	3,120
U. Vermont	169	7,864	11,209	11,914	11,621	5,190	4,853	5,537	5,794
Howard U.	170	8,401	8,336	9,535	10,431	6,046	6,241	7,420	8,156
Marquette U.	171	8,988	10,059	9,027	10,278	3,033	4,291	3,866	5,605
U. Nebraska, central administration	172	1,687	8,340	8,060	10,082	1,687	8,340	7,510	8,584
Texas State U.	173	4,611	6,892	9,321	9,722	623	746	1,537	2,429
U. Tulsa	174	13,213	13,182	10,926	9,554	1,520	1,387	2,410	1,557

TABLE 55

Total and federally financed higher education R&D expenditures in engineering, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Western Michigan U. and Homer Stryker M.D. School of Medicine	175	5,595	5,091	8,058	9,515	1,945	1,580	4,194	3,994
Villanova U.	176	9,612	10,193	9,484	9,453	1,543	1,375	2,122	1,949
Baylor U.	177	3,720	4,515	7,241	9,061	1,440	1,271	1,598	2,307
South Dakota State U.	178	5,516	5,490	7,161	8,977	2,925	2,674	3,854	4,783
Temple U.	179	8,042	9,294	8,279	8,898	3,830	4,758	4,734	4,494
Texas A&M U.-Corpus Christi	180	7,193	7,064	6,590	8,737	2,020	2,800	2,340	4,257
Missouri State U.	181	3,234	10,257	7,024	8,630	3,176	10,096	6,872	8,396
U. Puerto Rico, Mayaguez	182	16,446	16,903	11,397	8,482	8,892	9,428	8,136	7,325
U. Massachusetts, Dartmouth	183	7,764	7,944	8,049	8,480	2,696	2,170	2,434	2,245
California Polytechnic State U., San Luis Obispo	184	4,117	4,646	5,522	8,472	1,566	1,338	2,636	5,436
Southern Illinois U., Edwardsville	185	2,348	1,424	1,786	8,439	475	240	208	204
Morgan State U.	186	3,990	7,228	8,031	8,375	3,376	4,847	5,001	5,514
California State U., Sacramento	187	7,507	7,744	5,986	8,253	3,443	3,150	2,687	3,718
U. Wisconsin-Milwaukee	188	9,915	9,683	8,577	8,246	2,537	2,940	3,193	2,907
U. Maryland, Baltimore County	189	8,429	6,671	6,668	8,140	4,862	4,651	4,657	4,079
U. Mississippi	190	8,821	13,661	6,033	8,095	4,752	12,422	4,487	3,779
U. Texas Rio Grande Valley	191	3,573	4,018	5,354	7,844	1,134	1,761	2,885	4,536
Medical C. Wisconsin	192	7,800	8,542	7,560	7,618	6,029	6,389	5,221	5,046
U. Akron	193	16,650	11,345	7,714	7,558	6,447	5,096	3,985	4,632
Tennessee Technological U.	194	7,267	7,559	8,455	7,436	2,402	2,756	3,392	2,549
U. Southern Mississippi	195	3,371	5,999	5,963	7,380	3,286	1,823	1,970	2,661
Southern Methodist U.	196	9,207	9,798	9,972	7,313	5,145	5,103	3,590	2,769
San Jose State U.	197	1,864	2,863	3,664	6,968	1,029	1,575	700	1,323
Wright State U.	198	39,164	29,519	8,129	6,843	25,868	23,496	6,695	5,696
Tulane U.	199	8,416	6,881	6,662	6,823	4,170	4,050	4,016	3,801
California State Polytechnic U., Humboldt	200	5,232	4,261	5,564	6,779	16	153	208	197
U. Michigan, Dearborn	201	6,832	7,088	6,223	6,703	1,129	1,681	1,907	2,030
U.S. Military Academy	202	3,799	5,297	7,772	6,640	3,799	5,252	7,334	6,086
Indiana U.-Purdue U., Indianapolis	203	6,730	7,177	6,604	6,626	3,298	4,354	4,040	4,375
U.S. Naval Academy	204	7,482	7,376	6,719	6,342	7,311	7,202	6,604	6,197
U. South Alabama	205	2,411	3,640	5,085	6,231	1,467	2,624	3,209	4,296
U. Miami	206	5,400	5,060	4,527	5,961	2,532	2,128	2,816	4,423
Florida A&M U.	207	4,477	4,796	5,222	5,752	4,057	4,492	4,852	5,427
U. of the District of Columbia	208	708	1,388	3,134	5,725	708	1,388	3,134	5,725
Portland State U.	209	9,160	6,719	6,668	5,582	4,887	4,113	4,021	3,752

TABLE 55

Total and federally financed higher education R&D expenditures in engineering, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Prairie View A&M U.	210	5,121	5,222	4,687	5,305	3,183	3,184	2,885	3,849
Brandeis U.	211	0	1,048	2,221	5,264	0	0	824	147
Florida Institute of Technology	212	4,782	5,362	5,891	5,100	2,391	3,305	2,903	2,818
Idaho State U.	213	4,039	5,014	4,411	4,752	1,203	2,491	2,022	2,430
U. Oregon	214	541	0	0	4,656	505	0	0	3,729
Miami U.	215	3,070	3,783	4,356	4,474	361	667	532	843
Montana Technological U.	216	4,428	4,331	5,834	4,473	3,606	3,161	4,639	3,779
SUNY, U. Albany	217	3,087	3,319	3,133	4,266	512	1,039	1,393	1,355
Northern Arizona U.	218	2,613	4,996	6,497	4,194	1,106	3,649	4,910	2,709
U. Puerto Rico, Rio Piedras	219	37	341	1,152	4,135	37	270	1,152	3,900
Northern Illinois U.	220	1,418	1,467	4,134	4,132	222	246	1,856	2,039
Texas A&M U.-Kingsville	221	1,827	2,653	4,622	4,044	1,187	1,830	2,923	2,819
U. Colorado Denver ^e	222	na	na	3,695	3,906	na	na	3,152	3,398
U. Tennessee, Chattanooga	223	2,460	3,319	3,578	3,823	1,216	2,277	2,574	2,622
California State U., Long Beach	224	4,223	4,733	4,574	3,671	2,109	2,533	2,942	2,181
U. Denver	225	4,010	4,461	3,558	3,632	1,879	2,109	1,037	1,180
Lamar U.	226	1,609	1,825	2,437	3,536	442	838	635	445
Milwaukee School of Engineering	227	3,825	3,105	3,129	3,480	695	613	704	904
Alfred U.	228	5,032	2,720	2,654	3,458	1,459	887	933	991
Marshall U.	229	1,158	1,137	2,475	3,333	502	434	1,671	2,375
Georgia Southern U.	230	1,257	1,929	4,052	3,302	174	301	804	468
New School	231	2,828	3,205	3,793	3,301	99	116	422	294
Catholic U. of America	232	2,587	3,518	3,926	3,076	1,961	2,925	2,680	2,099
Youngstown State U.	233	3,993	3,491	1,794	3,058	2,667	2,818	1,261	2,525
Tuskegee U.	234	5,372	5,922	5,528	2,955	4,097	4,177	4,213	2,099
East Carolina U.	235	2,015	3,053	3,069	2,737	475	366	1,376	2,178
California State U., Northridge	236	714	1,115	1,216	2,621	604	926	1,069	2,377
Purdue U., Northwest	237	1,352	2,521	2,220	2,606	376	1,128	1,032	1,846
Jackson State U.	238	3,354	1,468	2,236	2,512	2,908	1,262	1,817	1,905
U. North Florida	239	2,392	2,433	2,119	2,472	360	304	316	258
CUNY, system office	240	1,001	1,132	1,137	2,447	912	662	731	718
San Francisco State U.	241	1,284	2,251	2,386	2,423	371	981	990	1,174
Franklin W. Olin C. of Engineering	242	534	491	936	2,380	111	255	636	805
Morehead State U.	243	806	1,271	756	2,312	754	1,208	756	1,799
Pittsburg State U.	244	1,990	1,659	2,250	2,309	12	50	314	600

TABLE 55

Total and federally financed higher education R&D expenditures in engineering, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Southern Illinois U., Carbondale	245	2,905	2,333	3,120	2,308	392	180	606	587
Virginia State U.	246	793	1,058	1,273	2,260	165	210	321	1,407
U. North Carolina, general administration	247	2,239	2,467	2,068	2,232	189	552	306	268
U. New Orleans	248	2,376	2,282	1,897	2,134	344	250	204	341
CUNY, Advanced Science Research Center	249	1,379	2,289	2,928	2,083	1,289	1,968	1,845	1,347
North Carolina Central U.	250	1,212	2,675	1,773	2,074	789	1,929	959	1,395
Western Illinois U.	251	409	79	780	1,983	321	71	780	1,983
California State U., Fresno	252	1,492	1,748	1,290	1,970	419	526	474	971
U. Alaska, Anchorage	253	1,393	1,101	1,674	1,957	562	644	869	1,074
Southern U. and A&M C., Baton Rouge	254	1,905	1,424	2,282	1,938	1,454	1,360	2,185	1,851
Alabama A&M U.	255	2,354 i	1,603 i	1,787 i	1,925 i	1,581 i	1,078 i	1,500 i	1,861 i
U. Minnesota, Duluth	256	2,399	2,186	2,392	1,892	319	180	341	322
U. Colorado Colorado Springs	257	694	1,367	902	1,883	649	877	488	1,134
Kent State U.	258	2,330	2,743	3,732	1,847	1,860	1,278	830	553
Pennsylvania State U., Behrend	259	1,508	1,232	2,395	1,799	408	337	610	1,039
California State Polytechnic U., Pomona	260	1,085	1,875	1,516	1,759	728	1,141	1,040	1,298
Santa Clara U.	261	876	948	1,588	1,741	215	393	814	1,061
West Texas A&M U.	262	1,178	1,277	1,400	1,713	477	500	673	915
Norfolk State U.	263	1,940	1,312	1,413	1,656	1,940	1,312	1,081	1,597
Kennesaw State U.	264	617	1,478	1,858	1,652	105	74	289	351
U. Texas Medical Branch	265	1,596	1,192	1,259	1,643	411	276	425	555
Bucknell U.	266	1,632	1,690 i	1,494	1,589	533	554 i	543	660
U. Arkansas, Little Rock	267	2,116	1,627	809	1,571	1,224	950	708	1,366
Saint Louis U.	268	2,344	2,621	1,999	1,559	1,176	1,549	1,183	768
U. Nebraska, Omaha	269	993	1,195	1,051	1,510	683	859	545	988
Western New England U.	270	ne	ne	ne	1,464	ne	ne	ne	395
U. South Dakota	271	3,243	1,385	1,429	1,447	1,280	440	731	859
Wake Forest U.	272	385	859	1,204	1,427	148	208	544	804
California State U., Los Angeles	273	879 i	922	1,486	1,423	688	806	1,067	1,414
U. Oklahoma, Tulsa	274	1,549	1,816	1,289	1,368	919	1,066	421	662
Florida Polytechnic U.	275	1,739	689	829	1,310	283	159	312	493
SUNY, C. of Environmental Science and Forestry	276	1,339	912	1,085	1,291 i	259	158	396	484
Tennessee State U.	277	1,207	2,922	1,768 i	1,278	824	2,584	1,755 i	1,265
U. Massachusetts, Boston	278	1,255	1,206	1,266	1,218	533	547	498	635
Hampton U.	279	1,049	866	827	1,215	1,049	866	827	1,215

TABLE 55

Total and federally financed higher education R&D expenditures in engineering, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed										
		2019	2020	2021	2022	2019	2020	2021	2022							
SUNY, Cobleskill	280	ne	ne	ne	1,211	ne	ne	ne	379							
California State U., Chico	281	567	1,120	1,236	1,192	179	613	768	636							
New York Institute of Technology	282	1,045	458	775	1,181	697	372	666	1,082							
Montclair State U.	283	0	14	104	1,129	0	0	5	49							
California State U., Fullerton	284	609	616	661	1,062	288	534	530	639							
U. Ana G. Mendez, Gurabo	285	2,324	884	1,034	996	i	575	365	667	987	i					
U. Colorado Anschutz Medical Campus ^e	286	na	na	1,204	957	na	na	1,189	730							
U. Central Oklahoma	287	0	1	i	1	i	928	i	0	1	i	392	i			
Oregon Institute of Technology	288	798	i	679	i	761	i	902	i	272	i	203	71	i	96	i
Manhattan C.	289	809	716	1,122	899	167	170	68	58							
Middle Tennessee State U.	290	59	182	592	889	3	76	100	288							
Minnesota State U., Mankato	291	1,472	1,486	996	871	174	244	170	0							
U. of St. Thomas (MN)	292	407	976	3,212	862	25	19	565	285							
U. San Diego	293	776	1,252	980	820	633	686	692	518							
James Madison U.	294	313	305	174	808	181	186	54	161							
U. Texas of the Permian Basin	295	ne	217	792	797	ne	82	270	509							
U. of the Virgin Islands	296	61	902	832	790	61	834	809	790							
South Carolina State U.	297	662	687	i	712	773	662	687	i	712	i	773	i			
U. Hartford	298	1,300	1,002	963	752	791	605	585	694							
Lawrence Technological U.	299	882	806	555	726	210	227	141	382							
Tarleton State U.	300	61	156	166	685	0	0	0	0							
California State U., San Bernardino	301	2,434	1,598	1,382	658	0	0	0	0							
U. Tennessee, Health Science Center	302	610	648	687	640	0	0	0	0							
Fort Lewis C.	303	760	505	605	623	702	477	563	592							
Savannah State U.	304	526	639	588	609	526	639	588	609							
Harvey Mudd C.	305	884	628	515	608	440	175	256	237							
Smith C.	306	553	952	688	599	463	725	571	426							
U. Detroit Mercy	307	227	119	114	560	59	75	64	510							
Western Washington U.	307	832	989	587	560	336	475	230	227							
U. Texas, Tyler	309	394	344	537	542	71	47	115	212							
Chapman U.	310	0	102	348	539	0	43	8	82							
U. North Carolina, Wilmington	311	1,226	640	1,064	537	484	335	297	182							
Pace U.	312	435	516	706	529	404	464	626	529							
California State U., San Marcos	313	797	2,408	1,682	527	797	2,408	1,680	504							
Hofstra U.	314	521	299	528	521	506	288	478	352							

TABLE 55

Total and federally financed higher education R&D expenditures in engineering, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Western Kentucky U.	315	597	689	604	510	2	68	82	135
Arkansas State U., Jonesboro	316	553	371	384	508	180	144	248	367
Central Michigan U.	317	559	736	412	499	162	84	95	48
Alabama State U.	318	0	533	366	483	0	533	73	267
U. Wisconsin-Green Bay	319	353 i	338 i	327 i	465 i	147 i	159 i	167 i	199 i
U. West Florida	320	21	277	709	450	0	196	265	14
Union C., Schenectady	321	118	204	722	446	10	81	595	359
California State U., Bakersfield	322	2,050	1,449	839	440	1,453	1,179	751	302
Boston C.	323	0	0	50	438	0	0	0	0
Christopher Newport U.	324	575	566	656	437	575	566	656	437
Hope C.	325	128	175	277	430	116	138	232	374
Kettering U.	326	1,354	1,046	295	424	184	114	3	0
Eastern Michigan U.	327	304	402	427	407	9	102	81	76
Wellesley C.	328	0	633	345	395	0	633	345	395
California State U., Maritime Academy	329	2,959	3,202	2,603	388	617	621	450	84
U. Washington, Bothell	330	161	0	304	387	146	0	304	387
Lafayette C.	331	184	251	201	384	107	139	84	222
Citadel Military C. South Carolina	332	ne	34	250	363	ne	13	136	222
Western Carolina U.	332	365	371	305	363	269	291	237	134
U. of the Incarnate Word	334	47	72	186	339	0	0	139	331
U. New Haven	335	1,013	533	319	329	485	238	81	64
Central State U.	336	340	166	211	314	340	166	211	314
Utah Valley U.	337	ne	ne	ne	310	ne	ne	ne	180
U. Wisconsin-Superior	338	4	9	207	297	4	9	32	71
U. Wisconsin-Oshkosh	339	146 i	152 i	158	294	74 i	74 i	73	252
C. New Jersey	340	ne	105	283	265	ne	8	133	133
Sam Houston State U.	341	21	20	36	253	0	0	0	167
U. Washington, Tacoma	342	0	59	319	250	0	59	314	250
Appalachian State U.	343	5	0	0	237	0	0	0	42
U. South Carolina, Aiken	344	1,520	1,331	1,322	231	1,453	1,331	1,322	128
U. Southern Maine	345	23	27	159	228	0	0	32	72
Northwest Indian C.	346	0	164 i	196 i	227	0	164 i	196 i	227
Alcorn State U.	347	343	133	181	222 i	330	126	178	219 i
Florida Gulf Coast U.	347	59	250	145	222	56	47	0	84
Roger Williams U.	349	36	30	32	221	0	0	17	44

TABLE 55

Total and federally financed higher education R&D expenditures in engineering, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Swarthmore C.	350	314	367	174	215	55	0	50	51
Delaware State U.	351	2,248	316 i	308	207	1,218	172 i	198	137
U. Wisconsin-Platteville	352	145 i	145 i	171 i	204 i	68 i	67 i	80 i	99 i
U. Virginia's C. Wise	353	ne	ne	0	197	ne	ne	0	156
CUNY, Hunter C.	354	0	0	0	191	0	0	0	191
Central Connecticut State U.	355	119	120	100	185	87	94	71	143
Coastal Carolina U.	356	0	0	68	175	0	0	68	159
Purdue U., Fort Wayne	357	221	443	465	169	160	194	125	92
Pennsylvania State U., Harrisburg	358	312	74	386	160	15	44	219	74
C. Charleston	359	0	67	72	158	0	67	72	158
Robert Morris U.	360	ne	ne	ne	144 i	ne	ne	ne	103 i
Seattle U.	361	283	140	62	137	72	10	10	48
U. of the Pacific	362	68	89	228	135	68	89	228	135
California State U., East Bay	363	ne	132	306	133	ne	41	0	0
Calvin U.	364	111	84 i	107 i	129 i	21	33 i	34 i	33
Fayetteville State U.	365	0	0	288	127	0	0	288	127
Texas A&M International U.	365	30	71	241	127	3	28	65	66
Illinois State U.	367	0	0	0	125	0	0	0	0
Virginia Military Institute	368	ne	ne	ne	119	ne	ne	ne	51
Grand Valley State U.	369	400	236	118	117	0	0	0	0
U. Wisconsin-Stevens Point	370	52 i	60	241	111	40 i	47	132	0
Texas A&M U.-San Antonio	371	ne	ne	ne	104	ne	ne	ne	0
Loyola U., Chicago	372	0	0	0	95	0	0	0	0
Texas Christian U.	373	73	46	36	88	0	8	8	84
Indiana State U.	374	1	4	2	87	0	0	0	70
Bowling Green State U.	375	60	121	57	80	0	0	35	42
Thomas Jefferson U.	376	0	143	55	77	0	59	55	77
DePaul U.	377	0	0	0	76	0	0	0	76
U. Houston-Downtown	378	42	36	189	71	0	28	189	71
Trinity U.	379	103	80	47	69	0	0	0	7
Duquesne U.	380	525	374	102	66	179	146	0	21
Claflin U.	381	145	170	65	63	144	170	65	63
U. Maryland, Eastern Shore	382	40	128	144	59	0	125	125	59
Loyola Marymount U.	383	160	165	234	57	0	0	0	0
Troy U.	384	ne	0	0	56	ne	0	0	56

TABLE 55

Total and federally financed higher education R&D expenditures in engineering, ranked by FY 2022 total: FYs 2019–22

(Dollars in thousands)

Institution	Rank	Total				Federally financed			
		2019	2020	2021	2022	2019	2020	2021	2022
Johnson C. Smith U.	385	0	364	57 i	52	0	364	57 i	52
CUNY, New York City C. of Technology	386	478	367	103	50	442	353	93	33
Texas A&M U.-Commerce	387	28	48	64	48	0	0	0	0
Trinity C., Hartford	388	86	49	45	42	19	13	1	13
Clark Atlanta U.	389	214	158	36	41	44	0	11	41
Lake Superior State U.	389	ne	ne	ne	41	ne	ne	ne	0
Central Washington U.	391	70	61	72	32	4	34	45	25
Kean U.	391	ne	0	0	32	ne	0	0	0
St. Cloud State U.	393	121	71	31	30	0	0	0	0
Abilene Christian U.	394	ne	ne	45	29	ne	ne	45	29
East Tennessee State U.	395	2 i	65 i	138 i	27 i	2	52	101	0
Southeastern Louisiana U.	396	0	4	16	24	0	3	8	6
Texas Southern U.	396	130	104	27	24	130	76	27	7
SUNY, Buffalo State	398	0	0	0	23	0	0	0	23
U. Houston-Clear Lake	399	5	2	0	21	0	0	0	13
Elon U.	400	87	45	29	18	68	25	13	0
Suffolk U.	400	ne	76	66	18	ne	76	66	18
Sonoma State U.	402	ne	1	1	17	ne	0	0	0
Hawaii Pacific U.	403	10	13	13	14	10	13	13	14
Azusa Pacific U.	404	50	31	5	10	0	0	0	0
Fisk U.	404	0	0	0	10	0	0	0	0
Northwestern State U. Louisiana	406	0	5	0	8	0	0	0	0
Dillard U.	407	0	0	0	7	0	0	0	7
Northeastern Illinois U.	407	0	0	0	7	0	0	0	7
U. Guam	409	0	0	0	6	0	0	0	6
California State U., Channel Islands	410	0	0	79	4	0	0	79	1
Marymount U.	411	ne	ne	0	3	ne	ne	0	0
Northeast Ohio Medical U.	411	0	0	0	3	0	0	0	2
Salisbury U.	411	0	0	3	3	0	0	0	0
U. San Francisco	411	0	6	3	3	0	0	0	0
Biola U.	415	2 i	2 i	2 i	2	0 i	0 i	0 i	0
U. Puget Sound	416	ne	0	ne	1	ne	0	ne	0
All other surveyed institutions	-	16,131	11,058	2,080	0	9,978	7,362	1,079	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

^a Johns Hopkins University includes the Applied Physics Laboratory (APL), with \$1,193,795 thousand imputed for total and \$1,154,078 thousand reported for federally financed R&D expenditures in engineering in FY 2022. Total expenditures by field for Johns Hopkins University are flagged as imputed because APL was unable to distribute a portion of institutionally funded R&D by field.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 56

Higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank			2022									
		2020	2021	All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
All institutions	-	13,702,434	14,291,729	15,596,634	1,647,191	1,726,307	1,108,245	1,647,038	3,436,892	615,228	2,062,508	886,681	2,466,544
Johns Hopkins U. ^a	1	1,205,632	1,237,980	1,324,646	164,961	82,261	24,980	18,090	567,218	100,873	247,082	37,033	82,148
Georgia Institute of Technology	2	695,176	839,071	935,632	281,775	49,446	28,746	23,950	378,019	68,872	65,814	21,127	17,883
SUNY, Polytechnic Institute	3	353,542	462,562	411,929	0	1,230	0	0	1	0	34	0	410,664
Texas A&M U., College Station and Health Science Center	4	357,559	385,656	402,999	32,301	27,673	19,620	110,000	29,267	12,286	38,297	11,116	122,439
Massachusetts Institute of Technology	5	419,636	382,569	397,946	36,986	105,214	49,094	16,428	51,752	603	49,402	29,280	59,187
Pennsylvania State U., University Park and Hershey Medical Center	6	367,730	378,667	385,594	34,060	33,997	13,450	12,444	123,291	6,773	107,002	54,577	0
U. Texas, Austin	7	259,935	279,730	319,719	14,072	10,324	46,906	41,873	80,126	72	70,078	24,710	31,558
Purdue U., West Lafayette	8	280,592	285,469	312,394	29,644	21,868	24,850	32,784	61,840	8,859	59,435	16,790	56,324
U. Michigan, Ann Arbor	9	283,329	279,682	299,254	15,615	29,990	15,462	21,267	80,277	5,384	48,222	13,520	69,517
Virginia Polytechnic Institute and State U.	10	263,711	246,965	260,158	26,384	28,433	5,291	32,674	67,367	34,760	24,678	13,007	27,564
Utah State U.	11	226,616	247,332	259,482	229,932	1,993	0	11,555	11,984	0	2,953	0	1,065
U. Illinois, Urbana-Champaign	12	203,564	216,233	228,786	16,647	15,966	20,595	26,706	56,110	0	31,526	19,386	41,850
Wichita State U.	13	134,848	157,430	226,111	219,716	165	0	0	1,543	748	1,178	0	2,761
Ohio State U.	14	175,109	163,509	219,388	803	4,213	12,200	19,553	32,558	18,026	84,396	23,085	24,554
U. California, San Diego	15	182,495	177,564	212,583	90	65,665	52	689	101,813	0	19,971	3,228	21,075
U. California, Berkeley	16	209,293	199,711	206,541	0	160	7,364	31,779	120,849	27	618	0	45,744
U. Dayton	17	153,082	180,158	195,856	18,896	308	6,636	737	7,550	54,874	8,302	87,386	11,167
Arizona State U.	18	155,015	145,574	192,681	0	15,232	7,780	36,223	52,683	12,354	10,404	6,583	51,422
U. Colorado Boulder	19	160,423	177,604	191,531	115,323	11,317	12,273	16,411	13,387	0	15,740	1,366	5,714
U. Washington, Seattle	20	152,919	157,622	172,004	10,064	32,757	9,292	21,696	41,353	1,957	18,658	6,645	29,582
North Carolina State U.	21	174,740	172,900	171,162	2,454	19,872	35,741	19,321	23,258	7,063	12,597	20,174	30,682
U. Maryland ^b	22	153,109	154,163	164,304	14,446	24,576	11,741	39,169	13,659	484	19,750	14,237	26,242
U. Wisconsin-Madison	23	133,600	131,709	148,673	0	16,734	15,061	14,220	20,315	5,387	16,882	13,129	46,945
Stanford U.	24	130,950	136,251	142,213	15,995	30,636	15,593	14,092	22,074	6,685	25,314	10,185	1,639
Carnegie Mellon U.	25	102,955	112,597	138,117	2,028	17,229	11,915	8,523	29,542	4,908	37,838	10,963	15,171
U. Florida	26	119,066	122,704	134,339	4,288	25,593	5,587	27,354	37,630	2,350	16,131	12,833	2,573
Iowa State U.	27	109,473	123,428	132,475	8,492	16,789	8,421	23,902	12,017	0	9,094	9,811	43,949
U. Minnesota, Twin Cities	28	120,929	121,637	131,042	10,420	33,495	21,128	14,114	19,282	1,501	24,802	6,300	0

TABLE 56

Higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022									
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
Cornell U.	29	123,703	118,621	125,320	3,107	20,839	15,313	9,915	25,771	5,503	18,703	18,154	8,015
U. Delaware	30	74,258	90,327	123,997	0	10,569	74,497	11,799	14,130	0	9,265	0	3,737
New York U.	31	100,207	99,307	119,160	0	71	3,470	1,604	15,842	0	2,682	0	95,491
U. Tennessee, Knoxville ^c	32	128,542	128,579	115,464	30,537	3,011	6,717	13,606	20,024	8,586	0	10,172	22,811
U. California, Davis	33	97,951	102,370	114,118	0	31,286	210	47,509	15,736	0	12,164	0	7,213
Rice U.	34	91,913	100,872	110,648	0	45,583	8,892	12,211	27,727	0	6,847	7,535	1,853
SUNY, U. Buffalo	35	112,843	100,194	109,870	12,279	12,264	14,783	8,297	5,354	7,407	25,052	3,223	21,211
U. Pennsylvania	36	82,299	88,937	106,282	0	30,184	9,817	12	23,441	0	24,366	0	18,462
U. Notre Dame	37	84,478	90,572	103,773	42,915	0	18,892	15,644	25,114	0	0	13	1,195
Duke U.	38	95,657	94,483	102,748	0	47,302	0	9,177	34,006	0	10,424	1,723	116
Clemson U.	39	76,971	90,038	98,733	0	14,082	5,187	14,619	15,046	3,836	27,730	11,060	7,173
U. California, Los Angeles	40	93,520	93,906	98,403	0	8,259	7,416	9,975	34,774	0	18,833	6,319	12,827
U. California, Santa Barbara	41	87,681	86,303	97,329	0	19,061	6,006	1,727	53,487	0	6,963	9,613	472
Harvard U.	42	97,884	92,782	96,920	0	62,685	1,513	4,317	5,323	0	292	20,335	2,455
Auburn U., Auburn	43	70,593	78,720	93,219	5,193	2,161	10,044	17,821	9,727	11,603	18,859	1,176	16,635
Northeastern U.	44	89,954	92,723	92,855	0	7,939	4,829	12,209	33,744	9,682	18,268	0	6,184
Boston U.	45	85,651	79,757	91,643	1,867	39,008	35	0	18,718	6,406	12,965	988	11,656
Woods Hole Oceanographic Institution	46	84,333	101,989	88,997	9,112	0	0	10,131	45,773	0	23,981	0	0
Northwestern U.	47	77,150	80,735	88,008	0	17,376	13,889	6,071	8,475	4,615	7,448	16,229	13,905
Columbia U. in the City of New York	48	72,758	75,457	87,884	2,001	27,298	11,462	2,609	5,078	1,555	5,159	0	32,722
U. Arizona	49	79,463	72,158	84,682	2,561	8,817	5,579	2,386	43,553	4,463	4,268	7,398	5,657
U. North Dakota	50	52,511	86,578	84,614	0	0	1,710	51,632	2,542	0	1,935	891	25,904
New Jersey Institute of Technology	51	85,445	82,240	83,738	0	10,569	8,106	24,292	5,235	0	2,899	197	32,440
Michigan State U.	52	82,690	79,360	81,143	0	19,620	11,917	10,614	17,545	0	11,501	0	9,946
Princeton U.	53	67,014	67,231	78,831	4,480	5,643	8,167	7,730	32,101	3,898	5,306	743	10,763
Vanderbilt U. and Vanderbilt U. Medical Center	54	94,674	86,541	78,534	0	21,651	9,456	14,050	20,748	0	10,212	0	2,417
U. Missouri, Columbia	55	53,343	56,685	78,494	0	2,629	1,085	7,982	7,217	460	3,907	344	54,870
U. California, Irvine	56	59,695	65,454	75,898	0	15,980	6,486	9,889	14,587	0	14,816	9,620	4,520
Mississippi State U.	57	69,220	67,472	73,980	17,972	1,131	5,536	4,298	9,044	5,951	7,547	620	21,881
U. Connecticut	58	46,751	54,185	68,902	0	5,736	8,061	21,804	8,613	0	8,539	14,963	1,186
U. Maine	59	37,127	46,986	68,261	16	97	9,990	1,948	1,961	1,395	2,371	49,355	1,128

TABLE 56

Higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022									
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
U. Massachusetts, Amherst	60	58,804	60,065	67,776	0	3,913	21,842	15,006	13,103	0	9,172	0	4,740
U. Pittsburgh, Pittsburgh	61	53,586	56,681	65,936	0	19,319	10,535	5,713	9,496	2,279	14,365	0	4,229
U. Virginia, Charlottesville	62	72,602	62,271	65,604	0	15,055	6,028	0	11,820	0	11,272	12,527	8,902
U. Houston	63	55,210	56,555	64,026	0	11,622	14,041	9,167	11,191	551	7,554	904	8,996
U. Southern California	64	78,005	78,179	63,694	4,996	7,801	8,307	3,608	32,486	2,572	0	0	3,924
Rensselaer Polytechnic Institute	65	70,156	67,810	63,146	0	8,233	9,971	3,369	14,865	440	17,423	5,813	3,032
U. Texas, Arlington	66	59,395	58,154	61,467	5,890	4,880	0	13,842	6,928	12,597	5,889	0	11,441
U. Kentucky	67	46,976	52,361	61,287	0	3,028	3,262	11,874	2,243	1,109	5,732	5,093	28,946
Colorado School of Mines	68	46,694	54,062	60,371	1,384	1,998	4,141	13,493	491	2,508	3,250	13,612	19,494
U. Central Florida	69	59,627	57,620	59,060	14,651	73	0	8,191	9,547	2,980	10,922	4,480	8,216
Oregon State U.	70	50,900	52,731	58,552	0	2,150	2,306	16,363	14,790	4,711	6,876	607	10,749
Florida State U.	71	56,493	52,153	58,212	2,334	2,327	1,481	6,463	17,653	4,202	19,751	2,654	1,347
Rutgers, State U. New Jersey, New Brunswick	72	55,880	51,289	57,490	0	4,883	5,911	2,670	6,895	312	7,215	2,508	27,096
George Mason U.	73	52,423	49,826	57,196	0	7,892	0	5,780	20,900	19,862	1,295	955	512
U. Nebraska, Lincoln	74	51,685	53,927	56,068	0	13,382	3,331	18,859	7,618	423	4,869	5,434	2,152
U. California, Santa Cruz	75	41,752	49,576	55,542	0	1,439	0	0	6,933	0	0	0	47,170
Montana State U., Bozeman	76	38,833	51,785	54,188	0	7,225	2,426	6,800	6,567	18	8,063	0	23,089
Louisiana State U., Baton Rouge	77	40,084	39,104	53,974	0	0	8,733	14,299	5,273	1,230	7,067	5,130	12,242
U. Alabama, Huntsville	78	51,198	55,510	53,958	32,628	120	1,117	3,469	6,422	4,347	3,689	754	1,412
New Mexico Institute of Mining and Technology	79	13,084	13,002	53,897	340	0	2,028	0	316	0	1,829	1,294	48,090
California Institute of Technology	80	51,693	51,630	51,975	7,418	6,392	7,286	11,452	7,780	0	183	96	11,368
U. Texas, Dallas	81	50,812	50,646	51,310	0	14,392	0	0	11,903	1,164	9,581	5,999	8,271
U. South Florida ^d	82	37,162	50,547	50,859	161	6,121	2,906	20,822	8,256	1,635	4,767	0	6,191
U. Alabama, Tuscaloosa	83	33,019	43,941	49,885	4,741	0	6,263	12,969	11,696	0	7,166	7,043	7
U. Iowa	84	48,433	47,722	49,233	0	1,377	948	19,430	2,174	681	1,740	0	22,883
Florida International U.	85	39,826	41,740	48,549	0	5,186	0	15,560	13,396	795	9,167	702	3,743
Michigan Technological U.	86	45,263	46,733	48,400	0	3,049	4,055	3,893	7,611	0	24,096	3,261	2,435
Colorado State U., Fort Collins	87	42,839	41,575	47,833	0	1,198	4,028	15,066	9,042	1,196	14,058	0	3,245
U. Utah	88	57,608	48,225	47,060	0	9,552	4,170	9,583	8,112	0	2,052	722	12,869
U. Cincinnati	89	43,098	42,434	46,955	7,787	2,804	3,684	7,945	11,173	0	11,273	0	2,289

TABLE 56

Higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022									
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
Texas Tech U.	90	42,856	41,962	46,952	0	0	8,432	10,384	10,791	3,297	7,698	0	6,350
Washington State U.	91	39,533	48,031	45,571	407	2,412	4,391	9,005	8,748	192	7,857	3,584	8,975
U. New Mexico	92	42,739	41,317	45,191	8,696	707	4,171	9,062	11,907	996	1,756	524	7,372
U. Oklahoma, Norman and Health Science Center	93	36,643	39,785	44,727	6,991	3,450	5,241	6,452	15,798	1,357	0	0	5,438
U. Massachusetts, Lowell	94	35,847	36,339	44,358	0	6,080	14,402	2,601	7,989	0	13,076	0	210
West Virginia U.	95	40,786	39,855	43,972	1,155	0	8,566	5,181	5,319	2,154	13,630	2,353	5,614
Stevens Institute of Technology	96	33,103	33,983	43,702	0	2,101	1,132	6,862	5,387	19,362	4,698	0	4,160
Missouri U. of Science and Technology	97	36,447	43,470	43,119	1,488	58	2,374	6,863	7,120	1,383	4,369	18,532	932
U. Chicago	98	24,468	30,018	41,866	0	0	0	0	0	0	0	0	41,866
Case Western Reserve U.	99	37,911	39,079	41,783	0	17,281	10,565	1,025	4,911	0	7,616	0	385
U. Texas, El Paso	100	25,172	26,599	40,798	42	1,266	0	5,850	4,940	2,184	23,507	833	2,176
U. Arkansas, Fayetteville	101	37,758	37,818	40,691	0	7,970	4,957	6,705	12,634	3,788	2,744	0	1,893
New Mexico State U.	102	25,030	29,884	40,367	7,551	0	1,488	6,165	12,731	99	2,358	122	9,853
U. Illinois, Chicago	103	31,496	35,675	39,656	0	15,275	2,508	3,980	4,772	0	12,789	269	63
U. North Carolina, Chapel Hill	104	30,774	30,935	39,242	0	12,488	0	25,656	0	1,098	0	0	0
SUNY, Stony Brook U.	105	30,180	28,344	38,670	0	8,438	0	3,012	12,136	0	1,853	10,565	2,666
Drexel U.	106	31,230	32,665	38,649	0	8,725	5,362	3,657	3,195	0	7,256	7,980	2,474
Mercer U.	107	37,450	40,439	38,452	14,803	0	0	9	1,608	0	11,183	10,282	567
Yale U.	108	36,806	35,778	36,714	0	10,422	6,281	0	9,921	0	8,366	0	1,724
Dartmouth C. and Dartmouth Hitchcock Medical Center	109	31,140	33,559	36,219	0	11,862	3,766	2,255	8,172	7	5,735	0	4,422
Oklahoma State U., Stillwater	110	33,983	35,094	36,217	9,450	0	5,691	5,101	3,771	1,851	2,977	1,439	5,937
CUNY, City C.	111	23,140	34,710	36,189	0	4,315	2,631	4,097	8,515	974	3,107	0	12,550
U. South Carolina, Columbia	112	37,747	36,222	35,508	0	0	7,794	4,324	5,766	0	11,896	1,716	4,012
SUNY, Binghamton U.	113	32,668	39,529	33,595	0	4,010	0	0	5,581	15,458	7,656	0	890
U.S. Air Force Academy	114	29,812	29,132	33,169	1,772	0	0	479	327	895	28,282	314	1,100
U. California, Riverside	115	31,937	34,888	32,758	0	2,135	6,741	9,555	8,992	0	4,136	184	1,015
Tufts U.	116	26,662	24,017	32,535	183	13,580	2,814	5,069	4,267	0	3,532	849	2,241
U. Nevada, Reno	117	23,939	27,769	32,454	1,540	1,963	3,510	9,968	488	4	7,014	2,042	5,925
U. Louisiana, Lafayette	118	27,878	30,295	32,259	0	0	7,505	5,716	3,643	0	9,967	4,728	700
Worcester Polytechnic Institute	119	23,758	27,108	31,514	688	2,084	3,303	576	3,046	0	18,938	1,294	1,585

TABLE 56

Higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022									
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
U. Alabama, Birmingham	120	53,030	46,844	30,637	999	7,608	349	1,765	3,155	0	7,713	7,790	1,258
Virginia Commonwealth U.	121	29,811	32,233	30,592	0	6,127	4,212	0	8,940	0	7,014	0	4,299
Kansas State U.	122	28,155	27,743	29,980	1,491	0	4,357	4,360	4,182	1,547	6,378	0	7,665
Brown U.	123	23,965	23,587	29,569	28	10,799	3,028	0	3,283	0	3,821	3,499	5,111
Lehigh U.	124	24,054	25,835	28,948	0	3,269	4,106	5,711	2,209	2,115	6,751	4,752	35
U. Wyoming	125	20,317	24,675	28,379	214	760	14,886	5,420	907	0	2,028	116	4,048
Old Dominion U.	126	25,869	25,811	28,288	1,485	0	0	1,088	8,687	14,708	2,320	0	0
Washington U., Saint Louis	127	23,821	26,574	28,151	0	11,340	6,035	164	4,836	0	0	5,415	361
Air Force Institute of Technology	128	23,947	26,780	27,794	4,892	0	0	1,036	5,905	14,097	0	1,864	0
U. New Hampshire	129	23,457	22,509	25,040	0	0	1,964	6,101	11,718	0	4,849	408	0
U. Hawaii, Manoa	130	25,423	23,966	24,574	43	967	0	4,785	11,857	0	1,786	0	5,136
U. Texas, San Antonio	131	22,922	21,499	24,403	0	4,096	0	7,198	4,575	821	3,312	0	4,401
George Washington U.	132	22,682	22,749	23,736	1,697	6,442	0	2,428	6,271	2,270	1,439	83	3,106
U. Louisville	133	18,105	20,965	23,630	0	6,652	2,259	1,870	5,224	1,186	2,713	9	3,717
U. North Texas, Denton	134	15,205	18,285	23,078	7	3,486	0	0	2,550	0	1,831	14,597	607
Rochester Institute of Technology	135	20,910	20,874	22,869	0	1,677	1,094	10	5,983	2,293	2,655	0	9,157
U. Georgia	136	19,273	20,289	22,379	0	1,724	6,268	9,385	4,292	0	0	0	710
U. Rochester	137	16,116	16,780	22,179	0	5,664	1,647	0	5,945	0	7,745	0	1,178
U. Kansas	138	19,830	21,363	22,075	2,269	0	7,420	6,504	3,308	0	2,232	0	342
Syracuse U.	139	24,272	24,698	21,602	0	4,027	50	2,263	7,000	0	7,441	0	821
Naval Postgraduate School	140	22,933	24,254	21,556	5,364	71	24	391	4,013	592	2,301	4,029	4,771
North Dakota State U.	141	14,007	13,963	20,187	211	2	729	8,659	1,993	615	2,066	213	5,699
Brigham Young U., Provo	142	15,943	20,162	19,599	0	0	4,083	1,863	6,042	907	6,605	0	99
North Carolina A&T State U.	143	10,393	11,616	18,186	0	0	441	2,173	4,572	1,138	721	0	9,141
U. Alaska, Fairbanks	144	17,843	17,314	17,869	401	0	0	5,916	8,429	0	443	339	2,341
Ohio U.	145	16,291	16,645	17,216	3,418	0	4,365	2,386	505	32	513	434	5,563
South Dakota School of Mines and Technology	146	12,677	13,658	17,162	0	891	6,467	1,739	489	76	421	4,652	2,427
Florida Atlantic U.	147	10,574	17,064	16,449	85	0	1,550	2,121	23	0	0	0	12,670
Emory U.	148	11,349	11,488	16,415	0	16,415	0	0	0	0	0	0	0
Embry-Riddle Aeronautical U.	149	12,015	11,279	16,049	14,396	0	0	416	0	0	721	0	516
Rowan U.	150	11,784	11,570	15,432	0	2,657	3,895	4,452	666	0	340	0	3,422

TABLE 56

Higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022									
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
U. Puerto Rico, Mayaguez	182	16,903	11,397	8,482	0	0	1,657	1,779	2,867	74	664	300	1,141
U. Massachusetts, Dartmouth	183	7,944	8,049	8,480	0	1,036	0	2,038	2,827	0	2,295	0	284
California Polytechnic State U., San Luis Obispo	184	4,646	5,522	8,472	3,861	372	0	1,453	169	45	983	4	1,585
Southern Illinois U., Edwardsville	185	1,424	1,786	8,439	130	7,553	0	82	2	0	672	0	0
Morgan State U.	186	7,228	8,031	8,375	210	0	0	2,973	3,394	320	0	0	1,478
California State U., Sacramento	187	7,744	5,986	8,253	0	0	0	8,064	21	0	168	0	0
U. Wisconsin-Milwaukee	188	9,683	8,577	8,246	0	349	0	2,323	1,262	208	2,290	904	910
U. Maryland, Baltimore County	189	6,671	6,668	8,140	589	2,246	372	725	1,447	303	1,336	194	928
U. Mississippi	190	13,661	6,033	8,095	346	1,077	256	1,893	1,609	0	1,334	524	1,056
U. Texas Rio Grande Valley	191	4,018	5,354	7,844	55	249	16	668	961	2,111	2,437	136	1,211
Medical C. Wisconsin	192	8,542	7,560	7,618	0	7,618	0	0	0	0	0	0	0
U. Akron	193	11,345	7,714	7,558	10	768	1,613	1,268	703	5	2,886	0	305
Tennessee Technological U.	194	7,559	8,455	7,436	0	0	214	1,325	2,403	382	2,989	0	123
U. Southern Mississippi	195	5,999	5,963	7,380	0	0	0	123	0	0	0	0	7,257
Southern Methodist U.	196	9,798	9,972	7,313	0	0	0	779	2,300	0	1,178	0	3,056
San Jose State U.	197	2,863	3,664	6,968	342	18	1,452	760	2,189	590	772	0	845
Wright State U.	198	29,519	8,129	6,843	1	1,243	0	0	4,276	0	1,167	91	65
Tulane U.	199	6,881	6,662	6,823	0	3,081	3,720	6	0	0	0	0	16
California State Polytechnic U., Humboldt	200	4,261	5,564	6,779	0	349	0	1,108	3,207	12	0	0	2,103
U. Michigan, Dearborn	201	7,088	6,223	6,703	0	0	0	0	3,375	1,522	1,600	0	206
U.S. Military Academy	202	5,297	7,772	6,640	0	0	210	179	1,569	1,136	2,389	0	1,157
Indiana U.-Purdue U., Indianapolis	203	7,177	6,604	6,626	0	1,642	0	14	1,381	0	3,078	0	511
U.S. Naval Academy	204	7,376	6,719	6,342	709	0	0	0	987	0	1,353	0	3,293
U. South Alabama	205	3,640	5,085	6,231	0	0	2,044	2,134	905	0	519	0	629
U. Miami	206	5,060	4,527	5,961	0	475	0	3,718	521	0	580	0	667
Florida A&M U.	207	4,796	5,222	5,752	0	0	1,080	1,317	636	892	889	0	938
U. of the District of Columbia	208	1,388	3,134	5,725	472	0	0	1,231	242	1,130	2,650	0	0
Portland State U.	209	6,719	6,668	5,582	200	0	0	1,988	2,079	150	716	170	279
Prairie View A&M U.	210	5,222	4,687	5,305	98	323	343	293	2,604	49	1,030	32	533
Brandeis U.	211	1,048	2,221	5,264	141	5,123	0	0	0	0	0	0	0

TABLE 56

Higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022									
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
Florida Institute of Technology	212	5,362	5,891	5,100	740	534	205	390	364	13	1,039	0	1,815
Idaho State U.	213	5,014	4,411	4,752	0	0	0	198	160	0	90	0	4,304
U. Oregon	214	0	0	4,656	0	4,656	0	0	0	0	0	0	0
Miami U.	215	3,783	4,356	4,474	0	741	1,703	0	1,359	558	113	0	0
Montana Technological U.	216	4,331	5,834	4,473	0	0	5	316	209	0	319	3,575	49
SUNY, U. Albany	217	3,319	3,133	4,266	0	0	0	0	1,666	0	0	0	2,600
Northern Arizona U.	218	4,996	6,497	4,194	0	1,139	158	369	1,579	0	278	3	668
U. Puerto Rico, Rio Piedras	219	341	1,152	4,135	0	4,135	0	0	0	0	0	0	0
Northern Illinois U.	220	1,467	4,134	4,132	0	0	0	0	194	2,921	442	0	575
Texas A&M U.-Kingsville	221	2,653	4,622	4,044	181	0	40	240	673	45	935	0	1,930
U. Colorado Denver ^e	222	na	3,695	3,906	0	438	0	972	952	0	1,097	0	447
U. Tennessee, Chattanooga	223	3,319	3,578	3,823	0	0	202	543	994	0	334	0	1,750
California State U., Long Beach	224	4,733	4,574	3,671	34	917	722	812	149	0	561	0	476
U. Denver	225	4,461	3,558	3,632	0	1,841	0	194	1,008	0	0	589	0
Lamar U.	226	1,825	2,437	3,536	0	0	1,259	1,098	120	884	175	0	0
Milwaukee School of Engineering	227	3,105	3,129	3,480	0	359	0	1,182	10	13	1,232	0	684
Alfred U.	228	2,720	2,654	3,458	0	0	0	0	0	0	0	3,458	0
Marshall U.	229	1,137	2,475	3,333	0	269	0	2,852	0	0	29	6	177
Georgia Southern U.	230	1,929	4,052	3,302	26	56	0	722	480	630	1,358	20	10
New School	231	3,205	3,793	3,301	0	0	1,425	305	18	0	1,500	0	53
Catholic U. of America	232	3,518	3,926	3,076	0	1,313	0	371	1,049	0	343	0	0
Youngstown State U.	233	3,491	1,794	3,058	0	0	0	1,631	239	0	266	87	835
Tuskegee U.	234	5,922	5,528	2,955	469	0	96	0	911	0	360	1,119	0
East Carolina U.	235	3,053	3,069	2,737	0	0	0	236	0	0	0	0	2,501
California State U., Northridge	236	1,115	1,216	2,621	0	131	0	36	111	0	1,508	30	805
Purdue U., Northwest	237	2,521	2,220	2,606	0	0	0	12	15	2,080	486	0	13
Jackson State U.	238	1,468	2,236	2,512	0	0	0	1,192	1,278	0	0	0	42
U. North Florida	239	2,433	2,119	2,472	0	0	0	539	189	0	1,567	0	177
CUNY, system office	240	1,132	1,137	2,447	0	0	0	0	0	0	0	0	2,447
San Francisco State U.	241	2,251	2,386	2,423	0	90	0	674	1,233	0	394	0	32
Franklin W. Olin C. of Engineering	242	491	936	2,380	202	0	0	20	504	0	980	0	674
Morehead State U.	243	1,271	756	2,312	2,147	0	0	0	165	0	0	0	0

TABLE 56

Higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022									
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
Pittsburg State U.	244	1,659	2,250	2,309	32	50	1,709	0	0	0	0	518	0
Southern Illinois U., Carbondale	245	2,333	3,120	2,308	0	0	2	189	589	0	768	67	693
Virginia State U.	246	1,058	1,273	2,260	1,002	0	0	0	0	186	0	8	1,064
U. North Carolina, general administration	247	2,467	2,068	2,232	17	531	742	0	508	0	384	0	50
U. New Orleans	248	2,282	1,897	2,134	0	0	0	213	810	0	497	0	614
CUNY, Advanced Science Research Center	249	2,289	2,928	2,083	0	242	359	896	0	0	0	0	586
North Carolina Central U.	250	2,675	1,773	2,074	0	2,074	0	0	0	0	0	0	0
Western Illinois U.	251	79	780	1,983	0	0	0	0	0	0	0	1,983	0
California State U., Fresno	252	1,748	1,290	1,970	0	0	0	1,080	843	0	13	0	34
U. Alaska, Anchorage	253	1,101	1,674	1,957	32	0	0	1,060	219	0	409	144	93
Southern U. and A&M C., Baton Rouge	254	1,424	2,282	1,938	0	0	0	5	271	0	1,662	0	0
Alabama A&M U.	255	1,603	1,787	1,925	0	0	0	334	786	131	472	202	0
U. Minnesota, Duluth	256	2,186	2,392	1,892	0	0	163	718	138	622	0	0	251
U. Colorado Colorado Springs	257	1,367	902	1,883	23	0	0	0	958	0	890	0	12
Kent State U.	258	2,743	3,732	1,847	802	11	92	0	316	50	104	14	458
Pennsylvania State U., Behrend	259	1,232	2,395	1,799	0	567	18	0	6	544	383	281	0
California State Polytechnic U., Pomona	260	1,875	1,516	1,759	282	0	709	629	3	77	58	1	0
Santa Clara U.	261	948	1,588	1,741	0	509	0	1	432	0	799	0	0
West Texas A&M U.	262	1,277	1,400	1,713	0	0	813	323	0	42	0	0	535
Norfolk State U.	263	1,312	1,413	1,656	0	0	0	0	0	0	0	0	1,656
Kennesaw State U.	264	1,478	1,858	1,652	0	0	0	517	174	0	300	0	661
U. Texas Medical Branch	265	1,192	1,259	1,643	0	1,643	0	0	0	0	0	0	0
Bucknell U.	266	1,690	1,494	1,589	0	163	415	254	239	0	285	0	233
U. Arkansas, Little Rock	267	1,627	809	1,571	1,439	76	8	0	1	0	0	47	0
Saint Louis U.	268	2,621	1,999	1,559	49	476	0	180	22	0	777	0	55
U. Nebraska, Omaha	269	1,195	1,051	1,510	390	536	4	536	0	18	0	0	26
Western New England U.	270	ne	ne	1,464	0	34	0	186	819	54	371	0	0
U. South Dakota	271	1,385	1,429	1,447	134	1,313	0	0	0	0	0	0	0
Wake Forest U.	272	859	1,204	1,427	0	0	0	0	0	0	0	0	1,427
California State U., Los Angeles	273	922	1,486	1,423	0	0	0	787	167	0	469	0	0
U. Oklahoma, Tulsa	274	1,816	1,289	1,368	0	143	0	0	1,224	0	0	0	1

TABLE 56

Higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022										
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec	
Florida Polytechnic U.	275	689	829	1,310	0	0	0	0	0	527	0	189	483	111
SUNY, C. of Environmental Science and Forestry	276	912	1,085	1,291	1	163	295	746	77	0	0	0	0	9
Tennessee State U.	277	2,922	1,768	1,278	38	0	0	466	0	0	661	0	113	
U. Massachusetts, Boston	278	1,206	1,266	1,218	0	24	0	0	865	10	0	0	319	
Hampton U.	279	866	827	1,215	0	0	12	0	1,203	0	0	0	0	
SUNY, Cobleskill	280	ne	ne	1,211	0	0	0	0	0	0	0	0	1,211	
California State U., Chico	281	1,120	1,236	1,192	0	0	0	403	264	82	414	0	29	
New York Institute of Technology	282	458	775	1,181	0	0	0	0	814	0	367	0	0	
Montclair State U.	283	14	104	1,129	0	1,041	32	56	0	0	0	0	0	
California State U., Fullerton	284	616	661	1,062	30	0	0	275	237	0	184	0	336	
U. Ana G. Mendez, Gurabo	285	884	1,034	996	0	0	0	0	0	0	0	0	996	
U. Colorado Anschutz Medical Campus ^e	286	na	1,204	957	0	957	0	0	0	0	0	0	0	
U. Central Oklahoma	287	1	1	928	0	182	0	0	746	0	0	0	0	
Oregon Institute of Technology	288	679	761	902	0	0	0	123	224	72	144	0	339	
Manhattan C.	289	716	1,122	899	0	0	308	577	11	0	3	0	0	
Middle Tennessee State U.	290	182	592	889	167	0	0	420	0	0	0	0	302	
Minnesota State U., Mankato	291	1,486	996	871	0	0	0	346	26	0	95	0	404	
U. of St. Thomas (MN)	292	976	3,212	862	0	0	0	8	316	114	214	0	210	
U. San Diego	293	1,252	980	820	0	0	0	0	0	68	0	0	752	
James Madison U.	294	305	174	808	0	67	0	0	0	31	0	0	710	
U. Texas of the Permian Basin	295	217	792	797	0	0	29	0	262	0	11	0	495	
U. of the Virgin Islands	296	902	832	790	790	0	0	0	0	0	0	0	0	
South Carolina State U.	297	687	712	773	0	0	245	0	0	0	0	0	528	
U. Hartford	298	1,002	963	752	725	0	0	0	0	0	27	0	0	
Lawrence Technological U.	299	806	555	726	0	58	0	496	61	0	99	0	12	
Tarleton State U.	300	156	166	685	0	0	0	129	0	0	299	0	257	
California State U., San Bernardino	301	1,598	1,382	658	0	7	0	651	0	0	0	0	0	
U. Tennessee, Health Science Center	302	648	687	640	0	640	0	0	0	0	0	0	0	
Fort Lewis C.	303	505	605	623	51	56	18	0	0	0	0	0	498	
Savannah State U.	304	639	588	609	0	228	183	0	0	0	0	0	198	
Harvey Mudd C.	305	628	515	608	6	51	60	49	103	6	143	6	184	

TABLE 56

Higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022									
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
Smith C.	306	952	688	599	28	220	28	287	10	0	7	0	19
U. Detroit Mercy	307	119	114	560	0	0	0	8	398	0	154	0	0
Western Washington U.	307	989	587	560	0	0	0	0	0	0	0	0	560
U. Texas, Tyler	309	344	537	542	0	0	89	284	84	3	82	0	0
Chapman U.	310	102	348	539	0	42	0	0	52	0	0	0	445
U. North Carolina, Wilmington	311	640	1,064	537	309	0	0	228	0	0	0	0	0
Pace U.	312	516	706	529	0	0	0	0	0	0	529	0	0
California State U., San Marcos	313	2,408	1,682	527	0	23	0	0	0	0	0	0	504
Hofstra U.	314	299	528	521	8	38	0	13	293	18	34	0	117
Western Kentucky U.	315	689	604	510	0	0	143	42	113	0	180	0	32
Arkansas State U., Jonesboro	316	371	384	508	0	0	0	309	62	0	137	0	0
Central Michigan U.	317	736	412	499	433	5	0	40	0	0	0	0	21
Alabama State U.	318	533	366	483	0	0	0	0	0	0	0	0	483
U. Wisconsin-Green Bay	319	338	327	465	0	0	0	142	197	0	126	0	0
U. West Florida	320	277	709	450	0	0	0	0	0	0	11	0	439
Union C., Schenectady	321	204	722	446	0	185	0	0	33	0	228	0	0
California State U., Bakersfield	322	1,449	839	440	0	0	0	0	100	0	0	0	340
Boston C.	323	0	50	438	0	0	0	0	0	0	0	0	438
Christopher Newport U.	324	566	656	437	437	0	0	0	0	0	0	0	0
Hope C.	325	175	277	430	0	0	0	0	0	0	430	0	0
Kettering U.	326	1,046	295	424	0	0	30	0	146	47	167	0	34
Eastern Michigan U.	327	402	427	407	0	0	8	175	23	0	72	0	129
Wellesley C.	328	633	345	395	390	0	0	0	0	0	0	0	5
California State U., Maritime Academy	329	3,202	2,603	388	0	0	0	0	0	0	34	0	354
U. Washington, Bothell	330	0	304	387	0	0	0	0	81	0	306	0	0
Lafayette C.	331	251	201	384	0	20	188	133	19	0	8	0	16
Citadel Military C. South Carolina	332	34	250	363	0	0	0	257	14	0	92	0	0
Western Carolina U.	332	371	305	363	0	35	0	207	0	0	0	0	121
U. of the Incarnate Word	334	72	186	339	0	32	0	0	0	0	307	0	0
U. New Haven	335	533	319	329	16	10	63	1	0	107	0	0	132
Central State U.	336	166	211	314	0	0	0	240	0	0	58	0	16
Utah Valley U.	337	ne	ne	310	0	0	0	19	253	0	38	0	0

TABLE 56

Higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022										
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec	
U. Wisconsin-Superior	338	9	207	297	0	0	0	0	0	0	297	0	0	0
U. Wisconsin-Oshkosh	339	152 i	158	294	0	0	0	271	11	0	12	0	0	0
C. New Jersey	340	105	283	265	0	118	0	65	51	0	9	0	0	22
Sam Houston State U.	341	20	36	253	0	0	0	0	0	0	0	0	0	253
U. Washington, Tacoma	342	59	319	250	0	119	0	0	118	0	13	0	0	0
Appalachian State U.	343	0	0	237	0	0	0	0	0	0	0	0	0	237
U. South Carolina, Aiken	344	1,331	1,322	231	0	0	0	0	0	0	0	0	0	231
U. Southern Maine	345	27	159	228	163	0	0	0	0	20	0	45	0	0
Northwest Indian C.	346	164 i	196 i	227	227	0	0	0	0	0	0	0	0	0
Alcorn State U.	347	133	181	222 i	0 i	0 i	0 i	0 i	0 i	0 i	194 i	0 i	0 i	28 i
Florida Gulf Coast U.	347	250	145	222	64	67	0	91	0	0	0	0	0	0
Roger Williams U.	349	30	32	221	0	0	0	109	0	0	25	0	0	87
Swarthmore C.	350	367	174	215	0	0	0	18	116	0	81	0	0	0
Delaware State U.	351	316 i	308	207	0	0	137	0	70	0	0	0	0	0
U. Wisconsin-Platteville	352	145 i	171 i	204 i	0 i	0 i	0 i	19 i	39 i	13 i	73 i	0 i	0 i	60 i
U. Virginia's C. Wise	353	ne	0	197	0	197	0	0	0	0	0	0	0	0
CUNY, Hunter C.	354	0	0	191	0	0	0	0	0	0	0	0	0	191
Central Connecticut State U.	355	120	100	185	90	0	8	43	0	6	21	0	0	17
Coastal Carolina U.	356	0	68	175	0	159	0	0	0	0	0	0	0	16
Purdue U., Fort Wayne	357	443	465	169	0	0	0	65	0	0	60	0	0	44
Pennsylvania State U., Harrisburg	358	74	386	160	0	33	0	7	12	0	108	0	0	0
C. Charleston	359	67	72	158	0	0	158	0	0	0	0	0	0	0
Robert Morris U.	360	ne	ne	144 i	0 i	57 i	0 i	0 i	0 i	17 i	48 i	22 i	0 i	0 i
Seattle U.	361	140	62	137	0	0	0	24	80	0	5	0	0	28
U. of the Pacific	362	89	228	135	0	135	0	0	0	0	0	0	0	0
California State U., East Bay	363	132	306	133	0	0	0	0	133	0	0	0	0	0
Calvin U.	364	84 i	107 i	129 i	0 i	10 i	0 i	2 i	0 i	0 i	36 i	0 i	0 i	81 i
Fayetteville State U.	365	0	288	127	0	0	0	0	0	0	0	0	0	127
Texas A&M International U.	365	71	241	127	0	5	0	0	0	0	0	0	0	122
Illinois State U.	367	0	0	125	0	0	0	0	0	125	0	0	0	0
Virginia Military Institute	368	ne	ne	119	38	0	0	13	2	0	66	0	0	0
Grand Valley State U.	369	236	118	117	0	0	0	0	3	0	2	0	0	112

TABLE 56

Higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022										
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec	
Sonoma State U.	402	1	1	17	8	0	0	0	0	9	0	0	0	0
Hawaii Pacific U.	403	13	13	14	0	0	0	0	0	0	14	0	0	0
Azusa Pacific U.	404	31	5	10	0	0	0	0	0	0	0	10	0	0
Fisk U.	404	0	0	10	0	10	0	0	0	0	0	0	0	0
Northwestern State U. Louisiana	406	5	0	8	0	0	0	0	0	0	0	0	0	8
Dillard U.	407	0	0	7	7	0	0	0	0	0	0	0	0	0
Northeastern Illinois U.	407	0	0	7	0	0	0	0	0	0	0	0	0	7
U. Guam	409	0	0	6	0	0	0	0	0	6	0	0	0	0
California State U., Channel Islands	410	0	79	4	0	0	0	0	0	0	0	4	0	0
Marymount U.	411	ne	0	3	0	3	0	0	0	0	0	0	0	0
Northeast Ohio Medical U.	411	0	0	3	0	3	0	0	0	0	0	0	0	0
Salisbury U.	411	0	3	3	0	0	0	0	0	0	0	3	0	0
U. San Francisco	411	6	3	3	0	0	0	2	0	0	0	0	0	1
Biola U.	415	2	2	2	2	0	0	0	0	0	0	0	0	0
U. Puget Sound	416	0	ne	1	1	0	0	0	0	0	0	0	0	0
All other surveyed institutions	-	11,058	2,080	0	0	0	0	0	0	0	0	0	0	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

nec = not elsewhere classified.

^a Johns Hopkins University includes the Applied Physics Laboratory (APL), with \$1,193,795 thousand imputed for total R&D expenditures in engineering in FY 2022. Total expenditures by field for Johns Hopkins University are flagged as imputed because APL was unable to distribute a portion of institutionally funded R&D by field.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 57

Federally financed higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022									
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
All institutions	-	8,119,848	8,713,515	9,694,378	1,246,002	1,100,258	646,644	784,286	2,484,203	434,246	1,409,792	589,129	999,818
Johns Hopkins U. ^a	1	1,154,993	1,183,154	1,264,048	159,473	72,410	23,486	16,038	546,944	97,517	236,186	32,584	79,410
Georgia Institute of Technology	2	537,693	666,235	739,429	259,142	31,909	17,733	14,211	304,352	52,520	40,734	12,566	6,262
Pennsylvania State U., University Park and Hershey Medical Center	3	277,345	284,244	300,829	14,713	13,957	10,634	7,832	112,295	6,065	92,718	42,615	0
Utah State U.	4	206,998	228,986	239,736	224,735	1,165	0	3,402	7,830	0	1,880	0	724
U. Texas, Austin	5	175,426	194,110	216,881	12,350	6,462	18,372	9,422	66,044	49	65,345	18,650	20,187
Massachusetts Institute of Technology	6	213,108	193,246	215,477	23,398	68,994	19,336	4,478	32,876	55	22,905	11,403	32,032
U. Michigan, Ann Arbor	7	176,141	180,607	189,405	9,894	20,220	7,676	8,063	51,136	3,355	31,627	8,593	48,841
U. Dayton	8	145,508	171,865	189,150	18,846	198	6,315	733	7,245	53,995	7,966	82,728	11,124
Purdue U., West Lafayette	9	122,469	137,052	163,895	19,139	8,963	12,148	8,992	39,070	3,689	30,587	11,077	30,230
U. Colorado Boulder	10	105,890	132,769	148,185	89,374	9,269	10,437	12,830	9,618	0	11,057	1,283	4,317
U. Illinois, Urbana-Champaign	11	131,529	139,887	144,390	11,797	10,964	13,284	18,410	37,006	0	22,511	12,670	17,748
Texas A&M U., College Station and Health Science Center	12	95,138	123,286	138,068	20,840	19,364	6,188	27,518	14,549	7,168	10,203	7,666	24,572
U. California, San Diego	13	97,602	100,212	129,923	0	50,173	52	175	52,667	0	16,534	1,254	9,068
U. Washington, Seattle	14	114,031	119,758	127,827	7,012	23,702	8,210	13,959	31,054	1,325	10,812	3,420	28,333
Virginia Polytechnic Institute and State U.	15	107,677	108,080	114,336	12,674	15,769	2,761	10,557	36,203	12,975	11,427	6,911	5,059
U. Maryland ^b	16	86,398	95,898	104,247	10,119	17,093	10,001	16,021	11,816	484	13,249	9,274	16,190
Ohio State U.	17	85,038	88,435	103,560	244	2,364	8,064	10,252	18,756	5,956	34,318	12,968	10,638
U. California, Berkeley	18	79,645	78,026	93,638	0	0	3,867	8,416	70,634	0	0	0	10,721
Stanford U.	19	81,391	89,861	89,919	12,679	17,395	8,117	7,521	14,712	5,351	16,183	6,823	1,138
North Carolina State U.	20	94,592	91,430	88,636	1,865	7,583	13,782	8,072	15,399	2,723	9,364	10,891	18,957
U. Delaware	21	53,448	68,504	88,552	0	8,112	54,839	8,259	11,084	0	6,180	0	78
Wichita State U.	22	46,023	64,692	88,257	86,506	0	0	0	841	487	395	0	28
U. Wisconsin-Madison	23	73,412	75,104	85,549	0	7,721	9,328	5,739	11,794	2,732	11,612	7,565	29,058
Arizona State U.	24	80,121	73,746	85,208	0	8,935	4,872	16,853	27,343	8,774	6,962	3,347	8,122
Carnegie Mellon U.	25	56,175	63,083	84,680	1,773	13,835	6,043	3,109	17,467	2,393	27,722	6,389	5,949
U. Minnesota, Twin Cities	26	74,167	78,808	84,060	8,568	22,600	13,713	5,489	13,011	670	15,300	4,709	0
Woods Hole Oceanographic Institution	27	75,442	93,266	82,286	i 8,414 i	0	0	i 8,665 i	43,112	i 0 i	22,095	i 0 i	0
Duke U.	28	73,605	74,308	80,356	0	36,517	0	4,669	28,986	0	8,419	1,723	42
U. Florida	29	62,573	72,191	79,991	3,150	12,360	3,287	14,279	25,232	1,082	11,848	8,179	574

TABLE 57

Federally financed higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022									
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
Cornell U.	30	69,870	72,771	73,646	1,114	14,003	10,409	7,198	11,580	2,808	13,110	10,877	2,547
Columbia U. in the City of New York	31	62,020	64,962	73,487	1,961	24,055	9,263	2,347	3,579	1,122	4,080	0	27,080
Northeastern U.	32	66,614	69,550	72,409	0	6,009	3,662	9,663	29,564	6,981	12,575	0	3,955
U. Tennessee, Knoxville ^c	33	66,562	66,556	70,892	20,634	1,631	3,413	6,223	11,446	5,967	0	5,782	15,796
SUNY, U. Buffalo	34	61,140	66,790	67,985	10,385	4,474	7,527	3,648	3,387	5,208	22,039	1,333	9,984
U. California, Santa Barbara	35	43,340	44,958	67,267	0	17,891	4,765	0	34,129	0	6,577	3,478	427
Iowa State U.	36	62,369	62,113	66,024	5,017	12,096	4,252	8,706	5,734	0	4,933	6,638	18,648
U. California, Los Angeles	37	49,163	53,761	65,455	0	6,850	4,932	5,399	24,999	0	14,643	4,229	4,403
Clemson U.	38	38,214	46,693	62,349	0	9,397	2,962	7,818	10,271	1,472	18,985	6,860	4,584
Northwestern U.	39	49,383	55,739	56,993	0	12,224	8,794	4,082	5,896	2,673	5,633	11,910	5,781
U. California, Davis	40	37,203	43,175	56,254	0	24,545	205	6,237	11,849	0	7,169	0	6,249
Boston U.	41	53,265	48,537	54,675	1,837	23,600	0	0	10,524	4,659	7,252	0	6,803
U. Southern California	42	55,089	51,948	54,438	3,861	7,044	4,875	3,400	28,797	2,537	0	0	3,924
U. Pennsylvania	43	44,542	49,526	54,427	0	18,092	5,593	0	15,464	0	15,229	0	49
Rice U.	44	42,085	46,799	53,851	0	16,490	4,417	6,595	19,865	0	2,980	3,466	38
Princeton U.	45	40,829	44,201	52,615	1,621	2,285	5,274	3,271	25,259	2,990	3,786	648	7,481
Vanderbilt U. and Vanderbilt U. Medical Center	46	52,373	43,570	52,364	0	14,751	6,104	9,299	13,374	0	6,963	0	1,873
U. Notre Dame	47	41,771	42,501	50,651	16,112	0	6,694	10,420	17,175	0	0	0	250
George Mason U.	48	45,977	44,086	50,246	0	4,573	0	4,324	19,952	19,287	819	788	503
New Jersey Institute of Technology	49	53,702	50,822	48,863	0	4,575	4,477	14,162	2,195	0	504	0	22,950
Mississippi State U.	50	45,520	44,188	48,255	14,275	669	4,045	1,045	3,564	3,386	3,450	296	17,525
Auburn U., Auburn	51	28,796	40,288	47,059	2,609	582	3,919	8,937	4,035	8,026	10,008	286	8,657
Harvard U.	52	52,801	50,918	47,017	0	26,699	1,491	604	2,923	0	292	15,008	0
New Mexico Institute of Mining and Technology	53	11,869	10,164	45,940	340	0	1,581	0	316	0	1,697	1,260	40,746
Oregon State U.	54	35,946	38,914	44,377	0	689	2,058	11,509	12,250	4,232	5,042	326	8,271
U. Maine	55	18,038	27,452	44,010	0	0	5,209	624	345	32	567	37,079	154
U. Pittsburgh, Pittsburgh	56	36,623	37,749	43,571	0	14,308	7,475	3,246	6,530	1,522	10,489	0	1
U. California, Santa Cruz	57	22,817	33,002	43,539	0	0	0	0	6,141	0	0	0	37,398
U. Alabama, Huntsville	58	42,499	44,780	43,390	29,143	14	401	3,084	4,039	3,317	1,889	519	984
Montana State U., Bozeman	59	28,753	39,190	42,936	0	3,856	1,289	5,009	5,211	0	5,239	0	22,332
Colorado School of Mines	60	33,432	37,909	42,745	1,170	1,657	2,937	10,665	270	2,457	2,352	9,756	11,481
U. Virginia, Charlottesville	61	41,454	37,143	42,481	0	10,622	4,725	0	9,165	0	8,388	9,045	536

TABLE 57

Federally financed higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022									
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
U. Connecticut	62	30,450	37,988	42,418	0	4,715	4,795	13,601	5,879	0	5,903	7,344	181
U. Arizona	63	34,459	34,360	42,072	1,821	4,004	4,094	494	20,447	2,861	2,619	2,495	3,237
U. California, Irvine	64	27,421	29,315	40,869	0	11,242	4,428	3,746	6,599	0	8,254	6,563	37
U. Kentucky	65	26,818	33,001	38,078	0	2,429	2,268	6,988	1,521	934	4,922	3,053	15,963
Florida State U.	66	38,126	34,492	37,798	690	2,026	890	2,400	13,663	2,182	14,128	1,534	285
U. Central Florida	67	34,825	36,318	37,217	12,141	0	0	3,402	4,923	2,049	7,118	2,355	5,229
U. New Mexico	68	34,153	33,001	37,091	7,771	603	3,224	6,986	9,944	493	1,259	480	6,331
Colorado State U., Fort Collins	69	30,860	30,424	36,428	0	1,109	3,585	11,475	7,934	1,011	10,078	0	1,236
Rutgers, State U. New Jersey, New Brunswick	70	40,629	35,691	35,877	0	2,914	3,770	481	5,888	33	5,212	1,972	15,607
U. Chicago	71	20,168	25,909	35,751	0	0	0	0	0	0	0	0	35,751
U. Massachusetts, Amherst	72	28,635	32,063	35,204	0	2,447	13,477	6,201	5,857	0	4,997	0	2,225
U. Utah	73	34,915	29,330	35,141	0	8,540	3,340	8,967	7,635	0	1,968	472	4,219
Stevens Institute of Technology	74	23,906	26,766	34,630	0	1,564	911	5,840	2,811	18,399	3,234	0	1,871
Michigan State U.	75	31,431	31,314	34,356	0	4,261	4,571	5,866	9,170	0	5,608	0	4,880
U. North Dakota	76	20,330	35,155	33,233	0	0	747	23,663	721	0	807	132	7,163
U.S. Air Force Academy	77	29,812	28,914	32,709	1,572	0	0	479	272	890	28,240	306	950
Florida International U.	78	21,747	23,801	31,994	0	3,660	0	11,484	8,541	27	7,204	197	881
Case Western Reserve U.	79	27,954	30,483	31,686	0	13,861	8,373	747	2,192	0	6,372	0	141
SUNY, Polytechnic Institute	80	26,696	24,019	30,702	0	0	0	0	0	0	34	0	30,668
U. Alabama, Tuscaloosa	81	19,679	25,859	30,544	3,448	0	4,155	5,631	8,551	0	4,850	3,909	0
Mercer U.	82	29,625	31,923	29,959	13,040	0	0	0	858	0	6,941	9,120	0
New Mexico State U.	83	15,583	19,957	29,723	6,003	0	1,013	4,783	11,422	90	1,897	0	4,515
Rensselaer Polytechnic Institute	84	28,960	31,832	29,720	0	4,863	3,548	992	6,082	400	11,647	2,090	98
U. Houston	85	24,929	26,599	28,251	0	8,152	6,453	3,684	4,818	210	3,147	0	1,787
U. Texas, Arlington	86	22,163	23,581	28,177	3,191	2,509	0	3,169	3,749	9,684	3,191	0	2,684
U. South Florida ^d	87	18,073	26,183	27,554	161	4,798	1,143	10,357	5,349	968	2,659	0	2,119
Michigan Technological U.	88	23,332	26,289	27,496	0	1,548	2,232	1,405	5,855	0	15,704	639	113
Drexel U.	89	19,772	20,821	27,063	0	5,940	4,224	2,197	2,670	0	6,152	4,587	1,293
U. Massachusetts, Lowell	90	14,870	18,884	26,414	0	4,648	7,324	1,385	4,366	0	8,592	0	99
U. Texas, El Paso	91	11,812	15,602	26,326	0	1,026	0	2,638	3,050	1,404	17,333	94	781
SUNY, Stony Brook U.	92	15,329	17,613	25,968	0	5,757	0	921	9,232	0	1,408	8,150	500
California Institute of Technology	93	26,324	24,011	25,812	4,594	460	5,304	7,180	2,989	0	183	96	5,006

TABLE 57

Federally financed higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022									
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
Dartmouth C. and Dartmouth Hitchcock Medical Center	94	21,064	24,126	25,052	0	9,421	3,304	1,461	6,219	0	4,647	0	0
U. Texas, Dallas	95	21,594	24,793	24,404	0	8,829	0	0	3,915	720	7,282	2,299	1,359
U. Iowa	96	20,687	23,116	24,367	0	486	70	9,935	824	444	762	0	11,846
U. Illinois, Chicago	97	17,537	21,610	24,287	0	8,801	1,659	2,797	2,938	0	8,092	0	0
Missouri U. of Science and Technology	98	16,411	21,797	24,061	921	0	1,430	4,251	2,965	716	2,871	10,484	423
Washington U., Saint Louis	99	19,552	22,291	24,042	0	9,584	4,772	163	4,122	0	0	5,040	361
Yale U.	100	24,172	23,578	23,926	0	7,035	3,839	0	7,197	0	5,855	0	0
U. Arkansas, Fayetteville	101	18,074	17,980	22,533	0	4,361	2,154	3,622	9,406	1,845	945	0	200
U. North Carolina, Chapel Hill	102	17,813	19,983	22,510	0	8,693	0	13,105	0	712	0	0	0
U. Nebraska, Lincoln	103	21,149	21,450	22,395	0	5,300	1,339	8,400	3,467	0	1,878	2,011	0
U. Alabama, Birmingham	104	44,243	43,477	22,205	944	5,501	349	287	1,565	0	5,769	7,790	0
West Virginia U.	105	15,930	18,042	21,919	841	0	5,060	2,487	3,039	1,158	7,977	551	806
Air Force Institute of Technology	106	15,238	17,065	21,622	2,824	0	0	836	5,073	12,237	0	652	0
U. California, Riverside	107	17,034	18,541	21,080	0	1,642	5,798	2,381	7,938	0	3,116	77	128
U. South Carolina, Columbia	108	13,921	16,470	21,003	0	0	3,060	2,532	4,891	0	8,804	1,716	0
U. Oklahoma, Norman and Health Science Center	109	15,069	15,235	20,850	2,449	832	1,905	2,772	10,362	269	0	0	2,261
New York U.	110	15,445	18,633	20,507	0	0	2,209	828	8,352	0	1,987	0	7,131
Washington State U.	111	20,360	23,129	20,359	0	1,078	2,781	4,654	2,757	96	3,289	2,456	3,248
Tufts U.	112	20,397	19,362	19,796	183	9,519	1,952	3,085	2,374	0	2,282	0	401
CUNY, City C.	113	15,704	18,078	19,125	0	3,581	2,597	1,752	7,741	0	3,089	0	365
Lehigh U.	114	16,205	16,976	19,098	0	2,417	3,270	2,870	1,209	1,545	5,452	2,335	0
Texas Tech U.	115	14,399	15,359	18,858	0	0	4,194	3,718	6,251	970	3,668	0	57
Worcester Polytechnic Institute	116	13,084	16,095	18,401	403	941	2,106	211	1,467	0	12,109	0	1,164
Brown U.	117	17,138	15,963	18,304	0	6,397	2,632	0	2,537	0	3,074	2,827	837
U. Missouri, Columbia	118	16,905	15,905	17,346	0	977	1,011	5,935	4,966	223	3,025	215	994
U. Hawaii, Manoa	119	17,536	16,553	17,241	43	484	0	2,560	10,762	0	1,486	0	1,906
U. Rochester	120	12,764	14,213	17,031	0	5,260	854	0	5,085	0	5,832	0	0
U. Wyoming	121	4,640	7,391	17,026	162	760	10,137	3,682	369	0	1,276	116	524
Oklahoma State U., Stillwater	122	11,969	15,319	16,574	4,498	0	2,363	2,511	1,650	555	2,005	1,133	1,859
Brigham Young U., Provo	123	11,438	15,694	15,386	0	0	3,031	1,089	5,242	716	5,308	0	0

TABLE 57
Federally financed higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022									
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
Kansas State U.	124	12,530	13,810	15,266	878	0	2,488	1,738	2,667	734	3,638	0	3,123
U. Cincinnati	125	11,447	12,970	14,790	3,289	397	1,214	3,480	4,000	0	2,145	0	265
U. Louisville	126	9,077	11,844	14,712	0	4,201	1,943	621	3,515	694	1,932	9	1,797
Embry-Riddle Aeronautical U.	127	7,943	9,272	14,083	13,127	0	0	99	0	0	364	0	493
Naval Postgraduate School	128	20,145	20,798	13,920	4,706	0	24	391	3,263	421	2,092	128	2,895
George Washington U.	129	15,091	15,052	13,339	1,305	3,447	0	1,179	5,029	766	743	55	815
U. Kansas	130	13,829	12,206	13,244	1,386	0	3,342	3,436	3,307	0	1,773	0	0
South Dakota School of Mines and Technology	131	8,887	9,834	12,779	0	185	4,691	1,448	439	23	342	4,311	1,340
U. Alaska, Fairbanks	132	11,998	11,355	12,504	154	0	0	2,941	7,011	0	346	232	1,820
Louisiana State U., Baton Rouge	133	10,268	11,014	12,249	0	0	1,394	3,422	1,456	333	2,120	87	3,437
U. Nevada, Reno	134	9,664	11,419	11,896	157	758	1,768	3,639	50	4	2,417	1,284	1,819
Old Dominion U.	135	11,802	9,683	11,184	834	0	0	765	4,409	3,931	1,245	0	0
Boise State U.	136	8,245	9,596	11,149	38	5,298	794	236	1,546	59	350	1,777	1,051
Illinois Institute of Technology	137	9,230	11,070	10,795	1,016	5,210	159	579	2,510	73	822	0	426
Oregon Health and Science U.	138	9,549	10,841	10,647	0	10,647	0	0	0	0	0	0	0
Rochester Institute of Technology	139	7,965	10,659	10,560	0	1,353	1,031	0	2,721	519	1,472	0	3,464
Emory U.	140	8,676	8,356	10,545	0	10,545	0	0	0	0	0	0	0
U. Georgia	141	7,208	8,139	10,503	0	131	2,810	5,130	2,432	0	0	0	0
U. Texas, San Antonio	142	5,961	7,346	10,333	0	1,990	0	877	1,885	601	1,387	0	3,593
U. North Texas, Denton	143	3,805	7,232	10,227	0	1,302	0	0	1,174	0	206	7,540	5
North Dakota State U.	144	3,085	4,341	10,191	211	0	578	5,956	977	114	874	163	1,318
North Carolina A&T State U.	145	8,664	9,071	10,157	0	0	429	1,798	4,149	989	613	0	2,179
U. Rhode Island	146	6,939	7,962	9,997	0	563	1,298	1,001	2,319	0	1,801	8	3,007
Florida Atlantic U.	147	6,955	11,045	9,749	85	0	0	1,303	23	0	0	0	8,338
U. Louisiana, Lafayette	148	3,557	6,909	9,736	0	0	2,137	2,310	1,097	0	1,386	2,806	0
U. New Hampshire	149	11,466	8,984	9,665	0	0	1,389	3,962	1,083	0	2,873	358	0
Cleveland State U.	150	11,055	7,748	9,597	0	7,919	570	142	253	0	713	0	0
Virginia Commonwealth U.	151	11,779	9,924	9,441	0	3,380	1,798	0	1,324	0	2,939	0	0
Rowan U.	152	7,616	8,035	9,274	0	2,286	3,452	2,609	511	0	177	0	239
U. Missouri, Kansas City	153	6,902	7,506	9,153	32	0	0	544	8,230	0	334	0	13
U. North Carolina, Charlotte	154	8,853	9,381	8,783	0	0	0	1,688	1,395	0	1,655	0	4,045
U. Nebraska, central administration	155	8,340	7,510	8,584	0	398	591	0	5,076	0	137	1,370	1,012

TABLE 57

Federally financed higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022									
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
U. Toledo	156	5,921	7,574	8,517	0	369	1,161	578	1,700	0	4,575	0	134
Missouri State U.	157	10,096	6,872	8,396	0	0	0	0	0	0	0	8,396	0
SUNY, Binghamton U.	158	6,526	7,463	8,326	0	1,641	0	0	1,771	3,190	1,724	0	0
Howard U.	159	6,241	7,420	8,156	0	0	417	1,184	4,165	0	1,442	0	948
U. Puerto Rico, Mayaguez	160	9,428	8,136	7,325	0	0	1,516	1,405	2,385	74	584	300	1,061
Syracuse U.	161	7,696	8,013	7,290	0	2,328	0	210	2,255	0	2,497	0	0
Indiana U., Bloomington	162	6,314	5,752	7,149	0	0	0	0	7,149	0	0	0	0
U. Idaho	163	8,376	6,705	7,063	1,190	291	588	1,398	716	10	725	232	1,913
Wayne State U.	164	5,947	5,695	6,722	0	1,414	1,543	2,247	421	497	106	0	494
U.S. Naval Academy	165	7,202	6,604	6,197	709	0	0	0	987	0	1,353	0	3,148
U.S. Military Academy	166	5,252	7,334	6,086	0	0	207	165	1,569	841	2,149	0	1,155
U. Vermont	167	4,853	5,537	5,794	1,497	0	0	1,547	816	0	1,934	0	0
U. of the District of Columbia	168	1,388	3,134	5,725	472	0	0	1,231	242	1,130	2,650	0	0
Wright State U.	169	23,496	6,695	5,696	0	1,068	0	0	4,087	0	476	13	52
Marquette U.	170	4,291	3,866	5,605	0	1,828	0	723	2,083	0	971	0	0
Morgan State U.	171	4,847	5,001	5,514	0	0	0	2,544	1,486	70	0	0	1,414
California Polytechnic State U., San Luis Obispo	172	1,338	2,636	5,436	3,768	11	0	864	28	19	266	0	480
Florida A&M U.	173	4,492	4,852	5,427	0	0	1,070	1,143	615	861	820	0	918
Ohio U.	174	4,454	5,340	5,209	2,314	0	476	1,088	45	0	136	254	896
Clarkson U.	175	4,584	4,577	5,180	0	0	435	1,458	2,076	0	1,211	0	0
Medical C. Wisconsin	176	6,389	5,221	5,046	0	5,046	0	0	0	0	0	0	0
San Diego State U.	177	3,851	4,553	5,043	1,077	98	0	1,422	1,054	0	1,392	0	0
U. Nevada, Las Vegas	178	4,946	4,037	5,031	0	0	0	2,111	781	0	2,128	0	11
U. California, Merced	179	5,760	4,627	5,007	0	1,419	82	60	0	0	1,512	699	1,235
South Dakota State U.	180	2,674	3,854	4,783	0	0	0	539	597	0	675	0	2,972
U. Akron	181	5,096	3,985	4,632	0	689	897	665	262	0	2,109	0	10
U. Texas Rio Grande Valley	182	1,761	2,885	4,536	55	249	0	3	205	1,415	1,324	120	1,165
U. Memphis	183	2,513	2,275	4,518	30	958	0	1,524	1,165	16	379	0	446
Temple U.	184	4,758	4,734	4,494	0	1,268	0	1,245	587	0	993	0	401
U. Miami	185	2,128	2,816	4,423	0	364	0	2,701	326	0	502	0	530
Indiana U.-Purdue U., Indianapolis	186	4,354	4,040	4,375	0	1,285	0	0	806	0	2,103	0	181
U. South Alabama	187	2,624	3,209	4,296	0	0	1,301	1,562	706	0	212	0	515

TABLE 57

Federally financed higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022									
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
Texas A&M U.-Corpus Christi	188	2,800	2,340	4,257	2,463	10	0	142	159	0	558	0	925
U. Maryland, Baltimore County	189	4,651	4,657	4,079	552	1,100	92	453	573	107	328	118	756
Western Michigan U. and Homer Stryker M.D. School of Medicine	190	1,580	4,194	3,994	506	0	2,165	218	464	35	564	0	42
U. Puerto Rico, Rio Piedras	191	270	1,152	3,900	0	3,900	0	0	0	0	0	0	0
Prairie View A&M U.	192	3,184	2,885	3,849	18	0	342	293	1,719	0	939	32	506
Tulane U.	193	4,050	4,016	3,801	0	2,421	1,380	0	0	0	0	0	0
Montana Technological U.	194	3,161	4,639	3,779	0	0	0	248	188	0	290	3,053	0
U. Mississippi	194	12,422	4,487	3,779	314	148	116	1,517	376	0	486	0	822
Portland State U.	196	4,113	4,021	3,752	168	0	0	980	1,636	0	661	100	207
U. Oregon	197	0	0	3,729	0	3,729	0	0	0	0	0	0	0
California State U., Sacramento	198	3,150	2,687	3,718	0	0	0	3,717	0	0	1	0	0
U. Colorado Denver ^e	199	na	3,152	3,398	0	415	0	624	952	0	1,074	0	333
Louisiana Tech U.	200	4,582	4,117	3,120	0	637	663	449	86	13	1,272	0	0
U. Wisconsin-Milwaukee	201	2,940	3,193	2,907	0	0	0	798	406	62	1,378	258	5
Texas A&M U.-Kingsville	202	1,830	2,923	2,819	181	0	0	143	275	0	871	0	1,349
Florida Institute of Technology	203	3,305	2,903	2,818	442	115	0	0	340	0	540	0	1,381
Southern Methodist U.	204	5,103	3,590	2,769	0	0	0	418	1,489	0	862	0	0
Northern Arizona U.	205	3,649	4,910	2,709	0	531	0	154	1,567	0	188	0	269
U. Southern Mississippi	206	1,823	1,970	2,661	0	0	0	123	0	0	0	0	2,538
U. Tennessee, Chattanooga	207	2,277	2,574	2,622	0	0	158	458	769	0	139	0	1,098
Tennessee Technological U.	208	2,756	3,392	2,549	0	0	119	241	832	270	1,059	0	28
Youngstown State U.	209	2,818	1,261	2,525	0	0	0	1,518	0	0	172	0	835
Idaho State U.	210	2,491	2,022	2,430	0	0	0	87	32	0	57	0	2,254
Texas State U.	211	746	1,537	2,429	464	0	0	541	451	0	122	31	820
California State U., Northridge	212	926	1,069	2,377	0	128	0	23	5	0	1,504	24	693
Marshall U.	213	434	1,671	2,375	0	269	0	2,096	0	0	10	0	0
Baylor U.	214	1,271	1,598	2,307	127	1	0	0	1,692	0	465	0	22
U. Massachusetts, Dartmouth	215	2,170	2,434	2,245	0	113	0	837	736	0	559	0	0
California State U., Long Beach	216	2,533	2,942	2,181	7	655	592	416	84	0	401	0	26
East Carolina U.	217	366	1,376	2,178	0	0	0	142	0	0	0	0	2,036
Catholic U. of America	218	2,925	2,680	2,099	0	1,021	0	10	725	0	343	0	0

TABLE 57

Federally financed higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022									
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec
Tuskegee U.	218	4,177	4,213	2,099	469	0	96	0	300	0	287	947	0
Northern Illinois U.	220	246	1,856	2,039	0	0	0	0	92	1,453	302	0	192
U. Michigan, Dearborn	221	1,681	1,907	2,030	0	0	0	0	1,427	121	482	0	0
Western Illinois U.	222	71	780	1,983	0	0	0	0	0	0	0	1,983	0
Villanova U.	223	1,375	2,122	1,949	0	0	166	786	688	0	309	0	0
Jackson State U.	224	1,262	1,817	1,905	0	0	0	938	925	0	0	0	42
Alabama A&M U.	225	1,078 i	1,500 i	1,861 i	0 i	0 i	0 i	314 i	767 i	125 i	459 i	196 i	0 i
Southern U. and A&M C., Baton Rouge	226	1,360	2,185	1,851	0	0	0	0	243	0	1,608	0	0
Purdue U., Northwest	227	1,128	1,032	1,846	0	0	0	0	3	1,547	296	0	0
Morehead State U.	228	1,208	756	1,799	1,799	0	0	0	0	0	0	0	0
Norfolk State U.	229	1,312	1,081	1,597	0	0	0	0	0	0	0	0	1,597
Oakland U.	230	233	953	1,572	0	0	0	0	843	0	729	0	0
U. Tulsa	231	1,387	2,410	1,557	0	0	127	0	152	0	1,183	0	95
California State U., Los Angeles	232	806	1,067	1,414	0	0	0	787	159	0	468	0	0
Virginia State U.	233	210	321	1,407	157	0	0	0	0	186	0	0	1,064
North Carolina Central U.	234	1,929	959	1,395	0	1,395	0	0	0	0	0	0	0
U. Arkansas, Little Rock	235	950	708	1,366	1,336	22	8	0	0	0	0	0	0
SUNY, U. Albany	236	1,039	1,393	1,355	0	0	0	0	762	0	0	0	593
CUNY, Advanced Science Research Center	237	1,968	1,845	1,347	0	233	338	776	0	0	0	0	0
San Jose State U.	238	1,575	700	1,323	9	0	241	0	745	13	84	0	231
California State Polytechnic U., Pomona	239	1,141	1,040	1,298	220	0	628	366	0	30	54	0	0
Tennessee State U.	240	2,584	1,755 i	1,265	38	0	0	466	0	0	661	0	100
Hampton U.	241	866	827	1,215	0	0	12	0	1,203	0	0	0	0
U. Denver	242	2,109	1,037	1,180	0	684	0	194	292	0	0	10	0
San Francisco State U.	243	981 i	990	1,174	0	87	0	209	846	0	0	0	32
U. Colorado Colorado Springs	244	877	488	1,134	18	0	0	0	314	0	802	0	0
New York Institute of Technology	245	372	666	1,082	0	0	0	0	715	0	367	0	0
U. Alaska, Anchorage	246	644	869	1,074	32	0	0	533	177	0	184	144	4
Santa Clara U.	247	393	814	1,061	0	199	0	0	108	0	754	0	0
Pennsylvania State U., Behrend	248	337	610	1,039	0	476	0	0	1	291	196	75	0
Alfred U.	249	887	933	991	0	0	0	0	0	0	0	991	0
U. Nebraska, Omaha	250	859	545	988	361	213	0	414	0	0	0	0	0

TABLE 57

Federally financed higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022											
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec		
U. Ana G. Mendez, Gurabo	251	365	667	987	0	0	0	0	0	0	0	0	0	987	
California State U., Fresno	252	526	474	971	0	0	0	376	593	0	2	0	0	0	
West Texas A&M U.	253	500	673	915	0	0	338	0	0	42	0	0	0	535	
Milwaukee School of Engineering	254	613	704	904	0	359	0	26	10	0	8	0	0	501	
U. South Dakota	255	440	731	859	134	725	0	0	0	0	0	0	0	0	
Miami U.	256	667	532	843	0	0	314	0	432	97	0	0	0	0	
Franklin W. Olin C. of Engineering	257	255	636	805	126	0	0	20	299	0	139	0	0	221	
Wake Forest U.	258	208	544	804	0	0	0	0	0	0	0	0	0	804	
U. of the Virgin Islands	259	834	809	790	790	0	0	0	0	0	0	0	0	0	
South Carolina State U.	260	687	712	773	0	0	245	0	0	0	0	0	0	528	
Saint Louis U.	261	1,549	1,183	768	0	166	0	87	22	0	493	0	0	0	
U. Colorado Anschutz Medical Campus ^e	262	na	1,189	730	0	730	0	0	0	0	0	0	0	0	
CUNY, system office	263	662	731	718	0	0	0	0	0	0	0	0	0	718	
U. Hartford	264	605	585	694	694	0	0	0	0	0	0	0	0	0	
U. Oklahoma, Tulsa	265	1,066	421	662	0	103	0	0	559	0	0	0	0	0	
Bucknell U.	266	554	543	660	0	15	309	93	182	0	53	0	0	8	
California State U., Fullerton	267	534	530	639	0	0	0	12	161	0	144	0	0	322	
California State U., Chico	268	613	768	636	0	0	0	35	236	0	365	0	0	0	
U. Massachusetts, Boston	269	547	498	635	0	24	0	0	611	0	0	0	0	0	
Savannah State U.	270	639	588	609	0	228	183	0	0	0	0	0	0	198	
Pittsburg State U.	271	50	314	600	32	50	0	0	0	0	0	518	0	0	
Fort Lewis C.	272	477	563	592	35	56	17	0	0	0	0	0	0	484	
Southern Illinois U., Carbondale	273	180	606	587	0	0	0	95	226	0	235	31	0	0	
U. Texas Medical Branch	274	276	425	555	0	555	0	0	0	0	0	0	0	0	
Kent State U.	275	1,278	830	553	54	10	92	0	250	0	104	14	0	29	
Pace U.	276	464	626	529	0	0	0	0	0	0	529	0	0	0	
U. San Diego	277	686	692	518	0	0	0	0	0	0	0	0	0	518	
U. Detroit Mercy	278	75	64	510	0	0	0	0	387	0	123	0	0	0	
U. Texas of the Permian Basin	279	82	270	509	0	0	7	0	258	0	0	0	0	244	
California State U., San Marcos	280	2,408	1,680	504	0	0	0	0	0	0	0	0	0	504	
Florida Polytechnic U.	281	159	312	493	0	0	0	0	245	0	33	215	0	0	

TABLE 57
Federally financed higher education R&D expenditures in engineering subfields, ranked by all FY 2022 engineering R&D: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022										
				All engineering	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronic, and communications engineering	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering	Engineering nec	
Hawaii Pacific U.	377	13	13	14	0	0	0	0	0	0	14	0	0	0
U. West Florida	377	196	265	14	0	0	0	0	0	0	0	0	0	14
Trinity C., Hartford	379	13	1	13	0	0	0	0	0	0	0	0	0	13
U. Houston-Clear Lake	379	0	0	13	0	0	0	0	0	0	0	0	0	13
Dillard U.	381	0	0	7	7	0	0	0	0	0	0	0	0	0
Northeastern Illinois U.	381	0	0	7	0	0	0	0	0	0	0	0	0	7
Texas Southern U.	381	76	27	7	0	0	0	0	0	0	0	0	0	7
Trinity U.	381	0	0	7	0	0	7	0	0	0	0	0	0	0
Southeastern Louisiana U.	385	3	8	6	0	0	0	0	0	0	6	0	0	0
U. Guam	385	0	0	6	0	0	0	0	0	6	0	0	0	0
Northeast Ohio Medical U.	387	0	0	2	0	2	0	0	0	0	0	0	0	0
California State U., Channel Islands	388	0	79	1	0	0	0	0	0	0	0	1	0	0
All other surveyed institutions	-	7,885	1,498	0	0	0	0	0	0	0	0	0	0	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. nec = not eligible; institution did not meet the criteria for inclusion.

nec = not elsewhere classified.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$1,154,078 thousand in federally financed R&D expenditures in engineering in FY 2022.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
All institutions	-	5,035,968	5,114,283	5,857,608	1,081,380	213,000	1,740,784	713,685	358,693	363,079	224,572	1,162,415
U. Pennsylvania	1	146,396	139,396	139,339	80,722	8,837	13,885	10,078	12,920	0	3,622	9,275
Arizona State U.	2	78,430	81,652	128,398	44,875	4,076	47,317	11,005	4,787	10,981	5,357	0
U. Michigan, Ann Arbor	3	100,931	118,228	121,582	15,156	1,740	12,943	25,283	6,311	7,319	3,616	49,214
U. Utah	4	29,823	27,419	117,635	3,460	1,671	1,809	1,557	732	43	3,950	104,413
New York U.	5	89,103	76,810	115,115	7,270	0	26,248	25,247	38,726	5,913	1,800	9,911
Harvard U.	6	123,639	109,083	111,157	32,502	3,057	40,789	12,226	20,298	0	2,285	0
U. Wisconsin-Madison	7	91,878	85,191	95,771	12,255	6,059	30,239	17,166	3,958	1,314	2,423	22,357
Florida State U.	8	80,379	77,689	88,449	14,381	2,413	35,670	9,901	5,189	12,449	5,872	2,574
U. Kansas	9	76,326	80,837	86,502	1,210	1,567	64,951	2,104	18	15,433	342	877
Virginia Commonwealth U.	10	28,285	72,243	78,574	7,429	57	27,439	16,558	0	1,648	7,750	17,693
Syracuse U.	11	71,962	72,037	77,564	25,657	4,913	5,869	11,730	7,609	1,217	5,623	14,946
Vanderbilt U. and Vanderbilt U. Medical Center	12	50,086	50,702	77,399	9,349	0	45,325	3,872	6,860	0	5,372	6,621
U. California, Berkeley	13	43,697	52,025	74,758	21,356	5,520	21,245	4,363	20,943	0	622	709
Ohio State U.	14	54,061	59,506	73,945	4,624	464	27,007	3,789	684	9,261	2,219	25,897
U. Georgia	15	63,130	64,523	70,657	23,884	4,017	9,937	8,741	4,980	4,056	5,957	9,085
U. Virginia, Charlottesville	16	67,324	59,610	70,333	5,246	12	38,779	7,190	1,228	0	491	17,387
U. Washington, Seattle	17	85,569	73,658	68,040	130	12,557	32,072	4,029	689	13,481	1,695	3,387
Georgia State U.	18	76,064	71,402	66,267	14,093	8,946	30,097	645	4,562	5,116	2,808	0
U. South Florida ^a	19	46,005	65,052	65,953	12,629	2,681	31,715	6,239	0	848	3,148	8,693
U. Texas, Austin	20	70,284	70,185	65,855	4,525	9,556	20,684	6,256	1,570	12,013	574	10,677
U. California, Los Angeles	21	54,234	58,429	65,643	18,285	2,891	32,018	6,073	2,973	0	3,267	136
Purdue U., West Lafayette	22	48,429	55,952	63,268	13,921	2,862	9,832	2,930	0	0	547	33,176
U. Maryland ^b	23	55,151	54,635	63,141	1,532	594	6,875	3,918	4,685	23,405	388	21,744
Columbia U. in the City of New York	24	51,003	55,440	62,587	1,740	3,775	5,120	8,364	9,979	31,040	184	2,385
U. Southern California	25	41,691	40,040	61,177	1,673	9,240	12,039	5,895	607	14,598	2,324	14,801
Clemson U.	26	54,255	53,989	59,137	2,867	163	5,119	464	0	0	9	50,515
Texas Tech U.	27	52,481	46,832	57,545	16,346	3,221	24,307	4,350	1,747	0	3,453	4,121
U. North Carolina, Chapel Hill	28	43,949	45,359	56,417	2,381	1,637	13,233	4,259	248	18,958	4,515	11,186
Texas A&M U., College Station and Health Science Center	29	40,859	39,523	56,295	11,284	540	31,580	1,678	379	355	235	10,244
U. Oklahoma, Norman and Health Science Center	30	24,585	45,990	54,089	12,573	1,228	18,284	2,845	289	1,163	958	16,749
Texas State U.	31	31,472	31,997	52,359	3,826	2,000	8,735	3,002	29,171	0	0	5,625
Cornell U.	32	42,944	40,205	49,756	17,796	5,860	441	2,242	992	0	2,837	19,588

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
Massachusetts Institute of Technology	33	61,915	52,737	48,875	5,184	151	29,247	2,100	1	260	310	11,622
Washington State U.	34	40,370	33,017	45,834	8,934	6,424	25,232	1,327	98	175	90	3,554
U. South Carolina, Columbia	35	40,744	46,932	44,972	9,103	2,159	7,486	6,800	471	4,606	2,194	12,153
U. Florida	36	52,546	40,461	44,949	2,934	3,467	21,412	5,457	144	2	2,407	9,126
Georgetown U.	37	33,155	30,603	44,734	12,008	432	431	4,079	25,796	0	0	1,988
Stanford U.	38	44,141	44,474	44,597	307	865	40,158	307	2,646	0	131	183
U. Minnesota, Twin Cities	39	43,068	38,218	42,387	17,900	400	12,714	3,640	2,190	958	502	4,083
Auburn U., Auburn	40	33,778	36,980	41,056	17,201	1,038	4,232	6,964	0	428	0	11,193
U. Louisiana, Lafayette	41	25,845	32,651	40,623	12,600	1,238	13,193	9,282	0	237	2,398	1,675
U. Alabama, Tuscaloosa	42	22,940	29,799	40,440	12,382	2,459	10,328	3,936	1,897	3,975	3,107	2,356
Michigan State U.	43	38,813	37,274	39,370	4,683	4,196	15,222	4,138	0	2,024	380	8,727
U. Nebraska, Lincoln	44	35,528	36,001	39,299	12,105	1,416	4,946	7,578	3,270	0	2,819	7,165
Indiana U., Bloomington	45	34,734	36,185	38,886	7,847	1,721	4,582	2,497	1,186	0	4,828	16,225
U. Illinois, Urbana-Champaign	46	30,615	35,349	38,841	3,533	266	5,928	4,727	1,429	7,619	1,299	14,040
Dartmouth C. and Dartmouth Hitchcock Medical Center	47	40,798	37,247	38,778	15,501	0	97	15,701	0	0	1,259	6,220
U. Notre Dame	48	26,720	25,936	38,564	4,630	0	36	7,194	1,777	0	763	24,164
Pennsylvania State U., University Park and Hershey Medical Center	49	21,466	34,537	37,651	8,148	2,159	18,556	5,587	1,703	611	887	0
U. Colorado Boulder	50	29,125	28,679	36,566	3,471	93	27,118	2,243	3,326	57	0	258
American U.	51	34,334	36,404	35,931	6,169	5,816	2,473	2,742	10,783	0	707	7,241
U. Central Florida	52	34,995	36,435	35,796	12,525	1,328	10,791	2,548	138	1,613	1,695	5,158
U. Texas, San Antonio	53	46,980	47,330	35,646	7,400	1,140	7,511	3,467	0	1,805	724	13,599
Oklahoma State U., Stillwater	54	33,474	46,863	35,302	15,765	2,194	2,805	5,285	126	0	1,265	7,862
Boston U.	55	29,183	26,605	34,597	6,289	749	10,744	7,971	3,908	4,246	315	375
U. Missouri, Columbia	56	28,274	34,279	34,489	606	3,088	21,075	432	167	602	217	8,302
U. Iowa	57	27,790	31,735	33,562	7,487	891	12,175	5,426	737	998	199	5,649
Northwestern U.	58	26,992	25,077	32,235	15,461	3,090	8,171	3,470	1,216	0	827	0
Florida International U.	59	26,584	30,202	31,959	8,505	1,306	11,138	5,490	1,191	194	1,797	2,338
U. California, Irvine	60	34,144	36,272	31,745	757	0	21,638	7,131	672	0	1,547	0
U. Houston	61	25,846	24,693	31,473	2,147	667	9,258	1,733	1,106	6,172	52	10,338
U. Tennessee, Knoxville ^c	62	28,093	28,899	31,439	9,931	2,796	3,893	6,179	2,715	1,024	2,042	2,859
U. Oregon	63	25,661	30,203	31,289	2,637	1,520	13,590	1,030	1,478	0	1,137	9,897
Washington U., Saint Louis	64	25,534	28,558	30,865	231	0	212	129	26	30,153	89	25
California Institute of Technology	65	30,954	16,133	30,663	0	388	0	7,342	0	0	0	22,933

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
Rutgers, State U. New Jersey, New Brunswick	66	26,421	28,675	30,129	2,704	2,209	11,475	3,245	0	3,237	150	7,109
U. Arizona	67	17,742	28,655	30,072	9,269	190	6,009	4,904	3,505	0	4,575	1,620
U. Mississippi	68	6,988	11,646	29,426	12,892	753	3,125	5,150	3,905	27	1,322	2,252
George Mason U.	69	22,083	21,002	27,597	2,603	2,141	4,654	1,999	15,208	69	225	698
U. Massachusetts, Boston	70	27,392	26,602	27,462	541	42	25,315	842	0	233	462	27
U. North Texas, Denton	71	26,475	24,514	27,017	10,276	0	3,756	5,814	0	0	6,335	836
San Diego State U.	72	18,845	21,399	26,545	6,600	1,452	6,064	6,244	0	2,314	1,704	2,167
U. California, San Diego	73	8,387	40,402	26,391	637	593	6,683	4,290	0	0	1,492	12,696
SUNY, U. Albany	74	17,604	14,148	24,923	5,682	1,138	6,341	5,748	0	3,295	1,248	1,471
Iowa State U.	75	56,769	25,604	24,896	8,981	1,207	2,554	6,803	0	0	1,541	3,810
U. Delaware	76	5,928	6,877	24,548	1,512	0	6,887	10,938	0	0	2,486	2,725
U. West Florida	77	26,275	25,768	24,425	22,074	113	2,103	0	33	25	11	66
U. Cincinnati	78	18,886	20,882	23,750	3,303	162	6,869	3,239	55	0	148	9,974
U. Texas, El Paso	79	21,191	22,518	23,509	5,487	1,736	5,461	3,313	0	1,323	1,548	4,641
Georgia Institute of Technology	80	31,180	28,320	23,468	1,362	1,009	13,268	769	0	0	1,289	5,771
SUNY, U. Buffalo	81	20,398	18,083	22,651	6,747	202	14,153	517	631	175	19	207
U. Nevada, Las Vegas	82	28,266	26,894	22,489	5,608	748	6,226	3,584	2,648	244	0	3,431
Boston C.	83	19,895	19,430	22,395	124	30	13,237	974	162	6,335	64	1,469
U. Massachusetts, Amherst	84	14,391	12,637	21,731	1,686	221	5,421	2,959	18	0	327	11,099
U. Denver	85	18,737	17,378	20,867	128	8	6,354	190	233	13,913	41	0
SUNY, Binghamton U.	86	11,950	14,075	20,383	1,919	67	3,398	9,077	0	107	2,134	3,681
Southern Methodist U.	87	16,199	15,962	20,226	5,341	0	7,422	1,852	2,936	0	1,994	681
Northeastern U.	88	10,266	12,311	20,199	4,599	1,089	3,758	703	3,735	0	768	5,547
Emory U.	89	28,099	9,982	20,078	494	286	909	6,393	929	0	3,491	7,576
U. Arkansas, Fayetteville	90	24,604	22,171	20,062	5,377	101	9,843	582	1,927	224	171	1,837
U. Texas, Arlington	91	26,776	20,484	20,034	3,301	55	1,571	494	0	6,023	272	8,318
Mississippi State U.	92	16,118	17,231	20,002	8,096	488	6,591	1,776	138	236	1,051	1,626
Temple U.	93	25,449	19,778	19,912	3,578	581	3,720	4,328	2,480	965	676	3,584
Montana State U., Bozeman	94	18,842	18,838	19,869	1,831	174	3,546	1,736	0	0	1,207	11,375
U. North Carolina, Greensboro	95	13,602	18,041	19,100	338	0	14,370	239	0	1,761	40	2,352
Virginia Polytechnic Institute and State U.	96	10,169	10,563	18,633	4,875	307	2,006	291	0	0	901	10,253
George Washington U.	97	20,624	17,607	18,306	4,437	9	5,512	1,209	2,609	0	105	4,425
U. Illinois, Chicago	98	16,086	17,681	17,810	1,273	147	4,801	5,726	0	2,394	423	3,046

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
Illinois State U.	99	24,411	16,488	17,699	118	0	13,073	40	0	20	0	4,448
U. Memphis	100	15,270	16,971	17,033	4,961	379	3,625	1,652	869	310	1,655	3,582
Carnegie Mellon U.	101	13,865	15,836	17,006	9,058	157	221	4,683	0	0	2,771	116
Princeton U.	102	14,088	14,796	16,760	0	148	12	11,047	0	0	4,332	1,221
San Jose State U.	103	6,827	11,569	16,508	8,735	293	2,893	3,838	0	28	0	721
Wichita State U.	104	14,146	17,381	16,009	1,608	4	362	3,763	0	1	1,178	9,093
U. Nevada, Reno	105	15,463	16,820	15,943	5,967	503	1,072	1,924	1,650	52	1,718	3,057
Duke U.	106	16,429	15,403	15,868	12,685	0	0	1,534	761	0	235	653
Kent State U.	107	16,378	14,368	15,735	5,030	1,309	4,742	2,113	0	0	1,004	1,537
North Carolina State U.	108	18,201	17,811	15,453	57	0	8,693	6,703	0	0	0	0
Brandeis U.	109	13,443	14,906	15,399	655	44	825	6,413	63	0	1,222	6,177
Tulane U.	110	13,706	13,338	15,158	7	142	0	1,596	5,648	0	329	7,436
U. New Hampshire	111	11,057	14,573	14,692	4,272	718	3,399	3,690	827	776	522	488
Baylor U.	112	8,452	6,722	14,487	3,751	496	787	7,848	23	705	225	652
U. Vermont	113	12,319	13,013	14,448	3,363	363	2,473	6,150	0	304	1,670	125
Kansas State U.	114	14,161	13,647	13,919	2,059	302	2,847	1,652	0	0	1,339	5,720
U. Rhode Island	115	7,908	9,030	13,913	1,364	613	1,504	597	145	819	132	8,739
U. Chicago	116	10,487	8,646	13,451	1,490	0	3,422	882	181	5,171	11	2,294
U. Kentucky	117	11,543	10,441	13,160	3,551	370	1,057	1,492	124	1,854	697	4,015
U. California, Davis	118	12,019	12,023	13,147	255	431	7,479	809	555	0	3,590	28
Fordham U.	119	14,984	11,252	12,878	3,255	425	1,230	3,231	2,704	975	0	1,058
Brown U.	120	9,256	12,193	12,850	16	10	5,899	2,862	3	0	292	3,768
Chapman U.	121	12,709	9,226	12,712	779	544	2,075	145	837	0	37	8,295
U. California, Santa Barbara	122	12,911	16,161	12,454	7,794	291	2,519	1,747	0	0	103	0
Georgia Southern U.	123	2,117	11,909	12,207	3,685	417	3,007	2,640	390	15	1,453	600
U. Louisville	124	13,949	12,590	12,133	3,084	346	2,552	792	514	3,056	890	899
William & Mary	125	10,906	10,738	11,811	1,540	0	7,023	1,247	1,928	0	40	33
U. Alabama, Birmingham	126	9,681	7,879	11,712	25	2	6,627	95	0	446	0	4,517
U. Montana, Missoula	127	8,714	9,277	11,706	914	260	3,093	1,108	772	4,950	0	609
U. Texas Rio Grande Valley	128	9,092	9,737	11,699	3,149	349	1,720	686	0	449	1,388	3,958
New Jersey Institute of Technology	129	16,812	23,397	11,694	1,928	0	7,065	945	0	0	0	1,756
California State U., East Bay	130	3,557	4,748	11,585	1,625	63	9,355	101	0	37	45	359
U. North Dakota	131	9,616	10,565	11,435	1,175	456	4,019	1,603	1,807	158	860	1,357

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
Montclair State U.	132	7,032	5,920	11,396	2,328	636	3,033	3,083	86	491	1,405	334
Colorado State U., Fort Collins	133	23,258	15,066	11,372	289	288	6,036	3,308	622	396	363	70
CUNY, John Jay C. of Criminal Justice	134	9,382	9,883	11,352	0	0	0	353	10,827	0	15	157
Wayne State U.	135	13,506	12,825	11,251	216	37	2,923	379	26	6,286	174	1,210
Louisiana State U., Baton Rouge	136	8,922	13,166	11,158	1,830	685	817	707	748	669	176	5,526
U. Maine	137	9,184	10,082	10,851	1,627	1,043	1,865	2,278	0	751	548	2,739
U. Connecticut	138	9,734	6,239	10,677	1,684	165	1,597	1,029	96	3,091	1,515	1,500
U. Pittsburgh, Pittsburgh	139	12,685	10,594	10,492	452	13	4,545	288	387	2,059	7	2,741
U. Texas, Dallas	140	12,661	9,866	10,177	8,070	0	640	1,467	0	0	0	0
Johns Hopkins U. ^d	141	5,825 i	6,448 i	10,120 i	0 i	0 i	0 i	9,994 i	0 i	0 i	0 i	126 i
Marquette U.	142	7,984	7,718	9,767	900	1,234	138	2,154	914	0	201	4,226
Rhode Island C.	143	8,656	9,361	9,760	1,174	4	7,685	12	0	875	0	10
U. Maryland, Baltimore County	144	4,198	2,760	9,562	28	29	3,669	3,358	0	186	1,022	1,270
Drexel U.	145	8,331	8,650	9,359	1	16	2,953	717	13	0	257	5,402
U. North Florida	146	8,083	10,424	9,343	3,935	13	4,842	177	0	0	155	221
North Dakota State U.	147	5,778	14,067	8,936	5,340	491	257	1,067	0	0	525	1,256
U. Alabama, Huntsville	148	7,326	7,902	8,906	2,817	105	4,886	700	0	4	363	31
Florida A&M U.	149	7,125	11,179	8,850	766	0	2,206	0	364	0	0	5,514
U. Massachusetts, Lowell	150	6,870	7,397	8,832	3,282	0	2,129	2,000	0	0	598	823
East Carolina U.	151	10,697	9,609	8,709	2,857	3	3,039	624	0	506	18	1,662
Yale U.	152	14,439	17,371	8,568	1,992	0	1,230	3,782	44	0	251	1,269
Portland State U.	153	10,013	8,215	8,466	42	310	1,824	733	0	1,797	105	3,655
Catholic U. of America	154	1,122	8,991	8,156	0	0	0	3,174	73	142	0	4,767
U. Southern Mississippi	155	7,826	6,970	8,034	44	9	4,206	681	0	1	864	2,229
West Virginia U.	156	8,103	8,956	8,001	2,383	290	2,190	483	171	69	39	2,376
Cleveland State U.	157	6,097	5,477	7,970	1,799	0	2,225	4	1,001	37	0	2,904
Middle Tennessee State U.	158	3,917	8,291	7,900	605	668	602	3,878	0	56	1,174	917
Rochester Institute of Technology	159	8,205	7,530	7,817	12	2	5,679	211	0	0	1,512	401
CUNY, Hunter C.	160	4,394	2,962	7,692	0	0	2,644	1,812	0	2,531	391	314
Colorado School of Mines	161	3,754	1,979	7,540	45	0	108	10	30	0	0	7,347
Indiana U.-Purdue U., Indianapolis	162	7,301	6,475	7,478	1,667	4	1,691	898	34	1,207	433	1,544
Rensselaer Polytechnic Institute	163	8,367	8,476	7,477	2,491	69	0	0	0	0	947	3,970
Wake Forest U.	164	3,372	5,051	7,369	0	90	505	5,252	339	0	445	738

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
U. Wyoming	165	1,323	972	7,226	2,644	400	1,475	1,185	104	185	573	660
U. New Orleans	166	2,908	3,581	7,222	188	0	11	629	0	0	0	6,394
Villanova U.	167	5,091	5,526	7,073	989	83	379	3,535	358	0	53	1,676
Western Michigan U. and Homer Stryker M.D. School of Medicine	168	9,191	7,642	6,918	49	18	6,369	131	0	276	69	6
Loyola Marymount U.	169	2,704	7,383	6,745	303	272	4,321	1,269	530	0	0	50
New School	170	3,931	4,119	6,625	28	350	2,358	643	0	975	1,332	939
North Carolina A&T State U.	171	4,769	5,562	6,482	1,243	0	1,018	0	0	165	0	4,056
Northern Illinois U.	172	8,745	5,904	6,348	868	0	387	0	0	0	269	4,824
U. Wisconsin-Milwaukee	173	6,287	6,083	6,317	26	322	822	2,908	0	724	184	1,331
Salisbury U.	174	5,064	5,596	6,262	816	64	2,428	178	2	1,843	39	892
High Tech High Graduate School of Ed.	175	3,304	5,032	6,203	0	0	6,203	0	0	0	0	0
Miami U.	176	2,681	2,093	6,144	1,213	331	1,693	1,271	0	14	164	1,458
Bowling Green State U.	177	7,030	6,202	5,979	52	0	4,265	414	0	0	223	1,025
James Madison U.	178	4,078	6,000	5,976	1,151	306	1,529	553	0	0	1,008	1,429
Oregon State U.	179	5,959	5,737	5,928	0	0	93	0	0	0	0	5,835
U. Puerto Rico, Rio Piedras	180	5,007	9,099	5,924	309	19	685	107	0	0	0	4,804
U. California, Riverside	181	6,973	6,186	5,900	109	0	2,359	1,416	0	0	24	1,992
Rice U.	182	6,468	6,601	5,892	694	0	3,633	1,262	0	0	32	271
U. New Mexico	183	6,126	5,184	5,803	610	875	2,416	441	523	0	155	783
Delaware State U.	184	3,478	3,999	5,582	300	0	4,755	0	0	527	0	0
Kennesaw State U.	185	3,399	4,719	5,577	2,197	481	816	1,609	0	377	22	75
Claremont Graduate U.	186	5,038	3,954	5,562	3,384	0	2,178	0	0	0	0	0
Louisiana Tech U.	187	6,214	6,637	5,207	3,434	245	341	394	0	0	654	139
Naval Postgraduate School	188	4,627	6,861	5,161	1,853	63	732	0	0	0	0	2,513
Rutgers, State U. New Jersey, Newark	189	4,888	3,602	5,039	2,322	0	137	169	1,814	1	81	515
U. San Diego	190	4,707	3,806	5,029	589	128	1,680	1,038	1,019	0	143	432
CUNY, City C.	191	1,457	2,183	4,998	0	14	2,612	0	3	0	27	2,342
U. California, Santa Cruz	192	3,629	3,776	4,989	0	133	393	3,088	0	0	1,375	0
Old Dominion U.	193	6,842	3,854	4,982	479	13	2,959	210	0	0	81	1,240
Ohio U.	194	9,545	5,565	4,975	1,198	55	1,325	672	0	271	406	1,048
U. Colorado Denver ^e	195	na	4,972	4,957	377	42	2,804	77	220	46	100	1,291
Utah State U.	196	3,362	3,084	4,887	31	85	2,186	278	0	48	281	1,978
Brigham Young U., Provo	197	4,759	4,163	4,876	1,175	51	983	1,462	193	0	308	704

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
U. North Carolina, Charlotte	198	4,869	4,419	4,862	585	10	2,244	541	0	337	59	1,086
Northwest Indian C.	199	3,078	3,958	4,841	0	65	4,776	0	0	0	0	0
U. Toledo	200	2,257	1,540	4,834	220	7	3,811	114	0	471	12	199
U. Washington, Bothell	201	5,847	6,065	4,831	531	254	3,837	0	0	0	0	209
Winston-Salem State U.	202	1,403	1,233	4,758	278	107	769	41	0	0	0	3,563
U. California, Merced	203	2,545	6,097	4,702	355	14	1,032	925	0	0	672	1,704
Naval War C.	204	5,220	4,748	4,600	0	0	0	0	0	0	0	4,600
U. Miami	205	940	711	4,537	1	26	1,524	326	2,605	0	55	0
Seton Hall U.	206	5,179	4,317	4,535	0	0	4,535	0	0	0	0	0
Tufts U.	207	6,958	3,927	4,449	76	0	1,503	1,188	211	91	292	1,088
SUNY, Stony Brook U.	208	3,267	4,113	4,347	110	580	355	1,507	0	1,004	659	132
Morgan State U.	209	274	1,740	4,304	458	0	2,851	103	0	441	0	451
California State U., Fullerton	210	472	2,643	4,242	744	657	575	1,398	0	7	542	319
Sam Houston State U.	211	6,679	6,893	4,219	76	17	2,338	91	387	0	43	1,267
U. South Dakota	212	4,513	4,646	4,182	1,081	21	457	922	614	535	444	108
California Polytechnic State U., San Luis Obispo	213	2,926	3,412	4,155	2,798	32	1,012	313	0	0	0	0
California State U., San Bernardino	214	3,404	3,608	4,082	23	22	3,852	7	0	12	43	123
Texas A&M U.-Corpus Christi	215	4,038	3,430	4,023	174	4	1,371	29	0	0	18	2,427
U. Oklahoma, Tulsa	216	2,892	3,753	4,006	0	0	3,096	0	0	821	0	89
Florida Gulf Coast U.	217	3,217	3,140	3,879	5	8	2,394	0	44	48	12	1,368
U. Baltimore	218	11,598	11,757	3,761	0	0	0	0	120	0	0	3,641
William Paterson U.	219	4,631	3,867	3,635	865	200	1,211	960	0	38	333	28
CUNY, Graduate Center	220	1,174	913	3,628	0	0	296	1,806	3	0	42	1,481
Bryn Mawr C.	221	6,067	4,184	3,584	0	0	118	2,746	0	527	193	0
Duquesne U.	222	3,634	2,932	3,565	1,216	0	716	343	440	0	6	844
Eastern Michigan U.	223	2,504	2,391	3,516	1,041	19	1,078	651	57	230	369	71
Long Island U.	224	3,849	4,407	3,505	963	0	568	1,417	0	287	0	270
California State U., Sacramento	225	3,514	3,627	3,407	888	0	1,684	358	0	83	136	258
Lehigh U.	225	1,637	2,161	3,407	54	62	2,830	222	0	0	0	239
U. Idaho	227	3,626	3,259	3,405	19	1	1,759	328	0	8	15	1,275
Nova Southeastern U.	228	559	328	3,403	3,052	22	98	0	106	22	0	103
Worcester Polytechnic Institute	229	1,143	1,452	3,377	2,169	0	0	247	0	0	0	961
U. Hawaii, Manoa	230	2,609	3,076	3,355	47	114	1,320	92	13	948	4	817

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
Western Washington U.	231	2,508	2,405	3,312	60	40	1,551	1,310	0	0	340	11
Tarleton State U.	232	2,637	3,041	3,262	753	170	1,318	413	478	0	0	130
Saint Louis U.	233	2,670	3,535	3,175	0	123	1,720	309	416	509	49	49
Florida Atlantic U.	234	3,843	3,491	3,155	1,159	0	417	1	0	271	0	1,307
Michigan Technological U.	235	3,196	3,208	3,104	1,755	0	267	854	0	0	228	0
Prairie View A&M U.	236	2,620	2,715	3,068	0	0	435	233	2,224	0	0	176
U. Missouri, Saint Louis	236	2,676	3,148	3,068	279	29	1,368	491	0	257	0	644
Grinnell C.	238	2,905	1,993	3,026	0	0	464	2,041	0	0	507	14
Southern Connecticut State U.	239	1,887	2,883	2,983	1,074	10	334	787	0	189	223	366
Hofstra U.	240	468	2,438	2,981	858	197	360	415	954	0	162	35
Texas Christian U.	241	1,736	2,261	2,926	49	0	2,801	0	0	76	0	0
Boise State U.	242	4,388	2,898	2,921	526	85	1,533	304	0	79	282	112
Wesleyan U.	243	2,329	2,413	2,867	0	525	1,290	855	0	0	176	21
West Chester U. Pennsylvania	244	3,552	2,056	2,717	445	53	450	451	0	107	101	1,110
Marshall U.	245	3,230	2,065	2,710	724	0	1,370	0	0	0	0	616
Towson U.	246	353	504	2,563	744	181	567	497	25	0	460	89
San Francisco State U.	247	2,651	2,886	2,558	525	301	415	246	8	0	236	827
U. Rochester	248	1,437	2,197	2,541	166	0	1,951	34	0	0	56	334
Ball State U.	249	2,658	2,564	2,528	478	0	552	121	18	376	0	983
U. North Carolina, Wilmington	250	1,539	1,605	2,419	708	0	834	113	0	0	356	408
Northern Arizona U.	251	1,908	1,571	2,397	50	142	2,000	174	26	0	0	5
New Mexico Institute of Mining and Technology	252	324	258	2,373	177	0	0	3	0	0	0	2,193
U. Puerto Rico, Mayaguez	253	657	2,046	2,360	1,060	290	451	14	0	0	101	444
Clarkson U.	254	1,009	1,253	2,338	645	96	710	171	0	0	0	716
Pratt Institute	255	ne	2,547	2,325	0	0	0	0	0	0	0	2,325
U. Tennessee, Chattanooga	256	1,774	1,812	2,294	1,833	53	203	94	0	0	0	111
Johnson C. Smith U.	257	1,385	2,157	2,291	86	65	431	61	0	587	0	1,061
Winthrop U.	258	1,017	1,145	2,263	0	0	2,222	0	0	40	1	0
Indiana U. Pennsylvania	259	2,863	2,931	2,243	1,074	132	175	805	0	0	17	40
U. North Carolina, Asheville	260	1,857	1,695	2,241	165	40	863	466	0	565	0	142
DePaul U.	261	803	1,382	2,233	235	469	676	64	105	111	318	255
Augusta U.	262	75	65	2,187	648	425	423	0	0	0	356	335
North Carolina Central U.	263	2,134	2,265	2,186	76	0	2,070	0	0	40	0	0

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
Virginia State U.	264	2,188	1,339	2,174	17	0	1,652	0	0	0	0	505
La Sierra U.	265	1,467	1,511	2,165	128	1	1,105	416	0	0	87	428
U. Colorado Anschutz Medical Campus ^e	266	na	1,328	2,142	0	0	405	599	0	418	0	720
California State U., Bakersfield	267	1,151	1,645	2,119	394	145	1,168	238	122	0	0	52
Colorado C.	267	1,463	4,781	2,119	0	0	216	443	0	0	964	496
Missouri U. of Science and Technology	269	188	2,768	2,115	4	24	3	8	0	0	0	2,076
Lawrence Technological U.	270	646	1,091	2,102	1,470	0	26	2	0	0	0	604
Erikson Institute	271	1,992	1,723	2,068	0	0	2,068	0	0	0	0	0
U. Dayton	272	1,502	1,487	2,058	57	20	1,499	0	0	103	72	307
California State U., Long Beach	273	784	924	2,026	4	183	444	535	0	569	80	211
Loyola U., Chicago	274	1,155	1,694	1,987	26	0	637	32	8	772	0	512
Western U. of Health Sciences	275	1,033	1,090	1,986	0	0	1,986	0	0	0	0	0
U. Missouri, Kansas City	276	1,661	2,099	1,972	342	0	679	298	6	0	187	460
California State U., Northridge	277	1,823	1,353	1,914	127	0	1,387	131	169	0	0	100
U. Alaska, Fairbanks	278	1,935	2,034	1,856	105	20	632	81	0	0	0	1,018
Wellesley C.	279	3,131	1,551	1,812	0	203	1,050	35	0	0	81	443
Texas A&M International U.	280	1,354	1,404	1,785	103	0	238	5	0	0	48	1,391
Purdue U., Northwest	281	1,424	1,387	1,768	803	0	194	43	0	0	156	572
Creighton U.	282	1,440	1,604	1,759	405	68	440	238	188	108	55	257
Saint Joseph's U.	283	1,402	1,524	1,732	829	10	834	54	0	0	5	0
U. Virginia's C. Wise	284	ne	1,964	1,721	656	0	91	0	0	0	0	974
Calvin U.	285	864	1,253	1,642	0	282	72	1,240	0	0	48	0
Texas Tech U., Health Sciences Center	286	1,033	1,016	1,613	0	0	1,567	0	0	0	0	46
Franklin and Marshall C.	287	1,704	1,523	1,611	95	0	233	146	0	0	83	1,054
Texas A&M U.-Kingsville	288	2,177	2,298	1,593	78	0	1,449	0	0	0	0	66
Stevens Institute of Technology	289	2,107	2,073	1,575	557	0	854	129	0	0	32	3
U. South Alabama	290	531	1,110	1,571	4	24	767	19	0	0	0	757
Texas Southern U.	291	1,538	1,248	1,544	0	0	0	0	0	0	0	1,544
St. Cloud State U.	292	2,016	1,200	1,510	0	6	1,458	0	0	0	21	25
Azusa Pacific U.	293	3,459	2,852	1,498	23	75	243	979	0	48	56	74
St. Edward's U.	294	4,242	4,738	1,479	65	35	974	75	0	300	30	0
Colorado State U., Pueblo	295	1,167	831	1,468	0	0	0	0	0	0	0	1,468
Fayetteville State U.	296	812	1,661	1,461	194	255	962	0	0	0	50	0

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
Lewis and Clark C.	297	1,443	1,345	1,448	0	0	70	6	1,370	0	2	0
Pacific U.	298	1,302	923	1,414	79	0	780	344	0	5	0	206
New Mexico State U.	299	1,458	1,060	1,408	141	31	499	156	0	36	39	506
Williams C.	299	1,375	1,342	1,408	0	0	0	876	41	0	491	0
U. Alaska, Anchorage	301	590	742	1,399	334	0	525	0	0	497	0	43
Reed C.	302	1,493	1,450	1,397	0	0	0	1,397	0	0	0	0
Texas A&M U.-Commerce	303	1,622	1,796	1,381	156	16	486	11	0	5	11	696
Texas Woman's U.	304	897	1,093	1,371	11	0	941	0	0	0	0	419
Pace U.	305	1,195	1,303	1,370	165	0	1,066	48	47	0	0	44
U. Nebraska, Omaha	306	3,256	1,452	1,366	56	0	322	26	0	0	23	939
Jackson State U.	307	102	1,335	1,363	0	0	1,323	40	0	0	0	0
U. Central Oklahoma	308	4,366	4,508	1,358	739	0	0	538	0	0	81	0
Swarthmore C.	309	1,004	900	1,342	0	0	134	393	0	0	815	0
Kean U.	310	1,125	3,145	1,341	239	0	375	462	0	4	175	86
U. of the District of Columbia	311	648	1,050	1,304	0	0	0	0	0	0	0	1,304
California State U., Dominguez Hills	312	255	705	1,299	36	14	1,139	64	6	0	20	20
Rutgers, State U. New Jersey, Camden	313	599	1,259	1,288	0	0	2	16	35	0	0	1,235
U. Massachusetts, Dartmouth	314	1,510	743	1,284	13	229	1,002	0	11	0	28	1
Babson C.	315	2,352	1,286	1,270	112	0	0	752	22	0	384	0
Embry-Riddle Aeronautical U.	316	350	776	1,268	157	382	613	8	0	0	0	108
U. Texas of the Permian Basin	317	1,166	1,236	1,203	102	8	761	323	0	0	9	0
C. Charleston	318	1,586	1,252	1,192	210	52	131	359	0	0	143	297
MGH Institute of Health Professions	319	535	537	1,177	0	0	1,177	0	0	0	0	0
Case Western Reserve U.	320	2,053	1,935	1,156	149	0	989	3	5	0	0	10
Tennessee Technological U.	321	472	771	1,150	106	0	411	5	0	0	3	625
Texas Tech U., Health Sciences Center, El Paso	322	127	805	1,133	0	0	958	0	0	0	0	175
Central Michigan U.	323	1,398	1,336	1,101	389	47	47	29	0	0	13	576
Pennsylvania State U., Harrisburg	324	68	286	1,095	223	0	702	0	0	170	0	0
Yeshiva U.	325	0	1,369	1,086	41	0	0	0	1,007	10	0	28
Lamar U.	326	1,988	1,580	1,082	232	54	463	52	0	0	3	278
Pepperdine U.	326	853	1,091	1,082	125	44	438	104	266	0	45	60
Hamilton C.	328	1,084	966	1,064	0	2	254	275	0	0	492	41
U. Central Arkansas	329	1,348	2,051	1,057	36	0	791	176	0	0	54	0

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
Suffolk U.	330	1,261	1,408	1,022	800	0	94	0	128	0	0	0
U. Colorado Colorado Springs	331	1,172	843	981	43	14	275	0	0	1	2	646
East Tennessee State U.	332	307	1,053	967	399	0	215	0	0	0	0	353
Grambling State U.	333	1,572	886	961	0	0	200	65	0	635	0	61
U. Tulsa	334	300	761	960	5	3	428	379	10	0	20	115
Southern Illinois U., Edwardsville	335	4,013	4,441	959	0	0	0	440	30	0	205	284
Oakland U.	336	98	598	953	45	1	698	16	0	0	0	193
Colgate U.	337	750	499	952	0	0	85	809	0	0	58	0
Howard U.	338	856	970	948	0	248	35	0	0	665	0	0
Willamette U.	339	881	1,007	945	23	0	267	19	243	0	13	380
U. Houston-Downtown	340	1,617	834	937	0	0	639	0	0	0	225	73
CUNY, Baruch C.	341	153	224	934	152	0	0	97	0	13	8	664
California State Polytechnic U., Pomona	342	245	133	909	14	0	0	0	0	0	0	895
U. Northern Colorado	343	1,376	850	906	125	71	626	14	0	0	2	68
U. Maryland Center for Environmental Science	344	884	879	904	0	0	870	0	34	0	0	0
Appalachian State U.	345	753	859	888	152	4	472	114	1	56	1	88
Citadel Military C. South Carolina	346	319	557	868	22	0	813	33	0	0	0	0
Elon U.	347	1,078	1,111	865	291	146	62	193	11	0	129	33
Hope C.	348	665	782	859	0	2	240	184	0	0	47	386
California State U., San Marcos	349	1,332	993	854	33	0	349	14	0	0	16	442
Hawaii Pacific U.	350	0	32	828	0	0	266	3	0	521	0	38
U. Nebraska, central administration	351	858	364	824	0	0	0	0	0	0	0	824
Eastern Connecticut State U.	352	742	795	822	85	0	185	548	0	3	0	1
Seattle U.	353	1,152	1,053	816	0	0	743	9	37	0	0	27
U. Nebraska, Kearney	354	116	334	813	26	382	132	1	0	1	1	270
U. of Mary Washington	355	944	687	806	553	0	0	214	0	0	0	39
U. Illinois, Springfield	356	547	326	799	0	0	594	22	0	0	0	183
U. Arkansas, Little Rock	357	828	501	796	0	0	506	0	204	0	0	86
Smith C.	358	638	452	795	0	0	25	386	0	4	231	149
Drake U.	359	ne	704	792	0	0	618	0	71	0	0	103
CUNY, Brooklyn C.	360	556	550	788	0	0	18	99	0	0	11	660
U. North Georgia	361	1,542	819	783	0	0	741	42	0	0	0	0
Florida Institute of Technology	362	995	957	778	176	8	0	0	0	0	0	594

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
Stephen F. Austin State U.	363	1,216	684	777	3	0	360	123	0	166	38	87
U. Guam	364	369	454	773	0	0	715	0	0	0	0	58
Purdue U., Fort Wayne	365	884	1,178	771	7	0	0	91	0	0	6	667
Coastal Carolina U.	366	0	183	769	186	52	155	98	0	0	197	81
Austin Peay State U.	367	859	657	758	1	0	44	7	0	0	478	228
South Carolina State U.	368	673	697	757	139	0	618	0	0	0	0	0
Amherst C.	369	915	410	723	0	0	0	620	0	0	103	0
CUNY, Lehman C.	370	725	1,213	719	0	6	128	43	0	10	32	500
Southeastern Louisiana U.	371	694	652	707	707	0	0	0	0	0	0	0
West Texas A&M U.	372	732	906	694	0	0	275	0	0	0	0	419
Carleton C.	373	974	816	687	0	0	0	369	0	0	318	0
Framingham State U.	374	0	0	676	214	0	326	136	0	0	0	0
Southern U. and A&M C., Baton Rouge	375	617	1,044	671	5	0	45	595	0	0	0	26
Santa Clara U.	376	113	352	659	92	49	214	45	138	0	0	121
U. South Carolina, Aiken	377	101	48	639	5	3	125	486	0	0	0	20
California State Polytechnic U., Humboldt	378	337	454	627	0	6	292	0	0	31	0	298
Biola U.	379	545	570	619	0	0	0	619	0	0	0	0
Western Kentucky U.	380	1,219	852	617	92	37	280	134	0	53	21	0
Northwestern State U. Louisiana	381	599	419	614	202	234	112	0	0	5	55	6
Morehouse C.	382	139	431	608	199	0	0	0	0	0	193	216
California State U., Chico	383	634	575	606	0	0	594	0	0	0	0	12
Trinity U.	384	638	307	581	36	32	10	237	0	0	238	28
U. San Francisco	385	1,004	368	578	61	15	258	81	0	0	12	151
Fort Lewis C.	386	0	20	573	0	0	163	36	0	0	0	374
U. Washington, Tacoma	387	325	429	562	423	0	68	0	0	69	0	2
Northeastern Illinois U.	388	640	543	561	0	0	561	0	0	0	0	0
East Stroudsburg U. Pennsylvania	389	ne	ne	550	2	0	544	0	0	0	4	0
Saginaw Valley State U.	390	42	42	546	43	10	366	40	81	0	6	0
Elizabeth City State U.	391	463	398	544	0	2	470	72	0	0	0	0
California State U., Fresno	392	509	929	541	84	0	231	171	0	0	0	55
U. of St. Thomas (MN)	393	632	675	540	0	0	196	0	151	0	0	193
Haverford C.	394	0	411	526	0	0	0	526	0	0	0	0
South Dakota State U.	394	339	389	526	0	101	41	1	0	0	0	383

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
Dillard U.	396	36	795	524	0	0	330	112	57	0	6	19
Sul Ross State U.	397	0	0	521	105	17	185	67	0	11	0	136
California State U., Los Angeles	398	402	490	519	0	1	473	0	0	0	0	45
Grand Valley State U.	399	438	494	512	13	5	17	30	2	3	9	433
Western Carolina U.	400	344	406	505	44	0	108	2	0	276	10	65
U. Wisconsin-Oshkosh	401	209	224	501	45	13	246	64	0	6	127	0
National Defense U.	402	2,000	1,200	500	0	0	500	0	0	0	0	0
U. Akron	403	901	593	494	126	40	46	181	15	0	51	35
Pennsylvania State U., Behrend	404	30	407	479	19	13	436	2	0	0	9	0
Roger Williams U.	405	246	384	467	2	0	235	0	134	0	0	96
Colby C.	406	146	539	449	0	0	48	279	0	0	83	39
CUNY, New York City C. of Technology	407	228	338	431	0	6	0	20	0	0	0	405
Indiana State U.	408	403	365	426	19	5	388	0	0	0	0	14
U. Minnesota, Duluth	409	503	491	425	112	3	53	13	0	3	60	181
U. Michigan, Dearborn	410	636	298	414	216	0	27	22	0	0	0	149
Hampton U.	411	560	488	413	188	0	8	0	0	0	0	217
CUNY, Queens C.	412	864	1,117	407	0	53	230	67	0	0	16	41
Saint John's U.	413	599	352	406	32	6	194	126	0	0	48	0
U.S. Military Academy	414	601	656	402	5	0	0	364	20	0	0	13
Alabama A&M U.	415	512	455	386	37	11	199	17	0	37	4	81
Bucknell U.	416	406	340	385	67	0	10	157	0	0	87	64
Christopher Newport U.	416	364	283	385	6	100	0	221	0	0	38	20
C. of Saint Benedict	418	582	322	372	31	5	178	113	0	0	45	0
Vassar C.	419	15	108	366	0	0	100	193	0	0	73	0
Norfolk State U.	420	32	8	359	0	0	124	0	0	22	0	213
Bowdoin C.	421	165	305	358	0	0	169	99	0	0	42	48
Claremont McKenna C.	422	443	311	348	0	0	0	348	0	0	0	0
CUNY, C. Staten Island	423	148	134	347	0	0	8	89	0	12	21	217
St. John's U., New York	423	352	244	347	0	3	157	34	85	0	0	68
Albion C.	425	266	259	344	15	7	163	101	3	0	55	0
Kettering U.	426	310	928	341	272	0	61	0	0	8	0	0
Manhattan C.	427	243	342	323	167	0	156	0	0	0	0	0
U. Richmond	427	396	177	323	151	35	0	103	0	0	29	5

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022																			
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other											
Sonoma State U.	429	86	79	318	0	10	171	107	0	0	0	30											
Marymount U.	430	ne	495	303	5	0	142	93	0	0	0	63											
SUNY, C. of Environmental Science and Forestry	431	296	295	298	i	223	i	15	i	0	i	43	i	0	i	17	i						
Barnard C.	432	299	508	295	0	0	181	75	0	0	39	0											
Northern Michigan U.	433	360	237	288	102	0	19	163	0	1	0	3											
Bentley U.	434	ne	ne	286	0	0	286	0	0	0	0	0											
Spelman C.	435	614	396	277	0	0	0	0	0	0	0	277											
U. of the Incarnate Word	436	61	87	275	36	0	0	0	0	0	0	239											
C. Wooster	437	253	246	i	274	0	4	0	177	0	0	74	19										
Gallaudet U.	438	1,695	10	273	0	225	0	0	0	0	0	48											
Touro U., California	439	12	14	271	0	0	0	0	0	0	0	271											
Macalester C.	440	190	147	268	0	0	0	237	0	0	31	0											
Pomona C.	441	273	268	262	0	0	0	167	0	0	95	0											
U. Texas, Tyler	442	125	165	261	33	0	141	0	0	0	0	87											
Lafayette C.	443	205	156	256	0	0	0	114	0	0	55	87											
Idaho State U.	444	246	207	254	5	4	131	53	0	0	12	49											
Northland C.	444	ne	215	i	254	i	58	i	0	i	137	i	59	i	0	i	0	i					
Troy U.	446	103	154	246	45	1	154	8	0	18	6	14											
Mount Holyoke C.	447	121	181	244	0	29	59	0	0	0	141	15											
Clark U.	448	482	181	243	0	0	119	0	0	0	0	124											
Bowie State U.	449	599	418	239	0	0	0	0	0	0	0	239											
Tougaloo C.	450	0	0	i	238	i	15	i	0	i	134	i	12	i	0	i	19	i	0	i	58	i	
Abilene Christian U.	451	ne	185	237	0	0	5	168	0	6	0	58											
Langston U.	452	455	255	233	0	0	145	0	0	54	0	34											
SUNY, Geneseo	453	114	223	232	17	17	9	65	0	0	4	120											
Des Moines U.	454	626	253	i	227	0	0	227	0	0	0	0											
Rowan U.	455	749	372	226	0	0	59	25	34	0	0	108											
U. Wisconsin-Platteville	455	261	i	194	i	226	i	61	i	0	i	127	i	31	i	0	i	0	i	7	i	0	i
Wright State U.	457	851	407	223	119	0	0	0	18	57	0	29											
Central Connecticut State U.	458	583	307	204	16	4	94	73	0	5	12	0											
Davidson C.	459	421	187	200	0	0	9	55	0	0	0	136											
U. Southern Maine	459	455	139	200	0	0	18	0	0	0	64	118											
Butler U.	461	ne	ne	198	17	48	14	105	0	0	14	0											

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020		2021		2022																	
						All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other									
U. Wisconsin-Green Bay	462	133	i	127	i	197	i	39	i	8	i	65	i	23	i	0	i	12	i	0	i	50	i
New Mexico Highlands U.	463	0		0	i	194	i	64	i	26	i	0	i	100	i	0	i	4	i	0	i	0	i
Connecticut C.	464	0		0		192		0		0		0		183		0		0		0		9	
Tennessee State U.	465	464		181	i	187		0		0		187		0		0		0		0		0	
Franklin W. Olin C. of Engineering	466	913		691		174		0		0		170		0		0		0		0		4	
Union C., Schenectady	467	225		43		170		0		0		0		80		0		0		67		23	
Whitman C.	468	0		ne		169		0		0		0		123		0		0		21		25	
Mercyhurst U.	469	289	i	227	i	166		2		2		2		11		0		0		4		145	
U. Wisconsin-La Crosse	470	225		154		164		25		0		0		35		0		0		3		101	
C. New Jersey	471	75		84		163		2		6		114		33		0		0		8		0	
SUNY, Polytechnic Institute	472	132		124		161		0		0		0		161		0		0		0		0	
Florida Polytechnic U.	473	20		103		159		159		0		0		0		0		0		0		0	
Mercer U.	474	161		94		149		61		0		82		6		0		0		0		0	
Trinity C., Hartford	475	119		55		147		0		0		2		106		0		0		39		0	
U. New Haven	475	107		54		147		26		15		106		0		0		0		0		0	
Western Illinois U.	477	164		138		145		5		0		136		0		0		4		0		0	
Hobart and William Smith Colleges	478	107		55		144		9		2		13		62		0		0		51		7	
U. North Carolina, general administration	479	10		219		137		0		0		0		0		0		0		0		137	
Middlebury C.	480	0		0		136		0		0		0		0		0		0		33		103	
Oregon Health and Science U.	481	64		14		132		0		0		0		0		132		0		0		0	
Skidmore C.	482	96		66		129		26		0		14		0		0		14		15		60	
Fisk U.	483	0		177		123		0		0		14		109		0		0		0		0	
U. Ana G. Mendez, Gurabo	484	24		52		115	i	0	i	0	i	0	i	0	i	0	i	0	i	0	i	115	i
Northern Kentucky U.	485	282		137		111		10		17		0		38		0		17		26		3	
CUNY, York C.	486	43		73		107		3		0		0		9		0		5		3		87	
U. Detroit Mercy	487	30		156		94		6		10		0		0		61		0		0		17	
Bates C.	488	66		43		91		0		0		81		1		0		0		9		0	
Ithaca C.	488	70		64		91		0		10		3		16		0		0		16		46	
U. Houston-Clear Lake	490	235		317		88		4		0		10		1		0		0		0		73	
California State U., Channel Islands	491	98		79		85		20		17		30		14		0		0		0		4	
California State U., Stanislaus	492	74		29		83		8		0		0		31		0		5		39		0	
Youngstown State U.	492	124		485		83		5		0		24		0		0		0		9		45	
Illinois Institute of Technology	494	119		156		81		51		0		9		0		0		0		0		21	

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022											
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other			
Black Hills State U.	495	60	76	80	0	0	80	0	0	0	0	0			
New York Institute of Technology	496	107	76	78	0	0	78	0	0	0	0	0			
Arkansas State U., Jonesboro	497	3	43	73	0	0	29	0	0	0	44	0			
Texas A&M U.-San Antonio	497	ne	ne	73	8	0	0	0	0	0	0	65			
U. California, Office of the President	499	0	386	72	0	0	0	0	0	0	0	72			
Occidental C.	500	0	64	71	i	0	i	71	i	0	i	0	i		
Kenyon C.	501	12	ne	69	0	0	0	47	0	0	0	18	4		
California State U., Maritime Academy	502	0	196	68	0	0	0	0	0	0	0	0	68		
U. Puget Sound	503	72	ne	62	1	0	0	61	0	0	0	0	0		
California State U., Monterey Bay	504	111	38	61	8	2	3	2	0	0	0	0	46		
Oklahoma State U., Center for Health Sciences	504	36	6	61	61	0	0	0	0	0	0	0	0		
Virginia Military Institute	506	ne	ne	60	10	0	0	0	0	0	0	0	50		
Teachers C., Columbia U.	507	460	32	57	0	0	57	0	0	0	0	0	0		
Harvey Mudd C.	508	66	31	55	0	0	0	55	0	0	0	0	0		
Robert Morris U.	509	ne	ne	54	i	14	i	2	i	16	i	10	i	0	i
SUNY, C. Brockport	510	6	3	53	0	0	6	34	0	3	8	2			
SUNY, Buffalo State	511	45	27	52	0	0	44	0	0	0	0	8			
U. Hawaii, Hilo	512	35	32	46	0	0	0	46	0	0	0	0			
Utah Valley U.	513	ne	ne	45	0	0	0	45	0	0	0	0			
Tuskegee U.	514	0	0	44	0	0	0	13	0	31	0	0			
U. Northern Iowa	515	100	79	43	0	0	22	17	0	0	4	0			
Central Washington U.	516	54	10	42	0	8	10	14	10	0	0	0			
St. Catherine U.	517	ne	ne	41	2	0	0	21	0	0	0	18			
U. Louisiana, Monroe	517	13	63	41	0	0	0	0	0	0	0	41			
CUNY, system office	519	234	0	40	0	0	0	0	0	0	0	40			
Minnesota State U., Mankato	519	415	136	40	1	0	4	0	0	0	0	35			
Alaska Pacific U.	521	27	2	39	0	0	39	0	0	0	0	0			
U. Hartford	522	197	5	35	0	4	2	11	0	0	10	8			
U. Wisconsin-Eau Claire	523	43	75	34	0	0	0	34	0	0	0	0			
Furman U.	524	22	655	33	0	0	31	0	0	0	0	2			
Alabama State U.	525	0	0	32	0	0	0	0	0	0	0	32			
Murray State U.	526	26	87	26	12	0	3	8	0	0	0	3			
SUNY, Oswego	527	34	37	24	4	5	4	4	0	0	7	0			

TABLE 58
Higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
U. New England	528	5	5	23	1	0	0	19	0	0	0	3
Loma Linda U.	529	279 i	241	19	19	0	0	0	0	0	0	0
Plymouth State U.	530	ne	ne	17	0	0	17	0	0	0	0	0
U. Puerto Rico, Cayey	531	0	0	16	16	0	0	0	0	0	0	0
Augustana U.	532	ne	10	15	0	15	0	0	0	0	0	0
Xavier U. Louisiana	532	52	139	15	0	0	15	0	0	0	0	0
U. Wisconsin-Superior	534	6	4	14	14	0	0	0	0	0	0	0
Clark Atlanta U.	535	193	180	12	0	0	0	0	0	6	0	6
Roseman U. of Health Sciences	536	0	92	11	0	0	0	0	0	0	0	11
U. Wisconsin-Stevens Point	536	51	8	11	0	0	0	2	0	0	0	9
Monmouth U.	538	0	0	10	0	0	10	0	0	0	0	0
CUNY, Advanced Science Research Center	539	147	3	8	0	0	0	0	0	0	1	7
Eastern Washington U.	540	61	3	7	0	0	7	0	0	0	0	0
Missouri State U.	541	111	20	6	0	0	0	6	0	0	0	0
Thomas Jefferson U.	541	23	29	6	0	0	0	0	0	0	0	6
Kentucky State U.	543	0	0	4	0	4	0	0	0	0	0	0
U. of the Pacific	544	23	1	3	0	0	0	2	0	0	0	1
U.S. Air Force Academy	545	8,889	0	2	2	0	0	0	0	0	0	0
West Virginia School of Osteopathic Medicine	545	8	10	2	0	0	2	0	0	0	0	0
Alcorn State U.	547	0	0	1 i	0 i	0 i	0 i	0 i	1 i	0 i	0 i	0 i
U. Hawaii, system office	547	0	0	1	0	0	1	0	0	0	0	0
All other surveyed institutions	-	39,041	6,672	0	0	0	0	0	0	0	0	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

S&E = science and engineering.

^a The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^d Johns Hopkins University includes the Applied Physics Laboratory (APL), with zero imputed for total non-S&E R&D expenditures in FY 2022. Total expenditures by field for Johns Hopkins University are flagged as imputed because APL was unable to distribute a portion of institutionally funded R&D by field.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 59
Federally financed higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
All institutions	-	1,238,035	1,355,932	1,490,752	97,962	42,707	783,518	68,956	32,391	181,943	21,188	262,087
U. Washington, Seattle	1	37,000	46,225	49,224	0	4,873	26,232	3,428	101	10,326	1,409	2,855
Ohio State U.	2	33,733	35,971	42,579	71	147	15,899	914	12	5,346	520	19,670
U. Kansas	3	33,020	30,542	35,791	276	1,092	20,894	984	0	11,867	137	541
U. North Carolina, Chapel Hill	4	20,294	20,850	30,311	976	279	9,132	264	12	11,580	2,255	5,813
U. Texas, Austin	5	21,951	24,298	29,763	669	1,494	14,865	626	0	8,519	150	3,440
Columbia U. in the City of New York	6	18,374	27,114	28,963	379	0	4,458	298	526	22,908	0	394
U. Virginia, Charlottesville	7	17,919	14,801	25,882	3	12	20,573	3,285	294	0	18	1,697
Stanford U.	8	25,472	26,065	24,794	6	602	24,044	12	110	0	0	20
Florida State U.	9	21,067	22,599	24,597	67	1,427	21,672	244	0	1,041	49	97
Washington State U.	10	19,600	17,081	23,985	3,183	1,152	17,663	462	0	28	5	1,492
Virginia Commonwealth U.	11	17,485	19,474	21,941	0	5	20,525	62	0	313	27	1,009
Vanderbilt U. and Vanderbilt U. Medical Center	12	21,966	19,390	21,318	0	0	20,858	83	0	0	20	357
U. Missouri, Columbia	13	19,161	18,506	20,709	46	43	17,425	55	152	63	0	2,925
Arizona State U.	14	15,773	17,666	20,599	3,269	664	9,787	793	2	5,962	122	0
U. Louisiana, Lafayette	15	14,125	17,648	20,572	7,227	0	8,657	4,348	0	0	114	226
Texas A&M U., College Station and Health Science Center	16	16,093	15,927	20,456	591	101	18,012	429	39	0	0	1,284
Texas State U.	17	13,652	15,180	20,181	0	0	5,708	200	13,935	0	0	338
U. California, Los Angeles	18	12,811	14,850	20,027	2,418	626	15,921	139	198	0	589	136
U. Wisconsin-Madison	19	14,656	15,444	19,870	58	541	16,569	1,072	0	0	0	1,630
U. Pennsylvania	20	15,517	16,017	19,812	811	5,851	5,119	1,534	630	0	197	5,670
U. Maryland ^a	21	20,102	19,989	19,789	926	205	4,732	1,308	242	8,521	16	3,839
Washington U., Saint Louis	22	14,855	17,410	19,218	0	0	0	0	16	19,180	0	22
U. South Florida ^b	23	16,872	24,086	19,061	274	381	17,397	97	0	115	33	764
U. Southern California	24	12,592	15,153	18,166	900	608	2,785	47	591	6,550	1,973	4,712
U. Florida	25	21,625	18,722	17,766	2,235	710	11,803	52	48	0	528	2,390
Purdue U., West Lafayette	26	12,964	17,615	17,765	1,748	352	4,096	73	0	0	0	11,496
Pennsylvania State U., University Park and Hershey Medical Center	27	6,685	16,343	16,991	3,002	1,426	10,486	1,130	428	505	14	0
Georgia State U.	28	15,364	18,398	16,205	378	1,793	10,150	0	700	2,883	301	0
U. Colorado Boulder	29	15,393	15,435	15,952	1,535	92	13,834	183	0	57	0	251
New York U.	30	15,252	12,475	15,767	214	0	10,045	410	192	2,682	96	2,128
U. California, Irvine	31	15,767	17,136	14,611	154	0	14,402	4	28	0	23	0
U. Oregon	32	15,096	13,625	14,397	96	637	10,807	251	72	0	0	2,534

TABLE 59
Federally financed higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
U. North Carolina, Greensboro	33	9,868	12,066	14,360	263	0	11,509	26	0	1,009	2	1,551
Georgia Institute of Technology	34	9,624	14,134	13,768	352	698	9,754	726	0	0	684	1,554
U. Illinois, Urbana-Champaign	35	11,348	12,238	13,675	748	62	3,316	182	51	1,974	164	7,178
U. Oklahoma, Norman and Health Science Center	36	4,088	12,251	13,473	788	101	11,371	5	80	202	55	871
U. California, San Diego	37	753	27,633	12,527	2	0	2,470	1,244	0	0	0	8,811
Michigan State U.	38	11,863	10,275	12,202	1,156	1,484	7,512	905	0	433	10	702
U. West Florida	39	9,681	9,624	11,381	10,397	0	949	0	0	0	0	35
U. Denver	40	10,202	9,902	10,496	122	0	2,909	126	38	7,301	0	0
Clemson U.	41	7,765	6,152	10,391	34	31	2,355	43	0	0	0	7,928
Montana State U., Bozeman	42	8,799	8,284	9,710	60	0	1,679	1	0	0	0	7,970
Virginia Polytechnic Institute and State U.	43	1,840	2,442	9,161	110	218	892	118	0	0	15	7,808
U. Michigan, Ann Arbor	44	7,501	8,958	9,046	226	0	5,505	498	6	2,353	247	211
U. California, Berkeley	45	4,886	6,331	9,024	985	729	5,946	179	1,151	0	2	32
U. Minnesota, Twin Cities	46	10,678	8,249	9,022	498	161	6,305	921	356	436	41	304
U. Utah	47	7,394	10,897	8,505	563	1,376	68	1,201	7	0	3,825	1,465
U. Massachusetts, Boston	48	12,568	8,735	8,308	0	0	7,934	72	0	0	302	0
U. Alabama, Tuscaloosa	49	5,819	7,491	8,283	725	1	4,568	30	0	2,935	0	24
Rutgers, State U. New Jersey, New Brunswick	50	7,257	6,982	8,213	1,506	410	3,331	429	0	1,681	12	844
Harvard U.	51	7,290	7,279	8,186	0	37	6,601	1,328	220	0	0	0
U. Illinois, Chicago	52	7,040	7,809	8,085	411	0	2,592	1,641	0	1,070	15	2,356
Iowa State U.	53	4,759	8,657	8,013	3,494	245	634	725	0	0	428	2,487
U. Central Florida	54	6,715	6,711	7,494	313	23	4,475	66	0	856	0	1,761
U. Chicago	55	4,713	4,177	7,350	426	0	1,068	399	0	3,377	0	2,080
Indiana U., Bloomington	56	4,318	5,735	7,113	361	161	3,033	144	0	0	0	3,414
Boston U.	57	5,785	5,758	6,951	110	0	4,445	85	34	2,277	0	0
U. Notre Dame	58	4,287	4,986	6,852	161	0	0	582	40	0	0	6,069
U. Iowa	59	4,022	5,148	6,812	497	398	2,385	2,927	30	567	0	8
Colorado State U., Fort Collins	60	10,237	7,834	6,723	200	186	3,561	2,004	502	93	177	0
California State U., East Bay	61	1,330	1,858	6,615	0	18	6,597	0	0	0	0	0
Drexel U.	62	4,611	5,319	6,305	0	0	2,023	265	0	0	68	3,949
George Mason U.	63	4,738	3,802	5,963	2,011	374	3,042	253	0	0	0	283
Oregon State U.	64	5,848	5,648	5,865	0	0	39	0	0	0	0	5,826
U. Georgia	65	4,004	3,604	5,838	184	132	2,422	115	62	1,808	0	1,115

TABLE 59
Federally financed higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
U. South Carolina, Columbia	66	6,857	5,702	5,779	470	0	1,521	377	0	643	0	2,768
Northeastern U.	67	4,521	4,780	5,771	867	232	2,578	194	843	0	470	587
William & Mary	68	4,976	5,395	5,751	256	0	4,786	258	422	0	0	29
Portland State U.	69	6,563	5,745	5,746	0	146	1,273	144	0	1,058	0	3,125
Boston C.	70	5,825	5,519	5,720	54	0	2,094	0	0	3,572	0	0
U. Houston	71	2,792	4,255	5,608	342	112	2,836	53	42	2,223	0	0
Florida A&M U.	72	3,114	5,092	5,534	390	0	1,892	0	364	0	0	2,888
Syracuse U.	73	4,323	4,846	5,487	1,487	257	287	0	2,739	197	0	520
U. Massachusetts, Amherst	74	3,624	4,203	5,446	138	91	2,393	100	18	0	16	2,690
U. California, Davis	75	3,897	4,488	5,429	99	162	3,569	298	0	0	1,301	0
North Carolina State U.	76	4,146	4,934	5,423	0	0	2,280	3,143	0	0	0	0
U. Delaware	77	4,460	5,060	5,401	414	0	3,953	3	0	0	0	1,031
Delaware State U.	78	3,478	3,999	5,342	195	0	4,733	0	0	414	0	0
Temple U.	79	8,036	7,215	5,177	1,857	14	1,852	2	264	609	37	542
Western Michigan U. and Homer Stryker M.D. School of Medicine	80	7,813	6,091	5,159	0	0	5,159	0	0	0	0	0
U. Montana, Missoula	81	3,322	3,846	4,961	0	81	1,517	4	0	3,359	0	0
Rochester Institute of Technology	82	4,013	3,484	4,953	0	0	4,220	200	0	0	454	79
Cornell U.	83	3,675	4,358	4,677	176	1,310	250	122	41	0	427	2,351
Naval War C.	84	5,220	4,748	4,600	0	0	0	0	0	0	0	4,600
Florida International U.	85	5,608	4,839	4,517	2,064	0	2,326	109	0	0	9	9
U. Pittsburgh, Pittsburgh	86	6,558	5,243	4,480	226	0	2,088	0	4	883	0	1,279
Winston-Salem State U.	87	1,264	651	4,461	208	107	569	41	0	0	0	3,536
U. North Florida	88	3,401	5,350	4,449	1,349	0	3,061	0	0	0	0	39
American U.	89	2,632	3,012	4,407	403	1,138	502	0	1,219	0	0	1,145
Wayne State U.	90	4,601	6,268	4,360	0	0	605	106	3	3,030	18	598
Naval Postgraduate School	91	3,161	5,489	4,316	1,008	63	732	0	0	0	0	2,513
North Carolina A&T State U.	92	3,168	3,920	4,297	931	0	851	0	0	132	0	2,383
California Institute of Technology	93	7,133	5,387	4,294	0	0	0	4,135	0	0	0	159
New Jersey Institute of Technology	94	3,415	5,197	4,137	212	0	2,775	84	0	0	0	1,066
Rhode Island C.	95	3,026	3,424	4,074	465	0	3,140	0	0	459	0	10
Morgan State U.	96	85	1,112	3,931	342	0	2,731	80	0	408	0	370
U. Baltimore	97	10,724	10,844	3,761	0	0	0	0	120	0	0	3,641
U. Kentucky	98	2,816	2,137	3,700	752	79	445	0	0	1,106	0	1,318

TABLE 59
Federally financed higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
SUNY, U. Buffalo	99	4,326	3,033	3,672	116	192	3,032	260	0	68	0	4
U. Memphis	100	2,136	4,040	3,657	11	0	1,804	0	0	137	0	1,705
Johns Hopkins U. ^c	101	2,673	2,121	3,641	0	0	0	3,594	0	0	0	47
U. Nebraska, Lincoln	102	2,505	2,974	3,618	184	0	2,035	805	0	0	40	554
Northwestern U.	103	3,696	3,100	3,608	982	889	1,470	36	231	0	0	0
U. Tennessee, Knoxville ^d	104	1,661	2,129	3,607	528	1,017	1,275	21	12	7	1	746
San Diego State U.	105	2,068	3,086	3,567	339	145	2,349	48	0	682	0	4
Northwest Indian C.	106	2,540	3,021	3,507	0	65	3,442	0	0	0	0	0
Mississippi State U.	107	1,523	2,221	3,427	20	0	3,172	10	0	0	0	225
U. Connecticut	108	4,085	2,604	3,401	181	77	1,073	26	0	1,534	510	0
Kansas State U.	109	2,936	2,849	3,312	15	5	1,343	127	0	0	0	1,822
U. Texas, San Antonio	110	1,822	1,775	3,309	41	102	1,377	34	0	795	47	913
West Virginia U.	111	2,202	4,085	3,273	134	231	1,633	35	0	22	10	1,208
Salisbury U.	112	2,209	2,855	3,265	334	0	1,980	0	0	825	0	126
Yale U.	113	2,595	6,126	3,226	1,338	0	1,172	704	0	0	0	12
Auburn U., Auburn	114	624	771	3,220	0	0	600	173	0	0	0	2,447
Massachusetts Institute of Technology	115	4,557	3,434	3,211	933	141	606	422	0	136	31	942
U. Mississippi	116	1,438	2,831	3,168	205	34	508	6	932	0	0	1,483
U. Arkansas, Fayetteville	117	2,258	2,860	3,164	0	0	2,348	1	530	0	0	285
U. Texas, Arlington	118	2,793	2,812	3,083	49	0	687	20	0	625	0	1,702
U. Rhode Island	119	1,382	1,931	3,072	811	346	273	463	0	581	0	598
U. Cincinnati	120	2,840	2,686	3,071	425	0	1,766	20	0	0	0	860
Rice U.	121	2,093	2,534	3,038	66	0	2,938	0	0	0	0	34
U. Arizona	122	3,186	2,630	3,005	384	25	1,874	12	106	0	16	588
U. Toledo	123	358	190	2,929	104	0	2,534	0	0	254	0	37
Southern Methodist U.	124	2,193	3,083	2,882	0	0	2,759	123	0	0	0	0
Illinois State U.	125	5,080	4,593	2,876	81	0	2,792	3	0	0	0	0
California State U., San Bernardino	126	2,312	2,604	2,836	0	0	2,836	0	0	0	0	0
East Carolina U.	127	3,585	3,180	2,835	106	0	2,206	427	0	59	0	37
Oklahoma State U., Stillwater	128	1,454	2,185	2,801	285	38	717	61	126	0	9	1,565
Louisiana State U., Baton Rouge	129	920	5,193	2,794	0	149	405	101	0	644	56	1,439
U. New Mexico	130	2,745	2,625	2,787	563	0	1,420	115	157	0	0	532
U. Louisville	131	4,625	5,251	2,735	0	227	438	0	154	1,914	0	2

TABLE 59
Federally financed higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
Lehigh U.	132	1,242	1,568	2,726	0	0	2,502	86	0	0	0	138
U. New Hampshire	133	5,819	3,744	2,681	13	40	2,255	30	0	295	0	48
U. Alabama, Birmingham	134	2,904	2,081	2,556	25	0	650	0	0	328	0	1,553
U. North Dakota	135	2,132	1,721	2,549	0	161	1,144	0	0	12	0	1,232
U. New Orleans	136	127	108	2,506	58	0	0	200	0	0	0	2,248
George Washington U.	137	3,507	2,874	2,495	640	0	753	301	52	0	0	749
Bowling Green State U.	138	1,842	2,074	2,481	0	0	1,981	7	0	0	0	493
Florida Gulf Coast U.	139	2,665	2,057	2,474	5	0	1,601	0	14	0	0	854
U. Colorado Denver ^e	140	na	2,808	2,423	377	19	1,630	77	0	0	97	223
Old Dominion U.	141	3,426	2,356	2,380	43	0	2,249	88	0	0	0	0
U. Puerto Rico, Mayaguez	142	0	390	2,300	1,029	290	451	0	0	0	101	429
CUNY, Hunter C.	143	2,387	1,891	2,202	0	0	1,728	4	0	157	0	313
U. Rochester	144	1,087	1,221	2,201	163	0	1,876	0	0	0	5	157
U. Maine	145	1,621	1,999	2,185	0	22	267	216	0	15	0	1,665
Indiana U.-Purdue U., Indianapolis	146	1,573	1,749	2,184	111	0	506	128	0	727	0	712
Brown U.	147	2,496	3,272	2,168	0	0	1,370	291	3	0	0	504
Texas Tech U.	148	1,790	1,809	2,122	953	320	549	95	0	0	58	147
U. Southern Mississippi	149	1,079	1,323	2,113	17	0	66	94	0	0	850	1,086
U. Texas, El Paso	150	1,631	1,545	2,096	0	0	1,190	25	0	879	1	1
U. Maryland, Baltimore County	151	1,213	1,565	2,032	0	0	1,811	0	0	0	0	221
New Mexico Institute of Mining and Technology	152	324	258	2,024	173	0	0	3	0	0	0	1,848
Utah State U.	153	723	1,234	2,009	0	0	1,007	0	0	0	0	1,002
U. California, Merced	154	495	1,641	2,003	183	11	459	0	0	0	4	1,346
U. Massachusetts, Lowell	155	1,267	1,209	1,973	34	0	983	330	0	0	0	626
Kent State U.	156	1,598	1,559	1,967	0	0	1,275	0	0	0	0	692
SUNY, Stony Brook U.	157	952	1,420	1,942	0	182	355	400	0	921	0	84
Winthrop U.	158	866	816	1,914	0	0	1,894	0	0	20	0	0
U. North Carolina, Charlotte	159	1,283	1,341	1,906	166	0	1,026	231	0	146	10	327
U. Alaska, Fairbanks	160	1,842	1,982	1,813	105	14	626	50	0	0	0	1,018
Brigham Young U., Provo	161	1,843	1,825	1,792	313	0	358	1,028	0	0	0	93
Sam Houston State U.	162	2,320	3,160	1,720	0	0	1,635	26	0	0	0	59
Rensselaer Polytechnic Institute	163	4,216	2,629	1,655	232	0	0	0	0	0	14	1,409
U. Nevada, Las Vegas	164	1,065	1,414	1,623	5	64	1,368	0	0	0	0	186

TABLE 59
Federally financed higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
CUNY, John Jay C. of Criminal Justice	165	2,825	2,769	1,615	0	0	0	20	1,575	0	0	20
Wichita State U.	166	3,498	4,940	1,610	4	0	29	30	0	0	0	1,547
Texas A&M U.-Corpus Christi	167	896	1,185	1,607	167	0	1,080	26	0	0	0	334
Duke U.	168	1,723	1,586	1,587	595	0	0	52	338	0	74	528
U. Idaho	169	1,632	1,715	1,579	0	0	1,507	0	0	0	0	72
U. California, Santa Barbara	170	2,078	2,965	1,547	139	110	961	337	0	0	0	0
Northern Arizona U.	171	895	854	1,528	0	93	1,435	0	0	0	0	0
Johnson C. Smith U.	172	1,143	1,644	1,498	86	65	431	61	0	0	0	855
San Jose State U.	173	2,041	1,021	1,496	1,358	0	0	29	0	11	0	98
U. California, Riverside	174	2,268	1,702	1,481	0	0	1,458	22	0	0	0	1
SUNY, Binghamton U.	175	537	1,213	1,475	257	0	886	0	0	0	0	332
Fordham U.	176	997	963	1,472	0	0	628	2	30	781	0	31
Rutgers, State U. New Jersey, Newark	177	1,471	1,390	1,458	1,415	0	0	37	0	0	0	6
Boise State U.	178	1,793	1,304	1,456	322	0	1,085	22	0	0	0	27
Worcester Polytechnic Institute	179	754	964	1,452	906	0	0	0	0	0	0	546
Tufts U.	180	2,847	1,587	1,414	0	0	773	213	0	0	64	364
Texas A&M U.-Kingsville	181	1,357	1,443	1,391	0	0	1,391	0	0	0	0	0
Virginia State U.	182	1,012	855	1,364	0	0	1,019	0	0	0	0	345
U. Dayton	183	886	966	1,308	0	0	1,009	0	0	0	52	247
U. of the District of Columbia	184	644	1,050	1,304	0	0	0	0	0	0	0	1,304
Montclair State U.	185	1,016	1,330	1,272	0	0	656	257	40	1	0	318
U. North Texas, Denton	186	1,634	1,892	1,257	456	0	731	30	0	0	25	15
CUNY, Graduate Center	187	355	245	1,246	0	0	290	425	0	0	0	531
U. South Alabama	188	466	834	1,176	0	0	544	0	0	0	0	632
Embry-Riddle Aeronautical U.	189	151	601	1,164	84	378	598	0	0	0	0	104
North Carolina Central U.	190	904	845	1,148	0	0	1,108	0	0	40	0	0
Miami U.	191	1,644	558	1,130	0	24	641	143	0	0	60	262
North Dakota State U.	192	505	5,177	1,089	0	18	235	0	0	0	0	836
Pace U.	193	877	1,014	1,062	0	0	1,062	0	0	0	0	0
U. Hawaii, Manoa	194	603	819	1,051	0	61	17	0	0	530	0	443
Emory U.	195	1,149	931	1,047	0	108	535	245	0	0	32	127
Loyola Marymount U.	196	108	831	1,038	0	0	1,019	0	0	0	0	19
U. North Carolina, Wilmington	197	799	738	1,031	388	0	407	113	0	0	101	22

TABLE 59
Federally financed higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
SUNY, U. Albany	198	877	947	1,021	209	0	598	51	0	119	0	44
California State U., Dominguez Hills	199	73	473	1,013	0	0	1,013	0	0	0	0	0
California State U., Bakersfield	200	242	660	990	0	0	990	0	0	0	0	0
La Sierra U.	201	614	812	972	0	0	972	0	0	0	0	0
Loyola U., Chicago	202	741	969	967	0	0	432	0	5	520	0	10
Claremont Graduate U.	203	6	526	961	0	0	961	0	0	0	0	0
St. Edward's U.	204	3,132	3,620	930	0	0	930	0	0	0	0	0
Western U. of Health Sciences	205	431	600	929	0	0	929	0	0	0	0	0
Florida Atlantic U.	206	908	1,031	924	0	0	218	0	0	93	0	613
U. Massachusetts, Dartmouth	207	440	597	923	0	196	727	0	0	0	0	0
California Polytechnic State U., San Luis Obispo	208	413	378	912	22	1	793	96	0	0	0	0
Seton Hall U.	209	2,186	1,134	907	0	0	907	0	0	0	0	0
Princeton U.	210	812	570	885	0	148	0	525	0	0	52	160
Villanova U.	210	445	721	885	0	0	0	81	43	0	0	761
Cleveland State U.	212	522	564	881	19	0	713	0	110	37	0	2
Wesleyan U.	213	746	580	877	0	0	877	0	0	0	0	0
U. Maryland Center for Environmental Science	214	876	830	869	0	0	869	0	0	0	0	0
U. Washington, Bothell	215	1,555	1,053	864	45	0	819	0	0	0	0	0
California State U., Northridge	216	783	626	854	76	0	581	61	77	0	0	59
U. Miami	217	410	369	846	0	0	812	34	0	0	0	0
Dartmouth C. and Dartmouth Hitchcock Medical Center	218	1,179	886	824	65	0	9	323	0	0	163	264
U. Nebraska, central administration	218	858	326	824	0	0	0	0	0	0	0	824
Case Western Reserve U.	220	838	780	821	97	0	724	0	0	0	0	0
Hawaii Pacific U.	221	0	0	819	0	0	266	3	0	521	0	29
Erikson Institute	222	1,006	772	815	0	0	815	0	0	0	0	0
California State U., San Marcos	223	1,237	905	793	9	0	349	14	0	0	0	421
Stevens Institute of Technology	224	1,320	1,373	789	383	0	314	92	0	0	0	0
Jackson State U.	225	102	1,099	784	0	0	744	40	0	0	0	0
Texas Southern U.	226	659	610	782	0	0	0	0	0	0	0	782
Pacific U.	227	877	544	769	0	0	670	99	0	0	0	0
California State Polytechnic U., Pomona	228	214	129	764	0	0	0	0	0	0	0	764
U. Guam	229	358	454	763	0	0	705	0	0	0	0	58
California State U., Sacramento	230	801	1,263	762	0	0	636	49	0	6	0	71

TABLE 59
Federally financed higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022											
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other			
South Carolina State U.	231	673	697	757	139	0	618	0	0	0	0	0	0		
Duquesne U.	232	402	585	747	349	0	10	62	0	0	0	0	326		
U. Colorado Colorado Springs	233	398	261	739	0	0	160	0	0	0	0	0	579		
U. Nevada, Reno	234	966	1,006	727	626	21	4	0	36	0	40	0	0		
U. Oklahoma, Tulsa	235	394	586	706	0	0	426	0	0	280	0	0	0		
Seattle U.	236	816	840	691	0	0	691	0	0	0	0	0	0		
Western Washington U.	237	128	327	687	0	4	683	0	0	0	0	0	0		
Drake U.	238	ne	645	686	0	0	616	0	42	0	0	0	28		
Colorado School of Mines	239	1,685	1,874	682	22	0	31	0	0	0	0	0	629		
Pennsylvania State U., Harrisburg	240	14	19	677	0	0	668	0	0	9	0	0	0		
DePaul U.	241	132	52	673	20	0	653	0	0	0	0	0	0		
Colorado C.	242	105	3,528	669	0	0	181	0	0	0	488	0	0		
Ball State U.	243	107	370	667	22	0	305	0	0	82	0	258	0		
U. California, Santa Cruz	244	655	376	648	0	0	302	260	0	0	86	0	0		
Chapman U.	245	537	693	644	0	47	90	0	98	0	0	409	0		
Howard U.	246	471	536	635	0	150	35	0	0	450	0	0	0		
U. Texas, Dallas	247	758	471	633	137	0	362	134	0	0	0	0	0		
U. Arkansas, Little Rock	248	629	501	632	0	0	506	0	40	0	0	86	0		
Citadel Military C. South Carolina	249	266	456	629	10	0	619	0	0	0	0	0	0		
Southern Illinois U., Edwardsville	250	903	1,044	621	0	0	0	440	30	0	143	8	0		
U. Alabama, Huntsville	251	689	530	617	332	1	196	49	0	0	8	31	0		
Morehouse C.	252	139	431	608	199	0	0	0	0	0	193	216	0		
California State U., Long Beach	253	168	329	607	0	168	133	306	0	0	0	0	0		
Fayetteville State U.	253	209	1,009	607	0	0	607	0	0	0	0	0	0		
Texas Woman's U.	255	818	505	597	0	0	597	0	0	0	0	0	0		
Georgetown U.	256	544	1,621	588	168	73	0	61	84	0	0	202	0		
Texas Tech U., Health Sciences Center, El Paso	256	28	265	588	0	0	580	0	0	0	0	8	0		
California State U., Chico	258	577	552	587	0	0	587	0	0	0	0	0	0		
U. Texas Rio Grande Valley	259	503	663	584	20	0	486	0	0	11	0	67	0		
William Paterson U.	260	824	653	578	1	0	577	0	0	0	0	0	0		
CUNY, City C.	261	68	118	568	0	0	28	0	0	0	2	538	0		
U. Missouri, Kansas City	262	399	419	563	26	0	246	143	0	0	0	148	0		
Northeastern Illinois U.	263	640	543	561	0	0	561	0	0	0	0	0	0		

TABLE 59
Federally financed higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
U. Houston-Downtown	264	1,118	665	558	0	0	558	0	0	0	0	0
Lamar U.	265	989	716	555	148	0	189	0	0	0	0	218
U. Wisconsin-Milwaukee	265	641	453	555	0	0	328	10	0	0	3	214
Tulane U.	267	74	385	554	0	0	0	0	0	0	0	554
Purdue U., Northwest	268	27	115	550	0	0	14	0	0	0	90	446
U. North Carolina, Asheville	269	557	547	547	45	0	401	54	0	0	0	47
Saint Louis U.	270	256	783	545	0	6	115	21	0	354	0	49
Tennessee Technological U.	271	133	364	544	0	0	274	0	0	0	0	270
Florida Institute of Technology	272	551	663	541	30	0	0	0	0	0	0	511
Fort Lewis C.	273	0	16	537	0	0	163	0	0	0	0	374
Kennesaw State U.	273	287	542	537	21	0	248	258	0	0	10	0
Lawrence Technological U.	275	109	32	521	0	0	1	0	0	0	0	520
Pepperdine U.	276	432	425	519	0	0	396	7	116	0	0	0
Eastern Michigan U.	277	78	208	518	42	5	393	0	0	78	0	0
Elizabeth City State U.	278	463	337	517	0	2	470	45	0	0	0	0
National Defense U.	279	2,000	1,200	500	0	0	500	0	0	0	0	0
U. Colorado Anschutz Medical Campus ^e	280	na	668	497	0	0	0	0	0	399	0	98
Marshall U.	281	8	332	494	133	0	338	0	0	0	0	23
Clarkson U.	282	219	374	492	58	0	300	134	0	0	0	0
East Stroudsburg U. Pennsylvania	283	ne	ne	470	0	0	470	0	0	0	0	0
California State U., Los Angeles	284	292	410	459	0	0	414	0	0	0	0	45
U. Alaska, Anchorage	285	162	227	440	21	0	382	0	0	0	0	37
Marquette U.	286	206	448	433	0	0	0	0	0	0	0	433
Dillard U.	287	36	416	430	0	0	330	24	57	0	0	19
Pennsylvania State U., Behrend	288	0	272	412	2	13	387	2	0	0	8	0
Santa Clara U.	289	35	174	411	92	0	214	0	0	0	0	105
San Francisco State U.	290	320	323	408	408	0	0	0	0	0	0	0
U. San Diego	291	350	557	407	0	0	348	54	5	0	0	0
Saginaw Valley State U.	292	0	0	401	13	5	324	21	35	0	3	0
Saint Joseph's U.	293	272	506	398	0	0	398	0	0	0	0	0
U. Northern Colorado	294	620	580	392	0	0	392	0	0	0	0	0
CUNY, New York City C. of Technology	295	226	313	386	0	0	0	0	0	0	0	386
CUNY, Lehman C.	296	583	776	376	0	0	78	17	0	0	0	281

TABLE 59
Federally financed higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
Roger Williams U.	297	201	230	369	0	0	235	0	134	0	0	0
U.S. Military Academy	298	338	51	364	0	0	0	331	20	0	0	13
Alabama A&M U.	299	211 i	280 i	347 i	28 i	9 i	189 i	12 i	0 i	35 i	2 i	72 i
Baylor U.	300	167	146	344	0	0	191	132	0	21	0	0
New Mexico State U.	301	915	464	341	27	0	221	0	0	0	0	93
U. Vermont	302	305	436	336	0	0	336	0	0	0	0	0
Brandeis U.	303	625	746	335	189	0	27	16	0	0	0	103
U. Illinois, Springfield	304	5	15	329	0	0	308	21	0	0	0	0
U. Tulsa	305	142	352	328	0	0	205	6	10	0	12	95
Kean U.	306	253	120	327	55	0	206	61	0	2	0	3
Grambling State U.	307	428	295	326 i	0 i	0 i	200 i	65 i	0 i	0 i	0 i	61 i
Norfolk State U.	308	27	0	316	0	0	103	0	0	0	0	213
Indiana State U.	309	314	290	315	0	0	315	0	0	0	0	0
St. Cloud State U.	310	318	304	311	0	0	311	0	0	0	0	0
Hofstra U.	311	391	306	298	0	0	298	0	0	0	0	0
U. Missouri, Saint Louis	312	306	513	295	29	0	221	0	0	45	0	0
Bentley U.	313	ne	ne	286	0	0	286	0	0	0	0	0
Texas A&M U.-Commerce	314	222	198	282	21	0	108	0	0	0	0	153
Gallaudet U.	315	942	10	273	0	225	0	0	0	0	0	48
West Texas A&M U.	315	289	280	273	0	0	42	0	0	0	0	231
Michigan Technological U.	317	260	382	266	0	0	266	0	0	0	0	0
Western Carolina U.	318	92	72	265	0	0	0	0	0	265	0	0
U. of Mary Washington	319	453	239	264	148	0	0	88	0	0	0	28
Middle Tennessee State U.	320	1,166	52	259	3	0	0	130	0	0	0	126
Georgia Southern U.	321	31	75	249	0	0	249	0	0	0	0	0
U. Central Arkansas	321	47	505	249	0	0	249	0	0	0	0	0
Prairie View A&M U.	323	115	251	240	0	0	64	0	0	0	0	176
Bowie State U.	324	599	418	239	0	0	0	0	0	0	0	239
Tougaloo C.	325	0	0 i	238 i	15 i	0 i	134 i	12 i	0 i	19 i	0 i	58 i
Pratt Institute	326	ne	294	228	0	0	0	0	0	0	0	228
Ohio U.	327	77	116	227	0	1	218	0	0	0	6	2
Hampton U.	328	436	336	225	0	0	8	0	0	0	0	217
Creighton U.	329	139 i	159 i	223 i	10 i	8 i	97 i	15 i	8 i	50 i	3 i	32 i

TABLE 59
Federally financed higher education R&D expenditures in non-science and engineering fields, ranked by all FY 2022 non-S&E fields: FYs 2020–22 and by subfield for FY 2022

(Dollars in thousands)

Institution	Rank	2020	2021	2022								
				All non-S&E fields	Business management and business administration	Communication and communications technologies	Education	Humanities	Law	Social work	Visual and performing arts	Other
U. of St. Thomas (MN)	396	0	0	55	0	0	55	0	0	0	0	0
Coastal Carolina U.	397	0	4	54	0	0	54	0	0	0	0	0
Southern U. and A&M C., Baton Rouge	398	429	375	50	5	0	45	0	0	0	0	0
SUNY, Geneseo	398	0	86	50	0	0	0	0	0	0	0	50
U. North Carolina, general administration	398	10	66	50	0	0	0	0	0	0	0	50
Albion C.	401	0	0	46	4	1	31	4	1	0	5	0
Stephen F. Austin State U.	401	373	215	46	0	0	27	0	0	19	0	0
SUNY, Buffalo State	403	1	0	44	0	0	44	0	0	0	0	0
Central Connecticut State U.	404	383	155	41	0	0	18	23	0	0	0	0
CUNY, C. Staten Island	404	33	0	41	0	0	0	41	0	0	0	0
St. John's U., New York	406	0	19	40	0	0	40	0	0	0	0	0
Alaska Pacific U.	407	27	2	39	0	0	39	0	0	0	0	0
Oklahoma State U., Center for Health Sciences	407	16	0	39	39	0	0	0	0	0	0	0
U. Wisconsin-Platteville	407	44	32	39	1	0	37	1	0	0	0	0
U. Puget Sound	410	4	ne	37	0	0	0	37	0	0	0	0
U. Wisconsin-Green Bay	410	31	31	37	1	1	20	1	0	4	0	10
Towson U.	412	11	15	35	0	0	3	0	0	0	0	32
CUNY, system office	413	15	0	34	0	0	0	0	0	0	0	34
Grinnell C.	414	27	35	33	0	0	33	0	0	0	0	0
Middlebury C.	414	0	0	33	0	0	0	0	0	0	33	0
Purdue U., Fort Wayne	414	28	22	33	0	0	0	16	0	0	0	17
Framingham State U.	417	0	0	32	1	0	29	2	0	0	0	0
Tuskegee U.	418	0	0	31	0	0	0	0	0	31	0	0
Babson C.	419	14	0	29	29	0	0	0	0	0	0	0
SUNY, C. Brockport	420	0	0	28	0	0	0	28	0	0	0	0
U. Minnesota, Duluth	420	61	43	28	0	0	0	0	0	0	0	28
Christopher Newport U.	422	18	10	27	0	0	0	7	0	0	0	20
Illinois Institute of Technology	423	92	113	25	0	0	6	0	0	0	0	19
U. Detroit Mercy	424	25	102	23	0	0	0	0	23	0	0	0
CUNY, York C.	425	33	33	21	0	0	0	0	0	0	0	21
SUNY, Polytechnic Institute	425	5	0	21	0	0	0	21	0	0	0	0
U. Akron	425	65	71	21	1	0	18	0	0	0	2	0
Missouri U. of Science and Technology	428	7	0	19	0	18	0	1	0	0	0	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

S&E = science and engineering.

^a The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^b The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^c Johns Hopkins University includes the Applied Physics Laboratory, with zero in federally financed non-S&E R&D expenditures in FY 2022.

^d The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 60

Federally financed higher education R&D expenditures, financed by the Department of Defense, ranked by DOD R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOD R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
All institutions	-	7,978,816	1,008,407	265,345	1,398,169	172,278	688,996	58,674	82,686	111,293	4,116,469	76,499
Johns Hopkins U. ^a	1	1,476,638	201,905	15,739	74,722	108,423	194,633	129	3,965	56,531	820,591	0
Georgia Institute of Technology	2	694,431	103,556	1,057	188	24	2,638	837	1,566	0	576,016	8,549
Pennsylvania State U., University Park and Hershey Medical Center	3	274,204	43,196	4,294	3,666	9,022	15,704	307	1,369	0	192,902	3,744
U. Texas, Austin	4	211,424	40,420	131	4,438	1,145	35,889	277	158	17	128,422	527
U. Dayton	5	192,587	9,845	312	224	0	466	0	0	0	181,381	359
Uniformed Services U. of the Health Sciences	6	182,363	0	0	168,254	0	0	14,109	0	0	0	0
Massachusetts Institute of Technology	7	135,575	36,942	762	5,195	879	14,994	117	61	612	75,466	547
Utah State U.	8	131,862	63	0	1,923	0	488	0	34	0	129,101	253
U. Maryland ^b	9	130,164	18,131	455	23,696	819	17,291	444	11,909	20,505	36,842	72
U. Southern California	10	122,075	80,573	0	8,095	112	3,992	340	813	0	27,750	400
Carnegie Mellon U.	11	111,193	67,332	0	223	1,632	742	1,313	986	55	38,859	51
U. Washington, Seattle	12	108,842	5,585	31,288	31,493	1,024	4,582	813	292	0	33,072	693
U. California, San Diego	13	104,632	460	44,711	19,683	78	8,260	1,916	931	15	28,309	269
Colorado State U., Fort Collins	14	100,464	1,031	2,818	87,083	385	570	144	3,358	282	4,793	0
U. Michigan, Ann Arbor	15	82,277	432	161	17,107	521	4,319	189	3,238	0	56,310	0
U. Alabama, Huntsville	16	80,980	49,554	405	47	6	581	68	837	0	29,464	18
Stanford U.	17	75,608	7,877	1,790	18,720	986	17,463	563	1,059	0	26,766	384
Purdue U., West Lafayette	18	70,926	5,628	0	2,134	192	4,005	58	0	14	56,207	2,688
Wichita State U.	19	68,495	0	0	0	0	0	0	0	0	67,276	1,219
U. Illinois, Urbana-Champaign	20	62,791	14,836	191	4,072	82	6,924	271	318	123	35,122	852
Duke U.	21	62,529	1,032	2,524	34,764	718	888	44	281	0	22,263	15
George Mason U.	22	59,544	11,559	1,637	2,780	1,461	1,467	259	386	0	37,922	2,073
U. Pittsburgh, Pittsburgh	23	58,347	2,560	26	43,415	583	4,197	0	109	246	7,113	98
Harvard U.	24	57,929	3,375	365	15,766	213	20,862	197	4,445	0	12,706	0
U. Pennsylvania	25	57,657	11,346	132	13,631	593	5,608	2,115	4,326	0	18,686	1,220
Virginia Polytechnic Institute and State U.	26	56,414	2,393	0	2,298	3,677	1,781	0	0	58	38,927	7,280
U. California, Los Angeles	27	55,336	3,391	1,542	19,236	3,096	2,843	66	1,170	477	23,163	352
Columbia U. in the City of New York	28	53,738	12,887	1,213	17,683	30	3,958	213	410	0	17,326	18
Texas A&M U., College Station and Health Science Center	29	52,870	3,660	785	11,471	220	356	0	1,552	5	34,287	534
Northwestern U.	30	50,435	2,117	0	27,058	0	8,540	156	89	44	11,256	1,175
Cornell U.	31	49,918	6,804	81	11,410	0	13,722	184	367	0	17,350	0
U. California, San Francisco	32	49,573	0	0	44,582	0	4,991	0	0	0	0	0

TABLE 60

Federally financed higher education R&D expenditures, financed by the Department of Defense, ranked by DOD R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOD R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. California, Berkeley	33	48,175	0	0	3,842	645	11,592	699	298	2,008	29,084	7
SUNY, U. Buffalo	34	47,799	791	0	5,222	30	1,325	0	0	0	40,431	0
U. Florida	35	47,390	2,391	66	18,003	181	333	103	1,743	0	24,570	0
Ohio State U.	36	45,916	945	561	16,253	175	2,781	164	183	568	23,516	770
Woods Hole Oceanographic Institution	37	44,908	0	12,771	0	0	0	0	0	0	32,137	0
U. Alaska, Fairbanks	38	44,132	0	36,261	441	0	2,035	0	0	1,923	3,409	63
Arizona State U.	39	43,855	8,631	235	2,115	343	2,045	938	1,314	6,113	21,288	833
U. California, Santa Barbara	40	42,985	2,942	750	247	330	9,515	415	140	0	28,396	250
Naval Postgraduate School	41	42,875	4,702	3,825	704	2,056	4,668	40	4,261	5,020	13,346	4,253
U. Wisconsin-Madison	42	42,075	2,127	1,902	8,856	691	5,314	83	0	1,513	21,509	80
U. Colorado Boulder	43	38,946	3,510	1,773	1,158	77	15,059	130	0	0	17,239	0
Montana State U., Bozeman	44	38,791	550	122	2,577	80	3,267	0	0	0	25,246	6,949
Vanderbilt U. and Vanderbilt U. Medical Center	45	37,196	5,803	24	17,911	2	0	0	0	0	13,456	0
U. Minnesota, Twin Cities	46	36,190	700	0	14,940	832	807	246	303	0	18,216	146
U. Virginia, Charlottesville	47	36,141	10,408	43	9,480	55	1,371	132	465	85	13,702	400
U. Hawaii, Manoa	48	35,803	14,804	5,263	1,319	0	2,823	0	0	0	11,594	0
U.S. Air Force Academy	49	35,311	150	97	244	423	2,175	0	0	0	32,222	0
U. Arizona	50	34,437	5,119	365	7,646	78	3,265	335	498	0	17,131	0
U. Notre Dame	51	34,222	1,951	0	3,864	175	790	43	0	2,164	25,235	0
U. Central Florida	52	33,878	10,222	0	1,064	0	12,455	2,503	286	0	7,140	208
Yale U.	53	33,555	1,840	97	14,413	232	10,764	431	40	0	5,738	0
Mississippi State U.	54	33,169	3,230	0	481	0	93	198	1,729	0	27,418	20
North Carolina State U.	55	32,063	2,525	325	3,293	1,229	1,871	0	308	7,288	15,218	6
Northeastern U.	56	30,725	3,715	0	615	0	1,127	302	1,009	0	23,264	693
Mercer U.	57	30,267	0	0	0	0	0	0	0	333	29,934	0
Air Force Institute of Technology	58	29,403	1,794	735	0	149	7,538	0	0	0	19,187	0
Princeton U.	59	29,379	2,811	75	1,375	869	4,431	474	576	0	18,768	0
California Institute of Technology	60	28,973	4,140	825	2,938	0	12,713	0	0	0	8,145	212
Stevens Institute of Technology	61	28,280	1,654	0	168	313	200	0	0	0	25,941	4
U. Tennessee, Knoxville	62	27,848	530	150	6,724	139	1,046	0	136	1,519	17,341	263
U. California, Davis	63	27,617	516	117	12,659	259	827	0	887	0	12,188	164
U. Maine	64	26,804	0	32	13	0	75	0	0	0	26,656	28
U. Miami	65	26,703	0	13,353	11,007	0	407	1,199	0	0	737	0

TABLE 60

Federally financed higher education R&D expenditures, financed by the Department of Defense, ranked by DOD R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOD R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. North Carolina, Chapel Hill	66	26,622	1,946	818	19,578	209	2,668	0	326	0	852	225
SUNY, Polytechnic Institute	67	26,605	0	0	0	0	0	0	0	0	26,605	0
U. Utah	68	26,133	2,934	374	9,627	0	2,853	2,513	1,916	0	5,869	47
U. Chicago	69	26,106	1,857	0	3,725	844	9,187	350	398	0	9,745	0
U. Delaware	70	25,879	674	3,276	1,660	331	2,660	469	0	0	16,761	48
New Mexico Institute of Mining and Technology	71	25,843	12,269	13	0	0	567	0	0	0	12,971	23
Washington U., Saint Louis	72	24,820	930	58	20,453	102	1,165	353	13	0	1,746	0
Florida International U.	73	24,093	1,606	623	1,863	39	9,460	0	1,447	0	9,055	0
U. Alabama, Birmingham	74	24,013	142	0	11,439	0	83	114	0	0	12,235	0
U. Massachusetts, Lowell	75	23,720	2,706	494	921	0	6,944	0	119	0	11,691	845
Rice U.	76	23,480	1,381	66	820	562	2,929	1,131	0	0	16,475	116
U. New Mexico	77	22,576	428	266	5,182	0	1,990	62	241	270	14,137	0
U. Connecticut	78	22,079	243	432	3,039	245	875	0	0	0	17,245	0
New Mexico State U.	79	22,026	55	0	5,051	95	1,368	0	0	0	15,457	0
Icahn School of Medicine at Mount Sinai	80	21,977	0	0	21,977	0	0	0	0	0	0	0
Indiana U., Bloomington	81	21,934	4,916	238	12,849	76	610	718	76	208	989	1,254
Auburn U., Auburn	82	21,851	654	0	1,940	4	367	220	0	75	18,466	125
Florida State U.	83	21,806	467	1,686	548	179	450	3,578	1	0	14,897	0
Boston U.	84	20,741	2,160	280	7,601	293	1,170	223	0	0	9,014	0
Michigan Technological U.	85	20,345	3,905	2,828	0	7	191	0	0	37	13,271	106
Brown U.	86	19,511	4,882	159	3,075	2,933	415	0	179	48	7,820	0
U. Nebraska, central administration	87	19,432	332	0	12,430	0	0	0	0	0	5,846	824
New York U.	88	19,381	3,532	0	6,806	2,124	2,422	572	0	0	3,683	242
U. California, Irvine	89	19,376	3,003	0	7,952	551	1,044	319	74	0	6,406	27
Baylor C. of Medicine	90	19,239	0	0	19,239	0	0	0	0	0	0	0
U.S. Military Academy	91	19,072	6,444	0	130	837	178	774	4,427	0	6,086	196
Oregon State U.	92	19,049	760	4,346	2,215	72	298	71	40	279	10,883	85
U. Colorado Anschutz Medical Campus ^c	93	18,448	0	0	18,448	0	0	0	0	0	0	0
U. Massachusetts, Amherst	94	18,086	6,256	0	1,057	268	330	0	0	0	10,075	100
Louisiana State U., Baton Rouge	95	17,384	12,851	931	1,473	293	389	4	0	0	1,411	32
Case Western Reserve U.	96	17,244	0	0	7,771	0	1,075	0	37	0	8,361	0
U. Iowa	97	16,617	248	0	6,659	11	2,238	0	171	0	6,859	431
Rutgers, State U. New Jersey, New Brunswick	98	16,363	405	736	4,872	368	1,432	0	130	63	8,357	0

TABLE 60

Federally financed higher education R&D expenditures, financed by the Department of Defense, ranked by DOD R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOD R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Michigan State U.	99	16,019	1,951	260	2,248	720	3,497	346	39	43	6,180	735
U. Oklahoma, Norman and Health Science Center	100	14,075	181	1,073	2,075	0	1,388	0	443	0	8,905	10
U. Cincinnati	101	13,541	85	0	9,965	108	0	0	222	0	2,990	171
U. Southern Mississippi	102	13,469	92	3,707	297	119	7,687	0	525	0	123	919
SUNY, Stony Brook U.	103	13,272	3,145	149	1,442	336	1,413	33	73	187	6,494	0
U. South Florida ^d	104	12,998	2,387	295	1,593	167	43	84	67	0	7,745	617
U. Missouri, Columbia	105	12,797	1,701	274	2,588	131	2,384	122	5	0	5,592	0
U. Texas, El Paso	106	12,604	348	76	299	63	104	0	0	0	11,714	0
U. Texas, Arlington	107	12,573	21	0	131	0	1,341	168	0	0	10,912	0
U. Illinois, Chicago	108	12,378	1,604	0	5,493	0	497	0	529	0	3,538	717
U. Rochester	109	12,329	411	0	3,207	0	6,010	0	44	111	2,546	0
Tufts U.	110	12,255	685	0	1,517	3,620	733	2,572	0	367	2,761	0
Drexel U.	111	12,246	914	0	1,491	0	0	63	0	0	9,637	141
U. Louisville	112	12,225	35	0	10,691	0	0	0	0	0	1,499	0
U. Texas M. D. Anderson Cancer Center	113	12,224	0	0	11,960	8	0	0	256	0	0	0
Rensselaer Polytechnic Institute	114	12,091	3,255	0	0	145	358	1,764	0	0	5,935	634
Emory U.	115	12,007	170	0	8,639	137	1,802	0	4	0	1,240	15
Wright State U.	116	11,960	4,239	0	1,144	0	323	1,121	0	54	4,970	109
U. Hawaii, system office	117	11,932	0	11,932	0	0	0	0	0	0	0	0
U. Kentucky	118	11,889	807	95	6,005	0	192	1	0	0	4,278	511
George Washington U.	119	11,839	741	0	3,650	14	1,124	161	897	39	5,173	40
Virginia Commonwealth U.	120	11,785	108	0	9,787	25	168	254	0	0	1,442	1
Clemson U.	121	11,729	1,012	0	655	310	185	0	0	0	9,567	0
U. Alabama, Tuscaloosa	122	11,677	193	119	8	0	880	78	30	0	10,315	54
U. Texas, Dallas	123	11,635	2,936	0	1,836	35	1,897	249	0	0	4,682	0
Colorado School of Mines	124	11,603	1,081	122	87	23	1,079	0	0	0	9,211	0
Iowa State U.	125	11,228	435	0	1,442	11	309	0	0	0	8,938	93
Oregon Health and Science U.	126	10,755	0	0	10,628	0	0	0	0	0	127	0
U. Texas Southwestern Medical Center	127	10,629	0	0	10,629	0	0	0	0	0	0	0
New Jersey Institute of Technology	128	10,556	204	0	103	237	416	0	0	0	8,815	781
Dartmouth C. and Dartmouth Hitchcock Medical Center	129	10,250	722	0	2,613	1,866	441	648	161	0	3,799	0
U. California, Riverside	130	9,863	1,010	43	1,605	0	1,039	155	69	0	5,942	0
U. South Carolina, Columbia	131	9,775	138	202	882	296	0	0	277	0	7,894	86

TABLE 60

Federally financed higher education R&D expenditures, financed by the Department of Defense, ranked by DOD R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOD R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Texas Health Science Center, Houston	132	9,674	0	0	9,674	0	0	0	0	0	0	0
Wake Forest U.	133	9,627	0	0	9,613	0	14	0	0	0	0	0
U. Rhode Island	134	9,281	0	1,436	290	0	813	0	77	278	5,924	463
Temple U.	135	9,238	50	0	3,990	0	3,001	0	15	0	1,322	860
U. California, Santa Cruz	136	9,210	849	2,733	11	0	353	1	108	0	5,155	0
Georgetown U.	137	9,173	1,132	0	7,561	0	0	0	480	0	0	0
U.S. Naval Academy	138	9,152	746	454	0	1,097	1,050	0	0	0	5,805	0
Worcester Polytechnic Institute	139	9,100	993	0	0	488	150	0	0	0	7,435	34
Rochester Institute of Technology	140	8,788	846	0	0	133	2,407	30	0	0	5,372	0
Wayne State U.	141	8,457	128	0	4,295	15	1,794	0	0	0	2,216	9
U. Nebraska, Medical Center	142	8,289	0	0	8,289	0	0	0	0	0	0	0
Missouri State U.	143	8,287	0	0	51	0	0	0	0	0	8,236	0
Washington State U.	144	8,251	971	640	2,282	139	1,342	440	100	0	2,337	0
U. Nevada, Reno	145	8,127	2,561	64	4,100	47	165	117	121	0	916	36
U. Arkansas, Fayetteville	146	8,085	829	111	463	0	1,400	152	0	0	5,087	43
U. Missouri, Kansas City	147	7,934	0	0	138	0	372	0	0	0	7,424	0
Northern Arizona U.	148	7,687	0	0	5,911	0	353	60	0	0	1,363	0
Texas Tech U.	149	7,422	0	241	829	2	320	153	34	0	5,695	148
U. Texas, San Antonio	150	7,398	1,355	757	828	0	1,115	476	146	0	2,721	0
U. Mississippi	151	7,174	0	0	1,170	0	4,199	0	0	0	1,776	29
U. Kansas	152	7,049	728	700	1,611	180	47	570	304	1	2,270	638
U. Massachusetts, Medical School	153	6,900	0	0	6,900	0	0	0	0	0	0	0
Old Dominion U.	154	6,838	314	55	552	0	113	88	156	0	5,444	116
U. Georgia	155	6,816	736	124	2,157	0	449	179	839	0	2,192	140
U. Toledo	156	6,713	0	0	690	0	3,007	0	0	0	2,152	864
Boston C.	157	6,683	0	5,817	0	0	866	0	0	0	0	0
U. North Texas, Denton	158	6,553	436	0	50	0	266	0	0	0	5,801	0
Florida Atlantic U.	159	6,289	81	41	813	167	266	48	0	0	4,862	11
U. Texas Health Science Center, San Antonio	160	6,283	0	0	6,283	0	0	0	0	0	0	0
U. Nebraska, Lincoln	161	6,153	282	113	7	4	3,071	123	192	0	2,361	0
Albert Einstein C. of Medicine	162	5,969	0	0	5,969	0	0	0	0	0	0	0
Missouri U. of Science and Technology	163	5,888	371	0	112	0	554	69	0	0	4,782	0
Medical C. Wisconsin	164	5,874	0	0	5,271	0	0	0	0	0	603	0

TABLE 60

Federally financed higher education R&D expenditures, financed by the Department of Defense, ranked by DOD R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOD R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Rowan U.	165	5,845	105	0	0	55	0	0	0	0	5,633	52
CUNY, Advanced Science Research Center	166	5,729	0	26	0	0	5,432	0	0	0	271	0
U. Houston	167	5,695	1,388	0	236	46	509	463	0	0	2,699	354
U. Montana, Missoula	168	5,598	0	0	5,565	0	33	0	0	0	0	0
U. New Hampshire	169	5,544	57	4,019	70	0	30	262	17	0	984	105
Naval War C.	170	5,529	0	0	0	0	0	0	929	0	0	4,600
Oklahoma State U., Stillwater	171	5,213	0	0	508	1	347	0	0	0	4,314	43
Thomas Jefferson U.	172	5,109	0	0	5,032	0	0	0	0	0	77	0
North Dakota State U.	173	5,102	87	0	2	0	2,908	0	0	0	1,992	113
U. Maryland, Baltimore County	174	4,748	3,237	9	83	0	742	0	0	0	677	0
San Diego State U.	175	4,743	401	309	963	162	403	0	49	0	2,325	131
West Virginia U.	176	4,464	170	0	2,997	0	12	0	189	0	977	119
Brigham Young U., Provo	177	4,401	539	121	103	30	666	0	0	0	2,228	714
Boise State U.	178	4,362	280	0	50	90	1,475	0	113	0	2,354	0
Texas State U.	179	4,281	160	956	2,153	66	684	0	1	0	261	0
U. Texas Medical Branch	180	4,274	0	0	4,274	0	0	0	0	0	0	0
SUNY, Binghamton U.	181	4,211	319	0	5	0	378	149	0	0	3,360	0
California Polytechnic State U., San Luis Obispo	182	4,195	1	118	0	33	0	0	0	0	4,043	0
U. Vermont	183	4,170	368	0	2,480	46	134	0	0	0	1,142	0
U. West Florida	184	4,146	2,971	0	37	0	0	0	0	0	14	1,124
U. Massachusetts, Dartmouth	185	4,058	65	2,834	90	144	0	0	0	0	925	0
Desert Research Institute	186	4,027	0	4,027	0	0	0	0	0	0	0	0
National Defense U.	187	3,920	0	0	400	0	0	0	3,020	0	0	500
Tulane U.	188	3,902	0	87	3,545	0	270	0	0	0	0	0
Embry-Riddle Aeronautical U.	189	3,878	42	120	384	0	2,503	0	0	0	703	126
Florida Institute of Technology	190	3,709	1,188	0	0	66	0	207	0	0	2,248	0
Cleveland State U.	191	3,686	0	0	1,829	0	0	0	0	0	1,857	0
Nova Southeastern U.	192	3,657	0	1,750	1,863	0	0	34	0	0	0	10
U. Oregon	193	3,577	796	0	253	0	1,715	192	46	0	404	171
Southern Methodist U.	194	3,541	0	2,730	0	30	0	0	0	30	751	0
Lehigh U.	195	3,504	184	156	195	0	0	0	0	0	2,966	3
Morgan State U.	196	3,376	0	9	0	0	1,671	6	0	0	1,690	0
South Dakota School of Mines and Technology	197	3,369	0	0	0	0	61	0	0	0	3,308	0

TABLE 60

Federally financed higher education R&D expenditures, financed by the Department of Defense, ranked by DOD R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOD R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Kansas State U.	198	3,252	1,163	0	322	0	265	274	259	0	960	9
U. Tennessee, Health Science Center	199	3,162	0	0	3,162	0	0	0	0	0	0	0
Montana Technological U.	200	3,091	0	0	0	0	0	0	0	0	3,091	0
U. Louisiana, Lafayette	201	3,084	374	93	2,016	0	0	0	0	0	0	601
U. Memphis	202	2,975	705	0	76	0	0	0	294	0	1,688	212
Howard U.	203	2,972	155	0	530	0	125	65	0	0	2,097	0
Syracuse U.	204	2,827	54	0	325	0	911	0	13	0	1,268	256
Scripps Research Institute	205	2,784	0	0	2,784	0	0	0	0	0	0	0
U. Arkansas, Little Rock	206	2,761	1,603	0	1,158	0	0	0	0	0	0	0
Marshall U.	207	2,666	0	0	402	0	115	0	0	0	1,730	419
U. Arkansas for Medical Sciences	208	2,650	0	0	2,650	0	0	0	0	0	0	0
U. North Carolina, Charlotte	209	2,607	238	0	256	107	441	328	123	0	1,103	11
U. Guam	210	2,584	0	432	2,152	0	0	0	0	0	0	0
Western U. of Health Sciences	211	2,553	0	0	2,553	0	0	0	0	0	0	0
U. North Dakota	212	2,523	504	362	202	0	71	112	0	0	1,181	91
Citadel Military C. South Carolina	213	2,507	2,505	0	2	0	0	0	0	0	0	0
Dakota State U.	214	2,434	2,434	0	0	0	0	0	0	0	0	0
SUNY, Upstate Medical U.	215	2,427	0	0	2,427	0	0	0	0	0	0	0
U. Nebraska, Omaha	216	2,400	1,686	0	707	0	0	0	7	0	0	0
William & Mary	217	2,376	0	859	157	182	691	0	0	0	0	487
CUNY, City C.	218	2,370	207	0	0	0	557	0	0	0	1,604	2
Youngstown State U.	219	2,301	0	0	0	0	0	0	0	0	2,301	0
Rockefeller U.	220	2,287	0	434	1,853	0	0	0	0	0	0	0
East Carolina U.	221	2,238	0	257	1,054	0	0	0	79	0	454	394
Delaware State U.	222	2,236	0	127	65	187	1,857	0	0	0	0	0
Rutgers, State U. New Jersey, Newark	223	2,208	1,626	329	2	0	0	0	0	0	0	251
U. Texas Rio Grande Valley	224	2,199	534	0	50	0	213	0	0	0	1,402	0
Tuskegee U.	225	2,188	0	0	739	0	0	0	0	0	1,449	0
North Carolina A&T State U.	226	2,170	174	0	0	99	60	0	0	0	1,701	136
Western Illinois U.	227	1,983	0	0	0	0	0	0	0	0	1,983	0
Portland State U.	228	1,971	45	152	73	199	0	240	62	0	1,200	0
U. South Alabama	229	1,933	20	61	628	0	75	0	0	0	850	299
U. Wyoming	230	1,907	116	48	1,383	0	0	0	27	0	333	0

TABLE 60

Federally financed higher education R&D expenditures, financed by the Department of Defense, ranked by DOD R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOD R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Augusta U.	231	1,860	64	0	1,796	0	0	0	0	0	0	0
Baylor U.	232	1,794	0	0	282	4	94	58	0	0	1,356	0
Georgia State U.	233	1,792	84	0	94	0	1,028	0	0	0	0	586
Prairie View A&M U.	234	1,745	0	0	125	0	593	0	0	0	940	87
U. California, Merced	235	1,712	0	0	161	130	827	0	75	0	202	317
Saint Louis U.	236	1,708	0	33	1,493	0	17	1	0	0	164	0
Clarkson U.	237	1,660	198	0	107	80	77	0	0	0	1,164	34
U. Tulsa	238	1,659	1,326	0	0	0	208	5	0	0	120	0
Jackson State U.	239	1,568	56	0	0	0	679	0	0	0	833	0
Chapman U.	240	1,562	0	0	402	0	997	0	123	0	40	0
U. Akron	241	1,554	0	0	232	0	830	0	0	0	492	0
U. Colorado Colorado Springs	242	1,510	1,202	135	0	0	0	0	0	0	173	0
Louisiana Tech U.	243	1,498	275	0	32	65	132	8	0	0	986	0
Cold Spring Harbor Laboratory	244	1,486	0	0	1,486	0	0	0	0	0	0	0
U. Alaska, Anchorage	245	1,468	21	215	833	0	0	0	187	0	191	21
Hampton U.	246	1,448	0	169	499	0	7	0	0	0	688	85
California State U., San Marcos	247	1,441	0	0	0	0	0	0	0	1,441	0	0
Alabama A&M U.	248	1,408	i 142	i 0	i 323	i 11	i 94	i 12	i 18	i 0	i 797	i 11
Indiana U.-Purdue U., Indianapolis	248	1,408	20	0	84	0	534	0	0	0	649	121
U.S. Army War C.	250	1,399	i 0	i 0	i 0	i 0	i 0	i 0	i 1,399	i 0	i 0	i 0
California State U., Northridge	251	1,302	0	39	0	49	116	0	0	0	1,098	0
Haverford C.	252	1,298	0	0	0	0	1,298	0	0	0	0	0
South Dakota State U.	253	1,293	0	0	22	0	120	0	0	0	1,151	0
Ohio U.	254	1,268	0	0	207	0	107	0	0	0	954	0
U. San Diego	255	1,251	0	0	0	1,180	46	0	0	0	0	25
SUNY, U. Albany	256	1,228	186	683	19	0	150	6	66	0	34	84
North Carolina Central U.	257	1,188	0	0	0	0	1,188	0	0	0	0	0
Creighton U.	258	1,171	i 389	i 0	i 357	i 91	i 298	i 13	i 15	i 0	i 0	i 8
Medical U. South Carolina	259	1,162	0	0	1,162	0	0	0	0	0	0	0
U. New Orleans	260	1,152	335	0	0	176	317	0	204	0	120	0
SUNY, Downstate Health Sciences U.	261	1,149	0	0	1,149	0	0	0	0	0	0	0
U. Tennessee, Chattanooga	261	1,149	276	0	0	0	0	0	0	0	873	0
San Jose State U.	263	1,139	0	589	67	0	78	0	0	0	405	0

TABLE 60

Federally financed higher education R&D expenditures, financed by the Department of Defense, ranked by DOD R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOD R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Towson U.	264	1,090	544	390	128	2	26	0	0	0	0	0
Marquette U.	265	1,068	0	0	292	0	0	0	0	0	776	0
California State U., Long Beach	266	1,059	0	40	42	0	0	0	0	0	800	177
Virginia State U.	267	1,043	0	0	0	0	0	0	0	0	1,043	0
Duquesne U.	268	1,042	0	0	1,042	0	0	0	0	0	0	0
Virginia Military Institute	269	1,040	1,031	0	0	0	0	0	0	0	9	0
U. Puerto Rico, Mayaguez	270	987	44	10	0	0	19	0	0	0	914	0
U. Idaho	271	945	50	0	656	0	0	0	0	0	239	0
Van Andel Research Institute	272	941	0	0	941	0	0	0	0	0	0	0
Southern Illinois U., Carbondale	273	923	0	0	720	0	164	0	0	26	13	0
Oakland U.	274	916	274	0	0	0	304	0	0	0	338	0
Florida A&M U.	275	915	114	0	0	0	27	0	0	0	774	0
California State U., Fullerton	276	880	0	2	0	584	0	152	0	0	142	0
Miami U.	277	873	0	25	300	0	115	236	0	0	197	0
Villanova U.	278	867	52	0	0	0	0	0	0	0	815	0
Kent State U.	279	850	0	0	329	2	331	0	24	0	164	0
Illinois Institute of Technology	280	816	120	0	65	0	0	0	0	0	631	0
Toyota Technological Institute, Chicago	281	813	813	0	0	0	0	0	0	0	0	0
Norfolk State U.	282	809	298	0	0	0	437	0	0	0	74	0
CUNY, Hunter C.	283	801	139	0	12	0	465	0	0	0	185	0
Clark Atlanta U.	284	777	0	0	7	0	770	0	0	0	0	0
Loyola U., Chicago	285	771	41	0	730	0	0	0	0	0	0	0
Brandeis U.	286	755	114	0	112	0	279	0	78	172	0	0
Charles R. Drew U. of Medicine and Science	287	731	0	0	731	0	0	0	0	0	0	0
Spelman C.	287	731	0	0	43	661	0	0	0	0	0	27
Texas A&M U.-Corpus Christi	289	673	0	138	4	0	0	0	0	0	531	0
Central State U.	290	668	0	25	0	0	585	0	0	0	58	0
U. of the Incarnate Word	291	656	0	0	146	0	179	0	0	0	331	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	292	650	0	0	133	0	0	0	0	0	483	34
Wesleyan U.	293	626	0	0	0	120	325	181	0	0	0	0
U. Massachusetts, Boston	294	625	0	5	450	0	0	0	0	0	170	0
U. Northern Iowa	295	617	0	0	0	0	617	0	0	0	0	0
U. Colorado Denver ^C	296	610	0	0	0	100	0	0	0	0	441	69

TABLE 60

Federally financed higher education R&D expenditures, financed by the Department of Defense, ranked by DOD R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOD R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Langston U.	297	600	0	0	600	0	0	0	0	0	0	0
U. of the District of Columbia	298	599	0	0	0	0	0	0	0	0	599	0
U. North Carolina, Greensboro	299	597	0	0	209	59	0	0	0	0	0	329
San Francisco State U.	300	593	0	0	5	0	351	178	0	0	59	0
California State U., Dominguez Hills	301	592	0	0	0	0	592	0	0	0	0	0
U. New Haven	302	590	513	0	0	0	0	77	0	0	0	0
American U.	303	586	134	0	0	393	0	0	0	5	0	54
Alfred U.	304	581	0	0	0	0	0	0	0	0	581	0
Louisiana State U., Health Sciences Center, New Orleans	305	562	0	0	562	0	0	0	0	0	0	0
U. Nevada, Las Vegas	306	546	0	0	280	0	242	0	0	0	24	0
Fisk U.	307	533	0	0	0	0	533	0	0	0	0	0
Seton Hall U.	308	522	0	0	0	0	522	0	0	0	0	0
U. Wisconsin-Milwaukee	309	513	0	0	0	0	0	0	0	0	513	0
Purdue U., Northwest	310	495	270	0	0	0	0	0	0	0	211	14
Texas Tech U., Health Sciences Center	311	488	0	0	488	0	0	0	0	0	0	0
U. Central Oklahoma	312	486	82	0	22	17	37	5	68	0	235	20
U. North Georgia	313	480	434	0	23	0	13	0	10	0	0	0
U. Washington, Bothell	314	473	92	0	75	0	0	0	0	0	306	0
Xavier U. Louisiana	315	465	225	0	0	0	240	0	0	0	0	0
Texas A&M U.-Kingsville	316	448	0	0	3	0	0	0	0	0	445	0
U. Puerto Rico, Medical Sciences Campus	317	437	0	0	437	0	0	0	0	0	0	0
Rosalind Franklin U. of Medicine and Science	318	431	0	0	431	0	0	0	0	0	0	0
SUNY, C. of Environmental Science and Forestry	319	415	0	0	415	0	0	0	0	0	0	0
CUNY, New York City C. of Technology	320	401	20	0	0	0	381	0	0	0	0	0
Albany Medical C.	321	400	0	0	400	0	0	0	0	0	0	0
U. North Carolina, Wilmington	322	393	90	100	66	0	0	0	52	0	59	26
U. Detroit Mercy	323	387	0	0	0	0	0	0	0	0	387	0
U. Maryland, Eastern Shore	324	385	0	0	326	0	0	0	0	0	59	0
U. Texas, Tyler	324	385	0	0	385	0	0	0	0	0	0	0
New York Institute of Technology	326	384	0	0	0	0	0	0	0	0	384	0
Central Washington U.	327	381	381	0	0	0	0	0	0	0	0	0
SUNY, Cobleskill	328	379	0	0	0	0	0	0	0	0	379	0
Savannah State U.	329	378	0	110	85	0	0	0	0	0	183	0

TABLE 60

Federally financed higher education R&D expenditures, financed by the Department of Defense, ranked by DOD R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOD R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. North Carolina, general administration	330	369	51	0	0	0	0	0	0	0	268	50
Catholic U. of America	331	366	0	0	58	0	184	0	0	0	124	0
Fordham U.	332	356	119	0	4	0	233	0	0	0	0	0
New Mexico Highlands U.	332	356 i	118 i	3 i	10 i	57 i	34 i	0 i	117 i	0 i	0 i	17 i
U. Denver	334	354	0	0	139	0	27	0	0	0	188	0
Tennessee State U.	335	346	0	0	0	0	0	0	0	0	346	0
Alabama State U.	336	340	73	0	0	0	0	0	0	0	267	0
California State U., Fresno	336	340	0	0	0	0	0	0	0	0	340	0
Saginaw Valley State U.	338	325 i	162 i	0 i	0 i	0 i	0 i	0 i	148 i	0 i	0 i	15 i
Austin Peay State U.	339	321	0	206	115	0	0	0	0	0	0	0
Southern Illinois U., Edwardsville	340	320	0	27	32	0	261	0	0	0	0	0
Bowie State U.	341	319	319	0	0	0	0	0	0	0	0	0
Indiana U. Pennsylvania	342	316	113	0	0	0	0	0	203	0	0	0
Claremont McKenna C.	343	304	0	0	0	0	304	0	0	0	0	0
Tennessee Technological U.	344	301	0	0	7	0	0	0	0	0	294	0
U. South Dakota	344	301	0	0	301	0	0	0	0	0	0	0
California State Polytechnic U., Pomona	346	299	7	0	0	0	0	0	0	0	292	0
Santa Clara U.	346	299	0	0	0	0	0	0	0	0	299	0
U. Puerto Rico, Rio Piedras	348	294	0	0	0	124	170	0	0	0	0	0
California State U., Los Angeles	349	292	0	0	0	0	107	0	0	0	185	0
U. of Health Sciences and Pharmacy in St. Louis	350	281	0	0	272	0	9	0	0	0	0	0
Eastern Virginia Medical School	351	279	0	0	279	0	0	0	0	0	0	0
U. Washington, Tacoma	352	273	198	56	0	0	0	0	0	19	0	0
U. Hawaii, Hilo	353	262	0	0	184	0	78	0	0	0	0	0
Rush U.	354	260	0	0	260	0	0	0	0	0	0	0
Southern U. and A&M C., Baton Rouge	355	255	89	0	0	0	0	0	0	0	166	0
U. Texas of the Permian Basin	356	244	0	0	0	0	0	0	0	0	244	0
East Tennessee State U.	357	239	0	0	239	0	0	0	0	0	0	0
Texas Woman's U.	357	239	0	0	239	0	0	0	0	0	0	0
California State U., Chico	359	236	0	0	0	0	0	0	0	0	236	0
Fayetteville State U.	360	213	188	0	0	0	0	0	0	0	25	0
West Chester U. Pennsylvania	361	204	0	0	204	0	0	0	0	0	0	0
Clafin U.	362	198	0	0	198	0	0	0	0	0	0	0

TABLE 60

Federally financed higher education R&D expenditures, financed by the Department of Defense, ranked by DOD R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOD R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Maryland Center for Environmental Science	363	194	0	119	75	0	0	0	0	0	0	0
Meharry Medical C.	364	191	0	0	191	0	0	0	0	0	0	0
Northeast Ohio Medical U.	365	188	0	0	188	0	0	0	0	0	0	0
U. Texas Health Science Center, Tyler	366	183	0	0	183	0	0	0	0	0	0	0
Elizabeth City State U.	367	174	0	0	174	0	0	0	0	0	0	0
U. North Florida	368	169	30	0	0	0	0	0	0	0	2	137
Saint Joseph's U.	369	165	0	0	0	0	0	0	165	0	0	0
Middle Tennessee State U.	370	163	0	0	18	0	0	0	145	0	0	0
Tougaloo C.	370	163	i 0	i 0	i 111	i 21	i 24	i 0	i 1	i 0	i 0	i 6
Kennesaw State U.	372	157	50	0	0	0	0	20	0	0	87	0
Morehouse School of Medicine	373	153	0	0	153	0	0	0	0	0	0	0
U. Wisconsin-Green Bay	374	152	i 15	i 4	i 33	i 1	i 11	i 0	i 2	i 0	i 83	i 3
Appalachian State U.	375	151	0	0	151	0	0	0	0	0	0	0
U. of the Virgin Islands	376	150	150	0	0	0	0	0	0	0	0	0
Northern Illinois U.	377	141	0	0	0	0	14	0	72	0	55	0
Dillard U.	378	139	0	0	0	0	132	0	0	0	7	0
Sam Houston State U.	379	137	0	0	0	0	0	0	137	0	0	0
Texas Christian U.	379	137	0	0	0	0	0	0	4	0	84	49
Reed C.	381	134	i 0	i 0	i 91	i 19	i 23	i 0	i 1	i 0	i 0	i 0
U. Wisconsin-Platteville	382	132	i 10	i 0	i 10	i 2	i 10	i 0	i 12	i 0	i 84	i 4
U. Arkansas, Pine Bluff	383	131	0	0	8	0	123	0	0	0	0	0
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	384	129	0	0	129	0	0	0	0	0	0	0
Rutgers, State U. New Jersey, Camden	384	129	129	0	0	0	0	0	0	0	0	0
Bowling Green State U.	386	124	0	66	0	0	0	0	0	0	0	58
Coastal Carolina U.	387	120	0	69	0	0	51	0	0	0	0	0
California State U., Monterey Bay	388	119	0	119	0	0	0	0	0	0	0	0
Harvey Mudd C.	389	116	0	0	0	0	116	0	0	0	0	0
U. of St. Thomas (MN)	390	114	0	0	0	0	0	0	0	0	114	0
Loyola Marymount U.	391	113	0	0	0	0	0	0	0	0	0	113
CUNY, Queens C.	392	108	0	0	0	0	80	0	28	0	0	0
Oregon Institute of Technology	393	107	i 11	i 1	i 10	i 4	i 0	i 0	i 0	i 0	i 81	i 0
Sul Ross State U.	394	98	i 32	i 1	i 12	i 6	i 10	i 2	i 21	i 0	i 0	i 14

TABLE 60

Federally financed higher education R&D expenditures, financed by the Department of Defense, ranked by DOD R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOD R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Davidson C.	461	6	0	0	0	0	6	0	0	0	0	0
Clark U.	462	5	0	0	0	0	5	0	0	0	0	0
Whitman C.	462	5	0	0	5	0	0	0	0	0	0	0
California State U., Channel Islands	464	4	0	0	0	0	4	0	0	0	0	0
SUNY, C. Brockport	464	4	0	0	0	0	4	0	0	0	0	0
U. Hartford	464	4	0	0	0	0	0	4	0	0	0	0
C. of Saint Benedict	467	3 i	0 i	0 i	2 i	0 i	1 i	0 i	0 i	0 i	0 i	0 i
SUNY, Buffalo State	467	3	3	0	0	0	0	0	0	0	0	0
Lawrence Technological U.	469	1	1	0	0	0	0	0	0	0	0	0
Loma Linda U.	469	1	0	0	1	0	0	0	0	0	0	0
U. Wisconsin-Stevens Point	469	1	0	0	0	0	1	0	0	0	0	0

i = imputed.

DOD = Department of Defense; nec = not elsewhere classified; S&E = science and engineering.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$1,378,372 thousand in R&D expenditures financed by DOD in FY 2022.^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.^c The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.**Note(s):**Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).**Source(s):**

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 61

Federally financed higher education R&D expenditures, financed by the Department of Energy, ranked by DOE R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOE R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
All institutions	-	2,488,278	67,103	131,608	252,351	11,593	896,963	705	14,712	30,488	1,074,222	8,533
Michigan State U.	1	127,822	106	175	18,120	341	102,019	0	156	0	6,891	14
U. Rochester	2	91,685	0	0	170	0	88,871	0	0	0	2,644	0
U. Illinois, Urbana-Champaign	3	90,166	4,034	807	47,330	230	10,609	491	73	31	25,969	592
Massachusetts Institute of Technology	4	82,270	1,801	1,062	169	170	41,421	0	521	563	36,563	0
U. Wisconsin-Madison	5	78,676	1,029	2,270	27,392	0	20,053	0	0	258	27,674	0
U. Tennessee, Knoxville	6	55,570	4,137	0	3,302	40	8,765	0	0	3,399	34,522	1,405
U. Texas, Austin	7	54,041	2,251	4,412	4,185	1,135	11,946	0	0	0	29,800	312
Texas A&M U., College Station and Health Science Center	8	50,115	226	2,094	4,172	122	11,155	0	459	0	31,865	22
U. California, Berkeley	9	45,902	134	1,748	5,817	391	14,911	0	465	3,971	18,435	30
Pennsylvania State U., University Park and Hershey Medical Center	10	45,400	916	5,091	4,234	498	6,248	72	960	0	27,218	163
U. California, Los Angeles	11	44,212	87	2,056	3,158	128	14,578	0	17	13,929	10,259	0
U. Michigan, Ann Arbor	12	43,491	38	163	1,567	0	8,025	0	0	0	33,698	0
U. Utah	13	42,094	2,021	24,850	151	1,334	3,252	0	35	0	10,451	0
U. Washington, Seattle	14	41,060	193	2,465	4,740	165	18,901	0	0	0	13,918	678
U. California, San Diego	15	38,141	245	1,512	1,880	152	22,945	0	486	1,345	9,576	0
Iowa State U.	16	35,457	11	769	2,677	160	17,468	0	0	0	14,328	44
Purdue U., West Lafayette	17	33,847	1,166	0	3,045	53	7,284	0	92	0	21,996	211
Stanford U.	18	32,543	1,194	4,212	1,724	0	7,354	0	0	0	18,059	0
U. Colorado Boulder	19	31,077	511	3,076	399	228	11,594	0	0	90	15,179	0
Princeton U.	20	30,766	394	1,417	1,462	0	11,645	0	0	0	15,848	0
Northwestern U.	21	30,065	729	57	3,226	0	13,054	0	4,453	0	8,546	0
Ohio State U.	22	29,057	488	339	1,336	0	8,454	0	282	278	17,880	0
North Carolina State U.	23	28,484	464	202	1,921	159	5,281	0	0	0	20,427	30
U. North Dakota	24	28,294	2	118	0	0	315	0	7	0	27,852	0
Columbia U. in the City of New York	25	26,945	1,052	2,009	476	0	7,726	0	73	0	15,609	0
Georgia Institute of Technology	26	26,906	222	722	361	0	1,099	0	97	0	24,027	378
U. Maryland ^a	27	26,309	2,244	1,301	919	0	8,329	0	138	0	13,378	0
U. California, Santa Barbara	28	26,239	0	588	328	0	10,582	0	135	0	14,606	0
Cornell U.	29	24,801	488	521	1,476	61	12,277	0	0	0	9,978	0
Colorado School of Mines	30	24,478	370	1,122	717	80	5,126	0	417	0	16,624	22
U. Minnesota, Twin Cities	31	24,107	195	65	2,104	0	12,946	0	140	0	8,653	4
SUNY, Stony Brook U.	32	23,900	213	1,840	381	316	12,335	0	0	2,655	6,160	0
California Institute of Technology	33	23,564	297	1,089	0	0	20,877	0	0	0	1,301	0

TABLE 61

Federally financed higher education R&D expenditures, financed by the Department of Energy, ranked by DOE R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOE R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Washington State U.	34	22,296	183	2,107	2,847	66	9,391	0	0	625	6,749	328
Arizona State U.	35	22,087	0	30	3,039	100	5,237	0	466	1,480	11,735	0
Virginia Polytechnic Institute and State U.	36	21,423	1,074	489	334	351	3,782	0	0	0	15,393	0
Harvard U.	37	20,978	193	592	3,596	0	14,144	0	9	0	2,444	0
Colorado State U., Fort Collins	38	20,904	0	2,420	2,426	38	4,672	0	108	46	11,194	0
U. California, Davis	39	19,800	799	135	6,846	239	5,408	0	141	0	6,071	161
U. California, Irvine	40	19,058	48	2,268	1,351	0	10,484	0	0	0	4,907	0
Oregon State U.	41	17,862	0	1,309	1,843	0	842	0	0	0	13,860	8
U. Florida	42	17,469	281	153	3,775	1	6,090	0	0	0	7,169	0
U. Delaware	43	17,218	24	594	721	38	2,911	0	0	364	12,566	0
Carnegie Mellon U.	44	16,658	1,938	61	0	0	4,745	0	5	0	9,909	0
U. Chicago	45	16,632	1,736	798	456	57	6,837	0	31	0	6,717	0
Duke U.	46	16,235	21	519	1,885	163	9,303	0	0	0	4,344	0
U. Wyoming	47	15,555	231	3,044	180	0	179	0	0	0	11,921	0
U. Notre Dame	48	15,024	0	0	213	38	7,160	0	0	0	7,613	0
U. Georgia	49	14,581	0	62	12,799	68	492	0	476	0	684	0
U. Virginia, Charlottesville	50	14,154	616	0	188	0	6,306	0	0	22	6,881	141
West Virginia U.	51	13,893	0	2,143	795	0	1,724	0	144	0	8,977	110
U. New Mexico	52	13,826	929	217	631	302	2,110	49	339	0	9,078	171
U. Pennsylvania	53	13,728	0	0	405	0	10,805	0	0	0	2,513	5
U. North Carolina, Chapel Hill	54	13,674	206	319	947	0	12,067	0	1	0	134	0
U. Kentucky	55	13,364	0	127	135	0	2,135	0	0	17	10,920	30
Johns Hopkins U. ^b	56	12,785	927	274	17	177	5,654	0	10	0	5,726	0
U. Pittsburgh, Pittsburgh	57	12,668	25	120	49	0	4,053	0	0	0	8,421	0
U. Maine	58	12,470	0	0	6	0	984	0	0	0	11,480	0
Florida State U.	59	11,990	175	67	0	138	6,937	0	0	1	4,647	25
Yale U.	60	11,409	0	0	949	0	8,052	0	0	0	2,402	6
New Mexico Institute of Mining and Technology	61	11,177	361	773	226	0	181	0	0	0	9,599	37
U. Texas, San Antonio	62	11,164	7,951	0	15	0	436	0	4	0	2,744	14
Vanderbilt U. and Vanderbilt U. Medical Center	63	10,858	669	0	31	0	1,481	0	0	0	8,609	68
Rensselaer Polytechnic Institute	64	10,768	263	0	0	119	1,289	0	0	0	8,982	115
Rutgers, State U. New Jersey, New Brunswick	65	10,666	0	302	1,884	277	3,748	0	154	0	4,288	13
U. Arizona	66	10,616	661	1,015	1,681	292	2,830	0	15	0	4,083	39
U. Alaska, Fairbanks	67	10,597	0	5,401	183	0	115	0	46	5	4,847	0

TABLE 61

Federally financed higher education R&D expenditures, financed by the Department of Energy, ranked by DOE R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOE R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Southern California	68	10,556	3,082	378	1,022	0	3,164	0	24	0	2,886	0
U. Nebraska, Lincoln	69	10,515	186	0	3,738	0	2,635	0	0	0	3,956	0
U. Illinois, Chicago	70	10,314	0	157	1,038	0	5,581	0	0	0	3,538	0
U. Central Florida	71	9,311	438	2,753	0	30	986	0	161	0	4,943	0
U. South Carolina, Columbia	72	9,296	198	0	2,238	307	430	0	797	0	5,191	135
Kansas State U.	73	8,972	42	0	713	0	5,687	0	0	0	2,530	0
Rice U.	74	8,841	1,300	838	236	154	3,842	0	0	0	2,471	0
CUNY, Queens C.	75	8,749	0	33	8,359	0	357	0	0	0	0	0
Florida International U.	76	8,389	0	96	0	0	1,054	0	0	0	7,239	0
Texas Tech U.	77	8,193	82	2,071	41	0	901	0	0	0	5,098	0
Clemson U.	78	8,174	0	0	2,828	0	527	0	0	0	4,819	0
SUNY, U. Buffalo	79	8,111	244	9	170	61	552	0	0	0	7,075	0
Mississippi State U.	80	7,798	14	107	1,313	0	1,194	0	0	0	5,170	0
U. Nevada, Reno	81	7,660	73	2,053	123	0	2,530	0	64	24	2,793	0
Case Western Reserve U.	82	7,513	1	0	62	0	2,572	0	0	0	4,864	14
New Mexico State U.	83	7,496	249	270	41	0	665	0	0	0	6,271	0
Missouri U. of Science and Technology	84	7,472	33	0	0	0	166	0	0	0	7,273	0
U. Houston	85	7,435	132	1,310	0	0	1,587	0	0	32	4,374	0
U. Oklahoma, Norman and Health Science Center	86	7,212	328	1,184	159	0	1,108	0	306	0	4,127	0
U. Massachusetts, Amherst	87	7,195	13	189	696	52	3,877	0	40	0	2,328	0
Washington U., Saint Louis	88	7,135	33	402	842	0	2,341	0	0	0	3,517	0
Boston U.	89	6,972	566	202	773	0	2,978	0	0	0	2,453	0
U. Missouri, Columbia	90	6,915	232	97	1,210	0	1,655	0	0	0	3,721	0
U. California, Riverside	91	6,814	442	62	531	90	2,895	0	0	0	2,794	0
U. Connecticut	92	6,786	0	0	389	21	2,422	0	0	0	3,954	0
U. Oregon	93	6,770	3,067	19	637	0	2,889	0	0	0	0	158
Brown U.	94	6,583	0	0	0	548	3,548	0	0	0	2,487	0
Michigan Technological U.	95	6,477	0	889	0	0	28	0	0	0	5,560	0
Auburn U., Auburn	96	6,337	255	0	459	73	2,190	0	0	0	3,360	0
U. Arkansas, Fayetteville	97	6,254	340	604	67	0	605	0	0	0	4,638	0
Indiana U., Bloomington	98	6,152	0	560	487	0	4,582	0	352	0	171	0
U. Toledo	99	6,116	0	886	0	0	2,182	0	95	0	2,756	197
Oklahoma State U., Stillwater	100	6,002	0	770	1,378	0	1,198	0	0	0	2,552	104
Lehigh U.	101	5,730	0	0	0	0	532	0	252	0	4,946	0

TABLE 61

Federally financed higher education R&D expenditures, financed by the Department of Energy, ranked by DOE R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOE R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Alabama, Tuscaloosa	102	5,613	219	187	17	98	1,617	0	0	0	3,475	0
U. Hawaii, Manoa	103	5,571	186	1,654	64	0	2,585	0	20	457	605	0
U. California, Santa Cruz	104	5,545	216	475	0	0	4,159	0	0	0	695	0
Desert Research Institute	105	5,524	0	5,524	0	0	0	0	0	0	0	0
Illinois Institute of Technology	106	5,496	350	0	58	0	2,413	0	0	0	2,675	0
New York U.	107	5,322	537	0	346	824	2,808	0	0	0	764	43
Louisiana State U., Baton Rouge	108	5,321	0	122	349	0	3,592	0	72	22	1,164	0
Montana State U., Bozeman	109	5,226	33	596	2,524	0	1,073	0	0	0	1,000	0
U. Idaho	110	5,004	386	383	2,003	0	275	38	63	0	1,848	8
Old Dominion U.	111	4,956	157	202	0	95	3,017	0	0	0	1,443	42
Brigham Young U., Provo	112	4,777	4	40	2	0	678	0	0	0	4,053	0
U. Kansas	113	4,572	17	639	8	0	2,278	0	2	0	1,628	0
U. Massachusetts, Lowell	114	4,470	61	1	0	0	1,112	0	0	0	3,296	0
Utah State U.	115	4,455	0	0	382	0	950	0	0	0	3,123	0
Dartmouth C. and Dartmouth Hitchcock Medical Center	116	4,298	0	0	353	33	613	0	76	0	3,223	0
Ohio U.	117	4,255	0	1,762	0	0	2,431	0	0	0	62	0
U. Texas, El Paso	118	4,206	347	191	76	0	713	0	0	0	2,879	0
Catholic U. of America	119	4,180	0	0	0	0	4,180	0	0	0	0	0
Tufts U.	120	4,042	0	0	108	0	2,541	0	0	0	1,393	0
U. New Hampshire	121	3,998	19	1,628	40	0	962	0	502	0	847	0
U. Nevada, Las Vegas	122	3,965	300	175	232	0	2,181	0	0	0	1,077	0
Northeastern U.	123	3,942	52	0	0	0	826	0	0	0	3,064	0
U. Texas, Dallas	124	3,812	0	0	0	0	794	23	0	0	2,995	0
Boise State U.	125	3,775	73	2	37	0	2,192	0	80	0	1,384	7
Emory U.	126	3,772	42	95	823	191	2,462	0	0	0	159	0
U. Iowa	127	3,726	122	0	18	0	3,169	0	0	0	417	0
Temple U.	128	3,360	301	5	0	103	2,579	0	0	0	372	0
U. North Carolina, Charlotte	129	3,330	49	0	0	0	26	0	0	0	3,255	0
Idaho State U.	130	3,304	188	284	43	0	468	32	0	0	2,284	5
U. Cincinnati	131	3,287	0	122	216	0	1,165	0	0	0	1,773	11
Worcester Polytechnic Institute	132	3,184	0	0	0	0	0	0	0	0	3,184	0
U. North Texas, Denton	133	3,097	0	0	1,413	0	1,107	0	0	0	577	0
Northern Illinois U.	134	3,075	244	19	0	0	2,647	0	0	0	165	0
George Washington U.	135	2,967	190	0	56	0	2,005	0	159	0	557	0

TABLE 61

Federally financed higher education R&D expenditures, financed by the Department of Energy, ranked by DOE R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOE R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Texas, Arlington	136	2,931	0	97	0	0	2,654	0	0	0	180	0
Drexel U.	137	2,861	24	0	0	0	560	0	0	0	2,277	0
Florida A&M U.	138	2,652	0	11	0	0	1,714	0	0	0	927	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	139	2,596	0	104	0	0	40	0	0	0	2,452	0
Syracuse U.	140	2,571	0	7	0	0	823	0	0	0	1,597	144
U. California, Merced	141	2,559	75	103	8	79	1,503	0	41	222	528	0
U. Alabama, Birmingham	142	2,484	0	62	741	0	802	0	0	0	879	0
William & Mary	143	2,419	354	157	0	0	1,656	0	0	0	0	252
Wayne State U.	144	2,396	0	0	0	0	2,167	0	0	0	229	0
U. Louisiana, Lafayette	145	2,361	0	79	0	0	42	0	0	0	2,240	0
Northern Arizona U.	146	2,146	105	179	1,728	0	126	0	0	0	0	8
CUNY, City C.	147	2,092	0	0	0	0	509	0	0	0	1,241	342
U. South Florida ^c	148	2,056	44	0	0	0	623	0	0	0	1,124	265
U. Louisville	149	2,052	0	0	0	0	220	0	0	0	1,832	0
U. Wisconsin-Milwaukee	150	2,009	0	531	658	0	269	0	0	0	551	0
Virginia Commonwealth U.	151	1,991	70	0	29	0	844	0	0	0	1,048	0
U. Maryland, Baltimore County	152	1,956	121	268	42	0	1,525	0	0	0	0	0
Rochester Institute of Technology	153	1,921	129	0	0	0	596	0	0	0	1,196	0
Marquette U.	154	1,901	0	0	0	0	132	0	0	0	1,769	0
South Dakota School of Mines and Technology	155	1,845	0	0	0	0	1,073	0	0	0	772	0
Stevens Institute of Technology	156	1,775	37	0	0	0	130	0	0	0	1,546	62
Woods Hole Oceanographic Institution	157	1,661	0	658	0	0	0	0	0	0	1,003	0
Central Michigan U.	158	1,651	0	0	0	0	1,651	0	0	0	0	0
SUNY, Polytechnic Institute	159	1,640	0	0	0	0	0	0	0	0	1,640	0
Tulane U.	160	1,639	786	0	35	105	369	0	0	0	191	153
U. California, San Francisco	161	1,575	0	0	936	0	639	0	0	0	0	0
North Carolina A&T State U.	162	1,557	204	0	38	0	267	0	0	0	1,027	21
Baylor U.	163	1,484	0	148	251	75	921	0	0	0	89	0
Illinois State U.	164	1,449	0	0	1,449	0	0	0	0	0	0	0
Southern Methodist U.	165	1,431	0	0	0	104	1,122	0	0	0	205	0
New Jersey Institute of Technology	166	1,392	276	0	0	0	216	0	0	0	801	99
U. Rhode Island	167	1,322	0	200	535	0	392	0	0	0	195	0
Tennessee Technological U.	168	1,319	0	0	0	0	162	0	0	0	883	274
Prairie View A&M U.	169	1,313	0	0	0	0	1,154	0	0	0	159	0

TABLE 61

Federally financed higher education R&D expenditures, financed by the Department of Energy, ranked by DOE R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOE R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
SUNY, U. Albany	170	1,300	0	405	0	0	299	0	0	0	596	0
U. Miami	171	1,284	54	713	155	0	111	0	0	0	251	0
Georgetown U.	172	1,278	0	0	163	0	1,115	0	0	0	0	0
Portland State U.	173	1,262	25	73	0	12	0	0	0	0	1,152	0
SUNY, Binghamton U.	174	1,253	0	0	0	0	560	0	11	0	682	0
Brandeis U.	175	1,214	1	17	0	0	1,196	0	0	0	0	0
U. Dayton	176	1,209	43	0	0	0	0	0	0	0	1,166	0
Purdue U., Northwest	177	1,193	0	0	0	0	0	0	0	0	1,193	0
San Diego State U.	178	1,180	0	91	152	0	528	0	0	0	409	0
George Mason U.	179	1,151	52	92	0	0	114	0	0	0	893	0
Cold Spring Harbor Laboratory	180	1,143	0	0	1,143	0	0	0	0	0	0	0
North Carolina Central U.	181	1,116	0	0	0	0	1,116	0	0	0	0	0
Kent State U.	182	1,095	3	40	0	0	946	0	0	0	106	0
U. Montana, Missoula	183	1,092	398	344	290	0	60	0	0	0	0	0
U. Akron	184	1,061	0	8	0	0	1,027	0	0	0	26	0
U. South Alabama	185	1,036	0	0	0	0	146	0	0	0	890	0
Indiana U.-Purdue U., Indianapolis	186	1,009	36	0	0	0	0	0	17	0	845	111
U. Puerto Rico, Mayaguez	187	983	0	73	0	0	0	0	0	0	910	0
Boston C.	188	940	0	0	0	0	940	0	0	0	0	0
Abilene Christian U.	189	905	0	0	0	0	905	0	0	0	0	0
U. Texas Rio Grande Valley	190	903	0	0	0	0	103	0	0	0	800	0
U. Alabama, Huntsville	191	869	0	414	0	0	274	0	0	0	181	0
U. Mississippi	192	856	0	0	0	0	705	0	0	0	151	0
South Carolina State U.	193	845	i	0	i	216	i	0	i	0	444	i
U. of the District of Columbia	193	845	0	0	0	0	0	0	0	0	845	0
U. Tulsa	195	841	46	0	0	0	0	0	0	0	795	0
CUNY, Hunter C.	196	833	0	0	0	0	833	0	0	0	0	0
Hampton U.	197	832	0	0	117	163	541	0	0	0	11	0
Georgia State U.	198	785	0	19	0	0	766	0	0	0	0	0
U. Ana G. Mendez, Gurabo	199	783	0	0	0	0	0	0	0	0	701	82
San Jose State U.	200	779	0	310	109	99	169	0	0	0	12	80
U. Tennessee, Chattanooga	201	762	0	0	0	0	0	0	0	497	265	0
West Texas A&M U.	202	739	0	147	0	0	0	0	0	0	592	0
Naval Postgraduate School	203	737	151	90	0	13	0	0	420	0	0	63

TABLE 61

Federally financed higher education R&D expenditures, financed by the Department of Energy, ranked by DOE R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOE R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
North Dakota State U.	203	737	0	0	0	0	395	0	7	0	268	67
East Carolina U.	205	734	0	734	0	0	0	0	0	0	0	0
Florida Atlantic U.	206	700	0	20	27	0	0	0	0	0	653	0
Tennessee State U.	207	661	0	0	0	0	0	0	0	0	661	0
Morehouse C.	208	631	79	0	0	0	492	0	0	60	0	0
U. Maryland Center for Environmental Science	209	608	0	51	557	0	0	0	0	0	0	0
U. Vermont	210	600	0	0	0	0	17	0	0	0	583	0
Alabama A&M U.	211	564 i	14 i	0 i	71 i	1 i	196 i	0 i	0 i	0 i	278 i	4 i
Morgan State U.	211	564	241	0	0	0	66	0	0	0	237	20
CUNY, York C.	213	557	0	557	0	0	0	0	0	0	0	0
Saginaw Valley State U.	214	543 i	1 i	0 i	542 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i
Pace U.	215	529	0	0	0	0	0	0	0	0	529	0
Lawrence Technological U.	216	520	0	0	0	0	0	0	0	0	0	520
SUNY, Geneseo	217	507	0	0	0	0	507	0	0	0	0	0
U. Southern Mississippi	218	496	0	0	0	0	479	0	0	0	0	17
Bowling Green State U.	219	488	0	0	44	0	444	0	0	0	0	0
Wichita State U.	220	485	0	0	0	0	50	0	0	0	435	0
California Polytechnic State U., San Luis Obispo	221	471	0	0	29	0	315	0	0	0	127	0
South Dakota State U.	222	460	0	0	74	0	0	0	0	0	386	0
Wake Forest U.	223	457	0	0	0	0	408	0	0	0	49	0
Rutgers, State U. New Jersey, Newark	224	455	0	8	0	0	447	0	0	0	0	0
Clafin U.	225	450	361	89	0	0	0	0	0	0	0	0
U.S. Air Force Academy	225	450	0	0	0	0	0	0	0	0	450	0
Barnard C.	227	425	0	0	0	0	425	0	0	0	0	0
U. Texas Southwestern Medical Center	228	404	0	0	404	0	0	0	0	0	0	0
U. Memphis	229	397	0	6	0	0	69	0	0	0	322	0
U. Massachusetts, Medical School	230	396	0	0	396	0	0	0	0	0	0	0
Florida Institute of Technology	231	349	0	0	0	0	349	0	0	0	0	0
U. Michigan, Dearborn	232	347	0	0	0	0	0	0	0	0	347	0
U. Minnesota, Duluth	233	344	0	0	334	0	0	0	0	0	10	0
California State U., East Bay	234	341	0	0	93	0	248	0	0	0	0	0
New York Medical C.	235	314	0	0	314	0	0	0	0	0	0	0
U.S. Naval Academy	236	305	0	0	0	0	196	0	0	0	109	0
CUNY, Baruch C.	237	298	0	0	0	0	298	0	0	0	0	0

TABLE 61

Federally financed higher education R&D expenditures, financed by the Department of Energy, ranked by DOE R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOE R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Virginia State U.	272	169	0	0	0	0	42	0	0	0	127	0
Wright State U.	272	169	39	0	0	0	0	0	0	0	130	0
Marshall U.	274	160	0	122	0	0	10	0	0	0	9	19
U. Arkansas, Little Rock	275	157	157	0	0	0	0	0	0	0	0	0
U. West Florida	276	153	19	54	80	0	0	0	0	0	0	0
Western Illinois U.	276	153	0	0	153	0	0	0	0	0	0	0
Western New England U.	278	147	0	0	0	0	0	0	0	0	147	0
U. Colorado Colorado Springs	279	142	0	0	0	0	0	0	0	0	142	0
CUNY, Lehman C.	280	139	0	0	0	0	139	0	0	0	0	0
U. South Carolina, Aiken	281	136	0	0	0	0	8	0	0	0	128	0
Rhode Island C.	282	135	0	0	0	0	135	0	0	0	0	0
Oakland U.	283	131	92	0	0	0	35	0	0	0	4	0
U. Central Oklahoma	284	128	0	0	108	0	16	0	3	0	1	0
Scripps Research Institute	285	124	0	0	124	0	0	0	0	0	0	0
California State U., Long Beach	286	123	0	19	0	0	104	0	0	0	0	0
Texas A&M U.-Commerce	287	122	0	0	0	0	122	0	0	0	0	0
U. Puerto Rico, Rio Piedras	288	121	0	0	0	0	121	0	0	0	0	0
Western Washington U.	288	121	121	0	0	0	0	0	0	0	0	0
Arkansas State U., Jonesboro	290	113	0	0	13	0	0	0	0	0	100	0
U. Alaska, Anchorage	291	112	0	36	0	0	0	0	0	0	76	0
U. New England	292	107	0	107	0	0	0	0	0	0	0	0
Indiana State U.	293	104	0	0	0	0	104	0	0	0	0	0
California State U., Los Angeles	294	102	0	0	0	0	74	0	0	0	28	0
Drake U.	295	99	0	0	99	0	0	0	0	0	0	0
San Francisco State U.	296	97	0	0	0	0	95	0	0	0	2	0
Canisius C.	297	95	0	0	0	0	0	0	0	95	0	0
U. Northern Iowa	298	90	0	0	0	0	90	0	0	0	0	0
Western Kentucky U.	299	87	0	0	0	0	87	0	0	0	0	0
California State Polytechnic U., Pomona	300	83	0	0	0	0	0	0	0	0	83	0
Texas A&M U.-Corpus Christi	300	83	0	25	0	0	0	0	0	0	58	0
Clark Atlanta U.	302	81	0	0	0	0	71	0	0	0	10	0
U. Richmond	302	81	0	0	0	0	81	0	0	0	0	0
Murray State U.	304	80	0	80	0	0	0	0	0	0	0	0
Kennesaw State U.	305	78	15	0	0	0	16	0	0	0	47	0

TABLE 61

Federally financed higher education R&D expenditures, financed by the Department of Energy, ranked by DOE R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOE R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Missouri State U.	306	72	0	0	0	0	72	0	0	0	0	0
Lewis and Clark C.	307	71	0	71	0	0	0	0	0	0	0	0
U. Arkansas for Medical Sciences	307	71	0	0	71	0	0	0	0	0	0	0
Delaware State U.	309	70	0	0	0	0	70	0	0	0	0	0
U. North Florida	310	66	0	0	0	0	62	0	0	0	4	0
Fordham U.	311	65	0	0	65	0	0	0	0	0	0	0
U. Wisconsin-Green Bay	312	64 i	1 i	7 i	4 i	0 i	23 i	0 i	1 i	0 i	27 i	1 i
California State U., Channel Islands	313	62	62	0	0	0	0	0	0	0	0	0
Lafayette C.	313	62	0	0	0	0	0	0	0	0	62	0
Clark U.	315	61	0	0	34	0	27	0	0	0	0	0
Norfolk State U.	316	57	0	0	0	0	0	0	0	0	57	0
U. Denver	317	52	0	0	0	0	52	0	0	0	0	0
Tougaloo C.	318	51 i	11 i	0 i	2 i	0 i	35 i	0 i	0 i	0 i	0 i	3 i
U. Wisconsin-Eau Claire	318	51	0	0	0	0	51	0	0	0	0	0
American U.	320	50	0	0	0	33	0	0	17	0	0	0
Middle Tennessee State U.	321	49	0	0	0	0	49	0	0	0	0	0
U. New Orleans	321	49	1	0	0	0	48	0	0	0	0	0
Alcorn State U.	323	48 i	0 i	0 i	30 i	0 i	0 i	0 i	0 i	0 i	18 i	0 i
C. New Jersey	323	48	0	0	0	0	43	0	0	0	5	0
U. Hawaii, Hilo	325	47	0	0	47	0	0	0	0	0	0	0
Lamar U.	326	46	0	0	0	0	0	0	0	0	46	0
California State U., Fresno	327	44	0	0	0	0	44	0	0	0	0	0
New School	328	41	0	0	0	0	0	0	0	0	41	0
Reed C.	328	41 i	10 i	0 i	0 i	0 i	31 i	0 i	0 i	0 i	0 i	0 i
U. New Haven	328	41	0	0	0	0	0	0	0	0	41	0
U. San Francisco	328	41	0	41	0	0	0	0	0	0	0	0
Texas A&M U.-Kingsville	332	40	0	0	0	0	0	0	0	0	40	0
U. North Carolina, Greensboro	333	39	0	0	39	0	0	0	0	0	0	0
Louisiana Tech U.	334	36	0	0	1	0	0	0	0	0	35	0
U. Baltimore	334	36	36	0	0	0	0	0	0	0	0	0
California State U., Maritime Academy	336	34	0	0	0	0	0	0	0	0	34	0
Oregon Health and Science U.	337	32	0	0	30	0	0	0	0	0	2	0
Sul Ross State U.	338	31 i	0 i	5 i	24 i	0 i	2 i	0 i	0 i	0 i	0 i	0 i
New Mexico Highlands U.	339	30 i	1 i	15 i	0 i	0 i	14 i	0 i	0 i	0 i	0 i	0 i

TABLE 61

Federally financed higher education R&D expenditures, financed by the Department of Energy, ranked by DOE R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	DOE R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Minnesota State U., Mankato	374	4	4	0	0	0	0	0	0	0	0	0
Bucknell U.	375	3	0	0	0	0	0	0	0	0	3	0
Appalachian State U.	376	2	0	0	2	0	0	0	0	0	0	0
U. Wisconsin-Stevens Point	376	2	0	0	2	0	0	0	0	0	0	0
California State U., Dominguez Hills	378	1	0	0	0	0	1	0	0	0	0	0

i = imputed.

DOE = Department of Energy; nec = not elsewhere classified; S&E = science and engineering.

^a The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^b Johns Hopkins University includes the Applied Physics Laboratory, with \$849 thousand in R&D expenditures financed by DOE in FY 2022.

^c The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^d The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
All institutions	-	30,288,941	181,941	77,148	26,479,262	72,368	678,686	644,047	461,238	127,119	1,191,971	375,161
Johns Hopkins U. ^a	1	844,336	14,978	6,858	752,121	596	5,113	5,921	1,654	177	56,665	253
Duke U.	2	769,574	1,340	0	703,169	1,863	4,038	4,379	17,948	0	36,338	499
U. Pennsylvania	3	727,643	1,135	0	679,750	1,712	11,215	4,666	5,400	0	19,202	4,563
U. California, San Francisco	4	713,951	0	0	680,838	0	33,113	0	0	0	0	0
U. Pittsburgh, Pittsburgh	5	696,411	2,140	6,621	648,095	718	4,560	12,639	1,381	1,318	16,830	2,109
Columbia U. in the City of New York	6	694,702	447	658	634,292	43	8,673	3,122	426	0	23,901	23,140
U. Washington, Seattle	7	693,347	1,563	2,386	608,857	1,168	13,595	6,048	3,253	0	30,563	25,914
U. Michigan, Ann Arbor	8	680,713	4,181	142	563,869	1,118	9,630	5,778	69,886	0	23,712	2,397
U. North Carolina, Chapel Hill	9	659,640	16,703	1,707	573,035	493	10,022	12,859	15,989	0	14,475	14,357
Stanford U.	10	643,308	458	74	588,162	1,465	22,602	8,876	1,778	0	19,848	45
U. California, San Diego	11	627,145	1,060	6,350	535,275	0	22,777	8,975	5,246	0	45,033	2,429
U. California, Los Angeles	12	622,820	1,287	63	580,524	374	8,868	9,290	4,281	2,893	11,266	3,974
Washington U., Saint Louis	13	617,453	436	0	571,032	91	10,224	5,714	85	0	11,085	18,786
Yale U.	14	599,703	129	0	578,141	249	8,907	5,117	461	0	6,628	71
Icahn School of Medicine at Mount Sinai	15	585,539	0	0	585,539	0	0	0	0	0	0	0
New York U.	16	583,692	1,353	0	544,411	1,545	5,618	18,887	1,690	0	1,859	8,329
Vanderbilt U. and Vanderbilt U. Medical Center	17	570,513	101	0	527,559	39	11,755	5,995	50	0	20,028	4,986
Emory U.	18	532,883	435	1,258	511,965	119	5,942	3,668	235	0	8,539	722
Harvard U.	19	472,585	5,146	14,900	378,512	14,680	11,777	2,204	25,987	239	16,780	2,360
Northwestern U.	20	467,367	58	0	434,016	0	7,932	2,067	5,022	1,727	15,917	628
U. Minnesota, Twin Cities	21	453,718	1,622	342	391,282	558	5,224	15,256	19,154	0	16,346	3,934
U. Wisconsin-Madison	22	423,835	209	91	357,029	25	9,002	3,376	17,011	22,465	13,079	1,548
U. Southern California	23	397,767	8,897	0	321,890	35	2,288	2,313	45,690	0	7,098	9,556
U. Colorado Anschutz Medical Campus ^b	24	395,404	0	19	393,978	0	224	254	97	0	433	399
Cornell U.	25	389,731	1,218	0	346,614	112	21,095	3,141	1,415	0	14,794	1,342
Ohio State U.	26	383,114	335	67	339,157	385	1,599	3,805	3,538	6,711	12,166	15,351
U. Alabama, Birmingham	27	380,585	0	0	367,449	0	137	5,301	308	0	5,809	1,581
Baylor C. of Medicine	28	358,696	0	0	358,696	0	0	0	0	0	0	0
U. Maryland ^c	29	355,651	2,185	420	308,462	143	2,939	7,733	6,140	488	15,981	11,160
Case Western Reserve U.	30	340,332	683	0	325,302	145	1,463	1,291	178	36	11,220	14
Oregon Health and Science U.	31	333,732	0	0	323,804	0	0	0	0	0	9,928	0
Boston U.	32	329,129	68	0	275,178	1,815	8,304	13,015	183	292	26,980	3,294

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Chicago	33	324,202	8,583	0	284,492	496	12,860	2,912	5,063	0	6,283	3,513
U. Cincinnati	34	310,961	0	0	298,582	67	1,173	7,852	1,293	0	1,254	740
U. California, Davis	35	290,032	54	260	255,075	591	6,284	1,546	11,414	0	14,671	137
U. Texas Southwestern Medical Center	36	282,769	0	0	282,769	0	0	0	0	0	0	0
Indiana U., Bloomington	37	276,691	969	0	254,711	599	6,036	5,726	2,953	527	3,378	1,792
U. Florida	38	249,511	1,159	706	217,568	257	5,053	11,079	1,736	0	10,310	1,643
U. Massachusetts, Medical School	39	247,901	0	0	247,901	0	0	0	0	0	0	0
U. Utah	40	245,834	6,632	14,725	201,152	315	3,454	1,919	7,752	0	3,094	6,791
Scripps Research Institute	41	234,754	0	0	234,754	0	0	0	0	0	0	0
Rutgers, State U. New Jersey, New Brunswick	42	231,018	679	30	215,078	591	1,577	4,782	160	0	5,692	2,429
U. Iowa	43	223,247	1,039	0	205,186	9	980	7,472	140	0	4,494	3,927
Albert Einstein C. of Medicine	44	214,688	0	0	214,688	0	0	0	0	0	0	0
U. Virginia, Charlottesville	45	212,368	616	0	185,782	0	4,897	3,801	119	2,393	8,244	6,516
U. Texas M. D. Anderson Cancer Center	46	211,709	0	0	183,889	9,456	8,176	5,279	4,909	0	0	0
U. Rochester	47	207,285	86	0	186,802	0	2,358	4,684	0	6,600	6,754	1
U. Illinois, Chicago	48	192,025	869	0	174,365	84	3,461	926	562	154	9,626	1,978
U. Miami	49	189,650	1,030	1,149	174,555	0	48	9,761	561	0	2,546	0
U. Arizona	50	187,114	719	0	172,086	565	2,840	4,444	1,731	5	4,416	308
U. California, Irvine	51	185,563	1,764	0	155,810	645	6,410	3,275	911	0	12,825	3,923
U. Kentucky	52	180,292	0	56	164,448	474	1,647	3,912	1,114	420	6,807	1,414
Pennsylvania State U., University Park and Hershey Medical Center	53	169,289	1,762	555	114,958	2,327	4,030	22,424	5,319	0	14,205	3,709
Thomas Jefferson U.	54	168,466	0	0	168,466	0	0	0	0	0	0	0
U. Texas Health Science Center, Houston	55	167,117	0	0	167,117	0	0	0	0	0	0	0
U. California, Berkeley	56	166,783	187	629	108,274	480	9,378	7,557	3,362	25,915	10,746	255
Wake Forest U.	57	164,717	27	0	163,883	30	257	133	0	0	362	25
U. New Mexico	58	156,055	35	0	147,958	29	662	4,750	1,441	0	909	271
Medical U. South Carolina	59	154,901	0	0	154,901	0	0	0	0	0	0	0
Brown U.	60	149,308	1,888	22	107,172	914	1,069	7,431	21,642	6,326	2,538	306
Massachusetts Institute of Technology	61	148,759	8,994	297	64,748	0	12,910	298	1,432	272	59,708	100
Medical C. Wisconsin	62	142,490	0	0	139,081	0	0	0	0	0	3,409	0
Texas A&M U., College Station and Health Science Center	63	133,931	929	2,691	103,063	370	5,052	3,803	4,742	547	11,854	880
U. Kansas	64	131,767	70	0	106,512	0	4,776	5,439	425	21	1,588	12,936
U. South Florida ^d	65	126,254	301	0	110,202	0	2,266	1,586	8,486	0	3,134	279

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Virginia Commonwealth U.	66	125,345	63	0	103,362	18	631	7,895	306	0	2,958	10,112
U. Connecticut	67	125,263	699	109	104,380	72	2,105	10,130	1,808	0	4,354	1,606
SUNY, U. Buffalo	68	122,689	0	0	107,931	175	1,733	2,698	669	173	9,040	270
U. Texas, Austin	69	119,022	1,485	0	70,422	397	4,592	7,287	9,450	1	12,881	12,507
George Washington U.	70	118,969	254	0	111,466	76	864	1,970	942	319	2,679	399
U. Texas Medical Branch	71	116,827	0	0	116,272	0	0	0	0	0	555	0
Temple U.	72	113,603	96	0	101,147	124	1,681	7,887	485	0	1,301	882
Dartmouth C. and Dartmouth Hitchcock Medical Center	73	112,729	931	462	89,914	325	2,731	7,536	199	0	10,297	334
U. Texas Health Science Center, San Antonio	74	108,578	0	0	108,578	0	0	0	0	0	0	0
Tulane U.	75	106,598	0	355	101,353	48	283	1,202	835	0	2,208	314
Michigan State U.	76	104,978	1,003	28	79,563	1,406	4,878	6,595	1,435	40	7,649	2,381
Wayne State U.	77	102,915	271	0	90,008	0	5,014	1,581	98	1,011	1,702	3,230
U. Nebraska, Medical Center	78	102,014	0	0	102,014	0	0	0	0	0	0	0
Georgetown U.	79	95,785	43	0	91,615	0	1,359	883	1,862	0	0	23
U. Georgia	80	95,248	96	0	74,341	6	1,551	16,040	147	80	1,975	1,012
SUNY, Stony Brook U.	81	92,030	1,341	0	74,357	1,708	3,459	4,412	180	29	5,605	939
U. Louisville	82	91,269	0	0	84,029	205	503	747	19	0	3,576	2,190
Rockefeller U.	83	90,882	0	0	88,838	38	2,006	0	0	0	0	0
U. Arkansas for Medical Sciences	84	89,958	0	0	89,958	0	0	0	0	0	0	0
California Institute of Technology	85	89,631	248	0	65,248	0	11,059	0	0	0	9,839	3,237
U. Missouri, Columbia	86	89,116	594	0	78,860	39	936	3,051	8	0	2,023	3,605
U. Oklahoma, Norman and Health Science Center	87	85,136	166	49	76,051	0	5,161	1,753	95	0	1,472	389
U. Illinois, Urbana-Champaign	88	83,915	938	1	39,583	121	10,684	3,968	275	43	22,763	5,539
Tufts U.	89	83,882	17	0	57,913	759	3,952	855	218	11,980	7,900	288
Arizona State U.	90	79,143	622	0	47,875	383	2,688	4,762	3,823	798	13,005	5,187
U. Vermont	91	79,120	0	0	75,548	69	806	2,277	5	0	415	0
Rush U.	92	79,068	0	0	75,621	0	0	3,447	0	0	0	0
Purdue U., West Lafayette	93	78,444	242	0	52,822	809	5,585	5,397	586	0	11,276	1,727
U. Colorado Boulder	94	63,352	383	0	36,943	640	987	11,230	4,007	436	8,568	158
Washington State U.	95	62,684	1,032	0	51,596	0	1,291	1,339	2,401	574	1,014	3,437
U. Mississippi	96	61,984	0	0	61,509	0	101	25	16	0	137	196
Augusta U.	97	61,395	0	0	61,110	0	187	98	0	0	0	0
Drexel U.	98	60,693	526	0	49,810	0	96	1,407	11	0	5,246	3,597

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Princeton U.	99	58,925	1,334	102	46,504	372	4,398	898	2,969	0	2,348	0
U. South Carolina, Columbia	100	58,509	466	0	51,084	203	14	5,276	66	0	319	1,081
Colorado State U., Fort Collins	101	57,818	0	19	42,878	278	2,038	2,197	1,688	4,905	3,630	185
Georgia Institute of Technology	102	56,193	6,889	0	8,612	538	6,339	798	786	0	32,173	58
U. Tennessee, Health Science Center	103	55,803	0	0	55,803	0	0	0	0	0	0	0
U. California, Santa Cruz	104	54,726	0	3,653	10,999	0	6,536	0	47	0	33,491	0
U. Delaware	105	54,711	1,655	0	22,970	0	8,208	6,162	1,129	1,663	11,826	1,098
Georgia State U.	106	54,374	157	0	32,947	308	3,627	2,995	10,668	0	0	3,672
U. Oregon	107	54,309	0	126	32,651	0	698	16,376	0	0	2,804	1,654
North Carolina State U.	108	51,694	384	1,196	24,929	2,974	5,125	198	1,601	1,084	12,955	1,248
Cold Spring Harbor Laboratory	109	50,973	0	0	50,973	0	0	0	0	0	0	0
Northeastern U.	110	50,592	3,242	0	16,929	0	8,970	6,694	833	0	13,291	633
U. Hawaii, Manoa	111	49,056	0	5	47,809	0	14	281	60	67	106	714
Virginia Polytechnic Institute and State U.	112	48,876	228	0	34,776	474	1,667	577	912	0	10,133	109
Cleveland State U.	113	46,611	0	0	39,704	21	225	180	228	0	6,216	37
Florida International U.	114	44,561	705	0	20,514	0	3,198	16,562	926	0	2,650	6
Louisiana State U., Baton Rouge	115	44,154	0	495	40,185	68	1,580	2	57	0	1,168	599
West Virginia U.	116	43,922	123	32	40,160	21	1,418	885	12	21	784	466
U. California, Riverside	117	43,248	67	490	30,119	602	5,517	2,627	356	1,592	1,805	73
Carnegie Mellon U.	118	42,840	14,004	0	7,223	1,233	2,336	5,184	627	165	12,022	46
U. Massachusetts, Amherst	119	42,807	1,785	0	25,398	598	4,994	4,525	386	286	3,889	946
U. Houston	120	41,043	352	52	17,774	20	3,352	5,897	0	0	10,603	2,993
Florida State U.	121	41,010	210	0	26,338	779	2,442	5,384	818	682	1,800	2,557
SUNY, U. Albany	122	37,732	0	0	34,102	0	1,882	1,009	557	0	180	2
U. Montana, Missoula	123	37,649	534	0	27,694	48	4,352	279	38	0	0	4,704
Saint Louis U.	124	36,317	0	0	33,870	128	1,641	235	3	0	80	360
Brandeis U.	125	35,479	129	0	21,984	0	3,959	1,898	6,324	1,185	0	0
U. Louisiana, Lafayette	126	32,725	8,507	0	23,690	0	15	0	27	0	0	486
Louisiana State U., Health Sciences Center, New Orleans	127	31,854	0	0	31,854	0	0	0	0	0	0	0
U. Puerto Rico, Medical Sciences Campus	128	31,698	0	0	31,698	0	0	0	0	0	0	0
San Diego State U.	129	31,223	0	0	16,162	11	1,655	12,073	0	0	0	1,322
U. Nevada, Reno	130	30,941	0	0	26,574	0	588	2,779	0	0	773	227
Morehouse School of Medicine	131	30,358	0	0	30,358	0	0	0	0	0	0	0

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Notre Dame	132	29,289	158	0	8,385	68	8,914	3,420	95	3,035	4,899	315
Iowa State U.	133	28,573	176	0	20,188	23	1,844	21	167	0	5,728	426
Oregon State U.	134	28,146	0	241	22,735	218	668	0	776	0	3,445	63
Van Andel Research Institute	135	28,135	0	0	28,135	0	0	0	0	0	0	0
U. Texas, Dallas	136	27,924	41	0	13,115	104	2,987	1,872	0	0	9,805	0
Rice U.	137	27,122	1,300	0	4,959	1,258	2,239	1,677	493	0	15,196	0
U. Nebraska, Lincoln	138	26,614	0	0	12,270	125	3,778	5,314	2,543	0	2,051	533
Howard U.	139	26,170	0	0	19,025	0	4,102	861	222	0	1,325	635
SUNY, Upstate Medical U.	140	24,935	0	0	24,935	0	0	0	0	0	0	0
U. New Hampshire	141	23,788	0	0	13,411	0	94	1	9,148	0	921	213
SUNY, Downstate Health Sciences U.	142	23,465	0	0	23,465	0	0	0	0	0	0	0
Montana State U., Bozeman	143	23,459	0	0	14,826	630	1,991	240	73	2,722	2,898	79
U. California, Santa Barbara	144	23,064	339	463	9,606	0	3,818	1,253	878	700	5,890	117
U. Rhode Island	145	21,890	87	66	15,923	0	94	2,978	577	1,383	152	630
Loyola U., Chicago	146	21,888	187	0	20,573	0	276	357	60	0	0	435
U. Central Florida	147	19,761	441	0	11,078	14	985	2,891	122	0	3,217	1,013
U. North Dakota	148	19,368	0	0	18,375	0	10	124	0	0	182	677
U. Massachusetts, Lowell	149	18,400	2,026	0	8,679	0	674	204	1,833	0	4,950	34
U. Texas, El Paso	150	18,064	0	0	11,251	586	2,804	1,571	309	0	792	751
Indiana U.-Purdue U., Indianapolis	151	17,939	443	0	10,413	12	565	3,046	1,282	251	1,258	669
CUNY, Hunter C.	152	17,604	1,004	0	4,322	142	2,361	7,747	95	0	0	1,933
U. Denver	153	17,558	0	0	3,162	0	1,577	5,244	0	0	527	7,048
U. Texas, San Antonio	154	17,482	87	0	12,731	0	1,658	394	325	0	1,789	498
George Mason U.	155	17,418	438	71	6,684	272	488	1,098	5,328	0	2,758	281
East Carolina U.	156	17,064	0	0	16,086	0	511	36	29	0	317	85
Auburn U., Auburn	157	16,606	0	0	10,553	0	826	383	448	3	1,883	2,510
Clemson U.	158	16,596	0	0	7,279	14	466	1,117	94	0	7,515	111
U. Wyoming	159	15,983	0	0	15,324	28	0	7	0	0	624	0
U. Maryland, Baltimore County	160	15,597	106	0	6,822	0	1,162	383	5,870	0	1,032	222
Boston C.	161	15,584	250	400	5,590	0	5,157	1,006	6	0	0	3,175
Louisiana State U., Health Sciences Center, Shreveport	162	15,135	0	0	15,135	0	0	0	0	0	0	0
Kansas State U.	163	15,008	0	0	11,348	0	686	2,375	16	15	425	143
U. Missouri, Kansas City	164	14,937	0	0	14,455	0	109	350	0	0	0	23

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Alabama, Tuscaloosa	165	14,699	98	0	6,399	28	1,243	2,687	3	0	1,118	3,123
Meharry Medical C.	166	14,611	0	0	14,611	0	0	0	0	0	0	0
U. Toledo	167	14,423	0	22	11,490	0	2,350	122	0	0	345	94
U. Texas Health Science Center, Tyler	168	13,978	0	0	13,978	0	0	0	0	0	0	0
Texas Tech U., Health Sciences Center	169	13,608	0	0	13,602	0	0	0	0	0	0	6
Syracuse U.	170	13,166	220	0	2,743	0	2,683	1,269	2,330	0	1,021	2,900
CUNY, City C.	171	13,040	0	0	4,766	0	3,552	775	0	0	3,897	50
Albany Medical C.	172	12,984	0	0	12,984	0	0	0	0	0	0	0
Illinois Institute of Technology	173	12,566	174	0	7,501	0	82	0	0	0	4,809	0
U. South Alabama	174	12,440	7	123	11,387	87	0	691	0	0	95	50
Northern Arizona U.	175	12,399	0	0	11,740	0	22	0	0	140	367	130
U. Tennessee, Knoxville	176	12,103	0	0	7,866	0	1,352	993	277	154	1,121	340
U. North Carolina, Greensboro	177	12,098	47	0	4,850	0	3,065	2,394	261	0	0	1,481
U. Texas, Arlington	178	11,601	242	0	7,337	155	1,315	78	0	0	2,188	286
Uniformed Services U. of the Health Sciences	179	11,523	0	0	11,523	0	0	0	0	0	0	0
Utah State U.	180	11,276	0	0	7,609	0	810	1,986	20	0	317	534
Marshall U.	181	11,223	0	0	10,303	0	887	0	0	0	0	33
Portland State U.	181	11,223	0	0	7,670	246	1,245	739	175	0	0	1,148
Rensselaer Polytechnic Institute	183	11,168	332	0	3,702	51	1,334	0	0	0	5,749	0
CUNY, Graduate School of Public Health and Health Policy	184	10,647	0	0	8,653	0	0	1,994	0	0	0	0
Mississippi State U.	185	10,644	0	0	6,221	0	542	221	3,412	108	133	7
U. Memphis	186	10,562	1,149	110	3,663	121	374	1,050	1,798	15	374	1,908
U. Nevada, Las Vegas	187	10,550	0	0	8,834	0	838	521	82	35	106	134
U. Idaho	188	10,548	0	0	10,361	0	0	21	17	0	89	60
U. Arkansas, Fayetteville	189	10,505	176	0	2,009	0	1,392	153	1,744	0	3,233	1,798
SUNY, Binghamton U.	190	10,105	24	0	1,823	0	2,255	4,429	0	0	1,369	205
New Jersey Institute of Technology	191	10,077	212	0	4,430	66	493	0	0	109	4,712	55
Lehigh U.	192	10,051	302	0	4,992	0	1,443	406	89	0	2,790	29
U. Massachusetts, Boston	193	9,983	376	0	3,504	40	301	1,510	1,005	0	24	3,223
Charles R. Drew U. of Medicine and Science	194	9,925	0	0	9,925	0	0	0	0	0	0	0
Oklahoma State U., Stillwater	195	9,918	0	0	6,581	9	600	1,442	166	46	616	458
Xavier U. Louisiana	196	9,707	396	0	3,171	0	6,077	63	0	0	0	0
New Mexico State U.	197	9,614	0	0	8,498	0	559	90	46	0	421	0

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Florida Atlantic U.	198	9,579	628	0	5,945	103	918	1,078	27	0	629	251
North Dakota State U.	199	9,492	12	0	5,308	3	1,414	1,130	240	1,025	360	0
U. Wisconsin-Milwaukee	200	9,430	0	317	4,691	0	167	2,814	793	0	577	71
U. South Dakota	201	9,291	0	0	8,449	0	69	503	0	0	71	199
Creighton U.	202	9,278	i 54 i	0 i	8,650 i	24 i	242 i	127 i	104 i	0 i	0 i	77 i
Eastern Virginia Medical School	203	9,022	0	0	9,022	0	0	0	0	0	0	0
Northeast Ohio Medical U.	204	8,847	0	0	8,829	0	0	0	18	0	0	0
New York Medical C.	205	8,756	0	0	8,756	0	0	0	0	0	0	0
East Tennessee State U.	206	8,690	0	0	8,690	0	0	0	0	0	0	0
Rowan U.	207	8,202	0	0	5,711	153	286	840	0	0	1,212	0
Rutgers, State U. New Jersey, Newark	208	8,180	1	0	6,643	0	516	387	3	0	0	630
Kent State U.	209	7,962	0	0	3,681	0	835	2,012	724	4	0	706
U. Alaska, Fairbanks	210	7,917	0	78	7,732	0	0	59	0	0	48	0
San Francisco State U.	211	7,852	0	0	5,902	0	381	171	747	594	54	3
U. Texas Rio Grande Valley	212	7,789	67	0	7,030	0	313	23	127	0	229	0
Loma Linda U.	213	7,726	0	0	7,104	0	0	622	0	0	0	0
Marquette U.	214	7,480	247	0	4,869	147	489	246	0	0	1,279	203
Morgan State U.	215	7,400	0	0	5,967	0	128	0	0	0	0	1,305
California State U., Northridge	216	7,395	0	17	2,801	0	3,878	186	256	48	128	81
North Carolina Central U.	217	7,334	0	0	6,075	0	0	0	0	63	998	198
Brigham Young U., Provo	218	7,088	0	0	3,674	0	1,161	106	5	0	1,959	183
Delaware State U.	219	7,051	0	0	5,471	0	337	25	804	0	0	414
Wright State U.	220	6,919	207	0	5,800	33	322	92	0	0	465	0
Ohio U.	221	6,917	8	0	5,665	0	368	299	115	0	462	0
Chapman U.	222	6,762	0	0	5,630	0	18	1,072	0	0	42	0
Rosalind Franklin U. of Medicine and Science	223	6,649	0	0	6,262	0	0	387	0	0	0	0
Texas Tech U.	224	6,446	0	0	2,238	0	1,468	778	0	0	1,962	0
U. North Carolina, Charlotte	225	6,425	2,532	113	2,368	106	960	155	23	0	105	63
California State U., Long Beach	226	6,369	149	0	2,411	93	1,474	1,159	65	0	834	184
Florida A&M U.	227	6,195	0	0	6,170	0	0	25	0	0	0	0
Southern Illinois U., Carbondale	228	6,131	0	0	5,573	0	225	137	0	41	155	0
Boise State U.	229	6,121	0	0	2,844	0	27	58	0	14	3,178	0
Baylor U.	230	5,786	282	157	2,935	0	1,481	452	378	0	22	79

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Nebraska, Omaha	231	5,659	223	0	5,166	14	0	29	203	0	0	24
U. California, Merced	232	5,622	0	513	2,754	184	341	105	0	737	779	209
U. Southern Mississippi	233	5,561	24	36	5,236	0	38	98	129	0	0	0
U. Colorado Denver ^b	234	5,461	213	41	691	73	849	929	290	0	1,787	588
Texas State U.	235	5,165	0	0	630	0	757	294	1,887	0	0	1,597
Winston-Salem State U.	236	5,008	0	0	1,372	0	100	0	0	0	0	3,536
Rochester Institute of Technology	237	4,984	1,136	0	369	65	380	113	0	0	1,452	1,469
Alabama A&M U.	238	4,916	i 23	i 0	i 4,334	i 12	i 157	i 138	i 99	i 0	i 81	i 72
Oakland U.	239	4,880	0	0	3,497	0	1,206	137	0	0	39	1
Jackson State U.	240	4,860	9	0	4,147	0	580	0	0	0	0	124
MGH Institute of Health Professions	241	4,628	0	0	4,628	0	0	0	0	0	0	0
Texas Christian U.	242	4,579	0	0	337	0	136	179	0	3,927	0	0
Worcester Polytechnic Institute	243	4,566	314	0	1,027	529	580	0	0	0	1,850	266
South Dakota State U.	244	4,562	0	0	2,942	339	885	255	8	0	105	28
U. Alaska, Anchorage	245	4,253	0	0	3,946	0	0	57	194	0	0	56
U. Detroit Mercy	246	4,164	0	0	3,987	0	0	38	0	0	116	23
Western U. of Health Sciences	247	4,153	0	0	3,224	0	0	0	0	0	0	929
Miami U.	248	4,147	0	0	1,610	45	1,339	818	0	0	301	34
Old Dominion U.	249	3,973	296	0	1,143	11	496	820	119	0	601	487
U. Puerto Rico, Rio Piedras	250	3,935	0	0	1,380	0	645	63	24	1,799	0	24
U. North Texas, Denton	251	3,898	369	50	994	0	210	856	0	0	1,381	38
Michigan Technological U.	252	3,848	34	61	563	15	474	131	0	0	2,570	0
North Carolina A&T State U.	253	3,833	0	0	1,989	0	404	99	0	0	759	582
Ball State U.	254	3,560	0	0	3,284	0	199	0	70	0	0	7
CUNY, Advanced Science Research Center	255	3,557	0	12	2,890	0	355	0	0	0	300	0
Central Michigan U.	256	3,482	0	0	3,189	0	0	103	0	190	0	0
Southern Methodist U.	257	3,473	0	0	1,161	207	600	1,105	70	0	188	142
Texas Southern U.	258	3,443	0	0	2,871	0	0	572	0	0	0	0
CUNY, Queens C.	259	3,377	0	0	1,796	0	356	1,225	0	0	0	0
CUNY, Brooklyn C.	260	3,333	0	0	555	0	1,403	1,375	0	0	0	0
U. New England	261	3,296	0	0	3,296	0	0	0	0	0	0	0
Tuskegee U.	262	3,203	0	0	3,097	0	0	106	0	0	0	0
Colorado School of Mines	263	3,060	12	0	125	472	36	0	0	0	2,415	0

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Missouri, Saint Louis	264	2,983	0	0	2,440	0	377	124	42	0	0	0
U. North Florida	265	2,909	0	0	0	0	0	949	52	0	68	1,840
U. Guam	266	2,901	0	0	2,745	0	0	0	156	0	0	0
Nova Southeastern U.	267	2,856	0	54	2,706	0	0	96	0	0	0	0
Duquesne U.	268	2,832	0	0	2,619	0	117	0	86	0	0	10
U. North Texas, Health Science Center	269	2,812	0	0	2,812	0	0	0	0	0	0	0
U. Central del Caribe	270	2,807	0	0	2,807	0	0	0	0	0	0	0
Oklahoma State U., Center for Health Sciences	271	2,759	0	0	2,159	0	0	561	0	0	0	39
Stevens Institute of Technology	272	2,732	529	0	665	0	0	0	0	0	1,538	0
Rhode Island C.	273	2,720	0	0	519	0	306	143	0	0	0	1,752
Clark Atlanta U.	274	2,681	0	0	2,681	0	0	0	0	0	0	0
Fordham U.	275	2,651	0	0	232	0	17	1,832	24	0	0	546
California State U., Los Angeles	276	2,636	22	0	263	0	2,244	0	0	0	0	107
Western Michigan U. and Homer Stryker M.D. School of Medicine	277	2,430	0	0	1,338	0	134	182	21	0	0	755
U. Maine	278	2,334	37	0	1,213	0	210	189	32	275	232	146
Florida Gulf Coast U.	279	2,290	0	436	1,641	0	60	79	0	0	0	74
U. of Health Sciences and Pharmacy in St. Louis	280	2,242	0	0	2,242	0	0	0	0	0	0	0
Bowling Green State U.	281	2,218	0	248	1,115	0	0	0	680	0	0	175
CUNY, John Jay C. of Criminal Justice	282	2,201	0	0	0	0	367	1,834	0	0	0	0
Mercer U.	283	2,175	0	0	2,175	0	0	0	0	0	0	0
Gallaudet U.	284	2,167	1,163	0	883	0	0	0	121	0	0	0
Missouri U. of Science and Technology	285	2,089	0	0	0	0	268	26	0	0	1,795	0
SUNY, C. of Optometry	286	2,080	0	0	2,080	0	0	0	0	0	0	0
Wichita State U.	287	2,077	0	0	1,662	0	415	0	0	0	0	0
California State U., San Marcos	288	2,063	17	0	408	0	23	460	76	1,057	0	22
California State U., Fullerton	289	2,054	0	0	1,623	0	0	1	0	430	0	0
San Jose State U.	290	2,051	0	0	1,150	0	741	0	0	0	149	11
U. Southern Maine	291	2,015	0	18	55	0	0	0	1,942	0	0	0
Illinois State U.	292	1,932	0	0	1,932	0	0	0	0	0	0	0
Hope C.	293	1,908	0	0	1,908	0	0	0	0	0	0	0
DePaul U.	294	1,830	0	0	1,814	0	0	16	0	0	0	0
Long Island U.	295	1,826	0	0	1,767	0	0	43	0	0	0	16
Pennsylvania State U., Harrisburg	296	1,817	0	0	1,059	0	0	34	0	0	56	668

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
St. John's U., New York	297	1,790	0	0	1,380	0	207	179	0	0	0	24
CUNY, Lehman C.	298	1,725	0	0	300	0	1,371	0	37	0	0	17
U. Akron	299	1,722	0	322	219	0	433	29	0	0	719	0
Catholic U. of America	300	1,720	0	0	401	0	4	219	0	0	1,053	43
Wesleyan U.	301	1,700	0	0	868	0	601	231	0	0	0	0
Woods Hole Oceanographic Institution	302	1,682	i 0 i	1,682 i	0	0	0	0	0	0	0 i	0
Texas Tech U., Health Sciences Center, El Paso	303	1,681	0	0	1,681	0	0	0	0	0	0	0
Idaho State U.	304	1,662	0	0	1,659	0	0	3	0	0	0	0
American U.	305	1,654	0	0	189	0	137	27	885	298	0	118
New York Institute of Technology	306	1,639	0	0	1,639	0	0	0	0	0	0	0
U. Louisiana, Monroe	307	1,616	0	0	1,491	0	125	0	0	0	0	0
Northern Illinois U.	308	1,613	125	0	435	0	509	460	0	0	84	0
New England C. of Optometry	309	1,609	0	0	1,609	0	0	0	0	0	0	0
Kennesaw State U.	310	1,592	37	0	483	475	0	0	233	0	138	226
Hampton U.	311	1,557	0	0	571	0	397	0	434	0	23	132
Palmer C. of Chiropractic, Davenport	312	1,550	0	0	1,550	0	0	0	0	0	0	0
U. of the Virgin Islands	313	1,523	0	0	1,523	0	0	0	0	0	0	0
Montclair State U.	314	1,469	0	0	713	0	602	154	0	0	0	0
Texas A&M U.-Kingsville	315	1,436	0	0	1,174	0	60	51	0	0	151	0
Pacific U.	316	1,434	0	0	1,434	0	0	0	0	0	0	0
William & Mary	317	1,420	82	0	630	0	690	7	0	0	0	11
U. North Carolina, Asheville	318	1,398	270	0	961	0	167	0	0	0	0	0
Hawaii Pacific U.	319	1,372	0	92	708	0	0	0	51	0	0	521
Northeastern Illinois U.	320	1,365	0	0	1,365	0	0	0	0	0	0	0
SUNY, Polytechnic Institute	321	1,329	0	0	1,329	0	0	0	0	0	0	0
South Carolina State U.	322	1,321	i 0 i	0 i	1,321 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i
Northern Kentucky U.	323	1,285	0	0	837	0	186	256	0	0	0	6
Villanova U.	324	1,259	0	17	941	8	104	0	0	0	189	0
California State U., Fresno	325	1,255	97	0	338	14	795	11	0	0	0	0
U. Oklahoma, Tulsa	326	1,225	0	0	416	0	0	0	0	0	103	706
Western Kentucky U.	327	1,220	0	0	755	0	103	284	78	0	0	0
Wellesley C.	328	1,215	0	0	477	0	157	170	411	0	0	0
Southern Illinois U., Edwardsville	329	1,214	0	0	1,083	0	1	0	0	0	130	0

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Saint Joseph's U.	330	1,211	0	0	788	0	423	0	0	0	0	0
Morehouse C.	331	1,197	0	0	0	47	968	0	0	182	0	0
Texas A&M U.-Corpus Christi	332	1,185	0	0	411	0	0	0	0	0	0	774
U. Nebraska, Kearney	333	1,168	0	0	1,044	0	48	0	0	0	0	76
California Polytechnic State U., San Luis Obispo	334	1,153	0	0	1,083	36	0	0	34	0	0	0
Eastern Michigan U.	335	1,148	0	0	1,034	0	0	36	0	0	0	78
Bowie State U.	336	1,143	0	0	1,143	0	0	0	0	0	0	0
U. Central Arkansas	337	1,135	459	0	293	0	134	0	0	0	0	249
Barnard C.	338	1,123	36	0	552	0	22	498	15	0	0	0
Albany C. of Pharmacy and Health Sciences	339	1,110	0	0	1,110	0	0	0	0	0	0	0
Middlebury C.	340	1,079	86	0	393	0	310	193	64	0	0	33
New Mexico Institute of Mining and Technology	341	1,052	0	0	136	16	71	33	0	0	793	3
Tennessee State U.	342	1,033	0	0	1,033	0	0	0	0	0	0	0
CUNY, C. Staten Island	343	1,026	0	0	614	0	284	128	0	0	0	0
Black Hills State U.	344	1,016	0	0	1,016	0	0	0	0	0	0	0
Nevada State C.	345	994	0	0	994	0	0	0	0	0	0	0
Grand Valley State U.	346	991	0	0	774	0	217	0	0	0	0	0
Salisbury U.	347	989	0	0	0	0	40	0	0	0	0	949
U. of the Pacific	348	982	0	0	817	0	0	0	0	30	135	0
Dine C.	349	980	0	0	980	0	0	0	0	0	0	0
Alabama State U.	350	971	0	0	971	0	0	0	0	0	0	0
Midwestern U.	350	971	0	0	971	0	0	0	0	0	0	0
U. Dayton	352	969	0	0	379	0	0	158	0	0	7	425
Touro U., California	353	954	0	0	954	0	0	0	0	0	0	0
U. Puerto Rico, Mayaguez	354	950	47	0	124	0	202	0	0	0	577	0
Sam Houston State U.	355	913	0	0	516	0	0	50	321	0	0	26
California State U., Dominguez Hills	356	887	0	0	0	21	426	330	110	0	0	0
U. West Florida	357	858	3	0	471	0	361	0	0	0	0	23
Saginaw Valley State U.	358	855	i 11	i 0	i 835	i 0	i 0	i 0	i 1	i 0	i 0	i 8
Northwest Indian C.	359	849	0	0	504	0	0	0	0	0	0	345
Reed C.	360	841	i 3	i 0	i 685	i 7	i 74	i 56	i 16	i 0	i 0	i 0
Yeshiva U.	360	841	0	0	841	0	0	0	0	0	0	0
Western Carolina U.	362	838	0	0	588	0	0	0	0	0	0	250

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Rutgers, State U. New Jersey, Camden	363	824	811	0	0	0	13	0	0	0	0	0
U. Wisconsin-Oshkosh	364	811	0	0	495	0	316	0	0	0	0	0
U. Hawaii, Hilo	365	806	0	0	806	0	0	0	0	0	0	0
U. Texas of the Permian Basin	366	797	0	0	797	0	0	0	0	0	0	0
Tougaloo C.	367	787	i 3	i 0	i 577	i 8	i 80	i 60	i 6	i 0	i 0	i 53
Louisiana Tech U.	368	784	11	0	591	0	0	0	0	0	182	0
Trinity C., Hartford	369	781	0	0	659	0	0	105	17	0	0	0
Florida Institute of Technology	370	773	77	0	289	66	0	341	0	0	0	0
California State U., San Bernardino	371	772	19	0	251	0	115	387	0	0	0	0
U. Massachusetts, Dartmouth	372	771	272	0	0	0	358	0	0	0	141	0
Trinity U.	373	770	0	0	214	0	244	312	0	0	0	0
Desert Research Institute	374	761	0	761	0	0	0	0	0	0	0	0
Loyola Marymount U.	375	748	0	0	56	0	99	593	0	0	0	0
Bowdoin C.	376	732	0	0	472	0	153	107	0	0	0	0
U. Arkansas, Little Rock	377	727	408	0	54	0	246	0	0	0	19	0
Georgia Southern U.	378	720	0	0	325	0	0	0	395	0	0	0
Smith C.	379	699	0	0	386	0	138	96	0	0	79	0
U. Puerto Rico, Cayey	380	670	0	0	0	0	2	0	0	668	0	0
CUNY, Baruch C.	381	658	0	0	579	26	0	24	0	0	0	29
James Madison U.	382	650	0	0	515	0	135	0	0	0	0	0
U. North Carolina, Wilmington	383	648	0	0	258	0	99	217	30	0	0	44
CUNY, York C.	384	647	0	0	355	0	152	140	0	0	0	0
Keck Graduate Institute	385	643	0	0	643	0	0	0	0	0	0	0
U. Michigan, Dearborn	386	641	0	0	189	20	0	0	0	0	424	8
Bucknell U.	387	638	0	0	579	0	52	0	0	0	0	7
William Paterson U.	388	621	0	0	435	0	0	0	186	0	0	0
Savannah State U.	389	617	0	0	159	0	0	0	0	230	228	0
Drake U.	390	616	0	0	0	0	0	0	0	0	0	616
Santa Clara U.	391	606	0	0	185	0	150	126	0	0	145	0
Amherst C.	392	602	0	0	470	98	34	0	0	0	0	0
Arkansas State U., Jonesboro	393	590	0	0	427	0	116	32	0	0	15	0
Clarkson U.	394	584	0	9	219	12	226	0	0	0	118	0
Davidson C.	395	581	0	0	189	0	0	392	0	0	0	0

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	396	577	0	0	577	0	0	0	0	0	0	0
Franklin and Marshall C.	397	576	0	0	445	19	110	2	0	0	0	0
U. Central Oklahoma	398	575	i 6 i	0 i	457 i	2 i	47 i	38 i	0 i	0 i	22 i	3 i
Fort Lewis C.	399	573	0	0	490	0	32	0	0	0	51	0
U. Wisconsin-Green Bay	400	566	i 2 i	0 i	504 i	1 i	16 i	14 i	11 i	0 i	11 i	7 i
U. Colorado Colorado Springs	401	549	0	0	184	0	102	263	0	0	0	0
Southeastern Louisiana U.	402	547	0	0	431	0	116	0	0	0	0	0
U. Texas, Tyler	403	546	0	0	546	0	0	0	0	0	0	0
U. Northern Iowa	404	544	0	0	0	0	0	0	544	0	0	0
Fayetteville State U.	405	535	0	0	437	0	0	0	56	42	0	0
Swarthmore C.	406	521	0	0	226	0	244	0	0	0	51	0
California State Polytechnic U., Pomona	407	493	0	0	493	0	0	0	0	0	0	0
Des Moines U.	408	492	0	0	404	0	0	0	88	0	0	0
Bates C.	409	483	0	0	450	0	33	0	0	0	0	0
U.S. Army War C.	410	477	i 0 i	0 i	0 i	0 i	0 i	0 i	477 i	0 i	0 i	0 i
Clark U.	411	471	0	0	296	0	137	0	38	0	0	0
Milwaukee School of Engineering	411	471	0	0	0	0	0	0	0	0	471	0
U. Washington, Tacoma	411	471	76	0	276	0	0	0	0	0	119	0
West Virginia School of Osteopathic Medicine	414	468	0	0	468	0	0	0	0	0	0	0
Edward Via C. of Osteopathic Medicine	415	466	0	0	466	0	0	0	0	0	0	0
Seton Hall U.	416	463	0	0	463	0	0	0	0	0	0	0
Toyota Technological Institute, Chicago	417	448	448	0	0	0	0	0	0	0	0	0
U. Washington, Bothell	418	440	22	0	418	0	0	0	0	0	0	0
Augustana U.	419	435	0	0	279	0	141	0	0	0	0	15
Texas Woman's U.	419	435	0	0	365	0	0	70	0	0	0	0
Southern U. and A&M C., Baton Rouge	421	432	0	0	337	0	95	0	0	0	0	0
Robert Morris U.	422	430	i 2 i	0 i	385 i	1 i	0 i	5 i	6 i	0 i	29 i	2 i
Middle Tennessee State U.	423	423	0	0	369	0	54	0	0	0	0	0
Montana Technological U.	424	417	0	0	319	0	0	0	0	0	98	0
C. Charleston	425	409	0	45	264	0	82	9	0	0	0	9
Western Washington U.	426	408	0	0	0	0	295	113	0	0	0	0
Pomona C.	427	403	41	0	65	0	297	0	0	0	0	0

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Minnesota, Duluth	461	270	0	0	204	0	0	0	0	0	38	28
Azusa Pacific U.	462	269	0	0	0	0	0	269	0	0	0	0
Langston U.	462	269	0	0	192	0	0	77	0	0	0	0
West Chester U. Pennsylvania	464	266	0	0	157	0	0	109	0	0	0	0
Pace U.	465	263	71	0	161	0	31	0	0	0	0	0
Central State U.	466	261	0	0	0	0	261	0	0	0	0	0
Appalachian State U.	467	258	0	0	208	0	0	50	0	0	0	0
St. Catherine U.	468	256	0	0	256	0	0	0	0	0	0	0
Manhattan C.	469	251	0	0	0	111	140	0	0	0	0	0
Hofstra U.	470	250	0	0	110	0	0	0	0	0	0	140
Suffolk U.	471	249	0	0	0	0	0	236	13	0	0	0
Pittsburg State U.	472	243	0	0	216	0	27	0	0	0	0	0
Towson U.	473	241	0	0	72	0	45	124	0	0	0	0
Elon U.	474	235	0	0	97	0	0	112	18	0	0	8
St. Edward's U.	475	230	0	0	0	109	121	0	0	0	0	0
C. New Jersey	476	222	0	0	222	0	0	0	0	0	0	0
Bryn Mawr C.	477	220	0	0	0	0	220	0	0	0	0	0
U. Charleston	478	217	0	0	217	0	0	0	0	0	0	0
U. South Carolina, Aiken	479	214	0	0	214	0	0	0	0	0	0	0
Coastal Carolina U.	480	212	0	0	0	0	0	0	0	0	159	53
Embry-Riddle Aeronautical U.	480	212	0	189	0	0	0	0	0	0	23	0
Carleton C.	482	208	0	0	0	0	0	208	0	0	0	0
Dillard U.	483	199	0	0	199	0	0	0	0	0	0	0
California State U., Sacramento	484	198	0	0	135	0	63	0	0	0	0	0
New School	485	197	0	0	0	0	0	197	0	0	0	0
Elizabeth City State U.	486	195	0	0	195	0	0	0	0	0	0	0
U. of the Incarnate Word	487	189	0	0	189	0	0	0	0	0	0	0
Erikson Institute	488	188	0	0	0	0	0	0	0	0	0	188
Colgate U.	489	187	0	0	108	0	79	0	0	0	0	0
Seattle U.	490	186	0	0	89	97	0	0	0	0	0	0
California State U., Stanislaus	491	181	0	0	80	0	101	0	0	0	0	0
Kenyon C.	492	179	0	0	161	18	0	0	0	0	0	0
SUNY, C. of Environmental Science and Forestry	493	176	0	0	159	0	0	0	17	0	0	0

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. of the District of Columbia	494	174	0	0	0	0	0	0	0	0	82	92
Indiana State U.	495	170	0	0	170	0	0	0	0	0	0	0
Lamar U.	496	169	0	0	12	0	0	0	15	0	0	142
CUNY, New York City C. of Technology	497	167	0	0	167	0	0	0	0	0	0	0
U. New Haven	498	161	0	0	96	0	0	0	65	0	0	0
Claremont McKenna C.	499	159	0	0	159	0	0	0	0	0	0	0
Sul Ross State U.	499	159	i 2	i 0	i 97	i 1	i 32	i 14	i 2	i 0	i 0	i 11
Western Illinois U.	501	154	0	0	0	0	0	0	154	0	0	0
Purdue U., Northwest	502	153	0	0	153	0	0	0	0	0	0	0
Pepperdine U.	503	151	0	0	25	0	0	107	19	0	0	0
Lafayette C.	504	150	0	0	0	0	104	46	0	0	0	0
SUNY, Oswego	505	147	30	0	0	0	117	0	0	0	0	0
California State U., East Bay	506	144	0	0	126	0	0	0	0	0	0	18
U. Arkansas, Pine Bluff	507	141	0	0	0	0	55	0	86	0	0	0
Southern U. and A&M C., Agricultural Research and Extension Center	508	140	0	0	140	0	0	0	0	0	0	0
Occidental C.	509	138	i 0	i 0	i 0	i 0	i 136	i 0	i 2	i 0	i 0	i 0
U. Richmond	510	137	0	0	111	0	0	0	26	0	0	0
Western New England U.	511	134	0	0	134	0	0	0	0	0	0	0
Plymouth State U.	512	133	0	0	133	0	0	0	0	0	0	0
U. Tennessee, Chattanooga	513	128	0	0	5	123	0	0	0	0	0	0
Florida Polytechnic U.	514	122	122	0	0	0	0	0	0	0	0	0
New Mexico Highlands U.	515	121	i 8	i 0	i 52	i 6	i 44	i 0	i 8	i 0	i 0	i 3
Missouri State U.	516	120	0	0	120	0	0	0	0	0	0	0
Colby C.	517	117	0	0	102	0	15	0	0	0	0	0
Eastern Washington U.	518	114	0	0	114	0	0	0	0	0	0	0
Purdue U., Fort Wayne	519	112	0	0	0	0	0	112	0	0	0	0
SUNY, C. Plattsburgh	519	112	0	0	112	0	0	0	0	0	0	0
Claremont Graduate U.	521	111	0	0	0	0	0	11	94	0	0	6
U. Houston-Clear Lake	521	111	0	0	0	0	0	111	0	0	0	0
Kean U.	523	110	0	0	110	0	0	0	0	0	0	0
U. Virginia's C. Wise	524	108	0	0	108	0	0	0	0	0	0	0
Calvin U.	525	104	0	0	76	0	0	0	28	0	0	0
U. Wisconsin-La Crosse	526	103	0	0	103	0	0	0	0	0	0	0

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields													
C. Wooster	527	102	0	0	102	0	0	0	0	0	0	0													
U. of St. Thomas (MN)	528	101	0	0	0	0	0	0	0	0	101	0													
U. San Francisco	529	99	0	0	99	0	0	0	0	0	0	0													
U. Houston-Downtown	530	98	0	0	61	0	0	37	0	0	0	0													
Willamette U.	530	98	0	0	98	0	0	0	0	0	0	0													
Skidmore C.	532	96	0	0	0	14	0	68	0	0	0	14													
Utah Valley U.	533	95	95	0	0	0	0	0	0	0	0	0													
Framingham State U.	534	94	i	1	i	0	i	72	i	0	i	13	i	6	i	1	i	0	i	0	i	0	i	1	i
Oregon Institute of Technology	535	93	i	1	i	1	i	84	i	0	i	0	i	6	i	0	i	0	i	0	i	1	i	0	i
Morehead State U.	536	90	0	0	90	0	0	0	0	0	0	0													
U. New Orleans	537	87	21	0	0	0	0	0	0	8	0	58													
Norfolk State U.	538	85	0	0	8	0	0	0	0	0	77	0													
U. Northern Colorado	539	83	0	0	83	0	0	0	0	0	0	0													
U. Wisconsin-Platteville	540	81	i	1	i	0	i	61	i	0	i	11	i	5	i	2	i	1	i	0	i	0	i	0	i
Citadel Military C. South Carolina	541	80	10	0	70	0	0	0	0	0	0	0													
Fort Valley State U.	541	80	0	0	80	0	0	0	0	0	0	0													
Canisius C.	543	75	0	0	0	0	0	0	0	75	0	0													
Macalester C.	543	75	0	0	0	13	62	0	0	0	0	0													
U. Ana G. Mendez, Gurabo	543	75	0	i	0	i	75	i	0	i	0	i	0	i	0	i	0	i	0	i	0	i	0	i	
Virginia State U.	546	73	0	0	0	0	0	73	0	0	0	0													
U. Alaska, Southeast	547	71	0	0	71	0	0	0	0	0	0	0													
California State U., Chico	548	63	0	0	63	0	0	0	0	0	0	0													
Albion C.	549	62	i	2	i	0	i	28	i	4	i	7	i	0	i	13	i	0	i	0	i	0	i	8	i
Christopher Newport U.	549	62	0	0	62	0	0	0	0	0	0	0													
Stockton U.	549	62	0	0	62	0	0	0	0	0	0	0													
Chicago State U.	552	59	0	0	0	0	0	0	59	0	0	0													
Franklin W. Olin C. of Engineering	553	56	0	0	0	0	0	0	0	0	56	0													
U. Puerto Rico, Humacao	554	51	0	0	1	0	50	0	0	0	0	0													
Indiana U. Pennsylvania	555	49	0	0	0	0	0	5	39	5	0	0													
U. Hartford	555	49	0	0	0	0	0	22	27	0	0	0													
U. Puget Sound	555	49	0	0	49	0	0	0	0	0	0	0													
Central Connecticut State U.	558	43	0	0	8	0	0	0	35	0	0	0													
Philadelphia C. of Osteopathic Medicine	559	40	0	0	40	0	0	0	0	0	0	0													

TABLE 62
Federally financed higher education R&D expenditures, financed by the Department of Health and Human Services, ranked by HHS R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	HHS R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Bentley U.	560	39	0	0	0	0	0	0	39	0	0	0
U. Illinois, Springfield	561	37	0	0	0	0	0	0	37	0	0	0
U. Maryland Center for Environmental Science	562	36	0	0	36	0	0	0	0	0	0	0
Northern Michigan U.	563	34	0	0	0	0	0	34	0	0	0	0
Harvey Mudd C.	564	31	0	0	31	0	0	0	0	0	0	0
Roseman U. of Health Sciences	565	30	0	0	30	0	0	0	0	0	0	0
Minnesota State U., Mankato	566	25	0	0	25	0	0	0	0	0	0	0
Pennsylvania State U., Behrend	566	25	0	0	0	0	0	25	0	0	0	0
California State Polytechnic U., Humboldt	568	23	0	0	23	0	0	0	0	0	0	0
C. of Saint Benedict	569	21	i	i	17	i	2	i	2	i	0	i
Stephen F. Austin State U.	570	19	0	0	0	0	0	0	0	0	0	19
Marymount U.	571	17	0	0	17	0	0	0	0	0	0	0
Northwestern State U. Louisiana	572	13	0	0	13	0	0	0	0	0	0	0
U. San Diego	573	11	0	0	1	0	4	6	0	0	0	0
Central Washington U.	574	8	0	0	0	0	0	0	0	0	0	8
Sonoma State U.	575	7	0	0	7	0	0	0	0	0	0	0
Hobart and William Smith Colleges	576	6	0	0	0	0	6	0	0	0	0	0
Prairie View A&M U.	577	5	0	0	5	0	0	0	0	0	0	0
Union C., Schenectady	577	5	0	0	0	0	0	0	0	0	5	0
Johnson C. Smith U.	579	4	0	0	0	0	4	0	0	0	0	0
St. Cloud State U.	580	1	0	0	1	0	0	0	0	0	0	0

i = imputed.

HHS = Department of Health and Human Services; nec = not elsewhere classified; S&E = science and engineering.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$31,124 thousand in R&D expenditures financed by HHS in FY 2022.

^b The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^c The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 63

Federally financed higher education R&D expenditures, financed by the National Aeronautics and Space Administration, ranked by NASA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NASA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
All institutions	-	2,044,072	27,517	525,426	89,305	20,385	673,259	16,575	15,289	5,005	660,630	10,681
Johns Hopkins U. ^a	1	426,124	10,526	61,698	1,018	17,009	78,981	0	0	73	256,819	0
U. Colorado Boulder	2	166,203	231	34,173	377	81	52,258	0	0	131	78,933	19
California Institute of Technology	3	83,886	0	20,067	558	0	62,401	0	0	0	860	0
U. California, Berkeley	4	74,073	0	881	857	0	69,307	0	0	1,278	1,750	0
U. Maryland ^b	5	73,862	127	24,221	785	0	39,592	0	6,342	324	2,471	0
U. Arizona	6	60,760	0	1,577	1,159	0	54,256	0	190	0	3,578	0
U. New Hampshire	7	49,867	0	49,270	107	0	213	0	0	0	70	207
Arizona State U.	8	49,398	1	42,269	825	0	2	1	2,248	427	3,570	55
U. Iowa	9	42,072	0	0	0	0	40,607	0	226	0	1,232	7
Utah State U.	10	40,850	0	0	785	0	560	0	0	0	39,505	0
Massachusetts Institute of Technology	11	40,331	253	5,854	29	53	20,858	0	0	641	12,583	60
U. Oklahoma, Norman and Health Science Center	12	37,076	0	36,097	57	0	779	0	0	0	143	0
U. Alabama, Huntsville	13	33,436	3,985	14,693	25	0	7,919	0	0	0	6,814	0
U. California, Los Angeles	14	31,788	0	24,250	320	0	3,441	0	841	0	2,936	0
U. Michigan, Ann Arbor	15	27,890	0	483	614	68	2,889	16	54	0	23,766	0
U. Maryland, Baltimore County	16	27,592	444	14,233	17	0	12,284	2	0	0	552	60
U. Alaska, Fairbanks	17	22,954	24	17,374	113	0	4,789	0	0	160	494	0
Columbia U. in the City of New York	18	21,796	69	13,684	614	0	4,596	0	0	0	2,833	0
U. Washington, Seattle	19	20,794	125	8,683	1,993	0	3,217	0	36	0	6,674	66
Stanford U.	20	19,608	0	1,605	1,002	0	11,540	0	178	0	4,286	997
Pennsylvania State U., University Park and Hershey Medical Center	21	18,875	23	3,021	189	45	10,900	0	0	0	4,648	49
Catholic U. of America	22	18,342	0	0	0	0	17,890	0	0	0	452	0
San Jose State U.	23	17,474	0	967	0	0	351	16,106	0	0	50	0
U. Texas, Austin	24	17,385	558	2,417	442	198	3,920	0	0	0	9,850	0
Baylor C. of Medicine	25	16,360	0	0	16,360	0	0	0	0	0	0	0
Princeton U.	26	15,677	0	518	0	0	14,406	0	0	0	753	0
Georgia Institute of Technology	27	14,950	165	2,950	135	93	4,338	0	0	0	7,085	184
U. California, San Diego	28	13,781	214	7,679	522	0	2,994	0	0	0	2,372	0
U. Wisconsin-Madison	29	13,728	704	5,562	3,998	0	2,344	0	7	40	1,073	0
Purdue U., West Lafayette	30	13,223	45	2,744	309	0	518	0	0	0	9,607	0
U. Florida	31	11,394	1	375	3,015	0	1,354	0	26	0	6,459	164
U. Hawaii, Manoa	32	11,011	31	6,063	95	0	4,705	0	0	0	117	0
U. Illinois, Urbana-Champaign	33	10,846	65	1,245	465	3	2,749	1	73	0	6,146	99

TABLE 63

Federally financed higher education R&D expenditures, financed by the National Aeronautics and Space Administration, ranked by NASA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NASA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Colorado State U., Fort Collins	34	10,455	0	6,148	2,413	60	0	0	0	180	1,654	0
Boston U.	35	10,452	0	3,586	0	0	5,066	0	0	0	1,527	273
Texas A&M U., College Station and Health Science Center	36	10,168	0	2,968	1,219	35	908	0	0	0	5,038	0
Washington U., Saint Louis	37	9,549	44	4,205	0	0	4,141	0	0	0	1,159	0
Harvard U.	38	9,545	81	4,895	510	0	3,212	0	31	0	816	0
Ohio State U.	39	9,173	0	947	161	15	2,435	0	0	60	5,314	241
U. Central Florida	40	8,863	714	0	129	0	3,173	0	0	0	4,847	0
Cornell U.	41	8,604	58	1,036	929	0	4,499	0	0	0	2,082	0
U. Chicago	42	8,437	0	2,491	0	0	5,946	0	0	0	0	0
Woods Hole Oceanographic Institution	43	8,406	0	7,690	0	0	0	0	0	0	716	0
U. Minnesota, Twin Cities	44	8,267	0	632	1,838	23	4,462	0	82	0	1,230	0
George Mason U.	45	8,244	45	6,012	0	0	1,647	0	0	0	356	184
U. California, Davis	46	7,974	0	267	1,023	0	959	0	0	0	5,725	0
Montana State U., Bozeman	47	7,810	1	521	673	0	3,952	0	0	1,099	1,404	160
Carnegie Mellon U.	48	7,239	2,468	494	0	0	450	0	0	0	3,827	0
U. California, Santa Barbara	49	6,825	0	3,000	0	0	3,025	0	0	0	800	0
Oregon State U.	50	6,492	38	3,061	2,375	0	260	26	0	30	125	577
Auburn U., Auburn	51	6,286	15	16	208	0	1,486	0	0	0	4,561	0
U. California, Santa Cruz	52	6,264	0	1,651	220	0	4,183	0	0	0	210	0
Morgan State U.	53	5,622	0	5,483	0	0	0	0	0	0	70	69
Dartmouth C. and Dartmouth Hitchcock Medical Center	54	5,554	0	386	600	0	3,559	0	142	22	845	0
U. Delaware	55	5,475	46	536	385	0	2,606	0	0	0	1,902	0
Virginia Polytechnic Institute and State U.	56	5,171	0	277	510	1	147	0	25	0	4,211	0
U. California, Irvine	57	5,167	0	2,159	1,006	0	1,099	0	0	0	903	0
Michigan Technological U.	58	5,115	5	1,824	0	0	0	0	6	0	3,280	0
New Mexico State U.	59	4,873	0	617	32	0	2,466	0	0	0	1,688	70
Brown U.	60	4,764	31	2,993	0	0	1,414	0	0	0	326	0
SUNY, Stony Brook U.	61	4,578	68	2,659	612	0	719	0	0	236	244	40
Texas State U.	62	4,480	0	318	187	0	260	0	0	0	713	3,002
Rice U.	63	4,431	3	1,390	59	0	1,837	15	0	0	1,127	0
U. Virginia, Charlottesville	64	4,419	359	525	601	0	2,078	0	0	0	856	0
Northern Arizona U.	65	4,351	0	1,015	715	0	2,598	0	0	23	0	0
Louisiana State U., Baton Rouge	66	4,307	15	678	197	0	1,927	0	0	0	479	1,011
U. Tennessee, Knoxville	67	4,277	0	1,120	138	0	0	0	0	0	3,019	0

TABLE 63

Federally financed higher education R&D expenditures, financed by the National Aeronautics and Space Administration, ranked by NASA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NASA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. South Carolina, Columbia	68	4,119	127	131	328	0	186	0	0	0	3,347	0
West Virginia U.	69	4,085	70	65	34	0	923	0	0	0	2,992	1
Hampton U.	70	4,035	0	1,351	0	0	2,684	0	0	0	0	0
U. Utah	71	4,027	334	48	17	455	0	0	707	0	2,466	0
U. Toledo	72	4,013	0	0	0	0	550	0	0	0	1,995	1,468
Iowa State U.	73	3,972	107	20	192	0	285	0	8	0	3,360	0
Michigan State U.	74	3,930	0	64	471	99	633	0	1,708	0	953	2
New Jersey Institute of Technology	75	3,917	0	0	0	32	3,766	0	0	0	119	0
Northwestern U.	76	3,872	0	90	137	0	2,138	0	0	0	1,244	263
U. New Mexico	77	3,851	76	1,259	83	0	1,401	0	0	0	1,032	0
U. Pennsylvania	78	3,635	0	145	1,581	0	1,482	0	0	0	427	0
Case Western Reserve U.	79	3,629	0	369	23	0	787	0	0	0	2,450	0
U. Texas, El Paso	80	3,569	425	145	125	0	49	0	0	0	2,825	0
U. Southern California	81	3,539	562	419	303	0	68	0	0	0	2,187	0
U. Massachusetts, Amherst	82	3,520	161	263	270	0	1,169	0	0	0	1,657	0
U. Houston	83	3,277	0	843	1,356	0	166	10	0	0	902	0
U. Idaho	84	3,258	12	479	316	0	925	0	253	0	1,273	0
U. Miami	85	3,246	0	2,345	78	0	738	0	0	0	85	0
Florida State U.	86	3,160	28	1,327	419	0	306	0	0	0	1,080	0
Colorado School of Mines	87	3,060	142	704	111	0	679	0	0	0	1,424	0
Rutgers, State U. New Jersey, New Brunswick	87	3,060	0	1,329	436	0	776	0	0	0	519	0
Vanderbilt U. and Vanderbilt U. Medical Center	89	3,032	340	254	240	0	327	0	0	0	1,871	0
Duke U.	90	3,027	0	230	1,017	0	405	0	0	0	1,375	0
Oklahoma State U., Stillwater	91	2,981	0	0	1	0	190	0	126	0	2,313	351
U. Kansas	92	2,955	0	329	70	0	780	0	0	0	1,776	0
Rochester Institute of Technology	93	2,836	0	0	9	563	2,215	0	0	0	49	0
Georgetown U.	94	2,802	0	0	2,755	0	47	0	0	0	0	0
Wichita State U.	95	2,752	0	0	0	0	246	0	0	0	2,477	29
American U.	96	2,621	0	108	0	8	2,505	0	0	0	0	0
U. California, Riverside	97	2,589	0	1,632	0	0	880	0	0	0	77	0
Yale U.	98	2,572	0	727	596	0	704	0	0	0	545	0
Rensselaer Polytechnic Institute	99	2,569	89	850	0	0	285	0	0	0	1,345	0
U. Texas, San Antonio	100	2,568	0	1,443	0	0	829	0	17	0	259	20
CUNY, City C.	101	2,559	0	1,053	51	0	0	0	0	0	1,455	0

TABLE 63

Federally financed higher education R&D expenditures, financed by the National Aeronautics and Space Administration, ranked by NASA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NASA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Kentucky	102	2,553	0	85	19	0	531	0	0	0	1,918	0
North Carolina State U.	103	2,512	0	351	654	150	94	69	0	0	1,194	0
U. North Dakota	104	2,507	65	1,345	0	0	0	0	0	0	1,097	0
U. Massachusetts, Lowell	105	2,414	0	179	0	0	1,575	0	0	0	660	0
George Washington U.	106	2,367	0	0	1,075	0	753	0	9	9	454	67
U. South Florida ^c	107	2,354	0	2,112	0	0	1	0	0	0	241	0
U. Southern Mississippi	108	2,327	12	111	0	0	1,134	0	0	0	1,070	0
U. Alabama, Birmingham	109	2,244	0	0	0	0	22	0	0	0	2,222	0
U. Connecticut	110	2,243	0	485	433	0	331	0	4	0	990	0
Texas Tech U.	111	2,218	0	1,212	0	0	444	0	0	0	562	0
U. Texas, Arlington	112	2,188	0	0	0	0	1,676	0	0	0	512	0
C. Charleston	113	2,136	23	1,740	59	0	154	0	0	0	158	2
Brigham Young U., Provo	114	2,096	0	84	0	83	492	0	0	0	1,437	0
U. Nevada, Las Vegas	115	2,066	20	467	292	0	916	0	0	0	371	0
U. of the District of Columbia	116	2,057	0	0	0	0	0	0	0	0	2,057	0
U. Texas, Dallas	117	2,055	0	0	0	33	2,005	0	0	0	17	0
U. Montana, Missoula	118	2,050	0	412	1,370	0	268	0	0	0	0	0
U. Maine	119	1,974	5	1,147	387	0	0	0	0	97	337	1
U. Pittsburgh, Pittsburgh	120	1,959	0	520	246	0	641	0	0	0	521	31
Florida International U.	121	1,948	0	366	68	0	0	0	76	0	1,438	0
Clemson U.	122	1,886	0	0	0	0	1,886	0	0	0	0	0
Mississippi State U.	123	1,873	0	137	0	0	83	0	0	0	1,653	0
U. Nevada, Reno	124	1,863	110	1,081	99	3	17	0	0	0	553	0
U. Rochester	125	1,825	0	383	620	0	577	0	0	0	245	0
Boise State U.	126	1,810	15	289	85	68	362	0	0	0	991	0
U. North Carolina, Chapel Hill	127	1,804	0	1,267	16	0	378	0	0	0	143	0
Morehead State U.	128	1,799	0	0	0	0	0	0	0	0	1,799	0
North Carolina A&T State U.	129	1,792	0	0	0	0	2	0	0	0	1,790	0
U. Puerto Rico, Rio Piedras	130	1,775	0	45	0	0	1,730	0	0	0	0	0
U. Notre Dame	131	1,667	231	0	49	0	606	0	0	0	781	0
California State U., Monterey Bay	132	1,656	0	12	1,644	0	0	0	0	0	0	0
U. Alabama, Tuscaloosa	133	1,619	20	192	0	0	431	0	208	0	768	0
Florida Institute of Technology	134	1,597	0	653	0	0	554	7	0	0	353	30
New York U.	135	1,572	159	24	0	418	759	0	140	0	72	0

TABLE 63

Federally financed higher education R&D expenditures, financed by the National Aeronautics and Space Administration, ranked by NASA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NASA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Embry-Riddle Aeronautical U.	136	1,552	96	86	0	0	1,288	0	0	0	79	3
Sonoma State U.	137	1,499	0	1,478	0	0	0	0	0	0	0	21
U. Vermont	138	1,497	0	0	0	0	0	0	0	0	1,497	0
U. Texas Southwestern Medical Center	139	1,494	0	0	1,494	0	0	0	0	0	0	0
Washington State U.	140	1,454	0	67	694	0	245	0	89	0	359	0
U. Wyoming	141	1,437	0	214	6	0	191	0	0	0	1,026	0
U. Georgia	142	1,413	0	204	45	0	376	236	534	0	18	0
Loma Linda U.	143	1,359	0	0	1,359	0	0	0	0	0	0	0
SUNY, U. Buffalo	144	1,344	0	677	0	0	0	0	0	0	667	0
U. Arkansas, Little Rock	145	1,336	0	0	0	0	0	0	0	0	1,336	0
Desert Research Institute	146	1,321	0	1,321	0	0	0	0	0	0	0	0
Old Dominion U.	147	1,319	66	156	5	244	508	48	2	0	290	0
Indiana U., Bloomington	148	1,293	220	154	380	0	492	0	47	0	0	0
U. Arkansas, Fayetteville	149	1,291	0	374	2	0	404	0	0	0	511	0
Missouri U. of Science and Technology	150	1,253	0	0	0	0	0	0	0	0	1,253	0
U. Akron	151	1,235	0	0	24	0	155	0	0	0	1,054	2
California State U., Northridge	152	1,229	0	58	11	0	240	0	0	0	920	0
Georgia State U.	153	1,184	199	0	0	0	985	0	0	0	0	0
Northeastern U.	154	1,175	23	38	0	0	707	0	0	0	407	0
San Diego State U.	155	1,126	46	111	20	0	145	0	8	0	796	0
U. Texas Medical Branch	156	1,125	0	0	1,125	0	0	0	0	0	0	0
U. Louisiana, Lafayette	157	1,041	0	59	192	0	3	0	0	0	787	0
U. Louisville	158	998	0	0	93	0	68	0	33	0	764	40
U. Oregon	159	990	0	781	48	0	54	0	107	0	0	0
Emory U.	160	970	0	0	878	0	92	0	0	0	0	0
South Dakota School of Mines and Technology	161	966	0	0	0	12	0	0	0	0	954	0
U. Missouri, Columbia	162	951	0	0	283	0	389	0	0	0	279	0
U. of the Virgin Islands	163	938	0	148	0	0	0	0	0	0	790	0
Kansas State U.	164	909	98	0	0	0	201	0	198	65	347	0
Wake Forest U.	165	888	117	0	632	0	0	0	0	0	139	0
U. California, Merced	166	860	0	7	162	0	78	0	0	0	610	3
Virginia Commonwealth U.	167	840	0	0	211	0	0	0	0	0	629	0
Eastern Virginia Medical School	168	827	0	0	827	0	0	0	0	0	0	0
Scripps Research Institute	169	806	0	0	806	0	0	0	0	0	0	0

TABLE 63
Federally financed higher education R&D expenditures, financed by the National Aeronautics and Space Administration, ranked by NASA R&D expenditures, by R&D field: FY 2022
(Dollars in thousands)

Institution	Rank	NASA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Portland State U.	170	783	0	212	193	0	239	0	0	0	139	0
U. Maryland Center for Environmental Science	171	769	0	237	532	0	0	0	0	0	0	0
Villanova U.	172	737	0	0	0	0	737	0	0	0	0	0
U. Rhode Island	173	736	0	573	0	0	144	0	0	0	19	0
South Dakota State U.	174	735	0	461	0	98	20	0	0	0	135	21
Boston C.	175	734	0	712	0	0	22	0	0	0	0	0
Stevens Institute of Technology	176	722	0	0	0	0	489	0	0	0	233	0
U. Mississippi	177	718	0	72	232	0	171	0	0	0	163	80
Prairie View A&M U.	178	717	0	0	106	0	0	0	0	0	611	0
Florida Atlantic U.	179	713	0	0	619	0	47	0	0	0	47	0
U. Cincinnati	180	707	0	159	295	24	147	0	0	0	82	0
New Mexico Institute of Mining and Technology	181	703	0	211	0	0	35	0	0	0	457	0
Tufts U.	182	702	0	0	0	0	226	0	0	0	476	0
U. Hartford	183	679	0	0	0	0	0	0	0	0	679	0
Southern Methodist U.	184	662	146	445	0	11	38	0	0	0	22	0
Temple U.	185	636	113	81	0	0	243	0	135	0	42	22
U. Massachusetts, Boston	186	600	0	205	280	0	0	0	0	0	0	115
Worcester Polytechnic Institute	187	598	0	0	0	161	0	0	0	0	437	0
Medical C. Wisconsin	188	596	0	0	596	0	0	0	0	0	0	0
Western Washington U.	189	587	0	443	0	0	3	0	0	101	0	40
Delaware State U.	190	565	0	60	0	0	505	0	0	0	0	0
Central Washington U.	191	564	0	103	0	0	461	0	0	0	0	0
Drexel U.	192	561	0	0	0	0	49	0	0	0	512	0
Xavier U. Louisiana	193	559	0	0	0	0	559	0	0	0	0	0
U. Nebraska, Lincoln	194	553	194	0	84	0	25	0	0	0	250	0
U. Dayton	195	546	0	126	0	0	0	0	0	0	419	1
U. Nebraska, Omaha	196	545	0	0	25	0	0	0	0	0	520	0
U. Texas Health Science Center, Houston	197	535	0	0	535	0	0	0	0	0	0	0
Naval Postgraduate School	198	528	0	144	0	0	0	0	0	0	384	0
Bowie State U.	199	525	525	0	0	0	0	0	0	0	0	0
U. North Texas, Denton	200	511	200	0	0	0	18	0	16	0	277	0
Wesleyan U.	201	508	0	341	0	0	167	0	0	0	0	0
U. Illinois, Chicago	202	500	3	374	0	0	51	0	0	0	72	0
U. Texas M. D. Anderson Cancer Center	203	485	0	0	485	0	0	0	0	0	0	0

TABLE 63
Federally financed higher education R&D expenditures, financed by the National Aeronautics and Space Administration, ranked by NASA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NASA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Franklin and Marshall C.	204	471	0	0	463	0	8	0	0	0	0	0
Ohio U.	204	471	0	0	265	0	0	0	0	0	205	1
SUNY, U. Albany	206	449	0	331	0	0	0	0	0	0	118	0
Christopher Newport U.	207	437	0	0	0	0	0	0	0	0	437	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	208	432	0	151	0	0	112	0	0	0	169	0
Icahn School of Medicine at Mount Sinai	209	396	0	0	396	0	0	0	0	0	0	0
Wellesley C.	210	390	0	0	0	0	0	0	0	0	390	0
Illinois Institute of Technology	211	386	0	11	0	0	0	0	0	0	375	0
Florida A&M U.	212	384	0	0	10	0	0	0	0	0	374	0
California State U., San Marcos	213	370	0	0	0	0	370	0	0	0	0	0
U. Richmond	214	365	0	365	0	0	0	0	0	0	0	0
California State U., Los Angeles	215	356	12	97	0	0	29	0	1	0	217	0
U. Alaska, Anchorage	216	351	10	0	0	0	179	0	0	8	154	0
Louisiana State U., Health Sciences Center, Shreveport	217	348	0	0	348	0	0	0	0	0	0	0
California Polytechnic State U., San Luis Obispo	218	334	155	0	27	0	41	0	33	0	78	0
Tulane U.	219	332	0	243	9	0	80	0	0	0	0	0
U. Guam	220	303	0	172	0	0	131	0	0	0	0	0
Wayne State U.	221	291	0	0	0	0	165	0	0	0	126	0
East Carolina U.	222	277	0	277	0	0	0	0	0	0	0	0
Louisiana Tech U.	223	276	12	0	48	2	26	2	0	0	186	0
U. Colorado Denver ^d	224	267	0	0	0	0	0	0	0	0	219	48
U. Wisconsin-Milwaukee	225	265	0	100	0	0	148	0	0	0	17	0
U. Puerto Rico, Medical Sciences Campus	226	264	0	264	0	0	0	0	0	0	0	0
Haverford C.	227	261	0	0	0	0	261	0	0	0	0	0
U. California, San Francisco	228	258	0	0	258	0	0	0	0	0	0	0
U. North Carolina, Charlotte	229	253	0	0	0	0	0	0	0	0	253	0
Howard U.	230	251	0	0	0	0	251	0	0	0	0	0
Saint Louis U.	230	251	0	20	0	0	46	0	0	0	185	0
Idaho State U.	232	249	0	115	0	0	126	0	0	0	8	0
Chapman U.	233	245	0	206	39	0	0	0	0	0	0	0
SUNY, C. of Environmental Science and Forestry	234	243	212	19	12	0	0	0	0	0	0	0
California State Polytechnic U., Pomona	235	239	0	0	9	0	128	0	0	0	102	0
U. Puerto Rico, Mayaguez	236	237	0	204	0	0	0	0	0	0	33	0
Miami U.	237	235	0	17	0	0	0	0	218	0	0	0

TABLE 63

Federally financed higher education R&D expenditures, financed by the National Aeronautics and Space Administration, ranked by NASA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NASA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields						
Kent State U.	272	156	0	72	0	0	75	0	0	0	9	0						
Montclair State U.	273	153	0	121	0	0	32	0	0	0	0	0						
Creighton U.	274	151	i	8	i	0	29	i	1	i	1	0	i	2	i			
U. Denver	275	150	0	0	113	0	37	0	0	0	0	0						
Clarkson U.	276	148	0	0	32	0	0	0	0	0	105	11						
U. Arkansas for Medical Sciences	277	145	0	0	145	0	0	0	0	0	0	0						
U. Tulsa	278	142	0	43	0	0	57	0	0	0	42	0						
Hope C.	279	140	0	0	20	17	41	0	0	0	62	0						
Alabama A&M U.	280	134	i	5	i	0	18	i	0	i	6	6	0	i	57	i	4	i
CUNY, Advanced Science Research Center	281	132	0	0	0	0	36	0	0	0	96	0						
Amherst C.	282	131	0	131	0	0	0	0	0	0	0	0						
U. North Carolina, Wilmington	283	130	0	104	0	0	26	0	0	0	0	0						
Oregon Health and Science U.	284	128	0	0	128	0	0	0	0	0	0	0						
SUNY, Polytechnic Institute	285	126	0	0	0	0	0	0	0	0	126	0						
Southern Illinois U., Carbondale	286	125	0	84	14	0	0	0	0	0	27	0						
Northern Illinois U.	287	124	0	48	0	0	0	0	0	0	76	0						
Marquette U.	288	122	0	0	0	0	93	0	0	0	29	0						
U. Washington, Tacoma	289	118	0	0	0	0	0	0	0	0	118	0						
Marshall U.	290	116	5	0	73	0	27	0	0	0	11	0						
North Dakota State U.	291	115	0	0	0	0	0	0	0	0	115	0						
Swarthmore C.	292	112	0	0	0	0	112	0	0	0	0	0						
C. New Jersey	293	111	0	0	0	0	19	0	0	0	89	3						
Missouri State U.	294	109	0	52	0	0	57	0	0	0	0	0						
Franklin W. Olin C. of Engineering	295	106	0	0	0	0	0	0	0	0	106	0						
Southern Connecticut State U.	295	106	0	0	0	0	106	0	0	0	0	0						
Drake U.	297	105	1	0	76	0	0	0	0	0	0	28						
U. San Francisco	298	102	0	0	0	0	102	0	0	0	0	0						
Northern Kentucky U.	299	100	0	0	0	0	100	0	0	0	0	0						
Winston-Salem State U.	299	100	0	0	100	0	0	0	0	0	0	0						
California State U., San Bernardino	301	99	0	0	48	0	51	0	0	0	0	0						
Bowdoin C.	302	95	0	70	5	0	20	0	0	0	0	0						
U. Hawaii, Hilo	303	92	0	0	45	0	47	0	0	0	0	0						
Clark Atlanta U.	304	91	0	0	0	91	0	0	0	0	0	0						
James Madison U.	305	89	0	0	0	0	89	0	0	0	0	0						

TABLE 63

Federally financed higher education R&D expenditures, financed by the National Aeronautics and Space Administration, ranked by NASA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NASA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Pomona C.	305	89	0	46	0	0	43	0	0	0	0	0
Louisiana State U., Health Sciences Center, New Orleans	307	88	0	0	88	0	0	0	0	0	0	0
U. Northern Iowa	307	88	0	0	0	0	88	0	0	0	0	0
Central Connecticut State U.	309	87	0	0	0	0	58	0	0	0	29	0
Jackson State U.	310	86	30	0	18	21	1	0	0	0	16	0
Thomas Jefferson U.	311	85	0	0	85	0	0	0	0	0	0	0
Tuskegee U.	312	80	0	0	2	0	0	0	0	0	78	0
U. North Florida	312	80	0	0	50	0	18	0	0	0	12	0
South Carolina State U.	314	78	i	0	i	0	i	0	i	0	i	0
SUNY, Geneseo	314	78	0	68	0	0	10	0	0	0	0	0
Bowling Green State U.	316	75	0	75	0	0	0	0	0	0	0	0
DePaul U.	316	75	0	0	0	0	0	0	0	0	0	75
U. Massachusetts, Dartmouth	316	75	0	1	0	0	74	0	0	0	0	0
U. Central Arkansas	319	74	0	0	6	0	45	0	23	0	0	0
Citadel Military C. South Carolina	320	72	0	0	0	15	43	0	0	0	14	0
U. Southern Maine	320	72	0	0	0	0	0	0	0	0	72	0
U.S. Naval Academy	320	72	0	0	0	0	72	0	0	0	0	0
Barnard C.	323	70	0	70	0	0	0	0	0	0	0	0
Eastern Michigan U.	323	70	0	0	0	9	61	0	0	0	0	0
Rush U.	323	70	0	0	70	0	0	0	0	0	0	0
SUNY, C. Brockport	323	70	0	0	0	0	70	0	0	0	0	0
Youngstown State U.	327	69	0	0	0	0	22	0	0	0	47	0
New Mexico Highlands U.	328	66	i	2	i	50	i	4	i	0	i	0
Middlebury C.	329	65	0	0	0	0	65	0	0	0	0	0
Florida Gulf Coast U.	330	64	0	0	0	0	0	0	0	0	64	0
Grand Valley State U.	330	64	8	37	15	1	1	0	0	0	0	2
Rockefeller U.	330	64	0	0	64	0	0	0	0	0	0	0
U. Hawaii, system office	330	64	0	64	0	0	0	0	0	0	0	0
Augustana U.	334	59	0	0	0	0	59	0	0	0	0	0
Loyola U., Chicago	335	57	0	0	0	0	57	0	0	0	0	0
Mount Holyoke C.	336	56	0	0	0	0	56	0	0	0	0	0
Texas A&M U.-Commerce	336	56	0	0	0	0	56	0	0	0	0	0
Clark U.	338	53	0	53	0	0	0	0	0	0	0	0
Occidental C.	338	53	i	0	i	0	i	0	i	0	i	0

TABLE 63
Federally financed higher education R&D expenditures, financed by the National Aeronautics and Space Administration, ranked by NASA R&D expenditures, by R&D field: FY 2022
(Dollars in thousands)

Institution	Rank	NASA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
CUNY, C. Staten Island	340	52	0	0	52	0	0	0	0	0	0	0
Fort Lewis C.	341	51	0	0	0	0	0	0	0	0	51	0
Indiana U.-Purdue U., Indianapolis	341	51	29	22	0	0	0	0	0	0	0	0
Fisk U.	343	50	0	0	0	0	50	0	0	0	0	0
Plymouth State U.	343	50	0	50	0	0	0	0	0	0	0	0
U. New Haven	343	50	0	0	32	0	0	0	0	0	18	0
Lafayette C.	346	49	0	0	0	0	49	0	0	0	0	0
Alaska Pacific U.	347	48	0	48	0	0	0	0	0	0	0	0
U. Nebraska, Medical Center	348	47	0	0	47	0	0	0	0	0	0	0
U. Central Oklahoma	349	43 i	1 i	0 i	25 i	0 i	9 i	0 i	0 i	0 i	8 i	0 i
CUNY, York C.	350	42	0	42	0	0	0	0	0	0	0	0
U. South Dakota	351	41	0	0	41	0	0	0	0	0	0	0
Utah Valley U.	351	41	0	0	0	0	41	0	0	0	0	0
Texas Christian U.	353	39	0	0	0	0	39	0	0	0	0	0
Williams C.	353	39 i	0 i	14 i	10 i	0 i	15 i	0 i	0 i	0 i	0 i	0 i
Central Michigan U.	355	38	0	38	0	0	0	0	0	0	0	0
Furman U.	355	38	0	18	19	0	1	0	0	0	0	0
Indiana State U.	355	38	0	0	0	0	2	0	0	0	36	0
Tennessee State U.	355	38	0	0	0	0	0	0	0	0	38	0
U.S. Air Force Academy	359	37	0	0	0	0	0	0	0	0	37	0
Oakland U.	360	36	0	0	0	0	14	0	0	0	22	0
California State U., Long Beach	361	34	0	5	0	0	0	0	22	0	7	0
Tougaloo C.	361	34 i	1 i	0 i	20 i	0 i	10 i	1 i	0 i	0 i	0 i	2 i
U. North Carolina, Asheville	361	34	0	0	23	0	9	0	0	0	0	2
West Chester U. Pennsylvania	364	33	0	0	0	0	33	0	0	0	0	0
Pittsburg State U.	365	32	0	0	0	0	0	0	0	0	32	0
U. Wisconsin-Green Bay	365	32 i	0 i	17 i	1 i	0 i	5 i	2 i	0 i	0 i	6 i	1 i
Appalachian State U.	367	31	0	0	0	0	31	0	0	0	0	0
Purdue U., Northwest	367	31	0	0	0	0	10	0	0	0	21	0
Trinity U.	369	30	27	0	0	0	3	0	0	0	0	0
U. Houston-Clear Lake	369	30	0	0	0	0	25	0	0	0	5	0
U. Oklahoma, Tulsa	369	30	0	0	0	0	0	0	0	0	30	0
Abilene Christian U.	372	29	0	0	0	0	0	0	0	0	29	0
Macalester C.	372	29	0	0	0	0	29	0	0	0	0	0

TABLE 63
Federally financed higher education R&D expenditures, financed by the National Aeronautics and Space Administration, ranked by NASA R&D expenditures, by R&D field: FY 2022
(Dollars in thousands)

Institution	Rank	NASA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Towson U.	372	29	0	0	0	0	29	0	0	0	0	0
U. of the Pacific	372	29	0	0	0	0	29	0	0	0	0	0
Union C., Schenectady	372	29	0	0	0	0	29	0	0	0	0	0
Virginia Military Institute	372	29	0	0	0	0	0	0	0	0	29	0
Carleton C.	378	28	0	0	0	0	28	0	0	0	0	0
Ithaca C.	378	28	0	0	0	0	28	0	0	0	0	0
Southeastern Louisiana U.	378	28	0	0	0	0	22	0	0	0	6	0
Georgia Southern U.	381	26	0	0	0	0	26	0	0	0	0	0
St. Edward's U.	381	26	0	0	0	0	26	0	0	0	0	0
Mercer U.	383	25	0	0	0	0	0	0	0	0	25	0
U. Alaska, Southeast	383	25	0	0	0	0	25	0	0	0	0	0
U. North Carolina, Greensboro	383	25	0	0	25	0	0	0	0	0	0	0
California State U., East Bay	386	24	0	0	0	0	24	0	0	0	0	0
Hamilton C.	386	24	0	0	0	0	0	24	0	0	0	0
Central State U.	388	23	0	14	0	0	0	0	0	0	9	0
Spelman C.	388	23	0	0	23	0	0	0	0	0	0	0
Sul Ross State U.	388	23	0	16	6	0	0	1	0	0	0	0
Reed C.	391	22	1	0	12	0	8	1	0	0	0	0
U. Nebraska, Kearney	391	22	0	0	1	0	21	0	0	0	0	0
Kennesaw State U.	393	21	0	0	0	0	0	0	0	0	0	21
U. Louisiana, Monroe	393	21	0	21	0	0	0	0	0	0	0	0
U. Missouri, Saint Louis	393	21	0	0	0	0	21	0	0	0	0	0
Ball State U.	396	20	0	0	20	0	0	0	0	0	0	0
Gallaudet U.	396	20	0	0	0	0	20	0	0	0	0	0
Colby C.	398	19	0	0	0	0	19	0	0	0	0	0
U. Puerto Rico, Cayey	398	19	0	0	0	0	19	0	0	0	0	0
Air Force Institute of Technology	400	18	0	18	0	0	0	0	0	0	0	0
Hobart and William Smith Colleges	400	18	0	0	0	0	18	0	0	0	0	0
Minnesota State U., Mankato	400	18	0	0	0	0	18	0	0	0	0	0
Purdue U., Fort Wayne	400	18	0	0	0	0	0	0	0	0	1	17
Suffolk U.	400	18	0	0	0	0	0	0	0	0	18	0
California State U., Maritime Academy	405	17	0	17	0	0	0	0	0	0	0	0
East Tennessee State U.	405	17	0	0	0	0	17	0	0	0	0	0
Oregon Institute of Technology	405	17	0	12	5	0	0	0	0	0	0	0

TABLE 63

Federally financed higher education R&D expenditures, financed by the National Aeronautics and Space Administration, ranked by NASA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NASA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Johnson C. Smith U.	441	2	0	0	0	2	0	0	0	0	0	0
Alcorn State U.	443	1 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	1 i
Milwaukee School of Engineering	443	1	0	0	0	0	0	0	0	0	1	0
North Carolina Central U.	443	1	0	0	0	0	0	0	0	0	1	0
SUNY, Binghamton U.	443	1	0	0	0	0	0	0	0	0	1	0
U. Wisconsin-Superior	443	1	0	0	1	0	0	0	0	0	0	0

i = imputed.

NASA = National Aeronautics and Space Administration; nec = not elsewhere classified; S&E = science and engineering.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$414,355 thousand in R&D expenditures financed by NASA in FY 2022.^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.^c The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.^d The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.**Note(s):**Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).**Source(s):**

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
All institutions	-	6,035,698	760,906	793,092	851,067	225,434	1,164,641	81,415	161,171	136,900	1,523,416	337,656
Texas A&M U., College Station and Health Science Center	1	137,220	10,615	76,779	6,577	3,738	9,563	0	1,025	130	27,456	1,337
U. Washington, Seattle	2	135,492	8,027	49,303	8,443	3,372	15,869	837	2,797	0	33,126	13,718
Woods Hole Oceanographic Institution	3	130,016	0	84,976	0	0	0	0	0	0	45,040	0
U. California, San Diego	4	129,565	21,767	39,126	5,562	3,309	10,047	3,211	1,114	5,298	39,621	510
U. Illinois, Urbana-Champaign	5	117,743	36,469	3,229	10,020	2,146	20,456	1,915	1,188	65	37,559	4,696
U. Texas, Austin	6	110,937	42,972	9,327	8,967	3,085	9,045	869	1,528	0	30,614	4,530
U. Wisconsin-Madison	7	109,834	14,854	12,409	23,254	3,553	28,921	1,044	1,724	2,395	15,559	6,121
Cornell U.	8	107,958	11,457	3,226	17,403	2,490	42,743	727	2,067	0	26,659	1,186
U. Colorado Boulder	9	106,602	12,970	25,533	5,036	1,796	24,044	597	4,029	400	19,953	12,244
Massachusetts Institute of Technology	10	106,311	20,205	7,923	8,376	3,771	36,462	296	2,096	1,162	24,342	1,678
U. California, Berkeley	11	100,084	832	2,760	9,654	5,317	24,082	1,429	1,472	25,834	25,693	3,011
U. Michigan, Ann Arbor	12	99,432	4,483	2,392	12,578	4,814	14,854	1,715	13,163	438	39,971	5,024
Columbia U. in the City of New York	13	99,333	11,806	38,569	8,101	2,117	18,439	756	1,526	0	13,159	4,860
California Institute of Technology	14	94,888	2,856	7,669	3,104	683	74,291	0	0	0	5,440	845
Purdue U., West Lafayette	15	87,682	20,539	2,292	6,810	327	9,939	359	1,402	26	42,887	3,101
Stanford U.	16	79,477	6,009	4,604	9,349	2,902	15,848	913	2,391	0	17,087	20,374
Arizona State U.	17	77,812	5,421	4,911	12,724	699	4,640	403	6,074	14,186	26,003	2,751
Pennsylvania State U., University Park and Hershey Medical Center	18	75,302	8,599	9,053	8,738	3,175	16,294	1,590	2,611	0	19,361	5,881
U. Chicago	19	74,035	17,607	6,241	3,576	3,176	24,418	1,747	1,809	0	11,889	3,572
U. California, Los Angeles	20	72,776	5,039	8,297	6,607	3,874	12,236	1,245	2,504	8,563	15,751	8,660
U. Minnesota, Twin Cities	21	72,227	5,249	6,587	16,052	3,647	8,460	969	2,999	67	27,098	1,099
Princeton U.	22	70,247	12,244	8,692	4,928	3,518	23,579	706	1,493	0	14,786	301
Carnegie Mellon U.	23	69,614	42,155	102	1,051	2,258	4,768	1,766	600	3,853	13,032	29
Michigan State U.	24	63,157	3,071	1,357	17,711	4,123	22,096	756	1,549	823	6,705	4,966
Ohio State U.	25	61,621	7,882	3,349	10,715	2,361	12,429	1,495	3,620	2,720	15,808	1,242
Georgia Institute of Technology	26	60,585	8,675	2,836	3,054	3,227	5,065	133	1,816	0	33,309	2,470
U. Maryland ^a	27	59,499	10,321	4,841	7,053	2,378	14,311	181	2,524	334	14,362	3,194
Florida State U.	28	58,432	2,093	4,176	4,494	1,289	29,847	257	744	0	13,236	2,296
U. Florida	29	58,242	5,790	7,465	8,921	914	8,994	113	1,310	0	19,542	5,193
Northwestern U.	30	57,278	3,676	595	3,771	1,290	15,119	430	2,350	10,648	18,878	521
North Carolina State U.	31	56,206	8,516	2,265	6,938	4,821	3,766	571	295	2,233	23,842	2,959
U. California, Santa Barbara	32	54,025	3,974	9,653	1,024	810	18,577	634	1,306	0	17,563	484

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Pennsylvania	33	53,123	4,309	260	4,553	1,686	17,040	1,551	1,728	121	12,783	9,092
Northeastern U.	34	52,153	10,795	2,320	2,152	587	4,720	579	1,848	0	26,098	3,054
Oregon State U.	35	52,117	1,229	22,754	9,716	673	3,199	321	577	2,050	7,912	3,686
U. Arizona	36	51,132	2,952	6,221	12,769	1,902	11,100	107	3,289	1,603	9,647	1,542
Virginia Polytechnic Institute and State U.	37	51,087	5,067	1,429	10,396	1,770	7,052	291	870	0	23,330	882
Harvard U.	38	49,923	4,031	2,912	8,827	2,261	14,347	420	2,201	14	12,616	2,294
U. California, Irvine	39	49,528	7,264	3,604	6,850	2,539	9,412	1,492	1,123	0	14,527	2,717
U. Southern California	40	46,412	11,164	8,754	3,247	1,061	3,698	279	1,024	0	12,873	4,312
U. Alaska, Fairbanks	41	44,315	0	29,096	4,006	168	2,039	0	666	6,526	1,094	720
U. Utah	42	43,706	13,982	29	5,576	3,508	8,052	743	807	0	9,988	1,021
New York U.	43	43,497	3,831	77	5,219	6,631	6,306	3,407	3,764	0	11,255	3,007
U. California, Davis	44	43,464	3,292	3,131	16,885	2,920	4,821	383	1,455	6	8,862	1,709
U. North Carolina, Chapel Hill	45	42,302	10,736	4,230	5,070	3,719	8,479	489	2,279	0	1,712	5,588
Rutgers, State U. New Jersey, New Brunswick	46	42,275	4,170	4,923	11,041	4,020	6,093	394	135	0	8,821	2,678
U. Connecticut	47	42,254	1,533	2,792	24,596	1,372	2,740	923	417	39	6,661	1,181
SUNY, Stony Brook U.	48	41,201	5,781	3,519	2,882	1,878	16,903	487	435	1,963	6,873	480
U. Virginia, Charlottesville	49	40,851	7,942	3,587	5,428	1,657	5,584	344	1,518	1,241	10,607	2,943
Indiana U., Bloomington	50	39,770	15,620	1,253	5,260	1,086	7,599	1,403	1,666	154	2,462	3,267
U. Delaware	51	39,581	1,548	8,476	2,926	1,172	9,858	476	1,385	1,077	10,686	1,977
U. Georgia	52	39,153	1,036	4,459	23,688	763	1,222	1,436	967	38	3,506	2,038
Johns Hopkins U. ^b	53	38,498	3,260	2,609	4,011	1,474	10,828	1,023	268	0	14,310	715
Duke U.	54	37,887	4,944	1,192	6,921	3,382	6,026	237	2,187	10	12,247	741
U. Massachusetts, Amherst	55	36,895	7,658	1,143	4,433	1,402	5,786	1,048	1,988	0	10,705	2,732
Rice U.	56	36,776	3,341	961	3,027	2,161	7,220	594	700	415	16,487	1,870
Boston U.	57	35,437	3,719	1,712	2,687	783	7,284	1,121	521	1,352	13,805	2,453
Yale U.	58	34,189	4,082	1,851	10,003	1,761	4,994	667	1,303	0	8,128	1,400
Iowa State U.	59	33,906	1,904	1,463	7,913	864	3,471	327	185	0	15,832	1,947
Colorado State U., Fort Collins	60	33,534	1,356	7,902	8,498	1,425	4,275	774	439	170	6,646	2,049
U. Pittsburgh, Pittsburgh	61	33,465	2,787	997	6,279	1,647	6,272	462	614	2,918	9,453	2,036
U. Notre Dame	62	32,276	2,740	0	2,140	2,533	11,837	519	568	451	10,735	753
U. Hawaii, Manoa	63	30,193	2,321	18,886	2,078	366	3,849	4	490	165	1,973	61
U. Nebraska, Lincoln	64	30,032	3,296	528	9,360	970	9,455	158	420	15	3,721	2,109
U. California, Riverside	65	28,973	4,161	1,137	7,944	1,035	5,183	411	511	0	8,332	259

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Brown U.	66	28,913	3,039	2,871	5,274	6,576	5,007	0	306	1,315	4,497	28
U. New Mexico	67	28,587	1,819	4,458	4,736	428	2,833	14	1,697	70	10,561	1,971
Vanderbilt U. and Vanderbilt U. Medical Center	68	27,889	4,755	468	3,743	752	2,633	1,736	390	0	6,362	7,050
SUNY, U. Buffalo	69	26,828	7,408	1,916	2,079	514	4,308	365	73	0	9,249	916
U. Central Florida	70	25,742	3,162	0	990	629	3,453	79	458	16	14,763	2,192
U. Kansas	71	25,253	1,880	3,649	9,196	441	4,861	371	690	0	3,418	747
U. Illinois, Chicago	72	23,792	4,498	12	2,322	2,122	5,862	143	82	0	6,639	2,112
Florida International U.	73	23,519	6,819	3,013	2,581	422	2,504	391	276	560	6,903	50
U. Tennessee, Knoxville	74	22,317	3,022	516	4,120	677	2,720	556	227	774	8,812	893
Clemson U.	75	21,701	2,458	0	1,273	860	2,186	411	917	0	11,680	1,916
Washington U., Saint Louis	76	20,371	2,616	1,204	3,911	1,291	3,577	84	852	1,100	5,614	122
Dartmouth C. and Dartmouth Hitchcock Medical Center	77	20,306	3,269	1,174	1,759	730	3,067	1,580	1,014	741	6,704	268
U. Rochester	78	20,026	1,848	1,774	2,117	174	5,929	398	276	625	4,842	2,043
U. Wyoming	79	20,019	766	7,105	8,179	508	1,171	55	779	0	1,360	96
U. Rhode Island	80	19,687	613	9,322	1,924	0	1,055	0	13	3,639	2,726	395
U. Oklahoma, Norman and Health Science Center	81	19,652	3,334	4,741	3,135	429	2,690	70	871	0	3,828	554
U. Houston	82	19,494	1,235	1,018	1,407	2,501	2,993	1,208	852	0	7,648	632
U. Kentucky	83	19,130	2,603	310	4,616	665	3,383	29	321	1	6,777	425
U. Alabama, Tuscaloosa	84	18,453	1,465	283	4,361	276	1,551	0	826	0	8,209	1,482
U. Oregon	85	17,940	1,056	2,343	2,316	1,185	5,234	303	812	0	521	4,170
U. Arkansas, Fayetteville	86	17,662	2,537	1,129	4,614	29	2,508	136	442	0	6,009	258
U. California, Santa Cruz	87	17,315	1,878	5,244	1,881	267	3,732	97	587	0	3,493	136
Kansas State U.	88	17,249	709	421	6,500	241	3,092	66	467	49	4,006	1,698
U. Nevada, Reno	89	16,817	2,777	2,580	4,422	214	2,342	517	189	0	3,733	43
U. New Hampshire	90	16,783	530	6,164	2,894	423	1,103	13	285	0	4,530	841
Washington State U.	91	16,555	2,481	1,552	3,824	112	1,946	164	443	407	4,365	1,261
Louisiana State U., Baton Rouge	92	16,481	915	2,307	2,642	1,054	4,881	61	416	91	3,605	509
U. Missouri, Columbia	93	16,283	1,186	553	6,177	667	1,087	934	255	844	2,423	2,157
U. South Carolina, Columbia	94	15,959	1,818	1,311	5,318	624	771	0	524	0	2,808	2,785
Drexel U.	95	15,944	3,175	0	1,478	630	885	58	1,027	94	6,670	1,927
U. South Florida ^c	96	15,319	1,666	2,957	1,368	647	2,402	195	681	157	4,916	330
George Mason U.	97	15,240	3,957	1,268	913	646	1,318	547	549	35	4,318	1,689
Colorado School of Mines	98	15,207	1,514	2,145	265	330	4,323	90	125	0	5,838	577

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Utah State U.	99	15,007	1,843	834	3,537	203	874	71	27	0	6,749	869
U. Texas, Dallas	100	14,536	3,430	316	344	647	2,049	185	511	0	6,445	609
U. Texas, El Paso	101	14,445	4,458	1,476	2,316	285	1,001	408	401	0	3,572	528
U. Maine	102	14,226	523	3,198	3,794	26	984	0	0	3,596	1,430	675
Montana State U., Bozeman	103	13,996	707	1,642	2,935	713	3,489	0	65	949	3,181	315
Auburn U., Auburn	104	13,750	502	919	3,417	422	2,674	0	237	57	5,184	338
U. Idaho	105	13,493	2,260	877	7,087	65	24	0	421	0	1,363	1,396
Tufts U.	106	13,418	430	238	2,109	1,652	2,342	246	557	0	5,284	560
Emory U.	107	13,359	1,170	96	3,270	790	6,823	0	565	0	607	38
George Washington U.	108	13,198	1,692	190	2,030	409	839	313	2,262	646	4,098	719
U. Cincinnati	109	13,046	355	185	1,597	424	2,811	61	163	0	6,576	874
Lehigh U.	110	13,029	1,167	640	1,234	247	1,316	430	0	0	7,403	592
U. Texas, Arlington	111	12,699	2,541	154	1,359	449	4,582	2	20	0	3,087	505
New Mexico State U.	112	12,557	3,013	423	2,084	43	2,383	50	101	1,111	3,216	133
Oklahoma State U., Stillwater	113	12,305	357	153	3,305	502	758	65	150	3,144	3,100	771
West Virginia U.	114	12,121	863	238	1,327	206	3,875	33	232	425	4,139	783
U. Iowa	115	12,113	1,611	1,027	1,763	463	2,730	167	418	21	2,706	1,207
Worcester Polytechnic Institute	116	11,976	3,981	0	477	428	1,076	0	328	0	4,658	1,028
Rensselaer Polytechnic Institute	117	11,939	1,311	666	1,021	497	1,072	194	401	0	6,467	310
U. Montana, Missoula	118	11,717	155	1,965	7,669	476	803	0	649	0	0	0
Boise State U.	119	11,680	1,331	1,125	3,353	1,113	604	0	61	230	2,620	1,243
New Jersey Institute of Technology	120	11,482	2,397	0	508	1,033	3,569	0	28	5	3,743	199
U. Maryland, Baltimore County	121	11,427	3,730	1,057	1,568	266	1,605	0	135	1,109	1,242	715
Temple U.	122	11,239	2,731	346	1,504	667	2,780	1,503	406	0	683	619
Georgia State U.	123	10,967	1,187	771	1,261	437	4,000	155	779	0	0	2,377
Case Western Reserve U.	124	10,859	1,873	129	1,263	360	1,867	1	133	0	4,440	793
CUNY, City C.	125	10,832	278	532	649	115	5,362	0	0	0	3,805	91
U. North Carolina, Charlotte	126	10,666	4,647	305	661	463	1,139	21	594	0	1,935	901
Syracuse U.	127	10,467	937	704	841	208	3,781	37	844	15	3,082	18
U. Vermont	128	10,399	607	1,011	4,058	95	1,345	0	598	1,527	1,007	151
Rochester Institute of Technology	129	10,243	3,190	0	307	1,066	2,375	0	196	0	1,847	1,262
Mississippi State U.	130	10,093	889	134	1,418	53	1,013	0	121	0	5,705	760
U. Miami	131	9,985	458	6,228	897	463	1,143	286	7	0	469	34

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Texas Tech U.	132	9,951	851	1,034	1,317	504	893	257	147	0	4,137	811
Brigham Young U., Provo	133	9,814	276	292	929	541	2,326	42	139	0	5,269	0
North Carolina A&T State U.	134	9,780	489	0	1,600	701	1,255	34	0	0	4,220	1,481
U. Puerto Rico, Rio Piedras	135	9,590	254	1,217	873	0	1,638	0	62	1,525	3,900	121
U. California, San Francisco	136	9,500	0	0	5,986	0	3,514	0	0	0	0	0
U. Wisconsin-Milwaukee	137	9,215	0	793	403	0	6,473	68	345	0	906	227
San Diego State U.	138	9,123	329	360	1,726	1,439	1,712	486	835	9	1,174	1,053
U. California, Merced	139	9,044	752	1,076	1,608	672	1,472	0	176	997	2,034	257
Northern Arizona U.	140	9,016	1,135	1,847	3,494	0	728	0	41	53	739	979
North Dakota State U.	141	8,822	595	331	2,523	0	1,512	167	30	2,143	1,415	106
Wayne State U.	142	8,801	1,169	132	752	193	3,796	144	489	4	1,951	171
U. of the Virgin Islands	143	8,640	117	5,575	837	679	1,130	0	302	0	0	0
U. Texas, San Antonio	144	8,444	3,130	411	252	392	1,431	37	624	51	1,879	237
Michigan Technological U.	145	8,279	772	3,695	189	124	966	118	364	405	1,486	160
New Mexico Institute of Mining and Technology	146	8,149	984	5,687	175	38	781	0	0	0	392	92
William & Mary	147	7,968	1,377	3,055	811	96	1,878	160	39	0	0	552
SUNY, Binghamton U.	148	7,911	1,394	215	503	77	2,036	109	306	0	2,914	357
U. Louisville	149	7,884	0	113	671	63	672	359	22	0	5,979	5
Boston C.	150	7,788	633	568	379	911	2,486	1,179	255	0	0	1,377
South Dakota School of Mines and Technology	151	7,732	0	0	0	4	982	0	0	0	6,746	0
U. Massachusetts, Lowell	152	7,699	1,082	849	161	72	564	524	113	0	4,038	296
U. Alabama, Huntsville	153	7,672	538	1,192	211	5	5,123	0	0	0	597	6
Virginia Commonwealth U.	154	7,331	979	160	1,138	615	801	147	234	0	2,789	468
Portland State U.	155	7,098	1,276	370	1,765	734	278	68	298	249	868	1,192
SUNY, U. Albany	156	6,876	961	2,699	1,028	212	438	8	432	0	403	695
U. North Texas, Denton	157	6,593	1,476	62	1,306	0	1,532	161	272	0	1,675	109
Tulane U.	158	6,497	647	1,533	202	369	2,012	0	287	0	1,402	45
Southern Methodist U.	159	6,419	101	306	0	999	1,892	0	257	407	1,428	1,029
Stevens Institute of Technology	160	6,403	1,774	0	0	20	438	0	0	0	3,735	436
U. Alabama, Birmingham	161	6,387	755	0	1,759	257	2,351	0	0	0	380	885
Indiana U.-Purdue U., Indianapolis	162	6,373	2,106	516	518	130	736	13	358	297	1,329	370
Howard U.	163	6,299	415	0	732	0	275	378	157	0	4,342	0
Missouri U. of Science and Technology	164	6,193	708	0	5	173	1,302	0	99	0	3,888	18

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Brandeis U.	165	6,030	838	0	503	282	4,010	22	186	0	0	189
Old Dominion U.	166	5,967	410	939	1,289	209	695	146	84	0	1,765	430
Jackson State U.	167	5,898	301	0	108	0	4,663	151	4	0	308	363
U. Louisiana, Lafayette	168	5,882	1,780	660	1,297	158	129	0	10	0	1,546	302
Georgetown U.	169	5,690	1,079	0	1,097	0	1,910	395	1,065	0	0	144
East Carolina U.	170	5,386	301	846	1,137	426	705	4	354	0	1,019	594
Texas State U.	171	5,296	720	41	417	1,082	1,200	0	155	23	560	1,098
U. Nevada, Las Vegas	172	5,207	438	275	1,174	37	666	0	81	0	1,926	610
U. Massachusetts, Boston	173	5,160	348	339	813	0	1,467	423	787	0	441	542
U. Guam	174	5,107	0	4,381	0	57	0	0	0	0	0	669
Kent State U.	175	5,055	442	216	994	213	1,535	144	419	0	274	818
Illinois Institute of Technology	176	5,027	2,339	110	16	379	332	0	91	58	1,702	0
U. Memphis	177	5,025	2,971	144	290	122	408	4	53	0	902	131
Rutgers, State U. New Jersey, Newark	178	5,008	272	990	982	0	1,943	45	236	0	0	540
San Francisco State U.	179	5,001	582	867	1,295	205	44	0	340	204	1,059	405
U. Texas Rio Grande Valley	180	4,780	769	128	0	714	670	0	78	0	1,882	539
California State U., Northridge	181	4,631	105	787	1,055	236	1,828	122	12	0	208	278
Western Washington U.	182	4,583	75	1,349	236	217	1,331	63	108	334	227	643
U. Akron	183	4,580	43	132	364	91	2,366	0	4	0	1,573	7
California State U., Los Angeles	184	4,479	207	51	717	0	2,456	8	36	0	808	196
Florida A&M U.	185	4,439	21	1,226	711	0	133	30	0	62	1,789	467
Baylor C. of Medicine	186	4,400	0	0	4,400	0	0	0	0	0	0	0
California Polytechnic State U., San Luis Obispo	187	4,371	97	246	512	1,205	920	0	0	0	972	419
Western Michigan U. and Homer Stryker M.D. School of Medicine	188	4,331	142	113	447	9	449	0	25	76	590	2,480
Florida Atlantic U.	189	4,214	1,006	76	805	309	267	0	0	0	1,652	99
U. South Alabama	190	4,213	631	921	520	144	202	0	100	0	1,089	606
U. North Carolina, Greensboro	191	4,142	92	90	1,362	333	650	19	80	0	0	1,516
U. of the District of Columbia	192	4,111	255	0	0	502	0	0	0	0	2,142	1,212
U. Southern Mississippi	193	4,094	5	1,243	892	0	1,926	0	7	0	19	2
U. Colorado Anschutz Medical Campus ^d	194	4,081	0	0	3,626	0	129	0	0	0	228	98
Morgan State U.	195	4,075	197	18	621	185	360	0	4	0	729	1,961
Marquette U.	196	4,047	694	0	613	269	906	0	0	0	1,390	175
U. Puerto Rico, Mayaguez	197	3,991	101	132	136	5	528	0	0	0	2,892	197

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. North Dakota	198	3,911	191	335	1,076	0	1,058	0	116	5	622	508
U. Colorado Denver ^d	199	3,900	177	546	572	447	829	0	46	0	798	485
Clarkson U.	200	3,876	296	0	55	138	643	0	119	0	2,478	147
U. Mississippi	201	3,856	104	153	834	268	1,695	0	101	0	566	135
Baylor U.	202	3,802	343	260	712	543	1,208	0	0	0	654	82
San Jose State U.	203	3,763	0	961	689	190	1,037	103	17	0	707	59
Cold Spring Harbor Laboratory	204	3,740	0	0	3,740	0	0	0	0	0	0	0
U. Nebraska, central administration	205	3,642	410	0	974	0	0	0	0	0	2,258	0
American U.	206	3,617	50	375	57	229	258	0	252	0	0	2,396
Teachers C., Columbia U.	207	3,587	1,700	0	81	0	0	0	1,806	0	0	0
Rowan U.	208	3,520	214	0	257	50	1,023	0	0	134	1,842	0
Delaware State U.	209	3,443	29	120	2,066	31	403	0	155	0	137	502
Idaho State U.	210	3,438	355	903	1,798	5	53	105	42	0	107	70
Chicago State U.	211	3,430	78	0	2,223	0	1,129	0	0	0	0	0
U. Maryland Center for Environmental Science	212	3,422	0	1,523	973	0	74	0	169	2	0	681
Hampton U.	213	3,402	720	1,056	472	0	653	0	0	0	493	8
Oakland U.	214	3,400	583	0	452	77	963	156	0	0	1,169	0
Miami U.	215	3,372	0	517	1,446	141	440	0	0	0	147	681
South Dakota State U.	216	3,367	0	0	2,152	90	231	0	242	0	551	101
California State U., San Bernardino	217	3,345	459	61	5	283	1,773	276	14	0	0	474
Tuskegee U.	218	3,313	645	0	145	819	1,490	2	0	0	212	0
U. Denver	219	3,284	36	43	617	139	1,184	121	122	0	271	751
Scripps Research Institute	220	3,172	0	0	3,172	0	0	0	0	0	0	0
Morehouse C.	221	3,170	317	0	393	0	933	59	0	1,468	0	0
U. South Dakota	222	3,152	138	0	805	0	1,529	0	0	0	680	0
Northern Illinois U.	223	3,106	239	720	312	31	1,531	94	18	0	87	74
U. Colorado Colorado Springs	224	3,082	1,133	15	129	0	212	38	0	0	816	739
Villanova U.	225	3,049	5	132	565	56	626	290	0	0	611	764
Loyola U., Chicago	226	3,028	128	0	1,193	32	920	392	24	0	0	339
U. Alaska, Anchorage	227	3,018	0	505	755	0	65	0	335	906	147	305
Embry-Riddle Aeronautical U.	228	3,016	499	0	0	106	953	0	0	0	908	550
Wake Forest U.	229	3,013	164	0	1,777	55	631	50	34	0	254	48
Ohio U.	230	2,983	0	87	476	26	1,288	95	224	0	569	218

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Texas A&M U.-Corpus Christi	231	2,959	301	1,149	639	0	50	0	207	0	338	275
California State U., Fresno	232	2,887	104	0	121	1,144	1,116	0	0	0	362	40
Montclair State U.	233	2,886	445	471	291	330	211	36	50	0	32	1,020
Tennessee Technological U.	234	2,884	1,870	0	0	0	284	0	0	0	730	0
Bowling Green State U.	235	2,867	1	777	88	52	701	0	0	0	42	1,206
North Carolina Central U.	236	2,856	0	87	37	0	2,161	0	0	0	334	237
U. Washington, Bothell	236	2,856	384	330	174	22	1,152	0	0	0	81	713
U. Massachusetts, Dartmouth	238	2,726	398	737	34	336	5	0	18	0	518	680
California State Polytechnic U., Pomona	239	2,714	269	1	697	80	1,094	20	22	0	126	405
U. Tennessee, Chattanooga	240	2,674	384	0	610	172	0	0	21	178	1,126	183
Saint Louis U.	241	2,652	294	75	1,190	37	384	0	246	0	284	142
U. Nebraska, Omaha	242	2,647	1,550	15	403	361	99	88	0	0	0	131
SUNY, Polytechnic Institute	243	2,588	0	0	278	0	0	0	0	0	2,310	0
U. Toledo	244	2,562	0	271	187	29	868	36	0	0	1,054	117
CUNY, Advanced Science Research Center	245	2,560	0	25	525	0	1,388	0	0	0	622	0
CUNY, Queens C.	246	2,498	313	262	651	172	695	0	260	0	0	145
Southern U. and A&M C., Baton Rouge	247	2,492	329	0	388	87	21	0	0	0	1,622	45
California State U., Fullerton	248	2,424	2	64	554	191	1,108	17	9	0	478	1
Norfolk State U.	249	2,413	0	0	93	35	614	0	0	0	1,389	282
U. Minnesota, Duluth	250	2,292	5	231	1,422	74	315	0	188	0	57	0
California State U., Long Beach	251	2,200	29	297	310	256	314	522	90	0	175	207
Fisk U.	252	2,199	410	0	895	158	722	0	0	0	0	14
Illinois State U.	253	2,191	100	362	433	145	1,151	0	0	0	0	0
California State U., Monterey Bay	254	2,163	949	553	76	154	431	0	0	0	0	0
U. North Carolina, Wilmington	255	2,159	124	1,329	505	51	0	0	2	0	107	41
Louisiana Tech U.	256	2,152	0	0	72	252	220	126	29	0	1,453	0
California State U., San Marcos	257	2,150	433	0	183	9	315	415	0	753	0	42
Barnard C.	258	2,140	65	0	530	0	964	375	53	0	0	153
Amherst C.	259	2,113	61	120	799	207	763	163	0	0	0	0
Clark Atlanta U.	260	2,069	231	0	235	230	1,342	0	0	0	31	0
Desert Research Institute	260	2,069	0	2,069	0	0	0	0	0	0	0	0
Wichita State U.	262	1,994	0	0	341	87	326	0	0	0	1,176	64
Prairie View A&M U.	263	1,981	53	0	34	0	51	0	79	0	1,700	64

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
James Madison U.	264	1,960	16	79	585	71	931	0	0	0	161	117
Occidental C.	265	1,908	i 313 i	165 i	312 i	108 i	394 i	393 i	152 i	0 i	0 i	71 i
Wesleyan U.	266	1,885	0	76	10	161	206	756	30	0	0	646
California State U., East Bay	267	1,880	0	249	188	10	308	0	43	0	0	1,082
U. Tulsa	268	1,875	1,046	2	204	0	24	0	100	0	486	13
CUNY, Graduate Center	269	1,865	6	3	0	88	0	151	470	389	0	758
Central Michigan U.	270	1,823	0	407	892	0	356	65	69	0	34	0
Harvey Mudd C.	271	1,801	573	0	495	168	283	0	0	45	237	0
Hofstra U.	272	1,799	0	196	367	188	538	0	0	0	352	158
South Carolina State U.	273	1,770	i 117 i	0 i	0 i	0 i	706 i	0 i	0 i	0 i	329 i	618 i
Virginia State U.	274	1,735	0	0	44	206	38	3	0	0	80	1,364
U. Texas Southwestern Medical Center	275	1,722	0	0	1,722	0	0	0	0	0	0	0
DePaul U.	276	1,688	613	63	216	92	0	0	50	0	76	578
Pace U.	277	1,672	586	0	17	0	7	0	0	0	0	1,062
CUNY, C. Staten Island	278	1,662	0	0	381	157	614	469	0	0	0	41
Southern Illinois U., Carbondale	279	1,655	0	560	225	4	506	0	49	8	303	0
Arkansas State U., Jonesboro	280	1,632	47	0	761	0	517	0	0	276	31	0
Carleton C.	281	1,618	80	1,112	87	54	217	0	68	0	0	0
Cleveland State U.	282	1,608	0	0	143	0	6	0	0	0	898	561
Appalachian State U.	283	1,604	260	110	506	6	403	28	249	0	42	0
U. Missouri, Kansas City	284	1,562	31	208	0	0	230	0	0	0	887	206
Dakota State U.	285	1,542	1,542	0	0	0	0	0	0	0	0	0
Bucknell U.	286	1,540	10	0	165	117	723	0	0	0	525	0
U. Texas Health Science Center, Houston	287	1,532	0	0	1,532	0	0	0	0	0	0	0
Texas A&M U.-Kingsville	288	1,516	0	0	0	0	0	0	0	0	1,516	0
CUNY, Hunter C.	289	1,488	200	0	0	24	532	127	407	0	6	192
CUNY, Lehman C.	290	1,483	0	0	0	213	721	0	193	0	0	356
California State U., Chico	291	1,474	0	582	76	15	153	0	0	0	400	248
Catholic U. of America	292	1,428	0	0	62	0	818	203	0	8	337	0
Middle Tennessee State U.	293	1,409	162	0	244	357	544	102	0	0	0	0
U. Washington, Tacoma	294	1,394	147	802	9	137	0	0	92	0	0	207
Fort Lewis C.	295	1,377	0	3	39	0	701	0	0	0	484	150
Hope C.	296	1,370	0	0	202	0	856	0	0	0	312	0

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Rockefeller U.	296	1,370	0	0	1,070	121	179	0	0	0	0	0
California State U., Sacramento	298	1,353	166	23	14	43	150	112	73	5	203	564
Alabama State U.	299	1,349	0	0	1,349	0	0	0	0	0	0	0
U. Puerto Rico, Medical Sciences Campus	300	1,326	0	0	1,326	0	0	0	0	0	0	0
Wellesley C.	301	1,310	437	157	382	169	0	0	160	0	5	0
California State U., Dominguez Hills	302	1,308	346	0	254	18	0	29	16	0	0	645
Spelman C.	302	1,308	10	0	538	7	385	322	46	0	0	0
Smith C.	304	1,307	234	0	333	244	177	1	0	15	303	0
Clark U.	305	1,302	11	352	291	0	550	0	98	0	0	0
Icahn School of Medicine at Mount Sinai	306	1,299	0	0	1,299	0	0	0	0	0	0	0
SUNY, C. of Environmental Science and Forestry	307	1,288	0	375	278	0	150	0	68	0	376	41
U. Massachusetts, Medical School	308	1,286	0	0	1,286	0	0	0	0	0	0	0
Bates C.	309	1,266	33	39	1,041	0	91	19	43	0	0	0
Florida Institute of Technology	310	1,260	398	398	123	76	48	0	0	0	217	0
Santa Clara U.	311	1,250	0	0	297	37	370	0	8	0	396	142
Texas Southern U.	312	1,247	99	173	0	94	874	0	0	0	7	0
Winston-Salem State U.	312	1,247	239	0	167	0	411	263	0	138	0	29
California State U., Channel Islands	314	1,227	0	0	0	460	73	0	0	676	1	17
Kennesaw State U.	315	1,217	166	0	32	149	365	0	161	0	79	265
C. New Jersey	316	1,216	212	0	175	21	764	0	3	0	39	2
CUNY, New York City C. of Technology	317	1,199	144	0	126	183	329	0	0	0	33	384
U. Dayton	318	1,190	0	29	169	0	197	216	0	0	508	71
U. Michigan, Dearborn	318	1,190	0	0	26	80	22	0	0	0	1,062	0
Colgate U.	320	1,157	79	288	61	113	595	0	21	0	0	0
U. San Diego	321	1,154	0	66	38	114	384	0	0	0	325	227
CUNY, Brooklyn C.	322	1,151	251	2	127	0	353	243	0	0	0	175
Rutgers, State U. New Jersey, Camden	323	1,123	1,039	0	0	0	0	0	84	0	0	0
Tougaloo C.	324	1,111	74	0	460	61	375	45	42	0	0	54
Murray State U.	325	1,102	0	9	656	351	74	0	0	0	0	12
Tennessee State U.	326	1,099	0	0	1,099	0	0	0	0	0	0	0
Alabama A&M U.	327	1,098	152	0	180	45	228	17	32	0	370	74
Colby C.	328	1,096	63	349	414	28	163	0	0	0	0	79
Oregon Health and Science U.	329	1,082	0	0	492	0	0	0	0	0	590	0

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Utah Valley U.	330	1,075	16	140	204	82	453	0	0	0	180	0
Central Washington U.	331	1,067	0	793	42	157	50	0	0	0	25	0
Sonoma State U.	332	1,061	0	109	342	506	28	56	0	13	0	7
Towson U.	333	1,053	141	142	295	82	393	0	0	0	0	0
Middlebury C.	334	1,036	20	479	233	0	172	46	86	0	0	0
U. West Florida	335	1,035	661	0	129	0	0	0	0	0	0	245
Georgia Southern U.	336	1,028	16	49	230	29	318	0	0	25	177	184
C. Charleston	337	1,004	167	168	360	0	238	0	0	0	0	71
Elizabeth City State U.	338	1,003	348	0	433	0	0	0	0	0	0	222
Bryn Mawr C.	339	990	120	0	401	53	416	0	0	0	0	0
Xavier U. Louisiana	339	990	52	0	289	0	620	0	18	0	0	11
Lafayette C.	341	983	0	0	524	36	254	0	0	0	160	9
Chapman U.	342	981	0	52	367	0	419	0	34	0	0	109
Swarthmore C.	343	973	55	0	594	111	130	0	0	0	0	83
New York Institute of Technology	344	964	89	0	76	0	101	0	0	0	698	0
U. Maryland, Eastern Shore	345	956	0	880	76	0	0	0	0	0	0	0
U. New Orleans	346	947	90	73	126	19	349	0	112	0	178	0
St. Edward's U.	347	940	120	0	364	50	170	0	0	0	0	236
Toyota Technological Institute, Chicago	348	938	938	0	0	0	0	0	0	0	0	0
U. Arkansas, Little Rock	349	936	658	0	142	1	38	0	0	0	11	86
U. North Florida	349	936	148	0	239	0	324	0	0	0	104	121
Seattle U.	351	934	1	0	83	0	126	0	0	0	33	691
U. Missouri, Saint Louis	352	924	0	0	163	161	285	0	94	0	0	221
Reed C.	353	921	67	0	287	55	344	41	26	0	0	101
Fayetteville State U.	354	919	45	0	0	0	165	0	0	0	102	607
U. Texas M. D. Anderson Cancer Center	355	918	0	0	797	33	88	0	0	0	0	0
Bowdoin C.	356	911	51	92	419	29	155	0	0	0	0	165
Mount Holyoke C.	357	910	225	0	193	146	266	80	0	0	0	0
Southern Illinois U., Edwardsville	358	890	1	144	90	26	75	0	74	0	2	478
Pacific U.	359	883	0	0	77	0	367	0	14	0	0	425
Northwest Indian C.	360	881	0	0	0	0	0	0	0	0	0	881
Butler U.	361	879	0	0	733	0	105	41	0	0	0	0
Furman U.	362	873	0	0	31	0	716	126	0	0	0	0

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Puerto Rico, Humacao	363	870	0	92	0	0	778	0	0	0	0	0
CUNY, Baruch C.	364	869	0	0	169	460	32	194	0	0	0	14
Colorado C.	365	868	0	432	0	44	211	0	0	0	0	181
U. Nebraska, Medical Center	366	860	0	0	860	0	0	0	0	0	0	0
Sam Houston State U.	367	850	0	118	147	356	187	0	42	0	0	0
Bowie State U.	368	845	325	0	216	0	304	0	0	0	0	0
U. Richmond	369	843	0	0	278	0	265	253	47	0	0	0
Northeastern Illinois U.	370	839	104	54	62	43	0	0	8	0	7	561
Fordham U.	371	836	2	0	267	34	392	82	0	0	0	59
Saint Joseph's U.	372	826	0	0	465	0	33	0	0	0	0	328
CUNY, John Jay C. of Criminal Justice	373	819	0	0	313	98	58	106	141	16	0	87
Duquesne U.	374	817	0	0	155	36	324	0	0	0	21	281
Eastern Michigan U.	375	815	11	47	259	24	25	138	21	0	0	290
Kenyon C.	376	807	0	0	528	0	279	0	0	0	0	0
Florida Gulf Coast U.	377	800	0	539	45	0	106	0	0	0	0	110
Haverford C.	377	800	18	31	88	30	511	107	15	0	0	0
Macalester C.	379	799	0	142	55	81	414	0	18	0	0	89
CUNY, system office	380	798	8	0	38	0	0	0	0	0	718	34
Gallaudet U.	381	795	262	0	63	0	39	166	40	0	0	225
Creighton U.	382	792	182	0	121	51	310	20	39	0	0	69
U. New Haven	383	788	702	81	0	0	0	0	0	0	5	0
Marshall U.	384	778	158	13	294	0	29	0	0	0	284	0
U. Texas Medical Branch	385	775	0	0	775	0	0	0	0	0	0	0
New School	386	774	0	131	1	0	0	297	92	0	253	0
U. Northern Colorado	387	767	0	151	130	31	3	24	428	0	0	0
Davidson C.	388	763	164	0	129	0	298	20	152	0	0	0
Texas A&M U.-Commerce	389	754	0	0	0	0	713	0	0	0	0	41
Morehouse School of Medicine	390	752	0	0	752	0	0	0	0	0	0	0
Vassar C.	391	741	113	2	429	80	0	0	17	0	0	100
Loyola Marymount U.	392	727	114	0	609	4	0	0	0	0	0	0
Christopher Newport U.	393	721	0	0	0	222	479	0	0	0	0	20
Citadel Military C. South Carolina	394	718	0	0	0	0	9	21	0	0	69	619
Hobart and William Smith Colleges	394	718	0	235	217	85	171	0	0	10	0	0

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Union C., Schenectady	396	716	49	158	41	36	78	0	0	0	354	0
Naval Postgraduate School	397	712	100	422	0	0	0	0	0	0	190	0
Roger Williams U.	398	707	0	86	260	0	30	0	0	0	0	331
Purdue U., Northwest	399	697	99	0	0	0	150	0	0	93	355	0
U. Puget Sound	400	684	0	31	572	0	60	0	21	0	0	0
Yeshiva U.	401	682	0	0	0	0	682	0	0	0	0	0
West Texas A&M U.	402	676	144	151	0	0	218	0	0	0	163	0
Lewis and Clark C.	403	675	0	137	345	0	193	0	0	0	0	0
California State U., Stanislaus	404	664	208	0	195	218	0	25	18	0	0	0
California State U., Bakersfield	405	661	0	17	0	438	105	0	0	0	101	0
Willamette U.	406	658	0	85	313	0	56	0	0	0	0	204
Montana Technological U.	407	655	0	209	16	0	196	0	0	0	234	0
U. Alaska, Southeast	408	651	0	121	30	0	0	0	0	500	0	0
SUNY, Geneseo	409	644	0	0	26	0	591	0	27	0	0	0
Fort Valley State U.	410	641	0	79	479	0	83	0	0	0	0	0
Pomona C.	410	641	9	62	158	222	182	8	0	0	0	0
Skidmore C.	412	640	0	157	108	0	318	38	0	0	0	19
U. Northern Iowa	413	637	0	0	0	0	53	0	584	0	0	0
Wright State U.	413	637	0	87	231	0	168	36	0	0	115	0
Calvin U.	415	636	44	0	48	0	246	0	0	265	33	0
Williams C.	416	629	38	72	234	32	188	23	14	0	0	28
U. Texas Health Science Center, San Antonio	417	621	0	0	621	0	0	0	0	0	0	0
U. Virginia's C. Wise	417	621	447	0	0	0	23	0	0	0	151	0
U.S. Naval Academy	419	618	58	62	0	18	197	0	0	0	283	0
Dine C.	420	614	0	0	614	0	0	0	0	0	0	0
Pennsylvania State U., Behrend	421	613	29	0	0	2	68	0	23	0	107	384
St. John's U., New York	422	612	131	0	215	0	157	93	0	0	0	16
Western Kentucky U.	423	611	0	50	37	57	337	4	0	0	126	0
Youngstown State U.	423	611	132	0	0	66	242	0	0	0	171	0
Ball State U.	425	610	128	0	53	27	298	82	22	0	0	0
Pepperdine U.	426	609	0	0	213	0	0	0	0	0	0	396
Claremont McKenna C.	427	603	24	0	113	79	81	306	0	0	0	0
U. Hawaii, Hilo	428	600	82	7	290	25	145	0	51	0	0	0

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields													
Salisbury U.	429	591	191	0	111	0	0	0	0	0	0	289													
Texas Woman's U.	430	590	0	0	586	0	4	0	0	0	0	0													
Black Hills State U.	431	582	363	0	98	0	95	0	0	0	0	26													
SUNY, Buffalo State	432	550	0	367	0	139	0	0	0	0	0	44													
Franklin W. Olin C. of Engineering	433	540	0	0	0	0	0	0	0	0	540	0													
C. Wooster	434	536	0	155	0	68	313	0	0	0	0	0													
U. Nebraska, Kearney	435	533	0	0	445	0	62	0	0	0	0	26													
Long Island U.	436	530	28	262	61	0	172	0	0	0	0	7													
U. Texas, Tyler	437	528	37	0	318	74	0	0	4	0	95	0													
Trinity U.	438	513	0	90	0	38	373	0	5	0	7	0													
Missouri State U.	439	507	0	225	67	0	30	48	137	0	0	0													
Central State U.	440	481	0	0	90	42	108	0	0	34	207	0													
Dillard U.	441	471	0	89	166	19	23	0	0	174	0	0													
Bentley U.	442	470	75	13	0	51	0	0	45	0	0	286													
East Stroudsburg U. Pennsylvania	442	470	0	0	0	0	0	0	0	0	0	470													
Milwaukee School of Engineering	444	464	65	0	0	0	0	0	0	0	399	0													
Texas Christian U.	445	436	104	0	26	0	181	3	10	0	0	112													
U. Oklahoma, Tulsa	446	432	0	0	0	0	0	0	0	0	432	0													
Whitman C.	447	429	0	107	98	0	194	0	30	0	0	0													
Grambling State U.	448	428	i	0	i	0	i	0	i	0	i	0	i												
Northern Kentucky U.	448	428	0	0	0	72	347	0	4	0	0	5													
Texas Tech U., Health Sciences Center	450	423	0	0	411	0	0	0	0	0	0	12													
Hawaii Pacific U.	451	420	0	390	10	0	0	0	0	0	14	6													
Franklin and Marshall C.	452	419	0	0	0	0	390	29	0	0	0	0													
Indiana U. Pennsylvania	453	417	0	211	6	0	132	68	0	0	0	0													
Medical U. South Carolina	454	409	0	0	409	0	0	0	0	0	0	0													
SUNY, Downstate Health Sciences U.	455	405	0	0	405	0	0	0	0	0	0	0													
Winthrop U.	456	394	58	10	0	0	234	0	0	0	0	92													
Tarleton State U.	457	387	0	0	0	0	0	0	0	387	0	0													
Texas A&M U.-San Antonio	457	387	151	0	200	0	0	0	36	0	0	0													
New Mexico Highlands U.	459	386	i	53	i	77	i	14	i	96	i	79	i	0	i	17	i	0	i	0	i	0	i	50	i
East Tennessee State U.	460	378	0	0	102	125	151	0	0	0	0	0													
Grand Valley State U.	460	378	0	119	181	0	30	33	0	0	0	15													

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. North Carolina, Asheville	460	378	19	69	0	0	26	0	0	0	0	264
Texas A&M International U.	463	372	0	0	0	7	0	0	0	365	0	0
CUNY, York C.	464	350	0	289	0	61	0	0	0	0	0	0
Drake U.	465	349	0	0	30	108	211	0	0	0	0	0
California State Polytechnic U., Humboldt	466	337	10	80	215	0	32	0	0	0	0	0
U. Arkansas for Medical Sciences	467	332	0	0	332	0	0	0	0	0	0	0
U. Central Oklahoma	468	331	i 37	i 0	i 72	i 28	i 86	i 5	i 1	i 0	i 59	i 43
U. Wisconsin-Eau Claire	469	330	0	33	0	11	286	0	0	0	0	0
Southeastern Louisiana U.	470	328	0	0	203	0	125	0	0	0	0	0
Alaska Pacific U.	471	326	0	287	0	0	0	0	0	0	0	39
Colorado State U., Pueblo	471	326	326	0	0	0	0	0	0	0	0	0
Kean U.	471	326	234	0	24	0	0	0	0	0	0	68
U. South Carolina, Aiken	474	325	0	0	325	0	0	0	0	0	0	0
Northland C.	475	321	i 0	i 51	i 193	i 34	i 0	i 17	i 7	i 0	i 0	i 19
Lawrence Technological U.	476	317	52	0	0	21	132	0	0	0	111	1
Western Carolina U.	477	316	0	13	210	0	0	0	0	0	93	0
Hamilton C.	478	310	0	49	75	0	42	0	139	0	0	5
Coastal Carolina U.	479	301	11	121	109	0	60	0	0	0	0	0
Florida Polytechnic U.	480	291	16	0	0	0	0	0	0	0	200	75
U. of the Pacific	481	290	0	53	114	0	123	0	0	0	0	0
St. Cloud State U.	482	288	0	0	0	0	0	0	0	0	0	288
Ithaca C.	483	287	57	13	0	122	51	0	44	0	0	0
U. San Francisco	484	285	0	138	39	12	0	0	96	0	0	0
Stockton U.	485	281	0	281	0	0	0	0	0	0	0	0
Western New England U.	486	274	69	0	0	50	0	0	0	0	155	0
U. of St. Thomas (MN)	487	269	7	7	102	19	40	0	0	0	39	55
Saginaw Valley State U.	488	267	i 74	i 0	i 48	i 0	i 0	i 0	i 1	i 0	i 0	i 144
Augusta U.	489	266	164	0	21	81	0	0	0	0	0	0
Lincoln U., Jefferson City	490	265	0	28	40	0	0	0	0	197	0	0
U. Wisconsin-Oshkosh	490	265	0	23	9	0	11	0	0	0	0	222
Plymouth State U.	492	262	0	262	0	0	0	0	0	0	0	0
Northeast Ohio Medical U.	493	256	0	0	22	0	0	0	232	0	2	0
Trinity C., Hartford	494	255	0	0	152	18	85	0	0	0	0	0

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Savannah State U.	495	254	0	37	11	0	53	0	6	34	113	0
West Chester U. Pennsylvania	496	252	0	0	6	0	219	0	8	0	0	19
Clafin U.	497	248	26	16	34	0	45	0	64	0	63	0
Midwestern U.	497	248	0	0	248	0	0	0	0	0	0	0
U. North Georgia	499	247	22	62	26	0	0	0	0	0	0	137
Lamar U.	500	246	55	0	23	0	30	0	0	0	91	47
U. Central Arkansas	500	246	50	0	101	1	94	0	0	0	0	0
Grinnell C.	502	242	123	0	20	21	43	0	2	0	0	33
Southern Connecticut State U.	503	240	2	0	31	0	113	14	0	27	0	53
Stephen F. Austin State U.	504	235	0	0	0	208	0	0	0	0	0	27
U. of the Incarnate Word	505	233	0	0	5	0	228	0	0	0	0	0
Augustana U.	506	230	0	0	124	0	106	0	0	0	0	0
U. Ana G. Mendez, Gurabo	506	230	0	0	197	0	33	0	0	0	0	0
CUNY, Graduate School of Public Health and Health Policy	508	226	0	0	226	0	0	0	0	0	0	0
U. of Mary Washington	509	223	0	28	111	0	84	0	0	0	0	0
Medical C. Wisconsin	510	215	0	0	84	0	0	0	0	0	131	0
Minnesota State U., Mankato	511	214	1	5	197	0	11	0	0	0	0	0
U. Wisconsin-La Crosse	512	203	62	0	0	43	73	0	25	0	0	0
U. Baltimore	513	201	128	0	0	0	0	0	73	0	0	0
Seton Hall U.	514	200	0	0	0	0	200	0	0	0	0	0
Morehead State U.	515	197	0	0	197	0	0	0	0	0	0	0
Meharry Medical C.	516	186	65	0	121	0	0	0	0	0	0	0
Albion C.	517	181	37	35	12	31	33	0	21	0	0	12
Eastern Washington U.	517	181	0	0	63	0	118	0	0	0	0	0
Northern Michigan U.	519	178	14	78	86	0	0	0	0	0	0	0
Alfred U.	520	177	0	0	0	0	0	0	0	0	177	0
U. New England	521	176	0	109	67	0	0	0	0	0	0	0
William Paterson U.	522	174	0	144	30	0	0	0	0	0	0	0
Nevada State C.	523	173	0	82	91	0	0	0	0	0	0	0
Monmouth U.	524	162	0	0	51	0	99	12	0	0	0	0
Marymount U.	525	161	161	0	0	0	0	0	0	0	0	0
Canisius C.	526	159	0	0	0	0	159	0	0	0	0	0
Claremont Graduate U.	527	153	0	0	0	15	0	26	107	0	0	5

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Louisiana State U., Health Sciences Center, New Orleans	527	153	0	0	153	0	0	0	0	0	0	0
Pratt Institute	527	153	0	0	0	0	0	0	0	0	0	153
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	530	152	0	0	152	0	0	0	0	0	0	0
U.S. Army War C.	531	151	i	0	0	0	0	0	151	0	0	0
U. Tennessee, Health Science Center	532	150	0	0	150	0	0	0	0	0	0	0
SUNY, C. Brockport	533	146	0	0	12	0	105	0	1	0	0	28
Elon U.	534	145	0	0	0	84	0	50	0	0	0	11
Indiana State U.	535	143	0	110	0	24	9	0	0	0	0	0
U. Houston-Downtown	536	139	96	4	32	0	7	0	0	0	0	0
Van Andel Research Institute	536	139	0	0	139	0	0	0	0	0	0	0
Connecticut C.	538	138	0	0	138	0	0	0	0	0	0	0
Nova Southeastern U.	538	138	0	133	5	0	0	0	0	0	0	0
Purdue U., Fort Wayne	540	135	0	0	0	0	56	0	0	0	79	0
U. Wisconsin-Green Bay	541	131	i	17	17	18	5	24	2	3	0	38
Alcorn State U.	542	129	i	0	0	0	0	0	0	0	129	0
Manhattan C.	543	128	0	0	0	70	0	0	0	0	58	0
U. Arkansas, Pine Bluff	544	125	0	0	18	0	107	0	0	0	0	0
Kentucky State U.	545	124	5	0	0	119	0	0	0	0	0	0
Sul Ross State U.	545	124	i	14	25	20	10	28	2	3	0	22
California State U., Maritime Academy	547	123	0	34	0	0	0	0	0	0	32	57
SUNY, Oswego	548	113	0	16	82	0	15	0	0	0	0	0
U. Detroit Mercy	549	112	23	0	82	0	0	0	0	0	7	0
Rhode Island C.	550	110	0	0	110	0	0	0	0	0	0	0
Eastern Connecticut State U.	551	103	0	0	19	0	0	0	0	0	0	84
U. Houston-Clear Lake	552	94	2	0	0	0	61	23	0	0	8	0
Austin Peay State U.	553	92	0	0	34	0	58	0	0	0	0	0
U. Wisconsin-Stevens Point	553	92	0	0	6	0	86	0	0	0	0	0
West Virginia State U.	555	85	0	0	85	0	0	0	0	0	0	0
U. Wisconsin-Platteville	556	84	i	15	0	13	6	19	1	2	1	8
Texas Tech U., Health Sciences Center, El Paso	557	78	0	0	70	0	0	0	0	0	0	8
U. Hartford	558	74	0	0	44	30	0	0	0	0	0	0
Suffolk U.	559	73	0	14	14	0	45	0	0	0	0	0

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Troy U.	560	72	0	0	2	0	0	0	0	0	56	14
U. Southern Maine	561	69	0	21	7	13	0	0	28	0	0	0
U. Puerto Rico, Cayey	562	68	0	0	30	0	38	0	0	0	0	0
Pennsylvania State U., Harrisburg	563	66	5	3	35	7	7	0	0	0	9	0
Air Force Institute of Technology	564	65	0	0	0	0	65	0	0	0	0	0
California Lutheran U.	564	65	0	0	23	0	42	0	0	0	0	0
Erikson Institute	566	63	0	0	0	0	0	0	0	0	0	63
Johnson C. Smith U.	567	60	0	0	60	0	0	0	0	0	0	0
Langston U.	567	60	0	0	0	0	46	0	0	0	0	14
SUNY, Upstate Medical U.	569	54	0	0	54	0	0	0	0	0	0	0
Oregon Institute of Technology	570	49 i	15 i	1 i	17 i	7 i	0 i	1 i	0 i	0 i	8 i	0 i
Pittsburg State U.	570	49	0	0	49	0	0	0	0	0	0	0
Framingham State U.	572	48 i	6 i	0 i	12 i	5 i	11 i	0 i	1 i	0 i	0 i	13 i
SUNY, C. Plattsburgh	573	46	0	33	0	0	13	0	0	0	0	0
St. Catherine U.	574	44	0	0	36	0	0	0	8	0	0	0
Mercer U.	575	37	3	0	0	0	0	0	34	0	0	0
Western Illinois U.	575	37	0	0	0	0	37	0	0	0	0	0
U. Texas of the Permian Basin	577	35	0	0	0	0	0	35	0	0	0	0
Robert Morris U.	578	31 i	8 i	0 i	4 i	2 i	0 i	1 i	2 i	0 i	10 i	4 i
Babson C.	579	29	0	0	0	0	0	0	0	0	0	29
Central Connecticut State U.	579	29	0	0	0	0	6	0	0	0	0	23
U. Wisconsin-Superior	581	28	0	28	0	0	0	0	0	0	0	0
U.S. Air Force Academy	581	28	0	0	0	28	0	0	0	0	0	0
Mercyhurst U.	583	24	0	0	0	0	24	0	0	0	0	0
Oklahoma State U., Center for Health Sciences	583	24	0	0	24	0	0	0	0	0	0	0
C. of Saint Benedict	585	23 i	3 i	0 i	7 i	2 i	8 i	1 i	1 i	0 i	0 i	1 i
U. Illinois, Springfield	586	21	0	0	0	0	0	0	0	0	0	21
Des Moines U.	587	20	0	10	10	0	0	0	0	0	0	0
Thomas Jefferson U.	588	17	0	0	17	0	0	0	0	0	0	0
Virginia Military Institute	588	17	0	0	0	0	17	0	0	0	0	0
Eastern Virginia Medical School	590	16	0	0	16	0	0	0	0	0	0	0
U.S. Military Academy	591	14	14	0	0	0	0	0	0	0	0	0
Western U. of Health Sciences	591	14	0	0	14	0	0	0	0	0	0	0

TABLE 64

Federally financed higher education R&D expenditures, financed by the National Science Foundation, ranked by NSF R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	NSF R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Rush U.	593	11	0	0	11	0	0	0	0	0	0	0
Kettering U.	594	10	8	0	0	0	2	0	0	0	0	0
Touro U., California	594	10	0	0	10	0	0	0	0	0	0	0
Marshall B. Ketchum U.	596	8 i	0 i	0 i	8 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i
U. Louisiana, Monroe	597	1	0	0	1	0	0	0	0	0	0	0

i = imputed.

NSF = National Science Foundation; nec = not elsewhere classified; S&E = science and engineering.

^a The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^b Johns Hopkins University includes the Applied Physics Laboratory, with \$2,553 thousand in R&D expenditures financed by NSF in FY 2022.

^c The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^d The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 65
Federally financed higher education R&D expenditures, financed by the Department of Agriculture, ranked by USDA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	USDA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
All institutions	-	1,500,988	13,291	35,995	1,212,975	8,437	10,243	2,508	73,069	7,824	87,560	49,086
Iowa State U.	1	52,471	165	301	31,243	7,065	82	0	2,542	0	6,353	4,720
Washington State U.	2	52,115	1,082	1,050	41,722	0	68	1	1,313	247	1,557	5,075
North Carolina State U.	3	51,000	0	808	45,658	227	139	74	1,254	156	2,670	14
U. California, Davis	4	50,132	0	1,239	43,759	0	2,696	0	667	0	1,771	0
Texas A&M U., College Station and Health Science Center	5	46,205	234	1,307	39,936	0	46	0	3,179	0	556	947
U. Florida	6	45,735	0	610	41,667	0	72	0	832	0	2,416	138
U. Georgia	7	44,862	167	9	33,620	0	0	30	9,941	5	1,023	67
Colorado State U., Fort Collins	8	44,464	193	1,705	38,436	281	64	0	1,766	69	1,727	223
Ohio State U.	9	43,453	0	138	23,942	0	0	0	1,685	49	3,516	14,123
U. Minnesota, Twin Cities	10	41,976	285	133	29,573	0	6	91	2,382	75	9,069	362
Cornell U.	11	41,219	55	0	38,554	0	0	120	105	0	990	1,395
Oregon State U.	12	38,302	2,560	185	31,819	0	20	0	622	164	2,893	39
Mississippi State U.	13	37,885	429	19	32,090	0	1,217	0	1,404	879	1,843	4
Pennsylvania State U., University Park and Hershey Medical Center	14	35,157	24	197	25,988	3	178	832	5,765	0	1,113	1,057
Michigan State U.	15	33,485	136	652	27,608	43	15	0	2,357	19	2,458	197
U. Wisconsin-Madison	16	30,025	0	65	25,742	0	0	0	1,885	177	2,070	86
Purdue U., West Lafayette	17	27,335	73	0	19,469	26	0	0	2,225	0	4,830	712
U. Maryland ^a	18	27,187	70	2,010	22,748	0	0	0	79	0	2,280	0
U. Missouri, Columbia	19	27,061	0	0	26,300	0	114	0	167	0	364	116
Kansas State U.	20	26,145	138	8	21,025	0	1	357	2,818	0	720	1,078
U. Illinois, Urbana-Champaign	21	24,588	2,139	4	18,539	3	139	592	146	0	2,815	211
U. Nebraska, Lincoln	22	24,104	15	0	20,406	52	2	40	68	0	3,261	260
Rutgers, State U. New Jersey, New Brunswick	23	23,800	0	644	22,886	0	2	0	199	0	69	0
Virginia Polytechnic Institute and State U.	24	22,949	440	60	19,493	38	172	0	1,957	0	574	215
Auburn U., Auburn	25	20,881	0	370	18,355	0	178	0	41	896	948	93
U. Tennessee, Knoxville	26	17,554	0	8	13,795	0	0	0	18	1,481	2,224	28
U. Idaho	27	17,483	0	274	13,337	0	0	0	2,771	0	992	109
U. California, Riverside	28	17,001	128	2,410	13,836	0	49	0	77	0	501	0
U. Vermont	29	16,786	0	0	15,948	0	0	0	838	0	0	0
Montana State U., Bozeman	30	16,181	93	118	15,359	0	12	0	12	0	564	23
Tufts U.	31	16,090	0	136	15,242	0	0	0	307	0	405	0
U. Maine	32	15,852	26	369	14,089	0	0	0	12	0	328	1,028
Baylor C. of Medicine	33	15,671	0	0	15,671	0	0	0	0	0	0	0

TABLE 65
Federally financed higher education R&D expenditures, financed by the Department of Agriculture, ranked by USDA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	USDA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Arizona	34	15,395	59	305	13,013	54	0	0	110	0	1,790	64
U. Arkansas, Fayetteville	35	14,355	0	330	12,861	0	0	0	111	0	843	210
North Dakota State U.	36	14,183	0	0	12,506	0	105	0	404	0	1,168	0
U. Kentucky	37	14,045	21	0	11,147	0	9	0	852	0	1,308	708
Oklahoma State U., Stillwater	38	11,972	43	0	8,827	0	22	47	1,190	0	868	975
U. Hawaii, Manoa	39	11,265	0	0	10,027	0	0	0	22	748	463	5
Utah State U.	40	10,736	4	0	9,733	0	155	0	413	0	203	228
Louisiana State U., Baton Rouge	41	10,699	0	327	9,997	0	0	0	158	0	131	86
West Virginia U.	42	10,093	0	38	9,403	0	0	0	56	317	188	91
New Mexico State U.	43	9,730	0	1,346	6,968	0	332	0	80	529	391	84
Florida A&M U.	44	9,476	0	65	9,210	0	0	0	0	0	201	0
South Dakota State U.	45	9,268	0	77	7,973	0	29	93	334	0	762	0
Clemson U.	46	9,177	795	0	4,414	0	0	0	545	0	257	3,166
Alcorn State U.	47	8,824	0	0	4,470	0	0	0	4,354	0	0	0
Lincoln U., Jefferson City	48	8,723	0	0	8,655	0	0	0	47	21	0	0
U. Connecticut	49	8,702	0	0	6,727	0	0	40	1,713	0	222	0
U. New Hampshire	50	8,113	0	468	7,613	0	0	0	27	0	0	5
U. Washington, Seattle	51	7,702	0	490	6,811	0	0	0	6	0	23	372
U. Massachusetts, Amherst	52	7,395	0	275	6,398	6	33	0	453	0	230	0
Tennessee State U.	53	7,328	0	0	7,328	0	0	0	0	0	0	0
U. Rhode Island	54	7,212	0	2,917	3,275	0	0	0	847	173	0	0
North Carolina A&T State U.	55	7,131	0	0	7,119	0	0	0	0	0	0	12
U. Wyoming	56	6,701	0	13	6,673	0	0	0	15	0	0	0
U. Nevada, Reno	57	6,167	49	0	4,791	0	175	0	1,049	0	99	4
Fort Valley State U.	58	6,131	0	0	6,131	0	0	0	0	0	0	0
U. Mississippi	59	5,717	0	81	3,249	0	694	0	0	0	794	899
Prairie View A&M U.	60	5,610	0	0	5,107	0	40	0	120	0	272	71
U. Montana, Missoula	61	5,310	227	75	4,086	0	0	0	841	0	0	81
U. Delaware	62	5,134	0	63	4,264	0	0	0	638	83	86	0
Kentucky State U.	63	4,615	0	0	4,615	0	0	0	0	0	0	0
Tarleton State U.	64	4,523	0	219	4,304	0	0	0	0	0	0	0
Northern Arizona U.	65	4,501	0	61	4,068	0	0	0	167	150	55	0
Texas Tech U.	66	4,334	0	0	3,762	0	0	3	320	0	85	164
U. Maryland, Eastern Shore	67	4,266	0	0	4,266	0	0	0	0	0	0	0

TABLE 65
Federally financed higher education R&D expenditures, financed by the Department of Agriculture, ranked by USDA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	USDA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Tuskegee U.	68	4,193	0	0	4,193	0	0	0	0	0	0	0
Southern U. and A&M C., Agricultural Research and Extension Center	69	4,121	0	0	4,121	0	0	0	0	0	0	0
Central State U.	70	4,103	0	85	4,018	0	0	0	0	0	0	0
U. of the Virgin Islands	71	4,090	0	24	4,066	0	0	0	0	0	0	0
Delaware State U.	72	3,919	0	0	3,731	23	0	0	78	0	0	87
U. California, Berkeley	73	3,904	0	0	3,045	0	0	0	12	300	490	57
West Virginia State U.	74	3,827	2	0	3,825	0	0	0	0	0	0	0
Virginia State U.	75	3,811	0	37	3,774	0	0	0	0	0	0	0
U. Guam	76	3,434	0	132	3,266	0	0	0	0	0	0	36
Arizona State U.	77	3,195	0	0	1,062	0	0	0	1,162	356	615	0
U. Arkansas, Pine Bluff	78	2,790	0	0	2,749	0	0	0	0	41	0	0
Texas A&M U.-Kingsville	79	2,701	0	0	2,598	0	0	0	0	0	103	0
U. Texas Health Science Center, Houston	80	2,692	0	0	2,692	0	0	0	0	0	0	0
U. Alaska, Fairbanks	81	2,654	0	365	1,322	0	67	0	0	0	0	900
U. North Carolina, Chapel Hill	82	2,599	0	0	2,303	0	0	0	0	0	0	296
U. California, San Diego	83	2,511	0	59	2,272	0	0	0	60	0	112	8
Langston U.	84	2,495	0	0	2,394	0	0	0	0	0	0	101
Florida Atlantic U.	85	2,462	0	0	2,209	0	0	0	0	0	253	0
U. Louisiana, Lafayette	86	2,279	0	0	10	0	0	0	201	0	45	2,023
U. Colorado Boulder	87	2,075	228	46	1,074	87	0	0	323	0	314	3
Baylor U.	88	2,063	0	60	1,948	0	0	0	55	0	0	0
U. of the District of Columbia	89	1,978	0	0	1,978	0	0	0	0	0	0	0
SUNY, C. of Environmental Science and Forestry	90	1,957	0	140	1,708	0	0	0	2	0	107	0
U. California, Merced	91	1,935	0	169	400	0	0	0	0	5	757	604
U. North Dakota	92	1,919	0	105	234	0	86	0	0	0	262	1,232
U. Nevada, Las Vegas	93	1,809	0	1,615	119	0	0	0	0	0	75	0
Cold Spring Harbor Laboratory	94	1,786	0	0	1,786	0	0	0	0	0	0	0
U.S. Army War C.	95	1,755	0	0	0	0	0	0	1,755	0	0	0
U. New Mexico	96	1,694	0	34	1,525	0	0	0	133	0	0	2
Western Illinois U.	97	1,650	0	0	1,650	0	0	0	0	0	0	0
California Polytechnic State U., San Luis Obispo	98	1,645	0	0	1,191	0	0	0	432	0	0	22
U. California, Santa Cruz	99	1,635	0	1,290	204	0	0	0	86	0	0	55
U. Texas Rio Grande Valley	100	1,624	77	0	1,465	0	0	0	0	48	0	34
Michigan Technological U.	101	1,556	0	1,486	0	0	0	0	70	0	0	0

TABLE 65

Federally financed higher education R&D expenditures, financed by the Department of Agriculture, ranked by USDA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	USDA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Princeton U.	102	1,385	0	1,385	0	0	0	0	0	0	0	0
Virginia Commonwealth U.	103	1,377	162	3	314	0	0	26	0	0	73	799
U. Southern Mississippi	104	1,360	0	36	257	0	0	0	0	0	0	1,067
U. Pennsylvania	105	1,296	0	0	928	0	203	0	0	0	165	0
U. Toledo	106	1,263	0	596	583	0	0	0	0	0	84	0
Carnegie Mellon U.	107	1,259	1,048	0	211	0	0	0	0	0	0	0
California State Polytechnic U., Humboldt	108	1,256	0	0	429	0	0	0	827	0	0	0
U. Michigan, Ann Arbor	109	1,237	0	0	1,065	0	25	0	136	0	0	11
Middle Tennessee State U.	110	1,230	19	0	1,172	0	36	0	0	0	0	3
Johns Hopkins U. ^b	111	1,226	0	517	524	0	63	0	0	0	122	0
Boise State U.	112	1,207	0	36	948	0	26	4	0	0	166	27
U. Virginia, Charlottesville	113	1,190	0	82	1,009	0	0	0	63	0	12	24
Southern Illinois U., Carbondale	114	1,095	0	0	787	0	0	0	0	308	0	0
Yale U.	115	990	0	0	905	0	0	0	0	0	0	85
Texas State U.	116	982	0	40	732	0	34	0	64	0	28	84
U. Alabama, Tuscaloosa	117	981	203	0	95	0	0	0	151	0	532	0
U. Notre Dame	118	976	350	0	418	0	24	0	1	0	183	0
U. Iowa	119	963	0	0	390	0	0	0	24	0	549	0
Desert Research Institute	120	958	0	958	0	0	0	0	0	0	0	0
U. North Carolina, Greensboro	121	922	0	0	294	0	434	44	8	0	0	142
Vanderbilt U. and Vanderbilt U. Medical Center	122	880	111	0	540	0	0	0	0	0	229	0
Arkansas State U., Jonesboro	123	863	0	0	694	0	73	0	96	0	0	0
Syracuse U.	124	860	0	37	651	0	0	0	157	0	15	0
Duke U.	125	848	26	97	395	45	0	0	142	0	112	31
New York U.	126	840	0	0	840	0	0	0	0	0	0	0
U. Oklahoma, Norman and Health Science Center	127	814	0	202	354	0	0	0	65	0	193	0
U. Oregon	128	810	0	0	681	0	0	11	12	0	0	106
U. Maryland, Baltimore County	129	784	0	460	165	0	0	0	51	0	108	0
Florida State U.	130	782	0	20	661	0	98	0	3	0	0	0
Illinois Institute of Technology	131	778	0	0	778	0	0	0	0	0	0	0
Tennessee Technological U.	132	773	303	0	459	0	0	0	0	0	11	0
Chapman U.	133	772	0	0	772	0	0	0	0	0	0	0
Stanford U.	134	765	0	62	68	0	136	0	0	0	499	0
Brigham Young U., Provo	135	761	0	0	714	0	0	0	20	0	27	0

TABLE 65

Federally financed higher education R&D expenditures, financed by the Department of Agriculture, ranked by USDA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	USDA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Utah	136	760	0	0	181	0	0	0	206	0	373	0
California State U., Fresno	137	757	0	0	726	0	29	0	0	0	2	0
Portland State U.	138	749	0	155	552	0	0	0	42	0	0	0
Georgia Institute of Technology	139	744	0	0	0	0	0	0	101	0	626	17
U. South Alabama	140	741	0	0	0	0	0	0	262	0	479	0
Florida International U.	141	738	64	0	549	0	39	0	0	0	79	7
U. Texas, Arlington	142	721	0	0	0	243	0	0	0	0	410	68
U. South Carolina, Columbia	143	717	0	0	695	0	0	0	0	0	6	16
U. Puerto Rico, Rio Piedras	144	714	77	366	271	0	0	0	0	0	0	0
Emory U.	145	691	0	185	506	0	0	0	0	0	0	0
Indiana U. Pennsylvania	146	658	0	0	658	0	0	0	0	0	0	0
Sam Houston State U.	146	658	0	0	482	0	2	0	7	0	167	0
U. Kansas	148	648	94	111	219	0	0	0	0	0	224	0
Colorado School of Mines	149	638	0	0	186	0	0	0	0	0	452	0
Indiana U., Bloomington	150	627	0	0	350	0	0	0	277	0	0	0
California State U., East Bay	151	594	0	0	594	0	0	0	0	0	0	0
U. Arkansas for Medical Sciences	152	581	0	0	581	0	0	0	0	0	0	0
Western Kentucky U.	153	536	0	47	198	0	291	0	0	0	0	0
Washington U., Saint Louis	154	524	0	0	7	0	0	0	0	0	517	0
U. Louisville	155	516	0	4	356	0	0	0	0	0	156	0
Stephen F. Austin State U.	156	506	0	0	506	0	0	0	0	0	0	0
U. California, Santa Barbara	157	503	0	284	0	0	177	0	0	0	8	34
Georgia State U.	158	502	314	0	175	0	0	0	13	0	0	0
California State Polytechnic U., Pomona	159	474	0	0	467	0	7	0	0	0	0	0
Tulane U.	160	462	0	82	380	0	0	0	0	0	0	0
U. California, Los Angeles	161	448	0	52	118	0	0	0	0	0	278	0
U. Central Florida	162	443	19	0	114	0	137	0	49	0	90	34
Louisiana Tech U.	163	441	0	0	404	0	0	0	0	0	37	0
U. Maryland Center for Environmental Science	164	436	0	129	164	0	0	0	143	0	0	0
Texas A&M U.-Commerce	165	430	0	0	409	0	0	0	0	0	0	21
U. Chicago	166	426	0	0	166	0	0	0	27	0	233	0
U. North Texas, Denton	167	417	0	0	326	0	0	0	0	0	76	15
Northwestern U.	168	411	0	0	21	0	0	0	0	0	390	0
Western U. of Health Sciences	168	411	0	0	411	0	0	0	0	0	0	0

TABLE 65

Federally financed higher education R&D expenditures, financed by the Department of Agriculture, ranked by USDA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	USDA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields											
Case Western Reserve U.	170	406	0	74	165	0	0	0	0	0	167	0											
U. Texas, Austin	171	403	0	76	327	0	0	0	0	0	0	0											
California State U., Sacramento	172	400	0	0	0	0	0	0	315	85	0	0											
U. Pittsburgh, Pittsburgh	173	399	0	1	265	0	0	0	0	0	133	0											
U. California, Irvine	174	395	0	27	293	0	0	5	55	0	15	0											
U. Hawaii, Hilo	175	392	0	0	278	0	0	0	24	90	0	0											
Drexel U.	176	391	0	0	102	0	0	0	0	0	289	0											
Harvard U.	177	387	0	141	246	0	0	0	0	0	0	0											
Missouri State U.	178	386	0	0	386	0	0	0	0	0	0	0											
SUNY, U. Buffalo	178	386	0	0	307	0	63	0	10	0	6	0											
SUNY, U. Albany	180	384	0	0	299	0	61	0	0	0	24	0											
Temple U.	181	378	0	0	237	0	0	0	5	0	136	0											
California State U., Long Beach	182	374	0	0	374	0	0	0	0	0	0	0											
Wayne State U.	183	370	0	0	79	0	0	0	0	0	0	291											
Rice U.	184	359	0	0	225	0	0	0	0	0	134	0											
U. Wisconsin-Milwaukee	185	358	0	103	254	0	0	0	1	0	0	0											
U. Massachusetts, Lowell	186	354	0	0	354	0	0	0	0	0	0	0											
Alabama A&M U.	187	352	i	2	i	0	i	313	i	2	i	2	i	3	i	7	i	0	i	10	i	13	i
U. Puerto Rico, Mayaguez	188	351	0	7	255	0	39	0	48	0	2	0											
California State U., Monterey Bay	189	342	0	0	342	0	0	0	0	0	0	0											
San Diego State U.	190	336	0	0	207	0	0	0	81	0	0	48											
Dartmouth C. and Dartmouth Hitchcock Medical Center	191	333	0	0	282	0	0	0	51	0	0	0											
Florida Institute of Technology	191	333	0	0	333	0	0	0	0	0	0	0											
Dine C.	193	329	0	0	329	0	0	0	0	0	0	0											
U. Minnesota, Duluth	194	324	0	30	292	0	0	0	2	0	0	0											
Worcester Polytechnic Institute	195	318	56	0	0	219	26	0	0	0	17	0											
New Jersey Institute of Technology	196	311	0	0	0	0	39	0	0	0	244	28											
Boston U.	197	310	0	134	78	0	0	0	98	0	0	0											
American U.	198	304	0	0	0	0	57	0	0	247	0	0											
U. Houston	199	295	0	0	89	0	0	0	0	0	197	9											
South Dakota School of Mines and Technology	200	288	0	0	0	0	21	0	0	0	267	0											
U. Texas, El Paso	201	274	0	3	0	0	70	0	0	0	201	0											
West Texas A&M U.	202	268	0	0	268	0	0	0	0	0	0	0											
U. Alabama, Huntsville	203	267	0	258	9	0	0	0	0	0	0	0											

TABLE 65

Federally financed higher education R&D expenditures, financed by the Department of Agriculture, ranked by USDA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	USDA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Ball State U.	238	164	0	0	0	0	0	0	0	0	0	164
C. Charleston	239	157	0	0	157	0	0	0	0	0	0	0
Wake Forest U.	239	157	0	0	157	0	0	0	0	0	0	0
Western Carolina U.	239	157	0	0	34	0	0	0	123	0	0	0
Columbia U. in the City of New York	242	156	0	34	80	0	0	0	0	0	42	0
U. Massachusetts, Medical School	243	151	0	0	151	0	0	0	0	0	0	0
Fort Lewis C.	244	150	0	0	150	0	0	0	0	0	0	0
U. California, Office of the President	245	149	0	0	149	0	0	0	0	0	0	0
Indiana U.-Purdue U., Indianapolis	246	148	54	83	7	0	0	0	4	0	0	0
Minnesota State U., Mankato	247	145	0	0	145	0	0	0	0	0	0	0
U. Tulsa	247	145	0	0	145	0	0	0	0	0	0	0
California State U., Fullerton	249	143	29	0	81	0	0	0	0	33	0	0
U. Arkansas, Little Rock	249	143	9	0	134	0	0	0	0	0	0	0
South Carolina State U.	251	139	0	0	0	0	0	0	0	0	0	139
North Carolina Central U.	252	138	0	98	0	0	0	0	0	0	40	0
U. Missouri, Saint Louis	253	136	0	0	136	0	0	0	0	0	0	0
Montana Technological U.	254	134	0	37	0	0	0	0	0	0	97	0
Texas A&M U.-Corpus Christi	255	133	0	44	89	0	0	0	0	0	0	0
Southern Illinois U., Edwardsville	256	130	0	0	94	0	0	0	0	36	0	0
U. Alaska, Anchorage	257	127	0	0	114	0	0	0	0	0	0	13
Old Dominion U.	258	125	0	0	103	3	3	0	0	0	14	2
U. Illinois, Chicago	259	121	0	0	121	0	0	0	0	0	0	0
U. Texas, Dallas	259	121	0	0	43	0	0	0	0	0	78	0
Northwest Indian C.	261	120	0	0	0	0	0	0	0	0	0	120
California State U., Bakersfield	262	118	0	0	44	0	0	0	0	0	74	0
Miami U.	262	118	0	0	79	0	0	0	39	0	0	0
Uniformed Services U. of the Health Sciences	264	115	0	0	115	0	0	0	0	0	0	0
U. Northern Iowa	265	112	0	0	103	0	0	0	9	0	0	0
Brown U.	266	110	0	0	110	0	0	0	0	0	0	0
New Mexico Highlands U.	266	110	0	4	78	0	0	0	21	0	0	7
Salisbury U.	268	109	34	0	0	0	0	0	0	0	0	75
Sul Ross State U.	269	104	0	1	97	0	0	0	4	0	0	2
U. Alabama, Birmingham	269	104	0	0	99	0	0	0	0	0	5	0
Bowie State U.	271	103	0	0	103	0	0	0	0	0	0	0

TABLE 65

Federally financed higher education R&D expenditures, financed by the Department of Agriculture, ranked by USDA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	USDA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields	
San Jose State U.	271	103	0	103	0	0	0	0	0	0	0	0	
U. North Carolina, Charlotte	271	103	70	0	2	0	0	0	0	0	31	0	
U. Missouri, Kansas City	274	102	0	0	0	0	0	0	0	0	102	0	
Rowan U.	275	101	0	0	0	0	0	0	0	0	101	0	
Texas Tech U., Health Sciences Center	275	101	0	0	101	0	0	0	0	0	0	0	
U. Central Arkansas	277	99	0	0	6	0	0	0	93	0	0	0	
Occidental C.	278	98	i	0	i	0	i	0	i	0	i	0	i
New Mexico Institute of Mining and Technology	279	97	0	0	0	0	0	0	0	0	0	97	
Oklahoma State U., Center for Health Sciences	280	94	0	0	0	0	0	94	0	0	0	0	
Clarkson U.	281	90	0	0	5	0	0	0	0	0	85	0	
U. Northern Colorado	282	89	0	0	89	0	0	0	0	0	0	0	
Troy U.	283	88	0	0	88	0	0	0	0	0	0	0	
George Washington U.	284	85	0	0	13	0	0	0	0	0	69	3	
Icahn School of Medicine at Mount Sinai	284	85	0	0	85	0	0	0	0	0	0	0	
Furman U.	286	81	0	81	0	0	0	0	0	0	0	0	
Embry-Riddle Aeronautical U.	287	79	0	53	26	0	0	0	0	0	0	0	
CUNY, Brooklyn C.	288	78	0	62	16	0	0	0	0	0	0	0	
U. Southern California	289	77	0	59	0	0	0	0	18	0	0	0	
Midwestern U.	290	76	0	0	76	0	0	0	0	0	0	0	
Wright State U.	291	75	0	0	60	15	0	0	0	0	0	0	
East Tennessee State U.	292	74	0	0	74	0	0	0	0	0	0	0	
Stevens Institute of Technology	293	69	0	0	0	0	0	0	0	0	69	0	
U. Louisiana, Monroe	293	69	0	0	69	0	0	0	0	0	0	0	
Loyola U., Chicago	295	66	0	0	66	0	0	0	0	0	0	0	
Purdue U., Northwest	295	66	0	0	0	0	0	0	0	0	66	0	
U. Wisconsin-Platteville	295	66	i	1	i	0	i	59	i	1	i	2	i
Saint Louis U.	298	64	14	24	26	0	0	0	0	0	0	0	
U. California, San Francisco	299	63	0	0	63	0	0	0	0	0	0	0	
Yeshiva U.	299	63	0	0	63	0	0	0	0	0	0	0	
East Stroudsburg U. Pennsylvania	301	62	0	0	62	0	0	0	0	0	0	0	
Morehouse C.	302	58	0	0	58	0	0	0	0	0	0	0	
Idaho State U.	303	56	0	56	0	0	0	0	0	0	0	0	
U. Cincinnati	303	56	0	0	56	0	0	0	0	0	0	0	
U. Colorado Denver ^d	305	55	0	16	39	0	0	0	0	0	0	0	

TABLE 65

Federally financed higher education R&D expenditures, financed by the Department of Agriculture, ranked by USDA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	USDA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
California State U., Los Angeles	306	54	0	54	0	0	0	0	0	0	0	0
U. North Florida	306	54	0	0	0	0	0	0	0	0	54	0
San Francisco State U.	308	51	0	0	48	0	0	0	0	3	0	0
Pittsburg State U.	309	50	0	0	0	0	0	0	0	0	50	0
St. Edward's U.	309	50	0	0	50	0	0	0	0	0	0	0
SUNY, Geneseo	309	50	0	0	0	0	0	0	0	0	0	50
Rutgers, State U. New Jersey, Newark	312	49	0	49	0	0	0	0	0	0	0	0
Southern Connecticut State U.	312	49	0	0	49	0	0	0	0	0	0	0
Medical C. Wisconsin	314	47	0	0	47	0	0	0	0	0	0	0
Kennesaw State U.	315	45	0	0	45	0	0	0	0	0	0	0
U. Washington, Bothell	315	45	0	0	0	0	0	0	0	0	0	45
Fordham U.	317	44	0	0	7	0	0	0	37	0	0	0
Creighton U.	318	42	1	0	39	0	0	0	0	0	0	2
Drake U.	318	42	0	0	0	0	0	0	0	0	0	42
Middlebury C.	318	42	0	25	17	0	0	0	0	0	0	0
SUNY, Upstate Medical U.	318	42	0	0	42	0	0	0	0	0	0	0
U. Texas M. D. Anderson Cancer Center	318	42	0	0	0	0	42	0	0	0	0	0
Roger Williams U.	323	41	0	0	41	0	0	0	0	0	0	0
Boston C.	324	40	0	0	40	0	0	0	0	0	0	0
SUNY, Stony Brook U.	324	40	0	13	27	0	0	0	0	0	0	0
Utah Valley U.	326	39	0	0	39	0	0	0	0	0	0	0
Albert Einstein C. of Medicine	327	38	0	0	38	0	0	0	0	0	0	0
Virginia Military Institute	327	38	0	0	0	0	38	0	0	0	0	0
Kenyon C.	329	35	0	0	35	0	0	0	0	0	0	0
U. Alaska, Southeast	330	32	0	1	27	0	0	0	0	4	0	0
Wichita State U.	330	32	0	0	13	0	0	0	0	0	19	0
California State U., Northridge	332	31	0	0	31	0	0	0	0	0	0	0
U. Central Oklahoma	332	31	0	0	11	0	0	0	8	0	4	8
Pennsylvania State U., Behrend	334	30	0	0	30	0	0	0	0	0	0	0
U. Puerto Rico, Medical Sciences Campus	334	30	0	0	30	0	0	0	0	0	0	0
Murray State U.	336	29	0	0	29	0	0	0	0	0	0	0
U. Illinois, Springfield	337	28	0	0	28	0	0	0	0	0	0	0
U. Colorado Anschutz Medical Campus ^d	338	25	0	0	25	0	0	0	0	0	0	0
CUNY, Queens C.	339	24	0	0	24	0	0	0	0	0	0	0

TABLE 65
Federally financed higher education R&D expenditures, financed by the Department of Agriculture, ranked by USDA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	USDA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Reed C.	373	10 i	0 i	0 i	7 i	1 i	0 i	0 i	2 i	0 i	0 i	0 i
U. South Carolina, Aiken	373	10	0	0	10	0	0	0	0	0	0	0
Nova Southeastern U.	376	9	0	9	0	0	0	0	0	0	0	0
U. Texas, Tyler	376	9	0	0	9	0	0	0	0	0	0	0
Colorado C.	378	8	0	8	0	0	0	0	0	0	0	0
Loyola Marymount U.	378	8	0	5	0	0	0	0	3	0	0	0
U. Dayton	378	8	0	0	8	0	0	0	0	0	0	0
U. Virginia's C. Wise	378	8	0	0	2	0	0	0	1	0	5	0
Williams C.	378	8 i	0 i	2 i	5 i	0 i	0 i	0 i	1 i	0 i	0 i	0 i
Davidson C.	383	7	0	0	7	0	0	0	0	0	0	0
Texas A&M U.-San Antonio	383	7	0	7	0	0	0	0	0	0	0	0
Bucknell U.	385	6	0	0	0	0	0	0	0	6	0	0
Northwestern State U. Louisiana	385	6	0	0	0	0	0	0	6	0	0	0
Florida Gulf Coast U.	387	5	0	0	0	0	0	0	0	0	5	0
Kent State U.	387	5	0	0	0	0	0	0	5	0	0	0
Montclair State U.	387	5	0	1	0	0	0	0	0	0	4	0
Northern Kentucky U.	387	5	0	0	5	0	0	0	0	0	0	0
Northland C.	387	5 i	0 i	0 i	5 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i
Southern Methodist U.	387	5	0	5	0	0	0	0	0	0	0	0
Southern U. and A&M C., Baton Rouge	387	5	0	0	5	0	0	0	0	0	0	0
SUNY, C. Brockport	387	5	0	0	5	0	0	0	0	0	0	0
Albion C.	395	4 i	0 i	1 i	0 i	0 i	0 i	0 i	2 i	0 i	0 i	1 i
Austin Peay State U.	395	4	0	0	4	0	0	0	0	0	0	0
U. New England	395	4	0	0	4	0	0	0	0	0	0	0
Framingham State U.	398	3 i	0 i	0 i	1 i	0 i	1 i	0 i	1 i	0 i	0 i	0 i
U. Massachusetts, Dartmouth	398	3	0	3	0	0	0	0	0	0	0	0
Central Michigan U.	400	2	0	0	0	0	0	0	2	0	0	0
CUNY, Lehman C.	400	2	0	0	2	0	0	0	0	0	0	0
Robert Morris U.	400	2 i	0 i	0 i	2 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i
California State U., San Bernardino	403	1	0	0	1	0	0	0	0	0	0	0
Central Washington U.	403	1	0	0	0	0	0	0	1	0	0	0
Colgate U.	403	1	0	0	1	0	0	0	0	0	0	0
Marshall B. Ketchum U.	403	1 i	0 i	0 i	1 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i
New York Institute of Technology	403	1	0	0	1	0	0	0	0	0	0	0

TABLE 65

Federally financed higher education R&D expenditures, financed by the Department of Agriculture, ranked by USDA R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	USDA R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Akron	403	1	0	0	0	0	0	0	0	0	0	1

i = imputed.

USDA = Department of Agriculture; nec = not elsewhere classified; S&E = science and engineering.

^a The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^b Johns Hopkins University includes the Applied Physics Laboratory, with zero in R&D expenditures financed by USDA in FY 2022.

^c The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^d The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 66

Federally financed higher education R&D expenditures, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	Other agency R&D expenditures ^a	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
All institutions	-	3,634,675	125,602	650,088	675,588	26,827	99,617	71,406	267,305	44,996	1,040,110	633,136
Johns Hopkins U. ^b	1	172,209	26,915	2,965	11,868	9,436	5,469	0	393	2,675	109,815	2,673
U. Colorado Boulder	2	99,637	199	61,587	603	236	23,830	95	1,371	189	7,999	3,528
Georgia Institute of Technology	3	86,679	8,261	1,165	2,060	4	3,338	158	3,388	0	66,193	2,112
U. North Carolina, Chapel Hill	4	80,517	2,799	6,523	9,183	0	681	12,126	34,166	0	5,194	9,845
U. Maryland ^c	5	77,775	5,544	34,802	4,731	0	4,368	155	3,471	408	18,933	5,363
U. Washington, Seattle	6	75,853	1,644	36,846	16,642	48	54	563	1,822	0	10,451	7,783
Texas A&M U., College Station and Health Science Center	7	74,846	1,920	10,485	12,888	0	576	170	2,166	2,893	27,012	16,736
Utah State U.	8	66,680	0	33	5,492	29	0	262	1	0	60,738	125
Ohio State U.	9	64,568	111	412	14,113	8	4	44	2,911	10,753	25,360	10,852
Pennsylvania State U., University Park and Hershey Medical Center	10	62,932	7,831	2,479	5,347	332	368	723	2,082	0	41,382	2,388
U. California, San Diego	11	54,921	626	23,556	12,259	235	956	253	2,825	0	4,900	9,311
Clemson U.	12	50,249	685	0	8,375	130	2,578	1,137	3,635	0	28,511	5,198
Colorado State U., Fort Collins	13	49,088	937	23,104	12,482	38	387	4	479	607	6,784	4,266
U. South Florida ^d	14	47,361	210	6,838	6,467	0	0	339	5,529	27	10,382	17,569
U. Oklahoma, Norman and Health Science Center	15	47,029	374	28,304	1,311	0	92	683	1,563	0	2,182	12,520
U. Delaware	16	46,777	16	6,188	995	0	409	0	2,161	5	34,725	2,278
U. Wisconsin-Madison	17	42,681	355	15,821	5,117	246	185	86	4,251	0	4,585	12,035
Purdue U., West Lafayette	18	41,433	2,366	215	10,876	0	577	0	981	0	17,092	9,326
U. Florida	19	37,998	1,063	354	13,997	82	0	54	2,295	0	9,525	10,628
Mississippi State U.	20	36,745	4	13,079	8,262	78	0	0	6,353	0	6,333	2,636
U. Michigan, Ann Arbor	21	35,596	264	4,967	5,977	435	31	133	8,422	1,805	11,948	1,614
Virginia Polytechnic Institute and State U.	22	34,385	89	283	8,671	381	85	1,932	501	0	21,768	675
U. Miami	23	34,103	0	26,250	2,575	0	2,968	1,156	24	0	318	812
Arizona State U.	24	33,604	35	207	1,468	0	0	1,337	6,718	3,074	8,992	11,773
New Jersey Institute of Technology	25	33,591	125	0	0	0	25	0	37	0	30,429	2,975
U. Rhode Island	26	33,062	1	27,828	1,666	0	200	0	303	499	981	1,584
Michigan State U.	27	32,113	1,183	492	12,259	0	0	936	9,816	0	3,520	3,907
U. Illinois, Urbana-Champaign	28	30,904	676	420	13,107	1	41	359	276	322	14,016	1,686
Oregon State U.	29	30,653	6	9,207	13,001	52	39	436	1,127	119	5,259	1,407
U. Louisiana, Lafayette	30	29,738	2,021	952	1,090	0	5	0	3,392	0	5,118	17,160
U. California, Berkeley	31	29,621	4	138	7,562	35	5,657	90	2,539	492	7,440	5,664
U. California, Davis	32	29,449	101	3,997	7,933	49	2,188	0	4,880	77	6,966	3,258

TABLE 66

Federally financed higher education R&D expenditures, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	Other agency R&D expenditures ^a	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields	
U. Missouri, Columbia	33	29,309	61	6	9,589	261	99	183	1,335	0	2,944	14,831	
North Carolina State U.	34	28,623	570	8,977	2,591	1,924	571	90	85	319	12,330	1,166	
U. Kansas	35	27,873	121	1,102	648	0	0	1,725	467	0	2,340	21,470	
U. Hawaii, Manoa	36	26,863	0	17,037	5,680	0	83	0	511	898	2,383	271	
Florida State U.	37	26,564	186	1,435	1,794	0	162	171	836	123	2,138	19,719	
Florida International U.	38	26,435	730	6,517	1,705	0	2,696	2,428	3,216	59	4,630	4,454	
New Mexico Institute of Mining and Technology	39	25,573	297	1,171	56	0	10	539	0	0	21,728	1,772	
Woods Hole Oceanographic Institution	40	24,864	i	0	i	21,474	i	0	0	0	3,390	i	0
Rutgers, State U. New Jersey, New Brunswick	41	24,478	0	4,648	6,227	389	79	386	1,525	0	8,131	3,093	
Washington State U.	42	24,225	4	1,039	4,128	11	150	232	648	151	3,978	13,884	
U. Virginia, Charlottesville	43	23,870	1,934	605	1,810	159	245	24	1,056	0	2,179	15,858	
U. Connecticut	44	23,425	197	3,994	4,723	0	0	4,672	233	0	8,992	614	
U. Texas, Austin	45	23,084	791	2,949	1,134	95	207	78	629	0	5,314	11,887	
U. Alaska, Fairbanks	46	22,173	700	13,733	4,622	0	0	0	270	106	2,612	130	
U. New Hampshire	47	21,628	0	12,663	3,715	0	0	133	1,494	0	2,313	1,310	
Iowa State U.	48	21,549	40	508	3,077	4,417	181	752	306	0	11,485	783	
U. Southern California	49	21,321	1,961	3,668	1,116	0	0	1,871	7,163	0	1,644	3,898	
U. Southern Mississippi	50	21,061	404	16,847	1,585	0	153	0	515	0	1,449	108	
U. California, Los Angeles	51	20,758	148	1,359	7,638	24	175	307	2,108	156	1,802	7,041	
Tufts U.	52	19,692	0	328	14,455	0	0	0	2,465	301	1,577	566	
Auburn U., Auburn	53	19,172	80	438	5,368	17	0	0	154	304	12,657	154	
William & Mary	54	19,124	74	10,784	420	0	7	3	3,442	0	0	4,394	
Texas State U.	55	18,466	0	1,404	1,121	0	0	0	674	0	867	14,400	
U. Georgia	56	18,270	50	2,719	8,743	0	0	2,709	321	42	1,105	2,581	
Virginia Commonwealth U.	57	18,057	16	1	6,010	59	116	695	97	0	502	10,561	
Florida A&M U.	58	17,882	1,073	4,944	5,382	0	0	52	2	0	1,362	5,067	
Massachusetts Institute of Technology	59	17,810	345	2,669	406	0	990	0	5,174	585	6,815	826	
George Mason U.	60	17,557	3,675	3,493	1,241	79	16	388	2,931	0	3,998	1,736	
Wichita State U.	61	17,532	0	0	0	0	0	352	8	0	16,874	298	
Harvard U.	62	17,336	272	1,304	2,665	1,001	1,730	51	5,126	0	1,655	3,532	
U. Pennsylvania	63	16,236	200	5	6,992	0	0	213	3,243	0	651	4,932	
Vanderbilt U. and Vanderbilt U. Medical Center	64	15,914	1,285	0	1,108	0	425	0	2,073	0	1,809	9,214	
U. Minnesota, Twin Cities	65	15,899	40	308	4,431	0	124	3,614	457	0	3,448	3,477	
U. Iowa	66	15,608	0	141	5,112	0	410	260	335	0	8,110	1,240	

TABLE 66

Federally financed higher education R&D expenditures, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	Other agency R&D expenditures ^a	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Arizona	67	15,482	527	4,913	4,327	174	1,193	7	1,530	332	1,427	1,052
U. Nebraska, Lincoln	68	15,277	0	135	4,159	192	0	3,125	155	0	6,795	716
Embry-Riddle Aeronautical U.	69	15,126	1,251	890	130	0	0	0	0	0	12,370	485
U. Alabama, Tuscaloosa	70	14,944	3,393	458	783	0	0	125	434	0	6,127	3,624
Cornell U.	71	14,250	12	202	10,578	0	10	234	667	0	1,793	754
New York U.	72	14,077	234	47	1,959	694	0	420	3,703	0	2,874	4,146
Indiana U., Bloomington	73	13,833	5,909	950	1,675	0	267	203	3,860	20	149	800
Louisiana State U., Baton Rouge	74	13,540	469	5,380	1,319	276	563	120	565	0	4,291	557
Montana State U., Bozeman	75	13,511	2	354	1,724	70	0	0	534	0	8,643	2,184
U. Texas, Arlington	76	13,312	173	0	27	0	0	0	0	0	10,888	2,224
U. Massachusetts, Amherst	77	13,146	1,706	683	2,424	0	13	1	331	0	6,320	1,668
U. Oregon	78	12,842	164	1,935	51	0	0	2,139	415	0	0	8,138
U. Kentucky	79	12,579	138	756	945	0	0	429	39	3,590	6,070	612
Georgetown U.	80	12,485	148	0	4,470	0	5,678	0	1,768	0	0	421
George Washington U.	81	12,442	332	0	2,831	0	52	0	6,208	1,443	309	1,267
U. California, Santa Cruz	82	12,387	0	5,721	5,405	27	39	0	243	0	495	457
U. California, Irvine	83	12,306	444	110	908	102	330	773	272	137	1,286	7,944
U. Illinois, Chicago	84	12,198	15	39	6,239	0	0	396	1,357	0	874	3,278
U. Central Florida	85	12,133	2,356	0	1,414	0	1,320	555	224	0	2,217	4,047
U. Nevada, Reno	86	12,056	238	3,309	4,478	0	12	0	573	0	3,029	417
Georgia State U.	87	12,037	21	122	20	0	0	528	1,776	0	0	9,570
Princeton U.	88	12,011	0	8,751	81	0	0	0	2,483	0	112	584
U. North Carolina, Greensboro	89	11,999	183	31	568	0	0	211	114	0	0	10,892
U. Colorado Anschutz Medical Campus ^e	90	11,991	0	0	11,922	0	0	0	0	0	69	0
Duke U.	91	11,707	0	980	4,412	0	238	11	2,088	0	3,677	301
U. Pittsburgh, Pittsburgh	92	11,398	601	125	8,442	23	0	0	84	817	1,100	206
Northeastern U.	93	11,297	76	802	138	0	727	67	1,811	0	6,285	1,391
SUNY, U. Buffalo	94	11,074	0	464	6,247	0	107	0	239	14	1,517	2,486
U. Notre Dame	95	10,957	1,351	0	635	0	95	707	942	238	1,205	5,784
U. West Florida	96	10,922	0	0	210	0	651	0	72	0	0	9,989
U. Maine	97	10,412	14	5,373	1,019	0	25	0	127	0	3,547	307
Carnegie Mellon U.	98	10,357	2,634	8	0	182	286	216	0	0	7,031	0
Kansas State U.	99	10,285	35	72	3,506	0	1	7	2	0	6,278	384
U. Montana, Missoula	100	10,091	0	276	9,067	0	327	0	245	0	0	176

TABLE 66

Federally financed higher education R&D expenditures, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	Other agency R&D expenditures ^a	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Boston U.	101	10,061	1,064	1,396	5,529	0	0	47	198	0	896	931
Texas A&M U.-Corpus Christi	102	9,982	0	2,893	1,769	0	1,119	0	279	34	3,330	558
U. Maryland Center for Environmental Science	103	9,644	0	5,527	3,660	0	67	0	0	202	0	188
U. Tennessee, Knoxville	104	9,591	0	5	3,956	0	23	245	573	258	3,853	678
Northwestern U.	105	9,343	0	93	2,347	0	3,834	0	1,217	69	762	1,021
SUNY, Stony Brook U.	106	9,133	324	5,998	1,501	1	0	77	157	0	592	483
Stanford U.	107	8,816	266	713	674	0	19	98	678	0	3,374	2,994
U. Cincinnati	108	8,794	67	40	2,896	0	0	81	2,320	0	2,115	1,275
West Virginia U.	109	8,749	13	328	1,487	0	960	0	383	13	3,862	1,703
U. Puerto Rico, Mayaguez	110	8,724	0	3,444	68	0	492	219	401	0	1,997	2,103
U. Alabama, Huntsville	111	8,553	329	1,452	37	17	0	0	0	0	6,125	593
U. South Carolina, Columbia	112	8,377	91	1,611	1,283	0	0	219	2,059	0	1,438	1,676
Colorado School of Mines	113	8,154	16	497	742	0	0	0	35	0	6,781	83
Tulane U.	114	8,114	0	654	5,172	0	77	74	2,095	0	0	42
Portland State U.	115	7,836	51	698	2,272	0	0	380	636	0	393	3,406
CUNY, City C.	116	7,684	39	439	0	0	0	0	0	0	7,123	83
Columbia U. in the City of New York	117	7,676	460	3,258	1,313	0	50	0	1,033	0	617	945
U. California, Santa Barbara	118	7,600	365	2,412	63	0	2,818	0	1,276	0	4	662
Eastern Virginia Medical School	119	7,472	0	0	7,472	0	0	0	0	0	0	0
U. Texas, El Paso	120	7,225	302	36	561	9	336	629	187	5	4,343	817
U. Wyoming	121	7,170	10	460	4,719	0	0	0	188	0	1,762	31
U. Texas, San Antonio	122	7,094	1,214	153	361	0	0	11	1,734	218	863	2,540
Delaware State U.	123	7,077	0	308	2,315	0	0	0	115	0	0	4,339
U. Houston	124	7,056	200	180	33	810	0	2,384	1	0	1,828	1,620
U. Chicago	125	6,968	473	0	2,382	0	0	792	2,172	0	884	265
Medical U. South Carolina	126	6,923	0	0	6,923	0	0	0	0	0	0	0
North Dakota State U.	127	6,892	0	24	912	0	104	52	124	0	4,873	803
Yale U.	128	6,852	194	114	3,870	0	0	483	42	0	485	1,664
U. Massachusetts, Boston	129	6,720	0	375	256	0	0	1,090	571	0	0	4,428
Drexel U.	130	6,703	669	0	2,202	0	7	719	34	0	2,432	640
U. Dayton	131	6,697	228	331	0	0	17	0	0	0	5,669	452
Texas Tech U.	132	6,572	0	1,904	2,053	0	0	76	221	0	1,319	999
U. Missouri, Kansas City	133	6,217	0	0	5,061	0	0	206	0	0	616	334
Teachers C., Columbia U.	134	6,189	238	0	1,180	0	0	315	4,456	0	0	0

TABLE 66

Federally financed higher education R&D expenditures, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	Other agency R&D expenditures ^a	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. New Mexico	135	6,185	0	634	2,552	0	0	0	1,253	0	1,374	372
U. Arkansas, Fayetteville	136	6,100	231	718	1,188	0	0	52	844	0	2,212	855
U. Nebraska, Omaha	137	6,050	116	0	319	0	0	0	969	4,165	468	13
California State U., East Bay	138	6,014	0	0	223	0	0	0	276	0	0	5,515
American U.	139	5,920	0	121	6	0	121	54	3,085	694	0	1,839
U. Alaska, Anchorage	139	5,920	0	3,668	1,574	0	71	0	43	13	506	45
Brown U.	141	5,878	1,803	119	276	0	415	94	701	0	636	1,834
U. New Orleans	142	5,872	2	932	67	0	56	0	358	2,128	13	2,316
U. California, Riverside	143	5,769	119	234	2,255	0	85	1	187	110	1,629	1,149
Missouri U. of Science and Technology	144	5,714	168	0	0	0	548	0	0	0	4,997	1
Baylor C. of Medicine	145	5,688	0	0	5,688	0	0	0	0	0	0	0
San Jose State U.	146	5,675	0	4,146	23	24	0	0	136	0	0	1,346
Oklahoma State U., Stillwater	147	5,494	23	26	2,073	0	264	0	198	0	2,811	99
California Institute of Technology	148	5,459	0	5,232	0	0	0	0	0	0	227	0
U. Idaho	149	5,429	42	1,052	2,820	0	0	0	250	0	1,259	6
New Mexico State U.	150	5,422	17	560	1,701	0	46	0	303	462	2,279	54
U. Alabama, Birmingham	151	5,406	0	0	3,970	0	0	509	162	0	675	90
U. California, San Francisco	152	5,398	0	0	5,085	0	313	0	0	0	0	0
U. Memphis	153	5,326	286	1,464	126	0	44	391	655	0	983	1,377
U. Massachusetts, Lowell	154	5,138	252	149	462	6	243	30	1,324	95	1,779	798
Temple U.	155	5,126	90	26	1,136	0	102	4	334	2	638	2,794
Boston C.	156	4,791	0	55	0	0	0	0	3,568	0	0	1,168
U. Nevada, Las Vegas	157	4,724	0	8	2,107	0	18	0	260	0	1,452	879
California State U., Sacramento	158	4,695	0	649	251	0	0	0	65	17	3,515	198
Florida Atlantic U.	159	4,684	0	211	1,980	125	0	0	152	0	1,653	563
U. Denver	160	4,642	0	4	0	0	0	162	1,585	0	194	2,697
Old Dominion U.	161	4,626	187	705	71	81	201	21	430	0	1,627	1,303
U. Baltimore	162	4,606	136	48	0	0	0	0	661	0	0	3,761
U. Vermont	163	4,591	98	1,935	868	263	0	0	92	0	1,150	185
U. Utah	164	4,486	195	0	122	218	0	69	336	0	2,900	646
Emory U.	165	4,467	0	313	3,882	0	0	0	0	0	0	272
Ohio U.	166	4,446	13	76	135	0	0	1,217	78	0	2,920	7
Rochester Institute of Technology	167	4,361	293	0	80	59	885	0	189	0	633	2,222
Rice U.	168	4,336	0	87	31	224	0	253	703	25	1,961	1,052

TABLE 66

Federally financed higher education R&D expenditures, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	Other agency R&D expenditures ^a	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Worcester Polytechnic Institute	169	4,262	2,199	0	85	162	37	0	835	0	820	124
U. North Dakota	170	4,215	252	1,551	318	0	0	0	16	0	2,037	41
Lehigh U.	171	4,054	0	75	902	0	0	0	0	0	975	2,102
U. Mississippi	172	3,965	0	1,218	599	0	90	0	37	0	192	1,829
Syracuse U.	173	3,909	156	0	490	0	57	0	808	0	269	2,129
U. North Carolina, Wilmington	174	3,841	0	8	1,666	0	490	0	748	0	9	920
U. of the Virgin Islands	175	3,786	0	2,797	757	0	0	0	232	0	0	0
East Carolina U.	176	3,771	0	370	273	0	0	777	295	0	372	1,684
SUNY, C. of Environmental Science and Forestry	177	3,681	0	44	3,267	0	293	0	0	30	0	47
U. Wisconsin-Superior	178	3,606	0	0	3,535	0	0	0	0	0	71	0
Wayne State U.	179	3,584	0	0	2,354	0	0	0	73	0	498	659
U. North Florida	180	3,544	238	25	497	0	32	0	387	0	14	2,351
SUNY, U. Albany	181	3,523	370	1,710	261	0	154	0	788	0	0	240
U. Massachusetts, Dartmouth	182	3,517	0	2,557	67	0	0	0	1	0	649	243
U. North Carolina, Charlotte	183	3,487	24	255	33	0	8	0	135	0	2,101	931
Morgan State U.	184	3,444	0	2	139	0	0	0	0	0	2,750	553
Southern Illinois U., Carbondale	185	3,425	0	3	3,217	0	0	0	131	16	58	0
U. Texas Health Science Center, San Antonio	186	3,413	0	0	3,413	0	0	0	0	0	0	0
Northern Arizona U.	187	3,353	7	1,366	1,239	0	67	0	78	0	185	411
U. Nebraska, Medical Center	188	3,335	0	0	3,335	0	0	0	0	0	0	0
Florida Gulf Coast U.	189	3,308	0	921	48	47	0	0	2	0	0	2,290
South Dakota State U.	190	3,306	0	183	1,109	66	27	0	187	0	1,693	41
U. Maryland, Baltimore County	191	3,264	178	962	176	0	273	132	40	0	468	1,035
U. South Alabama	192	3,178	691	1,491	2	0	0	0	0	0	773	221
Michigan Technological U.	193	3,146	33	1,677	89	0	0	0	18	0	1,329	0
U. Hawaii, Hilo	194	3,093	0	1,590	1,176	0	0	0	161	166	0	0
Medical C. Wisconsin	195	3,079	0	0	2,176	0	0	0	0	0	903	0
Boise State U.	196	3,060	34	609	568	0	0	0	1,214	0	456	179
Florida Institute of Technology	197	2,949	2,438	0	0	0	0	0	0	0	0	511
U. Maryland, Eastern Shore	198	2,918	0	2,863	55	0	0	0	0	0	0	0
California Polytechnic State U., San Luis Obispo	199	2,915	0	885	271	1,001	71	0	0	0	216	471
Texas Southern U.	200	2,860	0	0	2,078	0	0	0	0	0	0	782
U. Minnesota, Duluth	201	2,837	0	16	2,439	0	0	167	0	0	215	0
Illinois State U.	202	2,832	0	32	5	0	0	0	0	0	0	2,795

TABLE 66

Federally financed higher education R&D expenditures, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	Other agency R&D expenditures ^a	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
North Carolina A&T State U.	203	2,831	55	0	7	36	8	0	0	0	660	2,065
San Diego State U.	204	2,809	0	698	289	0	18	14	240	198	339	1,013
Air Force Institute of Technology	205	2,786	0	0	0	0	351	0	0	0	2,435	0
U. Guam	206	2,737	0	1,724	949	0	0	0	0	0	6	58
CUNY, John Jay C. of Criminal Justice	207	2,735	0	0	166	0	193	76	438	334	0	1,528
Central Michigan U.	208	2,733	0	137	2,571	0	16	0	0	0	0	9
Brigham Young U., Provo	209	2,699	278	0	541	0	0	0	572	0	413	895
Desert Research Institute	210	2,681	0	2,681	0	0	0	0	0	0	0	0
U. Texas Health Science Center, Houston	211	2,655	0	0	2,655	0	0	0	0	0	0	0
Nova Southeastern U.	212	2,654	0	2,568	0	0	0	35	0	0	0	51
Winston-Salem State U.	213	2,548	100	100	780	51	275	246	100	0	0	896
Pennsylvania State U., Behrend	214	2,518	0	573	921	0	0	130	0	0	866	28
Western Michigan U. and Homer Stryker M.D. School of Medicine	215	2,456	0	214	12	0	6	33	1	0	300	1,890
Jackson State U.	216	2,429	90	0	510	0	671	0	0	123	738	297
Indiana U.-Purdue U., Indianapolis	217	2,425	71	351	122	0	163	16	495	0	294	913
U. Louisville	218	2,419	43	21	842	0	18	6	83	0	906	500
Tennessee Technological U.	219	2,414	0	0	1,502	0	0	12	0	0	630	270
California State U., San Bernardino	220	2,382	8	0	0	0	0	0	12	0	0	2,362
Sam Houston State U.	221	2,378	0	0	387	0	0	0	297	0	0	1,694
Rhode Island C.	222	2,322	0	0	0	0	0	0	0	0	0	2,322
U. Wisconsin-Milwaukee	223	2,246	0	923	199	0	1	2	515	6	343	257
U. Washington, Tacoma	224	2,244	0	2,229	0	0	0	0	0	0	0	15
Northwest Indian C.	225	2,221	0	60	0	0	0	0	0	0	0	2,161
Clarkson U.	226	2,188	7	0	249	0	644	0	0	0	988	300
U. Colorado Denver ^e	227	2,165	229	39	92	368	0	0	51	0	153	1,233
Southern Methodist U.	228	2,149	0	211	0	0	0	0	0	52	175	1,711
Troy U.	229	2,136	0	67	27	0	1,910	0	0	0	0	132
Rensselaer Polytechnic Institute	230	2,070	0	5	84	0	0	143	0	0	1,242	596
Salisbury U.	231	2,045	0	89	1	0	0	0	3	0	0	1,952
U. North Texas, Denton	232	1,987	129	128	188	0	1	0	6	0	440	1,095
Dartmouth C. and Dartmouth Hitchcock Medical Center	233	1,975	0	32	1,167	0	0	0	358	12	184	222
California State U., San Marcos	234	1,940	0	0	0	0	273	0	25	409	504	729
Tuskegee U.	235	1,934	230	0	824	69	420	0	0	0	360	31
Bowling Green State U.	236	1,909	0	264	241	0	0	0	362	0	0	1,042

TABLE 66

Federally financed higher education R&D expenditures, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	Other agency R&D expenditures ^a	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Texas A&M U.-Kingsville	237	1,903	0	0	129	0	0	0	0	0	383	1,391
Wake Forest U.	238	1,895	0	0	1,895	0	0	0	0	0	0	0
California State U., Bakersfield	239	1,886	0	30	14	702	0	0	23	0	127	990
Stevens Institute of Technology	240	1,855	0	0	0	0	0	0	0	0	1,568	287
Winthrop U.	241	1,822	0	0	0	0	0	0	0	0	0	1,822
Johnson C. Smith U.	242	1,802	164	0	86	0	0	0	2	0	52	1,498
Northern Illinois U.	243	1,763	0	18	87	0	11	21	13	0	1,572	41
U.S. Army War C.	244	1,714	i	0	0	0	0	0	1,714	i	0	0
U. California, Merced	245	1,689	0	496	9	248	142	1	3	80	97	613
Duquesne U.	246	1,618	0	470	692	0	0	0	0	0	0	456
U. Toledo	247	1,604	0	867	351	0	52	0	14	0	131	189
California State U., Long Beach	248	1,580	0	9	75	0	806	70	216	0	365	39
U. Massachusetts, Medical School	249	1,513	0	0	1,513	0	0	0	0	0	0	0
Washington U., Saint Louis	250	1,501	0	0	756	0	0	26	5	0	404	310
San Francisco State U.	251	1,447	0	1,121	253	0	0	0	29	44	0	0
Marshall U.	252	1,426	0	35	1,027	0	0	0	0	0	341	23
SUNY, Binghamton U.	253	1,407	0	0	3	0	0	0	491	0	0	913
Howard U.	254	1,383	0	305	384	0	200	358	0	0	136	0
Icahn School of Medicine at Mount Sinai	255	1,350	0	0	1,350	0	0	0	0	0	0	0
U. Arkansas for Medical Sciences	256	1,343	0	0	1,343	0	0	0	0	0	0	0
U. Rochester	257	1,333	0	0	1,112	0	0	30	34	0	0	157
U. Puerto Rico, Medical Sciences Campus	258	1,295	0	0	1,295	0	0	0	0	0	0	0
Claremont Graduate U.	259	1,287	0	0	0	0	0	0	337	0	0	950
Miami U.	260	1,252	0	57	410	0	0	172	0	0	198	415
Loyola Marymount U.	261	1,228	0	0	0	0	0	0	303	0	0	925
Lake Superior State U.	262	1,184	0	0	1,178	0	0	0	6	0	0	0
Loyola U., Chicago	263	1,162	0	0	632	2	0	60	275	0	0	193
U. Illinois, Springfield	264	1,110	0	0	0	0	0	0	802	0	0	308
U. Tennessee, Health Science Center	265	1,106	0	0	1,106	0	0	0	0	0	0	0
California State Polytechnic U., Pomona	266	1,105	0	0	51	0	0	0	0	0	695	359
William Paterson U.	267	1,101	0	0	3	0	0	87	433	0	0	578
Rutgers, State U. New Jersey, Camden	268	1,089	116	0	0	0	0	0	973	0	0	0
Des Moines U.	269	1,077	0	434	451	0	0	0	192	0	0	0
North Carolina Central U.	270	1,076	0	0	0	0	131	0	210	0	22	713

TABLE 66

Federally financed higher education R&D expenditures, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	Other agency R&D expenditures ^a	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Kent State U.	271	1,072	0	29	113	0	0	67	13	407	0	443
CUNY, Graduate School of Public Health and Health Policy	272	1,007	0	0	1,007	0	0	0	0	0	0	0
U. Texas Rio Grande Valley	273	1,005	0	735	37	0	0	0	0	0	222	11
Oregon Health and Science U.	274	995	0	0	995	0	0	0	0	0	0	0
Cleveland State U.	275	977	0	0	14	0	0	0	277	0	403	283
La Sierra U.	276	972	0	0	0	0	0	0	0	0	0	972
Saint Louis U.	277	962	55	72	671	0	0	0	66	0	55	43
Colorado State U., Pueblo	278	952	0	0	952	0	0	0	0	0	0	0
Ball State U.	279	948	0	0	378	0	0	0	74	0	0	496
U. Texas Southwestern Medical Center	280	942	0	0	942	0	0	0	0	0	0	0
Augusta U.	281	919	0	0	919	0	0	0	0	0	0	0
U. Tulsa	282	908	410	47	11	0	0	7	4	0	114	315
Seton Hall U.	283	907	0	0	0	0	0	0	0	0	0	907
Fordham U.	284	904	0	0	0	0	0	37	0	0	0	867
Middle Tennessee State U.	284	904	0	0	141	0	209	0	126	0	172	256
Illinois Institute of Technology	286	894	0	21	0	0	245	0	0	0	603	25
U. Wisconsin-Stevens Point	287	889	0	25	864	0	0	0	0	0	0	0
U. Akron	288	883	0	92	12	0	0	0	0	0	768	11
Montana Technological U.	289	864	0	848	0	0	0	0	0	0	16	0
Texas A&M International U.	290	843	0	0	66	67	66	0	527	38	66	13
U. New Haven	291	817	0	47	3	0	120	183	464	0	0	0
California State Polytechnic U., Humboldt	292	805	0	59	549	0	0	0	0	0	197	0
Pittsburg State U.	293	793	0	0	253	0	0	0	22	0	518	0
C. Charleston	294	779	0	375	306	0	0	0	0	0	0	98
Northern Kentucky U.	295	778	14	0	764	0	0	0	0	0	0	0
Chapman U.	296	776	0	0	240	0	0	0	1	0	0	535
Rowan U.	297	775	103	0	9	0	0	124	0	0	480	59
Alabama A&M U.	298	749	25	0	182	5	24	19	57	0	268	169
Baylor U.	299	742	0	107	101	0	0	170	1	0	180	183
Arkansas State U., Jonesboro	300	725	91	0	413	0	0	0	0	0	221	0
Northwestern State U. Louisiana	301	723	0	0	0	0	0	0	723	0	0	0
California State U., Northridge	302	712	0	114	0	35	0	0	32	13	23	495
SUNY, Buffalo State	303	708	0	679	29	0	0	0	0	0	0	0
U. Northern Colorado	304	698	0	0	289	0	0	0	17	0	0	392

TABLE 66

Federally financed higher education R&D expenditures, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	Other agency R&D expenditures ^a	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Lamar U.	305	694	0	0	28	0	0	0	0	0	300	366
St. Edward's U.	305	694	0	0	0	0	0	0	0	0	0	694
California State U., Los Angeles	307	686	0	0	0	0	0	0	354	0	176	156
Murray State U.	308	679	0	36	477	0	166	0	0	0	0	0
Montclair State U.	309	676	0	130	54	0	0	227	0	0	13	252
Southern Illinois U., Edwardsville	310	672	0	416	41	0	0	0	0	0	72	143
Hawaii Pacific U.	311	653	0	311	50	0	0	0	0	0	0	292
U. South Dakota	312	638	0	0	530	0	0	0	0	0	108	0
Western Washington U.	313	630	0	179	92	0	0	0	239	116	0	4
U. Houston-Downtown	314	629	0	0	0	0	0	0	0	0	71	558
U. Texas, Dallas	315	623	88	0	6	0	3	71	15	34	382	24
California State U., Fullerton	316	616	125	70	59	0	0	0	351	0	0	11
U. Arkansas, Little Rock	317	615	63	0	0	0	0	0	6	0	0	546
Dillard U.	318	613	0	0	183	0	0	0	0	0	0	430
Morehouse C.	319	608	0	0	0	0	0	0	0	0	0	608
U. Alaska, Southeast	320	606	0	271	285	0	0	0	50	0	0	0
U. Houston-Clear Lake	320	606	0	0	546	0	0	0	60	0	0	0
U. Wisconsin-La Crosse	320	606	0	0	383	0	0	0	223	0	0	0
Missouri State U.	323	603	0	3	438	0	0	0	0	0	160	2
Texas Woman's U.	324	599	0	0	2	0	0	0	0	0	0	597
U. North Carolina, Asheville	325	594	0	27	12	0	323	0	0	0	0	232
Texas Tech U., Health Sciences Center, El Paso	326	580	0	0	0	0	0	0	0	0	0	580
Brandeis U.	327	564	0	0	53	0	0	0	329	36	0	146
Erikson Institute	327	564	0	0	0	0	0	0	0	0	0	564
Wright State U.	329	555	91	45	404	13	0	0	0	0	0	2
Wesleyan U.	330	548	0	53	0	0	243	21	0	0	0	231
Georgia Southern U.	331	547	0	137	176	0	21	0	37	0	111	65
Louisiana Tech U.	331	547	16	0	10	7	14	4	89	0	241	166
Villanova U.	333	541	0	16	93	0	0	0	0	0	311	121
South Dakota School of Mines and Technology	334	538	0	0	0	0	83	0	0	0	455	0
Purdue U., Northwest	335	536	0	0	0	0	0	0	0	0	0	536
SUNY, C. Brockport	336	526	0	0	512	0	0	0	14	0	0	0
U. Hawaii, system office	337	515	515	0	0	0	0	0	0	0	0	0
Marquette U.	338	508	117	0	0	5	0	4	0	0	327	55

TABLE 66

Federally financed higher education R&D expenditures, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	Other agency R&D expenditures ^a	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields		
Hobart and William Smith Colleges	339	504	0	2	502	0	0	0	0	0	0	0		
Colorado C.	340	495	0	0	0	0	0	0	7	0	0	488		
Scripps Research Institute	340	495	0	0	495	0	0	0	0	0	0	0		
U. San Diego	342	486	0	68	0	0	0	0	70	0	193	155		
U. Tennessee, Chattanooga	343	479	56	0	47	0	0	0	0	35	341	0		
Western Kentucky U.	343	479	0	338	51	0	81	0	0	0	9	0		
U. Puerto Rico, Rio Piedras	345	476	0	350	0	0	82	0	0	0	0	44		
California State U., Fresno	346	454	0	0	0	0	0	0	327	0	77	50		
Austin Peay State U.	347	448	0	0	448	0	0	0	0	0	0	0		
Case Western Reserve U.	348	440	23	0	19	0	0	0	210	4	184	0		
Indiana State U.	349	439	0	15	75	0	0	0	0	0	34	315		
Fort Lewis C.	350	433	0	0	46	0	0	0	0	0	0	387		
Louisiana State U., Health Sciences Center, New Orleans	351	430	0	0	430	0	0	0	0	0	0	0		
California State U., Monterey Bay	352	426	0	337	89	0	0	0	0	0	0	0		
Occidental C.	353	425	i	0	405	i	0	i	0	i	20	i	0	i
Savannah State U.	354	416	0	416	0	0	0	0	0	0	0	0	0	
Texas A&M U.-Commerce	355	414	93	0	0	0	0	101	0	0	0	220		
Fort Valley State U.	356	413	0	0	413	0	0	0	0	0	0	0		
U. Missouri, Saint Louis	356	413	0	0	316	0	0	0	23	0	0	74		
Clark U.	358	411	0	129	0	0	0	0	282	0	0	0		
Central Washington U.	359	408	0	393	0	0	6	0	3	0	0	6		
Western Carolina U.	360	407	0	213	138	0	0	0	0	0	41	15		
Oklahoma State U., Center for Health Sciences	361	404	0	0	153	0	0	251	0	0	0	0		
SUNY, C. Plattsburgh	362	400	0	400	0	0	0	0	0	0	0	0		
Southeastern Louisiana U.	363	382	0	0	171	0	0	0	0	0	0	211		
California State U., Dominguez Hills	364	368	0	0	0	0	0	0	0	0	0	368		
Grand Valley State U.	364	368	0	317	51	0	0	0	0	0	0	0		
California State U., Chico	366	364	0	8	0	0	2	0	15	0	0	339		
Citadel Military C. South Carolina	366	364	93	0	52	0	30	40	0	0	139	10		
Northern Michigan U.	368	359	0	63	217	0	0	0	21	0	0	58		
Fisk U.	369	356	0	0	0	0	356	0	0	0	0	0		
Pacific U.	370	355	0	0	11	0	0	0	0	0	0	344		
Tennessee State U.	371	354	0	120	14	0	0	0	0	0	220	0		
Central Connecticut State U.	372	352	0	0	15	0	0	0	205	0	114	18		

TABLE 66

Federally financed higher education R&D expenditures, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	Other agency R&D expenditures ^a	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
West Virginia State U.	372	352	0	0	352	0	0	0	0	0	0	0
U. Nebraska, central administration	374	351	0	0	0	0	0	0	0	0	351	0
Appalachian State U.	375	348	0	22	97	0	0	6	28	0	0	195
Smith C.	376	347	0	5	147	0	0	0	0	0	44	151
West Texas A&M U.	377	344	0	7	0	0	0	0	0	0	64	273
Eastern Washington U.	378	343	0	16	0	0	0	0	320	0	0	7
Monmouth U.	378	343	0	294	0	0	0	0	49	0	0	0
CUNY, Graduate Center	380	326	0	0	0	0	0	3	134	0	0	189
Grambling State U.	380	326 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	326 i
Idaho State U.	382	323	1	102	127	0	0	0	13	0	0	80
U. Ana G. Mendez, Gurabo	383	319	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	286 i	33 i
Saint Joseph's U.	384	318	85	0	152	0	0	0	11	0	0	70
East Tennessee State U.	385	317	0	0	292	0	24	0	0	0	0	1
Saginaw Valley State U.	386	315 i	3 i	0 i	65 i	0 i	0 i	0 i	21 i	0 i	0 i	226 i
Midwestern U.	387	314	0	0	314	0	0	0	0	0	0	0
Coastal Carolina U.	388	312	0	226	86	0	0	0	0	0	0	0
U. Michigan, Dearborn	389	306	0	0	0	0	0	0	0	131	174	1
Gallaudet U.	390	305	162	0	0	0	0	0	95	0	0	48
Santa Clara U.	391	304	0	0	0	0	0	0	0	0	35	269
Creighton U.	392	298 i	43 i	0 i	104 i	13 i	17 i	8 i	52 i	0 i	0 i	61 i
U. North Texas, Health Science Center	393	297	0	0	297	0	0	0	0	0	0	0
Elizabeth City State U.	394	295	0	0	0	0	0	0	0	0	0	295
Prairie View A&M U.	395	294	50	0	16	0	43	0	0	0	167	18
U. Louisiana, Monroe	396	286	0	82	51	0	0	0	153	0	0	0
U. Texas of the Permian Basin	397	283	0	0	0	0	0	0	25	0	258	0
U. Texas M. D. Anderson Cancer Center	398	281	0	0	281	0	0	0	0	0	0	0
Kean U.	399	279	3	1	8	0	1	7	0	0	0	259
SUNY, Upstate Medical U.	399	279	0	0	279	0	0	0	0	0	0	0
U. Central Oklahoma	401	275 i	1 i	0 i	63 i	7 i	5 i	4 i	5 i	0 i	63 i	127 i
Lawrence Technological U.	402	271	0	0	0	0	0	0	0	0	271	0
U. Texas Medical Branch	403	267	0	0	267	0	0	0	0	0	0	0
U.S. Military Academy	403	267	0	0	0	0	0	0	99	0	0	168
U. of Mary Washington	405	264	0	0	0	0	0	0	0	0	0	264
SUNY, Oswego	406	261	0	16	0	0	245	0	0	0	0	0

TABLE 66

Federally financed higher education R&D expenditures, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	Other agency R&D expenditures ^a	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Wisconsin-Oshkosh	407	260	0	1	7	0	0	0	0	0	252	0
Towson U.	408	254	197	22	5	0	0	0	27	0	0	3
CUNY, Hunter C.	409	251	0	86	0	0	0	88	0	0	0	77
Catholic U. of America	410	249	0	0	0	0	0	0	0	0	133	116
New School	410	249	0	0	0	0	0	152	0	0	0	97
Hope C.	412	248	0	0	0	0	25	0	0	0	0	223
Bowie State U.	413	239	0	0	0	0	0	0	0	0	0	239
Rush U.	414	238	0	0	0	0	0	238	0	0	0	0
California Lutheran U.	415	233	0	0	0	0	0	0	0	233	0	0
Sonoma State U.	416	230	0	88	11	0	0	0	0	0	0	131
Eastern Michigan U.	417	226	0	0	0	0	0	0	0	0	76	150
Texas Christian U.	418	221	0	0	0	0	0	0	0	193	0	28
New Mexico Highlands U.	419	219	i 2	i 35	i 26	i 25	i 4	i 0	i 20	i 0	i 0	i 107
Franklin and Marshall C.	420	214	0	2	0	0	0	0	212	0	0	0
Rosalind Franklin U. of Medicine and Science	421	212	0	0	212	0	0	0	0	0	0	0
California State U., Stanislaus	422	211	0	0	206	0	0	0	5	0	0	0
Kettering U.	423	203	0	0	0	0	0	0	0	0	0	203
Rutgers, State U. New Jersey, Newark	424	199	0	74	0	0	0	0	88	0	0	37
U. Washington, Bothell	425	195	0	21	0	0	0	0	68	0	0	106
Christopher Newport U.	426	192	0	0	153	0	0	32	0	0	0	7
Alaska Pacific U.	427	187	0	187	0	0	0	0	0	0	0	0
Roger Williams U.	428	186	0	97	33	0	0	21	0	0	0	35
Kennesaw State U.	429	180	0	0	155	0	0	0	0	0	0	25
U. Central Arkansas	430	177	0	0	177	0	0	0	0	0	0	0
U. Nebraska, Kearney	430	177	0	0	173	0	0	0	0	0	0	4
Indiana U. Pennsylvania	432	176	0	18	150	0	0	0	8	0	0	0
Tougaloo C.	433	173	i 3	i 0	i 28	i 1	i 13	i 5	i 6	i 0	i 0	i 117
U. South Carolina, Aiken	434	172	0	0	172	0	0	0	0	0	0	0
Oakland U.	435	170	0	0	7	0	0	0	0	0	0	163
Reed C.	435	170	i 3	i 0	i 23	i 1	i 12	i 4	i 10	i 0	i 0	i 117
Dine C.	437	168	0	0	168	0	0	0	0	0	0	0
Stockton U.	438	166	0	139	27	0	0	0	0	0	0	0
Uniformed Services U. of the Health Sciences	439	156	0	0	156	0	0	0	0	0	0	0
Mount Holyoke C.	440	152	0	0	75	0	0	77	0	0	0	0

TABLE 66

Federally financed higher education R&D expenditures, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	Other agency R&D expenditures ^a	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Calvin U.	441	151	0	0	150	0	0	0	0	0	0	1
C. New Jersey	442	145	0	0	12	0	14	0	0	0	0	119
Tarleton State U.	442	145	0	0	4	0	0	0	141	0	0	0
DePaul U.	444	144	0	25	0	0	0	0	119	0	0	0
Youngstown State U.	445	135	0	0	0	0	0	60	0	0	6	69
Bowdoin C.	446	129	0	68	61	0	0	0	0	0	0	0
Williams C.	447	128 i	2 i	6 i	14 i	0 i	7 i	2 i	5 i	0 i	0 i	92 i
Swarthmore C.	448	127	0	0	0	21	0	68	0	0	0	38
Virginia State U.	448	127	0	0	127	0	0	0	0	0	0	0
Bucknell U.	450	125	0	0	33	0	0	0	0	2	90	0
Canisius C.	450	125	0	0	0	0	0	0	0	125	0	0
Skidmore C.	450	125	0	0	80	0	0	0	13	0	0	32
Pepperdine U.	453	123	0	0	0	0	0	0	0	0	0	123
CUNY, C. Staten Island	454	119	119	0	0	0	0	0	0	0	0	0
Stephen F. Austin State U.	454	119	0	23	96	0	0	0	0	0	0	0
South Carolina State U.	456	117 i	0 i	0 i	0 i	0 i	117 i	0 i	0 i	0 i	0 i	0 i
U. Oklahoma, Tulsa	456	117	0	0	0	0	0	0	20	0	97	0
U. Texas, Tyler	456	117	0	0	0	0	0	0	0	0	117	0
Spelman C.	459	114	0	0	0	0	2	0	9	0	0	103
Northeast Ohio Medical U.	460	109	0	0	82	0	0	0	0	27	0	0
SUNY, Polytechnic Institute	461	108	0	0	66	0	0	0	0	0	21	21
U. Arkansas, Pine Bluff	461	108	0	0	108	0	0	0	0	0	0	0
CUNY, Advanced Science Research Center	463	104	0	71	33	0	0	0	0	0	0	0
James Madison U.	464	100	0	0	44	0	13	0	0	0	0	43
Abilene Christian U.	465	98	0	0	0	0	0	0	0	0	0	98
U. of the District of Columbia	466	95	0	95	0	0	0	0	0	0	0	0
Western New England U.	467	93	0	0	0	0	0	0	0	0	93	0
Franklin W. Olin C. of Engineering	468	91	0	0	0	0	0	0	0	0	87	4
Heidelberg U.	469	90	0	90	0	0	0	0	0	0	0	0
Northland C.	469	90 i	0 i	0 i	14 i	0 i	0 i	3 i	10 i	0 i	0 i	63 i
Rockefeller U.	469	90	0	90	0	0	0	0	0	0	0	0
U. Wisconsin-Green Bay	469	90 i	4 i	11 i	15 i	1 i	1 i	2 i	5 i	0 i	33 i	18 i
Albert Einstein C. of Medicine	473	85	0	0	85	0	0	0	0	0	0	0
Sul Ross State U.	474	84 i	1 i	11 i	34 i	3 i	4 i	1 i	3 i	0 i	0 i	27 i

TABLE 66

Federally financed higher education R&D expenditures, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	Other agency R&D expenditures ^a	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Yeshiva U.	475	82	0	0	82	0	0	0	0	0	0	0
West Chester U. Pennsylvania	476	81	0	0	0	0	0	81	0	0	0	0
St. Cloud State U.	477	79	0	0	56	0	0	0	0	0	0	23
Black Hills State U.	478	78	0	0	28	0	0	0	0	0	0	50
Minnesota State U., Mankato	478	78	0	0	0	0	0	0	78	0	0	0
U. New England	480	77	0	62	15	0	0	0	0	0	0	0
Morehouse School of Medicine	481	76	0	0	76	0	0	0	0	0	0	0
Southern U. and A&M C., Baton Rouge	481	76	0	0	54	0	17	0	0	0	0	5
Southern Connecticut State U.	483	75	0	23	12	0	0	0	0	0	0	40
Connecticut C.	484	66	0	0	0	0	0	0	0	0	0	66
East Stroudsburg U. Pennsylvania	484	66	0	0	66	0	0	0	0	0	0	0
Plymouth State U.	486	65	1	0	26	0	0	0	21	0	0	17
SUNY, Downstate Health Sciences U.	487	62	0	0	62	0	0	0	0	0	0	0
Carleton C.	488	60	0	0	0	0	0	0	53	0	0	7
Meharry Medical C.	488	60	0	0	60	0	0	0	0	0	0	0
U. Colorado Colorado Springs	490	59	59	0	0	0	0	0	0	0	0	0
Mercyhurst U.	491	58	0	0	0	0	0	0	0	40	0	18
Alabama State U.	492	57	0	0	57	0	0	0	0	0	0	0
U. Hartford	492	57	0	0	3	0	0	0	39	0	15	0
Western Illinois U.	494	55	0	0	8	0	47	0	0	0	0	0
Florida Polytechnic U.	495	53	0	0	0	0	0	0	0	0	53	0
U. Puerto Rico, Humacao	495	53	0	0	0	0	0	53	0	0	0	0
U. Virginia's C. Wise	497	49	0	0	0	0	0	0	49	0	0	0
Purdue U., Fort Wayne	498	48	0	0	20	0	0	0	0	0	12	16
Bryn Mawr C.	499	47	0	0	47	0	0	0	0	0	0	0
U. Southern Maine	500	45	0	0	45	0	0	0	0	0	0	0
U. Northern Iowa	501	44	0	0	44	0	0	0	0	0	0	0
Oregon Institute of Technology	502	43 i	0 i	17 i	22 i	1 i	0 i	0 i	0 i	0 i	3 i	0 i
U. Wisconsin-Platteville	502	43 i	0 i	0 i	18 i	1 i	1 i	0 i	4 i	1 i	3 i	15 i
Albion C.	504	40 i	2 i	3 i	1 i	0 i	1 i	0 i	9 i	0 i	0 i	24 i
Central State U.	504	40	0	0	0	0	0	0	0	0	40	0
Colby C.	504	40	0	0	8	0	0	0	32	0	0	0
Long Island U.	504	40	0	0	0	0	0	0	0	0	0	40
CUNY, Baruch C.	508	38	0	0	20	0	0	5	0	0	0	13

TABLE 66

Federally financed higher education R&D expenditures, financed by all other federal agencies, ranked by other agency R&D expenditures, by R&D field: FY 2022

(Dollars in thousands)

Institution	Rank	Other agency R&D expenditures ^a	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Hamilton C.	541	4	0	0	0	0	0	0	0	0	0	4
SUNY, Geneseo	541	4	0	0	4	0	0	0	0	0	0	0
CUNY, Lehman C.	545	3	0	0	0	0	0	0	0	0	0	3
U. Wisconsin-Eau Claire	546	2	0	2	0	0	0	0	0	0	0	0
Alcorn State U.	547	1 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	1 i	0 i
Alfred U.	547	1	0	1	0	0	0	0	0	0	0	0

i = imputed.

nec = not elsewhere classified; S&E = science and engineering.

^a Includes all other agencies reported.^b Johns Hopkins University includes the Applied Physics Laboratory, with \$155,825 thousand in R&D expenditures financed by all other federal agencies in FY 2022.^c The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.^e The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.**Note(s):**Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).**Source(s):**

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 67

Higher education R&D expenditures, by state: FYs 2010–22

(Dollars in thousands)

State	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
United States	61,286,610	65,274,393	65,729,007	66,977,566	67,161,428	68,519,962	71,736,671	75,148,301	79,024,262	83,488,120	86,302,262	89,694,837	97,680,528
Alabama	847,072	898,422	830,538	837,871	812,803	898,010	944,506	994,210	1,052,494	1,123,491	1,186,697	1,272,604	1,431,393
Alaska	180,888	185,942	181,983	184,472	174,431	163,012	167,308	176,424	165,198	169,296	177,537	196,501	226,717
Arizona	944,795	997,700	1,039,424	1,065,136	1,047,329	1,099,837	1,162,283	1,213,469	1,358,920	1,434,177	1,499,135	1,516,463	1,690,904
Arkansas	267,405	282,628	289,364	294,572	285,691	293,494	298,497	312,533	343,066	364,781	370,782	387,674	416,507
California	7,832,767	8,225,420	8,401,638	8,357,891	8,403,770	8,656,350	8,888,492	9,226,580	10,170,328	10,478,948	10,903,554	11,221,457	12,107,605
Colorado	1,180,741	1,292,081	1,338,888	1,253,466	1,232,376	1,273,753	1,378,920	1,461,877	1,552,251	1,622,011	1,665,742	1,746,975	1,898,797
Connecticut	888,949	945,705	946,289	1,059,367	1,062,741	1,091,381	1,176,170	1,254,440	1,287,024	1,387,319	1,400,865	1,494,357	1,587,047
Delaware	168,511	188,765	185,842	197,262	193,242	191,704	197,615	204,221	207,569	229,287	243,550	254,725	397,123
District of Columbia	470,217	493,469	501,534	524,241	543,149	559,222	555,721	601,551	630,161	664,872	684,793	717,928	783,163
Florida	1,994,860	2,125,648	2,179,352	2,171,626	2,272,556	2,354,871	2,483,359	2,584,487	2,529,896	2,682,412	2,694,387	2,750,264	3,048,253
Georgia	1,691,603	1,808,679	1,882,308	1,956,245	1,950,990	2,046,068	2,168,071	2,340,410	2,473,503	2,650,343	2,782,005	2,949,654	3,260,128
Hawaii	317,942	330,838	335,704	343,802	335,189	332,233	318,134	301,204	297,975	301,419	298,285	294,913	301,272
Idaho	126,433	142,364	146,326	143,728	142,772	146,700	154,989	163,093	171,053	167,903	170,595	165,913	179,835
Illinois	2,224,414	2,352,326	2,362,224	2,501,413	2,327,098	2,382,947	2,400,990	2,503,276	2,570,270	2,709,733	2,764,233	2,914,398	3,160,587
Indiana	1,186,421	1,271,364	1,306,462	1,336,343	1,308,856	1,323,824	1,408,862	1,461,367	1,505,426	1,661,312	1,715,310	1,699,302	1,872,200
Iowa	706,667	724,608	718,281	714,366	773,760	758,796	814,031	830,587	885,861	880,424	917,407	931,113	1,005,800
Kansas	482,901	511,048	527,122	545,364	547,813	562,254	559,279	577,566	640,735	703,716	739,872	785,055	882,644
Kentucky	575,277	596,081	586,240	550,941	533,834	516,754	546,527	583,143	596,532	615,383	641,301	655,290	733,242
Louisiana	713,675	727,510	699,228	671,580	665,754	662,778	683,125	690,958	744,283	778,357	798,373	830,787	941,868
Maine	137,516	139,983	120,072	104,573	124,688	103,102	100,351	122,740	128,500	151,249	153,262	165,224	191,739
Maryland	3,139,254	3,416,687	3,359,741	3,433,145	3,573,167	3,741,687	3,799,639	4,017,092	4,167,470	4,629,161	4,745,030	4,914,256	5,168,958
Massachusetts	2,749,926	2,949,264	3,214,549	3,532,767	3,500,516	3,673,620	3,796,798	3,928,192	4,059,931	4,305,676	4,389,620	4,556,451	4,837,383
Michigan	2,031,479	2,161,520	2,219,505	2,267,080	2,242,864	2,334,031	2,468,498	2,662,045	2,781,359	2,891,267	2,868,417	2,843,639	3,082,410
Minnesota	831,754	898,741	864,938	901,404	919,257	928,999	961,040	968,784	999,660	1,060,927	1,086,730	1,115,363	1,241,862
Mississippi	443,625	460,962	476,078	416,772	410,543	408,232	454,983	479,122	479,431	535,774	506,660	491,172	565,341
Missouri	1,087,432	1,121,330	1,098,287	1,074,632	1,050,665	1,074,115	1,151,047	1,188,439	1,260,217	1,368,942	1,444,375	1,582,870	1,708,351
Montana	207,827	195,267	196,721	185,996	181,127	181,680	195,125	229,206	230,099	273,459	290,297	330,081	340,611
Nebraska	400,660	412,756	438,303	444,917	454,744	464,664	481,383	513,581	535,911	572,488	586,550	589,184	626,792
Nevada	174,247	165,437	153,325	153,427	153,571	157,528	191,155	205,761	260,074	282,740	296,470	308,745	312,714
New Hampshire	311,455	359,839	366,337	354,296	365,537	357,665	379,991	455,859	471,347	473,061	484,313	498,518	551,187
New Jersey	1,075,872	1,141,570	1,113,109	1,173,474	1,130,474	1,106,186	1,158,998	1,261,174	1,350,470	1,336,562	1,393,596	1,352,770	1,516,963
New Mexico	422,868	405,339	400,952	403,776	412,428	390,913	367,031	370,329	369,927	365,769	376,331	473,020	543,867
New York	4,948,442	5,288,932	5,352,978	5,519,542	5,638,584	5,700,230	6,075,419	6,388,367	6,633,634	7,075,350	7,171,446	7,577,235	8,280,323
North Carolina	2,465,260	2,668,842	2,681,840	2,739,920	2,814,943	2,814,924	2,937,671	3,081,568	3,204,297	3,388,360	3,385,735	3,504,060	3,870,874
North Dakota	204,049	211,057	215,642	219,115	222,032	217,926	226,572	255,942	255,534	263,217	267,308	307,556	322,621

TABLE 67

Higher education R&D expenditures, by state: FYs 2010–22

(Dollars in thousands)

State	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Ohio	2,051,857	2,221,827	2,128,968	2,168,267	2,158,565	2,152,796	2,193,019	2,299,112	2,370,346	2,499,431	2,518,803	2,788,160	3,079,902
Oklahoma	400,731	444,722	437,180	420,067	419,653	419,602	488,559	505,940	517,283	533,785	604,114	623,319	650,977
Oregon	696,272	739,733	722,421	704,764	705,688	719,881	759,243	780,741	820,988	863,844	894,789	929,355	1,001,028
Pennsylvania	3,128,420	3,315,363	3,239,240	3,361,374	3,328,851	3,356,723	3,950,517	4,178,978	4,406,037	4,649,772	4,819,394	4,933,707	5,454,961
Rhode Island	428,738	459,321	495,366	479,162	447,469	453,291	462,777	332,483	368,079	390,575	395,730	425,750	458,694
South Carolina	660,415	620,533	636,534	648,137	655,757	665,319	687,110	699,199	736,318	742,924	742,827	753,287	805,510
South Dakota	131,165	136,305	129,200	117,361	104,962	103,368	106,941	112,916	115,860	118,377	110,619	100,534	117,368
Tennessee	938,237	1,016,915	1,025,283	1,032,124	1,133,373	1,077,068	1,091,835	1,183,795	1,293,909	1,337,211	1,408,786	1,624,957	1,715,468
Texas	4,416,323	4,661,517	4,651,322	4,813,050	4,898,443	5,036,366	5,254,298	5,472,126	5,622,830	5,970,929	6,620,370	6,849,522	7,440,455
Utah	562,349	627,180	622,244	688,972	693,796	733,407	573,106	611,015	812,458	924,632	950,562	993,876	1,062,475
Vermont	132,792	137,303	120,226	121,110	114,549	119,663	120,306	122,003	131,670	138,716	193,824	198,247	218,910
Virginia	1,199,244	1,390,412	1,379,440	1,419,504	1,381,078	1,411,176	1,462,939	1,551,003	1,684,274	1,814,048	1,918,654	1,942,260	2,117,336
Washington	1,358,061	1,502,284	1,475,365	1,526,001	1,499,528	1,518,660	1,613,401	1,715,069	1,779,849	1,805,214	1,827,963	1,882,879	1,972,326
West Virginia	194,834	210,899	202,118	196,492	195,675	199,167	199,164	210,259	211,695	212,963	217,788	231,347	248,022
Wisconsin	1,335,621	1,442,933	1,483,983	1,419,426	1,412,594	1,372,168	1,458,791	1,504,025	1,542,080	1,659,741	1,746,640	1,771,499	1,966,266
Wyoming	55,319	57,549	65,611	65,490	51,422	56,996	112,056	125,032	113,063	80,353	93,061	93,202	139,764
American Samoa	ne	ne	ne	ne	ne	1,337	793	ne	ne	860	ne	815	ne
Guam	5,555	5,626	6,131	6,043	7,075	6,062	7,402	8,842	11,225	12,249	13,043	17,666	20,481
Puerto Rico	125,123	163,853	151,532	135,659	123,285	126,792	120,619	113,868	103,935	121,074	111,101	123,707	103,245
Virgin Islands	32,350	21,994	25,719	20,041	20,371	20,630	21,215	12,298	11,957	12,236	13,631	15,231	20,259

ne = not eligible; no institutions within the state met the criteria for inclusion.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 68

Higher education R&D expenditures, by state, institutional control, and institution: FYs 2010–22

(Dollars in thousands)

State, institutional control, and institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Public													
California Polytechnic State U., San Luis Obispo	19,732	16,532	17,412	16,067	15,096	16,312	18,081	17,979	16,352	25,249	26,605	25,953	33,155
California State Polytechnic U., Humboldt	9,845	9,570	9,510	8,025	8,306	11,218	16,143	15,969	15,044	15,076	14,236	14,103	15,612
California State Polytechnic U., Pomona	6,493	7,198	6,597	6,988	5,455	4,611	5,254	5,863	8,043	6,099	7,396	7,011	7,909
California State U., Bakersfield	2,083	3,162	1,241	2,602	2,432	3,192	3,161	4,652	5,577	7,591	7,053	6,253	4,815
California State U., Channel Islands	ne	524	ne	1,236	3,862	1,949	1,383	1,096	1,248	1,572	1,497	2,341	3,377
California State U., Chico	2,881	2,684	2,492	2,868	2,384	1,837	2,363	1,600	2,452	3,232	4,305	4,209	4,177
California State U., Dominguez Hills	2,743	2,780	2,894	4,671	3,614	i 2,557	2,790	1,858	2,043	1,957	2,065	2,690	4,230
California State U., East Bay	1,312	1,644	1,039	934	ne	ne	837	ne	ne	ne	9,072	10,852	19,035
California State U., Fresno	8,698	8,597	8,359	7,682	8,109	8,624	8,586	8,102	8,988	8,599	8,856	9,213	12,603
California State U., Fullerton	21,776	28,186	22,222	18,478	7,919	5,611	5,755	5,510	6,348	7,173	5,929	9,006	16,642
California State U., Long Beach	15,494	14,595	i 13,696	i 12,796	10,097	8,830	16,390	18,805	22,880	18,664	16,684	15,134	17,807
California State U., Los Angeles	7,714	8,823	7,192	7,659	5,172	5,010	5,371	8,274	9,594	12,476	10,590	9,382	9,839
California State U., Maritime Academy	ne	3,005	2,793	2,480	1,011	1,542	2,205	1,921	3,039	2,959	3,202	2,799	526
California State U., Monterey Bay	5,305	6,959	6,567	6,129	4,787	5,492	5,680	5,397	5,799	6,444	5,874	6,882	8,975
California State U., Northridge	29,469	25,654	29,491	9,640	12,991	13,333	16,330	17,979	19,618	21,095	21,228	16,573	19,638
California State U., Sacramento	15,207	16,344	14,053	15,564	13,136	17,930	20,676	21,106	21,429	23,544	24,939	23,699	23,795
California State U., San Bernardino	4,188	11,591	9,303	11,942	13,582	15,317	10,771	12,924	16,702	16,062	10,819	11,607	11,929
California State U., San Marcos	5,788	6,795	i 7,802	i 8,809	8,302	6,432	6,634	6,549	8,348	10,595	13,250	10,213	9,238
California State U., Stanislaus	ne	1,487	1,881	1,342	1,136	1,080	1,248	1,365	1,394	1,477	1,843	2,085	1,966
Naval Postgraduate School	103,510	101,363	132,450	94,880	99,032	89,170	65,529	60,386	59,213	67,323	62,903	65,101	64,055
San Diego State U.	99,137	106,591	92,867	86,733	95,674	93,572	90,722	89,187	88,177	92,964	97,710	107,681	123,856
San Francisco State U.	25,615	26,198	30,291	33,885	29,457	26,345	28,273	29,940	30,903	31,888	33,828	i 35,768	36,617
San Jose State U.	38,241	40,149	34,727	38,326	43,509	45,037	41,662	39,192	41,366	44,309	47,301	60,100	71,695
Sonoma State U.	858	825	ne	1,938	1,714	1,163	693	ne	ne	ne	1,545	2,957	3,774
U. California, Berkeley	694,049	707,945	730,348	727,002	744,343	788,505	774,255	770,822	796,505	802,931	840,000	846,872	981,035
U. California, Davis	679,915	707,896	713,292	725,734	711,721	721,077	741,892	738,347	788,832	804,282	816,693	817,409	883,807
U. California, Irvine	327,594	344,678	350,030	347,773	340,056	329,798	345,319	361,414	426,610	448,967	490,597	523,752	534,947
U. California, Los Angeles	936,995	982,357	1,003,375	966,659	948,197	1,021,227	1,037,528	1,076,917	1,318,110	1,306,376	1,392,941	1,454,880	1,536,197
U. California, Merced	21,591	21,328	22,656	22,909	23,916	29,688	29,370	35,093	38,226	44,890	45,966	45,964	48,147
U. California, Office of the President	72,542	63,420	65,627	67,447	50,103	48,341	39,051	46,399	55,676	67,702	60,686	50,848	54,640
U. California, Riverside	130,288	132,238	135,494	132,617	133,558	144,511	152,233	163,632	167,847	177,655	184,894	189,600	199,135
U. California, San Diego	943,219	1,009,378	1,073,864	1,075,554	1,067,388	1,101,466	1,087,117	1,133,454	1,265,196	1,353,763	1,403,735	1,425,499	1,533,357
U. California, San Francisco	935,509	995,226	1,032,673	1,042,841	1,084,031	1,126,620	1,294,261	1,409,398	1,595,732	1,595,098	1,651,073	1,710,036	1,805,950
U. California, Santa Barbara	225,730	230,435	233,883	236,497	231,322	222,870	230,139	238,246	235,164	243,778	254,434	248,961	278,897
U. California, Santa Cruz	143,919	155,617	155,516	150,777	151,734	151,713	151,192	124,344	127,538	142,958	150,400	160,615	176,760

TABLE 68

Higher education R&D expenditures, by state, institutional control, and institution: FYs 2010–22

(Dollars in thousands)

State, institutional control, and institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Private													
Azusa Pacific U.	ne	3,620	2,056 i	ne	ne	7,521	8,898	8,430	8,380	5,598	7,068	5,318	3,389
Biola U.	ne	ne	ne	ne	ne	ne	2,418 i	2,499 i	2,622 i	2,792 i	2,868 i	3,003 i	3,260
California Institute of Technology	362,172	377,514	379,713	347,105	367,182	374,424	371,060	400,312	391,003	399,931	449,651	438,624	478,142
California Lutheran U.	ne	741	ne	ne	ne	ne	ne	ne	ne	1,143	630	ne	627
Chapman U.	3,830	3,547	3,314	4,463	4,794	5,353	6,554	10,626	14,141	19,592	26,660	25,820	34,212
Charles R. Drew U. of Medicine and Science	22,152	22,150	20,580	18,547	20,686	14,128	13,360	15,652	11,490	13,739	13,682	13,228	14,581
Claremont Graduate U.	7,116	6,589	10,350	9,705	9,540 i	9,375 i	9,210 i	9,045 i	8,880 i	8,715	9,403	7,235	8,382
Claremont McKenna C.	5,725	5,316	5,365 i	5,414 i	5,463 i	ne	6,094	5,818	5,693	6,214	5,846	4,515	5,893
Harvey Mudd C.	3,214	3,861	3,512	3,595	3,127	3,272	4,332	3,748	3,790	3,353	2,916	2,359	3,350
High Tech High Graduate School of Ed.	ne	ne	ne	ne	ne	ne	ne	ne	861	ne	3,304	5,032	6,203
Keck Graduate Institute	ne	2,313	1,920	2,357	2,132	1,722	1,660 i	1,598 i	1,536 i	1,474 i	1,412 i	1,350 i	1,282
La Sierra U.	ne	732	ne	ne	1,057	1,165	1,255	2,202	2,227	1,581	1,647	1,517	2,246
Loma Linda U.	35,990	39,409	31,772	31,715	23,375	25,519	22,977	21,846	19,892 i	17,938 i	15,984 i	14,029	15,517
Loyola Marymount U.	4,557	6,455	5,746	6,766	7,635	6,389	7,504	7,071	7,911	7,272	7,193	12,819	12,773
Marshall B. Ketchum U.	ne	ne	ne	ne	1,030	1,468	1,491	1,512 i	1,451 i	1,430 i	1,357 i	1,351 i	1,559 i
Occidental C.	2,289	1,809	1,592	1,634	2,177	1,544	2,008	1,764	1,445	2,458	2,657	3,587	4,139 i
Pepperdine U.	2,672	1,924	2,571	2,400	2,401	2,714	3,178	2,396	1,954	2,170	2,006	2,655	3,775
Pomona C.	2,924	3,640	3,259	3,679	3,818	3,538	3,691	3,205	2,983	2,985	2,855	2,146	2,589
Santa Clara U.	3,816	2,407	3,329	2,376	2,883	1,659	2,056	2,145	2,299	2,319	2,682	3,142	4,225
Scripps Research Institute	387,298	400,768	398,673	399,899	386,231	384,161	364,670	354,582	396,839	427,734	444,964	485,435	492,639
Stanford U.	839,839	907,971	903,238	945,450	959,247	1,022,551	1,066,269	1,109,708	1,157,597	1,204,116	1,203,950	1,274,483	1,384,555
Touro U., California	1,221	1,779	2,237	2,155	3,067	3,106	3,466	3,122	3,233	3,543	3,551	3,489	2,561
U. of the Pacific	6,120	4,704	5,291	4,563	4,088	2,734	3,013	2,155	3,014	3,078	1,713	1,371	1,835
U. San Diego	2,934	3,483	4,275	4,554	5,146	4,476	4,734	5,089	5,642	6,036	8,607	7,580	10,143
U. San Francisco	2,124	2,668	4,301	2,663	2,764	2,599	2,365	2,602	2,741	2,712	2,161	1,375	2,657
U. Southern California	592,791	603,294	623,544	645,636	687,222	691,031	702,866	764,322	891,625	909,683	941,198	955,565	1,039,905
Western U. of Health Sciences	1,786	1,768	3,005	3,721	5,474	4,904	6,895	6,187	5,140	4,951	5,899	6,688	9,029
Colorado													
Public													
Colorado School of Mines	44,879	48,704	58,836	59,091	59,695	58,349	60,931	59,477	60,372	70,397	78,517	81,443	98,404
Colorado State U., Fort Collins	302,896	330,784	375,919	313,238	307,978	317,219	331,862	338,404	374,955	398,477	407,302	447,197	456,911
Colorado State U., Pueblo	413	364	ne	ne	ne	ne	ne	ne	ne	3,107	3,104	2,990	3,117
Fort Lewis C.	392	606	ne	ne	ne	ne	ne	ne	ne	1,460	1,370	1,926	2,765
U. Colorado Anschutz Medical Campus ^a	na	na	na	na	na	na	na	na	na	na	na	562,855	611,358
U. Colorado Boulder	349,449	390,677	392,004	385,849	379,475	420,775	453,123	499,389	514,573	513,822	525,674	547,724	611,380

TABLE 68

Higher education R&D expenditures, by state, institutional control, and institution: FYs 2010–22

(Dollars in thousands)

State, institutional control, and institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Public													
Grambling State U.	993	2,135	2,179	1,695	1,469	1,863	1,570	5,911	2,981	2,836	2,427	2,124	2,306
Louisiana State U., Baton Rouge	289,872	287,841	285,395	283,400	290,076	281,154	291,972	265,168	286,726	296,497	286,733	296,673	344,556
Louisiana State U., Health Sciences Center, New Orleans	59,776	57,007	53,712	49,443	45,486	46,840	43,067	40,785	38,989	40,914	43,419	44,370	53,995
Louisiana State U., Health Sciences Center, Shreveport	30,817	31,021	29,365	28,266	25,004	24,069	23,353	22,560	24,463	26,262	25,321	24,600	29,502
Louisiana Tech U.	26,020	27,583	26,546	24,949	22,942	23,827	23,104	22,741	24,655	26,143	26,585	27,417	26,591
Northwestern State U. Louisiana	1,464	1,189	1,102	1,022	792	ne	1,628	1,373	1,623	2,058	1,940	1,663	1,848
Southeastern Louisiana U.	2,561	1,952	2,121	2,067	1,503	2,670	2,128	2,206	2,039	1,971	2,258	1,723	2,407
Southern U. and A&M C., Agricultural Research and Extension Center	ne	6,143	8,122	5,530	5,606	4,761	4,704	5,000	i	5,296	5,448	4,475	6,164
Southern U. and A&M C., Baton Rouge	6,865	6,819	i	6,773	4,920	4,766	4,322	4,043	4,171	4,492	3,849	4,943	4,344
U. Louisiana, Lafayette	69,412	69,978	65,275	61,887	67,580	77,300	80,099	100,956	124,713	144,187	164,070	181,400	205,201
U. Louisiana, Monroe	2,884	2,812	2,469	2,781	2,267	1,672	2,441	2,297	2,123	2,364	2,362	2,198	3,128
U. New Orleans	35,021	35,359	28,450	24,607	20,614	18,960	15,719	15,939	14,437	15,328	16,594	16,979	21,911
Private													
Dillard U.	8,425	7,936	i	7,448	7,741	6,939	9,387	9,566	7,095	6,573	2,772	2,523	2,270
Tulane U.	165,513	171,703	164,373	160,414	157,825	152,658	165,438	180,993	193,294	196,933	204,430	205,206	222,605
Xavier U. Louisiana	8,029	9,849	10,606	8,789	9,346	9,588	12,084	12,424	11,784	10,152	11,387	12,799	14,156
Maine													
Public													
U. Maine	111,282	111,600	92,135	77,583	101,247	79,500	79,222	99,502	106,694	129,913	134,183	146,801	171,931
U. Southern Maine	16,358	16,938	13,915	11,725	9,408	i	7,091	i	4,773	7,147	7,414	6,654	5,480
Private													
Bates C.	1,590	1,897	2,070	2,514	1,584	2,791	1,781	1,853	1,635	2,135	2,303	2,620	2,468
Bowdoin C.	2,627	2,877	4,732	4,292	3,126	2,991	3,204	2,340	2,724	2,991	2,719	2,417	2,648
Colby C.	1,782	1,772	1,996	1,822	1,673	1,748	1,903	2,071	2,240	1,852	1,536	1,672	2,530
U. New England	3,560	4,016	5,224	6,637	7,650	7,498	7,566	8,064	6,700	7,346	6,886	6,234	6,664
Maryland													
Public													
Bowie State U.	ne	1,910	1,739	1,422	1,761	1,497	1,927	1,813	1,839	1,911	1,967	1,398	3,351
Morgan State U.	12,804	12,803	17,751	15,475	15,720	13,577	15,727	14,978	12,993	13,253	17,193	20,628	29,482
Salisbury U.	3,503	1,852	6,891	6,959	7,923	7,960	8,473	7,731	9,119	9,368	9,496	10,552	10,614
Towson U.	3,052	3,574	2,599	2,800	2,997	3,153	2,303	2,834	3,194	3,423	3,612	3,794	8,788
U. Baltimore	4,229	5,944	5,556	5,448	4,990	5,022	5,798	6,851	10,556	12,451	15,054	14,672	6,646
U. Maryland ^c	na	na	na	na	na	na	na	na	na	1,096,600	1,103,062	1,142,264	1,228,550

TABLE 68

Higher education R&D expenditures, by state, institutional control, and institution: FYs 2010–22

(Dollars in thousands)

State, institutional control, and institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Maryland Center for Environmental Science	42,670	50,007	48,224	53,683	50,814	52,235	54,974	55,078	54,136	56,033	54,560	51,201	53,718
U. Maryland, Baltimore County	87,156	91,657	74,993	71,819	67,833	68,688	70,166	70,406	71,481	80,632	83,867	84,418	110,319
U. Maryland, Eastern Shore	8,692	8,664	7,309	8,826	8,982	9,700	8,250	7,403	4,941	7,133	8,092	8,636	9,274
U.S. Naval Academy	11,093	10,543	9,610	10,816	10,861	9,609	11,374	13,541	14,057	13,621	13,123	10,818	10,664
Uniformed Services U. of the Health Sciences	134,126	175,365	143,250	164,232	262,489	361,173	256,203	298,370	308,326	417,300	324,510	384,490	277,240
Private													
Johns Hopkins U. ^d	2,004,482	2,145,308	2,106,185	2,168,568	2,242,478	2,305,679	2,431,180	2,562,307	2,661,033	2,917,436	3,110,494	3,181,385	3,420,312
Massachusetts													
Public													
Framingham State U.	ne	ne	ne	ne	ne	ne	ne	1,901	164	ne	2,317	2,401	2,830
U. Massachusetts, Amherst	169,141	181,297	194,775	190,739	200,199	213,902	214,576	210,416	211,140	223,177	219,389	213,824	245,158
U. Massachusetts, Boston	56,416	57,040	60,086	60,380	61,186	62,374	64,223	70,019	61,473	62,018	64,219	63,723	65,215
U. Massachusetts, Dartmouth	25,725	25,644	22,732	27,326	28,219	26,776	26,824	26,102	26,626	28,036	26,836	28,729	33,136
U. Massachusetts, Lowell	59,345	60,013	60,624	63,136	64,591	70,384	68,494	69,677	72,266	83,996	92,216	94,708	111,144
U. Massachusetts, Medical School	232,039	262,714	256,090	245,923	241,869	250,338	253,099	279,884	274,211	281,507	279,096	347,337	358,204
Private													
Amherst C.	3,628	4,623	5,448	6,275	4,308	4,412	4,260	4,070	4,849	6,325	4,906	4,636	7,177
Babson C.	ne	696	ne	ne	ne	ne	2,108	1,849	1,917	1,845	2,352	1,286	1,825
Bentley U.	ne	ne	ne	ne	ne	ne	ne	562	ne	ne	ne	ne	1,161
Boston C.	50,537	52,253	51,442	50,702	49,724	47,761	54,469	58,088	57,030	61,956	63,063	65,156	68,958
Boston U.	352,817	355,916	334,496	368,281	367,328	388,336	395,921	421,360	484,205	534,205	583,267	652,096	725,402
Brandeis U.	71,006	74,889	74,660	76,060	74,992	74,700	73,435	68,437	61,639	60,825	91,355	95,001	102,378
Clark U.	7,111	6,861	7,260	5,693	6,168	7,050	6,970	8,453	8,318	10,193	10,277	7,931	8,813
Franklin W. Olin C. of Engineering	ne	1,016	1,777	1,157	1,561	2,136	1,762	1,553	1,254	1,655	1,404	1,627	2,554
Harvard U.	583,361	649,774	799,432	1,012,766	933,975	1,013,753	1,077,253	1,123,160	1,173,371	1,239,736	1,239,983	1,254,008	1,308,458
Massachusetts Institute of Technology	677,138	723,610	824,130	900,524	908,017	930,719	946,159	952,017	964,336	1,009,466	987,968	949,076	989,166
MGH Institute of Health Professions	ne	607	ne	ne	ne	3,931	2,548	2,282	3,328	4,130	3,549	3,037	5,805
Mount Holyoke C.	2,788	3,317	3,323	3,118	3,871	3,826	3,403	3,635	3,027	2,979	2,016	2,026	2,112
New England C. of Optometry	1,457	1,751	2,237	2,172	1,234	1,077	980	ne	1,026	1,223	1,150	1,978	1,868
Northeastern U.	79,949	86,783	107,862	116,088	116,245	122,915	129,040	142,349	166,711	183,998	200,068	211,342	231,607
Smith C.	4,613	4,529	4,246	4,234	4,283	5,268	4,466	6,055	5,954	6,041	4,685	4,085	5,831
Suffolk U.	ne	1,624	1,303	1,551	1,534	1,305	1,492	1,679	ne	ne	2,106	2,043	1,401
Tufts U.	156,106	156,395	160,922	156,525	160,825	168,314	189,085	223,409	213,457	213,285	216,241	224,956	231,224
Wellesley C.	8,422	7,242	8,439	9,113	10,127	9,595	11,664	10,326	11,530	8,810	8,088	6,252	6,326
Western New England U.	ne	1,111	483	ne	ne	ne	1,291	610	ne	ne	ne	ne	2,052

TABLE 68

Higher education R&D expenditures, by state, institutional control, and institution: FYs 2010–22

(Dollars in thousands)

State, institutional control, and institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Williams C.	4,691	4,513	4,518	3,857	4,440	5,679	5,747	5,227	5,506	5,188	4,924	4,902	5,657
Woods Hole Oceanographic Institution	181,746	198,775	204,352	198,232	220,016	216,592	212,374	194,088	204,400	229,143	227,573	262,048	255,017
Worcester Polytechnic Institute	18,613	22,137	20,232	25,298	29,929	36,130	37,822	33,368	33,067	39,878	43,092	48,702	56,904
Michigan													
Public													
Central Michigan U.	7,483	8,671	10,907	12,879	15,015	12,880	14,166	14,652	15,616	17,102	17,448	21,726	25,105
Eastern Michigan U.	14,133	11,643	12,437	3,128	1,428	1,761	3,815	6,281	6,600	7,175	9,088	7,233	8,025
Grand Valley State U.	5,044	6,429	7,814	9,202	8,198	7,453	6,764	6,917	6,968	6,592	6,792	6,809	6,695
Lake Superior State U.	ne	752	ne	ne	ne	1,170	1,039	1,067	633	ne	ne	ne	2,056
Michigan State U.	431,373	454,248	507,061	515,707	526,906	558,248	613,369	694,917	715,290	725,708	713,197	710,178	759,229
Michigan Technological U.	63,471	70,089	71,989	70,689	68,526	69,607	72,536	71,629	78,678	80,443	77,927	81,715	91,084
Northern Michigan U.	910	841	ne	ne	ne	ne	1,118	1,339	1,728	1,520	1,523	1,364	1,888
Oakland U.	12,856	15,868	18,194	16,767	15,196	17,108	16,001	14,561	13,817	18,002	12,949	20,261	38,061
Saginaw Valley State U.	873	1,249	1,094	939	ne	1,220	1,190	1,406	1,640	2,818	2,343	2,428	2,862
U. Michigan, Ann Arbor	1,184,445	1,279,123	1,322,711	1,375,117	1,349,262	1,369,278	1,436,448	1,530,139	1,600,869	1,675,805	1,673,862	1,639,645	1,770,708
U. Michigan, Dearborn	6,779	7,554	6,015	6,846	8,176	7,802	7,904	8,315	8,094	8,813	8,777	7,472	8,180
Wayne State U.	254,492	259,895	227,070	224,331	218,435	213,878	221,537	227,728	238,859	244,217	243,259	235,519	242,247
Western Michigan U. and Homer Stryker M.D. School of Medicine	26,391	25,051	21,073	18,979	18,942	19,679	18,927	22,372	21,184	25,071	24,541	25,314	27,768
Private													
Albion C.	ne	799	ne	ne	ne	ne	ne	1,074	1,055	1,040	1,132	1,127	1,300
Calvin U.	5,010	3,113	3,252	3,466	3,051	2,430	1,809	1,456	1,937	1,577	2,107	2,637	3,169
Hope C.	3,596	4,185	3,376	3,559	3,016	2,932	2,811	3,225	3,179	2,745	3,822	5,211	6,355
Kettering U.	6,880	5,087	4,059	3,449	3,517	3,673	3,463	4,233	2,531	1,765	2,081	1,315	816
Lawrence Technological U.	3,952	3,348	1,483	2,022	1,876	2,528	1,907	1,942	1,668	1,352	1,521	1,764	3,050
U. Detroit Mercy	1,148	1,462	970	ne	1,320	1,882	3,654	2,748	4,605	5,210	4,786	4,578	5,186
Van Andel Research Institute	ne	ne	ne	ne	ne	40,502	40,040	44,578	55,171	61,738	58,982	65,789	78,626
Minnesota													
Public													
Minnesota State U., Mankato	3,837	2,654	2,082	2,640	3,310	2,294	4,034	2,471	2,943	3,392	2,754	2,170	2,206
St. Cloud State U.	4,184	3,404	2,932	2,912	3,380	4,192	3,497	3,588	3,725	3,275	3,056	2,379	2,226
U. Minnesota, Duluth	21,150	23,400	21,530	21,383	21,904	27,550	27,528	24,956	25,189	27,530	26,137	23,767	23,362
U. Minnesota, Twin Cities	786,074	847,419	826,173	858,378	876,870	880,618	910,181	921,681	954,683	1,013,112	1,042,382	1,072,961	1,202,084
Private													
C. of Saint Benedict	ne	867	ne	1,347	1,451	1,179	1,305	1,122	1,142	1,126	1,069	1,064	1,228
Carleton C.	4,575	5,382	4,957	5,848	5,657	6,746	6,385	6,888	5,515	4,388	3,732	3,800	4,358
Macalester C.	4,389	4,653	1,721	1,457	1,455	1,286	1,562	1,916	1,404	1,808	1,755	1,280	1,691

TABLE 68

Higher education R&D expenditures, by state, institutional control, and institution: FYs 2010–22

(Dollars in thousands)

State, institutional control, and institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022				
Saint John's U.	640	891	ne	1,444	1,623	1,372	1,459	1,267	1,208	1,191	i	1,130	i	1,125	i	1,298	i
St. Catherine U.	ne	484	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	933			
U. of St. Thomas (MN)	1,330	1,316	1,030	1,424	916	ne	1,266	1,241	1,645	1,870		2,679		5,146		2,476	
Mississippi																	
Public																	
Alcorn State U.	10,280	11,397	11,515	11,315	10,060	9,396	8,204	16,129	13,834	14,435	13,710	14,188	16,726	i			
Jackson State U.	44,862	49,998	46,943	36,264	26,609	23,908	23,832	22,790	19,465	18,160	15,081	16,157	17,481				
Mississippi State U.	231,675	226,070	233,197	206,424	209,729	226,359	239,446	240,972	244,102	264,526	280,485	275,143	303,418				
U. Mississippi	110,020	122,765	121,731	108,168	109,922	94,040	121,665	134,542	137,521	158,809	122,960	116,175	152,903				
U. Southern Mississippi	42,059	46,591	60,079	51,962	51,938	51,840	59,363	61,659	61,336	76,464	72,322	67,417	72,477				
Private																	
Tougaloo C.	2,978	2,753	2,613	2,639	2,285	2,689	2,473	3,030	3,173	3,380	2,102	2,092	i	2,336	i		
Missouri																	
Public																	
Lincoln U., Jefferson City	8,475	8,518	7,899	6,585	6,742	6,296	5,826	5,164	4,215	4,581	5,777	7,621	11,500				
Missouri State U.	7,770	5,584	4,340	3,882	3,782	3,540	3,069	3,215	4,409	5,910	13,131	10,014	11,162				
Missouri U. of Science and Technology	42,263	41,581	38,588	40,397	39,065	35,842	35,756	38,243	42,986	47,807	47,001	54,437	53,357				
U. Missouri, Columbia	238,500	230,957	239,810	236,423	237,266	246,684	280,051	293,006	294,686	310,421	332,180	388,779	432,310				
U. Missouri, Kansas City	30,163	32,769	29,227	28,829	29,164	26,595	26,292	25,123	25,136	31,956	36,356	33,855	52,657				
U. Missouri, Saint Louis	14,628	18,461	19,356	20,869	18,618	12,061	13,460	12,042	12,266	14,432	15,352	14,632	13,247				
Private																	
Saint Louis U.	46,839	53,179	49,086	48,231	44,481	44,457	42,151	56,402	60,380	66,103	69,528	79,005	82,740				
U. of Health Sciences and Pharmacy in St. Louis	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	4,835	5,313	4,280				
Washington U., Saint Louis	695,974	725,039	706,410	684,847	664,752	694,069	741,115	754,462	816,139	887,088	920,215	989,214	1,047,098				
Montana																	
Public																	
Montana State U., Bozeman	135,084	125,966	124,228	113,136	113,348	108,414	112,073	129,622	125,129	154,811	166,285	193,577	200,820				
Montana Technological U.	7,424	6,705	11,765	11,059	11,348	11,595	11,851	13,059	12,666	12,731	12,987	14,933	14,188				
U. Montana, Missoula	63,540	60,159	59,313	60,189	55,032	60,485	70,059	85,044	90,563	104,665	110,218	121,571	125,603				
Nebraska																	
Public																	
U. Nebraska, central administration	ne	ne	ne	ne	ne	ne	ne	ne	13,352	18,860	23,672	21,295	25,402				
U. Nebraska, Kearney	1,655	2,199	1,715	1,761	1,504	1,496	1,864	3,510	2,639	2,919	2,640	3,201	4,009				
U. Nebraska, Lincoln	224,135	235,296	253,321	266,507	278,299	284,438	294,856	302,204	308,053	316,820	320,463	320,758	340,260				
U. Nebraska, Medical Center	138,219	133,036	141,619	137,485	139,126	145,009	150,694	171,491	177,245	194,455	202,406	200,974	205,253				
U. Nebraska, Omaha	8,951	9,509	8,376	9,181	9,222	9,422	10,459	12,061	12,943	14,302	16,134	19,006	24,259				

TABLE 68

Higher education R&D expenditures, by state, institutional control, and institution: FYs 2010–22

(Dollars in thousands)

State, institutional control, and institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
New Mexico Highlands U.	1,529	1,498	1,566	1,209	979	ne	1,111	1,023	952	ne	1,090	1,129	1,331
New Mexico Institute of Mining and Technology	51,696	43,857	37,875	32,499	48,338	26,265	19,598	20,491	21,383	24,616	24,591	28,745	89,900
New Mexico State U.	157,872	139,062	141,151	142,365	134,262	132,377	106,282	102,218	96,270	101,457	107,275	110,580	121,472
U. New Mexico	211,771	220,565	220,360	227,703	228,849	232,271	239,550	246,597	251,322	239,696	243,375	332,566	331,164
New York													
Public													
CUNY, Advanced Science Research Center	na	na	na	na	na	569	ne	3,541	5,666	8,310	11,373	15,403	16,507
CUNY, Baruch C.	2,616	2,645	3,605	2,264	2,183	2,451	2,998	2,543	2,817	2,387	2,396	2,521	3,156
CUNY, Brooklyn C.	6,846	9,306	9,216	8,064	9,407	9,091	9,602	7,393	6,600	6,837	7,074	6,318	6,220
CUNY, C. Staten Island	3,290	4,188	4,955	3,691	3,731	3,060	3,511	4,250	4,118	3,986	3,682	2,860	3,545
CUNY, City C.	46,699	60,648	57,982	55,138	52,654	53,223	62,484	54,627	53,979	52,738	45,632	57,361	65,569
CUNY, Graduate Center	11,562	11,974	9,173	11,982	7,797	6,175	7,093	8,011	4,781	5,399	4,787	4,265	5,509
CUNY, Graduate School of Public Health and Health Policy	na	na	na	na	na	na	na	na	9,751	9,521	12,177	15,035	16,423
CUNY, Hunter C.	38,900	39,772	41,022	40,059	38,879	36,368	37,094	31,273	33,702	37,478	38,345	33,816	35,348
CUNY, John Jay C. of Criminal Justice	5,916	6,205	9,319	7,355	8,633	8,689	9,688	11,934	14,310	12,295	13,939	11,791	16,233
CUNY, Lehman C.	3,593	3,762	3,228	2,904	3,265	3,130	5,347	4,979	5,556	4,690	4,154	4,181	4,656
CUNY, New York City C. of Technology	231	343	ne	ne	ne	ne	ne	ne	2,418	2,711	2,130	1,367	1,955
CUNY, Queens C.	16,845	23,219	22,399	19,762	23,434	19,092	19,168	15,936	16,676	18,391	16,470	16,063	21,434
CUNY, system office	ne	ne	1,817	1,210	1,088	1,782	1,655	1,114	3,253	2,619	1,704	1,664	2,900
CUNY, York C.	ne	2,180	1,544	999	ne	716	ne	ne	ne	1,621	1,691	1,133	1,912
SUNY, Binghamton U.	72,057	72,539	81,000	76,005	71,382	79,895	85,192	98,089	113,851	104,297	117,870	124,565	130,882
SUNY, Buffalo State	1,935	2,539	2,970	2,106	1,996	2,366	2,221	1,887	1,928	2,124	2,253	1,962	2,172
SUNY, C. Brockport	831	1,248	1,487	1,321	1,192	1,367	1,335	1,289	1,293	1,390	1,719	1,114	1,500
SUNY, C. of Environmental Science and Forestry	26,916	25,024	23,132	21,239	19,027	22,051	24,504	27,923	26,610	29,137	29,296	28,440	32,904
SUNY, C. of Optometry	3,529	3,738	3,466	3,637	3,481	3,906	4,169	3,304	3,120	2,968	3,477	3,460	4,497
SUNY, C. Plattsburgh	1,664	1,098	913	ne	1,008	1,135	1,020	1,003	1,604	1,729	1,452	1,280	1,043
SUNY, Cobleskill	1,414	938	ne	908	ne	ne	ne	ne	ne	ne	ne	ne	1,211
SUNY, Downstate Health Sciences U.	32,512	41,993	43,257	39,354	33,331	28,652	33,735	31,873	34,661	36,015	33,204	34,459	30,918
SUNY, Geneseo	1,373	2,677	2,132	1,201	1,084	1,314	1,750	1,758	1,939	2,139	1,642	2,070	2,091
SUNY, Oswego	783	977	ne	725	ne	ne	ne	1,658	1,982	1,781	1,534	1,003	1,209
SUNY, Polytechnic Institute	na	na	na	na	412,851	295,313	316,680	308,861	257,358	352,889	355,651	465,273	413,763
SUNY, Stony Brook U.	204,728	211,356	219,744	225,712	211,631	220,580	230,621	238,612	245,016	260,813	263,470	274,516	312,698
SUNY, U. Albany	359,364	148,625	137,758	137,759	130,955	111,705	120,232	156,386	173,031	181,531	138,088	114,501	129,796
SUNY, U. Buffalo	349,670	353,172	360,226	387,863	386,562	382,935	389,569	401,591	410,220	413,817	422,038	425,349	439,709

TABLE 68

Higher education R&D expenditures, by state, institutional control, and institution: FYs 2010–22

(Dollars in thousands)

State, institutional control, and institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
SUNY, Upstate Medical U.	43,824	39,988	35,897	34,286	33,460	32,453	31,892	35,551	36,674	38,091	41,557	44,870	50,586
U.S. Military Academy	22,171	13,799	12,227	11,630	14,819	15,312	13,500	13,617	13,582	10,765	12,473	19,696	20,841
Private													
Albany C. of Pharmacy and Health Sciences	3,074	3,496	2,639	2,637	3,200	2,533	1,789	2,567	2,732	3,383	3,765	3,687	2,276
Albany Medical C.	22,953	20,876	17,735	15,093	16,093	18,043	20,166	20,443	21,187	23,028	23,510	22,443	22,297
Albert Einstein C. of Medicine	na	na	na	na	na	na	289,660	289,685	297,328	298,824	288,654	301,715	318,314
Alfred U.	4,524	6,084	5,451	6,731	4,655	5,193	3,975	3,231	3,641	5,153	2,780	2,660	3,477
Barnard C.	3,353	4,046	3,684	2,931	2,738	2,916	3,534	3,730	3,458	4,010	3,748	4,632	4,988
Canisius C.	221	205	ne	ne	ne	ne	ne	1,546	1,069	950	ne	1,036	1,160
Clarkson U.	18,584	17,951	14,809	12,061	13,750	13,406	12,983	15,148	16,927	17,147	15,104	16,765	21,703
Cold Spring Harbor Laboratory	ne	89,913	84,072	78,236	76,733	84,653	88,943	97,288	115,870	126,773	115,198	114,903	118,034
Colgate U.	2,851	2,291	3,268	2,704	2,444	2,721	3,219	3,414	3,823	3,756	2,913	3,306	4,343
Columbia U. in the City of New York	807,235	878,900	889,487	889,188	890,642	868,159	837,312	893,062	947,504	1,003,615	1,032,909	1,098,570	1,230,924
Cornell U.	749,721	781,651	802,387	845,184	883,292	954,412	974,199	984,478	1,071,621	1,144,534	1,190,063	1,183,524	1,300,357
Fordham U.	19,289	18,350	19,311	18,822	17,961	20,939	25,374	20,807	20,644	20,287	20,456	16,731	20,432
Hamilton C.	3,192	3,109	3,069	2,942	2,846	2,291	2,662	2,354	1,796	2,050	1,869	1,747	1,879
Hobart and William Smith Colleges	1,434	1,566	1,516	2,238	1,221	946	ne	952	ne	1,919	2,114	1,941	3,228
Hofstra U.	2,552	2,472	3,237	2,394	3,102	2,585	2,440	1,702	1,662	1,744	1,445	5,545	6,939
Icahn School of Medicine at Mount Sinai	370,666	405,527	400,680	428,654	463,429	508,353	540,296	575,448	640,141	722,241	747,014	820,260	893,968
Ithaca C.	1,077	1,025	1,132	1,245	1,248	972	ne	ne	ne	ne	1,199	1,030	1,000
Long Island U.	832	877	890	915	ne	ne	1,420	2,290	2,405	5,113	13,997	15,059	17,183
Manhattan C.	498	638	ne	ne	ne	ne	ne	ne	ne	1,190	1,307	1,864	1,641
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	ne	2,342	2,562	2,979	3,356	3,089	3,177	3,285	3,502	3,769	3,737	3,776	4,954
New School	5,178	6,420	7,568	9,219	7,160	8,978	17,425	12,740	13,606	13,421	13,186	14,281	19,218
New York Institute of Technology	1,785	2,059	3,013	4,007	5,761	4,169	4,114	3,236	3,832	5,820	3,580	4,465	5,555
New York Medical C.	28,400	27,316	23,277	20,243	17,908	17,653	17,311	15,637	16,226	19,398	20,137	18,872	16,461
New York U.	365,944	430,752	458,645	471,909	523,623	602,041	809,739	917,744	887,558	934,720	947,293	1,063,704	1,276,038
Pace U.	3,085	3,732	4,214	3,611	4,373	4,647	5,359	5,028	4,282	3,855	4,272	3,649	3,524
Pratt Institute	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	2,547	2,325
Rensselaer Polytechnic Institute	83,952	84,834	92,720	92,495	105,608	102,841	101,127	104,797	100,856	103,739	122,753	119,056	121,809
Rochester Institute of Technology	38,663	34,889	36,935	36,613	35,945	40,442	45,518	51,263	49,413	58,175	57,777	56,043	62,383
Rockefeller U.	265,750	272,491	292,896	298,474	316,368	323,932	335,136	348,845	353,142	351,089	356,217	357,543	360,877
Skidmore C.	2,850	2,113	1,885	1,903	1,811	1,772	1,327	1,859	2,584	3,012	2,412	2,335	1,734
St. John's U., New York	1,643	1,786	2,161	2,401	2,507	2,558	2,307	2,542	2,903	2,352	3,282	2,940	3,592

TABLE 68

Higher education R&D expenditures, by state, institutional control, and institution: FYs 2010–22

(Dollars in thousands)

State, institutional control, and institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Syracuse U.	107,024	83,686	85,649	70,967	66,321	69,896	84,651	145,705	147,751	154,366	149,652	151,717	157,407
Teachers C., Columbia U.	17,167	18,406	20,805	19,649	20,538	23,269	24,124	24,194	24,477	24,865	22,630	24,335	30,978
U. Rochester	414,655	429,034	389,612	389,355	353,419	346,932	346,165	353,003	370,645	393,960	397,211	409,255	450,805
Union C., Schenectady	1,984	1,615	1,516	2,402	1,924	1,560	2,150	1,189	1,540	1,740	1,062	1,396	1,479
Vassar C.	1,280	1,838	1,258	1,694	1,220	2,854	1,495	1,600	4,185	1,009	1,568	1,606	2,580
Yeshiva U.	314,240	281,334	289,027	271,166	306,826	306,174	46,130	3,258	3,302	2,420	2,763	5,452	7,274
North Carolina													
Public													
Appalachian State U.	2,898	3,835	4,438	3,051	4,289	3,878	3,146	4,475	3,631	3,268	4,894	4,509	7,189
East Carolina U.	23,995	28,114	31,990	38,271	29,925	26,549	25,273	26,117	39,074	55,611	57,820	51,662	55,693
Elizabeth City State U.	5,576	10,455	4,455	4,515	2,988	2,277	1,889	1,340	978	ne	1,473	1,717	1,934
Fayetteville State U.	11,865	14,618	15,719	16,698	14,732	13,746	15,725	5,105	4,980	4,695	2,797	3,933	3,206
North Carolina A&T State U.	35,297	34,930	35,103	33,994	35,047	35,172	33,759	37,379	38,140	37,339	36,151	40,751	47,908
North Carolina Central U.	6,870	9,496	11,076	8,979	11,537	12,448	12,463	14,119	14,942	16,227	15,833	14,105	16,600
North Carolina State U.	360,795	378,154	404,225	417,468	446,112	468,293	489,918	500,445	509,841	541,100	546,290	547,118	583,203
U. North Carolina, Asheville	2,671	3,157	3,068	2,647	2,150	2,384	3,348	2,863	3,414	4,602	4,789	4,844	5,973
U. North Carolina, Chapel Hill	755,284	869,174	884,791	973,007	989,766	966,781	1,045,338	1,102,063	1,136,158	1,153,773	1,159,725	1,205,883	1,361,028
U. North Carolina, Charlotte	31,814	27,533	25,141	24,764	23,342	24,870	27,815	26,097	39,888	47,187	50,050	51,877	43,126
U. North Carolina, general administration	ne	ne	ne	ne	ne	4,197	4,137	3,721	4,843	4,154	3,942	4,024	3,522
U. North Carolina, Greensboro	22,436	26,121	19,080	16,590	20,723	23,026	23,965	23,231	22,743	26,325	28,966	37,033	41,303
U. North Carolina, Wilmington	23,143	22,593	19,722	18,145	14,648	15,564	15,715	16,015	16,955	17,515	16,544	16,656	20,053
Western Carolina U.	2,376	1,451	1,811	1,028	1,048	1,145	1,305	1,474	1,507	2,633	2,696	2,847	2,783
Winston-Salem State U.	ne	1,179	1,977	841	ne	ne	1,356	1,575	1,629	2,011	5,781	8,123	10,436
Private													
Davidson C.	1,493	1,977	1,400	2,337	1,804	2,377	1,521	1,736	1,638	1,777	2,263	2,466	2,788
Duke U.	983,289	1,022,207	1,009,911	992,821	1,036,813	1,036,698	1,055,778	1,126,924	1,167,611	1,226,517	1,196,638	1,237,686	1,390,538
Elon U.	ne	1,523	1,658	2,043	2,184	2,608	2,606	2,407	2,486	2,545	1,968	2,032	1,797
Johnson C. Smith U.	ne	ne	ne	ne	ne	ne	2,094	2,255	2,468	2,148	2,472	2,578	2,685
Wake Forest U.	192,034	209,134	204,328	182,721	176,380	171,926	170,006	182,227	191,371	238,933	244,643	264,216	269,109
North Dakota													
Public													
North Dakota State U.	126,419	134,064	135,493	150,173	154,437	153,542	156,297	153,119	145,669	152,381	155,645	164,050	174,904
U. North Dakota	76,560	74,882	80,149	68,942	67,595	64,384	70,275	102,823	109,865	110,836	111,663	143,506	147,717
Ohio													
Public													
Air Force Institute of Technology	31,259	31,879	32,746	27,592	23,902	26,866	29,998	35,733	33,360	34,016	35,584	45,703	44,391

TABLE 68

Higher education R&D expenditures, by state, institutional control, and institution: FYs 2010–22

(Dollars in thousands)

State, institutional control, and institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Bowling Green State U.	8,124	8,999	8,566	13,157	8,861	7,995	14,460	14,333	17,991	17,026	18,729	18,619	19,342
Central State U.	3,233	3,821	3,591	2,771	2,025	1,508	1,643	2,008	3,615	3,766	6,107	8,751	10,274
Cleveland State U.	34,235	55,502	61,111	67,378	61,783	57,662	77,720	83,762	83,641	80,077	78,189	71,451	81,225
Kent State U.	26,331	27,455	26,507	23,149	25,666	38,069	34,661	42,003	42,792	47,188	50,307	50,408	52,175
Miami U.	26,521	26,093	26,311	23,924	21,216	16,108	16,057	17,239	19,658	22,380	24,489	25,138	28,799
Northeast Ohio Medical U.	10,819	13,581	13,358	12,722	15,916	17,103	18,823	19,216	18,231	18,016	15,758	13,853	13,465
Ohio State U.	755,194	832,126	766,513	793,373	815,075	817,881	818,464	864,327	875,014	929,250	968,260	1,236,111	1,363,388
Ohio U.	50,440	57,643	57,203	59,734	60,800	61,078	59,117	61,092	53,303	53,735	51,914	49,764	52,465
U. Akron	52,884	60,352	66,413	69,640	69,528	58,512	58,817	41,326	32,582	30,020	23,496	17,340	19,943
U. Cincinnati	411,269	448,936	433,668	438,642	422,873	436,028	430,579	455,250	480,095	529,796	530,138	551,826	615,070
U. Toledo	70,399	74,149	68,228	69,072	61,900	52,354	50,019	50,030	50,320	55,006	54,100	53,169	64,654
Wright State U.	48,575	48,501	46,213	50,489	54,985	54,289	55,484	59,379	68,035	64,208	49,825	26,259	27,440
Youngstown State U.	4,523	4,732	3,598	3,785	3,464	3,348	2,342	4,439	4,463	4,447	4,120	2,775	4,157
Private													
C. Wooster	988	1,225	966	ne	1,321	1,245	ne	1,644	1,494	1,758	1,076	1,396	1,717
Case Western Reserve U.	418,164	429,206	431,090	425,788	419,011	401,527	405,655	408,609	434,441	438,994	439,778	421,868	467,389
Heidelberg U.	ne	1,219	ne	1,129	1,539	1,109	1,286	1,621	1,280	1,237	1,125	1,725	1,184
Kenyon C.	428	433	ne	ne	ne	ne	ne	ne	1,227	1,092	908	ne	1,330
U. Dayton	93,309	90,557	81,030	84,252	86,881	98,182	116,589	135,214	147,001	165,343	163,718	191,228	211,494
Oklahoma													
Public													
Langston U.	4,492	5,206	5,326	4,932	8,512	8,126	11,178	11,025	10,872	10,719	14,409	6,345	6,481
Oklahoma State U., Center for Health Sciences	4,398	2,815	2,122	2,137	1,805	1,625	2,182	2,454	2,608	5,408	8,378	7,758	8,368
Oklahoma State U., Stillwater	147,094	162,786	166,523	134,500	126,543	129,968	181,617	189,024	188,756	184,276	187,060	198,799	195,041
U. Central Oklahoma	1,786	1,548	1,028	1,067	1,362	7,691	6,275	5,832	5,104	5,682	5,788	5,997	7,070
U. Oklahoma, Norman and Health Science Center	218,089	249,297	240,974	255,674	253,344	242,367	259,998	272,239	283,638	302,679	362,209	380,048	408,656
U. Oklahoma, Tulsa	ne	ne	ne	ne	ne	4,104	4,962	4,487	6,233	6,373	7,483	7,185	7,945
Private													
U. Tulsa	23,387	19,489	20,270	21,757	27,077	25,066	22,347	20,879	20,072	18,648	18,787	17,187	17,416
Oregon													
Public													
Oregon Health and Science U.	314,990	334,324	305,530	308,767	314,802	326,915	331,524	348,449	372,180	415,629	446,890	452,812	479,226
Oregon Institute of Technology	ne	258	ne	ne	ne	2,056	4,027	3,595	3,163	4,793	4,267	4,314	5,086
Oregon State U.	216,595	228,814	240,507	232,677	230,963	245,317	254,275	267,068	272,433	263,830	268,385	276,955	297,934
Portland State U.	56,533	58,975	58,489	55,435	54,787	53,872	56,572	48,964	46,911	50,045	43,667	41,311	41,483

TABLE 68

Higher education R&D expenditures, by state, institutional control, and institution: FYs 2010–22

(Dollars in thousands)

State, institutional control, and institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Public													
Naval War C.	ne	ne	2,938 i	2,700 i	2,736 i	2,653	3,210	4,240 i	5,270	5,060	5,944	5,542	5,529
Rhode Island C.	ne	8,027	10,389	10,385	8,938	10,080	9,943	9,030	9,287	9,480	10,094	10,990	11,127
U. Rhode Island	90,016	102,630	114,323	101,898	91,706	93,828	97,900	101,871	104,490	115,160	109,967	129,296	129,102
Private													
Brown U.	335,838	344,090	365,120	361,010	341,531	342,040	347,016	212,290	244,838	256,954	266,127	276,331	310,780
Roger Williams U.	1,967	2,627	2,596	2,186	2,558	2,348	2,441	2,952	1,937	1,852	1,531	1,854	2,156
South Carolina													
Public													
C. Charleston	14,218	8,320	9,579	10,224	10,034	10,607	10,189	8,927	7,375	7,610	5,728	6,361	6,421
Citadel Military C. South Carolina	ne	415	ne	ne	ne	ne	ne	ne	ne	ne	1,012	2,054	4,374
Clemson U.	174,693	166,350	142,096	152,444	161,070	171,215	183,965	193,268	213,458	218,760	228,597	237,485	263,158
Coastal Carolina U.	2,404	2,162	2,412	2,516	2,166	1,862	1,779	1,893	1,631	2,042	1,903	2,245	3,724
Medical U. South Carolina	224,632	213,346	236,586	245,451	242,594	243,534	260,098	262,267	282,253	295,600	272,590	277,761	284,553
South Carolina State U.	7,167	10,037 i	12,909	12,809 i	12,709 i	12,607	13,076 i	14,300	15,130 i	3,659	3,796 i	3,933 i	4,270 i
U. South Carolina, Aiken	337	750	ne	1,309	1,133	1,154	1,445	2,961	2,602	2,481	2,590	2,042	2,595
U. South Carolina, Columbia	229,145	201,592	214,901	203,365	206,173	208,736	209,271	208,670	206,355	205,940	219,734	215,374	229,162
Winthrop U.	ne	5,089	7,993	12,495	13,981	10,156	1,993	1,826	2,007	2,189	2,217	2,586	3,424
Private													
Claflin U.	3,252	5,439	5,255	2,661	1,818	1,255	1,772	1,360	1,509	1,746	1,910	1,015	1,179
Furman U.	2,311	2,184	2,049	2,199	1,600	1,928	1,869	2,051	2,064	1,628	2,101	2,431	2,650
South Dakota													
Public													
Black Hills State U.	2,883	1,643	2,466	3,061	2,380	2,430	2,833	2,109	1,571	2,031	1,499	1,280	1,987
Dakota State U.	ne	1,015	5,709	1,574	1,446	1,152	2,171	2,284	3,619	3,710	4,412	3,416	4,684
South Dakota School of Mines and Technology	28,572	32,070	19,140	12,156	10,524	14,970	15,396	15,541	15,092	12,973	14,490	15,746	20,061
South Dakota State U.	67,552	69,680	68,743	63,843	58,334	58,373	60,677	63,412	63,465	66,794	60,939	51,542	59,590
U. South Dakota	30,616	28,959	31,982	33,187	30,700	25,661	25,864	28,358	30,943	32,028	29,279	27,537	30,322
Private													
Augustana U.	912	1,578	1,160	1,045	1,106	782	ne	1,212	1,170	841	ne	1,013	724
Tennessee													
Public													
Austin Peay State U.	ne	2,180	2,124	2,067	2,002	2,113	1,823	2,134	2,644	2,285	2,833	2,740	3,149
East Tennessee State U.	9,869	10,249	11,213	8,919	7,836	6,930	7,982	9,493	14,043	14,197	13,925	18,449	23,420
Middle Tennessee State U.	4,793	4,969	7,108	5,718	4,334	4,350	6,164	4,714	7,132	7,673	8,697	22,531	22,631
Tennessee State U.	12,432	13,468	15,439	16,177	20,068	19,955	19,520	18,108	17,681	15,236	25,942	21,977 i	18,012

TABLE 68

Higher education R&D expenditures, by state, institutional control, and institution: FYs 2010–22

(Dollars in thousands)

State, institutional control, and institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Tennessee Technological U.	16,754	13,247	10,233	9,715	10,097	11,082	11,528	12,079	12,765	13,801	14,085	15,387	16,398
U. Memphis	49,517	48,321	51,194	48,141	55,566	46,675	48,321	49,695	64,297	58,700	69,463	67,092	71,271
U. Tennessee, Chattanooga	10,749	9,251	10,896	7,844	6,239	6,817	5,600	6,352	7,585	9,280	10,834	11,192	12,808
U. Tennessee, Health Science Center	81,904	81,220	77,754	71,902	67,841	65,771	71,547	73,393	79,460	96,979	99,716	109,562	115,161
U. Tennessee, Knoxville ^e	150,671	167,456	179,252	193,054	179,041	173,533	183,268	203,800	259,607	247,693	320,407	316,273	324,435
Private													
Fisk U.	7,700	4,849	4,058	6,565	9,073	9,854	10,635	5,017	2,790	4,748	3,904	4,320	4,000
Meharry Medical C.	27,001	29,055	25,559	22,532	18,997	13,998	14,768	16,782	16,980	18,286	13,870	15,840	17,960
Vanderbilt U. and Vanderbilt U. Medical Center	504,959	566,031	560,466	571,603	683,890	647,816	640,842	712,036	738,620	776,937	824,803	1,019,273	1,086,223
Texas													
Public													
Lamar U.	5,829	4,762	3,589	2,605	2,447	2,824	2,783	3,883	3,595	4,848	4,327	4,734	5,304
Prairie View A&M U.	12,565	15,243	14,552	13,198	12,292	13,123	12,616	13,982	17,278	18,018	18,723	17,582	20,429
Sam Houston State U.	7,555	5,816	4,349	4,608	3,996	3,086	3,266	3,658	7,152	9,445	12,437	13,315	12,009
Stephen F. Austin State U.	9,127	6,046	5,495	4,612	4,298	5,170	4,749	3,677	3,336	3,679	3,672	3,204	3,184
Sul Ross State U.	3,039	3,183	2,375	2,159	2,528	2,204	2,015	2,500	2,934	2,352	2,068	2,143	2,526
Tarleton State U.	10,763	10,426	9,393	9,722	10,996	9,825	9,404	10,893	12,503	13,171	14,890	17,729	20,056
Texas A&M International U.	2,428	3,121	3,344	3,674	3,441	2,917	3,742	4,745	5,735	6,068	3,067	3,740	4,486
Texas A&M U., College Station and Health Science Center	689,624	705,720	693,421	820,015	854,214	866,678	892,718	905,474	922,178	952,156	1,130,803	1,147,720	1,152,666
Texas A&M U.-Commerce	2,679	2,242	2,279	2,541	2,833	3,755	2,943	4,227	3,431	3,403	4,166	3,827	4,955
Texas A&M U.-Corpus Christi	17,266	17,509	15,776	17,418	21,321	24,507	24,786	27,993	30,253	32,944	32,284	30,500	36,014
Texas A&M U.-Kingsville	17,378	17,114	17,419	18,653	21,819	20,894	21,309	22,633	21,150	22,268	22,745	23,578	23,451
Texas A&M U.-San Antonio	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,242
Texas Southern U.	7,003	6,318	6,380	6,548	6,038	5,005	4,495	4,722	3,740	4,893	10,138	9,128	12,120
Texas State U.	30,560	33,487	36,664	37,053	39,265	47,694	54,298	60,741	64,322	64,554	70,714	72,510	110,102
Texas Tech U.	133,360	149,399	138,026	142,676	159,308	163,897	172,521	191,482	185,742	193,923	199,643	197,739	226,729
Texas Tech U., Health Sciences Center	51,282	58,774	61,219	61,412	38,015	40,438	40,235	39,767	37,819	44,072	44,135	41,583	46,574
Texas Tech U., Health Sciences Center, El Paso	ne	ne	ne	ne	23,282	18,889	17,391	16,479	12,556	11,883	10,421	11,360	14,206
Texas Woman's U.	2,271	2,919	4,129	2,704	2,650	2,310	3,014	4,073	4,822	4,477	4,135	4,943	6,029
U. Houston	119,811	113,709	116,288	130,844	140,597	150,628	162,049	169,431	177,484	195,398	200,428	202,536	240,126
U. Houston-Clear Lake	1,279	1,746	1,769	1,542	1,716	1,535	1,578	1,779	1,251	1,370	1,363	1,716	1,800
U. Houston-Downtown	1,013	1,351	2,267	1,444	2,414	2,459	1,784	2,397	2,508	2,216	2,299	1,828	1,485
U. North Texas, Denton	31,496	42,475	46,943	49,518	44,180	43,628	37,106	43,789	44,025	78,691	84,239	81,252	93,538
U. North Texas, Health Science Center	38,862	45,943	46,865	44,904	47,002	46,335	50,567	48,476	49,503	50,124	42,766	50,698	10,439

TABLE 68

Higher education R&D expenditures, by state, institutional control, and institution: FYs 2010–22

(Dollars in thousands)

State, institutional control, and institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Middlebury C.	2,292	2,408	3,031	2,179	1,450	1,599	1,822	2,043	1,895	1,657	1,720	2,927	2,603
Virginia													
Public													
Christopher Newport U.	1,110	1,669	1,327	1,187	1,508	1,208	1,172	1,264	1,732	1,961	2,608	2,656	2,762
Eastern Virginia Medical School	44,420	36,569	37,745	44,183	43,917	42,296	32,550	28,671	30,010	27,064	20,870	19,415	22,165
George Mason U.	84,120	88,089	90,198	95,913	98,680	106,410	108,899	112,404	149,138	186,267	218,445	214,207	230,068
James Madison U.	7,038	7,303	8,891	5,835	4,628	3,712	3,303	3,248	4,191	8,726	10,247	14,687	17,021
Norfolk State U.	5,944	7,140	8,336	6,431	6,936	5,348	7,593	7,296	6,914	8,050	7,153	4,316	3,593
Old Dominion U.	97,176	102,192	104,579	99,138	67,037	65,092	70,054	67,990	60,321	67,425	65,704	62,332	64,877
U. of Mary Washington	ne	1,374	907	ne	ne	690	ne	ne	1,242	1,315	1,393	1,123	1,229
U. Virginia's C. Wise	481	336	ne	ne	ne	ne	ne	ne	ne	ne	ne	3,310	2,628
U. Virginia, Charlottesville	276,308	398,096	383,359	385,828	358,576	373,218	397,458	469,682	551,761	613,938	652,002	611,313	662,658
Virginia Commonwealth U.	197,709	207,756	201,366	196,015	201,858	218,925	225,999	235,464	246,190	255,648	283,874	364,096	405,898
Virginia Military Institute	849	374	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,746
Virginia Polytechnic Institute and State U.	398,169	450,058	454,417	496,169	513,149	504,282	521,773	522,425	531,636	541,969	556,341	542,045	591,861
Virginia State U.	7,466	8,562	10,296	9,535	8,374	7,808	8,147	10,725	10,673	11,457	10,014	10,123	12,326
William & Mary	57,461	58,919	55,805	57,940	59,015	61,554	63,027	64,127	65,269	64,835	66,763	68,801	75,953
Private													
Edward Via C. of Osteopathic Medicine	ne	2,453	2,576	4,992	2,633	2,237	5,692	8,119	7,601	7,225	7,475	6,629	7,121
Hampton U.	14,455	12,414	15,356	12,641	11,169	14,895	14,225	16,482	14,424	13,605	11,402	11,669	11,462
Marymount U.	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	2,307	1,298
U. Richmond	4,052	4,064	4,282	3,351	3,598	3,069	3,047	3,106	2,784	2,783	2,469	2,294	2,670
Washington													
Public													
Central Washington U.	5,159	2,858	2,753	2,122	2,124	2,581	2,751	3,798	3,066	3,223	2,674	2,410	3,176
Eastern Washington U.	3,266	3,910	2,700	2,115	1,867	2,973	3,368	2,000	2,590	2,024	2,282	1,921	2,437
Northwest Indian C.	2,426	2,744	2,847	3,247	2,609	1,631	ne	ne	2,154	2,659	3,650	4,641	5,632
U. Washington, Bothell	630	2,857	4,285	4,704	7,550	7,657	8,406	10,219	8,097	7,950	7,107	8,311	8,197
U. Washington, Seattle	1,022,740	1,148,533	1,109,008	1,192,513	1,176,340	1,180,563	1,277,679	1,348,220	1,413,902	1,425,601	1,456,902	1,488,645	1,559,708
U. Washington, Tacoma	872	1,359	1,845	2,203	2,938	3,618	3,957	3,246	3,006	3,471	3,504	4,291	5,484
Washington State U.	304,352	320,510	335,930	305,510	288,752	303,214	301,640	331,051	331,424	344,997	335,201	357,648	368,396
Western Washington U.	10,571	9,498	7,597	8,157	8,567	9,921	10,743	13,014	13,075	11,983	12,823	13,450	15,081
Private													
Seattle U.	1,337	1,274	642	ne	2,692	2,847	2,050	1,623	2,535	2,223	2,060	1,562	1,894
U. Puget Sound	461	530	ne	ne	ne	ne	ne	902	ne	ne	895	ne	1,051
Whitman C.	1,415	1,142	849	ne	ne	ne	ne	ne	ne	1,083	865	ne	1,270

TABLE 68
Higher education R&D expenditures, by state, institutional control, and institution: FYs 2010–22

(Dollars in thousands)

State, institutional control, and institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
West Virginia													
Public													
Marshall U.	24,501	26,723	18,998	19,617	20,382	19,936	20,687	18,348	20,050	19,622	22,250	23,620	25,692
West Virginia School of Osteopathic Medicine	594	528	ne	ne	ne	ne	ne	ne	ne	ne	1,311	1,255	1,329
West Virginia State U.	3,770	4,176	5,087	4,491	7,221	7,365	5,224	6,305	6,535	5,829	5,775	6,565	6,703
West Virginia U.	154,926	166,420	169,303	167,144	164,454	170,145	172,477	185,606	185,110	187,512	188,452	199,907	214,081
Private													
U. Charleston	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	217
Wisconsin													
Public													
U. Wisconsin-Eau Claire	1,950	1,406	1,362	1,235	915	ne	1,238	1,641	1,227	1,530	1,318	1,852	1,628
U. Wisconsin-Green Bay	1,219	1,239	i 1,259	i 1,279	i 1,299	i 1,320	1,599	1,510	1,454	2,083	1,982	1,879	2,713
U. Wisconsin-La Crosse	4,141	3,862	i 3,583	3,796	3,424	3,615	3,211	3,187	3,569	2,692	2,795	3,001	2,942
U. Wisconsin-Madison	1,029,295	1,111,642	1,169,779	1,123,501	1,108,564	1,069,077	1,157,680	1,193,413	1,205,518	1,297,331	1,363,931	1,380,075	1,523,513
U. Wisconsin-Milwaukee	71,181	65,648	61,771	56,587	60,752	63,414	59,813	54,181	55,771	53,773	61,069	55,664	56,822
U. Wisconsin-Oshkosh	1,556	2,384	2,331	2,167	1,935	i 1,703	i ne	1,507	i 1,544	i 1,581	i 1,618	i 1,656	1,990
U. Wisconsin-Platteville	681	715	i ne	ne	1,000	i 970	i ne	1,068	i ne	1,084	i 1,104	i 1,144	i 1,349
U. Wisconsin-Stevens Point	6,766	6,171	i 5,576	4,392	3,919	i 3,446	i 2,973	3,420	i 3,867	i 4,314	i 4,764	4,401	3,740
U. Wisconsin-Superior	5,890	6,187	i 6,041	i ne	3,030	i ne	ne	ne	3,068	2,250	2,301	2,602	4,615
Private													
Marquette U.	14,310	19,876	18,606	20,856	23,633	24,816	28,422	30,034	32,471	37,777	37,136	37,087	40,638
Medical C. Wisconsin	191,816	215,358	209,040	201,237	199,713	199,283	199,925	209,618	229,436	251,300	264,325	276,850	321,506
Milwaukee School of Engineering	3,944	4,472	4,635	4,376	4,410	4,524	3,930	3,374	3,232	4,026	3,190	3,193	3,545
Northland C.	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,096	i 1,265
Wyoming													
Public													
U. Wyoming	55,319	57,549	65,611	65,490	51,422	56,996	112,056	125,032	113,063	80,353	93,061	93,202	139,764
Guam													
Public													
U. Guam	5,555	5,626	6,131	6,043	7,075	6,062	7,402	8,842	11,225	12,249	13,043	17,666	20,481
Puerto Rico													
Public													
U. Puerto Rico, Cayey	927	1,474	1,916	1,726	1,795	1,521	1,415	1,109	1,359	1,870	1,974	1,881	1,390
U. Puerto Rico, Humacao	1,971	i 1,976	1,949	1,455	1,145	784	ne	ne	1,168	1,195	1,456	1,321	1,448
U. Puerto Rico, Mayaguez	26,475	34,424	32,115	29,225	27,152	28,100	25,491	26,130	24,769	26,877	26,553	18,368	18,274
U. Puerto Rico, Medical Sciences Campus	39,134	64,017	45,649	43,374	40,444	43,316	46,232	42,423	41,216	45,014	37,217	44,111	47,578

TABLE 68

Higher education R&D expenditures, by state, institutional control, and institution: FYs 2010–22

(Dollars in thousands)

State, institutional control, and institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Puerto Rico, Rio Piedras	30,515	32,582	33,099	29,234	28,793	28,579	23,491	21,204	17,085	24,088	22,895	28,896	28,083
Private													
U. Ana G. Mendez, Gurabo	6,620	7,098	6,953	6,916	2,694	2,473	2,518	1,777	1,579	3,945	2,049	1,574	1,419
U. Central del Caribe	7,122	7,515	7,313	7,095	7,181	6,964	7,090	5,634	4,111	3,953	3,931	3,831	5,053
Virgin Islands													
Public													
U. of the Virgin Islands	32,350	21,994	25,719	20,041	20,371	20,630	21,215	12,298	11,957	12,236	13,631	15,231	20,259

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

^a The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^b The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^c The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^d Johns Hopkins University includes the Applied Physics Laboratory, with \$2,056,063 thousand in total R&D expenditures in FY 2022.

^e The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 69

Higher education R&D expenditures, by state and source of funds: FY 2022

(Dollars in thousands)

State	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
United States	97,680,528	53,971,468	4,907,199	24,492,663	5,701,656	5,974,155	2,633,387
Alabama	1,431,393	779,272	68,758	437,472	87,132	40,619	18,140
Alaska	226,717	171,964	2,763	42,936	4,667	1,990	2,397
Arizona	1,690,904	729,574	136,865	552,382	51,204	92,415	128,464
Arkansas	416,507	174,976	69,558	135,614	16,168	12,338	7,853
California	12,107,605	6,587,133	463,811	2,481,533	813,103	1,244,886	517,139
Colorado	1,898,797	1,407,578	71,912	184,892	88,938	93,464	52,013
Connecticut	1,587,047	931,776	7,291	460,465	88,066	90,640	8,809
Delaware	397,123	219,136	12,150	145,855	5,989	5,692	8,301
District of Columbia	783,163	384,514	6,530	219,463	24,865	104,996	42,795
Florida	3,048,253	1,489,852	284,429	1,002,273	111,840	110,968	48,891
Georgia	3,260,128	1,968,946	183,628	782,771	173,058	133,083	18,642
Hawaii	301,272	190,232	17,913	76,959	2,750	12,717	701
Idaho	179,835	97,255	40,768	33,181	3,006	1,891	3,734
Illinois	3,160,587	1,942,622	41,713	758,082	198,165	180,882	39,123
Indiana	1,872,200	877,861	45,885	627,742	122,118	120,128	78,466
Iowa	1,005,800	508,226	43,761	364,805	51,317	36,806	885
Kansas	882,644	376,471	89,850	222,010	159,137	20,290	14,886
Kentucky	733,242	385,943	49,506	207,429	23,247	22,079	45,038
Louisiana	941,868	404,974	93,956	285,226	105,251	28,259	24,202
Maine	191,739	95,051	22,403	64,293	3,974	3,623	2,395
Maryland	5,168,958	4,055,588	99,124	620,194	157,683	218,721	17,648
Massachusetts	4,837,383	2,705,310	50,116	1,111,829	321,346	477,250	171,532
Michigan	3,082,410	1,611,073	61,599	1,109,643	138,028	120,241	41,826
Minnesota	1,241,862	663,217	80,078	363,811	53,266	46,788	34,702
Mississippi	565,341	297,587	109,217	136,905	6,521	13,033	2,078
Missouri	1,708,351	992,049	39,685	399,008	149,915	113,425	14,269
Montana	340,611	198,081	24,891	105,738	2,537	5,428	3,936
Nebraska	626,792	283,097	80,399	190,452	29,739	21,571	21,534
Nevada	312,714	131,036	10,036	148,549	5,509	7,212	10,372
New Hampshire	551,187	285,737	5,282	213,359	12,276	25,050	9,483
New Jersey	1,516,963	734,412	116,585	373,348	68,609	161,644	62,365
New Mexico	543,867	378,374	40,059	87,011	9,998	20,105	8,320
New York	8,280,323	4,446,597	340,868	1,964,999	587,571	588,442	351,846
North Carolina	3,870,874	2,319,789	198,727	747,610	343,150	212,111	49,487

TABLE 69

Higher education R&D expenditures, by state and source of funds: FY 2022

(Dollars in thousands)

State	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
North Dakota	322,621	108,080	76,507	115,128	15,066	1,591	6,249
Ohio	3,079,902	1,800,562	92,684	789,803	212,530	125,146	59,177
Oklahoma	650,977	281,427	50,747	266,143	33,474	15,074	4,112
Oregon	1,001,028	674,193	60,639	142,746	53,574	53,511	16,365
Pennsylvania	5,454,961	3,122,812	119,742	1,433,805	369,954	289,628	119,020
Rhode Island	458,694	320,509	10,983	82,078	5,581	32,536	7,007
South Carolina	805,510	409,143	45,090	273,511	43,025	22,959	11,782
South Dakota	117,368	58,169	20,008	22,079	2,135	3,091	11,886
Tennessee	1,715,468	958,144	41,526	549,263	98,331	53,491	14,713
Texas	7,440,455	3,106,159	972,083	2,100,792	530,526	431,324	299,571
Utah	1,062,475	680,822	27,112	256,513	53,521	34,371	10,136
Vermont	218,910	119,444	1,389	82,461	2,785	7,344	5,487
Virginia	2,117,336	969,660	147,155	721,967	94,893	98,968	84,693
Washington	1,972,326	1,295,518	77,227	230,056	70,422	249,757	49,346
West Virginia	248,022	118,659	13,290	87,833	5,336	4,486	18,418
Wisconsin	1,966,266	943,590	130,741	599,840	81,332	159,019	51,744
Wyoming	139,764	68,772	5,592	58,184	4,099	2,167	950
Guam	20,481	17,066	1,682	1,339	375	19	0
Puerto Rico	103,245	74,309	1,876	21,283	4,506	812	459
Virgin Islands	20,259	19,127	1,010	NA	48	74	0

NA = not available; data were not provided by institution.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
United States	97,680,528	53,971,468	4,907,199	24,492,663	5,701,656	5,974,155	2,633,387
Public	63,712,945	33,333,946	4,503,012	17,368,946	3,419,441	3,331,506	1,756,094
Private	33,967,583	20,637,522	404,187	7,123,717	2,282,215	2,642,649	877,293
Alabama	1,431,393	779,272	68,758	437,472	87,132	40,619	18,140
Public	1,409,452	764,361	65,552	436,344	87,132	40,619	15,444
Alabama A&M U.	9,611	9,221	4	0	386	0	0
Alabama State U.	3,178	2,930	0	0	216	1	31
Auburn U., Auburn	304,439	104,883	33,555	143,876	8,338	1,912	11,875
Troy U.	2,517	2,296	48	135	38	0	0
U. Alabama, Birmingham	713,480	421,223	8,816	172,809	73,595	35,196	1,841
U. Alabama, Huntsville	169,532	132,060	5,091	30,776	626	496	483
U. Alabama, Tuscaloosa	163,204	67,986	17,040	73,435	2,701	1,631	411
U. South Alabama	43,491	23,762	998	15,313	1,232	1,383	803
Private	21,941	14,911	3,206	1,128	0	0	2,696
Tuskegee U.	21,941	14,911	3,206	1,128	0	0	2,696
Alaska	226,717	171,964	2,763	42,936	4,667	1,990	2,397
Public	225,110	171,383	2,763	42,936	3,652	1,990	2,386
U. Alaska, Anchorage	21,024	15,249	1,227	3,392	282	493	381
U. Alaska, Fairbanks	202,516	154,742	1,508	39,501	3,346	1,433	1,986
U. Alaska, Southeast	1,570	1,392	28	43	24	64	19
Private	1,607	581	0	0	1,015	0	11
Alaska Pacific U.	1,607	581	0	0	1,015	0	11
Arizona	1,690,904	729,574	136,865	552,382	51,204	92,415	128,464
Public	1,690,384	729,574	136,865	552,362	50,704	92,415	128,464
Arizona State U.	797,224	309,094	98,817	282,983	21,980	62,833	21,517
Dine C.	2,091	2,091	0	0	0	0	0
Northern Arizona U.	66,729	43,453	7,055	14,501	813	768	139
U. Arizona	824,340	374,936	30,993	254,878	27,911	28,814	106,808
Private	520	0	0	20	500	0	0
Sonoran U. Health Sciences	520	0	0	20	500	0	0
Arkansas	416,507	174,976	69,558	135,614	16,168	12,338	7,853
Public	416,507	174,976	69,558	135,614	16,168	12,338	7,853
Arkansas State U., Jonesboro	8,214	3,932	3,325	658	271	28	0
U. Arkansas for Medical Sciences	205,493	95,080	15,287	71,431	11,022	6,253	6,420

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Arkansas, Fayetteville	184,080	64,252	48,654	59,522	4,705	5,742	1,205
U. Arkansas, Little Rock	7,530	6,675	220	80	170	157	228
U. Arkansas, Pine Bluff	7,506	3,306	1,449	2,737	0	14	0
U. Central Arkansas	3,684	1,731	623	1,186	0	144	0
California	12,107,605	6,587,133	463,811	2,481,533	813,103	1,244,886	517,139
Public	8,558,137	4,495,513	419,587	1,842,888	523,159	865,626	411,364
California Polytechnic State U., San Luis Obispo	33,155	15,084	3,155	9,964	2,008	2,890	54
California State Polytechnic U., Humboldt	15,612	2,421	4,248	4,784	110	2,209	1,840
California State Polytechnic U., Pomona	7,909	5,407	846	1,441	204	11	0
California State U., Bakersfield	4,815	2,665	259	1,878	0	13	0
California State U., Channel Islands	3,377	1,638	746	690	267	36	0
California State U., Chico	4,177	2,312	763	422	130	44	506
California State U., Dominguez Hills	4,230	3,156	23	1,001	0	50	0
California State U., East Bay	19,035	8,997	693	8,232	2	1,036	75
California State U., Fresno	12,603	5,928	1,102	3,854	356	1,258	105
California State U., Fullerton	16,642	6,136	305	9,664	95	442	0
California State U., Long Beach	17,807	11,739	572	2,980	534	837	1,145
California State U., Los Angeles	9,839	8,605	130	943	0	161	0
California State U., Maritime Academy	526	192	105	10	219	0	0
California State U., Monterey Bay	8,975	5,051	1,404	2,300	50	164	6
California State U., Northridge	19,638	15,546	984	1,207	181	1,703	17
California State U., Sacramento	23,795	6,646	10,203	5,694	115	511	626
California State U., San Bernardino	11,929	6,693	2,445	2,657	3	131	0
California State U., San Marcos	9,238	7,986	980	265	0	7	0
California State U., Stanislaus	1,966	1,056	243	176	464	27	0
Naval Postgraduate School	64,055	44,852	0	18,483	313	66	341
San Diego State U.	123,856	50,540	4,812	64,484	457	2,489	1,074
San Francisco State U.	36,617	15,276	2,013	18,257	53	990	28
San Jose State U.	71,695	30,984	7,796	27,661	1,792	2,296	1,166
Sonoma State U.	3,774	2,889	406	298	40	141	0
U. California, Berkeley	981,035	468,542	37,894	210,324	69,062	169,790	25,423
U. California, Davis	883,807	468,468	71,806	211,277	50,684	42,552	39,020
U. California, Irvine	534,947	291,393	15,008	115,832	42,941	33,110	36,663
U. California, Los Angeles	1,536,197	848,138	89,554	287,147	87,218	187,416	36,724

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. California, Merced	48,147	23,421	5,992	14,279	768	1,918	1,769
U. California, Office of the President	54,640	158	34,007	20,390	0	0	85
U. California, Riverside	199,135	114,257	8,566	51,532	6,267	8,538	9,975
U. California, San Diego	1,533,357	970,696	58,556	213,400	106,189	111,854	72,662
U. California, San Francisco	1,805,950	780,318	40,658	438,949	128,983	251,612	165,430
U. California, Santa Barbara	278,897	161,241	6,212	57,814	16,324	27,839	9,467
U. California, Santa Cruz	176,760	107,082	7,101	34,599	7,330	13,485	7,163
Private	3,549,468	2,091,620	44,224	638,645	289,944	379,260	105,775
Azusa Pacific U.	3,389	282	266	2,680	0	161	0
Biola U.	3,260	0	2	0	0	3,088	170
California Institute of Technology	478,142	326,401	5,009	54,587	17,200	52,970	21,975
California Lutheran U.	627	298	0	116	178	35	0
Chapman U.	34,212	11,098	854	13,710	425	7,989	136
Charles R. Drew U. of Medicine and Science	14,581	10,656	220	3,098	0	607	0
Claremont Graduate U.	8,382	1,610	342	1,113	3,384	1,381	552
Claremont McKenna C.	5,893	1,070	56	4,377	0	390	0
Harvey Mudd C.	3,350	1,956	0	1,020	2	138	234
High Tech High Graduate School of Ed.	6,203	0	0	0	0	6,203	0
Keck Graduate Institute	1,282	643	0	153	165	321	0
La Sierra U.	2,246	972	0	654	0	620	0
Loma Linda U.	15,517	9,134	630	3,012	1,358	942	441
Loyola Marymount U.	12,773	2,824	1,334	7,360	6	1,249	0
Marshall B. Ketchum U.	1,559 i	383 i	0 i	779 i	397 i	0 i	0 i
Occidental C.	4,139 i	2,622 i	484 i	NA	480 i	553 i	0 i
Pepperdine U.	3,775	883	19	885	0	1,988	0
Pomona C.	2,589	1,217	12	1,238	0	122	0
Santa Clara U.	4,225	2,660	299	NA	518	748	0
Scripps Research Institute	492,639	242,135	1,424	164,488	35,318	49,274	0
Stanford U.	1,384,555	860,125	20,064	169,346	138,118	189,536	7,366
Touro U., California	2,561	964	0	1,354	182	0	61
U. of the Pacific	1,835	1,351	413	NA	18	53	0
U. San Diego	10,143	2,911	510	5,842	0	576	304
U. San Francisco	2,657	547	265	1,123	0	717	5
U. Southern California	1,039,905	601,747	11,421	201,486	91,844	58,895	74,512

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Western U. of Health Sciences	9,029	7,131	600	224	351	704	19
Colorado	1,898,797	1,407,578	71,912	184,892	88,938	93,464	52,013
Public	1,849,590	1,380,167	67,235	176,849	87,001	87,327	51,011
Colorado School of Mines	98,404	66,200	1,446	13,739	9,580	2,329	5,110
Colorado State U., Fort Collins	456,911	316,727	30,749	65,700	11,888	22,618	9,229
Colorado State U., Pueblo	3,117	1,278	1,721	82	0	27	9
Fort Lewis C.	2,765	2,590	48	51	0	76	0
U. Colorado Anschutz Medical Campus ^a	611,358	429,949	24,575	47,955	52,346	43,531	13,002
U. Colorado Boulder	611,380	507,892	5,422	46,096	11,316	17,307	23,347
U. Colorado Colorado Springs	7,761	5,345	752	939	595	130	0
U. Colorado Denver ^a	18,080	12,668	2,422	1,063	453	1,160	314
U. Northern Colorado	3,308	1,692	100	1,224	143	149	0
U.S. Air Force Academy	36,506	35,826	0	0	680	0	0
Private	49,207	27,411	4,677	8,043	1,937	6,137	1,002
Colorado C.	3,646	1,371	258	1,090	0	927	0
U. Denver	45,561	26,040	4,419	6,953	1,937	5,210	1,002
Connecticut	1,587,047	931,776	7,291	460,465	88,066	90,640	8,809
Public	376,612	232,237	4,406	110,752	11,371	13,532	4,314
Central Connecticut State U.	1,035	511	58	459	0	4	3
Eastern Connecticut State U.	1,734	126	3	1,605	0	0	0
Southern Connecticut State U.	6,286	848	103	4,722	0	362	251
U. Connecticut	367,557	230,752	4,242	103,966	11,371	13,166	4,060
Private	1,210,435	699,539	2,885	349,713	76,695	77,108	4,495
Connecticut C.	1,875	620	0	1,252	0	0	3
Trinity C., Hartford	1,620	1,049	0	533	4	34	0
U. Hartford	1,090	886	17	117	6	64	0
U. New Haven	4,548	2,447	504	405	352	807	33
Wesleyan U.	10,101	5,267	0	3,652	93	1,052	37
Yale U.	1,191,201	689,270	2,364	343,754	76,240	75,151	4,422
Delaware	397,123	219,136	12,150	145,855	5,989	5,692	8,301
Public	397,123	219,136	12,150	145,855	5,989	5,692	8,301
Delaware State U.	29,016	24,361	598	3,457	150	440	10
U. Delaware	368,107	194,775	11,552	142,398	5,839	5,252	8,291
District of Columbia	783,163	384,514	6,530	219,463	24,865	104,996	42,795

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Public	14,699	13,779	920	0	0	0	0
National Defense U.	3,920	3,920	0	0	0	0	0
U. of the District of Columbia	10,779	9,859	920	0	0	0	0
Private	768,464	370,735	5,610	219,463	24,865	104,996	42,795
American U.	67,616	14,752	874	40,650	428	8,424	2,488
Catholic U. of America	38,191	26,285	130	4,211	370	7,195	0
Gallaudet U.	6,360	3,287	1	2,396	0	128	548
George Washington U.	275,483	161,867	2,264	67,384	5,048	25,886	13,034
Georgetown U.	313,220	127,213	1,144	81,692	16,111	61,547	25,513
Howard U.	67,594	37,331	1,197	23,130	2,908	1,816	1,212
Florida	3,048,253	1,489,852	284,429	1,002,273	111,840	110,968	48,891
Public	2,531,408	1,180,493	260,723	881,279	74,578	88,350	45,985
Florida A&M U.	50,636	41,943	1,510	6,256	334	593	0
Florida Atlantic U.	61,748	28,641	7,443	15,422	2,431	5,831	1,980
Florida Gulf Coast U.	9,896	6,482	1,823	214	110	1,211	56
Florida International U.	281,665	129,683	20,013	120,737	2,800	7,184	1,248
Florida Polytechnic U.	1,725	706	144	588	225	62	0
Florida State U.	355,986	163,744	24,003	152,444	4,914	3,723	7,158
U. Central Florida	221,488	110,131	8,500	82,434	11,278	5,068	4,077
U. Florida	1,085,834	467,739	171,655	327,074	39,233	51,825	28,308
U. North Florida	18,394	7,758	746	8,817	107	232	734
U. South Florida ^b	405,166	206,552	24,683	146,620	12,463	12,424	2,424
U. West Florida	38,870	17,114	203	20,673	683	197	0
Private	516,845	309,359	23,706	120,994	37,262	22,618	2,906
Embry-Riddle Aeronautical U.	28,650	23,863	358	1,425	1,002	225	1,777
Florida Institute of Technology	17,706	10,970	1,170	4,740	465	361	0
Nova Southeastern U.	31,189	9,314	3,571	16,839	417	616	432
U. Miami	439,300	265,212	18,607	97,990	35,378	21,416	697
Georgia	3,260,128	1,968,946	183,628	782,771	173,058	133,083	18,642
Public	2,191,995	1,322,856	182,620	511,206	104,094	59,096	12,123
Augusta U.	127,313	64,609	95	51,995	3,451	6,725	438
Fort Valley State U.	9,969	7,265	2,704	0	0	0	0
Georgia Institute of Technology	1,231,485	940,488	117,204	62,025	82,540	25,348	3,880
Georgia Southern U.	36,362	2,605	322	28,826	4,608	1	0

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Georgia State U.	215,908	81,641	6,415	112,773	502	13,940	637
Kennesaw State U.	21,705	3,290	529	17,003	205	543	135
Savannah State U.	1,888	1,881	7	0	0	0	0
U. Georgia	545,631	220,343	55,206	237,894	12,775	12,380	7,033
U. North Georgia	1,734	734	138	690	13	159	0
Private	1,068,133	646,090	1,008	271,565	68,964	73,987	6,519
Clark Atlanta U.	8,791	5,895	0	2,647	198	51	0
Emory U.	958,281	568,149	522	252,545	64,536	70,269	2,260
Mercer U.	50,222	32,504	46	9,218	4,083	112	4,259
Morehouse C.	5,664	5,664	0	0	0	0	0
Morehouse School of Medicine	42,489	31,339	440	7,155	0	3,555	0
Spelman C.	2,686	2,539	0	0	147	0	0
Hawaii	301,272	190,232	17,913	76,959	2,750	12,717	701
Public	297,970	187,565	17,865	76,955	2,435	12,477	673
U. Hawaii, Hilo	8,001	5,292	66	1,533	131	931	48
U. Hawaii, Manoa	277,323	169,762	17,799	75,287	2,304	11,546	625
U. Hawaii, system office	12,646	12,511	0	135	0	0	0
Private	3,302	2,667	48	4	315	240	28
Hawaii Pacific U.	3,302	2,667	48	4	315	240	28
Idaho	179,835	97,255	40,768	33,181	3,006	1,891	3,734
Public	179,835	97,255	40,768	33,181	3,006	1,891	3,734
Boise State U.	47,617	32,015	2,842	11,230	536	876	118
Idaho State U.	16,615	9,080	2,223	4,292	547	249	224
U. Idaho	115,603	56,160	35,703	17,659	1,923	766	3,392
Illinois	3,160,587	1,942,622	41,713	758,082	198,165	180,882	39,123
Public	1,338,296	718,791	38,203	416,526	69,783	67,719	27,274
Chicago State U.	3,701	3,699	0	0	0	2	0
Illinois State U.	25,510	8,673	487	14,540	54	1,752	4
Northeastern Illinois U.	2,224	2,224	0	0	0	0	0
Northern Illinois U.	27,068	9,840	774	14,986	634	606	228
Southern Illinois U., Carbondale	46,967	13,582	802	24,670	7,169	744	0
Southern Illinois U., Edwardsville	19,152	3,250	556	14,766	577	3	0
U. Illinois, Chicago	440,573	251,328	6,914	131,574	11,917	30,691	8,149
U. Illinois, Springfield	2,881	1,210	646	797	0	228	0

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Illinois, Urbana-Champaign	765,909	420,953	28,024	215,146	49,272	33,693	18,821
Western Illinois U.	4,311	4,032	0	47	160	0	72
Private	1,822,291	1,223,831	3,510	341,556	128,382	113,163	11,849
DePaul U.	8,362	3,757	169	2,195	260	1,948	33
Erikson Institute	2,068	815	178	125	0	950	0
Illinois Institute of Technology	29,791	25,963	2	1,759	948	371	748
Loyola U., Chicago	46,169	26,972	204	9,904	3,527	3,955	1,607
Midwestern U.	11,069	1,609	160	8,714	290	296	0
Northwestern U.	1,000,695	618,771	783	262,434	59,850	51,091	7,766
Rosalind Franklin U. of Medicine and Science	12,988	7,292	144	4,239	593	720	0
Rush U.	114,874	79,647	1,548	9,884	15,789	8,006	0
Toyota Technological Institute, Chicago	4,470	2,199	0	1,568	431	272	0
U. Chicago	591,805	456,806	322	40,734	46,694	45,554	1,695
Indiana	1,872,200	877,861	45,885	627,742	122,118	120,128	78,466
Public	1,589,905	752,223	45,398	533,370	105,780	98,783	54,351
Ball State U.	9,932	5,302	257	3,754	247	372	0
Indiana State U.	1,354	894	128	210	84	26	12
Indiana U., Bloomington	751,309	360,300	3,951	272,216	34,091	67,315	13,436
Indiana U.-Purdue U., Indianapolis	64,162	29,353	413	27,461	1,313	5,475	147
Purdue U., Fort Wayne	2,134	313	371	814	140	186	310
Purdue U., Northwest	6,387	3,171	767	1,323	477	128	521
Purdue U., West Lafayette	754,627	352,890	39,511	227,592	69,428	25,281	39,925
Private	282,295	125,638	487	94,372	16,338	21,345	24,115
Butler U.	1,691	1,227	0	216	113	135	0
U. Notre Dame	280,604	124,411	487	94,156	16,225	21,210	24,115
Iowa	1,005,800	508,226	43,761	364,805	51,317	36,806	885
Public	990,885	503,634	43,493	355,463	51,125	36,450	720
Iowa State U.	393,184	187,156	37,071	134,050	18,924	15,284	699
U. Iowa	594,215	314,346	5,957	220,605	32,201	21,085	21
U. Northern Iowa	3,486	2,132	465	808	0	81	0
Private	14,915	4,592	268	9,342	192	356	165
Des Moines U.	5,307	1,589	179	3,455	0	84	0
Drake U.	1,691	1,211	89	150	177	64	0
Grinnell C.	5,867	242	0	5,237	15	208	165

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Palmer C. of Chiropractic, Davenport	2,050	1,550	0	500	0	0	0
Kansas	882,644	376,471	89,850	222,010	159,137	20,290	14,886
Public	882,644	376,471	89,850	222,010	159,137	20,290	14,886
Kansas State U.	212,974	81,820	40,926	72,772	8,259	8,047	1,150
Pittsburg State U.	2,884	1,167	666	NA	1,051	0	0
U. Kansas	405,267	200,117	29,376	120,620	29,384	12,073	13,697
Wichita State U.	261,519	93,367	18,882	28,618	120,443	170	39
Kentucky	733,242	385,943	49,506	207,429	23,247	22,079	45,038
Public	733,242	385,943	49,506	207,429	23,247	22,079	45,038
Kentucky State U.	9,284	4,743	4,357	0	83	101	0
Morehead State U.	2,880	2,086	431	15	345	3	0
Murray State U.	3,371	2,176	23	1,060	112	0	0
Northern Kentucky U.	3,888	2,596	2	890	22	378	0
U. Kentucky	476,517	253,852	32,619	137,897	10,715	13,292	28,142
U. Louisville	229,582	117,363	11,543	63,606	11,915	8,259	16,896
Western Kentucky U.	7,720	3,127	531	3,961	55	46	0
Louisiana	941,868	404,974	93,956	285,226	105,251	28,259	24,202
Public	702,837	264,275	89,156	231,365	94,277	14,005	9,759
Grambling State U.	2,306 i	809 i	639 i	858 i	0 i	0 i	0 i
Louisiana State U., Baton Rouge	344,556	111,886	69,770	138,650	13,449	4,727	6,074
Louisiana State U., Health Sciences Center, New Orleans	53,995	33,087	168	13,488	3,193	3,275	784
Louisiana State U., Health Sciences Center, Shreveport	29,502	15,503	21	8,434	1,045	4,499	0
Louisiana Tech U.	26,591	5,734	2,532	15,621	713	0	1,991
Northwestern State U. Louisiana	1,848	742	838	268	0	0	0
Southeastern Louisiana U.	2,407	1,285	266	784	61	11	0
Southern U. and A&M C., Agricultural Research and Extension Center	7,048	4,261	2,765	22	0	0	0
Southern U. and A&M C., Baton Rouge	4,344	3,595	80	34	635	0	0
U. Louisiana, Lafayette	205,201	77,110	10,541	42,605	74,657	288	0
U. Louisiana, Monroe	3,128	1,993	748	208	41	138	0
U. New Orleans	21,911	8,270	788	10,393	483	1,067	910
Private	239,031	140,699	4,800	53,861	10,974	14,254	14,443
Dillard U.	2,270	1,422	0	848	0	0	0
Tulane U.	222,605	127,544	4,215	51,561	10,974	13,868	14,443
Xavier U. Louisiana	14,156	11,733	585	1,452	0	386	0

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Maine	191,739	95,051	22,403	64,293	3,974	3,623	2,395
Public	177,429	86,273	22,342	60,301	3,848	2,694	1,971
U. Maine	171,931	84,072	19,449	60,064	3,848	2,568	1,930
U. Southern Maine	5,498	2,201	2,893	237	0	126	41
Private	14,310	8,778	61	3,992	126	929	424
Bates C.	2,468	1,785	0	281	0	235	167
Bowdoin C.	2,648	1,867	46	635	0	91	9
Colby C.	2,530	1,466	0	573	0	243	248
U. New England	6,664	3,660	15	2,503	126	360	0
Maryland	5,168,958	4,055,588	99,124	620,194	157,683	218,721	17,648
Public	1,748,646	1,083,772	91,339	461,456	37,660	65,387	9,032
Bowie State U.	3,351	3,351	0	0	0	0	0
Morgan State U.	29,482	24,670	2,835	707	601	344	325
Salisbury U.	10,614	3,734	3,405	3,415	0	50	10
Towson U.	8,788	2,844	177	5,513	30	217	7
U. Baltimore	6,646	4,853	1,445	NA	4	259	85
U. Maryland ^c	1,228,550	750,447	49,950	334,100	34,844	52,546	6,663
U. Maryland Center for Environmental Science	53,718	15,109	26,071	10,222	223	1,792	301
U. Maryland, Baltimore County	110,319	65,368	7,264	31,743	1,958	2,611	1,375
U. Maryland, Eastern Shore	9,274	9,062	192	20	0	0	0
U.S. Naval Academy	10,664	10,147	0	0	0	251	266
Uniformed Services U. of the Health Sciences	277,240	194,187	0	75,736	0	7,317	0
Private	3,420,312	2,971,816	7,785	158,738	120,023	153,334	8,616
Johns Hopkins U. ^d	3,420,312	2,971,816	7,785	158,738	120,023	153,334	8,616
Massachusetts	4,837,383	2,705,310	50,116	1,111,829	321,346	477,250	171,532
Public	815,687	483,911	28,480	212,883	37,088	39,651	13,674
Framingham State U.	2,830	232	0	0	95	2,503	0
U. Massachusetts, Amherst	245,158	129,044	12,632	79,588	8,582	8,646	6,666
U. Massachusetts, Boston	65,215	23,131	8,852	25,606	2,043	4,958	625
U. Massachusetts, Dartmouth	33,136	11,162	1,519	18,713	1,035	440	267
U. Massachusetts, Lowell	111,144	62,195	2,599	39,067	4,463	2,112	708
U. Massachusetts, Medical School	358,204	258,147	2,878	49,909	20,870	20,992	5,408
Private	4,021,696	2,221,399	21,636	898,946	284,258	437,599	157,858
Amherst C.	7,177	2,862	0	2,130	0	127	2,058

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Babson C.	1,825	45	0	650	140	281	709
Bentley U.	1,161	509	0	0	0	652	0
Boston C.	68,958	36,560	1,439	13,949	652	15,649	709
Boston U.	725,402	413,102	752	187,662	22,525	84,116	17,245
Brandeis U.	102,378	44,205	1,027	40,627	1,100	11,813	3,606
Clark U.	8,813	2,500	77	4,552	0	1,577	107
Franklin W. Olin C. of Engineering	2,554	809	0	698	82	882	83
Harvard U.	1,308,458	628,683	5,379	415,763	62,034	179,073	17,526
Massachusetts Institute of Technology	989,166	531,056	2,523	117,128	165,200	100,640	72,619
MGH Institute of Health Professions	5,805	4,628	0	20	0	1,157	0
Mount Holyoke C.	2,112	1,511	0	285	0	316	0
New England C. of Optometry	1,868	1,609	52	108	88	11	0
Northeastern U.	231,607	150,093	1,747	55,478	12,107	11,909	273
Smith C.	5,831	2,403	0	1,740	248	1,440	0
Suffolk U.	1,401	340	0	996	0	65	0
Tufts U.	231,224	150,081	3,780	29,719	12,765	11,331	23,548
Wellesley C.	6,326	2,915	552	NA	89	2,008	762
Western New England U.	2,052	648	869	314	46	175	0
Williams C.	5,657 i	1,286 i	0 i	1,894 i	0 i	156 i	2,321 i
Woods Hole Oceanographic Institution	255,017	211,550	398	10,972	3,874	12,807	15,416
Worcester Polytechnic Institute	56,904	34,004	3,041	14,261	3,308	1,414	876
Michigan	3,082,410	1,611,073	61,599	1,109,643	138,028	120,241	41,826
Public	2,983,908	1,570,719	59,815	1,069,425	137,355	112,979	33,615
Central Michigan U.	25,105	9,773	1	14,061	157	794	319
Eastern Michigan U.	8,025	2,346	50	5,324	57	248	0
Grand Valley State U.	6,695	1,819	378	2,986	0	948	564
Lake Superior State U.	2,056	1,184	125	569	83	0	95
Michigan State U.	759,229	381,504	42,516	291,592	10,942	17,393	15,282
Michigan Technological U.	91,084	48,766	999	32,247	6,687	591	1,794
Northern Michigan U.	1,888	571	90	723	0	291	213
Oakland U.	38,061	9,533	2,911	18,539	2,613	2,636	1,829
Saginaw Valley State U.	2,862 i	2,341 i	0 i	388 i	5 i	112 i	16 i
U. Michigan, Ann Arbor	1,770,708	970,636	1,592	612,187	106,122	71,520	8,651
U. Michigan, Dearborn	8,180	2,537	9	3,259	2,070	223	82

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Wayne State U.	242,247	126,814	9,796	78,061	6,556	17,750	3,270
Western Michigan U. and Homer Stryker M.D. School of Medicine	27,768	12,895	1,348	9,489	2,063	473	1,500
Private	98,502	40,354	1,784	40,218	673	7,262	8,211
Albion C.	1,300 i	323 i	0 i	977 i	0 i	0 i	0 i
Calvin U.	3,169	931	12	559	24	1,376	267
Hope C.	6,355	3,691	0	1,928	0	625	111
Kettering U.	816	213	34	294	214	57	4
Lawrence Technological U.	3,050	1,109	1,037	154	192	558	0
U. Detroit Mercy	5,186	4,663	0	494	16	13	0
Van Andel Research Institute	78,626	29,424	701	35,812	227	4,633	7,829
Minnesota	1,241,862	663,217	80,078	363,811	53,266	46,788	34,702
Public	1,229,878	659,482	79,602	358,024	52,909	45,535	34,326
Minnesota State U., Mankato	2,206	575	110	1,300	0	18	203
St. Cloud State U.	2,226	401	235	690	601	299	0
U. Minnesota, Duluth	23,362	6,122	5,928	10,794	382	105	31
U. Minnesota, Twin Cities	1,202,084	652,384	73,329	345,240	51,926	45,113	34,092
Private	11,984	3,735	476	5,787	357	1,253	376
C. of Saint Benedict	1,228 i	51 i	0 i	1,177 i	0 i	0 i	0 i
Carleton C.	4,358	1,914	18	2,055	0	214	157
Macalester C.	1,691	943	51	459	0	238	0
Saint John's U.	1,298 i	0 i	0 i	1,298 i	0 i	0 i	0 i
St. Catherine U.	933	300	0	83	30	364	156
U. of St. Thomas (MN)	2,476	527	407	715	327	437	63
Mississippi	565,341	297,587	109,217	136,905	6,521	13,033	2,078
Public	563,005	295,251	109,217	136,905	6,521	13,033	2,078
Alcorn State U.	16,726 i	9,361 i	4,977 i	2,349 i	7 i	32 i	0 i
Jackson State U.	17,481	15,045	0	1,427	93	916	0
Mississippi State U.	303,418	138,207	92,113	60,534	3,170	7,928	1,466
U. Mississippi	152,903	84,270	183	61,653	2,696	3,489	612
U. Southern Mississippi	72,477	48,368	11,944	10,942	555	668	0
Private	2,336	2,336	0	0	0	0	0
Tougaloo C.	2,336 i	2,336 i	0 i	0 i	0 i	0 i	0 i
Missouri	1,708,351	992,049	39,685	399,008	149,915	113,425	14,269
Public	574,233	266,003	38,692	220,144	22,681	14,996	11,717

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Lincoln U., Jefferson City	11,500	8,988	2,512	NA	0	0	0
Missouri State U.	11,162	10,084	94	754	95	135	0
Missouri U. of Science and Technology	53,357	28,792	227	15,993	4,559	662	3,124
U. Missouri, Columbia	432,310	182,432	35,573	181,090	17,608	10,296	5,311
U. Missouri, Kansas City	52,657	31,134	225	17,201	338	969	2,790
U. Missouri, Saint Louis	13,247	4,573	61	5,106	81	2,934	492
Private	1,134,118	726,046	993	178,864	127,234	98,429	2,552
Saint Louis U.	82,740	42,170	355	22,991	5,459	11,584	181
U. of Health Sciences and Pharmacy in St. Louis	4,280	2,523	0	977	635	145	0
Washington U., Saint Louis	1,047,098	681,353	638	154,896	121,140	86,700	2,371
Montana	340,611	198,081	24,891	105,738	2,537	5,428	3,936
Public	340,611	198,081	24,891	105,738	2,537	5,428	3,936
Montana State U., Bozeman	200,820	118,974	18,147	55,164	1,546	3,208	3,781
Montana Technological U.	14,188	5,600	6,085	2,221	282	0	0
U. Montana, Missoula	125,603	73,507	659	48,353	709	2,220	155
Nebraska	626,792	283,097	80,399	190,452	29,739	21,571	21,534
Public	599,183	271,075	76,697	181,459	28,450	21,251	20,251
U. Nebraska, central administration	25,402	23,872	0	1,498	0	0	32
U. Nebraska, Kearney	4,009	1,900	530	1,459	48	0	72
U. Nebraska, Lincoln	340,260	113,248	61,070	134,864	19,767	6,247	5,064
U. Nebraska, Medical Center	205,253	114,754	12,652	39,600	8,591	14,617	15,039
U. Nebraska, Omaha	24,259	17,301	2,445	4,038	44	387	44
Private	27,609	12,022	3,702	8,993	1,289	320	1,283
Creighton U.	27,609	12,022	3,702	8,993	1,289	320	1,283
Nevada	312,714	131,036	10,036	148,549	5,509	7,212	10,372
Public	306,418	131,006	10,036	142,391	5,403	7,210	10,372
Desert Research Institute	28,478	17,341	385	4,377	960	4,381	1,034
Nevada State C.	1,191	1,167	0	22	0	2	0
U. Nevada, Las Vegas	94,967	28,867	2,174	59,398	1,656	809	2,063
U. Nevada, Reno	181,782	83,631	7,477	78,594	2,787	2,018	7,275
Private	6,296	30	0	6,158	106	2	0
Roseman U. of Health Sciences	6,296	30	0	6,158	106	2	0
New Hampshire	551,187	285,737	5,282	213,359	12,276	25,050	9,483
Public	207,061	130,292	3,938	56,975	9,893	5,107	856

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Plymouth State U.	669	571	0	84	0	0	14
U. New Hampshire	206,392	129,721	3,938	56,891	9,893	5,107	842
Private	344,126	155,445	1,344	156,384	2,383	19,943	8,627
Dartmouth C. and Dartmouth Hitchcock Medical Center	344,126	155,445	1,344	156,384	2,383	19,943	8,627
New Jersey	1,516,963	734,412	116,585	373,348	68,609	161,644	62,365
Public	994,536	471,559	111,824	263,333	47,989	86,282	13,549
C. New Jersey	3,464	1,984	186	579	0	715	0
Kean U.	5,499	715	180	4,548	15	41	0
Montclair State U.	32,202	5,189	619	24,540	54	1,683	117
New Jersey Institute of Technology	167,135	71,326	14,576	62,576	1,872	7,207	9,578
Rowan U.	29,949	18,613	4,720	4,546	1,177	893	0
Rutgers, State U. New Jersey, Camden	6,480	3,349	60	2,003	330	724	14
Rutgers, State U. New Jersey, New Brunswick	712,231	351,660	90,882	149,889	44,250	71,821	3,729
Rutgers, State U. New Jersey, Newark	28,345	16,099	421	8,531	167	3,041	86
Stockton U.	1,657	728	180	720	3	26	0
William Paterson U.	7,574	1,896	0	5,401	121	131	25
Private	522,427	262,853	4,761	110,015	20,620	75,362	48,816
Monmouth U.	1,938	535	505	93	407	397	1
Princeton U.	461,185	218,390	255	102,851	17,455	73,840	48,394
Seton Hall U.	5,741	2,092	1,737	1,176	150	586	0
Stevens Institute of Technology	53,563	41,836	2,264	5,895	2,608	539	421
New Mexico	543,867	378,374	40,059	87,011	9,998	20,105	8,320
Public	543,867	378,374	40,059	87,011	9,998	20,105	8,320
New Mexico Highlands U.	1,331 i	1,288 i	0 i	0 i	0 i	43 i	0 i
New Mexico Institute of Mining and Technology	89,900	72,594	10,532	2,895	2,922	269	688
New Mexico State U.	121,472	71,718	23,036	16,167	2,451	2,366	5,734
U. New Mexico	331,164	232,774	6,491	67,949	4,625	17,427	1,898
New York	8,280,323	4,446,597	340,868	1,964,999	587,571	588,442	351,846
Public	1,777,187	723,231	194,549	552,635	224,232	57,347	25,193
CUNY, Advanced Science Research Center	16,507	12,580	365	2,226	324	888	124
CUNY, Baruch C.	3,156	1,894	23	640	0	505	94
CUNY, Brooklyn C.	6,220	4,623	0	1,418	3	160	16
CUNY, C. Staten Island	3,545	2,916	93	342	1	133	60
CUNY, City C.	65,569	38,596	11,892	13,103	467	1,311	200

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
CUNY, Graduate Center	5,509	2,535	154	1,080	0	1,208	532
CUNY, Graduate School of Public Health and Health Policy	16,423	11,880	318	2,189	658	1,340	38
CUNY, Hunter C.	35,348	21,142	3,367	8,895	716	1,165	63
CUNY, John Jay C. of Criminal Justice	16,233	5,777	3,516	3,492	144	2,171	1,133
CUNY, Lehman C.	4,656	3,652	10	421	177	273	123
CUNY, New York City C. of Technology	1,955	1,769	16	120	20	0	30
CUNY, Queens C.	21,434	14,756	1,362	4,717	83	439	77
CUNY, system office	2,900	798	1,528	223	99	252	0
CUNY, York C.	1,912	1,659	0	189	0	64	0
SUNY, Binghamton U.	130,882	24,888	5,225	94,515	3,458	1,306	1,490
SUNY, Buffalo State	2,172	1,299	658	189	5	1	20
SUNY, C. Brockport	1,500	751	166	435	23	43	82
SUNY, C. of Environmental Science and Forestry	32,904	7,766	14,020	8,411	795	817	1,095
SUNY, C. of Optometry	4,497	2,080	0	708	1,642	56	11
SUNY, C. Plattsburgh	1,043	584	46	334	0	57	22
SUNY, Cobleskill	1,211	379	828	0	4	0	0
SUNY, Downstate Health Sciences U.	30,918	25,081	31	3,816	177	1,475	338
SUNY, Geneseo	2,091	1,564	8	502	0	17	0
SUNY, Oswego	1,209	544	36	549	0	74	6
SUNY, Polytechnic Institute	413,763	32,396	97,519	110,878	169,101	223	3,646
SUNY, Stony Brook U.	312,698	184,154	16,238	88,630	9,512	11,750	2,414
SUNY, U. Albany	129,796	51,492	1,234	71,042	735	2,963	2,330
SUNY, U. Buffalo	439,709	218,231	33,635	122,816	29,723	26,045	9,259
SUNY, Upstate Medical U.	50,586	27,737	2,261	10,660	5,883	2,331	1,714
U.S. Military Academy	20,841	19,708	0	95	482	280	276
Private	6,503,136	3,723,366	146,319	1,412,364	363,339	531,095	326,653
Albany C. of Pharmacy and Health Sciences	2,276	1,110	0	769	250	147	0
Albany Medical C.	22,297	13,384	0	3,132	3,606	689	1,486
Albert Einstein C. of Medicine	318,314	220,780	719	73,665	3,820	19,330	0
Alfred U.	3,477	1,008	1,659	517	264	29	0
Barnard C.	4,988	3,758	0	652	39	539	0
Canisius C.	1,160	454	0	0	0	706	0
Clarkson U.	21,703	8,834	2,713	8,116	1,363	508	169
Cold Spring Harbor Laboratory	118,034	59,163	134	36,235	3,766	18,736	0

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Colgate U.	4,343	1,570	0	2,625	78	66	4
Columbia U. in the City of New York	1,230,924	904,346	6,391	113,189	83,684	121,435	1,879
Cornell U.	1,300,357	636,481	88,200	250,308	55,328	115,788	154,252
Fordham U.	20,432	4,856	0	13,005	27	1,523	1,021
Hamilton C.	1,879	338	0	1,039	0	410	92
Hobart and William Smith Colleges	3,228	1,264	955	557	0	201	251
Hofstra U.	6,939	2,118	139	4,485	0	197	0
Icahn School of Medicine at Mount Sinai	893,968	610,646	3,652	132,627	81,384	50,251	15,408
Ithaca C.	1,000	703	46	149	0	23	79
Long Island U.	17,183	2,652	0	13,962	184	334	51
Manhattan C.	1,641	440	316	367	518	0	0
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	4,954	858	0	3,799	0	91	206
New School	19,218	1,261	298	3,023	2	11,860	2,774
New York Institute of Technology	5,555	2,988	167	2,180	0	220	0
New York Medical C.	16,461	9,070	985	813	2,947	1,980	666
New York U.	1,276,038	668,381	17,982	296,131	58,776	101,175	133,593
Pace U.	3,524	2,534	0	711	0	279	0
Pratt Institute	2,325	228	995	5	0	1,097	0
Rensselaer Polytechnic Institute	121,809	50,605	3,485	47,193	15,282	2,012	3,232
Rochester Institute of Technology	62,383	33,373	7,076	16,109	2,789	1,998	1,038
Rockefeller U.	360,877	94,693	102	225,209	2,292	37,218	1,363
Skidmore C.	1,734	861	0	337	0	536	0
St. John's U., New York	3,592	2,456	0	326	195	387	228
Syracuse U.	157,407	33,976	3,890	101,347	8,568	9,378	248
Teachers C., Columbia U.	30,978	10,177	4,357	NA	1,846	12,335	2,263
U. Rochester	450,805	334,503	2,037	53,315	36,329	18,783	5,838
Union C., Schenectady	1,479	750	0	596	2	107	24
Vassar C.	2,580	1,052	21	1,106	0	378	23
Yeshiva U.	7,274	1,695	0	4,765	0	349	465
North Carolina	3,870,874	2,319,789	198,727	747,610	343,150	212,111	49,487
Public	2,203,957	1,233,562	188,038	551,589	112,763	97,843	20,162
Appalachian State U.	7,189	2,567	103	3,129	617	771	2
East Carolina U.	55,693	29,648	408	19,542	3,991	1,783	321
Elizabeth City State U.	1,934	1,667	206	NA	61	0	0

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Fayetteville State U.	3,206	1,667	479	898	116	46	0
North Carolina A&T State U.	47,908	29,094	3,899	14,445	261	195	14
North Carolina Central U.	16,600	13,709	954	NA	434	776	727
North Carolina State U.	583,203	250,582	130,707	145,171	52,960	3,451	332
U. North Carolina, Asheville	5,973	2,600	542	543	54	2,234	0
U. North Carolina, Chapel Hill	1,361,028	827,158	38,681	343,102	49,664	84,942	17,481
U. North Carolina, Charlotte	43,126	26,871	1,158	11,848	2,689	560	0
U. North Carolina, general administration	3,522	369	3,153	0	0	0	0
U. North Carolina, Greensboro	41,303	29,822	524	9,054	593	579	731
U. North Carolina, Wilmington	20,053	7,178	6,644	3,338	1,166	1,638	89
Western Carolina U.	2,783	1,727	297	519	157	83	0
Winston-Salem State U.	10,436	8,903	283	0	0	785	465
Private	1,666,917	1,086,227	10,689	196,021	230,387	114,268	29,325
Davidson C.	2,788	1,370	4	702	31	542	139
Duke U.	1,390,538	901,807	802	167,200	208,132	92,526	20,071
Elon U.	1,797	428	0	1,303	0	47	19
Johnson C. Smith U.	2,685	1,868	674	0	12	131	0
Wake Forest U.	269,109	180,754	9,209	26,816	22,212	21,022	9,096
North Dakota	322,621	108,080	76,507	115,128	15,066	1,591	6,249
Public	322,621	108,080	76,507	115,128	15,066	1,591	6,249
North Dakota State U.	174,904	45,343	50,066	71,056	1,507	864	6,068
U. North Dakota	147,717	62,737	26,441	44,072	13,559	727	181
Ohio	3,079,902	1,800,562	92,684	789,803	212,530	125,146	59,177
Public	2,396,788	1,214,913	84,764	734,612	202,054	104,275	56,170
Air Force Institute of Technology	44,391	32,479	0	11,869	43	0	0
Bowling Green State U.	19,342	7,918	1,649	8,895	122	758	0
Central State U.	10,274	5,576	3,039	1,659	0	0	0
Cleveland State U.	81,225	53,395	848	18,497	3,481	4,812	192
Kent State U.	52,175	16,195	1,308	32,748	640	1,242	42
Miami U.	28,799	10,277	1,997	13,843	1,375	969	338
Northeast Ohio Medical U.	13,465	9,400	47	3,197	0	821	0
Ohio State U.	1,363,388	636,902	66,409	424,790	141,894	52,073	41,320
Ohio U.	52,465	20,587	1,035	26,187	3,634	634	388
U. Akron	19,943	11,036	160	5,608	2,102	893	144

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Cincinnati	615,070	350,392	6,044	161,967	45,002	38,204	13,461
U. Toledo	64,654	36,694	1,211	19,679	3,312	3,509	249
Wright State U.	27,440	20,529	757	5,368	407	343	36
Youngstown State U.	4,157	3,533	260	305	42	17	0
Private	683,114	585,649	7,920	55,191	10,476	20,871	3,007
C. Wooster	1,717	737	0	797	0	183	0
Case Western Reserve U.	467,389	380,423	6,503	53,133	4,856	20,142	2,332
Heidelberg U.	1,184	262	661	246	0	15	0
Kenyon C.	1,330	1,021	0	162	0	123	24
U. Dayton	211,494	203,206	756	853	5,620	408	651
Oklahoma	650,977	281,427	50,747	266,143	33,474	15,074	4,112
Public	633,561	275,534	50,427	262,120	27,344	14,107	4,029
Langston U.	6,481	3,616	0	2,449	416	0	0
Oklahoma State U., Center for Health Sciences	8,368	3,366	35	4,897	53	17	0
Oklahoma State U., Stillwater	195,041	53,885	21,322	106,925	11,236	1,351	322
U. Central Oklahoma	7,070 i	1,869 i	747 i	4,365 i	85 i	3 i	1 i
U. Oklahoma, Norman and Health Science Center	408,656	210,994	26,614	140,592	15,450	11,616	3,390
U. Oklahoma, Tulsa	7,945	1,804	1,709	2,892	104	1,120	316
Private	17,416	5,893	320	4,023	6,130	967	83
U. Tulsa	17,416	5,893	320	4,023	6,130	967	83
Oregon	1,001,028	674,193	60,639	142,746	53,574	53,511	16,365
Public	984,229	667,845	60,103	133,938	53,529	52,580	16,234
Oregon Health and Science U.	479,226	346,724	1,322	45,950	43,965	40,925	340
Oregon Institute of Technology	5,086 i	340	4,431 i	NA	109 i	206 i	0
Oregon State U.	297,934	192,621	50,654	28,792	8,037	2,772	15,058
Portland State U.	41,483	30,922	2,635	3,949	636	2,882	459
U. Oregon	160,500	97,238	1,061	55,247	782	5,795	377
Private	16,799	6,348	536	8,808	45	931	131
Lewis and Clark C.	2,566	746	0	1,522	0	298	0
Pacific U.	6,128	2,672	498	2,670	45	243	0
Reed C.	5,922 i	2,139 i	38 i	3,272 i	0 i	342 i	131 i
Willamette U.	2,183	791	0	1,344	0	48	0
Pennsylvania	5,454,961	3,122,812	119,742	1,433,805	369,954	289,628	119,020
Public	2,601,766	1,653,304	67,896	597,872	87,947	112,841	81,906

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
East Stroudsburg U. Pennsylvania	1,410	598	44	149	0	619	0
Indiana U. Pennsylvania	6,313	1,797	729	3,303	0	469	15
Pennsylvania State U., Behrend	6,384	3,262	405	1,345	848	514	10
Pennsylvania State U., Harrisburg	2,927	1,911	491	251	173	101	0
Pennsylvania State U., University Park and Hershey Medical Center	1,019,940	681,159	47,345	207,630	24,121	30,128	29,557
Temple U.	301,395	143,580	8,109	99,543	26,463	17,459	6,241
U. Pittsburgh, Pittsburgh	1,251,998	814,647	10,753	281,033	36,310	63,172	46,083
U.S. Army War C.	5,496 i	5,496 i	0 i	0 i	0 i	0 i	0 i
West Chester U. Pennsylvania	5,903	854	20	4,618	32	379	0
Private	2,853,195	1,469,508	51,846	835,933	282,007	176,787	37,114
Bryn Mawr C.	9,123	1,257	0	7,692	0	174	0
Bucknell U.	5,259	2,539	0	1,150	369	236	965
Carnegie Mellon U.	449,707	259,160	4,379	123,903	42,115	13,772	6,378
Drexel U.	151,903	99,399	3,418	36,121	2,323	7,882	2,760
Duquesne U.	13,944	6,309	928	4,043	217	2,447	0
Franklin and Marshall C.	4,440	1,680	266	1,555	339	333	267
Haverford C.	4,487	2,722	0	852	0	381	532
Lafayette C.	2,059	1,300	0	605	32	110	12
Lehigh U.	51,769	36,535	2,342	11,162	595	1,060	75
Mercyhurst U.	661	82	387	59	108	6	19
Philadelphia C. of Osteopathic Medicine	6,667	40	57	2,675	2,300	1,595	0
Robert Morris U.	1,000 i	577 i	13 i	235 i	67 i	81 i	27 i
Saint Joseph's U.	9,041	2,520	1,205	2,609	2,252	455	0
Swarthmore C.	4,225	1,733	6	2,130	0	356	0
Thomas Jefferson U.	321,644	173,861	14,252	63,739	26,469	24,927	18,396
U. Pennsylvania	1,791,311	873,318	23,189	562,094	204,216	120,832	7,662
Villanova U.	25,955	6,476	1,404	15,309	605	2,140	21
Rhode Island	458,694	320,509	10,983	82,078	5,581	32,536	7,007
Public	145,758	104,091	10,809	24,814	1,304	3,832	908
Naval War C.	5,529	5,529	0	0	0	0	0
Rhode Island C.	11,127	5,372	5,301	92	0	362	0
U. Rhode Island	129,102	93,190	5,508	24,722	1,304	3,470	908
Private	312,936	216,418	174	57,264	4,277	28,704	6,099
Brown U.	310,780	215,067	9	56,819	4,247	28,539	6,099

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Roger Williams U.	2,156	1,351	165	445	30	165	0
South Carolina	805,510	409,143	45,090	273,511	43,025	22,959	11,782
Public	801,681	406,684	45,068	272,442	43,000	22,790	11,697
C. Charleston	6,421	4,485	383	1,032	40	465	16
Citadel Military C. South Carolina	4,374	3,741	270	336	3	20	4
Clemson U.	263,158	119,512	25,685	95,211	17,690	4,796	264
Coastal Carolina U.	3,724	1,130	948	1,580	0	66	0
Medical U. South Carolina	284,553	163,395	4,565	76,566	20,932	9,097	9,998
South Carolina State U.	4,270 ⁱ	4,270 ⁱ	NA	NA	NA	NA	NA
U. South Carolina, Aiken	2,595	857	0	1,729	0	9	0
U. South Carolina, Columbia	229,162	106,752	13,021	95,360	4,322	8,292	1,415
Winthrop U.	3,424	2,542	196	628	13	45	0
Private	3,829	2,459	22	1,069	25	169	85
Clafin U.	1,179	1,179	0	0	0	0	0
Furman U.	2,650	1,280	22	1,069	25	169	85
South Dakota	117,368	58,169	20,008	22,079	2,135	3,091	11,886
Public	116,644	57,445	20,008	22,079	2,135	3,091	11,886
Black Hills State U.	1,987	1,676	119	192	0	0	0
Dakota State U.	4,684	3,976	236	382	84	6	0
South Dakota School of Mines and Technology	20,061	15,100	1,467	2,488	741	55	210
South Dakota State U.	59,590	22,991	16,267	4,841	1,278	2,537	11,676
U. South Dakota	30,322	13,702	1,919	14,176	32	493	0
Private	724	724	0	0	0	0	0
Augustana U.	724	724	0	0	0	0	0
Tennessee	1,715,468	958,144	41,526	549,263	98,331	53,491	14,713
Public	607,285	273,328	38,479	247,181	15,093	21,549	11,655
Austin Peay State U.	3,149	870	1,186	984	0	89	20
East Tennessee State U.	23,420	9,715	315	9,214	35	3,881	260
Middle Tennessee State U.	22,631	4,347	509	16,715	261	799	0
Tennessee State U.	18,012	10,859	567	6,466	4	116	0
Tennessee Technological U.	16,398	8,156	4,256	3,464	117	146	259
U. Memphis	71,271	24,686	8,365	33,900	1,084	3,045	191
U. Tennessee, Chattanooga	12,808	5,214	1,291	5,510	106	229	458
U. Tennessee, Health Science Center	115,161	60,221	6,205	32,641	3,958	6,232	5,904

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Tennessee, Knoxville	324,435	149,260	15,785	138,287	9,528	7,012	4,563
Private	1,108,183	684,816	3,047	302,082	83,238	31,942	3,058
Fisk U.	4,000	3,486	93	10	0	411	0
Meharry Medical C.	17,960	15,048	0	648	25	2,239	0
Vanderbilt U. and Vanderbilt U. Medical Center	1,086,223	666,282	2,954	301,424	83,213	29,292	3,058
Texas	7,440,455	3,106,159	972,083	2,100,792	530,526	431,324	299,571
Public	6,239,913	2,536,159	928,132	1,664,003	484,699	335,605	291,315
Lamar U.	5,304	1,180	3,639	220	167	98	0
Prairie View A&M U.	20,429	11,665	4,037	3,898	327	502	0
Sam Houston State U.	12,009	4,936	132	6,444	1	382	114
Stephen F. Austin State U.	3,184	879	1,326	511	22	267	179
Sul Ross State U.	2,526 i	623 i	151 i	143 i	30 i	941 i	638 i
Tarleton State U.	20,056	5,055	3,927	10,533	257	284	0
Texas A&M International U.	4,486	1,624	917	1,093	73	751	28
Texas A&M U., College Station and Health Science Center	1,152,666	505,355	218,735	315,112	35,535	47,156	30,773
Texas A&M U.-Commerce	4,955	1,776	222	2,783	4	153	17
Texas A&M U.-Corpus Christi	36,014	15,229	9,903	5,287	90	2,782	2,723
Texas A&M U.-Kingsville	23,451	8,225	6,241	2,812	389	5,647	137
Texas A&M U.-San Antonio	1,242	394	119	570	22	60	77
Texas Southern U.	12,120	7,550	1,150	3,362	0	58	0
Texas State U.	110,102	38,936	3,810	60,338	1,102	5,800	116
Texas Tech U.	226,729	45,136	29,861	121,050	13,367	16,426	889
Texas Tech U., Health Sciences Center	46,574	14,620	16,937	9,544	508	2,963	2,002
Texas Tech U., Health Sciences Center, El Paso	14,206	2,339	2,856	8,097	475	438	1
Texas Woman's U.	6,029	2,091	2,386	883	135	534	0
U. Houston	240,126	84,295	28,999	107,699	9,709	6,502	2,922
U. Houston-Clear Lake	1,800	841	408	91	399	61	0
U. Houston-Downtown	1,485	903	57	238	0	287	0
U. North Texas, Denton	93,538	23,056	5,007	61,728	1,979	1,762	6
U. North Texas, Health Science Center	10,439	3,172	0	6,615	502	14	136
U. Texas Health Science Center, Houston	342,633	184,205	46,379	55,120	15,764	28,031	13,134
U. Texas Health Science Center, San Antonio	238,510	119,071	27,587	57,408	9,276	24,858	310
U. Texas Health Science Center, Tyler	33,872	14,362	8,127	6,016	858	4,509	0
U. Texas M. D. Anderson Cancer Center	1,182,536	225,659	297,033	231,583	241,850	34,523	151,888

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Texas Medical Branch	204,518	123,467	8,481	53,371	7,267	11,932	0
U. Texas of the Permian Basin	3,577	1,538	685	756	132	466	0
U. Texas Rio Grande Valley	64,401	18,317	5,380	32,862	212	7,326	304
U. Texas Southwestern Medical Center	719,002	298,154	85,808	166,635	47,282	54,435	66,688
U. Texas, Arlington	133,770	56,025	27,482	38,339	2,935	6,948	2,041
U. Texas, Austin	845,896	536,296	31,721	151,594	76,512	45,893	3,880
U. Texas, Dallas	130,914	60,706	13,882	32,378	9,499	14,449	0
U. Texas, El Paso	130,501	60,387	15,999	41,654	1,177	2,151	9,133
U. Texas, San Antonio	147,629	54,384	13,795	64,443	5,765	6,123	3,119
U. Texas, Tyler	3,246	1,585	651	821	111	64	14
West Texas A&M U.	9,438	2,123	4,302	1,972	966	29	46
Private	1,200,542	570,000	43,951	436,789	45,827	95,719	8,256
Abilene Christian U.	6,310	1,032	0	231	4,907	140	0
Baylor C. of Medicine	827,005	420,054	35,155	292,730	28,251	50,815	0
Baylor U.	66,014	15,856	2,211	34,144	3,165	7,682	2,956
Rice U.	216,202	105,345	5,071	63,401	5,535	31,834	5,016
Southern Methodist U.	57,544	17,680	1,106	33,929	1,918	2,751	160
St. Edward's U.	3,393	1,940	101	1,150	15	160	27
Texas Christian U.	18,353	5,670	302	9,201	2,028	1,096	56
Trinity U.	3,657	1,345	5	1,117	0	1,149	41
U. of the Incarnate Word	2,064	1,078	0	886	8	92	0
Utah	1,062,475	680,822	27,112	256,513	53,521	34,371	10,136
Public	1,016,865	649,186	26,080	249,551	49,944	32,200	9,904
U. Utah	670,119	367,040	3,347	221,473	43,073	31,556	3,630
Utah State U.	344,851	280,866	22,243	28,019	6,871	578	6,274
Utah Valley U.	1,895	1,280	490	59	0	66	0
Private	45,610	31,636	1,032	6,962	3,577	2,171	232
Brigham Young U., Provo	45,610	31,636	1,032	6,962	3,577	2,171	232
Vermont	218,910	119,444	1,389	82,461	2,785	7,344	5,487
Public	216,307	117,163	1,379	82,412	2,785	7,081	5,487
U. Vermont	216,307	117,163	1,379	82,412	2,785	7,081	5,487
Private	2,603	2,281	10	49	0	263	0
Middlebury C.	2,603	2,281	10	49	0	263	0
Virginia	2,117,336	969,660	147,155	721,967	94,893	98,968	84,693

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
Public	2,094,785	956,102	147,066	713,765	94,819	98,381	84,652
Christopher Newport U.	2,762	1,701	0	855	48	158	0
Eastern Virginia Medical School	22,165	17,616	1,186	2,603	148	612	0
George Mason U.	230,068	119,406	5,816	55,812	6,969	35,685	6,380
James Madison U.	17,021	2,884	798	12,602	218	518	1
Norfolk State U.	3,593	3,398	89	0	0	106	0
Old Dominion U.	64,877	27,804	12,866	19,957	820	2,515	915
U. of Mary Washington	1,229	501	54	601	6	39	28
U. Virginia's C. Wise	2,628	786	837	965	4	36	0
U. Virginia, Charlottesville	662,658	332,993	9,520	187,912	32,511	32,320	67,402
Virginia Commonwealth U.	405,898	166,726	34,539	173,811	16,124	14,537	161
Virginia Military Institute	1,746	1,137	221	378	0	10	0
Virginia Polytechnic Institute and State U.	591,861	240,305	75,010	225,690	37,005	6,972	6,879
Virginia State U.	12,326	7,115	2,006	2,544	0	661	0
William & Mary	75,953	33,730	4,124	30,035	966	4,212	2,886
Private	22,551	13,558	89	8,202	74	587	41
Edward Via C. of Osteopathic Medicine	7,121	482	58	6,520	8	53	0
Hampton U.	11,462	11,274	0	188	0	0	0
Marymount U.	1,298	178	31	965	66	58	0
U. Richmond	2,670	1,624	0	529	0	476	41
Washington	1,972,326	1,295,518	77,227	230,056	70,422	249,757	49,346
Public	1,968,111	1,293,161	77,150	228,794	70,419	249,241	49,346
Central Washington U.	3,176	2,429	266	350	55	42	34
Eastern Washington U.	2,437	855	1,332	NA	13	149	88
Northwest Indian C.	5,632	4,298	0	1,334	0	0	0
U. Washington, Bothell	8,197	4,009	259	786	85	3,007	51
U. Washington, Seattle	1,559,708	1,083,090	19,188	117,096	61,099	231,172	48,063
U. Washington, Tacoma	5,484	4,553	432	207	0	138	154
Washington State U.	368,396	187,580	54,610	103,067	9,099	13,119	921
Western Washington U.	15,081	6,347	1,063	5,954	68	1,614	35
Private	4,215	2,357	77	1,262	3	516	0
Seattle U.	1,894	1,143	52	471	3	225	0
U. Puget Sound	1,051	780	0	174	0	97	0
Whitman C.	1,270	434	25	617	0	194	0

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
West Virginia	248,022	118,659	13,290	87,833	5,336	4,486	18,418
Public	247,805	118,442	13,290	87,833	5,336	4,486	18,418
Marshall U.	25,692	16,369	1,909	6,479	320	615	0
West Virginia School of Osteopathic Medicine	1,329	468	11	850	0	0	0
West Virginia State U.	6,703	4,278	1,601	815	0	9	0
West Virginia U.	214,081	97,327	9,769	79,689	5,016	3,862	18,418
Private	217	217	0	0	0	0	0
U. Charleston	217	217	0	0	0	0	0
Wisconsin	1,966,266	943,590	130,741	599,840	81,332	159,019	51,744
Public	1,599,312	774,226	129,913	480,441	42,974	129,257	42,501
U. Wisconsin-Eau Claire	1,628	681	396	278	243	24	6
U. Wisconsin-Green Bay	2,713	1,046	752	843	25	47	0
U. Wisconsin-La Crosse	2,942	968	694	977	227	70	6
U. Wisconsin-Madison	1,523,513	740,854	109,946	463,759	40,450	127,756	40,748
U. Wisconsin-Milwaukee	56,822	24,036	16,504	12,368	1,535	935	1,444
U. Wisconsin-Oshkosh	1,990	1,336	72	546	36	0	0
U. Wisconsin-Platteville	1,349	435	340	224	305	35	10
U. Wisconsin-Stevens Point	3,740	1,235	1,074	829	1	314	287
U. Wisconsin-Superior	4,615	3,635	135	617	152	76	0
Private	366,954	169,364	828	119,399	38,358	29,762	9,243
Marquette U.	40,638	15,316	207	16,222	752	2,440	5,701
Medical C. Wisconsin	321,506	152,301	586	102,906	35,121	27,050	3,542
Milwaukee School of Engineering	3,545	969	0	79	2,485	12	0
Northland C.	1,265	778	35	192	0	260	0
Wyoming	139,764	68,772	5,592	58,184	4,099	2,167	950
Public	139,764	68,772	5,592	58,184	4,099	2,167	950
U. Wyoming	139,764	68,772	5,592	58,184	4,099	2,167	950
Guam	20,481	17,066	1,682	1,339	375	19	0
Public	20,481	17,066	1,682	1,339	375	19	0
U. Guam	20,481	17,066	1,682	1,339	375	19	0
Puerto Rico	103,245	74,309	1,876	21,283	4,506	812	459
Public	96,773	70,095	1,520	19,785	4,506	812	55
U. Puerto Rico, Cayey	1,390	757	0	430	0	203	0
U. Puerto Rico, Humacao	1,448	1,160	0	288	0	0	0

TABLE 70

Higher education R&D expenditures, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Source of funds					
		Federal government	State and local government	Institution funds	Business	Nonprofit organizations	All other sources
U. Puerto Rico, Mayaguez	18,274	16,223	455	314	1,049	233	0
U. Puerto Rico, Medical Sciences Campus	47,578	35,050	1,005	8,295	3,228	0	0
U. Puerto Rico, Rio Piedras	28,083	16,905	60	10,458	229	376	55
Private	6,472	4,214	356	1,498	0	0	404
U. Ana G. Mendez, Gurabo	1,419	1,407	0	12	0	0	0
U. Central del Caribe	5,053	2,807	356	1,486	0	0	404
Virgin Islands	20,259	19,127	1,010	NA	48	74	0
Public	20,259	19,127	1,010	NA	48	74	0
U. of the Virgin Islands	20,259	19,127	1,010	NA	48	74	0

i = imputed. NA = not available; data were not provided by institution.

^a The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^b The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^c The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^d Johns Hopkins University includes the Applied Physics Laboratory, with \$2,056,063 thousand in total R&D expenditures in FY 2022.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
United States	97,680,528	3,224,949	3,690,235	56,498,207	879,526	6,167,583	1,443,894	3,165,440	1,156,452	15,596,634	5,857,608
Public	63,712,945	1,953,690	2,908,828	34,947,019	509,716	3,867,258	1,080,636	2,134,847	928,285	11,119,207	4,263,459
Private	33,967,583	1,271,259	781,407	21,551,188	369,810	2,300,325	363,258	1,030,593	228,167	4,477,427	1,594,149
Alabama	1,431,393	86,237	38,775	856,109	8,397	53,814	21,830	19,400	3,089	239,349	104,393
Public	1,409,452	85,362	38,775	841,037	7,509	51,904	21,722	19,311	3,089	236,394	104,349
Alabama A&M U.	9,611	372	0	5,654	78	758	201	237	0	1,925	386
Alabama State U.	3,178	192	0	2,471	0	0	0	0	0	483	32
Auburn U., Auburn	304,439	5,174	4,791	128,578	3,875	17,011	3,848	3,856	3,031	93,219	41,056
Troy U.	2,517	1	71	180	4	1,916	3	40	0	56	246
U. Alabama, Birmingham	713,480	898	66	653,373	263	6,282	9,755	494	0	30,637	11,712
U. Alabama, Huntsville	169,532	60,893	23,111	2,695	655	17,852	349	1,113	0	53,958	8,906
U. Alabama, Tuscaloosa	163,204	16,400	5,895	22,348	2,367	7,524	5,349	12,938	58	49,885	40,440
U. South Alabama	43,491	1,432	4,841	25,738	267	561	2,217	633	0	6,231	1,571
Private	21,941	875	0	15,072	888	1,910	108	89	0	2,955	44
Tuskegee U.	21,941	875	0	15,072	888	1,910	108	89	0	2,955	44
Alaska	226,717	955	129,232	37,609	181	14,453	116	2,763	18,288	19,826	3,294
Public	225,110	955	127,684	37,589	181	14,453	116	2,763	18,288	19,826	3,255
U. Alaska, Anchorage	21,024	48	5,286	8,875	0	577	57	1,529	1,296	1,957	1,399
U. Alaska, Fairbanks	202,516	907	121,905	28,235	181	13,832	59	1,184	16,488	17,869	1,856
U. Alaska, Southeast	1,570	0	493	479	0	44	0	50	504	0	0
Private	1,607	0	1,548	20	0	0	0	0	0	0	39
Alaska Pacific U.	1,607	0	1,548	20	0	0	0	0	0	0	39
Arizona	1,690,904	42,176	106,317	658,110	7,528	177,723	22,471	103,143	131,012	281,557	160,867
Public	1,690,384	42,176	106,317	657,590	7,528	177,723	22,471	103,143	131,012	281,557	160,867
Arizona State U.	797,224	21,414	67,062	141,306	3,418	27,777	15,720	80,307	119,141	192,681	128,398
Dine C.	2,091	0	0	2,091	0	0	0	0	0	0	0
Northern Arizona U.	66,729	2,492	5,396	43,147	5	7,427	178	345	1,148	4,194	2,397
U. Arizona	824,340	18,270	33,859	471,046	4,105	142,519	6,573	22,491	10,723	84,682	30,072
Private	520	0	0	520	0	0	0	0	0	0	0
Sonoran U. Health Sciences	520	0	0	520	0	0	0	0	0	0	0
Arkansas	416,507	10,932	5,334	312,679	70	12,895	1,418	7,565	856	42,770	21,988
Public	416,507	10,932	5,334	312,679	70	12,895	1,418	7,565	856	42,770	21,988
Arkansas State U., Jonesboro	8,214	299	0	5,942	0	886	43	187	276	508	73

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Arkansas for Medical Sciences	205,493	0	0	205,493	0	0	0	0	0	0	0
U. Arkansas, Fayetteville	184,080	6,819	5,333	92,217	59	10,739	1,294	6,866	0	40,691	20,062
U. Arkansas, Little Rock	7,530	3,204	1	1,519	1	292	0	146	0	1,571	796
U. Arkansas, Pine Bluff	7,506	0	0	6,299	0	513	0	114	580	0	0
U. Central Arkansas	3,684	610	0	1,209	10	465	81	252	0	0	1,057
California	12,107,605	288,264	535,533	7,639,018	74,172	1,050,483	152,296	390,272	213,860	1,251,330	512,377
Public	8,558,137	136,791	422,601	5,302,878	62,605	696,437	122,240	282,147	212,832	989,533	330,073
California Polytechnic State U., San Luis Obispo	33,155	359	2,006	9,048	2,826	5,294	183	738	74	8,472	4,155
California State Polytechnic U., Humboldt	15,612	76	863	4,020	1	899	0	2,088	259	6,779	627
California State Polytechnic U., Pomona	7,909	304	13	3,501	80	1,301	20	22	0	1,759	909
California State U., Bakersfield	4,815	0	69	75	1,457	322	72	261	0	440	2,119
California State U., Channel Islands	3,377	69	0	1,401	568	406	8	140	696	4	85
California State U., Chico	4,177	0	624	1,445	42	166	0	102	0	1,192	606
California State U., Dominguez Hills	4,230	413	15	335	72	1,464	435	197	0	0	1,299
California State U., East Bay	19,035	287	816	2,587	377	895	207	2,148	0	133	11,585
California State U., Fresno	12,603	234	7	4,894	1,626	2,668	11	652	0	1,970	541
California State U., Fullerton	16,642	1,047	414	4,038	1,234	1,615	404	1,163	1,423	1,062	4,242
California State U., Long Beach	17,807	390	399	4,858	369	3,494	1,974	574	52	3,671	2,026
California State U., Los Angeles	9,839	241	202	1,229	0	5,776	58	391	0	1,423	519
California State U., Maritime Academy	526	0	70	0	0	0	0	0	0	388	68
California State U., Monterey Bay	8,975	1,517	2,702	3,977	175	446	8	89	0	0	61
California State U., Northridge	19,638	173	1,181	5,528	435	7,084	308	312	82	2,621	1,914
California State U., Sacramento	23,795	221	808	1,154	131	403	319	3,830	5,269	8,253	3,407
California State U., San Bernardino	11,929	672	75	1,251	311	2,161	2,206	278	235	658	4,082
California State U., San Marcos	9,238	450	123	1,456	9	981	987	121	3,730	527	854
California State U., Stanislaus	1,966	215	2	1,094	218	117	114	123	0	0	83
Naval Postgraduate School	64,055	11,304	5,148	872	2,859	4,745	257	6,114	6,039	21,556	5,161
San Diego State U.	123,856	2,321	2,684	36,057	3,896	7,435	18,073	5,482	7,315	14,048	26,545
San Francisco State U.	36,617	1,878	4,988	13,356	1,288	3,626	1,917	3,159	1,424	2,423	2,558
San Jose State U.	71,695	151	16,303	5,838	1,157	4,464	17,046	3,260	0	6,968	16,508
Sonoma State U.	3,774	5	1,938	748	511	62	73	72	30	17	318
U. California, Berkeley	981,035	12,736	8,644	275,739	9,474	196,281	16,945	73,560	106,357	206,541	74,758
U. California, Davis	883,807	5,764	32,940	626,320	4,392	35,319	3,509	38,078	10,220	114,118	13,147

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. California, Irvine	534,947	24,680	11,555	318,016	7,424	40,171	11,147	13,324	987	75,898	31,745
U. California, Los Angeles	1,536,197	14,755	45,869	1,110,788	9,537	55,159	17,022	68,872	50,149	98,403	65,643
U. California, Merced	48,147	1,387	4,454	10,814	1,863	6,863	493	2,936	2,638	11,997	4,702
U. California, Office of the President	54,640	0	0	45,843	0	8,725	0	0	0	0	72
U. California, Riverside	199,135	7,468	11,310	107,118	2,207	17,938	5,411	6,764	2,261	32,758	5,900
U. California, San Diego	1,533,357	28,879	187,175	915,619	6,383	97,804	19,075	31,031	8,417	212,583	26,391
U. California, San Francisco	1,805,950	0	0	1,734,339	0	71,611	0	0	0	0	0
U. California, Santa Barbara	278,897	13,354	43,416	19,387	1,335	72,934	3,276	10,473	4,939	97,329	12,454
U. California, Santa Cruz	176,760	5,441	35,788	30,133	348	37,808	682	5,793	236	55,542	4,989
Private	3,549,468	151,473	112,932	2,336,140	11,567	354,046	30,056	108,125	1,028	261,797	182,304
Azusa Pacific U.	3,389	29	0	691	30	176	868	87	0	10	1,498
Biola U.	3,260	0	0	170	0	0	2,469	0	0	2	619
California Institute of Technology	478,142	11,363	57,033	98,580	1,063	227,465	0	0	0	51,975	30,663
California Lutheran U.	627	0	3	171	0	42	0	178	233	0	0
Chapman U.	34,212	708	324	13,148	29	1,814	1,329	3,609	0	539	12,712
Charles R. Drew U. of Medicine and Science	14,581	0	0	14,581	0	0	0	0	0	0	0
Claremont Graduate U.	8,382	76	0	0	74	0	595	2,075	0	0	5,562
Claremont McKenna C.	5,893	24	4	272	163	385	478	4,189	30	0	348
Harvey Mudd C.	3,350	711	0	605	378	744	0	0	249	608	55
High Tech High Graduate School of Ed.	6,203	0	0	0	0	0	0	0	0	0	6,203
Keck Graduate Institute	1,282	0	0	1,282	0	0	0	0	0	0	0
La Sierra U.	2,246	0	0	7	0	1	73	0	0	0	2,165
Loma Linda U.	15,517	0	0	14,632	0	0	866	0	0	0	19
Loyola Marymount U.	12,773	303	13	2,308	14	383	1,713	1,072	165	57	6,745
Marshall B. Ketchum U.	1,559	0	0	1,559	0	0	0	0	0	0	0
Occidental C.	4,139	313	1,416	577	108	877	443	334	0	0	71
Pepperdine U.	3,775	0	0	2,022	29	89	174	248	131	0	1,082
Pomona C.	2,589	120	272	338	301	695	86	515	0	0	262
Santa Clara U.	4,225	0	0	543	41	589	140	512	0	1,741	659
Scripps Research Institute	492,639	0	0	492,639	0	0	0	0	0	0	0
Stanford U.	1,384,555	25,448	30,947	999,214	6,408	101,529	15,648	18,390	161	142,213	44,597
Touro U., California	2,561	0	0	2,290	0	0	0	0	0	0	271
U. of the Pacific	1,835	70	53	1,392	0	152	0	0	30	135	3

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. San Diego	10,143	0	185	233	1,524	1,237	29	1,086	0	820	5,029
U. San Francisco	2,657	204	374	970	13	172	42	272	29	3	578
U. Southern California	1,039,905	112,104	22,308	680,873	1,392	17,696	5,103	75,558	0	63,694	61,177
Western U. of Health Sciences	9,029	0	0	7,043	0	0	0	0	0	0	1,986
Colorado	1,898,797	31,032	195,084	967,377	9,465	181,929	27,194	37,201	16,117	343,905	89,493
Public	1,849,590	30,954	194,182	961,827	9,178	177,193	19,836	33,523	16,117	340,273	66,507
Colorado School of Mines	98,404	3,443	9,411	2,918	1,012	12,923	90	696	0	60,371	7,540
Colorado State U., Fort Collins	456,911	4,052	53,708	289,050	3,006	14,885	3,476	15,024	14,505	47,833	11,372
Colorado State U., Pueblo	3,117	326	0	1,214	0	0	0	27	82	0	1,468
Fort Lewis C.	2,765	17	3	806	0	743	0	0	0	623	573
U. Colorado Anschutz Medical Campus ^a	611,358	0	71	606,860	0	566	313	449	0	957	2,142
U. Colorado Boulder	611,380	19,612	129,830	56,184	3,616	143,342	13,945	15,231	1,523	191,531	36,566
U. Colorado Colorado Springs	7,761	2,607	187	379	21	457	378	861	7	1,883	981
U. Colorado Denver ^a	18,080	687	650	2,804	989	1,895	1,554	638	0	3,906	4,957
U. Northern Colorado	3,308	0	202	1,368	83	72	80	597	0	0	906
U.S. Air Force Academy	36,506	210	120	244	451	2,310	0	0	0	33,169	2
Private	49,207	78	902	5,550	287	4,736	7,358	3,678	0	3,632	22,986
Colorado C.	3,646	0	806	128	44	316	97	136	0	0	2,119
U. Denver	45,561	78	96	5,422	243	4,420	7,261	3,542	0	3,632	20,867
Connecticut	1,587,047	15,107	18,847	1,269,534	6,967	73,331	40,374	27,135	2,186	106,924	26,642
Public	376,612	4,923	11,653	221,707	2,747	12,109	26,659	10,935	2,106	69,087	14,686
Central Connecticut State U.	1,035	27	5	121	24	104	19	346	0	185	204
Eastern Connecticut State U.	1,734	9	8	281	0	7	109	399	99	0	822
Southern Connecticut State U.	6,286	121	386	1,001	107	753	146	466	323	0	2,983
U. Connecticut	367,557	4,766	11,254	220,304	2,616	11,245	26,385	9,724	1,684	68,902	10,677
Private	1,210,435	10,184	7,194	1,047,827	4,220	61,222	13,715	16,200	80	37,837	11,956
Connecticut C.	1,875	134	0	477	0	690	325	57	0	0	192
Trinity C., Hartford	1,620	9	0	965	31	147	118	161	0	42	147
U. Hartford	1,090	3	0	82	34	8	34	142	0	752	35
U. New Haven	4,548	1,363	151	350	17	128	325	1,738	0	329	147
Wesleyan U.	10,101	0	632	1,833	506	2,622	1,363	262	16	0	2,867
Yale U.	1,191,201	8,675	6,411	1,044,120	3,632	57,627	11,550	13,840	64	36,714	8,568
Delaware	397,123	5,925	34,168	97,273	6,336	54,042	13,189	24,345	7,511	124,204	30,130

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Public	397,123	5,925	34,168	97,273	6,336	54,042	13,189	24,345	7,511	124,204	30,130
Delaware State U.	29,016	185	752	15,815	652	3,965	240	1,618	0	207	5,582
U. Delaware	368,107	5,740	33,416	81,458	5,684	50,077	12,949	22,727	7,511	123,997	24,548
District of Columbia	783,163	30,996	1,867	425,801	5,578	55,921	12,104	88,649	9,127	42,968	110,152
Public	14,699	255	183	3,210	502	0	0	3,020	0	5,725	1,804
National Defense U.	3,920	0	0	400	0	0	0	3,020	0	0	500
U. of the District of Columbia	10,779	255	183	2,810	502	0	0	0	0	5,725	1,304
Private	768,464	30,741	1,684	422,591	5,076	55,921	12,104	85,629	9,127	37,243	108,348
American U.	67,616	753	1,091	1,117	1,615	4,351	1,109	17,191	4,458	0	35,931
Catholic U. of America	38,191	0	0	637	0	23,353	1,064	1,897	8	3,076	8,156
Gallaudet U.	6,360	1,954	0	1,682	2	60	1,576	813	0	0	273
George Washington U.	275,483	8,137	288	184,091	781	6,840	3,090	25,553	4,661	23,736	18,306
Georgetown U.	313,220	18,321	0	190,912	2,463	15,192	2,719	38,879	0	0	44,734
Howard U.	67,594	1,576	305	44,152	215	6,125	2,546	1,296	0	10,431	948
Florida	3,048,253	98,622	167,943	1,594,522	21,899	209,785	109,248	101,362	13,185	404,784	326,903
Public	2,531,408	89,239	92,916	1,235,706	20,213	196,312	90,986	98,408	13,037	377,674	316,917
Florida A&M U.	50,636	1,208	6,499	26,175	15	1,905	108	62	62	5,752	8,850
Florida Atlantic U.	61,748	2,776	1,332	31,522	1,403	2,364	2,486	261	0	16,449	3,155
Florida Gulf Coast U.	9,896	5	2,791	2,606	105	207	79	2	0	222	3,879
Florida International U.	281,665	18,348	18,793	67,166	2,201	33,613	37,185	20,526	3,325	48,549	31,959
Florida Polytechnic U.	1,725	210	0	0	9	4	0	33	0	1,310	159
Florida State U.	355,986	9,004	17,014	67,760	7,277	65,661	17,992	17,838	6,779	58,212	88,449
U. Central Florida	221,488	26,882	5,319	33,455	3,609	39,361	9,368	8,004	634	59,060	35,796
U. Florida	1,085,834	15,896	18,734	797,710	2,303	39,928	14,968	16,987	20	134,339	44,949
U. North Florida	18,394	575	213	2,409	28	1,134	1,180	1,040	0	2,472	9,343
U. South Florida ^b	405,166	9,503	22,129	203,592	3,192	10,866	7,280	30,394	1,398	50,859	65,953
U. West Florida	38,870	4,832	92	3,311	71	1,269	340	3,261	819	450	24,425
Private	516,845	9,383	75,027	358,816	1,686	13,473	18,262	2,954	148	27,110	9,986
Embry-Riddle Aeronautical U.	28,650	2,417	1,823	1,064	111	5,852	0	66	0	16,049	1,268
Florida Institute of Technology	17,706	5,289	1,985	1,313	298	1,682	1,261	0	0	5,100	778
Nova Southeastern U.	31,189	57	11,526	14,336	20	0	846	981	20	0	3,403
U. Miami	439,300	1,620	59,693	342,103	1,257	5,939	16,155	1,907	128	5,961	4,537
Georgia	3,260,128	183,051	41,329	1,523,875	21,580	105,473	52,458	95,866	15,744	1,018,482	202,270

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Public	2,191,995	177,355	38,537	591,648	18,936	69,549	46,738	90,942	13,570	963,574	181,146
Augusta U.	127,313	291	0	123,587	110	266	183	689	0	0	2,187
Fort Valley State U.	9,969	0	79	9,807	0	83	0	0	0	0	0
Georgia Institute of Technology	1,231,485	161,111	14,771	37,289	8,634	33,858	4,126	12,596	0	935,632	23,468
Georgia Southern U.	36,362	1,104	642	6,734	1,344	5,740	994	4,176	119	3,302	12,207
Georgia State U.	215,908	5,346	2,276	73,616	2,033	18,277	10,364	37,729	0	0	66,267
Kennesaw State U.	21,705	3,538	0	5,744	1,114	1,096	112	1,661	1,211	1,652	5,577
Savannah State U.	1,888	0	694	255	0	53	0	13	264	609	0
U. Georgia	545,631	5,509	19,938	334,447	5,701	10,161	30,933	33,930	11,976	22,379	70,657
U. North Georgia	1,734	456	137	169	0	15	26	148	0	0	783
Private	1,068,133	5,696	2,792	932,227	2,644	35,924	5,720	4,924	2,174	54,908	21,124
Clark Atlanta U.	8,791	395	0	5,400	323	2,620	0	0	0	41	12
Emory U.	958,281	4,730	2,792	874,729	1,385	28,576	4,796	4,780	0	16,415	20,078
Mercer U.	50,222	149	0	8,473	221	1,925	300	89	464	38,452	149
Morehouse C.	5,664	396	0	451	47	2,393	59	0	1,710	0	608
Morehouse School of Medicine	42,489	0	0	42,489	0	0	0	0	0	0	0
Spelman C.	2,686	26	0	685	668	410	565	55	0	0	277
Hawaii	301,272	18,299	93,246	129,186	442	23,669	455	2,827	4,330	24,588	4,230
Public	297,970	18,299	92,299	127,755	442	23,669	455	2,745	4,330	24,574	3,402
U. Hawaii, Hilo	8,001	89	1,770	4,995	33	376	0	338	354	0	46
U. Hawaii, Manoa	277,323	17,690	78,404	122,760	409	23,293	455	2,407	3,976	24,574	3,355
U. Hawaii, system office	12,646	520	12,125	0	0	0	0	0	0	0	1
Private	3,302	0	947	1,431	0	0	0	82	0	14	828
Hawaii Pacific U.	3,302	0	947	1,431	0	0	0	82	0	14	828
Idaho	179,835	7,856	11,010	96,564	1,696	10,515	426	8,752	3,206	33,230	6,580
Public	179,835	7,856	11,010	96,564	1,696	10,515	426	8,752	3,206	33,230	6,580
Boise State U.	47,617	3,448	2,927	12,000	1,550	6,848	101	2,458	606	14,758	2,921
Idaho State U.	16,615	735	2,092	6,213	18	1,490	200	334	527	4,752	254
U. Idaho	115,603	3,673	5,991	78,351	128	2,177	125	5,960	2,073	13,720	3,405
Illinois	3,160,587	169,494	23,308	1,947,188	16,607	276,724	36,112	79,018	48,936	427,983	135,217
Public	1,338,296	119,106	11,514	655,520	8,324	110,638	18,571	23,662	22,363	285,436	83,162
Chicago State U.	3,701	78	0	2,223	0	1,341	0	59	0	0	0
Illinois State U.	25,510	165	491	4,488	198	1,812	489	43	0	125	17,699

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Northeastern Illinois U.	2,224	104	54	1,447	43	0	0	8	0	7	561
Northern Illinois U.	27,068	983	1,320	2,620	62	6,220	1,018	4,365	0	4,132	6,348
Southern Illinois U., Carbondale	46,967	389	1,522	38,470	9	1,825	252	1,358	834	2,308	0
Southern Illinois U., Edwardsville	19,152	71	604	8,447	70	426	0	100	36	8,439	959
U. Illinois, Chicago	440,573	12,880	948	325,514	4,213	21,497	3,620	8,851	5,584	39,656	17,810
U. Illinois, Springfield	2,881	0	0	33	0	14	0	1,978	57	0	799
U. Illinois, Urbana-Champaign	765,909	104,436	6,575	270,361	3,729	77,419	13,192	6,718	15,852	228,786	38,841
Western Illinois U.	4,311	0	0	1,917	0	84	0	182	0	1,983	145
Private	1,822,291	50,388	11,794	1,291,668	8,283	166,086	17,541	55,356	26,573	142,547	52,055
DePaul U.	8,362	736	88	2,088	154	13	194	2,780	0	76	2,233
Erikson Institute	2,068	0	0	0	0	0	0	0	0	0	2,068
Illinois Institute of Technology	29,791	3,307	146	9,464	429	3,705	0	91	66	12,502	81
Loyola U., Chicago	46,169	456	0	39,546	90	1,691	1,115	1,189	0	95	1,987
Midwestern U.	11,069	0	0	11,069	0	0	0	0	0	0	0
Northwestern U.	1,000,695	10,117	1,443	721,230	2,215	90,194	4,231	24,515	26,507	88,008	32,235
Rosalind Franklin U. of Medicine and Science	12,988	0	0	12,579	0	0	409	0	0	0	0
Rush U.	114,874	0	0	111,165	0	0	3,709	0	0	0	0
Toyota Technological Institute, Chicago	4,470	4,470	0	0	0	0	0	0	0	0	0
U. Chicago	591,805	31,302	10,117	384,527	5,395	70,483	7,883	26,781	0	41,866	13,451
Indiana	1,872,200	100,214	18,743	870,248	10,600	133,218	32,836	80,508	34,261	437,685	153,887
Public	1,589,905	85,147	18,743	833,450	5,569	85,548	26,866	67,764	17,781	333,912	115,125
Ball State U.	9,932	348	0	4,876	83	1,106	219	772	0	0	2,528
Indiana State U.	1,354	0	139	548	24	130	0	0	0	87	426
Indiana U., Bloomington	751,309	40,488	9,084	550,148	2,329	31,360	13,583	40,995	12,406	12,030	38,886
Indiana U.-Purdue U., Indianapolis	64,162	5,049	1,393	21,631	177	2,736	4,196	11,122	3,754	6,626	7,478
Purdue U., Fort Wayne	2,134	0	0	343	229	76	262	105	179	169	771
Purdue U., Northwest	6,387	394	0	1,120	0	202	9	0	288	2,606	1,768
Purdue U., West Lafayette	754,627	38,868	8,127	254,784	2,727	49,938	8,597	14,770	1,154	312,394	63,268
Private	282,295	15,067	0	36,798	5,031	47,670	5,970	12,744	16,480	103,773	38,762
Butler U.	1,691	0	0	1,276	0	154	48	15	0	0	198
U. Notre Dame	280,604	15,067	0	35,522	5,031	47,516	5,922	12,729	16,480	103,773	38,564
Iowa	1,005,800	10,271	9,289	599,319	20,818	87,568	14,588	17,408	2,285	181,708	62,546
Public	990,885	9,974	8,689	592,333	20,623	86,489	14,251	16,032	2,285	181,708	58,501

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Iowa State U.	393,184	5,782	4,897	160,235	19,927	30,440	3,852	10,305	375	132,475	24,896
U. Iowa	594,215	4,187	3,663	431,761	690	55,128	10,399	3,682	1,910	49,233	33,562
U. Northern Iowa	3,486	5	129	337	6	921	0	2,045	0	0	43
Private	14,915	297	600	6,986	195	1,079	337	1,376	0	0	4,045
Des Moines U.	5,307	0	600	4,128	0	36	36	280	0	0	227
Drake U.	1,691	19	0	536	109	220	6	9	0	0	792
Grinnell C.	5,867	278	0	272	86	823	295	1,087	0	0	3,026
Palmer C. of Chiropractic, Davenport	2,050	0	0	2,050	0	0	0	0	0	0	0
Kansas	882,644	8,381	15,012	378,280	3,765	32,562	16,776	13,656	17,307	280,475	116,430
Public	882,644	8,381	15,012	378,280	3,765	32,562	16,776	13,656	17,307	280,475	116,430
Kansas State U.	212,974	3,900	1,295	124,308	2,956	14,709	4,337	10,049	7,521	29,980	13,919
Pittsburg State U.	2,884	0	0	526	0	27	0	22	0	2,309	0
U. Kansas	405,267	4,418	13,717	237,780	682	16,123	11,416	2,768	9,786	22,075	86,502
Wichita State U.	261,519	63	0	15,666	127	1,703	1,023	817	0	226,111	16,009
Kentucky	733,242	6,166	4,505	554,324	2,864	15,882	8,778	6,627	20,306	87,739	26,051
Public	733,242	6,166	4,505	554,324	2,864	15,882	8,778	6,627	20,306	87,739	26,051
Kentucky State U.	9,284	5	0	9,156	119	0	0	0	0	0	4
Morehead State U.	2,880	0	0	517	0	10	41	0	0	2,312	0
Murray State U.	3,371	0	249	2,449	354	293	0	0	0	0	26
Northern Kentucky U.	3,888	122	0	2,148	73	875	405	126	28	0	111
U. Kentucky	476,517	5,913	2,948	352,400	1,582	9,118	5,066	5,072	19,971	61,287	13,160
U. Louisville	229,582	119	166	185,107	661	3,872	2,457	1,130	307	23,630	12,133
Western Kentucky U.	7,720	7	1,142	2,547	75	1,714	809	299	0	510	617
Louisiana	941,868	50,458	44,614	549,349	12,390	53,555	3,953	20,852	14,956	108,840	82,901
Public	702,837	48,049	39,558	363,159	11,286	41,240	1,808	13,832	14,691	102,010	67,204
Grambling State U.	2,306	0	0	0	0	1,345	0	0	0	0	961
Louisiana State U., Baton Rouge	344,556	18,477	33,440	173,539	6,720	30,594	832	4,752	11,070	53,974	11,158
Louisiana State U., Health Sciences Center, New Orleans	53,995	0	0	53,995	0	0	0	0	0	0	0
Louisiana State U., Health Sciences Center, Shreveport	29,502	0	0	29,502	0	0	0	0	0	0	0
Louisiana Tech U.	26,591	1,938	0	3,703	914	2,110	261	785	0	11,673	5,207
Northwestern State U. Louisiana	1,848	132	0	183	23	0	7	881	0	8	614
Southeastern Louisiana U.	2,407	38	0	1,022	0	606	0	10	0	24	707

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Southern U. and A&M C., Agricultural Research and Extension Center	7,048	0	0	7,048	0	0	0	0	0	0	0
Southern U. and A&M C., Baton Rouge	4,344	611	0	837	87	200	0	0	0	1,938	671
U. Louisiana, Lafayette	205,201	25,361	4,439	89,731	2,939	3,957	86	4,463	1,343	32,259	40,623
U. Louisiana, Monroe	3,128	0	103	2,583	0	247	0	154	0	0	41
U. New Orleans	21,911	1,492	1,576	1,016	603	2,181	622	2,787	2,278	2,134	7,222
Private	239,031	2,409	5,056	186,190	1,104	12,315	2,145	7,020	265	6,830	15,697
Dillard U.	2,270	0	89	1,199	21	158	1	6	265	7	524
Tulane U.	222,605	1,713	4,967	179,205	1,083	4,579	2,081	6,996	0	6,823	15,158
Xavier U. Louisiana	14,156	696	0	5,786	0	7,578	63	18	0	0	15
Maine	191,739	3,838	27,116	52,145	750	7,492	1,484	5,313	13,140	68,489	11,972
Public	177,429	3,637	25,664	42,343	673	6,427	1,217	4,788	13,140	68,489	11,051
U. Maine	171,931	2,084	25,600	41,542	660	6,427	1,217	2,169	13,120	68,261	10,851
U. Southern Maine	5,498	1,553	64	801	13	0	0	2,619	20	228	200
Private	14,310	201	1,452	9,802	77	1,065	267	525	0	0	921
Bates C.	2,468	40	65	1,743	1	330	54	144	0	0	91
Bowdoin C.	2,648	64	349	1,275	40	376	126	60	0	0	358
Colby C.	2,530	97	376	831	36	345	80	316	0	0	449
U. New England	6,664	0	662	5,953	0	14	7	5	0	0	23
Maryland	5,168,958	351,718	249,613	2,134,082	149,708	455,389	39,588	87,654	88,481	1,511,869	100,856
Public	1,748,646	81,481	152,824	954,536	8,231	138,107	31,844	78,536	25,128	187,223	90,736
Bowie State U.	3,351	1,169	0	1,462	0	481	0	0	0	0	239
Morgan State U.	29,482	605	5,672	7,898	192	2,314	36	86	0	8,375	4,304
Salisbury U.	10,614	328	882	2,182	123	326	34	474	0	3	6,262
Towson U.	8,788	1,204	654	1,816	269	880	586	816	0	0	2,563
U. Baltimore	6,646	336	48	0	0	0	0	2,501	0	0	3,761
U. Maryland ^c	1,228,550	63,281	78,455	655,867	4,538	110,607	9,885	56,249	22,223	164,304	63,141
U. Maryland Center for Environmental Science	53,718	6	42,407	8,403	0	1,014	0	509	475	0	904
U. Maryland, Baltimore County	110,319	13,685	20,378	13,643	1,893	20,806	1,891	17,891	2,430	8,140	9,562
U. Maryland, Eastern Shore	9,274	0	3,778	5,437	0	0	0	0	0	59	0
U.S. Naval Academy	10,664	867	550	0	1,216	1,679	0	10	0	6,342	0
Uniformed Services U. of the Health Sciences	277,240	0	0	257,828	0	0	19,412	0	0	0	0
Private	3,420,312	270,237	96,789	1,179,546	141,477	317,282	7,744	9,118	63,353	1,324,646	10,120

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Johns Hopkins U. ^d	3,420,312	270,237 i	96,789 i	1,179,546 i	141,477 i	317,282 i	7,744 i	9,118 i	63,353 i	1,324,646 i	10,120 i
Massachusetts	4,837,383	255,980	287,171	2,055,405	57,867	455,427	72,907	305,155	53,084	964,800	329,587
Public	815,687	45,209	23,866	466,394	6,115	48,076	15,525	26,548	2,137	121,832	59,985
Framingham State U.	2,830 i	82 i	0 i	1,586 i	39 i	238 i	53 i	156 i	0 i	0 i	676 i
U. Massachusetts, Amherst	245,158	30,721	4,378	77,193	3,351	23,286	8,227	7,235	1,260	67,776	21,731
U. Massachusetts, Boston	65,215	1,996	3,666	8,974	541	3,076	5,519	12,312	451	1,218	27,462
U. Massachusetts, Dartmouth	33,136	2,552	13,329	2,620	1,417	3,290	0	164	0	8,480	1,284
U. Massachusetts, Lowell	111,144	9,858	2,493	17,817	767	18,186	1,726	6,681	426	44,358	8,832
U. Massachusetts, Medical School	358,204	0	0	358,204	0	0	0	0	0	0	0
Private	4,021,696	210,771	263,305	1,589,011	51,752	407,351	57,382	278,607	50,947	842,968	269,602
Amherst C.	7,177	164	1,265	1,741	422	1,649	278	488	447	0	723
Babson C.	1,825	0 i	16 i	0 i	56 i	0 i	0 i	483 i	0 i	0 i	1,270 i
Bentley U.	1,161	75	13	652	51	0	0	84	0	0	286
Boston C.	68,958	1,399	9,912	8,226	951	12,202	4,174	9,261	0	438	22,395
Boston U.	725,402	17,480	9,399	485,379	4,935	38,445	24,237	12,084	7,203	91,643	34,597
Brandeis U.	102,378	3,218	27	30,648	2,092	16,778	3,793	22,375	2,784	5,264	15,399
Clark U.	8,813	138	843	3,706	0	1,277	102	2,504	0	0	243
Franklin W. Olin C. of Engineering	2,554	0	0	0	0	0	0	0	0	2,380	174
Harvard U.	1,308,458	21,712	38,984	741,297	22,230	118,530	6,355	144,801	6,472	96,920	111,157
Massachusetts Institute of Technology	989,166	124,985	29,992	128,090	9,676	174,813	803	54,104	19,882	397,946	48,875
MGH Institute of Health Professions	5,805	0	0	4,628	0	0	0	0	0	0	1,177
Mount Holyoke C.	2,112	235	90	520	159	370	457	37	0	0	244
New England C. of Optometry	1,868	0	0	1,868	0	0	0	0	0	0	0
Northeastern U.	231,607	27,623	5,122	37,639	1,107	27,207	10,494	9,361	0	92,855	20,199
Smith C.	5,831	504	120	2,701	296	453	145	152	66	599	795
Suffolk U.	1,401	0	14	19	0	45	236	47	0	18	1,022
Tufts U.	231,224	2,568	982	134,584	6,353	11,206	5,146	19,308	14,093	32,535	4,449
Wellesley C.	6,326	437	169	1,033	179	214	954	1,133	0	395	1,812
Western New England U.	2,052	69	0	467	50	0	2	0	0	1,464	0
Williams C.	5,657 i	120 i	337 i	2,275 i	105 i	675 i	206 i	531 i	0 i	0 i	1,408 i
Woods Hole Oceanographic Institution	255,017	0 i	166,020 i	0	0	0	0	0	0	88,997 i	0
Worcester Polytechnic Institute	56,904	10,044	0	3,538	3,090	3,487	0	1,854	0	31,514	3,377
Michigan	3,082,410	47,706	48,418	1,680,280	34,753	290,075	40,311	239,052	30,115	476,763	194,937

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Public	2,983,908	47,400	48,229	1,594,060	34,580	287,279	40,172	238,313	29,826	474,494	189,555
Central Michigan U.	25,105	100	683	17,871	122	2,396	390	112	1,831	499	1,101
Eastern Michigan U.	8,025	232	139	2,225	55	540	220	632	59	407	3,516
Grand Valley State U.	6,695	111	2,928	1,765	38	331	54	839	0	117	512
Lake Superior State U.	2,056	0	0	1,988	0	21	0	6	0	41	0
Michigan State U.	759,229	15,978	6,532	347,119	11,990	183,514	13,643	43,672	16,268	81,143	39,370
Michigan Technological U.	91,084	7,889	19,663	2,804	1,720	4,600	697	1,438	769	48,400	3,104
Northern Michigan U.	1,888	28	149	1,248	0	43	93	39	0	0	288
Oakland U.	38,061	3,608	0	9,762	80	8,447	367	61	0	14,783	953
Saginaw Valley State U.	2,862 i	268 i	0 i	1,845 i	0 i	0 i	0 i	203 i	0 i	0 i	546 i
U. Michigan, Ann Arbor	1,770,708	16,789	15,865	1,018,062	20,129	65,018	20,806	189,167	4,036	299,254	121,582
U. Michigan, Dearborn	8,180	24	0	217	163	262	178	88	131	6,703	414
Wayne State U.	242,247	2,214	193	183,074	208	20,880	2,572	1,575	6,648	13,632	11,251
Western Michigan U. and Homer Stryker M.D. School of Medicine	27,768	159	2,077	6,080	75	1,227	1,152	481	84	9,515	6,918
Private	98,502	306	189	86,220	173	2,796	139	739	289	2,269	5,382
Albion C.	1,300 i	63 i	103 i	430 i	59 i	139 i	0 i	162 i	0 i	0 i	344 i
Calvin U.	3,169	73 i	39 i	479 i	57 i	358 i	41 i	62 i	289 i	129 i	1,642 i
Hope C.	6,355	74	47	2,230	33	2,122	45	515	0	430	859
Kettering U.	816	19	0	0	3	29	0	0	0	424	341
Lawrence Technological U.	3,050	53	0	0	21	148	0	0	0	726	2,102
U. Detroit Mercy	5,186	24	0	4,455	0	0	53	0	0	560	94
Van Andel Research Institute	78,626	0	0	78,626	0	0	0	0	0	0	0
Minnesota	1,241,862	29,439	15,247	886,864	8,344	44,811	30,439	42,377	2,968	134,697	46,676
Public	1,229,878	28,963	13,643	884,492	7,799	43,266	29,713	40,837	2,968	133,835	44,362
Minnesota State U., Mankato	2,206	5	8	813	0	39	120	310	0	871	40
St. Cloud State U.	2,226	16	12	417	0	19	3	217	2	30	1,510
U. Minnesota, Duluth	23,362	133	528	19,244	184	493	198	265	0	1,892	425
U. Minnesota, Twin Cities	1,202,084	28,809	13,095	864,018	7,615	42,715	29,392	40,045	2,966	131,042	42,387
Private	11,984	476	1,604	2,372	545	1,545	726	1,540	0	862	2,314
C. of Saint Benedict	1,228 i	23 i	0 i	519 i	16 i	124 i	42 i	132 i	0 i	0 i	372 i
Carleton C.	4,358	402	1,374	330	372	301	217	675	0	0	687
Macalester C.	1,691	17	223	158	123	622	28	252	0	0	268
Saint John's U.	1,298 i	23 i	0 i	542 i	15 i	125 i	43 i	144 i	0 i	0 i	406 i

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
St. Catherine U.	933	0	0	537	0	33	0	322	0	0	41
U. of St. Thomas (MN)	2,476	11	7	286	19	340	396	15	0	862	540
Mississippi	565,341	9,222	46,148	260,407	2,457	45,730	4,483	41,341	4,300	92,189	59,064
Public	563,005	9,130	46,148	259,200	2,366	45,193	4,372	41,281	4,300	92,189	58,826
Alcorn State U.	16,726 i	0 i	0 i	8,074 i	0 i	0 i	0 i	8,429 i	0 i	222 i	1 i
Jackson State U.	17,481	671	0	5,257	26	7,277	181	4	190	2,512	1,363
Mississippi State U.	303,418	7,546	16,607	140,283	1,721	12,061	2,015	25,716	3,487	73,980	20,002
U. Mississippi	152,903	251	1,614	93,555	500	11,784	2,037	5,018	623	8,095	29,426
U. Southern Mississippi	72,477	662	27,927	12,031	119	14,071	139	2,114	0	7,380	8,034
Private	2,336	92	0	1,207	91	537	111	60	0	0	238
Tougaloo C.	2,336 i	92 i	0 i	1,207 i	91 i	537 i	111 i	60 i	0 i	0 i	238 i
Missouri	1,708,351	16,171	12,782	1,346,065	3,837	45,389	15,924	14,885	5,436	172,172	75,690
Public	574,233	10,316	2,225	336,413	2,061	15,847	8,280	11,280	3,699	142,462	41,650
Lincoln U., Jefferson City	11,500	0	28	11,109	0	0	0	145	218	0	0
Missouri State U.	11,162	1	337	1,673	0	291	52	172	0	8,630	6
Missouri U. of Science and Technology	53,357	2,899	0	797	221	3,734	154	149	169	43,119	2,115
U. Missouri, Columbia	432,310	6,157	1,575	283,404	1,666	9,469	6,487	8,731	1,838	78,494	34,489
U. Missouri, Kansas City	52,657	1,075	285	33,588	0	1,277	1,359	148	734	12,219	1,972
U. Missouri, Saint Louis	13,247	184	0	5,842	174	1,076	228	1,935	740	0	3,068
Private	1,134,118	5,855	10,557	1,009,652	1,776	29,542	7,644	3,605	1,737	29,710	34,040
Saint Louis U.	82,740	1,221	3,879	66,726	192	3,579	435	1,974	0	1,559	3,175
U. of Health Sciences and Pharmacy in St. Louis	4,280	0	0	4,271	0	9	0	0	0	0	0
Washington U., Saint Louis	1,047,098	4,634	6,678	938,655	1,584	25,954	7,209	1,631	1,737	28,151	30,865
Montana	340,611	5,250	19,730	159,674	3,835	27,877	1,389	22,364	10,256	58,661	31,575
Public	340,611	5,250	19,730	159,674	3,835	27,877	1,389	22,364	10,256	58,661	31,575
Montana State U., Bozeman	200,820	3,026	5,246	82,986	2,852	19,778	673	1,946	10,256	54,188	19,869
Montana Technological U.	14,188	18	8,666	656	0	375	0	0	0	4,473	0
U. Montana, Missoula	125,603	2,206	5,818	76,032	983	7,724	716	20,418	0	0	11,706
Nebraska	626,792	18,018	2,276	420,466	6,168	32,437	15,639	14,355	5,712	67,660	44,061
Public	599,183	16,865	2,276	399,610	5,870	30,417	15,302	13,169	5,712	67,660	42,302
U. Nebraska, central administration	25,402	742	0	13,754	0	0	0	0	0	10,082	824
U. Nebraska, Kearney	4,009	105	0	2,409	0	625	34	23	0	0	813
U. Nebraska, Lincoln	340,260	11,208	2,220	170,212	5,411	29,612	15,053	10,339	838	56,068	39,299

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Nebraska, Medical Center	205,253	0	0	205,253	0	0	0	0	0	0	0
U. Nebraska, Omaha	24,259	4,810	56	7,982	459	180	215	2,807	4,874	1,510	1,366
Private	27,609	1,153	0	20,856	298	2,020	337	1,186	0	0	1,759
Creighton U.	27,609	1,153	0	20,856	298	2,020	337	1,186	0	0	1,759
Nevada	312,714	7,659	51,110	121,567	3,864	19,670	8,105	12,997	4,180	45,119	38,443
Public	306,418	7,659	51,110	115,282	3,864	19,670	8,105	12,997	4,180	45,119	38,432
Desert Research Institute	28,478	0	24,804	3,674	0	0	0	0	0	0	0
Nevada State C.	1,191	0	82	1,109	0	0	0	0	0	0	0
U. Nevada, Las Vegas	94,967	1,556	5,393	31,571	2,224	9,030	1,959	7,012	1,068	12,665	22,489
U. Nevada, Reno	181,782	6,103	20,831	78,928	1,640	10,640	6,146	5,985	3,112	32,454	15,943
Private	6,296	0	0	6,285	0	0	0	0	0	0	11
Roseman U. of Health Sciences	6,296	0	0	6,285	0	0	0	0	0	0	11
New Hampshire	551,187	19,260	95,389	226,967	10,440	29,896	16,543	35,281	2,665	61,259	53,487
Public	207,061	1,466	86,456	55,782	1,481	5,090	1,086	15,946	5	25,040	14,709
Plymouth State U.	669	1	424	182	0	0	0	40	5	0	17
U. New Hampshire	206,392	1,465	86,032	55,600	1,481	5,090	1,086	15,906	0	25,040	14,692
Private	344,126	17,794	8,933	171,185	8,959	24,806	15,457	19,335	2,660	36,219	38,778
Dartmouth C. and Dartmouth Hitchcock Medical Center	344,126	17,794	8,933	171,185	8,959	24,806	15,457	19,335	2,660	36,219	38,778
New Jersey	1,516,963	61,484	65,874	697,444	32,808	163,712	22,577	101,174	3,480	280,619	87,791
Public	994,536	28,603	34,360	582,619	16,690	59,623	17,997	28,167	3,480	158,086	64,911
C. New Jersey	3,464	221	0	1,502	22	923	25	31	312	265	163
Kean U.	5,499	850	53	1,234	80	1,576	49	270	14	32	1,341
Montclair State U.	32,202	1,888	2,393	3,830	1,388	1,811	4,824	3,543	0	1,129	11,396
New Jersey Institute of Technology	167,135	10,764	0	31,619	4,727	17,202	0	7,277	114	83,738	11,694
Rowan U.	29,949	540	494	10,188	397	1,483	1,055	0	134	15,432	226
Rutgers, State U. New Jersey, Camden	6,480	2,722	0	275	0	297	108	1,790	0	0	1,288
Rutgers, State U. New Jersey, New Brunswick	712,231	9,306	27,807	521,311	10,013	32,108	10,418	11,158	2,491	57,490	30,129
Rutgers, State U. New Jersey, Newark	28,345	2,252	2,487	10,990	0	4,099	1,039	2,024	415	0	5,039
Stockton U.	1,657	0	798	291	0	0	0	568	0	0	0
William Paterson U.	7,574	60	328	1,379	63	124	479	1,506	0	0	3,635
Private	522,427	32,881	31,514	114,825	16,118	104,089	4,580	73,007	0	122,533	22,880
Monmouth U.	1,938	0	1,572	185	0	110	12	49	0	0	10
Princeton U.	461,185	28,066	29,942	112,932	15,763	101,461	4,568	72,862	0	78,831	16,760

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Seton Hall U.	5,741	0	0	463	0	743	0	0	0	0	4,535
Stevens Institute of Technology	53,563	4,815	0	1,245	355	1,775	0	96	0	43,702	1,575
New Mexico	543,867	23,198	28,200	284,944	1,226	25,439	7,573	14,476	9,578	139,455	9,778
Public	543,867	23,198	28,200	284,944	1,226	25,439	7,573	14,476	9,578	139,455	9,778
New Mexico Highlands U.	1,331 i	186 i	187 i	207 i	184 i	187 i	0 i	186 i	0 i	0 i	194 i
New Mexico Institute of Mining and Technology	89,900	14,645	15,847	691	77	1,798	572	0	0	53,897	2,373
New Mexico State U.	121,472	4,103	4,830	53,389	164	13,339	480	679	2,713	40,367	1,408
U. New Mexico	331,164	4,264	7,336	230,657	801	10,115	6,521	13,611	6,865	45,191	5,803
New York	8,280,323	182,919	163,781	5,435,811	59,778	494,029	120,763	188,667	36,221	1,133,396	464,958
Public	1,777,187	58,010	65,278	632,764	17,745	118,017	49,651	57,338	24,952	648,455	104,977
CUNY, Advanced Science Research Center	16,507	0	365	4,493	0	9,558	0	0	0	2,083	8
CUNY, Baruch C.	3,156	1	102	933	533	338	231	84	0	0	934
CUNY, Brooklyn C.	6,220	273	222	802	107	1,998	1,656	109	265	0	788
CUNY, C. Staten Island	3,545	133	25	1,070	173	1,097	631	9	60	0	347
CUNY, City C.	65,569	820	2,547	7,942	220	11,590	1,260	3	0	36,189	4,998
CUNY, Graduate Center	5,509	6	3	6	88	0	249	1,067	462	0	3,628
CUNY, Graduate School of Public Health and Health Policy	16,423	0	0	14,429	0	0	1,994	0	0	0	0
CUNY, Hunter C.	35,348	1,556	1,197	7,870	200	4,838	9,591	1,827	386	191	7,692
CUNY, John Jay C. of Criminal Justice	16,233	0	0	666	106	650	2,221	764	474	0	11,352
CUNY, Lehman C.	4,656	9	44	371	214	2,650	16	380	253	0	719
CUNY, New York City C. of Technology	1,955	195	0	304	239	727	0	0	9	50	431
CUNY, Queens C.	21,434	508	561	14,572	278	2,266	2,015	603	224	0	407
CUNY, system office	2,900	113	0	180	0	0	88	0	32	2,447	40
CUNY, York C.	1,912	0	953	429	109	172	140	0	2	0	107
SUNY, Binghamton U.	130,882	7,724	1,789	15,476	3,211	14,636	11,896	22,172	0	33,595	20,383
SUNY, Buffalo State	2,172	3	1,098	767	139	0	0	90	0	23	52
SUNY, C. Brockport	1,500	8	79	1,120	1	211	0	28	0	0	53
SUNY, C. of Environmental Science and Forestry	32,904	409 i	1,103 i	27,321 i	0 i	561 i	1,793 i	98 i	30 i	1,291 i	298 i
SUNY, C. of Optometry	4,497	0	0	4,497	0	0	0	0	0	0	0
SUNY, C. Plattsburgh	1,043	0	905	112	0	26	0	0	0	0	0
SUNY, Cobleskill	1,211	0	0	0	0	0	0	0	0	1,211	0
SUNY, Downstate Health Sciences U.	30,918	0	0	30,918	0	0	0	0	0	0	0
SUNY, Geneseo	2,091	0	82	152	16	1,234	311	64	0	0	232

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
SUNY, Oswego	1,209	38	64	194	0	450	43	56	340	0	24
SUNY, Polytechnic Institute	413,763	0	0	1,673	0	0	0	0	0	411,929	161
SUNY, Stony Brook U.	312,698	12,929	33,444	139,641	6,847	45,541	6,579	2,472	22,228	38,670	4,347
SUNY, U. Albany	129,796	6,141	15,821	49,048	2,264	7,299	3,901	16,133	0	4,266	24,923
SUNY, U. Buffalo	439,709	20,493	4,848	257,060	1,926	11,990	4,111	6,573	187	109,870	22,651
SUNY, Upstate Medical U.	50,586	0	0	50,586	0	0	0	0	0	0	0
U.S. Military Academy	20,841	6,651	26	132	1,074	185	925	4,806	0	6,640	402
Private	6,503,136	124,909	98,503	4,803,047	42,033	376,012	71,112	131,329	11,269	484,941	359,981
Albany C. of Pharmacy and Health Sciences	2,276	0	0	2,276	0	0	0	0	0	0	0
Albany Medical C.	22,297	0	0	22,297	0	0	0	0	0	0	0
Albert Einstein C. of Medicine	318,314	0	0	318,314	0	0	0	0	0	0	0
Alfred U.	3,477	0	1	0	2	16	0	0	0	3,458	0
Barnard C.	4,988	250	76	1,322	0	1,541	1,030	474	0	0	295
Canisius C.	1,160	0	0	0	0	159	0	0	1,001	0	0
Clarkson U.	21,703	531	112	1,339	784	3,918	89	146	0	12,446	2,338
Cold Spring Harbor Laboratory	118,034	0	0	118,034	0	0	0	0	0	0	0
Colgate U.	4,343	101	728	676	153	1,215	112	406	0	0	952
Columbia U. in the City of New York	1,230,924	31,786	79,949	893,199	4,427	52,767	5,168	13,157	0	87,884	62,587
Cornell U.	1,300,357	29,874	6,463	929,175	3,287	120,697	11,971	23,814	0	125,320	49,756
Fordham U.	20,432	511	0	1,213	212	1,532	2,567	1,519	0	0	12,878
Hamilton C.	1,879	3	52	116	4	127	132	337	44	0	1,064
Hobart and William Smith Colleges	3,228	13	288	2,357	90	300	5	21	10	0	144
Hofstra U.	6,939	166	410	1,232	286	711	107	525	0	521	2,981
Icahn School of Medicine at Mount Sinai	893,968	0	0	893,968	0	0	0	0	0	0	0
Ithaca C.	1,000	57	80	303	122	291	2	54	0	0	91
Long Island U.	17,183	142	372	10,025	414	767	1,119	838	1	0	3,505
Manhattan C.	1,641	0	0	37	242	140	0	0	0	899	323
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	4,954	0	0	4,954	0	0	0	0	0	0	0
New School	19,218	3	192	675	20	10	1,041	6,743	608	3,301	6,625
New York Institute of Technology	5,555	323	0	3,871	0	101	0	1	0	1,181	78
New York Medical C.	16,461	0	0	16,461	0	0	0	0	0	0	0
New York U.	1,276,038	14,731	800	909,144	20,916	26,391	30,932	38,528	321	119,160	115,115

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Pace U.	3,524	903	0	607	0	100	5	10	0	529	1,370
Pratt Institute	2,325	0	0	0	0	0	0	0	0	0	2,325
Rensselaer Polytechnic Institute	121,809	14,752	2,214	8,885	3,658	15,894	3,954	1,829	0	63,146	7,477
Rochester Institute of Technology	62,383	9,956	0	1,657	2,356	14,979	159	2,590	0	22,869	7,817
Rockefeller U.	360,877	8,486	800	344,493	1,405	5,693	0	0	0	0	0
Skidmore C.	1,734	18	547	329	26	433	197	55	0	0	129
St. John's U., New York	3,592	160	0	2,213	0	510	357	5	0	0	347
Syracuse U.	157,407	4,858	2,463	11,393	2,279	14,286	3,719	19,097	146	21,602	77,564
Teachers C., Columbia U.	30,978	3,235	0	6,007	0	0	1,729	19,950	0	0	57
U. Rochester	450,805	3,099	2,724	291,673	175	112,275	6,367	634	9,138	22,179	2,541
Union C., Schenectady	1,479	69	181	143	64	244	38	124	0	446	170
Vassar C.	2,580	133	51	918	95	233	312	472	0	0	366
Yeshiva U.	7,274	749	0	3,741	1,016	682	0	0	0	0	1,086
North Carolina	3,870,874	83,472	76,415	2,807,847	35,615	123,620	67,354	139,509	28,049	356,238	152,755
Public	2,203,957	74,359	68,237	1,378,021	25,886	97,763	58,155	95,630	27,751	251,993	126,162
Appalachian State U.	7,189	327	987	3,066	22	1,013	244	405	0	237	888
East Carolina U.	55,693	484	4,751	34,271	439	1,740	1,336	1,226	0	2,737	8,709
Elizabeth City State U.	1,934	585	0	802	0	0	0	3	0	0	544
Fayetteville State U.	3,206	472	0	784	0	165	0	155	42	127	1,461
North Carolina A&T State U.	47,908	1,008	0	19,160	863	2,053	156	0	0	18,186	6,482
North Carolina Central U.	16,600	138	234	6,414	0	4,976	0	319	259	2,074	2,186
North Carolina State U.	583,203	20,889	30,854	262,669	17,531	27,486	1,739	9,396	26,024	171,162	15,453
U. North Carolina, Asheville	5,973	289	96	1,605	22	718	0	354	648	0	2,241
U. North Carolina, Chapel Hill	1,361,028	39,486	23,339	1,020,666	5,464	49,368	49,297	77,515	234	39,242	56,417
U. North Carolina, Charlotte	43,126	8,681	1,077	5,643	803	3,345	1,100	2,519	0	15,096	4,862
U. North Carolina, general administration	3,522	903	0	250	0	0	0	0	0	2,232	137
U. North Carolina, Greensboro	41,303	398	135	11,226	609	5,251	3,551	1,033	0	0	19,100
U. North Carolina, Wilmington	20,053	280	6,351	7,428	51	675	223	1,683	406	537	2,419
Western Carolina U.	2,783	0	313	1,326	0	9	0	267	0	363	505
Winston-Salem State U.	10,436	419	100	2,711	82	964	509	755	138	0	4,758
Private	1,666,917	9,113	8,178	1,429,826	9,729	25,857	9,199	43,879	298	104,245	26,593
Davidson C.	2,788	179	0	787	86	531	482	523	0	0	200
Duke U.	1,390,538	8,320	8,178	1,174,640	9,125	23,281	7,467	40,627	284	102,748	15,868

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Elon U.	1,797	25	0	287	135	45	215	193	14	18	865
Johnson C. Smith U.	2,685	188	0	146	2	4	0	2	0	52	2,291
Wake Forest U.	269,109	401	0	253,966	381	1,996	1,035	2,534	0	1,427	7,369
North Dakota	322,621	5,223	7,678	150,091	1,705	13,003	4,036	9,474	6,239	104,801	20,371
Public	322,621	5,223	7,678	150,091	1,705	13,003	4,036	9,474	6,239	104,801	20,371
North Dakota State U.	174,904	2,957	804	115,027	1,357	9,362	2,354	7,856	6,064	20,187	8,936
U. North Dakota	147,717	2,266	6,874	35,064	348	3,641	1,682	1,618	175	84,614	11,435
Ohio	3,079,902	56,020	27,122	1,975,060	11,563	124,682	36,003	55,994	46,124	599,645	147,689
Public	2,396,788	42,288	24,265	1,566,140	10,887	112,201	34,017	54,956	45,896	362,006	144,132
Air Force Institute of Technology	44,391	3,474	1,025	0	164	11,934	0	0	0	27,794	0
Bowling Green State U.	19,342	97	1,679	4,077	348	2,201	1,200	3,623	58	80	5,979
Central State U.	10,274	0	124	8,806	42	954	0	0	34	314	0
Cleveland State U.	81,225	0	0	51,438	521	1,030	751	4,782	214	14,519	7,970
Kent State U.	52,175	1,619	1,088	10,845	1,824	8,065	4,245	5,668	1,239	1,847	15,735
Miami U.	28,799	462	829	9,782	346	2,701	3,279	782	0	4,474	6,144
Northeast Ohio Medical U.	13,465	0	6	13,150	0	0	0	278	28	3	0
Ohio State U.	1,363,388	27,225	9,228	897,954	5,660	47,143	10,892	28,605	43,348	219,388	73,945
Ohio U.	52,465	89	2,847	17,612	38	5,892	2,551	1,245	0	17,216	4,975
U. Akron	19,943	44	659	1,587	191	8,690	581	139	0	7,558	494
U. Cincinnati	615,070	3,655	993	508,639	1,549	10,335	8,721	9,610	863	46,955	23,750
U. Toledo	64,654	127	5,367	30,176	38	11,637	344	174	0	11,957	4,834
Wright State U.	27,440	5,329	418	11,782	92	1,253	1,388	0	112	6,843	223
Youngstown State U.	4,157	167	2	292	74	366	65	50	0	3,058	83
Private	683,114	13,732	2,857	408,920	676	12,481	1,986	1,038	228	237,639	3,557
C. Wooster	1,717	16	188	429	93	549	1	167	0	0	274
Case Western Reserve U.	467,389	3,165	634	406,880	520	10,694	1,539	790	228	41,783	1,156
Heidelberg U.	1,184	0	1,184	0	0	0	0	0	0	0	0
Kenyon C.	1,330	0	0	788	45	362	32	34	0	0	69
U. Dayton	211,494	10,551	851	823	18	876	414	47	0	195,856	2,058
Oklahoma	650,977	13,927	92,931	273,554	6,785	28,758	12,113	24,340	9,766	92,794	96,009
Public	633,561	10,078	92,739	272,546	6,779	28,040	11,434	24,053	9,603	83,240	95,049
Langston U.	6,481	0	0	6,074	2	53	119	0	0	0	233
Oklahoma State U., Center for Health Sciences	8,368	104	0	7,092	0	0	1,111	0	0	0	61

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Oklahoma State U., Stillwater	195,041	3,099	3,663	77,513	4,176	8,685	6,977	9,806	9,603	36,217	35,302
U. Central Oklahoma	7,070 i	238 i	0 i	3,393 i	106 i	572 i	133 i	342 i	0 i	928 i	1,358 i
U. Oklahoma, Norman and Health Science Center	408,656	6,637	89,076	176,123	2,495	18,730	3,077	13,702	0	44,727	54,089
U. Oklahoma, Tulsa	7,945	0	0	2,351	0	0	17	203	0	1,368	4,006
Private	17,416	3,849	192	1,008	6	718	679	287	163	9,554	960
U. Tulsa	17,416	3,849	192	1,008	6	718	679	287	163	9,554	960
Oregon	1,001,028	14,334	55,431	718,647	4,320	25,734	26,676	15,913	5,889	83,065	51,019
Public	984,229	14,099	55,090	710,830	4,142	24,022	26,373	14,980	5,813	83,065	45,815
Oregon Health and Science U.	479,226	0	0	463,631	0	0	2,090	0	0	13,373	132
Oregon Institute of Technology	5,086 i	160 i	387 i	3,404 i	100 i	0 i	133 i	0 i	0 i	902 i	0 i
Oregon State U.	297,934	5,820	46,982	162,192	1,601	6,297	1,024	6,357	3,181	58,552	5,928
Portland State U.	41,483	1,521	1,826	14,531	1,192	2,410	1,497	3,900	558	5,582	8,466
U. Oregon	160,500	6,598	5,895	67,072	1,249	15,315	21,629	4,723	2,074	4,656	31,289
Private	16,799	235	341	7,817	178	1,712	303	933	76	0	5,204
Lewis and Clark C.	2,566	13	222	545	0	246	15	77	0	0	1,448
Pacific U.	6,128	66	0	3,813	22	467	4	342	0	0	1,414
Reed C.	5,922 i	151 i	0 i	2,626 i	136 i	860 i	238 i	514 i	0 i	0 i	1,397 i
Willamette U.	2,183	5	119	833	20	139	46	0	76	0	945
Pennsylvania	5,454,961	349,356	56,273	3,461,285	49,986	233,519	94,498	132,696	26,487	786,311	264,550
Public	2,601,766	97,881	50,443	1,631,792	24,400	123,149	61,133	60,012	15,430	462,387	75,139
East Stroudsburg U. Pennsylvania	1,410	15	0	828	8	7	0	2	0	0	550
Indiana U. Pennsylvania	6,313	113	234	1,747	17	456	728	579	196	0	2,243
Pennsylvania State U., Behrend	6,384	47	1,727	1,484	41	521	206	80	0	1,799	479
Pennsylvania State U., Harrisburg	2,927	8	6	1,433	7	8	66	144	0	160	1,095
Pennsylvania State U., University Park and Hershey Medical Center	1,019,940	79,162	35,715	319,598	17,140	73,580	30,225	41,275	0	385,594	37,651
Temple U.	301,395	6,734	1,498	223,126	3,063	17,215	13,248	7,110	591	8,898	19,912
U. Pittsburgh, Pittsburgh	1,251,998	11,763	11,232	1,082,521	4,042	30,591	16,203	4,587	14,631	65,936	10,492
U.S. Army War C.	5,496 i	0 i	0 i	0 i	0 i	0 i	0 i	5,496 i	0 i	0 i	0 i
West Chester U. Pennsylvania	5,903	39	31	1,055	82	771	457	739	12	0	2,717
Private	2,853,195	251,475	5,830	1,829,493	25,586	110,370	33,365	72,684	11,057	323,924	189,411
Bryn Mawr C.	9,123	335	189	1,259	545	1,254	508	1,449	0	0	3,584
Bucknell U.	5,259	113	40	1,255	169	1,038	83	322	265	1,589	385

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Carnegie Mellon U.	449,707	211,839	736	15,109	14,435	23,841	10,640	12,720	5,264	138,117	17,006
Drexel U.	151,903	6,589	0	87,434	729	2,306	3,077	1,870	1,890	38,649	9,359
Duquesne U.	13,944	0	886	8,351	57	629	245	145	0	66	3,565
Franklin and Marshall C.	4,440	33	305	1,001	30	835	154	441	30	0	1,611
Haverford C.	4,487	47	115	1,153	51	2,231	162	202	0	0	526
Lafayette C.	2,059	35	13	649	41	483	81	117	0	384	256
Lehigh U.	51,769	2,373	1,124	9,078	289	5,157	911	439	43	28,948	3,407
Mercyhurst U.	661	0	1	40	0	27	2	380	45	0	166
Philadelphia C. of Osteopathic Medicine	6,667	0	0	6,667	0	0	0	0	0	0	0
Robert Morris U.	1,000	41	0	704	11	0	11	35	0	144	54
Saint Joseph's U.	9,041	126	0	5,199	15	1,397	295	277	0	0	1,732
Swarthmore C.	4,225	71	0	1,295	174	779	130	219	0	215	1,342
Thomas Jefferson U.	321,644	0	0	321,561	0	0	0	0	0	77	6
U. Pennsylvania	1,791,311	29,513	1,856	1,364,745	8,921	67,341	16,035	53,759	3,520	106,282	139,339
Villanova U.	25,955	360	565	3,993	119	3,052	1,031	309	0	9,453	7,073
Rhode Island	458,694	17,748	65,136	180,930	14,837	22,906	12,405	43,391	18,030	41,721	41,590
Public	145,758	828	54,685	30,304	0	4,560	3,746	3,688	7,743	11,931	28,273
Naval War C.	5,529	0	0	0	0	0	0	929	0	0	4,600
Rhode Island C.	11,127	85	0	634	0	441	194	13	0	0	9,760
U. Rhode Island	129,102	743	54,685	29,670	0	4,119	3,552	2,746	7,743	11,931	13,913
Private	312,936	16,920	10,451	150,626	14,837	18,346	8,659	39,703	10,287	29,790	13,317
Brown U.	310,780	16,895	9,945	149,795	14,835	18,299	8,605	39,703	10,284	29,569	12,850
Roger Williams U.	2,156	25	506	831	2	47	54	0	3	221	467
South Carolina	805,510	16,936	12,492	461,366	6,123	20,832	13,634	27,441	52	136,004	110,630
Public	801,681	16,521	12,255	459,940	6,099	19,417	13,497	27,362	52	135,941	110,597
C. Charleston	6,421	300	2,470	1,536	31	518	129	87	0	158	1,192
Citadel Military C. South Carolina	4,374	2,615	0	225	28	184	66	25	0	363	868
Clemson U.	263,158	8,664	0	72,699	1,919	11,923	3,225	6,858	0	98,733	59,137
Coastal Carolina U.	3,724	133	1,573	497	0	209	66	284	18	175	769
Medical U. South Carolina	284,553	0	0	284,553	0	0	0	0	0	0	0
South Carolina State U.	4,270	117	0	1,537	0	1,086	0	0	0	773	757
U. South Carolina, Aiken	2,595	0	0	1,165	12	292	11	245	0	231	639
U. South Carolina, Columbia	229,162	4,628	8,202	97,376	4,101	4,761	9,997	19,583	34	35,508	44,972

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Winthrop U.	3,424	64	10	352	8	444	3	280	0	0	2,263
Private	3,829	415	237	1,426	24	1,415	137	79	0	63	33
Clafin U.	1,179	387	105	458	0	102	0	64	0	63	0
Furman U.	2,650	28	132	968	24	1,313	137	15	0	0	33
South Dakota	117,368	5,468	968	64,345	790	9,022	1,714	2,484	188	27,586	4,803
Public	116,644	5,468	968	63,942	790	8,716	1,714	2,484	188	27,586	4,788
Black Hills State U.	1,987	385	0	1,421	0	101	0	0	0	0	80
Dakota State U.	4,684	4,589	15	65	0	15	0	0	0	0	0
South Dakota School of Mines and Technology	20,061	0	0	0	16	2,883	0	0	0	17,162	0
South Dakota State U.	59,590	44	953	44,606	657	1,610	426	1,791	0	8,977	526
U. South Dakota	30,322	450	0	17,850	117	4,107	1,288	693	188	1,447	4,182
Private	724	0	0	403	0	306	0	0	0	0	15
Augustana U.	724	0	0	403	0	306	0	0	0	0	15
Tennessee	1,715,468	38,481	9,660	1,139,048	7,563	60,394	28,529	43,434	29,183	219,926	139,250
Public	607,285	23,368	7,923	273,259	5,975	29,531	13,103	21,833	29,183	141,382	61,728
Austin Peay State U.	3,149	3	635	1,657	0	89	1	0	6	0	758
East Tennessee State U.	23,420	0	18	21,542	185	464	97	120	0	27	967
Middle Tennessee State U.	22,631	1,050	229	4,950	1,243	2,115	728	3,527	0	889	7,900
Tennessee State U.	18,012	384	120	16,043	0	0	0	0	0	1,278	187
Tennessee Technological U.	16,398	3,541	14	3,456	0	672	77	52	0	7,436	1,150
U. Memphis	71,271	6,795	4,298	10,731	1,138	3,012	6,817	8,068	1,554	11,825	17,033
U. Tennessee, Chattanooga	12,808	830	0	994	365	40	406	253	3,803	3,823	2,294
U. Tennessee, Health Science Center	115,161	0	0	113,398	0	0	0	0	1,123	640	0
U. Tennessee, Knoxville	324,435	10,765	2,609	100,488	3,044	23,139	4,977	9,813	22,697	115,464	31,439
Private	1,108,183	15,113	1,737	865,789	1,588	30,863	15,426	21,601	0	78,544	77,522
Fisk U.	4,000	431	0	1,289	167	1,926	54	0	0	10	123
Meharry Medical C.	17,960	65	0	17,895	0	0	0	0	0	0	0
Vanderbilt U. and Vanderbilt U. Medical Center	1,086,223	14,617	1,737	846,605	1,421	28,937	15,372	21,601	0	78,534	77,399
Texas	7,440,455	217,550	254,064	4,515,907	80,059	391,134	99,628	159,855	46,403	1,207,515	468,340
Public	6,239,913	203,054	240,300	3,651,766	69,214	329,889	87,215	129,794	26,476	1,079,968	422,237
Lamar U.	5,304	154	0	248	0	124	0	160	0	3,536	1,082
Prairie View A&M U.	20,429	134	0	9,381	5	2,139	33	247	117	5,305	3,068
Sam Houston State U.	12,009	8	196	3,358	413	308	469	2,785	0	253	4,219

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Stephen F. Austin State U.	3,184	3	62	1,773	241	114	2	212	0	0	777
Sul Ross State U.	2,526	92	168	1,303	40	219	51	132	0	0	521
Tarleton State U.	20,056	763	2,594	9,239	376	503	475	1,033	1,126	685	3,262
Texas A&M International U.	4,486	1	53	531	101	275	17	743	853	127	1,785
Texas A&M U., College Station and Health Science Center	1,152,666	25,705	122,622	435,563	6,898	56,540	7,635	29,994	8,415	402,999	56,295
Texas A&M U.-Commerce	4,955	141	0	2,119	9	1,028	183	46	0	48	1,381
Texas A&M U.-Corpus Christi	36,014	355	14,478	5,184	19	1,459	4	623	1,132	8,737	4,023
Texas A&M U.-Kingsville	23,451	0	242	17,132	0	323	51	0	66	4,044	1,593
Texas A&M U.-San Antonio	1,242	239	10	348	0	0	3	36	429	104	73
Texas Southern U.	12,120	132	173	8,033	96	1,015	572	531	0	24	1,544
Texas State U.	110,102	1,598	8,853	17,849	1,343	5,123	908	10,265	2,082	9,722	52,359
Texas Tech U.	226,729	5,410	11,018	65,627	3,793	15,739	8,234	12,411	0	46,952	57,545
Texas Tech U., Health Sciences Center	46,574	0	0	44,961	0	0	0	0	0	0	1,613
Texas Tech U., Health Sciences Center, El Paso	14,206	0	0	13,073	0	0	0	0	0	0	1,133
Texas Woman's U.	6,029	3	0	3,015	125	585	618	312	0	0	1,371
U. Houston	240,126	6,539	10,320	40,187	5,858	60,462	17,383	3,842	36	64,026	31,473
U. Houston-Clear Lake	1,800	21	0	1,322	0	123	146	79	0	21	88
U. Houston-Downtown	1,485	135	14	135	2	88	37	66	0	71	937
U. North Texas, Denton	93,538	9,124	687	17,731	0	8,762	3,186	3,953	0	23,078	27,017
U. North Texas, Health Science Center	10,439	0	0	10,439	0	0	0	0	0	0	0
U. Texas Health Science Center, Houston	342,633	0	0	342,633	0	0	0	0	0	0	0
U. Texas Health Science Center, San Antonio	238,510	0	0	238,510	0	0	0	0	0	0	0
U. Texas Health Science Center, Tyler	33,872	0	0	33,872	0	0	0	0	0	0	0
U. Texas M. D. Anderson Cancer Center	1,182,536	0	0	1,104,846	20,403	19,651	19,296	18,340	0	0	0
U. Texas Medical Branch	204,518	0	0	202,875	0	0	0	0	0	1,643	0
U. Texas of the Permian Basin	3,577	18	77	887	1	30	70	494	0	797	1,203
U. Texas Rio Grande Valley	64,401	3,543	1,981	26,835	2,731	3,997	1,119	4,604	48	7,844	11,699
U. Texas Southwestern Medical Center	719,002	0	0	719,002	0	0	0	0	0	0	0
U. Texas, Arlington	133,770	8,415	668	20,310	2,443	18,905	1,404	124	0	61,467	20,034
U. Texas, Austin	845,896	100,730	55,612	156,202	18,319	93,232	11,067	22,612	2,548	319,719	65,855
U. Texas, Dallas	130,914	10,179	815	31,502	1,429	16,709	5,601	2,262	930	51,310	10,177
U. Texas, El Paso	130,501	7,833	4,565	30,381	2,413	10,021	4,911	3,365	2,705	40,798	23,509
U. Texas, San Antonio	147,629	21,484	4,787	27,073	2,075	12,128	3,738	10,456	5,839	24,403	35,646

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Texas, Tyler	3,246	38	0	2,233	74	29	2	67	0	542	261
West Texas A&M U.	9,438	257	305	6,054	7	258	0	0	150	1,713	694
Private	1,200,542	14,496	13,764	864,141	10,845	61,245	12,413	30,061	19,927	127,547	46,103
Abilene Christian U.	6,310	0	0	185	0	5,831	10	6	12	29	237
Baylor C. of Medicine	827,005	0	0	827,005	0	0	0	0	0	0	0
Baylor U.	66,014	2,382	3,569	13,144	1,451	11,717	4,051	3,244	2,908	9,061	14,487
Rice U.	216,202	11,172	4,738	18,022	6,937	31,638	4,805	21,779	571	110,648	5,892
Southern Methodist U.	57,544	494	4,956	2,765	2,009	5,607	1,276	2,132	10,766	7,313	20,226
St. Edward's U.	3,393	270	0	734	209	571	100	30	0	0	1,479
Texas Christian U.	18,353	106	307	558	189	4,131	1,827	2,551	5,670	88	2,926
Trinity U.	3,657	72	194	756	50	1,272	344	319	0	69	581
U. of the Incarnate Word	2,064	0	0	972	0	478	0	0	0	339	275
Utah	1,062,475	34,333	50,924	450,822	7,877	31,528	12,767	19,315	1,015	326,451	127,443
Public	1,016,865	32,800	50,137	440,782	7,108	24,802	12,367	18,435	1,015	306,852	122,567
U. Utah	670,119	29,132	47,824	379,462	6,083	18,579	6,805	16,524	1,015	47,060	117,635
Utah State U.	344,851	3,545	2,173	60,940	943	5,408	5,562	1,911	0	259,482	4,887
Utah Valley U.	1,895	123	140	380	82	815	0	0	0	310	45
Private	45,610	1,533	787	10,040	769	6,726	400	880	0	19,599	4,876
Brigham Young U., Provo	45,610	1,533	787	10,040	769	6,726	400	880	0	19,599	4,876
Vermont	218,910	3,776	4,791	159,588	3,132	4,918	5,433	8,312	2,755	11,621	14,584
Public	216,307	3,614	4,278	158,896	3,132	4,354	5,186	8,023	2,755	11,621	14,448
U. Vermont	216,307	3,614	4,278	158,896	3,132	4,354	5,186	8,023	2,755	11,621	14,448
Private	2,603	162	513	692	0	564	247	289	0	0	136
Middlebury C.	2,603	162	513	692	0	564	247	289	0	0	136
Virginia	2,117,336	98,097	72,024	1,017,012	22,297	84,686	29,913	112,529	7,795	448,533	224,450
Public	2,094,785	97,008	69,079	1,007,003	22,098	79,883	29,429	111,764	7,795	447,315	223,411
Christopher Newport U.	2,762	0	0	625	225	851	44	195	0	437	385
Eastern Virginia Medical School	22,165	0	0	22,165	0	0	0	0	0	0	0
George Mason U.	230,068	25,373	14,205	30,410	3,606	6,154	3,809	61,667	51	57,196	27,597
James Madison U.	17,021	961	870	4,434	335	2,256	1,156	225	0	808	5,976
Norfolk State U.	3,593	344	0	148	35	1,051	0	0	0	1,656	359
Old Dominion U.	64,877	2,672	3,787	12,010	857	8,410	1,526	2,345	0	28,288	4,982
U. of Mary Washington	1,229	20	57	190	0	117	0	39	0	0	806

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Virginia's C. Wise	2,628	455	0	116	0	44	0	95	0	197	1,721
U. Virginia, Charlottesville	662,658	27,291	6,392	432,700	2,552	27,721	6,549	17,920	5,596	65,604	70,333
Virginia Commonwealth U.	405,898	7,073	269	269,742	931	3,282	10,807	4,628	0	30,592	78,574
Virginia Military Institute	1,746	1,304	0	83	39	112	0	29	0	119	60
Virginia Polytechnic Institute and State U.	591,861	28,642	4,652	223,775	12,917	23,394	5,111	14,507	72	260,158	18,633
Virginia State U.	12,326	0	37	7,493	206	80	76	0	0	2,260	2,174
William & Mary	75,953	2,873	38,810	3,112	395	6,411	351	10,114	2,076	0	11,811
Private	22,551	1,089	2,945	10,009	199	4,803	484	765	0	1,218	1,039
Edward Via C. of Osteopathic Medicine	7,121	0	0	7,121	0	0	0	0	0	0	0
Hampton U.	11,462	720	2,576	1,659	163	4,282	0	434	0	1,215	413
Marymount U.	1,298	350	0	394	0	2	46	200	0	3	303
U. Richmond	2,670	19	369	835	36	519	438	131	0	0	323
Washington	1,972,326	36,154	171,777	1,261,338	8,461	93,498	15,953	32,684	4,776	219,169	128,516
Public	1,968,111	36,039	171,614	1,259,954	8,304	92,578	15,871	32,475	4,776	219,031	127,469
Central Washington U.	3,176	406	1,394	437	196	541	0	128	0	32	42
Eastern Washington U.	2,437	0	17	410	2	125	87	1,789	0	0	7
Northwest Indian C.	5,632	0	60	504	0	0	0	0	0	227	4,841
U. Washington, Bothell	8,197	537	351	784	33	1,194	0	68	12	387	4,831
U. Washington, Seattle	1,559,708	25,836	152,187	1,045,014	7,095	62,596	10,431	16,490	15	172,004	68,040
U. Washington, Tacoma	5,484	421	3,535	463	137	0	0	97	19	250	562
Washington State U.	368,396	8,523	10,772	211,742	509	25,553	3,860	12,699	3,333	45,571	45,834
Western Washington U.	15,081	316	3,298	600	332	2,569	1,493	1,204	1,397	560	3,312
Private	4,215	115	163	1,384	157	920	82	209	0	138	1,047
Seattle U.	1,894	93	0	281	153	311	0	103	0	137	816
U. Puget Sound	1,051	0	42	778	4	123	5	36	0	1	62
Whitman C.	1,270	22	121	325	0	486	77	70	0	0	169
West Virginia	248,022	1,765	5,416	161,470	432	14,291	1,658	3,216	1,756	47,305	10,713
Public	247,805	1,765	5,416	161,253	432	14,291	1,658	3,216	1,756	47,305	10,713
Marshall U.	25,692	201	239	17,965	0	1,224	20	0	0	3,333	2,710
West Virginia School of Osteopathic Medicine	1,329	0	0	1,327	0	0	0	0	0	0	2
West Virginia State U.	6,703	2	0	6,701	0	0	0	0	0	0	0
West Virginia U.	214,081	1,562	5,177	135,260	432	13,067	1,638	3,216	1,756	43,972	8,001
Private	217	0	0	217	0	0	0	0	0	0	0

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Charleston	217	0	0	217	0	0	0	0	0	0	0
Wisconsin	1,966,266	32,661	77,987	1,301,681	8,080	111,825	15,960	74,486	50,664	179,666	113,256
Public	1,599,312	30,915	77,897	973,455	7,144	109,286	14,897	73,529	50,664	158,290	103,235
U. Wisconsin-Eau Claire	1,628	46	135	138	11	954	293	17	0	0	34
U. Wisconsin-Green Bay	2,713	77 i	114 i	1,543 i	21 i	156 i	43 i	97 i	0 i	465 i	197 i
U. Wisconsin-La Crosse	2,942	76	35	897	59	299	16	1,383	13	0	164
U. Wisconsin-Madison	1,523,513	30,295	68,178	952,068	7,005	97,161	10,208	65,924	48,230	148,673	95,771
U. Wisconsin-Milwaukee	56,822	376	9,026	10,207	25	10,084	4,294	5,843	2,404	8,246	6,317
U. Wisconsin-Oshkosh	1,990	1	43	640	0	398	20	93	0	294	501
U. Wisconsin-Platteville	1,349 i	44 i	0 i	605 i	23 i	98 i	23 i	109 i	17 i	204 i	226 i
U. Wisconsin-Stevens Point	3,740	0	338	3,144	0	136	0	0	0	111	11
U. Wisconsin-Superior	4,615	0	28	4,213	0	0	0	63	0	297	14
Private	366,954	1,746	90	328,226	936	2,539	1,063	957	0	21,376	10,021
Marquette U.	40,638	1,681	0	13,619	892	2,539	991	871	0	10,278	9,767
Medical C. Wisconsin	321,506	0	0	313,888	0	0	0	0	0	7,618	0
Milwaukee School of Engineering	3,545	65	0	0	0	0	0	0	0	3,480	0
Northland C.	1,265 i	0 i	90 i	719 i	44 i	0 i	72 i	86 i	0 i	0 i	254 i
Wyoming	139,764	2,220	19,400	52,377	1,661	2,625	883	5,421	19,572	28,379	7,226
Public	139,764	2,220	19,400	52,377	1,661	2,625	883	5,421	19,572	28,379	7,226
U. Wyoming	139,764	2,220	19,400	52,377	1,661	2,625	883	5,421	19,572	28,379	7,226
Guam	20,481	0	6,937	12,397	63	131	0	174	0	6	773
Public	20,481	0	6,937	12,397	63	131	0	174	0	6	773
U. Guam	20,481	0	6,937	12,397	63	131	0	174	0	6	773
Puerto Rico	103,245	863	7,069	56,826	308	8,432	390	1,798	5,531	13,613	8,415
Public	96,773	863	7,069	51,499	308	8,399	390	1,798	5,530	12,617	8,300
U. Puerto Rico, Cayey	1,390	0	0	30	0	61	55	4	1,224	0	16
U. Puerto Rico, Humacao	1,448	0	92	1	0	1,302	53	0	0	0	0
U. Puerto Rico, Mayaguez	18,274	254	4,127	654	74	1,580	219	524	0	8,482	2,360
U. Puerto Rico, Medical Sciences Campus	47,578	0	264	47,314	0	0	0	0	0	0	0
U. Puerto Rico, Rio Piedras	28,083	609	2,586	3,500	234	5,456	63	1,270	4,306	4,135	5,924
Private	6,472	0	0	5,327	0	33	0	0	1	996	115
U. Ana G. Mendez, Gurabo	1,419	0 i	0 i	274 i	0 i	33 i	0 i	0 i	1 i	996 i	115 i
U. Central del Caribe	5,053	0	0	5,053	0	0	0	0	0	0	0

TABLE 71

Higher education R&D expenditures, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Virgin Islands	20,259	267	8,729	8,130	679	1,130	0	534	0	790	0
Public	20,259	267	8,729	8,130	679	1,130	0	534	0	790	0
U. of the Virgin Islands	20,259	267	8,729	8,130	679	1,130	0	534	0	790	0

i = imputed.

nec = not elsewhere classified; S&E = science and engineering.

^a The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^b The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^c The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^d Johns Hopkins University includes the Applied Physics Laboratory, with \$2,056,063 thousand in total R&D expenditures in FY 2022.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 72

Higher education R&D expenditures at institutions with a medical school, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Medical school R&D expenditures
Alabama		
Public		
U. Alabama, Birmingham	713,480	531,426
U. South Alabama	43,491	19,737
Arizona		
Public		
U. Arizona	824,340	267,041
Arkansas		
Public		
U. Arkansas for Medical Sciences	205,493	205,493
California		
Public		
U. California, Davis	883,807	235,966
U. California, Irvine	534,947	179,108
U. California, Los Angeles	1,536,197	989,591
U. California, Riverside	199,135	17,831
U. California, San Diego	1,533,357	698,845
U. California, San Francisco	1,805,950	1,578,364
Private		
Charles R. Drew U. of Medicine and Science ^a	14,581	1,872
Loma Linda U.	15,517	11,216
Stanford U.	1,384,555	964,772
Touro U., California	2,561	1,919
U. Southern California	1,039,905	504,139
Western U. of Health Sciences	9,029	1,377
Colorado		
Public		
U. Colorado Anschutz Medical Campus ^b	611,358	463,291
Connecticut		
Public		
U. Connecticut	367,557	125,224
Private		
Yale U.	1,191,201	999,203
District of Columbia		
Private		
George Washington U.	275,483	71,355
Georgetown U.	313,220	182,957
Howard U.	67,594	21,099
Florida		
Public		
Florida Atlantic U.	61,748	7,735
Florida International U.	281,665	12,931
Florida State U.	355,986	31,771
U. Central Florida	221,488	8,994
U. Florida	1,085,834	497,771
U. South Florida ^c	405,166	151,883
Private		
Nova Southeastern U.	31,189	14,203
U. Miami	439,300	333,780
Georgia		
Public		

TABLE 72

Higher education R&D expenditures at institutions with a medical school, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Medical school R&D expenditures
Augusta U.	127,313	115,734
Private		
Emory U.	958,281	607,698
Mercer U.	50,222	5,493
Morehouse School of Medicine	42,489	41,340
Hawaii		
Public		
U. Hawaii, Manoa	277,323	27,546
Illinois		
Public		
Southern Illinois U., Carbondale	46,967	17,277
U. Illinois, Chicago	440,573	203,981
U. Illinois, Urbana-Champaign	765,909	394
Private		
Loyola U., Chicago	46,169	35,700
Midwestern U.	11,069	5,974
Northwestern U.	1,000,695	736,108
Rosalind Franklin U. of Medicine and Science	12,988	11,399
Rush U.	114,874	111,039
U. Chicago	591,805	385,010
Indiana		
Public		
Indiana U., Bloomington	751,309	487,460
Iowa		
Public		
U. Iowa	594,215	335,057
Private		
Des Moines U.	5,307	1,535
Kansas		
Public		
U. Kansas	405,267	159,020
Kentucky		
Public		
U. Kentucky	476,517	189,532
U. Louisville	229,582	154,607
Louisiana		
Public		
Louisiana State U., Health Sciences Center, New Orleans	53,995	47,044
Louisiana State U., Health Sciences Center, Shreveport	29,502	29,502
Private		
Tulane U.	222,605	90,865
Maine		
Private		
U. New England	6,664	980
Maryland		
Public		
U. Maryland ^d	1,228,550	494,675
Uniformed Services U. of the Health Sciences	277,240	189,945
Private		
Johns Hopkins U. ^e	3,420,312	843,859
Massachusetts		

TABLE 72

Higher education R&D expenditures at institutions with a medical school, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Medical school R&D expenditures
Public		
U. Massachusetts, Medical School	358,204	358,204
Private		
Boston U.	725,402	210,332
Harvard U.	1,308,458	418,526
Tufts U.	231,224	51,061
Michigan		
Public		
Central Michigan U.	25,105	13,051
Michigan State U.	759,229	98,519
Oakland U.	38,061	1,155
U. Michigan, Ann Arbor	1,770,708	735,436
Wayne State U.	242,247	166,504
Western Michigan U. and Homer Stryker M.D. School of Medicine	27,768	4,702
Minnesota		
Public		
U. Minnesota, Twin Cities	1,202,084	380,473
Mississippi		
Public		
U. Mississippi	152,903	62,846
Missouri		
Public		
U. Missouri, Columbia	432,310	81,583
U. Missouri, Kansas City	52,657	14,881
Private		
Saint Louis U.	82,740	33,326
Washington U., Saint Louis	1,047,098	926,944
Nebraska		
Public		
U. Nebraska, Medical Center	205,253	121,080
Private		
Creighton U.	27,609	16,093
Nevada		
Public		
U. Nevada, Las Vegas	94,967	5,956
U. Nevada, Reno	181,782	36,355
New Hampshire		
Private		
Dartmouth C. and Dartmouth Hitchcock Medical Center	344,126	152,491
New Jersey		
Public		
Rowan U.	29,949	10,956
Rutgers, State U. New Jersey, New Brunswick	712,231	343,513
New Mexico		
Public		
U. New Mexico	331,164	95,487
New York		
Public		
CUNY, City C.	65,569	4,479
SUNY, Downstate Health Sciences U.	30,918	29,894
SUNY, Stony Brook U.	312,698	139,055

TABLE 72

Higher education R&D expenditures at institutions with a medical school, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Medical school R&D expenditures
SUNY, U. Buffalo	439,709	203,698
SUNY, Upstate Medical U.	50,586	39,926
Private		
Albany Medical C.	22,297	22,297
Albert Einstein C. of Medicine	318,314	318,314
Columbia U. in the City of New York	1,230,924	594,596
Cornell U.	1,300,357	580,412
Hofstra U.	6,939	430
Icahn School of Medicine at Mount Sinai	893,968	893,968
New York Institute of Technology	5,555	3,301
New York Medical C.	16,461	15,044
New York U.	1,276,038	831,028
U. Rochester	450,805	273,975
North Carolina		
Public		
East Carolina U.	55,693	22,288
U. North Carolina, Chapel Hill	1,361,028	763,589
Private		
Duke U.	1,390,538	1,132,846
Wake Forest U.	269,109	249,336
North Dakota		
Public		
U. North Dakota	147,717	30,596
Ohio		
Public		
Northeast Ohio Medical U.	13,465	11,977
Ohio State U.	1,363,388	670,721
Ohio U.	52,465	10,992
U. Cincinnati	615,070	491,645
U. Toledo	64,654	26,410
Wright State U.	27,440	9,560
Private		
Case Western Reserve U.	467,389	394,669
Oklahoma		
Public		
Oklahoma State U., Center for Health Sciences	8,368	8,237
U. Oklahoma, Norman and Health Science Center	408,656	128,108
U. Oklahoma, Tulsa	7,945	2,351
Oregon		
Public		
Oregon Health and Science U.	479,226	287,602
Pennsylvania		
Public		
Pennsylvania State U., University Park and Hershey Medical Center	1,019,940	146,375
Temple U.	301,395	113,589
U. Pittsburgh, Pittsburgh	1,251,998	900,807
Private		
Drexel U.	151,903	40,613
Philadelphia C. of Osteopathic Medicine	6,667	2,675
Thomas Jefferson U.	321,644	316,719
U. Pennsylvania	1,791,311	1,208,978

TABLE 72

Higher education R&D expenditures at institutions with a medical school, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Medical school R&D expenditures
Rhode Island		
Private		
Brown U.	310,780	156,962
South Carolina		
Public		
Medical U. South Carolina	284,553	233,052
U. South Carolina, Columbia	229,162	22,626
South Dakota		
Public		
U. South Dakota	30,322	14,742
Tennessee		
Public		
East Tennessee State U.	23,420	8,607
U. Tennessee, Health Science Center	115,161	115,161
Private		
Meharry Medical C.	17,960	14,323
Vanderbilt U. and Vanderbilt U. Medical Center	1,086,223	603,994
Texas		
Public		
Sam Houston State U.	12,009	118
Texas A&M U., College Station and Health Science Center	1,152,666	51,205
Texas Tech U., Health Sciences Center	46,574	29,110
Texas Tech U., Health Sciences Center, El Paso	14,206	11,020
U. Houston	240,126	795
U. North Texas, Health Science Center	10,439	784
U. Texas Health Science Center, Houston	342,633	193,357
U. Texas Health Science Center, San Antonio	238,510	186,627
U. Texas Medical Branch	204,518	195,429
U. Texas Rio Grande Valley	64,401	21,410
U. Texas Southwestern Medical Center	719,002	711,862
U. Texas, Austin	845,896	45,552
Private		
Baylor C. of Medicine	827,005	827,005
Texas Christian U.	18,353	27
U. of the Incarnate Word	2,064	524
Utah		
Public		
U. Utah	670,119	301,906
Vermont		
Public		
U. Vermont	216,307	111,906
Virginia		
Public		
Eastern Virginia Medical School	22,165	22,040
U. Virginia, Charlottesville	662,658	337,517
Virginia Commonwealth U.	405,898	196,001
Virginia Polytechnic Institute and State U.	591,861	0
Private		
Edward Via C. of Osteopathic Medicine	7,121	7,121
Washington		
Public		

TABLE 72

Higher education R&D expenditures at institutions with a medical school, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Medical school R&D expenditures
U. Washington, Seattle	1,559,708	843,835
Washington State U.	368,396	13,504
West Virginia		
Public		
Marshall U.	25,692	14,247
West Virginia School of Osteopathic Medicine	1,329	1,329
West Virginia U.	214,081	58,256
Wisconsin		
Public		
U. Wisconsin-Madison	1,523,513	530,829
Private		
Medical C. Wisconsin	321,506	321,461
Puerto Rico		
Public		
U. Puerto Rico, Medical Sciences Campus	47,578	14,809
Private		
U. Central del Caribe	5,053	5,053

i = imputed.

^a MD degrees are granted by the University of California, Los Angeles (UCLA) through the Drew/UCLA Medical Education program, a partnership between the Charles R. Drew University of Medicine and Science and the UCLA, David Geffen School of Medicine.

^b The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^c The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^d The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^e Johns Hopkins University includes the Applied Physics Laboratory, with \$2,056,063 thousand in total R&D expenditures in FY 2022.

Note(s):

The source for medical schools is institution response to survey question 4.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 73

Higher education R&D expenditures at institutions reporting clinical trials, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total		Federal		Nonfederal	
	All R&D expenditures	Clinical trials	All R&D expenditures	Clinical trials	All R&D expenditures	Clinical trials
Alabama						
Public						
U. Alabama, Birmingham	713,480	66,549	421,223	25,264	292,257	41,285
U. Alabama, Tuscaloosa	163,204	2,501	67,986	2,496	95,218	5
U. South Alabama	43,491	994	23,762	45	19,729	949
Arizona						
Public						
Northern Arizona U.	66,729	1,424	43,453	1,424	23,276	0
U. Arizona	824,340	14,157	374,936	2,865	449,404	11,292
Private						
Sonoran U. Health Sciences	520	50	0	0	520	50
Arkansas						
Public						
U. Arkansas for Medical Sciences	205,493	2,789	95,080	154	110,413	2,635
California						
Public						
California Polytechnic State U., San Luis Obispo	33,155	933	15,084	799	18,071	134
California State U., San Bernardino	11,929	48	6,693	48	5,236	0
California State U., San Marcos	9,238	91	7,986	91	1,252	0
San Francisco State U.	36,617	526	15,276	526	21,341	0
U. California, Berkeley	981,035	226	468,542	226	512,493	0
U. California, Davis	883,807	17,254	468,468	5,059	415,339	12,195
U. California, Irvine	534,947	23,798	291,393	6,535	243,554	17,263
U. California, Los Angeles	1,536,197	102,237	848,138	71,343	688,059	30,894
U. California, San Diego	1,533,357	24,361	970,696	9,209	562,661	15,152
U. California, San Francisco	1,805,950	77,897	780,318	36,583	1,025,632	41,314
Private						
Chapman U.	34,212	158	11,098	157	23,114	1
Charles R. Drew U. of Medicine and Science	14,581	368	10,656	173	3,925	195
Loma Linda U.	15,517	3,384	9,134	182	6,383	3,202
Loyola Marymount U.	12,773	593	2,824	593	9,949	0
Stanford U.	1,384,555	165,309	860,125	65,286	524,430	100,023
Touro U., California	2,561	756	964	752	1,597	4
U. San Diego	10,143	6	2,911	6	7,232	0
U. Southern California	1,039,905	104,815	601,747	20,989	438,158	83,826
Western U. of Health Sciences	9,029	286	7,131	0	1,898	286
Colorado						
Public						
Colorado State U., Fort Collins	456,911	309	316,727	203	140,184	106
U. Colorado Anschutz Medical Campus ^a	611,358	51,338	429,949	4,750	181,409	46,588
Private						
U. Denver	45,561	766	26,040	698	19,521	68
Connecticut						
Public						
U. Connecticut	367,557	7,540	230,752	5,413	136,805	2,127
Private						
Trinity C., Hartford	1,620	105	1,049	105	571	0
Yale U.	1,191,201	41,353	689,270	0	501,931	41,353

TABLE 73

Higher education R&D expenditures at institutions reporting clinical trials, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total		Federal		Nonfederal	
	All R&D expenditures	Clinical trials	All R&D expenditures	Clinical trials	All R&D expenditures	Clinical trials
Delaware						
Public						
U. Delaware	368,107	3,402	194,775	3,401	173,332	1
District of Columbia						
Private						
George Washington U.	275,483	24,120	161,867	21,673	113,616	2,447
Georgetown U.	313,220	13,406	127,213	10	186,007	13,396
Howard U.	67,594	538	37,331	37	30,263	501
Florida						
Public						
Florida Atlantic U.	61,748	277	28,641	264	33,107	13
Florida International U.	281,665	10,540	129,683	9,534	151,982	1,006
Florida State U.	355,986	5,424	163,744	4,371	192,242	1,053
U. Central Florida	221,488	2,396	110,131	2,359	111,357	37
U. Florida	1,085,834	44,222	467,739	16,615	618,095	27,607
U. South Florida ^b	405,166	16,176	206,552	1,573	198,614	14,603
Private						
Nova Southeastern U.	31,189	258	9,314	0	21,875	258
U. Miami	439,300	46,133	265,212	14,046	174,088	32,087
Georgia						
Public						
Augusta U.	127,313	3,684	64,609	59	62,704	3,625
U. Georgia	545,631	1,115	220,343	718	325,288	397
Private						
Emory U.	958,281	66,715	568,149	15,146	390,132	51,569
Mercer U.	50,222	261	32,504	0	17,718	261
Morehouse School of Medicine	42,489	413	31,339	0	11,150	413
Hawaii						
Public						
U. Hawaii, Manoa	277,323	183	169,762	0	107,561	183
Illinois						
Public						
Southern Illinois U., Carbondale	46,967	1,333	13,582	0	33,385	1,333
U. Illinois, Chicago	440,573	27,889	251,328	22,540	189,245	5,349
U. Illinois, Urbana-Champaign	765,909	576	420,953	507	344,956	69
Private						
Loyola U., Chicago	46,169	3,879	26,972	476	19,197	3,403
Midwestern U.	11,069	10	1,609	0	9,460	10
Northwestern U.	1,000,695	378,292	618,771	310,950	381,924	67,342
Rosalind Franklin U. of Medicine and Science	12,988	36	7,292	0	5,696	36
Rush U.	114,874	24,573	79,647	9,251	35,227	15,322
U. Chicago	591,805	40,050	456,806	73	134,999	39,977
Indiana						
Public						
Ball State U.	9,932	2,642	5,302	2,642	4,630	0
Indiana U., Bloomington	751,309	56,297	360,300	24,339	391,009	31,958
Indiana U.-Purdue U., Indianapolis	64,162	3,136	29,353	2,600	34,809	536
Iowa						

TABLE 73

Higher education R&D expenditures at institutions reporting clinical trials, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total		Federal		Nonfederal	
	All R&D expenditures	Clinical trials	All R&D expenditures	Clinical trials	All R&D expenditures	Clinical trials
Public						
U. Iowa	594,215	21,944	314,346	0	279,869	21,944
Private						
Des Moines U.	5,307	36	1,589	35	3,718	1
Palmer C. of Chiropractic, Davenport	2,050	1,500	1,550	1,500	500	0
Kansas						
Public						
U. Kansas	405,267	25,922	200,117	1,112	205,150	24,810
Kentucky						
Public						
U. Kentucky	476,517	12,914	253,852	5,031	222,665	7,883
U. Louisville	229,582	11,868	117,363	4,136	112,219	7,732
Louisiana						
Public						
Louisiana State U., Baton Rouge	344,556	15,573	111,886	11,079	232,670	4,494
Louisiana State U., Health Sciences Center, New Orleans	53,995	1,307	33,087	223	20,908	1,084
Louisiana State U., Health Sciences Center, Shreveport	29,502	1,404	15,503	425	13,999	979
Private						
Tulane U.	222,605	10,910	127,544	116	95,061	10,794
Maine						
Private						
U. New England	6,664	80	3,660	80	3,004	0
Maryland						
Public						
U. Maryland ^c	1,228,550	33,505	750,447	4,911	478,103	28,594
Private						
Johns Hopkins U. ^d	3,420,312	48,389	2,971,816	819	448,496	47,570
Massachusetts						
Public						
U. Massachusetts, Medical School	358,204	8,132	258,147	541	100,057	7,591
Private						
Boston C.	68,958	685	36,560	685	32,398	0
Boston U.	725,402	2,200	413,102	240	312,300	1,960
Harvard U.	1,308,458	59,642	628,683	54,165	679,775	5,477
New England C. of Optometry	1,868	695	1,609	634	259	61
Tufts U.	231,224	2,047	150,081	1,329	81,143	718
Michigan						
Public						
Central Michigan U.	25,105	182	9,773	109	15,332	73
Grand Valley State U.	6,695	847	1,819	847	4,876	0
Michigan State U.	759,229	4,142	381,504	3,175	377,725	967
Michigan Technological U.	91,084	55	48,766	55	42,318	0
Oakland U.	38,061	39	9,533	0	28,528	39
U. Michigan, Ann Arbor	1,770,708	42,101	970,636	5,197	800,072	36,904
Wayne State U.	242,247	10,842	126,814	734	115,433	10,108
Western Michigan U. and Homer Stryker M.D. School of Medicine	27,768	322	12,895	29	14,873	293
Minnesota						

TABLE 73

Higher education R&D expenditures at institutions reporting clinical trials, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total		Federal		Nonfederal	
	All R&D expenditures	Clinical trials	All R&D expenditures	Clinical trials	All R&D expenditures	Clinical trials
Public						
U. Minnesota, Twin Cities	1,202,084	101,716	652,384	77,838	549,700	23,878
Private						
St. Catherine U.	933	30	300	0	633	30
Mississippi						
Public						
U. Mississippi	152,903	5,766	84,270	4,589	68,633	1,177
Missouri						
Public						
U. Missouri, Columbia	432,310	3,946	182,432	784	249,878	3,162
U. Missouri, Kansas City	52,657	73	31,134	0	21,523	73
Private						
Saint Louis U.	82,740	3,242	42,170	180	40,570	3,062
Washington U., Saint Louis	1,047,098	46,637	681,353	17,342	365,745	29,295
Montana						
Public						
Montana State U., Bozeman	200,820	1,438	118,974	1,424	81,846	14
Nebraska						
Public						
U. Nebraska, Lincoln	340,260	2,366	113,248	2,120	227,012	246
U. Nebraska, Medical Center	205,253	16,289	114,754	10,650	90,499	5,639
Private						
Creighton U.	27,609	1,609	12,022	452	15,587	1,157
Nevada						
Public						
U. Nevada, Las Vegas	94,967	132	28,867	0	66,100	132
U. Nevada, Reno	181,782	681	83,631	635	98,151	46
Private						
Roseman U. of Health Sciences	6,296	30	30	0	6,266	30
New Hampshire						
Private						
Dartmouth C. and Dartmouth Hitchcock Medical Center	344,126	21,561	155,445	10,963	188,681	10,598
New Jersey						
Public						
Rutgers, State U. New Jersey, New Brunswick	712,231	19,011	351,660	5,757	360,571	13,254
New Mexico						
Public						
U. New Mexico	331,164	8,766	232,774	5,226	98,390	3,540
New York						
Public						
CUNY, C. Staten Island	3,545	584	2,916	461	629	123
CUNY, Graduate School of Public Health and Health Policy	16,423	49	11,880	49	4,543	0
SUNY, C. of Optometry	4,497	1,623	2,080	6	2,417	1,617
SUNY, Downstate Health Sciences U.	30,918	538	25,081	296	5,837	242
SUNY, Stony Brook U.	312,698	9,482	184,154	4,518	128,544	4,964
SUNY, U. Buffalo	439,709	5,814	218,231	913	221,478	4,901
SUNY, Upstate Medical U.	50,586	6,982	27,737	674	22,849	6,308
Private						

TABLE 73

Higher education R&D expenditures at institutions reporting clinical trials, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total		Federal		Nonfederal	
	All R&D expenditures	Clinical trials	All R&D expenditures	Clinical trials	All R&D expenditures	Clinical trials
Albany Medical C.	22,297	4,048	13,384	93	8,913	3,955
Albert Einstein C. of Medicine	318,314	184	220,780	166	97,534	18
Columbia U. in the City of New York	1,230,924	93,271	904,346	42,965	326,578	50,306
Cornell U.	1,300,357	21,623	636,481	6,434	663,876	15,189
Icahn School of Medicine at Mount Sinai	893,968	134,301	610,646	66,466	283,322	67,835
Ithaca C.	1,000	92	703	92	297	0
New York Medical C.	16,461	1,647	9,070	518	7,391	1,129
New York U.	1,276,038	40,378	668,381	4,518	607,657	35,860
Rockefeller U.	360,877	121	94,693	48	266,184	73
Syracuse U.	157,407	251	33,976	251	123,431	0
U. Rochester	450,805	47,635	334,503	16,345	116,302	31,290
North Carolina						
Public						
East Carolina U.	55,693	2,869	29,648	240	26,045	2,629
U. North Carolina, Chapel Hill	1,361,028	46,460	827,158	9,216	533,870	37,244
U. North Carolina, Greensboro	41,303	1,458	29,822	1,458	11,481	0
Private						
Duke U.	1,390,538	652,897	901,807	447,761	488,731	205,136
Wake Forest U.	269,109	30,124	180,754	18,973	88,355	11,151
North Dakota						
Public						
North Dakota State U.	174,904	4	45,343	3	129,561	1
Ohio						
Public						
Kent State U.	52,175	467	16,195	466	35,980	1
Miami U.	28,799	13	10,277	12	18,522	1
Ohio State U.	1,363,388	91,153	636,902	36,593	726,486	54,560
Ohio U.	52,465	79	20,587	64	31,878	15
U. Cincinnati	615,070	29,715	350,392	15,029	264,678	14,686
U. Toledo	64,654	1,332	36,694	210	27,960	1,122
Wright State U.	27,440	517	20,529	345	6,911	172
Private						
Case Western Reserve U.	467,389	5,181	380,423	4,957	86,966	224
Oklahoma						
Public						
Oklahoma State U., Center for Health Sciences	8,368	13	3,366	0	5,002	13
U. Oklahoma, Norman and Health Science Center	408,656	11,721	210,994	23	197,662	11,698
U. Oklahoma, Tulsa	7,945	79	1,804	0	6,141	79
Private						
U. Tulsa	17,416	5	5,893	0	11,523	5
Oregon						
Public						
Oregon Health and Science U.	479,226	65,230	346,724	28,926	132,502	36,304
U. Oregon	160,500	8,392	97,238	8,288	63,262	104
Private						
Pacific U.	6,128	760	2,672	733	3,456	27
Pennsylvania						
Public						

TABLE 73

Higher education R&D expenditures at institutions reporting clinical trials, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total		Federal		Nonfederal	
	All R&D expenditures	Clinical trials	All R&D expenditures	Clinical trials	All R&D expenditures	Clinical trials
Pennsylvania State U., University Park and Hershey Medical Center	1,019,940	5,302	681,159	0	338,781	5,302
Temple U.	301,395	24,435	143,580	2,400	157,815	22,035
U. Pittsburgh, Pittsburgh	1,251,998	24,184	814,647	8,174	437,351	16,010
Private						
Carnegie Mellon U.	449,707	1,666	259,160	1,659	190,547	7
Drexel U.	151,903	764	99,399	132	52,504	632
Thomas Jefferson U.	321,644	24,610	173,861	6,081	147,783	18,529
U. Pennsylvania	1,791,311	67,030	873,318	5,784	917,993	61,246
South Carolina						
Public						
Medical U. South Carolina	284,553	41,815	163,395	22,166	121,158	19,649
U. South Carolina, Columbia	229,162	197	106,752	86	122,410	111
Tennessee						
Public						
East Tennessee State U.	23,420	75	9,715	0	13,705	75
U. Tennessee, Health Science Center	115,161	3,896	60,221	416	54,940	3,480
U. Tennessee, Knoxville	324,435	20	149,260	0	175,175	20
Private						
Meharry Medical C.	17,960	836	15,048	662	2,912	174
Vanderbilt U. and Vanderbilt U. Medical Center	1,086,223	87,817	666,282	48,288	419,941	39,529
Texas						
Public						
Texas A&M U., College Station and Health Science Center	1,152,666	1,149	505,355	0	647,311	1,149
Texas Tech U., Health Sciences Center	46,574	229	14,620	0	31,954	229
Texas Tech U., Health Sciences Center, El Paso	14,206	1,133	2,339	540	11,867	593
Texas Woman's U.	6,029	185	2,091	96	3,938	89
U. Houston	240,126	1,575	84,295	1,400	155,831	175
U. North Texas, Health Science Center	10,439	48	3,172	48	7,267	0
U. Texas Health Science Center, Houston	342,633	18,296	184,205	7,737	158,428	10,559
U. Texas Health Science Center, San Antonio	238,510	11,413	119,071	1,942	119,439	9,471
U. Texas Health Science Center, Tyler	33,872	815	14,362	705	19,510	110
U. Texas M. D. Anderson Cancer Center	1,182,536	180,599	225,659	3,139	956,877	177,460
U. Texas Medical Branch	204,518	3,416	123,467	2,298	81,051	1,118
U. Texas Rio Grande Valley	64,401	1,051	18,317	779	46,084	272
U. Texas Southwestern Medical Center	719,002	43,749	298,154	15,807	420,848	27,942
U. Texas, Arlington	133,770	1,168	56,025	885	77,745	283
U. Texas, Austin	845,896	1,099	536,296	190	309,600	909
U. Texas, El Paso	130,501	1,550	60,387	1,550	70,114	0
Private						
Baylor C. of Medicine	827,005	42,932	420,054	19,414	406,951	23,518
Baylor U.	66,014	1,605	15,856	1,605	50,158	0
Rice U.	216,202	165	105,345	165	110,857	0
Texas Christian U.	18,353	3,927	5,670	3,927	12,683	0
Utah						
Public						
U. Utah	670,119	33,956	367,040	0	303,079	33,956
Vermont						

TABLE 73

Higher education R&D expenditures at institutions reporting clinical trials, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total		Federal		Nonfederal	
	All R&D expenditures	Clinical trials	All R&D expenditures	Clinical trials	All R&D expenditures	Clinical trials
Public						
U. Vermont	216,307	10,007	117,163	6,324	99,144	3,683
Virginia						
Public						
Eastern Virginia Medical School	22,165	1,376	17,616	930	4,549	446
Old Dominion U.	64,877	533	27,804	524	37,073	9
U. Virginia, Charlottesville	662,658	8,886	332,993	283	329,665	8,603
Virginia Commonwealth U.	405,898	3,351	166,726	1,225	239,172	2,126
Virginia Polytechnic Institute and State U.	591,861	5,762	240,305	5,429	351,556	333
Washington						
Public						
U. Washington, Seattle	1,559,708	60,330	1,083,090	25,636	476,618	34,694
Washington State U.	368,396	9,100	187,580	8,902	180,816	198
West Virginia						
Public						
Marshall U.	25,692	1	16,369	1	9,323	0
West Virginia U.	214,081	3,490	97,327	1,095	116,754	2,395
Wisconsin						
Public						
U. Wisconsin-Madison	1,523,513	21,279	740,854	1,518	782,659	19,761
Private						
Marquette U.	40,638	1,787	15,316	1,597	25,322	190
Medical C. Wisconsin	321,506	23,307	152,301	1,197	169,205	22,110
Puerto Rico						
Public						
U. Puerto Rico, Medical Sciences Campus	47,578	2,113	35,050	1,494	12,528	619
Private						
U. Central del Caribe	5,053	79	2,807	0	2,246	79

i = imputed.

^a The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^b The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^c The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^d Johns Hopkins University includes the Applied Physics Laboratory, with zero in both total and federally financed clinical trials R&D expenditures in FY 2022.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 74

Total and federally financed higher education R&D expenditures received as a subrecipient, by highest degree granted and institutional control: FY 2022

(Dollars in thousands)

R&D expenditures and type of institution	All R&D expenditures	R&D expenditures received as a subrecipient				
		Total	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
Total R&D, all institutions	97,680,528	9,705,518	4,693,719	1,542,805	1,963,694	1,505,300
Doctorate	96,904,532	9,638,214	4,652,449	1,540,582	1,954,715	1,490,468
Nondoctorate	775,996	67,304	41,270	2,223	8,979	14,832
Public	63,712,945	6,460,460	2,874,060	1,088,455	1,229,685	1,268,260
Private	33,967,583	3,245,058	1,819,659	454,350	734,009	237,040
Federally financed R&D, all institutions	53,971,468	8,444,853	4,274,260	1,273,237	1,600,008	1,297,348
Doctorate	53,535,604	8,389,948	4,237,760	1,271,435	1,593,184	1,287,569
Nondoctorate	435,864	54,905	36,500	1,802	6,824	9,779
Public	33,333,946	5,620,118	2,640,496	886,294	983,521	1,109,807
Private	20,637,522	2,824,735	1,633,764	386,943	616,487	187,541

Note(s):

This table includes only institutions reporting \$1 million or more in total R&D expenditures in 2021. Institutions reporting less than \$1 million in total R&D expenditures in 2021 completed a shorter version of the survey form in FY 2022, and that form only requested R&D expenditures received from higher education institutions. For a listing of R&D expenditures received from higher education institutions at institutions completing the shorter version of the survey, see [table 85](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 75

Total and federally financed higher education R&D expenditures passed through to subrecipients, by highest degree granted and institutional control: FY 2022

(Dollars in thousands)

Type of institution	All R&D expenditures	R&D expenditures passed through to subrecipients				
		Total	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
Total R&D, all institutions	97,680,528	8,521,194	4,680,744	1,583,550	1,518,369	738,531
Doctorate	96,904,532	8,486,741	4,658,364	1,579,579	1,513,731	735,067
Nondoctorate	775,996	34,453	22,380	3,971	4,638	3,464
Public	63,712,945	5,143,769	2,917,167	1,006,494	765,384	454,724
Private	33,967,583	3,377,425	1,763,577	577,056	752,985	283,807
Federally financed R&D, all institutions	53,971,468	7,336,299	4,205,105	1,283,633	1,284,950	562,611
Doctorate	53,535,604	7,307,622	4,185,176	1,280,372	1,281,552	560,522
Nondoctorate	435,864	28,677	19,929	3,261	3,398	2,089
Public	33,333,946	4,500,305	2,608,381	882,747	646,427	362,750
Private	20,637,522	2,835,994	1,596,724	400,886	638,523	199,861

Note(s):

This table includes only institutions reporting \$1 million or more in total R&D expenditures in 2021. Institutions reporting less than \$1 million in total R&D expenditures in 2021 completed a shorter version of the survey form in FY 2022, and that form requested R&D expenditures passed through only to higher education institutions. For a list of R&D expenditures passed through to higher education institutions at institutions completing the shorter version of the survey, see [table 85](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
United States	9,705,518	4,693,719	1,542,805	1,963,694	1,505,300	8,444,853	4,274,260	1,273,237	1,600,008	1,297,348
Alabama										
Public										
Alabama A&M U.	1,200	1,180	0	0	20	1,180	1,180	0	0	0
Alabama State U.	445	445	0	0	0	445	445	0	0	0
Auburn U., Auburn	43,874 i	11,461 i	11,017 i	754 i	20,642 i	41,119	10,449	10,581	304	19,785
Troy U.	278	58	0	0	220	278	58	0	0	220
U. Alabama, Birmingham	50,399	38,247	6,051	4,621	1,480	50,399	38,247	6,051	4,621	1,480
U. Alabama, Huntsville	54,145	5,227	43,210	1,926	3,782	51,829	5,097	41,796	1,466	3,470
U. Alabama, Tuscaloosa	28,797	11,979	6,900	3,420	6,498	28,484	11,709	6,900	3,383	6,492
U. South Alabama	6,806	4,293	1,084	513	916	5,904	4,293	427	364	820
Private										
Tuskegee U.	1,999	1,407	139	423	30	1,999	1,407	139	423	30
Alaska										
Public										
U. Alaska, Anchorage	1,475	976	39	75	385	1,350	872	39	75	364
U. Alaska, Fairbanks	10,832	4,035	825	4,366	1,606	9,829	3,732	821	3,679	1,597
U. Alaska, Southeast	323	57	0	266	0	259	57	0	202	0
Private										
Alaska Pacific U.	291	287	0	0	4	287	287	0	0	0
Arizona										
Public										
Arizona State U.	96,656	28,999	19,157	43,420	5,080	56,222	26,282	15,931	9,891	4,118
Dine C.	56	56	0	0	0	56	56	0	0	0
Northern Arizona U.	6,979	3,988	781	1,129	1,081	6,540	3,563	781	1,129	1,067
U. Arizona	70,348 i	30,259 i	11,326 i	21,747 i	7,016 i	64,141	27,984	10,337	20,727	5,093
Private										
Sonoran U. Health Sciences	0	0	0	0	0	0	0	0	0	0
Arkansas										
Public										
Arkansas State U., Jonesboro	1,429	737	0	0	692	1,428	736	0	0	692
U. Arkansas for Medical Sciences	17,360	5,084	2,783	3,074	6,419	17,360	5,084	2,783	3,074	6,419

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
U. Arkansas, Fayetteville	15,776	6,710	2,891	884	5,291	14,418	5,845	2,745	543	5,285
U. Arkansas, Little Rock	3,601	1,553	954	0	1,094	3,601	1,553	954	0	1,094
U. Arkansas, Pine Bluff	320	218	0	0	102	320	218	0	0	102
U. Central Arkansas	1,251	619	263	56	313	1,190	619	258	0	313
California										
Public										
California Polytechnic State U., San Luis Obispo	4,484	2,226	554	513	1,191	3,665	1,862	389	397	1,017
California State Polytechnic U., Humboldt	1,980	1,044	97	577	262	690	387	55	139	109
California State Polytechnic U., Pomona	1,089	546	175	311	57	1,045	542	145	301	57
California State U., Bakersfield	55	22	0	0	33	33	0	0	0	33
California State U., Channel Islands	519	399	0	120	0	401	294	0	107	0
California State U., Chico	505	366	0	0	139	364	364	0	0	0
California State U., Dominguez Hills	508	508	0	0	0	508	508	0	0	0
California State U., East Bay	899	293	83	11	512	228	116	24	6	82
California State U., Fresno	2,693	2,073	45	273	302	1,217	704	29	192	292
California State U., Fullerton	908	816	62	30	0	678	616	62	0	0
California State U., Long Beach	2,145	1,545	111	412	77	1,076	872	111	16	77
California State U., Los Angeles	948	659	0	67	222	725	566	0	67	92
California State U., Maritime Academy	103	103	0	0	0	83	83	0	0	0
California State U., Monterey Bay	2,776	842	14	1,513	407	2,151	498	0	1,495	158
California State U., Northridge	4,568	1,930	181	1,121	1,336	1,683	1,127	0	203	353
California State U., Sacramento	1,682	984	0	91	607	1,053	367	0	79	607
California State U., San Bernardino	698	688	0	10	0	530	520	0	10	0
California State U., San Marcos	168	138	0	30	0	168	138	0	30	0
California State U., Stanislaus	305	305	0	0	0	298	298	0	0	0
Naval Postgraduate School	719	341	312	66	0	0	0	0	0	0
San Diego State U.	10,116	7,150	987	1,864	115	9,101	6,135	987	1,864	115
San Francisco State U.	2,650	1,840	172	185	453	1,952	1,657	172	119	4
San Jose State U.	6,085	5,545	24	347	169	5,645	5,105	24	347	169
Sonoma State U.	687	678	1	0	8	584	575	1	0	8
U. California, Berkeley	75,943	48,887	7,223	11,333	8,500	64,175	42,385	6,201	7,392	8,197
U. California, Davis	72,539	38,535	7,466	18,381	8,157	61,393	35,347	6,317	12,802	6,927

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
U. California, Irvine	41,799	22,983	10,605	7,681	530	33,302	21,244	5,489	6,039	530
U. California, Los Angeles	102,445	59,874	11,532	23,579	7,460	91,734	54,577	10,180	20,870	6,107
U. California, Merced	1,923	798	88	457	580	1,257	647	88	84	438
U. California, Office of the President	8	0	0	0	8	8	0	0	0	8
U. California, Riverside	14,931	9,027	1,551	2,195	2,158	13,736	8,732	912	2,151	1,941
U. California, San Diego	185,856	75,220	29,670	41,003	39,963	133,987	60,302	17,665	35,091	20,929
U. California, San Francisco	135,049	58,090	4,782	70,617	1,560	121,633	54,043	4,330	62,146	1,114
U. California, Santa Barbara	29,515	16,698	5,399	7,008	410	27,088	15,554	5,175	5,999	360
U. California, Santa Cruz	14,584	8,410	830	3,551	1,793	13,925	7,971	692	3,469	1,793
Private										
Azusa Pacific U.	84	6	0	7	71	6	6	0	0	0
Biola U.	123 i	66 i	17 i	30 i	10 i	0	0	0	0	0
California Institute of Technology	39,121	29,460	1,284	8,377	0	35,306	26,604	1,284	7,418	0
California Lutheran U.	0	0	0	0	0	0	0	0	0	0
Chapman U.	2,380 i	1,883 i	363 i	134 i	0 i	2,170	1,789	363	18	0
Charles R. Drew U. of Medicine and Science	1,098	0	0	0	1,098	1,098	0	0	0	1,098
Claremont Graduate U.	891	199	0	445	247	451	199	0	5	247
Claremont McKenna C.	126	126	0	0	0	117	117	0	0	0
Harvey Mudd C.	210	210	0	0	0	210	210	0	0	0
High Tech High Graduate School of Ed.	0	0	0	0	0	0	0	0	0	0
Keck Graduate Institute	100	100	0	0	0	100	100	0	0	0
La Sierra U.	0	0	0	0	0	0	0	0	0	0
Loma Linda U.	958	588	355	15	0	786	440	331	15	0
Loyola Marymount U.	235	206	0	29	0	82	82	0	0	0
Marshall B. Ketchum U.	37 i	37 i	0 i	0 i	0 i	37 i	37 i	0 i	0 i	0 i
Occidental C.	173 i	108 i	0 i	0 i	65 i	84 i	19 i	0 i	0 i	65 i
Pepperdine U.	135	91	0	44	0	87	62	0	25	0
Pomona C.	290	278	0	0	12	258	246	0	0	12
Santa Clara U.	755	176	186	5	388	750	176	186	0	388
Scripps Research Institute	22,540	16,470	1,422	4,303	345	21,595	15,525	1,422	4,303	345
Stanford U.	154,350	104,445	13,976	30,823	5,106	121,073	88,042	8,798	23,642	591
Touro U., California	603	603	0	0	0	603	603	0	0	0

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
U. of the Pacific	79	79	0	0	0	79	79	0	0	0
U. San Diego	743	391	41	229	82	484	288	9	105	82
U. San Francisco	183	163	0	20	0	183	163	0	20	0
U. Southern California	116,039	56,979	11,111	42,462	5,487	107,794	52,728	10,364	39,919	4,783
Western U. of Health Sciences	222	67	145	10	0	212	67	145	0	0
Colorado										
Public										
Colorado School of Mines	23,782	6,739	7,420	3,017	6,606	14,552	6,360	4,848	2,875	469
Colorado State U., Fort Collins	47,638	25,702	7,587	5,980	8,369	44,174	24,080	7,283	4,701	8,110
Colorado State U., Pueblo	106	106	0	0	0	106	106	0	0	0
Fort Lewis C.	602	537	0	26	39	589	537	0	13	39
U. Colorado Anschutz Medical Campus ^a	82,279 i	44,705 i	12,242 i	18,883 i	6,449 i	77,536	43,479	11,122	17,542	5,393
U. Colorado Boulder	79,189 i	42,856 i	13,257 i	10,696 i	12,380 i	77,124	42,299	12,660	10,277	11,888
U. Colorado Colorado Springs	1,764	442	1,261	61	0	1,764	442	1,261	61	0
U. Colorado Denver ^a	2,979 i	1,576 i	904 i	173 i	326 i	2,838	1,539	871	134	294
U. Northern Colorado	295	126	137	0	32	295	126	137	0	32
U.S. Air Force Academy	0	0	0	0	0	0	0	0	0	0
Private										
Colorado C.	8	8	0	0	0	8	8	0	0	0
U. Denver	7,506	4,713	511	1,798	484	6,785	4,296	511	1,571	407
Connecticut										
Public										
Central Connecticut State U.	341	64	0	0	277	341	64	0	0	277
Eastern Connecticut State U.	16	16	0	0	0	16	16	0	0	0
Southern Connecticut State U.	296	266	30	0	0	269	239	30	0	0
U. Connecticut	35,997	14,949	3,868	5,893	11,287	34,461	14,058	3,575	5,719	11,109
Private										
Connecticut C.	126	126	0	0	0	126	126	0	0	0
Trinity C., Hartford	30	30	0	0	0	30	30	0	0	0
U. Hartford	148	67	0	81	0	148	67	0	81	0
U. New Haven	571	350	14	158	49	438	231	0	158	49
Wesleyan U.	759	482	52	225	0	645	475	52	118	0

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
Yale U.	81,126	51,667	4,712	19,909	4,838	72,443	47,257	3,343	17,293	4,550
Delaware										
Public										
Delaware State U.	2,029	2,029	0	0	0	2,029	2,029	0	0	0
U. Delaware	30,541 i	17,759 i	3,746 i	4,160 i	4,876 i	28,148	15,366	3,746	4,160	4,876
District of Columbia										
Public										
National Defense U.	0	0	0	0	0	0	0	0	0	0
U. of the District of Columbia	0	0	0	0	0	0	0	0	0	0
Private										
American U.	3,783	1,216	42	2,219	306	3,319	1,117	42	1,966	194
Catholic U. of America	8,674	4,772	2,013	1,704	185	8,433	4,762	2,013	1,658	0
Gallaudet U.	556	191	0	365	0	426	191	0	235	0
George Washington U.	30,910	14,957	4,927	9,862	1,164	25,470	12,946	4,828	7,033	663
Georgetown U.	19,896	10,984	3,408	5,186	318	15,152	9,911	2,720	2,203	318
Howard U.	9,958	6,313	57	697	2,891	7,236	4,213	0	147	2,876
Florida										
Public										
Florida A&M U.	5,537	1,733	2,048	142	1,614	5,511	1,733	2,048	142	1,588
Florida Atlantic U.	3,693	2,211	337	19	1,126	3,693	2,211	337	19	1,126
Florida Gulf Coast U.	2,201	446	33	349	1,373	1,837	189	33	280	1,335
Florida International U.	32,348	17,289	8,385	2,834	3,840	25,707	11,847	8,175	2,101	3,584
Florida Polytechnic U.	283	215	15	0	53	216	148	15	0	53
Florida State U.	17,114	6,982	924	3,842	5,366	16,401	6,522	914	3,842	5,123
U. Central Florida	24,737 i	7,863 i	10,659 i	1,885 i	4,330 i	22,245	7,010	10,318	1,481	3,436
U. Florida	103,467	54,632	18,381	14,989	15,465	90,881	49,211	16,203	11,289	14,178
U. North Florida	7,523	3,686	107	359	3,371	5,705	2,959	2	132	2,612
U. South Florida ^b	57,291	12,081	2,220	6,658	36,332	56,122	11,903	2,183	6,507	35,529
U. West Florida	1,288	620	172	0	496	1,261	597	168	0	496
Private										
Embry-Riddle Aeronautical U.	2,891 i	2,763 i	128 i	0	0	2,455	2,378	77	0	0
Florida Institute of Technology	2,330	621	1,287	233	189	2,197	574	1,287	147	189

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
Nova Southeastern U.	2,079	1,551	209	75	244	1,908	1,398	208	58	244
U. Miami	55,938	24,490	16,042	10,231	5,175	53,236	23,112	15,412	9,559	5,153
Georgia										
Public										
Augusta U.	5,880	5,077	713	90	0	5,880	5,077	713	90	0
Fort Valley State U.	529	529	0	0	0	529	529	0	0	0
Georgia Institute of Technology	115,787	2,544	37,811	5,014	70,418	111,349	783	37,007	3,950	69,609
Georgia Southern U.	1,005	418	172	164	251	895	374	172	98	251
Georgia State U.	13,920	7,136	1,904	1,752	3,128	10,157	6,154	1,019	545	2,439
Kennesaw State U.	327	327	0	0	0	327	327	0	0	0
Savannah State U.	561	561	0	0	0	561	561	0	0	0
U. Georgia	49,954	33,479	3,179	7,520	5,776	48,198	32,078	3,179	7,379	5,562
U. North Georgia	500	500	0	0	0	474	474	0	0	0
Private										
Clark Atlanta U.	283	283	0	0	0	283	283	0	0	0
Emory U.	106,165	54,368	12,804	32,681	6,312	90,524	50,226	7,277	28,532	4,489
Mercer U.	4,032	378	3,654	0	0	337	337	0	0	0
Morehouse C.	563	563	0	0	0	563	563	0	0	0
Morehouse School of Medicine	10,031	10,031	0	0	0	10,031	10,031	0	0	0
Spelman C.	306	306	0	0	0	306	306	0	0	0
Hawaii										
Public										
U. Hawaii, Hilo	447	235	48	109	55	447	235	48	109	55
U. Hawaii, Manoa	22,733	7,544	1,787	4,004	9,398	22,568	7,501	1,787	3,882	9,398
U. Hawaii, system office	0	0	0	0	0	0	0	0	0	0
Private										
Hawaii Pacific U.	582	582	0	0	0	557	557	0	0	0
Idaho										
Public										
Boise State U.	6,763	3,880	203	2,488	192	6,742	3,859	203	2,488	192
Idaho State U.	2,805	2,159	250	19	377	2,796	2,159	250	19	368
U. Idaho	8,690	4,899	69	535	3,187	8,210	4,716	69	409	3,016

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
Illinois										
Public										
Chicago State U.	885	885	0	0	0	885	885	0	0	0
Illinois State U.	965	901	39	25	0	960	896	39	25	0
Northeastern Illinois U.	246	219	0	27	0	246	219	0	27	0
Northern Illinois U.	3,188	1,230	188	1,697	73	3,109	1,173	188	1,675	73
Southern Illinois U., Carbondale	5,266	1,584	550	135	2,997	4,600	1,405	357	0	2,838
Southern Illinois U., Edwardsville	1,107	6	0	66	1,035	1,107	6	0	66	1,035
U. Illinois, Chicago	56,633	33,678	9,687	10,037	3,231	53,906	31,974	9,585	9,184	3,163
U. Illinois, Springfield	0	0	0	0	0	0	0	0	0	0
U. Illinois, Urbana-Champaign	72,710	39,267	10,796	4,644	18,003	65,242	36,599	10,682	3,755	14,206
Western Illinois U.	2,305	2,143	0	0	162	2,305	2,143	0	0	162
Private										
DePaul U.	545	467	0	52	26	519	467	0	52	0
Erikson Institute	51	39	0	12	0	39	39	0	0	0
Illinois Institute of Technology	5,460	1,920	841	124	2,575	5,154	1,912	586	81	2,575
Loyola U., Chicago	6,933	5,678	184	566	505	6,184	5,127	184	403	470
Midwestern U.	268	104	0	0	164	247	83	0	0	164
Northwestern U.	98,900	59,283	27,510	11,677	430	74,094	55,071	9,076	9,580	367
Rosalind Franklin U. of Medicine and Science	793	786	0	7	0	786	786	0	0	0
Rush U.	19,934	16,346	0	2,180	1,408	17,771	14,340	0	2,038	1,393
Toyota Technological Institute, Chicago	254	254	0	0	0	254	254	0	0	0
U. Chicago	98,601	64,803	18,843	12,054	2,901	92,853	60,803	18,700	10,908	2,442
Indiana										
Public										
Ball State U.	923	379	0	179	365	740	344	0	83	313
Indiana State U.	111	107	0	0	4	111	107	0	0	4
Indiana U., Bloomington	71,027	36,115	9,444	21,429	4,039	56,299	32,937	3,399	16,489	3,474
Indiana U.-Purdue U., Indianapolis	6,204	2,901	861	1,296	1,146	5,541	2,734	861	909	1,037
Purdue U., Fort Wayne	330	54	127	5	144	6	0	1	5	0
Purdue U., Northwest	1,633	825	92	27	689	1,110	628	88	0	394
Purdue U., West Lafayette	88,996	35,678	15,750	9,324	28,244	59,104	32,958	14,347	5,620	6,179

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
Private										
Butler U.	93	3	0	90	0	3	3	0	0	0
U. Notre Dame	35,331	12,426	15,762	3,083	4,060	31,873	10,791	15,263	2,145	3,674
Iowa										
Public										
Iowa State U.	34,446	14,845	4,689	4,289	10,623	31,456	12,890	4,642	3,633	10,291
U. Iowa	12,124	1,925	1,813	1,619	6,767	12,124	1,925	1,813	1,619	6,767
U. Northern Iowa	1,137	426	0	0	711	1,137	426	0	0	711
Private										
Des Moines U.	88	88	0	0	0	87	87	0	0	0
Drake U.	759	165	7	71	516	669	153	0	0	516
Grinnell C.	92	92	0	0	0	51	51	0	0	0
Palmer C. of Chiropractic, Davenport	50	50	0	0	0	50	50	0	0	0
Kansas										
Public										
Kansas State U.	12,238	4,993	2,460	3,811	974	10,692	4,212	2,260	3,258	962
Pittsburg State U.	441	286	0	0	155	441	286	0	0	155
U. Kansas	44,030	20,471	3,485	4,976	15,098	39,347	18,473	2,761	4,451	13,662
Wichita State U.	4,827	1,877	835	1,243	872	4,706	1,853	821	1,239	793
Kentucky										
Public										
Kentucky State U.	27	24	2	1	0	27	24	2	1	0
Morehead State U.	759	0	345	414	0	759	0	345	414	0
Murray State U.	785	614	58	89	24	650	613	0	36	1
Northern Kentucky U.	1,205	467	0	0	738	1,205	467	0	0	738
U. Kentucky	51,560	18,395	9,627	4,279	19,259	48,486	15,717	9,482	4,129	19,158
U. Louisville	29,890	9,089	12,346	4,070	4,385	24,697	7,599	9,362	3,690	4,046
Western Kentucky U.	2,404	1,226	405	289	484	1,803	1,226	334	243	0
Louisiana										
Public										
Grambling State U.	750	162	48	0	540	210	162	48	0	0
Louisiana State U., Baton Rouge	24,648	18,293	1,699	1,586	3,070	24,010	18,292	1,690	1,570	2,458

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
Louisiana State U., Health Sciences Center, New Orleans	6,721	3,365	608	925	1,823	6,604	3,248	608	925	1,823
Louisiana State U., Health Sciences Center, Shreveport	983	967	16	0	0	983	967	16	0	0
Louisiana Tech U.	3,277	788	85	1,459	945	3,258	781	85	1,447	945
Northwestern State U. Louisiana	0	0	0	0	0	0	0	0	0	0
Southeastern Louisiana U.	815	749	0	0	66	815	749	0	0	66
Southern U. and A&M C., Agricultural Research and Extension Center	783	83	0	700	0	783	83	0	700	0
Southern U. and A&M C., Baton Rouge	621	0	595	0	26	0	0	0	0	0
U. Louisiana, Lafayette	9,331	3,441	573	529	4,788	7,714	2,347	550	29	4,788
U. Louisiana, Monroe	1,328	947	126	102	153	1,186	947	85	1	153
U. New Orleans	1,285	641	40	318	286	1,166	593	2	285	286
Private										
Dillard U.	73	26	0	0	47	73	26	0	0	47
Tulane U.	31,415	19,326	5,191	5,518	1,380	26,366	16,328	4,513	4,208	1,317
Xavier U. Louisiana	1,984	541	0	806	637	1,013	532	0	429	52
Maine										
Public										
U. Maine	22,888	5,616	7,963	25	9,284	21,933	5,331	7,784	25	8,793
U. Southern Maine	1,354	714	0	640	0	1,210	708	0	502	0
Private										
Bates C.	743	319	0	424	0	743	319	0	424	0
Bowdoin C.	420	100	0	299	21	420	100	0	299	21
Colby C.	279	89	0	171	19	229	61	0	149	19
U. New England	905	224	126	555	0	404	180	0	224	0
Maryland										
Public										
Bowie State U.	769	769	0	0	0	769	769	0	0	0
Morgan State U.	8,306	6,232	888	1,186	0	8,292	6,218	888	1,186	0
Salisbury U.	1,649	1,354	0	295	0	1,038	779	0	259	0
Towson U.	728	49	363	236	80	704	49	339	236	80
U. Baltimore	1,001	178	0	84	739	1,001	178	0	84	739
U. Maryland ^c	103,954	38,527	10,024	32,417	22,986	84,327	35,870	7,747	21,500	19,210
U. Maryland Center for Environmental Science	3,679	1,633	76	1,035	935	2,730	1,578	76	223	853

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
U. Maryland, Baltimore County	22,841	16,087	532	742	5,480	22,763	16,009	532	742	5,480
U. Maryland, Eastern Shore	947	947	0	0	0	947	947	0	0	0
U.S. Naval Academy	2,159	251	0	1,908	0	1,908	0	0	1,908	0
Uniformed Services U. of the Health Sciences	0	0	0	0	0	0	0	0	0	0
Private										
Johns Hopkins U. ^d	158,107	78,043	22,793	46,018	11,253	130,221	68,169	18,814	34,726	8,512
Massachusetts										
Public										
Framingham State U.	14 i	14 i	0 i	0 i	0 i	14 i	14 i	0 i	0 i	0 i
U. Massachusetts, Amherst	30,189	15,053	4,660	3,913	6,563	27,545	13,516	3,861	3,605	6,563
U. Massachusetts, Boston	7,106	2,437	397	3,271	1,001	4,783	2,172	325	1,920	366
U. Massachusetts, Dartmouth	3,204	806	525	1,544	329	3,104	746	485	1,544	329
U. Massachusetts, Lowell	14,306 i	7,692 i	2,681 i	2,702 i	1,231 i	13,631	7,461	2,568	2,587	1,015
U. Massachusetts, Medical School	33,745	18,980	2,656	11,561	548	28,183	17,007	2,470	8,158	548
Private										
Amherst C.	71	71	0	0	0	71	71	0	0	0
Babson C.	43 i	43 i	0 i	0 i	0 i	32	32	0	0	0
Bentley U.	212	212	0	0	0	161	161	0	0	0
Boston C.	5,398	2,264	1,154	1,362	618	3,547	1,725	1,154	668	0
Boston U.	69,164	36,389	5,918	22,326	4,531	62,548	32,317	5,471	20,668	4,092
Brandeis U.	8,226	3,505	877	1,945	1,899	7,216	3,092	684	1,610	1,830
Clark U.	347	177	0	69	101	246	177	0	69	0
Franklin W. Olin C. of Engineering	271	271	0	0	0	253	253	0	0	0
Harvard U.	125,427	55,598	7,579	27,398	34,852	102,698	51,195	3,620	20,293	27,590
Massachusetts Institute of Technology	156,556	81,387	30,545	34,364	10,260	123,471	67,018	25,120	29,132	2,201
MGH Institute of Health Professions	600	600	0	0	0	600	600	0	0	0
Mount Holyoke C.	256	256	0	0	0	256	256	0	0	0
New England C. of Optometry	72	72	0	0	0	72	72	0	0	0
Northeastern U.	31,267	15,615	3,713	9,531	2,408	28,743	14,464	3,595	8,767	1,917
Smith C.	648	254	0	393	1	344	192	0	152	0
Suffolk U.	50	49	0	1	0	49	49	0	0	0
Tufts U.	20,070	8,572	17	64	11,417	19,955	8,538	0	0	11,417

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
Wellesley C.	190	140	0	50	0	190	140	0	50	0
Western New England U.	131	131	0	0	0	131	131	0	0	0
Williams C.	95 i	95 i	0 i	0 i	0 i	95 i	95 i	0 i	0 i	0 i
Woods Hole Oceanographic Institution	23,222	9,219	8,773	4,275	955	22,082	8,976	8,731	3,420	955
Worcester Polytechnic Institute	7,492	3,168	3,092	1,206	26	7,205	3,057	3,067	1,073	8
Michigan										
Public										
Central Michigan U.	1,489	1,127	0	230	132	1,380	1,094	0	155	131
Eastern Michigan U.	500	401	32	67	0	468	401	0	67	0
Grand Valley State U.	796	467	0	0	329	597	362	0	0	235
Lake Superior State U.	974	47	0	0	927	974	47	0	0	927
Michigan State U.	66,049	40,531	10,539	9,132	5,847	61,367	38,554	8,543	8,670	5,600
Michigan Technological U.	14,119 i	2,610 i	8,623 i	1,218 i	1,668 i	13,535	2,410	8,527	1,120	1,478
Northern Michigan U.	258	54	0	0	204	258	54	0	0	204
Oakland U.	3,371	1,718	108	0	1,545	3,219	1,600	108	0	1,511
Saginaw Valley State U.	116 i	3 i	0 i	10 i	103 i	116 i	3 i	0 i	10 i	103 i
U. Michigan, Ann Arbor	163,108	82,052	23,751	41,120	16,185	141,901	75,135	15,455	36,026	15,285
U. Michigan, Dearborn	325	241	1	83	0	279	216	0	63	0
Wayne State U.	14,496	8,549	1,336	2,906	1,705	13,527	8,539	917	2,644	1,427
Western Michigan U. and Homer Stryker M.D. School of Medicine	1,943	696	242	106	899	1,623	596	242	34	751
Private										
Albion C.	53 i	53 i	0 i	0 i	0 i	53 i	53 i	0 i	0 i	0 i
Calvin U.	75	51	24	0	0	75	51	24	0	0
Hope C.	2,082	102	0	129	1,851	2,051	71	0	129	1,851
Kettering U.	208	161	0	0	47	203	161	0	0	42
Lawrence Technological U.	377	1	0	12	364	377	1	0	12	364
U. Detroit Mercy	125	78	47	0	0	125	78	47	0	0
Van Andel Research Institute	6,096	3,042	2,376	678	0	3,978	1,043	2,257	678	0
Minnesota										
Public										
Minnesota State U., Mankato	454 i	217 i	61 i	60 i	116 i	404 i	199 i	53 i	52 i	100 i
St. Cloud State U.	39	39	0	0	0	39	39	0	0	0

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
Montana State U., Bozeman	11,736	7,215	1,361	2,204	956	9,586	5,893	1,090	1,822	781
Montana Technological U.	852	751	0	0	101	811	751	0	0	60
U. Montana, Missoula	19,350	8,554	1,377	1,162	8,257	19,276	8,483	1,377	1,159	8,257
Nebraska										
Public										
U. Nebraska, central administration	2,958	952	291	1,715	0	2,926	920	291	1,715	0
U. Nebraska, Kearney	1,956	1,261	0	14	681	1,356	1,176	0	14	166
U. Nebraska, Lincoln	25,451	14,935	736	3,034	6,746	25,341	14,908	680	3,007	6,746
U. Nebraska, Medical Center	36,260	14,387	10,474	7,445	3,954	20,670	12,696	2,842	3,636	1,496
U. Nebraska, Omaha	3,749	2,867	22	546	314	3,365	2,660	0	477	228
Private										
Creighton U.	5,589	3,562	35	1,992	0	5,589	3,562	35	1,992	0
Nevada										
Public										
Desert Research Institute	4,635	2,273	1,409	586	367	3,974	2,040	1,208	577	149
Nevada State C.	912	912	0	0	0	912	912	0	0	0
U. Nevada, Las Vegas	8,868	2,451	1,724	2,026	2,667	7,104	1,928	1,339	1,478	2,359
U. Nevada, Reno	15,951	10,351	1,478	1,834	2,288	13,666	8,628	1,392	1,520	2,126
Private										
Roseman U. of Health Sciences	30	30	0	0	0	30	30	0	0	0
New Hampshire										
Public										
Plymouth State U.	332	260	46	0	26	319	247	46	0	26
U. New Hampshire	35,593	21,327	2,465	5,637	6,164	34,836	20,680	2,442	5,637	6,077
Private										
Dartmouth C. and Dartmouth Hitchcock Medical Center	31,209	19,152	2,454	8,905	698	26,674	16,520	1,936	7,550	668
New Jersey										
Public										
C. New Jersey	321	198	0	123	0	321	198	0	123	0
Kean U.	140	111	0	0	29	140	111	0	0	29
Montclair State U.	842	595	0	246	1	552	404	0	147	1
New Jersey Institute of Technology	37,335	3,737	1,169	863	31,566	37,284	3,693	1,169	856	31,566

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
Rowan U.	2,490	1,214	756	0	520	2,257	1,111	755	0	391
Rutgers, State U. New Jersey, Camden	1,480 i	443 i	58 i	26 i	953 i	1,392	419	36	0	937
Rutgers, State U. New Jersey, New Brunswick	60,564 i	35,488 i	6,597 i	8,617 i	9,862 i	60,517	35,474	6,597	8,617	9,829
Rutgers, State U. New Jersey, Newark	1,859 i	1,339 i	340 i	115 i	65 i	1,519	1,245	256	11	7
Stockton U.	133	20	15	13	85	123	14	15	9	85
William Paterson U.	1,498	168	490	6	834	1,483	168	490	0	825
Private										
Monmouth U.	90	15	0	0	75	87	12	0	0	75
Princeton U.	42,195	33,268	5,434	659	2,834	35,434	27,377	5,290	589	2,178
Seton Hall U.	37	37	0	0	0	37	37	0	0	0
Stevens Institute of Technology	8,126	1,867	5,141	339	779	7,525	1,660	4,856	268	741
New Mexico										
Public										
New Mexico Highlands U.	158 i	158 i	0 i	0 i	0 i	158 i	158 i	0 i	0 i	0 i
New Mexico Institute of Mining and Technology	15,636	1,510	3,199	6,299	4,628	15,177	1,510	3,199	6,299	4,169
New Mexico State U.	18,642	6,316	9,041	1,078	2,207	17,932	5,968	9,004	1,075	1,885
U. New Mexico	47,554	15,913	16,596	6,012	9,033	46,931	15,586	16,427	5,885	9,033
New York										
Public										
CUNY, Advanced Science Research Center	1,289	964	45	266	14	1,228	964	5	259	0
CUNY, Baruch C.	138	75	0	63	0	97	49	0	48	0
CUNY, Brooklyn C.	163	104	0	59	0	163	104	0	59	0
CUNY, C. Staten Island	238	162	7	69	0	238	162	7	69	0
CUNY, City C.	4,970	2,923	159	1,328	560	4,641	2,801	159	1,121	560
CUNY, Graduate Center	1,800	651	0	249	900	1,724	613	0	249	862
CUNY, Graduate School of Public Health and Health Policy	5,368	3,532	618	1,143	75	4,711	3,503	618	515	75
CUNY, Hunter C.	3,964	3,272	127	564	1	3,704	3,232	127	345	0
CUNY, John Jay C. of Criminal Justice	902	709	0	183	10	796	635	0	154	7
CUNY, Lehman C.	307	299	8	0	0	192	192	0	0	0
CUNY, New York City C. of Technology	57	15	0	42	0	57	15	0	42	0
CUNY, Queens C.	367	294	5	22	46	343	282	5	22	34
CUNY, system office	99	0	99	0	0	0	0	0	0	0

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
CUNY, York C.	0	0	0	0	0	0	0	0	0	0
SUNY, Binghamton U.	5,735	1,558	1,111	2	3,064	5,638	1,558	1,078	2	3,000
SUNY, Buffalo State	738	658	0	6	74	676	658	0	6	12
SUNY, C. Brockport	442	334	23	0	85	350	265	0	0	85
SUNY, C. of Environmental Science and Forestry	2,362	997	74	588	703	1,466	856	31	566	13
SUNY, C. of Optometry	101	95	0	6	0	101	95	0	6	0
SUNY, C. Plattsburgh	182	154	0	0	28	182	154	0	0	28
SUNY, Cobleskill	0	0	0	0	0	0	0	0	0	0
SUNY, Downstate Health Sciences U.	3,586	3,154	90	342	0	3,304	2,872	90	342	0
SUNY, Geneseo	14	10	0	4	0	10	10	0	0	0
SUNY, Oswego	0	0	0	0	0	0	0	0	0	0
SUNY, Polytechnic Institute	3,800	772	2,356	39	633	3,723	772	2,356	39	556
SUNY, Stony Brook U.	25,754	13,765	2,458	8,073	1,458	24,104	13,170	2,429	7,648	857
SUNY, U. Albany	9,488	4,148	1,666	2,231	1,443	6,578	3,887	1,004	1,339	348
SUNY, U. Buffalo	20,909	9,775	3,619	1,660	5,855	16,643	9,167	3,549	1,250	2,677
SUNY, Upstate Medical U.	5,029	2,695	524	710	1,100	4,497	2,372	524	561	1,040
U.S. Military Academy	0	0	0	0	0	0	0	0	0	0
Private										
Albany C. of Pharmacy and Health Sciences	206	128	0	78	0	206	128	0	78	0
Albany Medical C.	1,732	1,196	17	519	0	1,732	1,196	17	519	0
Albert Einstein C. of Medicine	26,201	20,745	666	4,071	719	23,711	18,802	597	3,715	597
Alfred U.	294	252	42	0	0	292	250	42	0	0
Barnard C.	259	259	0	0	0	243	243	0	0	0
Canisius C.	33	33	0	0	0	33	33	0	0	0
Clarkson U.	1,825	1,103	372	224	126	1,420	942	362	116	0
Cold Spring Harbor Laboratory	11,811	6,265	2,005	2,659	882	10,641	5,824	1,775	2,270	772
Colgate U.	95	34	0	60	1	25	24	0	1	0
Columbia U. in the City of New York	151,435	77,750	13,878	27,477	32,330	122,960	68,428	12,563	20,752	21,217
Cornell U.	110,178	75,672	5,809	27,514	1,183	92,603	65,978	5,754	20,050	821
Fordham U.	1,113	934	0	38	141	1,113	934	0	38	141
Hamilton C.	114	110	0	4	0	114	110	0	4	0
Hobart and William Smith Colleges	473	35	0	0	438	444	25	0	0	419

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
Hofstra U.	506	109	0	397	0	345	87	0	258	0
Icahn School of Medicine at Mount Sinai	92,270	52,397	7,397	31,029	1,447	86,695	48,744	7,397	29,339	1,215
Ithaca C.	160	160	0	0	0	125	125	0	0	0
Long Island U.	502	495	0	7	0	502	495	0	7	0
Manhattan C.	4	4	0	0	0	0	0	0	0	0
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	0	0	0	0	0	0	0	0	0	0
New School	839	585	0	181	73	581	576	0	0	5
New York Institute of Technology	440	440	0	0	0	440	440	0	0	0
New York Medical C.	1,697	1,382	315	0	0	1,697	1,382	315	0	0
New York U.	102,774	64,192	10,559	26,295	1,728	92,199	61,009	9,792	20,325	1,073
Pace U.	162	161	0	1	0	162	161	0	1	0
Pratt Institute	20	20	0	0	0	20	20	0	0	0
Rensselaer Polytechnic Institute	12,496	7,352	4,865	192	87	11,249	6,909	4,078	192	70
Rochester Institute of Technology	10,908	2,637	5,086	3,012	173	9,126	2,590	4,943	1,566	27
Rockefeller U.	14,764	9,181	31	5,552	0	13,846	9,181	31	4,634	0
Skidmore C.	92	92	0	0	0	80	80	0	0	0
St. John's U., New York	324	301	23	0	0	324	301	23	0	0
Syracuse U.	7,524	4,590	864	1,916	154	6,651	4,044	864	1,625	118
Teachers C., Columbia U.	4,449	2,056	0	1,985	408	2,755	1,490	0	1,135	130
U. Rochester	37,879	27,328	9,343	1,176	32	35,365	25,527	8,640	1,176	22
Union C., Schenectady	62	6	56	0	0	62	6	56	0	0
Vassar C.	284	58	0	203	23	73	49	0	24	0
Yeshiva U.	595	595	0	0	0	595	595	0	0	0
North Carolina										
Public										
Appalachian State U.	333	218	0	115	0	333	218	0	115	0
East Carolina U.	6,920	4,713	328	849	1,030	6,626	4,650	328	688	960
Elizabeth City State U.	492	492	0	0	0	270	270	0	0	0
Fayetteville State U.	479	479	0	0	0	0	0	0	0	0
North Carolina A&T State U.	5,293	3,520	182	531	1,060	5,274	3,520	182	522	1,050
North Carolina Central U.	2,078	812	168	553	545	863	668	0	49	146

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total						Federally financed					
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities		
North Carolina State U.	41,976	34,625	3,752	1,933	1,666	31,475	31,028	119	117	211		
U. North Carolina, Asheville	1,211	639	68	312	192	863	639	68	14	142		
U. North Carolina, Chapel Hill	187,739	99,125	14,065	28,706	45,843	166,765	87,970	12,265	21,755	44,775		
U. North Carolina, Charlotte	9,113	4,236	3,088	682	1,107	8,284	3,765	2,890	573	1,056		
U. North Carolina, general administration	0	0	0	0	0	0	0	0	0	0		
U. North Carolina, Greensboro	8,977	4,480	425	983	3,089	7,503	4,236	64	420	2,783		
U. North Carolina, Wilmington	3,389	1,186	1,033	182	988	2,360	989	676	90	605		
Western Carolina U.	108	76	0	7	25	85	53	0	7	25		
Winston-Salem State U.	466	466	0	0	0	466	466	0	0	0		
Private												
Davidson C.	101	93	0	0	8	93	93	0	0	0		
Duke U.	145,766	80,288	34,064	24,517	6,897	132,051	74,183	31,567	21,218	5,083		
Elon U.	186	174	0	12	0	163	151	0	12	0		
Johnson C. Smith U.	135	28	0	107	0	4	4	0	0	0		
Wake Forest U.	88,903	38,950	3,428	33,273	13,252	75,075	25,699	3,428	32,696	13,252		
North Dakota												
Public												
North Dakota State U.	11,581	3,273	967	1,033	6,308	11,102	3,188	887	1,033	5,994		
U. North Dakota	13,830	2,478	6,248	535	4,569	13,276	2,478	6,118	510	4,170		
Ohio												
Public												
Air Force Institute of Technology	442	98	344	0	0	442	98	344	0	0		
Bowling Green State U.	2,400	1,044	389	463	504	1,813	545	333	448	487		
Central State U.	225	209	0	0	16	225	209	0	0	16		
Cleveland State U.	1,278	888	333	57	0	38	38	0	0	0		
Kent State U.	4,115	2,649	509	270	687	3,094	1,941	317	213	623		
Miami U.	3,388	2,086	246	437	619	3,107	1,949	243	296	619		
Northeast Ohio Medical U.	670	414	13	216	27	534	374	13	120	27		
Ohio State U.	173,273	56,170	23,246	34,404	59,453	150,670	50,099	14,667	27,073	58,831		
Ohio U.	4,795	1,989	1,274	444	1,088	4,196	1,845	949	429	973		
U. Akron	4,847	2,127	1,826	429	465	4,558	1,977	1,731	429	421		
U. Cincinnati	60,506	31,250	3,437	18,623	7,196	54,402	28,804	3,326	15,198	7,074		

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
Public										
East Stroudsburg U. Pennsylvania	0	0	0	0	0	0	0	0	0	0
Indiana U. Pennsylvania	1,086	201	0	844	41	958	191	0	767	0
Pennsylvania State U., Behrend	283	145	20	45	73	197	79	20	25	73
Pennsylvania State U., Harrisburg	1,586	208	0	0	1,378	1,505	127	0	0	1,378
Pennsylvania State U., University Park and Hershey Medical Center	76,252	42,753	21,229	6,926	5,344	70,537	39,335	20,476	5,636	5,090
Temple U.	25,004	17,938	2,006	4,639	421	22,934	16,616	1,915	3,982	421
U. Pittsburgh, Pittsburgh	177,564 i	71,349	16,208 i	82,353 i	7,654 i	165,305	65,847	14,057	79,424	5,977
U.S. Army War C.	19 i	0 i	5 i	14 i	0 i	19 i	0 i	5 i	14 i	0 i
West Chester U. Pennsylvania	464	396	0	68	0	231	231	0	0	0
Private										
Bryn Mawr C.	232	195	0	37	0	232	195	0	37	0
Bucknell U.	364	262	0	0	102	325	223	0	0	102
Carnegie Mellon U.	59,907	28,425	23,363	7,918	201	54,326	24,846	22,756	6,724	0
Drexel U.	18,843	10,152	4,257	2,560	1,874	17,092	9,369	4,175	1,987	1,561
Duquesne U.	1,701	1,168	31	315	187	1,168	804	31	149	184
Franklin and Marshall C.	307	99	0	206	2	283	77	0	206	0
Haverford C.	243	243	0	0	0	196	196	0	0	0
Lafayette C.	154	154	0	0	0	154	154	0	0	0
Lehigh U.	7,019	4,985	1,658	359	17	6,823	4,789	1,658	359	17
Mercyhurst U.	429	24	0	53	352	64	24	0	15	25
Philadelphia C. of Osteopathic Medicine	3,935	40	2,300	1,595	0	40	40	0	0	0
Robert Morris U.	91 i	51 i	12 i	21 i	7 i	80 i	46 i	10 i	18 i	6 i
Saint Joseph's U.	486	485	0	0	1	478	477	0	0	1
Swarthmore C.	218	150	0	68	0	218	150	0	68	0
Thomas Jefferson U.	13,194	7,566	1,071	4,067	490	11,322	7,003	711	3,328	280
U. Pennsylvania	115,627	60,608	9,226	42,102	3,691	105,609	57,681	8,210	36,395	3,323
Villanova U.	3,032	1,034	890	940	168	1,844	623	135	918	168
Rhode Island										
Public										
Naval War C.	0	0	0	0	0	0	0	0	0	0
Rhode Island C.	1,680	913	0	244	523	1,552	909	0	120	523

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
U. Rhode Island	13,210	7,291	1,948	2,676	1,295	13,139	7,286	1,909	2,649	1,295
Private										
Brown U.	36,583	17,901	1,898	12,572	4,212	33,637	16,852	1,439	11,138	4,208
Roger Williams U.	953	944	0	0	9	922	913	0	0	9
South Carolina										
Public										
C. Charleston	766	522	74	1	169	739	496	74	1	168
Citadel Military C. South Carolina	2,085	2,085	0	0	0	2,045	2,045	0	0	0
Clemson U.	40,720 i	17,767 i	6,055 i	5,961 i	10,937 i	38,737	17,084 i	5,571 i	5,460 i	10,622 i
Coastal Carolina U.	792	267	338	37	150	792	267	338	37	150
Medical U. South Carolina	25,761	16,223	6,041	3,201	296	21,759	15,662	3,993	1,808	296
South Carolina State U.	1,585 i	1,400 i	60 i	67 i	58 i	1,585 i	1,400 i	60 i	67 i	58 i
U. South Carolina, Aiken	152	0	24	128	0	152	0	24	128	0
U. South Carolina, Columbia	21,947	9,526	5,167	3,648	3,606	20,416	9,239	5,167	2,601	3,409
Winthrop U.	461	422	0	0	39	461	422	0	0	39
Private										
Clafin U.	727	229	0	0	498	727	229	0	0	498
Furman U.	786	586	25	135	40	596	524	0	32	40
South Dakota										
Public										
Black Hills State U.	1,191	1,113	0	0	78	1,191	1,113	0	0	78
Dakota State U.	1,116	1,116	0	0	0	1,108	1,108	0	0	0
South Dakota School of Mines and Technology	3,670	1,976	985	672	37	3,632	1,938	985	672	37
South Dakota State U.	7,890	3,042	718	469	3,661	5,957	2,510	564	243	2,640
U. South Dakota	3,268 i	2,852 i	151 i	265 i	0 i	2,013 i	1,597 i	151 i	265 i	0 i
Private										
Augustana U.	541	541	0	0	0	541	541	0	0	0
Tennessee										
Public										
Austin Peay State U.	17	8	0	0	9	17	8	0	0	9
East Tennessee State U.	649	405	44	200	0	405	405	0	0	0
Middle Tennessee State U.	1,849	570	0	947	332	1,040	560	0	148	332

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
Tennessee State U.	1,316	1,316	0	0	0	1,058	1,058	0	0	0
Tennessee Technological U.	4,190	1,114	370	970	1,736	3,640	1,114	253	825	1,448
U. Memphis	7,706	2,068	1,475	1,870	2,293	5,848	1,855	1,450	550	1,993
U. Tennessee, Chattanooga	1,378 i	846 i	62 i	75 i	395 i	1,158	805	0	0	353
U. Tennessee, Health Science Center	7,808 i	5,819 i	390 i	1,098 i	501 i	7,049	5,560	269	968	252
U. Tennessee, Knoxville	31,599 i	16,876 i	6,546 i	2,903 i	5,274 i	29,184	16,050	6,191	2,502	4,441
Private										
Fisk U.	912	486	426	0	0	912	486	426	0	0
Meharry Medical C.	3,954	1,799	188	1,967	0	3,954	1,799	188	1,967	0
Vanderbilt U. and Vanderbilt U. Medical Center	131,766	61,697	21,019	37,477	11,573	126,199	57,601	20,569	36,481	11,548
Texas										
Public										
Lamar U.	164	152	0	0	12	152	152	0	0	0
Prairie View A&M U.	894	478	61	59	296	793	461	61	59	212
Sam Houston State U.	952	252	46	74	580	821	246	46	68	461
Stephen F. Austin State U.	476	336	0	53	87	139	0	0	52	87
Sul Ross State U.	411 i	35 i	0 i	0 i	376 i	317 i	35 i	0 i	0 i	282 i
Tarleton State U.	1,032	50	4	0	978	807	50	0	0	757
Texas A&M International U.	88	88	0	0	0	88	88	0	0	0
Texas A&M U., College Station and Health Science Center	147,923	42,387	16,568	27,051	61,917	134,926	38,282	14,296	24,002	58,346
Texas A&M U.-Commerce	214	38	0	69	107	212	37	0	69	106
Texas A&M U.-Corpus Christi	9,155	6,739	310	453	1,653	8,892	6,715	297	435	1,445
Texas A&M U.-Kingsville	1,769	760	100	0	909	1,548	745	100	0	703
Texas A&M U.-San Antonio	0	0	0	0	0	0	0	0	0	0
Texas Southern U.	1,845	467	38	322	1,018	1,845	467	38	322	1,018
Texas State U.	1,672	1,223	442	7	0	1,317	1,024	293	0	0
Texas Tech U.	13,141 i	5,270 i	3,085 i	1,741 i	3,045 i	10,633	4,413	2,669	1,313	2,238
Texas Tech U., Health Sciences Center	5,014	1,308	233	0	3,473	1,425	1,192	233	0	0
Texas Tech U., Health Sciences Center, El Paso	3,582	1,213	0	0	2,369	830	830	0	0	0
Texas Woman's U.	337	337	0	0	0	337	337	0	0	0
U. Houston	17,268	9,309	3,113	1,502	3,344	15,753	7,950	3,105	1,430	3,268
U. Houston-Clear Lake	312	181	50	46	35	312	181	50	46	35

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
U. Houston-Downtown	107	70	0	0	37	107	70	0	0	37
U. North Texas, Denton	6,555	2,327	1,478	619	2,131	5,400	2,092	1,466	619	1,223
U. North Texas, Health Science Center	1,564 i	777 i	277 i	350 i	160 i	1,280 i	700 i	162 i	329 i	89 i
U. Texas Health Science Center, Houston	44,968	33,374	2,541	5,500	3,553	39,351	28,553	2,541	5,500	2,757
U. Texas Health Science Center, San Antonio	17,644 i	10,808 i	1,823 i	4,048 i	965 i	14,682	10,007	967	3,446	262
U. Texas Health Science Center, Tyler	0	0	0	0	0	0	0	0	0	0
U. Texas M. D. Anderson Cancer Center	40,586	23,758	6,375	10,382	71	32,102	20,323	2,647	9,071	61
U. Texas Medical Branch	26,776	11,282	4,487	5,615	5,392	21,261	11,149	4,487	5,615	10
U. Texas of the Permian Basin	536	496	0	0	40	214	214	0	0	0
U. Texas Rio Grande Valley	3,769	3,022	0	326	421	3,214	2,895	0	274	45
U. Texas Southwestern Medical Center	31,943	17,535	2,979	6,869	4,560	28,306	16,138	2,660	5,804	3,704
U. Texas, Arlington	15,923	10,438	1,879	994	2,612	15,254	9,895	1,851	930	2,578
U. Texas, Austin	237,274	51,774	80,393	59,764	45,343	106,271	43,787	6,431	13,871	42,182
U. Texas, Dallas	4,876	1,779	0	0	3,097	1,620	1,620	0	0	0
U. Texas, El Paso	20,467	6,080	1,736	11,145	1,506	19,999	5,891	1,736	10,902	1,470
U. Texas, San Antonio	9,661	4,880	7	2,121	2,653	9,080	4,792	0	1,952	2,336
U. Texas, Tyler	410	383	0	0	27	410	383	0	0	27
West Texas A&M U.	398	66	0	0	332	398	66	0	0	332
Private										
Abilene Christian U.	0	0	0	0	0	0	0	0	0	0
Baylor C. of Medicine	63,395	45,839	1,514	16,042	0	52,536	42,489	1,051	8,996	0
Baylor U.	3,316	2,375	775	106	60	2,415	1,512	775	68	60
Rice U.	24,193	14,446	3,243	1,330	5,174	22,866	13,119	3,243	1,330	5,174
Southern Methodist U.	4,005	3,329	444	91	141	3,295	2,848	444	3	0
St. Edward's U.	152	152	0	0	0	152	152	0	0	0
Texas Christian U.	1,039	902	26	92	19	966	848	26	92	0
Trinity U.	226	76	0	150	0	165	65	0	100	0
U. of the Incarnate Word	37	5	0	32	0	37	5	0	32	0
Utah										
Public										
U. Utah	59,590	33,337	9,297	7,452	9,504	59,585	33,332	9,297	7,452	9,504
Utah State U.	56,884	9,921	44,671	209	2,083	56,884	9,921	44,671	209	2,083

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
Utah Valley U.	41	14	0	27	0	41	14	0	27	0
Private										
Brigham Young U., Provo	10,536 i	5,558 i	1,808 i	1,353 i	1,817 i	10,150	5,414	1,734	1,226	1,776
Vermont										
Public										
U. Vermont	26,822	15,915	1,630	6,253	3,024	25,250	15,531	1,454	5,803	2,462
Private										
Middlebury C.	765	689	0	76	0	753	689	0	64	0
Virginia										
Public										
Christopher Newport U.	211	0	211	0	0	211	0	211	0	0
Eastern Virginia Medical School	3,218	2,426	747	45	0	2,987	2,195	747	45	0
George Mason U.	23,829	9,644	11,154	1,549	1,482	23,243	9,585	11,101	1,246	1,311
James Madison U.	378 i	231 i	31 i	47 i	69 i	206	177	0	16	13
Norfolk State U.	576	362	214	0	0	576	362	214	0	0
Old Dominion U.	10,813	3,613	1,845	3,900	1,455	10,154	3,310	1,845	3,881	1,118
U. of Mary Washington	191	163	0	0	28	163	163	0	0	0
U. Virginia's C. Wise	682	25	0	59	598	186	25	0	54	107
U. Virginia, Charlottesville	85,142	32,495	20,058	12,660	19,929	74,811	29,955	16,741	9,957	18,158
Virginia Commonwealth U.	17,365 i	8,575 i	3,417 i	3,585 i	1,788 i	10,424	7,320	1,442	1,217	445
Virginia Military Institute	1,262	1,262	0	0	0	1,047	1,047	0	0	0
Virginia Polytechnic Institute and State U.	54,171 i	26,600 i	21,610 i	1,846 i	4,115 i	48,857	25,636	19,106	0	4,115
Virginia State U.	567	567	0	0	0	567	567	0	0	0
William & Mary	13,255	2,575	677	1,853	8,150	11,273	1,825	515	1,594	7,339
Private										
Edward Via C. of Osteopathic Medicine	165	8	13	54	90	98	8	0	0	90
Hampton U.	661	661	0	0	0	661	661	0	0	0
Marymount U.	35	0	35	0	0	35	0	35	0	0
U. Richmond	66	25	0	0	41	25	25	0	0	0
Washington										
Public										
Central Washington U.	300	158	0	142	0	300	158	0	142	0

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
Eastern Washington U.	302	80	0	2	220	2	2	0	0	0
Northwest Indian C.	0	0	0	0	0	0	0	0	0	0
U. Washington, Bothell	686	313	0	373	0	280	233	0	47	0
U. Washington, Seattle	235,310	83,007	16,108	107,132	29,063	213,134	74,747	15,374	97,462	25,551
U. Washington, Tacoma	2,458	126	345	112	1,875	2,416	89	345	112	1,870
Washington State U.	26,699	13,066	2,022	4,674	6,937	24,924	13,026	2,019	3,163	6,716
Western Washington U.	1,180	767	0	245	168	1,137	752	0	217	168
Private										
Seattle U.	132	132	0	0	0	105	105	0	0	0
U. Puget Sound	63	63	0	0	0	63	63	0	0	0
Whitman C.	70	70	0	0	0	70	70	0	0	0
West Virginia										
Public										
Marshall U.	3,496	1,649	61	158	1,628	3,234	1,580	0	74	1,580
West Virginia School of Osteopathic Medicine	479	479	0	0	0	468	468	0	0	0
West Virginia State U.	292	257	0	0	35	257	257	0	0	0
West Virginia U.	23,659	8,761	6,068	4,197	4,633	21,484	8,175	5,438	3,754	4,117
Private										
U. Charleston	217	217	0	0	0	217	217	0	0	0
Wisconsin										
Public										
U. Wisconsin-Eau Claire	38	38	0	0	0	37	37	0	0	0
U. Wisconsin-Green Bay	56	2	18	14	22	51	2	17	12	20
U. Wisconsin-La Crosse	667	272	0	0	395	627	232	0	0	395
U. Wisconsin-Madison	125,884	70,110	8,671	19,690	27,413	112,769	64,929	6,310	14,266	27,264
U. Wisconsin-Milwaukee	4,682	2,400	509	610	1,163	4,282	2,312	403	533	1,034
U. Wisconsin-Oshkosh	420	390	0	0	30	420	390	0	0	30
U. Wisconsin-Platteville	54	35	3	5	11	45	30	2	4	9
U. Wisconsin-Stevens Point	607	515	1	17	74	338	287	1	0	50
U. Wisconsin-Superior	197	113	0	0	84	197	113	0	0	84
Private										
Marquette U.	2,452	1,846	243	363	0	2,452	1,846	243	363	0

TABLE 76

Total and federally financed higher education R&D expenditures received as a subrecipient, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities	All R&D expenditures received	From higher education pass-through entities	From businesses	From nonprofit organizations	From other pass-through entities
Medical C. Wisconsin	20,769	7,997	1,146	8,702	2,924	18,202	7,118	1,146	7,164	2,774
Milwaukee School of Engineering	362	362	0	0	0	280	280	0	0	0
Northland C.	30 i	0 i	4 i	15 i	11 i	29 i	0 i	4 i	14 i	11 i
Wyoming										
Public										
U. Wyoming	11,019	5,338	1,026	165	4,490	11,019	5,338	1,026	165	4,490
Guam										
Public										
U. Guam	1,305	1,201	0	86	18	1,255	1,201	0	36	18
Puerto Rico										
Public										
U. Puerto Rico, Cayey	90	90	0	0	0	90	90	0	0	0
U. Puerto Rico, Humacao	111	111	0	0	0	111	111	0	0	0
U. Puerto Rico, Mayaguez	1,574	1,323	0	112	139	1,323	1,323	0	0	0
U. Puerto Rico, Medical Sciences Campus	6,344	5,870	0	474	0	6,344	5,870	0	474	0
U. Puerto Rico, Rio Piedras	2,552	2,216	0	3	333	2,552	2,216	0	3	333
Private										
U. Ana G. Mendez, Gurabo	0	0	0	0	0	0	0	0	0	0
U. Central del Caribe	1,900	1,299	0	0	601	1,140	1,140	0	0	0
Virgin Islands										
Public										
U. of the Virgin Islands	4,070	838	48	74	3,110	2,938	838	0	0	2,100

i = imputed.

^a The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^b The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^c The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^d Johns Hopkins University includes the Applied Physics Laboratory, with zero in both total and federally financed R&D expenditures received as a subrecipient in FY 2022.

Note(s):

This table includes only institutions reporting \$1 million or more in total R&D expenditures in 2021. Institutions reporting less than \$1 million in total R&D expenditures in 2021 completed a shorter version of the survey form in FY 2022, and that form only requested R&D expenditures received from higher education institutions. For a listing of R&D expenditures received from higher education institutions at institutions completing the shorter version of the survey, see [table 85](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
United States	8,521,194	4,680,744	1,583,550	1,518,369	738,531	7,336,299	4,205,105	1,283,633	1,284,950	562,611
Alabama										
Public										
Alabama A&M U.	357	287	70	0	0	287	287	0	0	0
Alabama State U.	297	297	0	0	0	297	297	0	0	0
Auburn U., Auburn	9,752	5,514 i	1,959 i	620 i	1,659 i	9,389	5,186 i	1,924 i	620 i	1,659 i
Troy U.	117	117	0	0	0	117	117	0	0	0
U. Alabama, Birmingham	87,099	51,392	22,694	12,471	542	80,605	50,826	19,486	9,822	471
U. Alabama, Huntsville	5,154	4,143	538	323	150	4,974	4,113	538	323	0
U. Alabama, Tuscaloosa	7,181	3,892	2,983	227	79	6,891	3,691	2,955	187	58
U. South Alabama	4,677	3,742	235	140	560	3,570	2,862	235	140	333
Private										
Tuskegee U.	576	549	27	0	0	576	549	27	0	0
Alaska										
Public										
U. Alaska, Anchorage	1,482	0	NA	NA	1,482	1,482	0	0 i	0 i	1,482 i
U. Alaska, Fairbanks	33,881	19	NA	29	33,833 i	33,881	19	0 i	29 i	33,833 i
U. Alaska, Southeast	52	0	0	40	12	52	0	0	40	12
Private										
Alaska Pacific U.	0	0	0	0	0	0	0	0	0	0
Arizona										
Public										
Arizona State U.	66,972	33,140	15,250	14,282	4,300	58,744	29,559	13,974	11,900	3,311
Dine C.	601	601	0	0	0	601	601	0	0	0
Northern Arizona U.	6,310	1,896	924	1,610	1,880	6,305	1,896	924	1,610	1,875
U. Arizona	58,598	27,781	18,711	10,112	1,994	57,639	27,041	18,690	9,995	1,913
Private										
Sonoran U. Health Sciences	0	0	0	0	0	0	0	0	0	0
Arkansas										
Public										
Arkansas State U., Jonesboro	465	450	15	0	0	436	436	0	0	0
U. Arkansas for Medical Sciences	12,630	10,258	464	1,808	100	11,889	9,625	464	1,700	100
U. Arkansas, Fayetteville	10,331	8,296	568	361	1,106	9,023	7,714	435	339	535

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
U. Arkansas, Little Rock	1,910	1,910	0	0	0	1,910	1,910	0	0	0
U. Arkansas, Pine Bluff	212	167	45	0	0	212	167	45	0	0
U. Central Arkansas	186	179	0	0	7	75	75	0	0	0
California										
Public										
California Polytechnic State U., San Luis Obispo	1,317	726	52	323	216	700	429	0	55	216
California State Polytechnic U., Humboldt	1,435	153	318	5	959	111	0	111	0	0
California State Polytechnic U., Pomona	472	472	0	0	0	417	417	0	0	0
California State U., Bakersfield	0	0	0	0	0	0	0	0	0	0
California State U., Channel Islands	115	115	0	0	0	101	101	0	0	0
California State U., Chico	752	600	119	33	0	722	570	119	33	0
California State U., Dominguez Hills	150	150	0	0	0	150	150	0	0	0
California State U., East Bay	5,072	243	0	2,182	2,647	4,571	107	0	2,182	2,282
California State U., Fresno	590	553	32	5	0	349	317	32	0	0
California State U., Fullerton	283	172	110	1	0	282	172	110	0	0
California State U., Long Beach	745	548	0	152	45	528	528	0	0	0
California State U., Los Angeles	326	247	0	79	0	273	194	0	79	0
California State U., Maritime Academy	22	22	0	0	0	0	0	0	0	0
California State U., Monterey Bay	1,280	1,280	0	0	0	673	673	0	0	0
California State U., Northridge	761	711	0	50	0	665	635	0	30	0
California State U., Sacramento	3,419	935	2,455	5	24	71	51	0	5	15
California State U., San Bernardino	526	526	0	0	0	156	156	0	0	0
California State U., San Marcos	555	514	0	41	0	541	500	0	41	0
California State U., Stanislaus	49	49	0	0	0	0	0	0	0	0
Naval Postgraduate School	1,194 i	1,194 i	0 i	0 i	0 i	1,194 i	1,194 i	0 i	0 i	0 i
San Diego State U.	5,956	3,546	200	1,493	717	5,132	3,156	200	1,255	521
San Francisco State U.	1,558	1,247	59	106	146	1,217	1,082	0	36	99
San Jose State U.	3,527	3,465	0	28	34	974	933	0	28	13
Sonoma State U.	723	231	33	459	0	723	231	33	459	0
U. California, Berkeley	82,865	46,816 i	15,622 i	10,939 i	9,488 i	64,337	36,617 i	12,192 i	8,606 i	6,922 i
U. California, Davis	52,099	29,640 i	9,876 i	6,969 i	5,614 i	51,877	29,524 i	9,832 i	6,939 i	5,582 i
U. California, Irvine	28,949	24,531 i	1,522 i	2,705 i	191 i	25,173	21,398 i	1,257 i	2,518 i	0 i
U. California, Los Angeles	196,118	107,303 i	38,369 i	26,827 i	23,619 i	148,407	84,467 i	28,125 i	19,856 i	15,959 i

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
U. California, Merced	1,775	490 i	174 i	122 i	989 i	887	490 i	174 i	122 i	101 i
U. California, Office of the President	25	0 i	0 i	0 i	25 i	0	0 i	0 i	0 i	0 i
U. California, Riverside	13,642	12,837 i	342 i	463 i	0 i	10,662	9,967 i	232 i	463 i	0 i
U. California, San Diego	126,465	70,675 i	24,126 i	16,873 i	14,791 i	95,158	54,158 i	18,033 i	12,729 i	10,238 i
U. California, San Francisco	145,634	80,539 i	28,097 i	19,633 i	17,365 i	106,666	60,708 i	20,214 i	14,269 i	11,475 i
U. California, Santa Barbara	25,474	19,070 i	2,192 i	798 i	3,414 i	17,937	14,549 i	2,192 i	798 i	398 i
U. California, Santa Cruz	14,816	10,667 i	2,473 i	1,676 i	0 i	12,998	9,086 i	2,236 i	1,676 i	0 i
Private										
Azusa Pacific U.	0	0	0	0	0	0	0	0	0	0
Biola U.	120 i	62 i	18 i	31 i	9 i	0	0	0	0	0
California Institute of Technology	64,169	40,688	17,892	2,369	3,220	54,927	35,371	15,578	2,197	1,781
California Lutheran U.	0	0	0	0	0	0	0	0	0	0
Chapman U.	3,888	3,810	0	78	0	2,578	2,500	0	78	0
Charles R. Drew U. of Medicine and Science	1,098	0	0	1,098	0	1,098	0	0	1,098	0
Claremont Graduate U.	304	304	0	0	0	11	11	0	0	0
Claremont McKenna C.	300	300	0	0	0	300	300	0	0	0
Harvey Mudd C.	46	46	0	0	0	46	46	0	0	0
High Tech High Graduate School of Ed.	113	113	0	0	0	0	0	0	0	0
Keck Graduate Institute	6	6	0	0	0	6	6	0	0	0
La Sierra U.	0	0	0	0	0	0	0	0	0	0
Loma Linda U.	1,116	808	174	112	22	778	643	1	112	22
Loyola Marymount U.	332	310	0	22	0	270	270	0	0	0
Marshall B. Ketchum U.	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i
Occidental C.	133 i	117 i	0 i	0 i	16 i	117 i	117 i	0 i	0 i	0 i
Pepperdine U.	260	159	0	101	0	24	24	0	0	0
Pomona C.	11	11	0	0	0	11	11	0	0	0
Santa Clara U.	147	57	0	90	0	147	57	0	90	0
Scripps Research Institute	58,159	15,920	14,390	26,409	1,440	57,362	15,123	14,390	26,409	1,440
Stanford U.	97,533	62,587	6,138	17,823	10,985	81,595	53,454	4,731	15,256	8,154
Touro U., California	10	10	0	0	0	10	10	0	0	0
U. of the Pacific	22	18	4	0	0	22	18	4	0	0
U. San Diego	1,679	1,250	47	360	22	1,329	1,114	0	215	0
U. San Francisco	27	27	0	0	0	24	24	0	0	0

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
U. Southern California	150,298	91,990	19,903	36,352	2,053	114,922	75,554	11,772	25,908	1,688
Western U. of Health Sciences	789	411	301	0	77	789	411	301	0	77
Colorado										
Public										
Colorado School of Mines	8,248	5,747	1,846	422	233	7,814	5,370	1,826	400	218
Colorado State U., Fort Collins	25,024	17,241	3,174	1,807	2,802	22,190	15,469	2,852	1,515	2,354
Colorado State U., Pueblo	84	84	0	0	0	84	84	0	0	0
Fort Lewis C.	336	336	0	0	0	336	336	0	0	0
U. Colorado Anschutz Medical Campus ^a	58,673	33,197	6,156	12,824	6,496	47,983	29,741	4,788	10,569	2,885
U. Colorado Boulder	80,995	35,087	38,561	3,858	3,489	75,375	32,399	37,282	2,934	2,760
U. Colorado Colorado Springs	863	825	24	14	0	840	802	24	14	0
U. Colorado Denver ^a	490	343	84	3	60	398	340	55	3	0
U. Northern Colorado	184	161	23	0	0	184	161	23	0	0
U.S. Air Force Academy	0	0	0	0	0	0	0	0	0	0
Private										
Colorado C.	0	0	0	0	0	0	0	0	0	0
U. Denver	5,010	2,537	179	2,294	0	4,355	2,334	48	1,973	0
Connecticut										
Public										
Central Connecticut State U.	0	0	0	0	0	0	0	0	0	0
Eastern Connecticut State U.	0	0	0	0	0	0	0	0	0	0
Southern Connecticut State U.	109	85	24	0	0	109	85	24	0	0
U. Connecticut	47,719	41,049	3,324	2,825	521	45,948	39,793	3,093	2,590	472
Private										
Connecticut C.	43	43	0	0	0	43	43	0	0	0
Trinity C., Hartford	458	458	0	0	0	458	458	0	0	0
U. Hartford	496	487	6	0	3	490	487	0	0	3
U. New Haven	321	97	0	224	0	276	52	0	224	0
Wesleyan U.	247	247	0	0	0	73	73	0	0	0
Yale U.	87,507	47,369	2,703	30,731	6,704	82,378	45,462	2,442	28,463	6,011
Delaware										
Public										
Delaware State U.	2,982	2,982	0	0	0	2,982	2,982	0	0	0

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
U. Delaware	37,600	23,478	11,828	704	1,590	30,619	19,774	9,696	559	590
District of Columbia										
Public										
National Defense U.	0	0	0	0	0	0	0	0	0	0
U. of the District of Columbia	0	0	0	0	0	0	0	0	0	0
Private										
American U.	2,375	1,218	299	806	52	1,540	854	299	387	0
Catholic U. of America	4,233	3,488	353	392	0	4,233	3,488	353	392	0
Gallaudet U.	1,141	475	317	315	34	1,061	475	237	315	34
George Washington U.	49,270	31,921	3,547	11,427	2,375	45,562	30,645	2,777	10,042	2,098
Georgetown U.	23,198	9,310	3,076	6,294	4,518	15,334	6,864	2,265	3,897	2,308
Howard U.	2,727	2,004	262	461	0	1,888	1,609	85	194	0
Florida										
Public										
Florida A&M U.	5,164	4,679	218	170	97	4,929	4,679	74	170	6
Florida Atlantic U.	2,872	2,843	0	29	0	2,364	2,335	0	29	0
Florida Gulf Coast U.	1,552	605	471	33	443	1,311	542	351	18	400
Florida International U.	15,301	10,251	1,767	2,031	1,252	13,339	9,373	1,667	1,100	1,199
Florida Polytechnic U.	92	92	0	0	0	89	89	0	0	0
Florida State U.	29,434	14,787	2,877	5,494	6,276	28,828	14,317	2,877	5,402	6,232
U. Central Florida	22,256	10,006	8,800	2,557	893	18,321	8,798	8,359	429	735
U. Florida	63,926	45,237	3,800	12,325	2,564	56,302	40,056	3,652	10,356	2,238
U. North Florida	30	17	0	13	0	30	17	0	13	0
U. South Florida ^b	48,925	25,360	7,922	8,193	7,450	46,872	24,933	7,647	7,882	6,410
U. West Florida	10,035	10,024	11	0	0	9,235	9,224	11	0	0
Private										
Embry-Riddle Aeronautical U.	10,612	4,507	5,955	0	150	10,602	4,497	5,955	0	150
Florida Institute of Technology	1,957	1,529	361	64	3	1,403	1,145	255	0	3
Nova Southeastern U.	2,250	703	986	505	56	1,170	486	164	479	41
U. Miami	45,352	33,813	3,569	7,923	47	43,476	32,364	3,181	7,884	47
Georgia										
Public										
Augusta U.	7,183	5,547	136	1,484	16	7,183	5,547	136	1,484	16

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
Fort Valley State U.	82	82	0	0	0	76	76	0	0	0
Georgia Institute of Technology	181,846	38,543	136,510	2,870	3,923	170,201	36,104	129,761	2,304	2,032
Georgia Southern U.	48	39	0	9	0	44	35	0	9	0
Georgia State U.	17,784	9,287	1,256	4,539	2,702	14,561	8,660	529	3,120	2,252
Kennesaw State U.	202	202	0	0	0	202	202	0	0	0
Savannah State U.	109	109	0	0	0	109	109	0	0	0
U. Georgia	34,097	26,781	981	4,196	2,139	32,854	25,955	808	4,184	1,907
U. North Georgia	0	0	0	0	0	0	0	0	0	0
Private										
Clark Atlanta U.	216	204	0	12	0	204	204	0	0	0
Emory U.	123,587	54,729	17,728	42,012	9,118	94,819	50,833	6,218	33,170	4,598
Mercer U.	1,967	21	1,929	0	17	1,786	21	1,748	0	17
Morehouse C.	974	974	0	0	0	974	974	0	0	0
Morehouse School of Medicine	4,266	2,544	0	1,722	0	3,775	2,053	0	1,722	0
Spelman C.	65	65	0	0	0	65	65	0	0	0
Hawaii										
Public										
U. Hawaii, Hilo	102	34	5	21	42	102	34	5	21	42
U. Hawaii, Manoa	12,748	5,315	3,998	2,948	487	12,038	5,072	3,842	2,792	332
U. Hawaii, system office	131	0	0	131	0	131	0	0	131	0
Private										
Hawaii Pacific U.	57	57	0	0	0	57	57	0	0	0
Idaho										
Public										
Boise State U.	2,106	1,871	45	137	53	1,987	1,778	45	135	29
Idaho State U.	495	370	0	14	111	495	370	0	14	111
U. Idaho	9,271	8,400	256	313	302	8,761	7,938	256	313	254
Illinois										
Public										
Chicago State U.	314	314	0	0	0	314	314	0	0	0
Illinois State U.	3,804	1,458	197	849	1,300	3,732	1,458	125	849	1,300
Northeastern Illinois U.	65	65	0	0	0	65	65	0	0	0
Northern Illinois U.	545	494	43	0	8	514	463	43	0	8

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
Southern Illinois U., Carbondale	1,089	495	0	0	594	374	125	0	0	249
Southern Illinois U., Edwardsville	192	3	0	0	189	189	0	0	0	189
U. Illinois, Chicago	27,061	16,596	3,016	4,308	3,141	20,685	14,238	1,259	3,464	1,724
U. Illinois, Springfield	222	0	0	0	222	0	0	0	0	0
U. Illinois, Urbana-Champaign	90,557	53,022	24,759	6,495	6,281	82,990	52,150	23,550	4,743	2,547
Western Illinois U.	1,630	1,224	183	121	102	1,630	1,224	183	121	102
Private										
DePaul U.	1,274	896	12	366	0	298	62	12	224	0
Erikson Institute	0	0	0	0	0	0	0	0	0	0
Illinois Institute of Technology	3,622	2,502	488	632	0	3,622	2,502	488	632	0
Loyola U., Chicago	3,040	2,237	59	26	718	2,700	1,914	57	26	703
Midwestern U.	47	21	0	5	21	47	21	0	5	21
Northwestern U.	93,707	1,458	2,898	89,351	0	86,626	697	0	85,929	0
Rosalind Franklin U. of Medicine and Science	426	129	23	235	39	426	129	23	235	39
Rush U.	15,261	9,901	466	4,362	532	13,559	8,944	387	3,706	522
Toyota Technological Institute, Chicago	157	157	0	0	0	157	157	0	0	0
U. Chicago	80,617	48,324	509	26,276	5,508	74,951	46,970	419	25,470	2,092
Indiana										
Public										
Ball State U.	2,090	1,482	0	608	0	1,963	1,355	0	608	0
Indiana State U.	84	84	0	0	0	57	57	0	0	0
Indiana U., Bloomington	61,589	35,603	3,122	17,088	5,776	57,327	33,222	2,879	15,965	5,261
Indiana U.-Purdue U., Indianapolis	3,204	1,827	77	1,267	33	2,533	1,658	77	765	33
Purdue U., Fort Wayne	0	0	0	0	0	0	0	0	0	0
Purdue U., Northwest	108	75	33	0	0	108	75	33	0	0
Purdue U., West Lafayette	60,396	43,243	6,364	4,391	6,398	52,291	36,330	5,728	4,295	5,938
Private										
Butler U.	0	0	0	0	0	0	0	0	0	0
U. Notre Dame	30,184	18,145	558	6,734	4,747	21,708	15,890	448	3,855	1,515
Iowa										
Public										
Iowa State U.	20,390	14,534	4,478	1,076	302	16,226	12,453	2,672	911	190
U. Iowa	58,365	55,447	0	0	2,918	56,208	53,398	0	0	2,810

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
U. Northern Iowa	271	271	0	0	0	271	271	0	0	0
Private										
Des Moines U.	52	52	0	0	0	52	52	0	0	0
Drake U.	59	0	0	59	0	59	0	0	59	0
Grinnell C.	13	13	0	0	0	8	8	0	0	0
Palmer C. of Chiropractic, Davenport	950	950	0	0	0	950	950	0	0	0
Kansas										
Public										
Kansas State U.	9,635	7,335	200	447	1,653	8,751	6,972	166	322	1,291
Pittsburg State U.	0	0	0	0	0	0	0	0	0	0
U. Kansas	25,760	17,632	3,627	1,678	2,823	23,403	16,811	2,291	1,560	2,741
Wichita State U.	14,986	8,439	603	5,944	0	9,897	3,350	603	5,944	0
Kentucky										
Public										
Kentucky State U.	260	225	11	24	0	260	225	11	24	0
Morehead State U.	0	0	0	0	0	0	0	0	0	0
Murray State U.	449	142	0	307	0	449	142	0	307	0
Northern Kentucky U.	125	9	0	116	0	125	9	0	116	0
U. Kentucky	24,170	18,727	1,979	2,996	468	21,325	16,816	1,137	2,904	468
U. Louisville	9,067	5,512	1,425	1,307	823	7,801	4,891	1,152	1,084	674
Western Kentucky U.	0	0	0	0	0	0	0	0	0	0
Louisiana										
Public										
Grambling State U.	23	23	0	0	0	23	23	0	0	0
Louisiana State U., Baton Rouge	15,206	13,926	180	976	124	14,259	13,040	167	928	124
Louisiana State U., Health Sciences Center, New Orleans	5,309	1,715	0	2,215	1,379	4,538	1,556	0	1,603	1,379
Louisiana State U., Health Sciences Center, Shreveport	374	374	0	0	0	251	251	0	0	0
Louisiana Tech U.	83	78	5	0	0	71	71	0	0	0
Northwestern State U. Louisiana	0	0	0	0	0	0	0	0	0	0
Southeastern Louisiana U.	24	24	0	0	0	24	24	0	0	0
Southern U. and A&M C., Agricultural Research and Extension Center	375	375	0	0	0	375	375	0	0	0
Southern U. and A&M C., Baton Rouge	102	0	70	5	27	102	0	70	5	27
U. Louisiana, Lafayette	5,823	4,113	1,710	0	0	5,555	3,845	1,710	0	0

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
U. Massachusetts, Amherst	13,795	7,872	850	2,921	2,152	9,550	6,580	448	1,876	646
U. Massachusetts, Boston	7,047	3,698	877	2,222	250	2,269	1,329	118	630	192
U. Massachusetts, Dartmouth	378	139	81	138	20	314	139	17	138	20
U. Massachusetts, Lowell	7,558	3,422	1,462	2,626	48	6,572	3,101	1,024	2,426	21
U. Massachusetts, Medical School	42,059	26,896	3,675	9,842	1,646	40,175	26,678	3,643	9,365	489
Private										
Amherst C.	264	264	0	0	0	264	264	0	0	0
Babson C.	NA	NA	NA	NA	NA	0	0	0	0	0
Bentley U.	158	158	0	0	0	158	158	0	0	0
Boston C.	6,882	2,112	49	2,513	2,208	4,219	1,694	0	1,995	530
Boston U.	171,916	44,596	106,443	20,528	349	102,687	37,004	48,320	17,053	310
Brandeis U.	4,802	3,354	101	982	365	3,567	2,699	101	694	73
Clark U.	259	228	31	0	0	259	228	31	0	0
Franklin W. Olin C. of Engineering	173	76	0	97	0	76	76	0	0	0
Harvard U.	168,324	60,541	5,677	34,439	67,667	129,735	48,878	5,505	27,614	47,738
Massachusetts Institute of Technology	15,441	1,428	12,578	1,225	210	14,568	1,426	12,379	553	210
MGH Institute of Health Professions	544	544	0	0	0	544	544	0	0	0
Mount Holyoke C.	4	0	0	4	0	4	0	0	4	0
New England C. of Optometry	406	406	0	0	0	406	406	0	0	0
Northeastern U.	29,937	13,456	4,932	10,973	576	28,524	13,095	4,896	10,107	426
Smith C.	111	106	0	5	0	111	106	0	5	0
Suffolk U.	230	120	0	110	0	191	81	0	110	0
Tufts U.	32,664	224	55	2,146	30,239	27,249	224	0	0	27,025
Wellesley C.	144	144	0	0	0	131	131	0	0	0
Western New England U.	655	69	504	82	0	151	69	0	82	0
Williams C.	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i
Woods Hole Oceanographic Institution	34,103	28,871	1,568	1,845	1,819	33,530	28,393	1,568	1,827	1,742
Worcester Polytechnic Institute	7,869	3,355	2,206	2,023	285	5,658	3,259	556	1,558	285
Michigan										
Public										
Central Michigan U.	3,675	3,280	0	0	395	3,646	3,256	0	0	390
Eastern Michigan U.	685	641	0	44	0	663	627	0	36	0
Grand Valley State U.	95	77	18	NA	NA	95	77	18	0	0

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
Alcorn State U.	538 i	538 i	0 i	0 i	0 i	538 i	538 i	0 i	0 i	0 i
Jackson State U.	1,285	1,178	107	0	0	1,285	1,178	107	0	0
Mississippi State U.	30,590	16,471	4,653	3,335	6,131	29,229	16,148	4,623	2,340	6,118
U. Mississippi	6,443	5,354	208	689	192	6,248	5,354	37	665	192
U. Southern Mississippi	10,608	8,842	1,198	285	283	10,422	8,656	1,198	285	283
Private										
Tougaloo C.	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i
Missouri										
Public										
Lincoln U., Jefferson City	244	244	0	0	0	244	244	0	0	0
Missouri State U.	5,811	73	5,718	20	0	5,776	73	5,703	0	0
Missouri U. of Science and Technology	2,942	1,894	917	84	47	2,885	1,894	879	84	28
U. Missouri, Columbia	23,265	15,467	1,237	3,482	3,079	18,291	11,257	1,001	3,058	2,975
U. Missouri, Kansas City	2,175	460	232	1,377	106	2,035	397	232	1,300	106
U. Missouri, Saint Louis	1,135	541	8	317	269	736	481	8	247	0
Private										
Saint Louis U.	6,701	6,182	63	293	163	6,399	5,963	63	212	161
U. of Health Sciences and Pharmacy in St. Louis	1,014	1,014	0	0	0	857	857	0	0	0
Washington U., Saint Louis	77,830	49,069	2,589	15,421	10,751	67,486	44,242	2,083	14,390	6,771
Montana										
Public										
Montana State U., Bozeman	18,287	11,408	1,614	3,094	2,171	17,568	11,023	1,594	3,094	1,857
Montana Technological U.	430	430	0	0	0	418	418	0	0	0
U. Montana, Missoula	11,578	7,705	3,270	434	169	11,186	7,688	2,993	388	117
Nebraska										
Public										
U. Nebraska, central administration	10,405	8,649	1,647	0	109	10,405	8,649	1,647	0	109
U. Nebraska, Kearney	128	42	75	0	11	128	42	75	0	11
U. Nebraska, Lincoln	11,688	10,050	346	600	692	10,615	9,677	154	487	297
U. Nebraska, Medical Center	13,809	11,158	937	1,148	566	12,952	10,916	917	1,119	0
U. Nebraska, Omaha	4,719	3,113	780	560	266	4,700	3,094	780	560	266
Private										
Creighton U.	1,185 i	776 i	184 i	225 i	0 i	1,185 i	776 i	184 i	225 i	0 i

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed														
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients										
New Mexico Highlands U.	0	i	0	i	0	i	0	i	0	i	0	i	0	i						
New Mexico Institute of Mining and Technology	5,422		2,572		2,375		0		475		5,362		2,512		2,375		0		475	
New Mexico State U.	11,494		4,651		4,980		965		898		11,236		4,557		4,852		965		862	
U. New Mexico	61,099		31,090		12,894		12,167		4,948		58,179		30,603		12,894		11,787		2,895	
New York																				
Public																				
CUNY, Advanced Science Research Center	2,433		1,864		100		189		280		2,433		1,864		100		189		280	
CUNY, Baruch C.	98		50		0		48		0		0		0		0		0		0	
CUNY, Brooklyn C.	161		156		0		5		0		156		156		0		0		0	
CUNY, C. Staten Island	334		141		0		191		2		334		141		0		191		2	
CUNY, City C.	6,450		4,042		967		1,437		4		5,014		3,968		26		1,016		4	
CUNY, Graduate Center	344		344		0		0		0		300		300		0		0		0	
CUNY, Graduate School of Public Health and Health Policy	1,324		594		223		507		0		1,287		573		223		491		0	
CUNY, Hunter C.	3,041		1,246		305		1,464		26		2,772		1,246		41		1,464		21	
CUNY, John Jay C. of Criminal Justice	1,985		714		1,082		94		95		1,718		505		1,082		36		95	
CUNY, Lehman C.	154		154		0		0		0		154		154		0		0		0	
CUNY, New York City C. of Technology	320		320		0		0		0		320		320		0		0		0	
CUNY, Queens C.	1,920		597		952		371		0		1,920		597		952		371		0	
CUNY, system office	383		383		0		0		0		383		383		0		0		0	
CUNY, York C.	81		0		0		81		0		81		0		0		81		0	
SUNY, Binghamton U.	4,673		1,248		2,672		379		374		3,413		1,236		1,450		353		374	
SUNY, Buffalo State	73		73		0		0		0		73		73		0		0		0	
SUNY, C. Brockport	2		0		0		0		2		0		0		0		0		0	
SUNY, C. of Environmental Science and Forestry	589		448		92		30		19		248		158		58		30		2	
SUNY, C. of Optometry	10		10		0		0		0		10		10		0		0		0	
SUNY, C. Plattsburgh	19		19		0		0		0		7		7		0		0		0	
SUNY, Cobleskill	335		0		108		227		0		0		0		0		0		0	
SUNY, Downstate Health Sciences U.	8,577		7,464		287		231		595		8,346		7,277		287		187		595	
SUNY, Geneseo	38		38		0		0		0		38		38		0		0		0	
SUNY, Oswego	0		0		0		0		0		0		0		0		0		0	
SUNY, Polytechnic Institute	24,401		18,341		5,954		106		0		10,103		4,176		5,927		0		0	
SUNY, Stony Brook U.	32,312		28,999		872		1,682		759		31,469		28,277		831		1,602		759	
SUNY, U. Albany	10,103		5,880		1,489		2,362		372		8,935		5,636		1,431		1,512		356	

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
SUNY, U. Buffalo	20,378	9,640	3,379	7,359	0	15,475	9,224	1,149	5,102	0
SUNY, Upstate Medical U.	1,939	1,532	154	253	0	1,784	1,519	154	111	0
U.S. Military Academy	1,850	1,815	16	19	0	1,608	1,608	0	0	0
Private										
Albany C. of Pharmacy and Health Sciences	139	0	0	0	139	139	0	0	0	139
Albany Medical C.	705	337	0	368	0	705	337	0	368	0
Albert Einstein C. of Medicine	35,520	32,732	156	2,632	0	32,732	32,732	0	0	0
Alfred U.	42	42	0	0	0	42	42	0	0	0
Barnard C.	1,030	1,030	0	0	0	1,030	1,030	0	0	0
Canisius C.	0	0	0	0	0	0	0	0	0	0
Clarkson U.	1,126	217	128	597	184	995	203	128	555	109
Cold Spring Harbor Laboratory	9,461 i	5,620 i	1,873 i	1,847 i	121 i	8,628 i	5,620 i	1,299 i	1,606 i	103 i
Colgate U.	254	254	0	0	0	254	254	0	0	0
Columbia U. in the City of New York	128,406	64,318	3,109	45,212	15,767	120,636	61,976	2,824	44,461	11,375
Cornell U.	106,417	69,040	7,722	16,301	13,354	89,910	61,664	6,599	13,514	8,133
Fordham U.	970	970	0	0	0	970	970	0	0	0
Hamilton C.	84	79	0	5	0	43	43	0	0	0
Hobart and William Smith Colleges	49	16	0	33	0	12	0	0	12	0
Hofstra U.	140	24	0	66	50	24	24	0	0	0
Icahn School of Medicine at Mount Sinai	110,579	52,800	24,134	24,276	9,369	106,715	50,915	24,118	22,539	9,143
Ithaca C.	28	20	0	8	0	28	20	0	8	0
Long Island U.	532	310	0	222	0	532	310	0	222	0
Manhattan C.	26	26	0	0	0	0	0	0	0	0
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	0	0	0	0	0	0	0	0	0	0
New School	1,689	78	0	1,611	0	8	8	0	0	0
New York Institute of Technology	423	423	0	0	0	423	423	0	0	0
New York Medical C.	464	457	7	0	0	457	457	0	0	0
New York U.	175,515	121,268	2,885	44,157	7,205	163,519	114,804	2,582	40,503	5,630
Pace U.	857	617	0	240	0	857	617	0	240	0
Pratt Institute	0	0	0	0	0	0	0	0	0	0
Rensselaer Polytechnic Institute	7,041	4,572	756	1,396	317	6,719	4,296	730	1,396	297
Rochester Institute of Technology	2,210	1,515	256	403	36	2,097	1,444	249	368	36

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
Public										
North Dakota State U.	8,142	7,369	773	0	0	6,626	5,901	725	0	0
U. North Dakota	21,702	4,578	15,600	1,238	286	11,188	4,466	5,247	1,225	250
Ohio										
Public										
Air Force Institute of Technology	0	0	0	0	0	0	0	0	0	0
Bowling Green State U.	1,132	1,075	46	6	5	1,095	1,044	46	0	5
Central State U.	213	204	0	8	1	205	204	0	0	1
Cleveland State U.	5,589	4,429	659	501	0	5,070	4,225	484	361	0
Kent State U.	2,717	1,307	123	1,238	49	2,129	821	99	1,160	49
Miami U.	839	573	222	34	10	548	481	38	29	0
Northeast Ohio Medical U.	143	141	0	0	2	141	141	0	0	0
Ohio State U.	97,418	62,491	4,891	24,020	6,016	73,818	47,907	3,611	16,847	5,453
Ohio U.	2,278	1,520	683	14	61	2,000	1,501	474	14	11
U. Akron	967	736	231	0	0	930	699	231	0	0
U. Cincinnati	31,648	14,103	1,814	15,496	235	28,540	12,878	1,736	13,713	213
U. Toledo	2,215	1,982	179	12	42	2,098	1,906	149	12	31
Wright State U.	5,290	4,484	77	422	307	5,254	4,463	62	422	307
Youngstown State U.	86	65	21	0	0	86	65	21	0	0
Private										
C. Wooster	0	0	0	0	0	0	0	0	0	0
Case Western Reserve U.	48,871	38,782	1,636	5,689	2,764	43,175	36,111	1,606	4,003	1,455
Heidelberg U.	0	0	0	0	0	0	0	0	0	0
Kenyon C.	15	15	0	0	0	15	15	0	0	0
U. Dayton	46,655	6,108	39,693	813	41	46,655	6,108	39,693	813	41
Oklahoma										
Public										
Langston U.	202	149	0	0	53	172	128	0	0	44
Oklahoma State U., Center for Health Sciences	208	170	0	0	38	208	170	0	0	38
Oklahoma State U., Stillwater	8,129	6,918	697	266	248	7,387	6,352	571	266	198
U. Central Oklahoma	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i
U. Oklahoma, Norman and Health Science Center	55,225	15,577	32,296	6,033	1,319	52,662	13,825	31,659	5,859	1,319
U. Oklahoma, Tulsa	35	35	0	0	0	3	3	0	0	0

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
Public										
Black Hills State U.	0	0	0	0	0	0	0	0	0	0
Dakota State U.	684	667	17	0	0	684	667	17	0	0
South Dakota School of Mines and Technology	2,812	2,756	0	49	7	2,524	2,468	0	49	7
South Dakota State U.	2,322	1,956	87	66	213	2,096	1,732	87	65	212
U. South Dakota	3,675	2,544	92	1,039	0	3,500	2,544	92	864	0
Private										
Augustana U.	0	0	0	0	0	0	0	0	0	0
Tennessee										
Public										
Austin Peay State U.	1	1	0	0	0	1	1	0	0	0
East Tennessee State U.	673	673	0	0	0	584	584	0	0	0
Middle Tennessee State U.	465	430	35	0	0	465	430	35	0	0
Tennessee State U.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tennessee Technological U.	369	269	47	17	36	369	269	47	17	36
U. Memphis	3,708	2,213	498	829	168	2,910	2,005	430	308	167
U. Tennessee, Chattanooga	373	373	0	0	0	373	373	0	0	0
U. Tennessee, Health Science Center	8,539	7,233	455	321	530	8,140	7,108	455	321	256
U. Tennessee, Knoxville	10,790	8,148	1,155	831	656	10,315	7,812	1,100	776	627
Private										
Fisk U.	182	182	0	0	0	182	182	0	0	0
Meharry Medical C.	1,213	561	0	652	0	1,213	561	0	652	0
Vanderbilt U. and Vanderbilt U. Medical Center	136,861	99,029	6,760	27,947	3,125	132,387	96,042	6,562	26,757	3,026
Texas										
Public										
Lamar U.	103	63	0	0	40	0	0	0	0	0
Prairie View A&M U.	1,305	1,295	0	0	10	1,239	1,239	0	0	0
Sam Houston State U.	491	481	0	0	10	478	468	0	0	10
Stephen F. Austin State U.	17	17	0	0	0	17	17	0	0	0
Sul Ross State U.	0	0	0	0	0	0	0	0	0	0
Tarleton State U.	549	0	4	0	545	437	0	0	0	437
Texas A&M International U.	38	38	0	0	0	38	38	0	0	0
Texas A&M U., College Station and Health Science Center	101,870	40,911	50,408	3,517	7,034	81,829	37,141	35,614	3,289	5,785

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
Texas A&M U.-Commerce	150	150	0	0	0	150	150	0	0	0
Texas A&M U.-Corpus Christi	3,358	861	2,476	17	4	1,952	529	1,406	13	4
Texas A&M U.-Kingsville	348	348	0	0	0	323	323	0	0	0
Texas A&M U.-San Antonio	0	0	0	0	0	0	0	0	0	0
Texas Southern U.	1,070	635	0	208	227	635	635	0	0	0
Texas State U.	4,675	2,280	1,892	234	269	4,201	2,257	1,532	209	203
Texas Tech U.	5,976	4,374	1,461	12	129	3,857	2,256	1,461	11	129
Texas Tech U., Health Sciences Center	1,797	1,528	269	0	0	1,499	1,460	39	0	0
Texas Tech U., Health Sciences Center, El Paso	458	0	0	85	373	160	0	0	85	75
Texas Woman's U.	0	0	0	0	0	0	0	0	0	0
U. Houston	11,678	9,107	1,362	894	315	10,597	8,452	1,362	691	92
U. Houston-Clear Lake	0	0	0	0	0	0	0	0	0	0
U. Houston-Downtown	126	126	0	0	0	126	126	0	0	0
U. North Texas, Denton	3,216	2,537	619	60	0	2,523	2,408	55	60	0
U. North Texas, Health Science Center	763 i	635 i	7 i	102 i	19 i	746 i	618 i	7 i	102 i	19 i
U. Texas Health Science Center, Houston	21,506	17,579	270	2,948	709	19,723	16,048	111	2,869	695
U. Texas Health Science Center, San Antonio	18,786	15,637	134	2,198	817	17,007	14,791	87	1,312	817
U. Texas Health Science Center, Tyler	758	0	0	0	758	758	0	0	0	758
U. Texas M. D. Anderson Cancer Center	31,113	19,764	686	9,329	1,334	22,574	14,138	657	6,862	917
U. Texas Medical Branch	19,449	10,481	3,208	1,224	4,536	18,563	9,595	3,208	1,224	4,536
U. Texas of the Permian Basin	0	0	0	0	0	0	0	0	0	0
U. Texas Rio Grande Valley	2,212	1,911	4	24	273	2,212	1,911	4	24	273
U. Texas Southwestern Medical Center	33,986	17,492	2,273	9,403	4,818	31,525	17,332	2,273	8,319	3,601
U. Texas, Arlington	8,940	6,741	148	2,000	51	8,623	6,424	148	2,000	51
U. Texas, Austin	61,710	40,211	11,544	9,184	771	60,909	39,806	11,410	8,934	759
U. Texas, Dallas	2,612	143	0	0	2,469	2,300	143	0	0	2,157
U. Texas, El Paso	6,602	4,535	108	1,171	788	6,062	4,365	108	806	783
U. Texas, San Antonio	11,849	10,164	601	972	112	10,146	8,929	566	651	0
U. Texas, Tyler	58	51	0	7	0	58	51	0	7	0
West Texas A&M U.	27	27	0	0	0	27	27	0	0	0
Private										
Abilene Christian U.	0	0	0	0	0	0	0	0	0	0
Baylor C. of Medicine	56,985	50,898	1,846	3,865	376	51,608	47,371	1,578	2,659	0

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
Baylor U.	2,574	1,454	208	855	57	2,149	1,377	0	756	16
Rice U.	28,815	15,372	5,492	1,712	6,239	16,001	12,973	1,060	1,702	266
Southern Methodist U.	1,366	1,120	45	46	155	1,366	1,120	45	46	155
St. Edward's U.	50	50	0	0	0	50	50	0	0	0
Texas Christian U.	662	497	165	0	0	662	497	165	0	0
Trinity U.	171	58	0	113	0	171	58	0	113	0
U. of the Incarnate Word	0	0	0	0	0	0	0	0	0	0
Utah										
Public										
U. Utah	53,345	2,618	1,039	3,529	46,159	47,996	1,610	5	332	46,049
Utah State U.	38,767	9,957	28,352	129	329	38,641	9,865	28,318	129	329
Utah Valley U.	80	80	0	0	0	74	74	0	0	0
Private										
Brigham Young U., Provo	3,881	2,578	1,030	68	205	3,808	2,558	1,023	68	159
Vermont										
Public										
U. Vermont	17,971	14,486	431	2,635	419	17,205	14,395	414	1,977	419
Private										
Middlebury C.	149	149	0	0	0	149	149	0	0	0
Virginia										
Public										
Christopher Newport U.	394	0	0	362	32	325	0	0	293	32
Eastern Virginia Medical School	2,898	2,898	0	0	0	2,828	2,828	0	0	0
George Mason U.	48,001	7,608	38,033	1,199	1,161	46,487	6,656	37,937	1,141	753
James Madison U.	28	28	NA	NA	NA	28	28	0	0	0
Norfolk State U.	331	331	0	0	0	331	331	0	0	0
Old Dominion U.	3,710	1,816	794	959	141	2,147	1,251	676	79	141
U. of Mary Washington	0	0	0	0	0	0	0	0	0	0
U. Virginia's C. Wise	34	0	0	34	0	0	0	0	0	0
U. Virginia, Charlottesville	41,306	27,532	2,848	6,643	4,283	36,040	26,336	2,176	5,240	2,288
Virginia Commonwealth U.	21,025	16,199	2,192	986	1,648	16,264	12,643	1,112	910	1,599
Virginia Military Institute	55	55	0	0	0	0	0	0	0	0
Virginia Polytechnic Institute and State U.	31,654	13,955	7,355	6,007	4,337	26,982	12,911	6,516	4,542	3,013

TABLE 77

Total and federally financed higher education R&D expenditures passed through to subrecipients, by state, institutional control, and institution: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Total					Federally financed				
	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients	All R&D expenditures passed through	To higher education subrecipients	To businesses	To nonprofit organizations	To other subrecipients
U. Wisconsin-La Crosse	79	79	0	0	0	79	79	0	0	0
U. Wisconsin-Madison	87,714	61,256	3,594	18,598	4,266	82,298	58,990	2,395	17,384	3,529
U. Wisconsin-Milwaukee	4,944	4,055	57	419	413	4,838	3,998	34	419	387
U. Wisconsin-Oshkosh	381	381	0	0	0	381	381	0	0	0
U. Wisconsin-Platteville	39 i	27 i	5 i	6 i	1 i	36 i	24 i	5 i	6 i	1 i
U. Wisconsin-Stevens Point	15	10	0	5	0	15	10	0	5	0
U. Wisconsin-Superior	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i
Private										
Marquette U.	2,660	1,968	355	139	198	2,348	1,781	321	48	198
Medical C. Wisconsin	32,610	12,803	4,481	15,285	41	32,403	12,658	4,481	15,223	41
Milwaukee School of Engineering	13	13	0	0	0	13	13	0	0	0
Northland C.	10 i	0 i	2 i	7 i	1 i	8 i	0 i	2 i	5 i	1 i
Wyoming										
Public										
U. Wyoming	14,480	5,210	8,079	803	388	14,284	5,129	8,000	803	352
Guam										
Public										
U. Guam	433	134	299	0	0	0	0	0	0	0
Puerto Rico										
Public										
U. Puerto Rico, Cayey	81	81	0	0	0	81	81	0	0	0
U. Puerto Rico, Humacao	181	181	0	0	0	181	181	0	0	0
U. Puerto Rico, Mayaguez	1,323	1,063	260	0	0	1,063	1,063	0	0	0
U. Puerto Rico, Medical Sciences Campus	3,344	1,965	1,379	0	0	3,344	1,965	1,379	0	0
U. Puerto Rico, Rio Piedras	4,740	4,720	0	20	0	4,517	4,517	0	0	0
Private										
U. Ana G. Mendez, Gurabo	0	0	0	0	0	0	0	0	0	0
U. Central del Caribe	0	0	0	0	0	0	0	0	0	0
Virgin Islands										
Public										
U. of the Virgin Islands	3,990	3,339	0	0	651	3,990	3,339	0	0	651

i = imputed. NA = not available; data were not provided by institution.

^a The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^b The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^c The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^d Johns Hopkins University includes the Applied Physics Laboratory, with zero in both total and federally financed R&D expenditures passed through to subrecipients in FY 2022.

Note(s):

This table includes only institutions reporting \$1 million or more in total R&D expenditures in 2021. Institutions reporting less than \$1 million in total R&D expenditures in 2021 completed a shorter version of the survey form in FY 2022, and that form requested R&D expenditures passed through only to higher education institutions. For a list of R&D expenditures passed through to higher education institutions at institutions completing the shorter version of the survey, see [table 85](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff	
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs
United States	1,030,999	496,129.4	371,468	198,599.8	384,411	177,336.1	275,120	120,193.5
Alabama								
Public								
Alabama A&M U.	290	112.7	46	21.1	135	54.6	109	37.0
Alabama State U.	301	126.3	168	77.2	65	26.2	68	22.9
Auburn U., Auburn	4,202	1,710.7	1,389	638.5	1,804	729.7	1,009	342.5
Troy U.	38	17.5	17	8.5	14	7.3	7	1.7
U. Alabama, Birmingham	9,811	6,671.0	4,264	2,899.0	3,953	2,688.0	1,594	1,084.0
U. Alabama, Huntsville	1,463	632.3	832	382.4	548	221.7	83	28.2
U. Alabama, Tuscaloosa	2,912	1,188.6	1,314	562.8	1,482	568.2	116	57.6
U. South Alabama	594	248.2	175	80.4	393	159.0	26	8.8
Private								
Tuskegee U.	20	19.0	20	6.0	0	10.0	0	3.0
Alaska								
Public								
U. Alaska, Anchorage	442	164.8	76	35.1	86	34.7	280	95.0
U. Alaska, Fairbanks	1,336	543.4	390	179.2	662	267.9	284	96.3
U. Alaska, Southeast	256	105.4	110	50.7	82	33.0	64	21.7
Private								
Alaska Pacific U.	51	9.9	27	6.3	18	2.7	6	0.9
Arizona								
Public								
Arizona State U.	9,812	1,365.0	5,205	811.0	2,452	151.0	2,155	403.0
Dine C.	56	20.5	10	4.6	5	2.0	41	13.9
Northern Arizona U.	1,252	403.0	228	201.0	611	112.0	413	90.0
U. Arizona	9,155	3,609.0	1,444	581.0	2,572	1,489.0	5,139	1,539.0
Private								
Sonoran U. Health Sciences	8	6.5	6	5.0	2	1.5	0	0.0
Arkansas								
Public								
Arkansas State U., Jonesboro	273	64.2	110	27.8	145	26.5	18	9.9
U. Arkansas for Medical Sciences	1,507	833.0	518	310.0	322	257.0	667	266.0
U. Arkansas, Fayetteville	3,152	1,497.0	1,224	524.0	1,416	723.0	512	250.0
U. Arkansas, Little Rock	449	180.1	115	52.8	218	88.0	116	39.3
U. Arkansas, Pine Bluff	132	109.8	42	34.7	35	30.2	55	44.9

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff					
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs				
U. Central Arkansas	72	33.1	i	72	33.1	i	NA	0.0	i	NA	0.0	i
California												
Public												
California Polytechnic State U., San Luis Obispo	1,128	466.4	i	183	84.1	i	945	382.3	i	0	0.0	i
California State Polytechnic U., Humboldt	460	98.7		52	12.8		129	38.7		279	47.2	
California State Polytechnic U., Pomona	277	41.0		62	24.0		9	3.0		206	14.0	
California State U., Bakersfield	82	37.5		20	10.8		46	14.9		16	11.8	
California State U., Channel Islands	87	13.9		21	4.6		57	7.6		9	1.7	
California State U., Chico	200	19.2		50	5.5		73	8.7		77	5.0	
California State U., Dominguez Hills	68	33.1		9	2.3		37	18.0		22	12.8	
California State U., East Bay	543	221.3	i	182	83.7	i	233	94.1	i	128	43.5	i
California State U., Fresno	569	232.0	i	191	87.7	i	244	98.7	i	134	45.6	i
California State U., Fullerton	620	58.4		226	19.7		304	33.7		90	5.0	
California State U., Long Beach	713	198.5		151	35.2		528	140.0		34	23.3	
California State U., Los Angeles	457	100.0		120	40.0		254	45.0		83	15.0	
California State U., Maritime Academy	22	11.4		8	2.9		11	6.4		3	2.1	
California State U., Monterey Bay	229	36.6		33	3.6		117	27.3		79	5.7	
California State U., Northridge	352	129.2	i	69	31.7	i	22	8.9	i	261	88.6	i
California State U., Sacramento	391	177.4	i	357	164.1	i	27	10.9	i	7	2.4	i
California State U., San Bernardino	279	45.0		70	6.0		15	1.7		194	37.3	
California State U., San Marcos	234	112.0		78	27.0		139	72.0		17	13.0	
California State U., Stanislaus	166	10.5		61	3.5		103	6.5		2	0.5	
Naval Postgraduate School	582	247.1	i	276	127.0	i	253	102.1	i	53	18.0	i
San Diego State U.	2,663	1,152.6	i	1,449	666.0	i	1,145	463.2	i	69	23.4	i
San Francisco State U.	902	281.6		310	130.6		537	123.3		55	27.7	
San Jose State U.	1,034	198.9		306	90.2		51	23.8		677	84.9	
Sonoma State U.	165	69.3	i	53	24.4	i	106	42.9	i	6	2.0	i
U. California, Berkeley	9,928	3,533.8		6,202	2,414.3		773	448.4		2,953	671.1	
U. California, Davis	11,130	4,218.5		6,063	2,370.8		1,886	1,129.4		3,181	718.3	
U. California, Irvine	5,186	1,802.9		3,935	1,404.6		683	253.1		568	145.2	
U. California, Los Angeles	12,044	5,498.5		6,516	2,877.2		2,651	1,400.3		2,877	1,221.0	
U. California, Merced	1,207	296.3		900	235.1		39	20.0		268	41.2	
U. California, Office of the President	459	179.0		92	18.1		120	53.7		247	107.2	
U. California, Riverside	2,551	1,038.2	i	843	387.5	i	1,095	442.8	i	613	207.9	i
U. California, San Diego	13,582	5,412.0		6,961	2,627.7		3,328	1,924.6		3,293	859.7	

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff	
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs
U. California, San Francisco	10,001	5,526.5	5,315	2,852.0	3,026	1,894.1	1,660	780.4
U. California, Santa Barbara	3,936	1,225.9	2,423	866.9	357	134.9	1,156	224.1
U. California, Santa Cruz	2,467	785.1	1,575	564.4	210	101.8	682	118.9
Private								
Azusa Pacific U.	288	144.1	246	123.0	2	1.8	40	19.3
Biola U.	388	242.4	186	133.3	163	81.9	39	27.2
California Institute of Technology	2,801	1,768.9	1,482	1,064.9	1,100	552.5	219	151.5
California Lutheran U.	73	9.8	69	8.3	1	0.3	3	1.2
Chapman U.	391	256.3	72	51.7	85	42.7	234	161.9
Charles R. Drew U. of Medicine and Science	41	29.2	30	21.6	0	0.0	11	7.6
Claremont Graduate U.	195	120.6	33	7.2	158	111.3	4	2.1
Claremont McKenna C.	517	341.2	236	169.7	123	61.9	158	109.6
Harvey Mudd C.	87	50.8	33	23.7	54	27.1	0	0.0
High Tech High Graduate School of Ed.	25	18.8	20	15.0	0	0.0	5	3.8
Keck Graduate Institute	37	24.7	22	15.4	0	0.0	15	9.3
La Sierra U.	91	16.5	20	7.5	2	1.5	69	7.5
Loma Linda U.	306	64.0	245	24.0	57	38.0	4	2.0
Loyola Marymount U.	423	74.6	154	23.1	161	37.0	108	14.5
Marshall B. Ketchum U.	325	215.3	196	140.8	76	38.1	53	36.4
Occidental C.	303	188.3	105	75.4	127	63.9	71	49.0
Pepperdine U.	243	174.6	243	174.6	NA	0.0	NA	0.0
Pomona C.	201	140.5	26	2.3	175	138.2	0	0.0
Santa Clara U.	378	243.0	145	103.9	115	57.8	118	81.3
Scripps Research Institute	1,719	1,452.7	216	172.2	1,387	1,176.2	116	104.3
Stanford U.	11,031	6,860.9	4,342	3,119.8	4,679	2,350.2	2,010	1,390.9
Touro U., California	31	18.2	18	5.2	13	13.0	0	0.0
U. of the Pacific	56	25.0	15	3.0	10	6.0	31	16.0
U. San Diego	120	106.0	76	73.0	28	24.0	16	9.0
U. San Francisco	379	250.3	173	124.5	90	45.4	116	80.4
U. Southern California	11,878	3,190.8	2,060	517.1	5,863	1,802.4	3,955	871.3
Western U. of Health Sciences	118	42.4	28	5.7	71	34.7	19	2.0
Colorado								
Public								
Colorado School of Mines	1,593	1,106.4	1,119	809.1	446	284.9	28	12.4
Colorado State U., Fort Collins	2,294	924.0	2,033	836.0	49	27.0	212	61.0

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff	
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs
Colorado State U., Pueblo	253	101.8	99	45.5	63	25.4	91	30.9
Fort Lewis C.	234	96.2	33	15.2	196	79.3	5	1.7
U. Colorado Anschutz Medical Campus ^a	7,002	4,613.0	2,222	1,513.0	2,172	1,476.0	2,608	1,624.0
U. Colorado Boulder	5,442	2,215.6	1,799	826.9	2,336	945.1	1,307	443.6
U. Colorado Colorado Springs	47	38.8	11	9.3	9	5.0	27	24.5
U. Colorado Denver ^a	692	197.0	210	20.0	326	133.0	156	44.0
U. Northern Colorado	189	14.5	32	3.8	59	3.2	98	7.5
U.S. Air Force Academy	300	59.0	300	59.0	NA	NA	NA	NA
Private								
Colorado C.	274	179.9	125	89.5	65	32.6	84	57.8
U. Denver	991	887.0	287	258.0	657	587.0	47	42.0
Connecticut								
Public								
Central Connecticut State U.	98	7.1	51	2.3	47	4.8	0	0.0
Eastern Connecticut State U.	82	10.0	53	9.0	0	0.0	29	1.0
Southern Connecticut State U.	178	48.0	100	41.0	72	1.0	6	6.0
U. Connecticut	4,399	1,207.7	1,057	245.8	2,991	854.7	351	107.2
Private								
Connecticut C.	21	7.0	7	2.0	2	2.0	12	3.0
Trinity C., Hartford	53	4.0	8	3.0	1	1.0	44	NA
U. Hartford	68	7.1	59	5.0	2	0.1	7	2.0
U. New Haven	171	24.0	56	2.0	90	12.0	25	10.0
Wesleyan U.	271	176.3	53	38.1	67	33.7	151	104.5
Yale U.	6,738	2,582.6	3,788	1,865.9	1,973	563.4	977	153.3
Delaware								
Public								
Delaware State U.	175	98.8	159	84.3	5	5.0	11	9.5
U. Delaware	4,341	2,495.0	878	790.0	2,053	1,000.0	1,410	705.0
District of Columbia								
Public								
National Defense U.	35	30.0	32	27.5	0	0.0	3	2.5
U. of the District of Columbia	175	63.2	32	14.7	NA	0.0	143	48.5
Private								
American U.	1,466	723.0	329	49.0	894	492.0	243	182.0
Catholic U. of America	253	189.0	84	50.0	148	118.0	21	21.0

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff	
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs
Gallaudet U.	200	29.0	95	11.0	86	16.0	19	2.0
George Washington U.	3,043	938.8	719	323.0	624	372.6	1,700	243.2
Georgetown U.	3,530	1,474.5	638	336.9	1,577	759.7	1,315	377.9
Howard U.	841	397.1	256	82.2	364	207.1	221	107.8
Florida								
Public								
Florida A&M U.	6,178	710.5	96	40.5	871	88.3	5,211	581.7
Florida Atlantic U.	1,320	539.3	i 312	i 143.4	i 827	i 334.5	i 181	i 61.4
Florida Gulf Coast U.	339	86.7	44	22.8	85	11.1	210	52.8
Florida International U.	4,968	2,806.0	874	790.4	3,348	1,350.8	746	664.8
Florida Polytechnic U.	111	13.4	44	5.6	4	2.5	63	5.3
Florida State U.	3,650	1,434.9	991	373.5	2,258	782.1	401	279.3
U. Central Florida	2,921	1,064.7	i 611	i 280.8	NA	0.0	i 2,310	i 783.9
U. Florida	14,085	5,576.9	4,582	2,346.6	6,325	2,280.1	3,178	950.2
U. North Florida	611	179.0	55	13.0	407	108.0	149	58.0
U. South Florida ^b	3,735	2,166.3	1,788	754.2	149	96.9	1,798	1,315.2
U. West Florida	312	119.4	i 74	i 34.0	i 71	i 28.7	i 167	i 56.7
Private								
Embry-Riddle Aeronautical U.	118	84.8	i 118	i 84.8	NA	0.0	NA	0.0
Florida Institute of Technology	769	417.6	i 131	i 94.1	i 622	i 312.4	i 16	i 11.1
Nova Southeastern U.	282	192.9	100	60.7	124	88.3	58	43.9
U. Miami	3,603	2,792.8	2,029	1,974.9	570	519.5	1,004	298.4
Georgia								
Public								
Augusta U.	808	312.0	300	113.0	310	124.0	198	75.0
Fort Valley State U.	107	41.5	i 27	i 12.4	i 30	i 12.1	i 50	i 17.0
Georgia Institute of Technology	9,159	3,760.9	i 2,938	i 1,350.4	i 4,595	i 1,858.7	i 1,626	i 551.8
Georgia Southern U.	1,224	246.0	805	204.9	390	26.8	29	14.3
Georgia State U.	5,075	1,918.5	i 1,424	i 654.5	i 386	i 156.1	i 3,265	i 1,107.9
Kennesaw State U.	906	392.5	i 631	i 290.2	i 140	i 56.7	i 135	i 45.6
Savannah State U.	59	13.0	55	11.0	2	1.0	2	1.0
U. Georgia	6,903	3,054.0	2,076	1,203.0	2,854	1,090.0	1,973	761.0
U. North Georgia	77	37.3	45	22.7	0	0.0	32	14.6
Private								
Clark Atlanta U.	203	126.5	29	28.5	171	96.0	3	2.0

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff	
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs
Emory U.	4,931	3,402.0	1,300	986.0	903	712.0	2,728	1,704.0
Mercer U.	566	296.0	271	75.3	194	184.3	101	36.4
Morehouse C.	87	62.5	87	62.5	0	0.0	0	0.0
Morehouse School of Medicine	291	240.5	120	93.5	88	67.6	83	79.4
Spelman C.	44	17.1	26	5.8	6	6.0	12	5.3
Hawaii								
Public								
U. Hawaii, Hilo	123	59.5	20	10.3	46	21.6	57	27.6
U. Hawaii, Manoa	3,147	1,637.9	674	387.9	2,025	977.1	448	272.9
U. Hawaii, system office	40	34.2	8	7.5	10	5.2	22	21.5
Private								
Hawaii Pacific U.	297	190.5	128	91.7	95	47.5	74	51.3
Idaho								
Public								
Boise State U.	894	362.3	313	144.1	323	130.7	258	87.5
Idaho State U.	690	279.5	242	111.1	249	100.9	199	67.5
U. Idaho	2,318	1,582.4	422	397.3	933	531.7	963	653.4
Illinois								
Public								
Chicago State U.	273	114.2	128	58.8	95	38.5	50	16.9
Illinois State U.	805	322.1	333	153.3	130	52.8	342	116.0
Northeastern Illinois U.	32	13.7	24	11.0	0	0.0	8	2.7
Northern Illinois U.	1,233	385.2	689	118.0	39	24.6	505	242.6
Southern Illinois U., Carbondale	1,103	463.1	429	197.1	573	231.8	101	34.2
Southern Illinois U., Edwardsville	177	36.5	36	7.9	114	23.2	27	5.4
U. Illinois, Chicago	6,080	3,793.9	2,117	1,123.3	2,854	1,926.1	1,109	744.5
U. Illinois, Springfield	158	44.6	14	5.1	66	16.5	78	23.0
U. Illinois, Urbana-Champaign	16,936	7,325.4	2,336	1,631.0	13,874	5,233.6	726	460.8
Western Illinois U.	80	33.1	15	6.9	64	25.9	1	0.3
Private								
DePaul U.	212	39.1	108	28.1	28	4.7	76	6.3
Erikson Institute	35	14.0	9	4.0	22	8.0	4	2.0
Illinois Institute of Technology	525	182.7	160	60.1	344	114.4	21	8.2
Loyola U., Chicago	955	610.3	305	219.1	309	155.2	341	236.0
Midwestern U.	539	139.4	33	3.4	506	136.0	0	0.0

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff	
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs
Public								
Bowie State U.	319 i	131.3 i	137 i	63.1 i	102 i	41.1 i	80 i	27.1 i
Morgan State U.	473	122.7	155	56.5	80	21.1	238	45.1
Salisbury U.	290	90.1	57	12.1	0	0.0	233	78.0
Towson U.	352	150.1 i	142	65.3 i	208	84.1 i	2	0.7 i
U. Baltimore	99	41.0 i	16	7.4 i	83	33.6 i	0	0.0
U. Maryland ^c	12,212	6,403.1	2,680	1,640.5	6,037	3,847.4	3,495	915.2
U. Maryland Center for Environmental Science	418	336.5	70	59.5	194	138.5	154	138.5
U. Maryland, Baltimore County	1,865	757.7 i	61	28.0 i	1,804	729.7 i	NA	0.0 i
U. Maryland, Eastern Shore	315 i	121.6 i	96 i	44.2 i	48 i	19.4 i	171 i	58.0 i
U.S. Naval Academy	115	40.3	115	40.3	0	0.0	0	0.0
Uniformed Services U. of the Health Sciences	630 i	258.1 i	231 i	106.4 i	248 i	100.4 i	151 i	51.3 i
Private								
Johns Hopkins U. ^d	18,900	12,561.8	9,484	7,517.0	7,339	3,328.0	2,077	1,716.8
Massachusetts								
Public								
Framingham State U.	411 i	172.7 i	230 i	105.6 i	89 i	35.8 i	92 i	31.3 i
U. Massachusetts, Amherst	3,153 i	1,275.3 i	1,088 i	500.3 i	1,141 i	461.5 i	924 i	313.5 i
U. Massachusetts, Boston	1,226	456.6	379	118.5	709	279.4	138	58.7
U. Massachusetts, Dartmouth	494	240.0	148	106.0	14	14.0	332	120.0
U. Massachusetts, Lowell	2,073	1,285.3	628	575.2	1,344	623.8	101	86.3
U. Massachusetts, Medical School	2,960	2,449.3	1,446	1,097.2	956	867.4	558	484.7
Private								
Amherst C.	548 i	349.8 i	257 i	184.7 i	191 i	96.0 i	100 i	69.1 i
Babson C.	312 i	198.9 i	146 i	105.0 i	109 i	54.6 i	57 i	39.3 i
Bentley U.	17	1.5	17	1.5	0	0.0	0	0.0
Boston C.	821	541.0	151	151.0	572	328.0	98	62.0
Boston U.	5,212	4,929.8	1,757	1,606.4	3,160	3,055.4	295	268.0
Brandeis U.	1,290	965.0	517	435.0	121	69.0	652	461.0
Clark U.	130	36.7	45	9.4	71	19.3	14	8.0
Franklin W. Olin C. of Engineering	104	7.7	30	2.9	71	3.4	3	1.4
Harvard U.	7,341	3,530.9	3,385	1,938.5	1,949	1,115.8	2,007	476.6
Massachusetts Institute of Technology	8,838	6,052.0 i	6,815	4,896.7 i	1,289	647.4 i	734	507.9 i
MGH Institute of Health Professions	48	25.0	41	25.0	0	0.0	7	NA
Mount Holyoke C.	51	8.0	23	7.0	28	1.0	0	0.0

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff	
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs
Minnesota State U., Mankato	487	204.2	204	93.7	224	90.5	59	20.0
St. Cloud State U.	205	13.1	63	5.6	10	1.9	132	5.6
U. Minnesota, Duluth	575	210.9	131	60.2	NA	0.0	444	150.7
U. Minnesota, Twin Cities	14,284	5,221.8	3,116	1,432.2	NA	0.0	11,168	3,789.6
Private								
C. of Saint Benedict	275	178.3	134	96.0	80	40.3	61	42.0
Carleton C.	119	27.0	26	5.2	70	15.6	23	6.2
Macalester C.	45	11.0	45	11.0	0	0.0	0	0.0
Saint John's U.	280	181.3	136	97.6	82	41.0	62	42.7
St. Catherine U.	74	7.6	25	3.6	47	2.8	2	1.2
U. of St. Thomas (MN)	358	13.3	35	1.6	301	8.7	22	3.0
Mississippi								
Public								
Alcorn State U.	430	161.3	112	51.4	29	11.7	289	98.2
Jackson State U.	272	115.9	135	47.5	2	1.7	135	66.7
Mississippi State U.	4,168	2,590.7	1,309	763.4	2,588	1,627.8	271	199.5
U. Mississippi	2,317	809.2	1,056	260.4	222	41.7	1,039	507.1
U. Southern Mississippi	717	269.1	123	56.5	168	68.0	426	144.6
Private								
Tougaloo C.	281	179.6	132	94.8	98	49.3	51	35.5
Missouri								
Public								
Lincoln U., Jefferson City	184	130.0	45	35.0	35	30.0	104	65.0
Missouri State U.	1,030	378.6	83	38.1	294	118.9	653	221.6
Missouri U. of Science and Technology	1,107	621.2	218	205.7	815	384.8	74	30.7
U. Missouri, Columbia	5,050	3,548.8	1,325	1,241.8	3,024	1,827.8	701	479.2
U. Missouri, Kansas City	799	554.2	233	212.8	425	245.0	141	96.4
U. Missouri, Saint Louis	353	250.0	92	83.3	199	121.2	62	45.5
Private								
Saint Louis U.	1,230	854.6	936	672.5	113	56.8	181	125.3
U. of Health Sciences and Pharmacy in St. Louis	43	29.0	33	19.3	10	9.7	0	0.0
Washington U., Saint Louis	5,742	3,266.7	1,546	752.8	3,697	2,208.0	499	305.9
Montana								
Public								
Montana State U., Bozeman	1,208	923.1	473	271.7	664	592.7	71	58.7

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff		
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	
Montana Technological U.	345	67.0	59	16.0	91	19.0	195	32.0	
U. Montana, Missoula	1,366	570.7	i 328	150.8	i 1,038	419.9	i NA	0.0	i
Nebraska									
Public									
U. Nebraska, central administration	53	40.3	21	13.7	16	15.4	16	11.2	
U. Nebraska, Kearney	180	75.6	i 61	28.0	i 111	44.9	i 8	2.7	i
U. Nebraska, Lincoln	7,073	3,934.2	1,627	1,432.7	4,975	2,353.0	471	148.5	
U. Nebraska, Medical Center	2,305	1,349.3	759	406.8	922	605.2	624	337.3	
U. Nebraska, Omaha	637	250.0	i 169	i 77.5	i 211	i 85.2	i 257	i 87.3	i
Private									
Creighton U.	511	345.3	i 159	i 114.0	i 65	i 32.4	i 287	i 198.9	i
Nevada									
Public									
Desert Research Institute	315	204.1	109	103.0	193	95.8	13	5.3	
Nevada State C.	43	4.5	42	3.5	1	1.0	0	0.0	
U. Nevada, Las Vegas	1,719	740.9	1,004	422.1	314	187.5	401	131.3	
U. Nevada, Reno	3,305	1,879.7	795	771.0	1,279	363.4	1,231	745.3	
Private									
Roseman U. of Health Sciences	191	74.0	184	70.0	2	1.0	5	3.0	
New Hampshire									
Public									
Plymouth State U.	48	39.2	10	9.3	10	7.3	28	22.6	
U. New Hampshire	951	619.6	489	303.6	421	276.3	41	39.7	
Private									
Dartmouth C. and Dartmouth Hitchcock Medical Center	1,853	1,230.0	1,229	921.0	450	213.0	174	96.0	
New Jersey									
Public									
C. New Jersey	93	12.4	78	7.8	13	4.5	2	0.1	
Kean U.	387	48.7	342	43.1	35	4.5	10	1.1	
Montclair State U.	764	1.3	473	0.3	0	0.0	291	1.0	
New Jersey Institute of Technology	889	424.0	450	278.0	247	82.0	192	64.0	
Rowan U.	826	165.2	241	46.4	139	65.7	446	53.1	
Rutgers, State U. New Jersey, Camden	42	19.3	i 42	i 19.3	NA	0.0	i NA	0.0	i
Rutgers, State U. New Jersey, New Brunswick	1,293	594.3	i 1,293	i 594.3	NA	0.0	i NA	0.0	i
Rutgers, State U. New Jersey, Newark	112	51.5	i 112	i 51.5	NA	0.0	i NA	0.0	i

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff	
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs
Stockton U.	119	5.3	14	0.4	105	4.9	0	0.0
William Paterson U.	343	49.0	152	26.0	62	5.0	129	18.0
Private								
Monmouth U.	78	14.4	14	4.1	63	10.1	1	0.2
Princeton U.	2,447	1,511.3	1,457	846.8	514	341.6	476	322.9
Seton Hall U.	54	37.0	44	30.0	5	4.0	5	3.0
Stevens Institute of Technology	522	282.5	177	118.4	344	163.3	1	0.8
New Mexico								
Public								
New Mexico Highlands U.	408	170.8	229	105.4	71	28.9	108	36.5
New Mexico Institute of Mining and Technology	1,120	419.8	155	71.2	324	131.1	641	217.5
New Mexico State U.	2,297	896.0	486	340.0	59	42.0	1,752	514.0
U. New Mexico	4,449	1,784.0	1,085	498.7	2,206	892.4	1,158	392.9
New York								
Public								
CUNY, Advanced Science Research Center	298	57.6	254	51.5	9	0.9	35	5.2
CUNY, Baruch C.	94	10.6	73	6.6	6	1.7	15	2.3
CUNY, Brooklyn C.	194	34.0	109	16.9	20	4.4	65	12.7
CUNY, C. Staten Island	118	16.9	100	13.4	0	0.0	18	3.5
CUNY, City C.	993	240.1	626	145.0	34	8.2	333	86.9
CUNY, Graduate Center	152	23.8	90	12.1	2	0.2	60	11.5
CUNY, Graduate School of Public Health and Health Policy	444	58.7	419	55.2	0	0.0	25	3.5
CUNY, Hunter C.	677	152.9	438	92.0	21	5.4	218	55.5
CUNY, John Jay C. of Criminal Justice	741	60.0	191	21.5	3	0.8	547	37.7
CUNY, Lehman C.	137	17.8	74	8.9	6	1.6	57	7.3
CUNY, New York City C. of Technology	48	5.5	17	2.3	0	0.0	31	3.2
CUNY, Queens C.	300	69.0	148	23.4	24	4.6	128	41.0
CUNY, system office	35	7.5	8	4.1	0	0.0	27	3.4
CUNY, York C.	113	9.0	24	5.0	11	2.0	78	2.0
SUNY, Binghamton U.	1,478	669.2	669	261.6	726	316.6	83	91.0
SUNY, Buffalo State	71	35.0	10	3.0	3	2.0	58	30.0
SUNY, C. Brockport	48	11.3	7	1.0	39	10.0	2	0.3
SUNY, C. of Environmental Science and Forestry	629	200.3	65	14.1	262	109.9	302	76.3
SUNY, C. of Optometry	21	8.1	11	2.8	7	5.2	3	0.1
SUNY, C. Plattsburgh	26	9.0	11	5.0	15	4.0	0	0.0

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(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff	
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs
SUNY, Cobleskill	26	5.1	2	1.0	23	4.0	1	0.1
SUNY, Downstate Health Sciences U.	189	134.9	75	27.9	102	95.2	12	11.8
SUNY, Geneseo	83	10.0	67	8.5	7	0.6	9	0.9
SUNY, Oswego	44	5.8	11	1.7	3	0.2	30	3.9
SUNY, Polytechnic Institute	1,506	582.3	363	166.9	425	171.8	718	243.6
SUNY, Stony Brook U.	3,120	1,647.8	598	563.9	2,007	948.1	515	135.8
SUNY, U. Albany	1,555	1,112.6	768	541.9	106	77.1	681	493.6
SUNY, U. Buffalo	4,041	1,634.8	1,395	641.3	1,462	591.6	1,184	401.9
SUNY, Upstate Medical U.	418	351.0	207	117.0	203	218.0	8	16.0
U.S. Military Academy	193	98.6	155	79.2	12	6.3	26	13.1
Private								
Albany C. of Pharmacy and Health Sciences	48	15.9	10	1.7	38	14.2	0	0.0
Albany Medical C.	506	326.8	255	182.9	157	78.9	94	65.0
Albert Einstein C. of Medicine	1,506	1,385.0	596	561.0	529	479.0	381	345.0
Alfred U.	32	13.5	24	7.8	6	5.0	2	0.7
Barnard C.	96	26.6	18	1.8	24	18.0	54	6.8
Canisius C.	19	13.3	7	5.0	0	0.0	12	8.3
Clarkson U.	594	370.7	125	89.8	230	115.5	239	165.4
Cold Spring Harbor Laboratory	1,261	785.4	502	360.8	530	266.0	229	158.6
Colgate U.	320	47.6	23	3.9	297	43.7	0	0.0
Columbia U. in the City of New York	10,020	8,870.0	5,721	5,129.0	802	764.0	3,497	2,977.0
Cornell U.	12,479	9,350.6	3,455	2,396.9	2,544	2,101.9	6,480	4,851.8
Fordham U.	528	324.0	237	170.3	252	126.7	39	27.0
Hamilton C.	108	21.4	63	9.5	38	8.4	7	3.5
Hobart and William Smith Colleges	102	27.3	23	2.5	79	24.8	0	0.0
Hofstra U.	475	262.0	104	74.7	366	183.8	5	3.5
Icahn School of Medicine at Mount Sinai	3,361	2,442.0	1,135	611.0	1,743	1,507.0	483	324.0
Ithaca C.	84	4.4	43	0.7	1	0.1	40	3.6
Long Island U.	366	128.9	293	92.8	49	25.0	24	11.1
Manhattan C.	359	243.0	207	148.5	56	28.2	96	66.3
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	39	34.0	39	34.0	0	0.0	0	0.0
New School	293	199.7	117	84.1	33	16.6	143	99.0
New York Institute of Technology	167	110.0	47	24.0	64	58.0	56	28.0
New York Medical C.	160	111.0	118	84.8	15	7.5	27	18.7
New York U.	8,168	6,934.1	3,095	2,824.4	389	374.2	4,684	3,735.5

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff	
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs
Pace U.	160	41.2	92	11.1	9	3.4	59	26.7
Pratt Institute	21	16.0	16	12.0	3	2.5	2	1.5
Rensselaer Polytechnic Institute	1,631 i	991.5 i	537 i	386.2 i	799 i	401.3 i	295 i	204.0 i
Rochester Institute of Technology	1,185	261.6	502	163.7	609	30.6	74	67.3
Rockefeller U.	1,003	771.4	516	432.0	358	294.7	129	44.7
Skidmore C.	68	12.0	21	4.0	47	8.0	0	0.0
St. John's U., New York	299 i	201.3 i	193 i	138.9 i	59 i	29.6 i	47 i	32.8 i
Syracuse U.	2,608	891.8	1,927	741.5	123	37.8	558	112.5
Teachers C., Columbia U.	75	53.9 i	75	53.9 i	NA	0.0 i	NA	0.0 i
U. Rochester	4,309	2,505.4 i	1,258	903.9 i	2,687	1,349.6 i	364	251.9 i
Union C., Schenectady	230	153.3 i	175	125.7 i	55	27.6 i	0	0.0 i
Vassar C.	258 i	150.9 i	74 i	53.5 i	159 i	80.1 i	25 i	17.3 i
Yeshiva U.	54	31.3 i	19	13.7 i	35	17.6 i	0	0.0 i
North Carolina								
Public								
Appalachian State U.	213	84.5 i	100	46.0 i	2	0.8 i	111	37.7 i
East Carolina U.	1,780	397.1	617	89.3	979	213.4	184	94.4
Elizabeth City State U.	12	4.0	12	4.0	NA	NA	NA	NA
Fayetteville State U.	50	3.2	32	1.5	6	0.5	12	1.2
North Carolina A&T State U.	538	232.4 i	269	123.6 i	269	108.8 i	0	0.0 i
North Carolina Central U.	592 i	246.3 i	217 i	99.9 i	289 i	117.1 i	86 i	29.3 i
North Carolina State U.	7,226	5,592.6	3,390	3,043.8	882	773.7	2,954	1,775.1
U. North Carolina, Asheville	126	61.0	49	23.0	51	25.0	26	13.0
U. North Carolina, Chapel Hill	10,581 i	4,279.5 i	3,653 i	1,678.9 i	3,828 i	1,548.6 i	3,100 i	1,052.0 i
U. North Carolina, Charlotte	1,402	307.5	308	41.0	885	238.1	209	28.4
U. North Carolina, general administration	239 i	96.6 i	94 i	43.2 i	59 i	24.1 i	86 i	29.3 i
U. North Carolina, Greensboro	991	423.5 i	514	236.2 i	389	157.4 i	88	29.9 i
U. North Carolina, Wilmington	638	298.9	293	106.4	151	99.6	194	92.9
Western Carolina U.	106	61.3	24	5.6	77	52.3	5	3.4
Winston-Salem State U.	197	74.2 i	54	24.8 i	13	5.3 i	130	44.1 i
Private								
Davidson C.	235	54.0	226	45.0	6	6.0	3	3.0
Duke U.	9,839	6,464.9	4,625	2,897.3	3,892	2,802.3	1,322	765.3
Elon U.	236	156.6 i	176	126.5 i	60	30.1 i	0	0.0 i
Johnson C. Smith U.	69	28.3	27	10.4	0	0.0	42	17.9

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff					
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs				
Wake Forest U.	2,662	1,697.0	i	723	519.5	i	866	435.0	i	1,073	742.5	i
North Dakota												
Public												
North Dakota State U.	3,663	916.1		397	235.2		567	283.5		2,699	397.4	
U. North Dakota	1,352	590.4	i	949	436.2	i	268	108.4	i	135	45.8	i
Ohio												
Public												
Air Force Institute of Technology	375	239.5		184	82.5		146	137.0		45	20.0	
Bowling Green State U.	1,456	148.0		114	22.9		1,342	125.1		0	0.0	
Central State U.	157	47.0		34	16.0		5	4.0		118	27.0	
Cleveland State U.	1,069	436.5	i	479	220.2	i	247	99.9	i	343	116.4	i
Kent State U.	1,165	503.1	i	592	272.1	i	561	226.9	i	12	4.1	i
Miami U.	577	265.2	i	577	265.2	i	NA	0.0	i	NA	0.0	i
Northeast Ohio Medical U.	165	119.7		117	75.6		44	40.1		4	4.0	
Ohio State U.	12,663	4,999.5		3,705	1,644.3		8,458	3,118.3		500	236.9	
Ohio U.	709	131.0		187	51.0		520	79.0		2	1.0	
U. Akron	534	221.3	i	98	45.0	i	434	175.6	i	2	0.7	i
U. Cincinnati	4,437	2,138.0		1,714	855.0		2,271	1,025.0		452	258.0	
U. Toledo	1,713	944.5		317	272.7		1,386	667.1		10	4.7	
Wright State U.	445	188.2		102	73.2		329	101.8		14	13.2	
Youngstown State U.	158	18.4		29	1.8		129	16.6		0	0.0	
Private												
C. Wooster	76	52.8	i	22	15.8	i	2	1.0	i	52	36.0	i
Case Western Reserve U.	2,870	1,774.7	i	1,059	760.8	i	1,260	632.6	i	551	381.3	i
Heidelberg U.	10	6.0		5	3.0		4	2.5		1	0.5	
Kenyon C.	77	8.4		17	3.8		60	4.6		0	0.0	
U. Dayton	1,201	747.4		843	473.6		121	116.2		237	157.6	
Oklahoma												
Public												
Langston U.	113	51.9	i	113	51.9	i	NA	0.0	i	NA	0.0	i
Oklahoma State U., Center for Health Sciences	113	55.5		45	12.3		10	5.1		58	38.1	
Oklahoma State U., Stillwater	2,322	989.8		1,486	630.3		193	109.5		643	250.0	
U. Central Oklahoma	302	118.3	i	79	36.1	i	99	40.1	i	124	42.1	i
U. Oklahoma, Norman and Health Science Center	3,870	1,558.6	i	1,183	543.7	i	1,583	640.3	i	1,104	374.6	i
U. Oklahoma, Tulsa	118	45.9	i	20	9.2	i	54	21.8	i	44	14.9	i

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Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff	
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs
Private								
U. Tulsa	478	172.8	332	109.9	18	14.4	128	48.5
Oregon								
Public								
Oregon Health and Science U.	4,006	1,621.5	1,294	594.8	1,633	660.6	1,079	366.1
Oregon Institute of Technology	271	108.3	89	41.0	86	34.7	96	32.6
Oregon State U.	4,578	1,329.6	867	257.0	3,008	915.6	703	157.0
Portland State U.	846	540.0	778	488.0	42	28.0	26	24.0
U. Oregon	1,784	648.1	386	138.1	82	34.8	1,316	475.2
Private								
Lewis and Clark C.	266	36.2	44	8.6	215	23.8	7	3.8
Pacific U.	313	201.5	143	102.5	96	48.1	74	50.9
Reed C.	285	172.8	97	69.9	145	72.8	43	30.1
Willamette U.	133	15.0	56	7.0	72	5.0	5	3.0
Pennsylvania								
Public								
East Stroudsburg U. Pennsylvania	68	16.4	52	10.4	4	2.0	12	4.0
Indiana U. Pennsylvania	275	54.8	122	24.4	70	11.2	83	19.2
Pennsylvania State U., Behrend	154	70.8	154	70.8	NA	0.0	NA	0.0
Pennsylvania State U., Harrisburg	154	70.8	154	70.8	NA	0.0	NA	0.0
Pennsylvania State U., University Park and Hershey Medical Center	4,294	1,973.7	4,294	1,973.7	NA	0.0	NA	0.0
Temple U.	3,494	2,471.0	643	369.0	1,084	930.9	1,767	1,171.1
U. Pittsburgh, Pittsburgh	12,043	6,714.1	2,805	1,584.2	6,249	3,831.2	2,989	1,298.7
U.S. Army War C.	305	115.2	68	31.2	56	22.7	181	61.3
West Chester U. Pennsylvania	503	207.7	302	138.8	11	4.4	190	64.5
Private								
Bryn Mawr C.	154	32.4	134	30.0	2	0.4	18	2.0
Bucknell U.	342	210.0	104	74.7	155	77.9	83	57.4
Carnegie Mellon U.	4,493	2,859.7	2,575	1,850.2	1,675	841.3	243	168.2
Drexel U.	2,225	1,920.0	1,203	1,053.0	440	330.0	582	537.0
Duquesne U.	394	247.2	51	36.6	141	70.8	202	139.8
Franklin and Marshall C.	277	42.1	30	4.1	85	20.4	162	17.6
Haverford C.	7	6.8	NA	NA	6	5.8	1	1.0
Lafayette C.	186	120.9	127	91.3	59	29.6	0	0.0
Lehigh U.	995	378.0	222	83.4	623	249.7	150	44.9

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff	
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs
Mercyhurst U.	169	24.5	81	16.5	73	NA	15	8.0
Philadelphia C. of Osteopathic Medicine	33	24.3	8	0.2	21	20.4	4	3.7
Robert Morris U.	404 i	257.8 i	176 i	126.2 i	139 i	69.7 i	89 i	61.9 i
Saint Joseph's U.	154	30.9	77	9.2	50	19.4	27	2.3
Swarthmore C.	319	47.3	35	4.4	51	10.7	233	32.2
Thomas Jefferson U.	1,681	706.0	697	209.0	873	471.0	111	26.0
U. Pennsylvania	15,719	11,740.4	1,426	552.4	2,226	2,042.6	12,067	9,145.4
Villanova U.	418	91.3	143	31.9	250	49.9	25	9.5
Rhode Island								
Public								
Naval War C.	0	0.0	0	0.0	0	0.0	0	0.0
Rhode Island C.	250	104.4 i	58	26.7 i	192	77.7 i	0	0.0 i
U. Rhode Island	1,694	455.1	1,400	368.8	19	9.4	275	76.9
Private								
Brown U.	729	553.0	191	116.0	511	422.0	27	15.0
Roger Williams U.	117	12.3	33	3.8	63	7.1	21	1.4
South Carolina								
Public								
C. Charleston	255	65.3	88	30.5	155	26.6	12	8.2
Citadel Military C. South Carolina	84	13.9	34	6.2	49	7.2	1	0.5
Clemson U.	922	0.4	406	0.1	495	0.2	21	0.1
Coastal Carolina U.	153	35.2	32	4.6	117	29.8	4	0.8
Medical U. South Carolina	1,303	520.1 i	518	238.1 i	240	97.1 i	545	184.9 i
South Carolina State U.	405 i	NA	82 i	NA	248 i	NA	75 i	NA
U. South Carolina, Aiken	43	26.0	16	14.9	2	1.2	25	9.9
U. South Carolina, Columbia	2,183	1,432.0	567	552.0	351	262.0	1,265	618.0
Winthrop U.	160	18.0	28	11.0	123	6.0	9	1.0
Private								
Clafin U.	38	23.6	9	0.4	2	0.2	27	23.0
Furman U.	96	16.0	29	3.2	7	1.9	60	10.9
South Dakota								
Public								
Black Hills State U.	24	11.3	10	5.7	10	3.0	4	2.6
Dakota State U.	24	16.0	19	14.0	0	0.0	5	2.0
South Dakota School of Mines and Technology	378	82.0	73	22.0	302	58.0	3	2.0

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff	
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs
South Dakota State U.	1,237	329.7	287	99.7	921	219.9	29	10.1
U. South Dakota	610	254.5	320	147.2	139	56.1	151	51.2
Private								
Augustana U.	81	44.5	17	12.2	63	31.6	1	0.7
Tennessee								
Public								
Austin Peay State U.	164	21.0	43	2.0	NA	NA	121	19.0
East Tennessee State U.	399	260.0	95	62.0	217	141.0	87	57.0
Middle Tennessee State U.	445	182.0	189	86.9	127	51.3	129	43.8
Tennessee State U.	119	51.3	80	36.8	19	7.7	20	6.8
Tennessee Technological U.	387	56.5	74	8.5	313	48.0	0	0.0
U. Memphis	1,876	155.3	132	30.8	NA	NA	1,744	124.5
U. Tennessee, Chattanooga	420	118.0	157	31.0	234	66.0	29	21.0
U. Tennessee, Health Science Center	1,184	666.0	615	362.0	488	254.0	81	50.0
U. Tennessee, Knoxville	5,688	2,552.1	1,894	1,058.3	3,252	1,170.0	542	323.8
Private								
Fisk U.	140	14.5	136	12.7	2	1.5	2	0.3
Meharry Medical C.	126	70.0	69	28.0	36	30.0	21	12.0
Vanderbilt U. and Vanderbilt U. Medical Center	8,190	5,087.6	2,964	2,129.0	3,467	1,741.1	1,759	1,217.5
Texas								
Public								
Lamar U.	214	86.4	71	32.6	81	32.8	62	21.0
Prairie View A&M U.	543	330.0	202	159.8	12	12.0	329	158.2
Sam Houston State U.	414	175.2	284	130.5	9	3.6	121	41.1
Stephen F. Austin State U.	243	101.6	75	34.5	154	62.3	14	4.8
Sul Ross State U.	293	117.8	90	41.2	115	46.6	88	30.0
Tarleton State U.	379	246.0	77	75.0	67	46.0	235	125.0
Texas A&M International U.	274	110.5	123	56.7	38	15.5	113	38.3
Texas A&M U., College Station and Health Science Center	15,158	5,074.7	2,624	917.4	8,326	2,793.9	4,208	1,363.4
Texas A&M U.-Commerce	259	107.5	65	29.9	180	72.8	14	4.8
Texas A&M U.-Corpus Christi	654	199.1	192	74.1	291	82.6	171	42.4
Texas A&M U.-Kingsville	628	389.3	130	108.5	155	86.8	343	194.0
Texas A&M U.-San Antonio	74	41.0	33	14.0	33	20.0	8	7.0
Texas Southern U.	113	69.1	51	36.8	30	20.0	32	12.3
Texas State U.	1,458	1,233.0	277	229.0	0	0.0	1,181	1,004.0

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff	
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs
Public								
U. Utah	8,898	3,707.7	3,844	2,211.4	4,446	1,242.9	608	253.4
Utah State U.	809	599.5	592	475.3	38	23.9	179	100.3
Utah Valley U.	408 i	171.1 i	235 i	108.2 i	64 i	25.9 i	109 i	37.0 i
Private								
Brigham Young U., Provo	1,786	1,241.5 i	211	151.6 i	NA	0.0 i	1,575	1,089.9 i
Vermont								
Public								
U. Vermont	2,608	912.4	952	406.9	876	369.1	780	136.4
Private								
Middlebury C.	158	23.8	37	6.2	12	2.0	109	15.6
Virginia								
Public								
Christopher Newport U.	116	25.0	116	25.0	0	0.0	0	0.0
Eastern Virginia Medical School	267	175.0	83	35.0	110	101.0	74	39.0
George Mason U.	3,567	1,175.9	479	454.9	1,698	590.3	1,390	130.7
James Madison U.	568 i	224.9 i	150 i	68.9 i	218 i	88.0 i	200 i	68.0 i
Norfolk State U.	61	12.6	17	2.8	29	5.4	15	4.4
Old Dominion U.	976	210.8	332	82.1	626	121.4	18	7.3
U. of Mary Washington	55	8.2	21	4.8	32	3.2	2	0.2
U. Virginia's C. Wise	52	19.4 i	12	5.5 i	6	2.4 i	34	11.5 i
U. Virginia, Charlottesville	7,350	2,901.8 i	1,576	724.4 i	3,346	1,353.5 i	2,428	823.9 i
Virginia Commonwealth U.	3,977	1,416.5 i	557	256.0 i	NA	0.0 i	3,420	1,160.5 i
Virginia Military Institute	70	24.0	14	10.0	0	0.0	56	14.0
Virginia Polytechnic Institute and State U.	7,366 i	3,052.8 i	3,299 i	1,516.5 i	2,400 i	970.8 i	1,667 i	565.5 i
Virginia State U.	379 i	146.5 i	126 i	58.1 i	40 i	16.1 i	213 i	72.3 i
William & Mary	1,775 i	716.3 i	340 i	156.4 i	1,124 i	454.5 i	311	105.4 i
Private								
Edward Via C. of Osteopathic Medicine	70	35.0	51	22.0	9	7.0	10	6.0
Hampton U.	106	78.0	51	44.0	0	0.0	55	34.0
Marymount U.	132	55.0	48	12.0	9	3.0	75	40.0
U. Richmond	135	30.0	45	10.2	78	16.6	12	3.2
Washington								
Public								
Central Washington U.	104	15.0	38	8.0	61	5.0	5	2.0

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff	
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs
Eastern Washington U.	87	15.9	18	2.8	63	12.1	6	1.0
Northwest Indian C.	43	7.8	15	3.4	0	0.0	28	4.4
U. Washington, Bothell	147	33.6	79	16.7	11	2.6	57	14.3
U. Washington, Seattle	14,409	5,557.0	9,169	3,388.8	1,335	731.0	3,905	1,437.2
U. Washington, Tacoma	140	26.7	57	15.2	17	4.7	66	6.8
Washington State U.	5,687	2,326.2	1,019	468.4	4,200	1,699.0	468	158.8
Western Washington U.	446	96.4	155	39.9	256	52.7	35	3.8
Private								
Seattle U.	49	35.2	49	35.2	NA	0.0	NA	0.0
U. Puget Sound	405	268.0	244	175.2	95	47.5	66	45.3
Whitman C.	232	22.4	231	21.8	1	0.6	0	0.0
West Virginia								
Public								
Marshall U.	411	246.0	90	36.0	102	68.0	219	142.0
West Virginia School of Osteopathic Medicine	28	14.4	17	4.4	6	6.0	5	4.0
West Virginia State U.	46	26.9	16	13.0	10	9.2	20	4.7
West Virginia U.	3,433	1,858.9	1,213	575.0	1,359	844.0	861	439.9
Private								
U. Charleston	6	1.0	2	0.5	4	0.5	0	0.0
Wisconsin								
Public								
U. Wisconsin-Eau Claire	183	76.1	40	18.4	141	57.0	2	0.7
U. Wisconsin-Green Bay	470	190.9	144	66.1	218	88.0	108	36.8
U. Wisconsin-La Crosse	259	36.0	91	8.8	163	22.4	5	4.8
U. Wisconsin-Madison	14,516	2,470.2	3,774	767.2	6,762	1,169.4	3,980	533.6
U. Wisconsin-Milwaukee	1,718	981.5	274	243.6	1,444	737.9	0	0.0
U. Wisconsin-Oshkosh	72	13.4	64	9.5	8	3.9	0	0.0
U. Wisconsin-Platteville	305	118.0	61	28.2	107	43.2	137	46.6
U. Wisconsin-Stevens Point	184	47.0	26	1.0	84	39.0	74	7.0
U. Wisconsin-Superior	299	123.5	129	59.5	96	38.7	74	25.3
Private								
Marquette U.	1,353	520.8	392	201.0	626	193.0	335	126.8
Medical C. Wisconsin	2,544	1,212.3	721	318.8	1,588	794.5	235	99.0
Milwaukee School of Engineering	93	37.6	48	20.3	16	4.5	29	12.8
Northland C.	405	249.0	140	100.3	181	90.9	84	57.8

TABLE 78

Headcount and FTEs of R&D personnel at higher education institutions, by state, institutional control, institution, and personnel function: FY 2022

(Number)

State, institutional control, and institution	All personnel functions		Researchers		R&D technicians		R&D support staff	
	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs	Personnel	FTEs
Wyoming								
Public								
U. Wyoming	1,193	489.9	343	157.8	672	271.7	178	60.4
Guam								
Public								
U. Guam	322	167.9	48	21.7	230	113.4	44	32.8
Puerto Rico								
Public								
U. Puerto Rico, Cayey	93	29.0	15	8.0	2	1.0	76	20.0
U. Puerto Rico, Humacao	90	10.5	14	2.0	74	7.0	2	1.5
U. Puerto Rico, Mayaguez	372	86.7	65	32.5	0	0.0	307	54.2
U. Puerto Rico, Medical Sciences Campus	342	189.0	119	65.0	68	38.0	155	86.0
U. Puerto Rico, Rio Piedras	258	184.0	97	59.0	23	23.0	138	102.0
Private								
U. Ana G. Mendez, Gurabo	33	10.0	33	10.0	0	0.0	0	0.0
U. Central del Caribe	108	91.0	27	25.0	59	45.0	22	21.0
Virgin Islands								
Public								
U. of the Virgin Islands	297	107.5	37	17.0	35	14.2	225	76.3

i = imputed. NA = not available; data were not provided by institution.

FTE = full-time equivalent.

^a The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, personnel were reported together under University of Colorado Denver and Anschutz Medical Campus.

^b The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^c The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^d Johns Hopkins University includes the Applied Physics Laboratory, with 8,090 personnel and 7,848 FTEs in FY 2022.

Note(s):

FTE R&D personnel are calculated as the total working effort spent on R&D during a specific period divided by the total effort representing a full-time schedule within the same period. This table includes only institutions reporting \$1 million or more in total R&D expenditures in FY 2021. Institutions reporting less than \$1 million in total R&D expenditures in FY 2021 completed a shorter version of the survey form in FY 2022 that did not include this question.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All institutions	-	58,387,551	61,988,017	62,198,981	63,342,770	63,733,283	64,906,285	67,603,238	70,847,375	74,382,109	78,633,252	81,266,294	84,580,554	91,822,920
Johns Hopkins U. ^a	1	1,997,252	2,135,547	2,092,999	2,149,770	2,227,536	2,299,057	2,425,199	2,556,641	2,656,152	2,913,280	3,104,669	3,174,937	3,410,192
U. California, San Francisco	2	935,509	995,226	1,032,673	1,042,841	1,084,031	1,126,620	1,294,261	1,409,398	1,595,732	1,595,098	1,651,073	1,710,036	1,805,950
U. Pennsylvania	3	793,523	851,522	813,210	790,265	792,314	828,649	1,140,833	1,247,686	1,304,291	1,368,837	1,432,968	1,492,554	1,651,972
U. Michigan, Ann Arbor	4	1,128,686	1,212,990	1,247,680	1,304,074	1,279,603	1,300,340	1,357,228	1,434,535	1,493,353	1,571,320	1,572,931	1,521,417	1,649,126
U. California, San Diego	5	937,982	1,003,584	1,065,306	1,066,979	1,060,207	1,093,784	1,079,429	1,126,269	1,256,171	1,344,185	1,395,348	1,385,097	1,506,966
U. Washington, Seattle	6	995,036	1,112,526	1,065,414	1,111,508	1,091,135	1,101,078	1,197,773	1,270,642	1,342,509	1,347,667	1,371,333	1,414,987	1,491,668
U. California, Los Angeles	7	899,677	942,450	969,682	934,135	920,183	992,009	1,002,013	1,037,780	1,242,619	1,249,535	1,338,707	1,396,451	1,470,554
U. Wisconsin-Madison	8	940,286	1,022,723	1,030,605	997,523	984,830	938,366	1,051,311	1,105,261	1,113,968	1,209,224	1,272,053	1,294,884	1,427,742
Duke U.	9	980,514	1,018,241	1,004,759	987,393	1,031,404	1,029,193	1,044,046	1,113,921	1,153,947	1,212,928	1,180,209	1,222,283	1,374,670
Stanford U.	10	810,300	868,393	854,580	900,547	912,244	969,643	1,012,351	1,055,418	1,106,314	1,158,689	1,159,809	1,230,009	1,339,958
U. North Carolina, Chapel Hill	11	746,828	846,499	864,748	942,467	955,601	939,252	1,013,128	1,061,535	1,094,063	1,113,654	1,115,776	1,160,524	1,304,611
Ohio State U.	12	719,574	794,023	720,082	743,321	752,836	745,238	751,293	804,699	818,428	876,402	914,199	1,176,605	1,289,443
Cornell U.	13	747,199	779,809	799,794	841,224	874,727	946,419	956,184	963,166	1,033,740	1,103,810	1,147,119	1,143,319	1,250,601
U. Pittsburgh, Pittsburgh	14	806,014	880,425	839,793	846,556	835,838	852,333	880,508	930,198	995,762	1,068,746	1,092,847	1,124,822	1,241,506
Georgia Institute of Technology	15	611,226	650,588	683,894	726,377	720,248	757,116	780,118	785,603	859,009	931,076	1,017,808	1,086,161	1,208,017
Harvard U.	16	561,703	623,116	753,973	910,569	875,964	955,246	1,011,950	1,032,590	1,066,612	1,129,158	1,116,344	1,144,925	1,197,301
Yale U.	17	621,125	654,259	654,824	787,609	764,002	792,953	865,970	930,569	972,856	1,056,640	1,079,696	1,147,777	1,182,633
U. Texas M. D. Anderson Cancer Center	18	599,529	663,279	685,814	718,096	794,980	833,406	852,095	888,029	929,710	969,496	1,051,297	1,124,971	1,182,536
Columbia U. in the City of New York	19	770,888	841,173	847,809	845,847	844,766	826,010	793,710	848,733	908,771	965,696	981,906	1,043,130	1,168,337
U. Maryland ^b	20	na	na	na	na	na	na	na	na	na	1,047,276	1,047,911	1,087,629	1,165,409
New York U.	21	343,762	402,327	425,043	435,095	490,614	505,071	751,393	822,329	801,961	845,249	858,190	986,894	1,160,923
U. Minnesota, Twin Cities	22	764,916	824,489	806,832	834,181	850,880	844,016	872,514	881,286	915,798	970,212	999,314	1,034,743	1,159,697
Texas A&M U., College Station and Health Science Center	23	666,516	682,553	669,968	796,101	826,152	836,250	859,952	869,100	882,191	911,375	1,089,944	1,108,197	1,096,371
U. Florida	24	636,607	686,048	649,988	642,502	652,341	699,750	741,945	766,469	831,362	880,771	889,677	919,504	1,040,885

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Washington U., Saint Louis	25	693,749	707,404	689,035	665,484	646,756	680,150	726,622	740,005	797,267	866,478	894,681	960,656	1,016,233
Vanderbilt U. and Vanderbilt U. Medical Center	26	478,345	534,806	533,878	548,086	659,418	619,866	612,351	681,286	702,128	730,378	774,717	968,571	1,008,824
Pennsylvania State U., University Park and Hershey Medical Center	27	762,041	776,945	783,894	825,011	785,705	774,384	809,985	826,683	885,661	924,031	970,457	936,007	982,289
U. Southern California	28	574,366	579,717	593,003	610,382	650,506	650,457	662,029	725,528	854,673	869,142	899,507	915,525	978,728
Northwestern U.	29	554,228	595,202	602,451	612,009	621,504	627,320	684,767	724,060	776,458	827,607	847,679	888,101	968,460
Massachusetts Institute of Technology	30	646,222	693,714	770,367	833,884	815,008	858,917	880,111	878,964	893,508	940,079	926,053	896,339	940,291
Emory U.	31	498,309	479,678	474,537	493,734	551,556	574,472	597,971	646,146	693,172	773,843	780,693	842,940	938,203
U. California, Berkeley	32	659,572	670,926	696,904	690,299	708,485	748,139	734,486	724,817	747,690	751,584	796,303	794,847	906,277
Icahn School of Medicine at Mount Sinai	33	370,666	405,527	400,680	428,654	463,429	508,353	540,296	575,448	640,141	722,241	747,014	820,260	893,968
U. California, Davis	34	669,282	698,193	704,999	715,870	699,689	706,087	726,070	726,469	774,775	791,184	804,674	805,386	870,660
Baylor C. of Medicine	35	447,874	466,061	474,700	508,799	496,314	520,220	572,527	604,952	623,396	651,920	685,641	716,976	827,005
U. Arizona	36	577,958	597,988	615,434	616,487	575,864	592,874	592,412	609,965	672,038	715,290	743,233	741,376	794,268
U. Texas, Austin	37	531,412	558,377	549,312	572,959	526,173	551,654	565,708	598,597	617,567	619,929	726,915	709,163	780,041
U. Illinois, Urbana-Champaign	38	493,386	522,769	558,022	721,587	598,531	614,011	587,264	602,641	609,984	640,880	658,561	695,919	727,068
Michigan State U.	39	399,358	423,766	471,620	479,145	492,501	519,994	573,204	653,611	673,959	682,018	674,384	672,904	719,859
U. Texas Southwestern Medical Center	40	419,220	431,883	435,085	440,620	434,627	438,824	442,666	461,797	474,260	496,697	595,939	632,134	719,002
Indiana U., Bloomington	41	156,996	160,038	151,240	173,464	172,380	451,508	471,055	507,553	534,811	630,449	676,116	659,073	712,423
U. Alabama, Birmingham	42	483,862	497,680	449,108	434,882	421,475	509,586	531,492	553,651	575,060	595,361	608,545	636,451	701,768
Purdue U., West Lafayette	43	477,145	520,001	528,140	528,564	502,457	498,887	517,879	533,598	535,826	598,411	638,715	623,530	691,359
Boston U.	44	344,687	348,593	330,247	359,312	353,850	372,267	379,117	398,754	435,864	508,813	554,084	625,491	690,805
Rutgers, State U. New Jersey, New Brunswick	45	407,170	415,502	420,737	474,192	627,076	607,257	610,648	633,789	666,368	621,194	661,656	615,280	682,102
Arizona State U.	46	296,458	323,567	344,611	367,277	380,581	403,708	441,411	484,315	559,391	572,588	594,927	595,651	668,826

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Colorado Anschutz Medical Campus ^c	47	na	na	na	na	na	na	na	na	na	na	na	561,527	609,216
U. Virginia, Charlottesville	48	271,843	377,757	363,569	366,103	337,732	339,813	367,926	431,793	490,902	547,179	584,678	551,703	592,325
U. Cincinnati	49	393,518	419,456	408,294	414,738	399,571	408,412	401,701	427,236	464,289	513,397	511,252	530,944	591,320
U. Chicago	50	432,943	446,512	411,864	389,900	378,322	402,777	402,491	419,996	412,791	448,263	448,404	489,005	578,354
U. Colorado Boulder	51	335,983	372,034	373,512	369,663	362,882	403,654	433,850	474,496	488,883	486,073	496,549	519,045	574,814
Virginia Polytechnic Institute and State U.	52	393,888	445,302	448,054	487,121	502,486	495,502	512,333	511,340	520,575	532,154	546,172	531,482	573,228
North Carolina State U.	53	357,802	374,446	400,046	413,524	440,392	462,347	479,039	488,974	497,851	523,124	528,089	529,307	567,750
U. Iowa	54	435,118	433,088	432,980	423,097	436,852	423,528	447,718	466,462	484,253	483,809	510,793	522,141	560,653
U. Utah	55	375,420	410,392	425,558	486,245	476,017	509,409	322,670	318,956	534,208	548,714	577,238	597,318	552,484
U. California, Irvine	56	311,105	328,870	335,874	329,500	322,315	313,798	325,582	339,309	399,295	422,781	456,453	487,480	503,202
Scripps Research Institute	57	387,298	400,768	398,673	399,899	386,231	384,161	364,670	354,582	396,839	427,734	444,964	485,435	492,639
Oregon Health and Science U.	58	314,990	334,324	305,360	307,134	313,112	325,268	329,414	346,710	372,148	415,629	446,826	452,798	479,094
U. Georgia	59	274,380	300,388	311,498	308,486	313,445	330,273	360,520	403,575	390,773	414,909	419,656	429,421	474,974
Case Western Reserve U.	60	417,805	428,206	430,246	422,041	417,436	400,167	403,827	406,196	430,379	435,852	437,725	419,933	466,233
U. Kentucky	61	350,857	364,175	354,132	332,366	322,313	325,558	340,295	367,934	382,973	398,384	406,131	418,800	463,357
U. Rochester	62	412,704	428,144	388,401	382,399	347,161	344,921	344,489	351,924	369,072	392,275	395,774	407,058	448,264
California Institute of Technology	63	359,245	374,636	374,075	333,548	358,137	350,833	356,204	380,711	363,007	375,558	418,697	422,491	447,479
Colorado State U., Fort Collins	64	291,621	321,130	335,336	303,461	300,572	308,785	323,068	328,221	356,951	382,252	384,044	432,131	445,539
Princeton U.	65	231,862	255,483	264,980	264,998	287,730	272,379	285,733	321,953	351,297	370,700	382,414	389,652	444,425
U. Miami	66	278,664	321,830	361,772	338,568	342,852	328,082	355,690	365,310	355,132	358,621	380,470	375,130	434,763
Carnegie Mellon U.	67	221,376	240,956	254,992	270,898	250,497	241,829	304,383	313,145	318,218	346,356	373,131	386,540	432,701
U. Illinois, Chicago	68	355,581	373,750	381,918	358,797	339,644	344,619	314,365	352,200	343,254	365,409	396,061	411,904	422,763
SUNY, U. Buffalo	69	337,976	337,783	340,930	371,387	370,083	367,133	373,308	386,386	393,241	394,279	401,640	407,266	417,058
SUNY, Polytechnic Institute	70	na	na	na	na	412,851	295,313	316,680	308,843	257,316	352,788	355,519	465,149	413,602
U. Missouri, Columbia	71	133,120	130,269	234,975	232,760	233,613	243,430	262,919	272,196	275,413	288,501	303,906	354,500	397,821
Iowa State U.	72	243,890	261,016	252,675	259,320	297,293	295,635	316,822	310,100	343,890	342,498	306,338	334,671	368,288
Rockefeller U.	73	265,750	272,491	292,896	298,474	316,368	323,932	335,136	348,845	353,142	351,089	356,217	357,543	360,877

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Massachusetts, Medical School	74	232,039	262,714	256,090	245,923	241,869	250,338	253,099	279,884	274,211	281,507	279,096	347,337	358,204
U. Connecticut	75	230,387	247,252	250,468	236,126	247,379	251,621	257,958	257,176	256,826	273,034	270,397	296,090	356,880
U. Oklahoma, Norman and Health Science Center	76	201,187	223,828	217,177	220,916	227,104	227,568	240,239	250,627	262,863	283,375	337,624	334,058	354,567
U. Delaware	77	147,204	160,503	161,327	170,470	169,641	167,904	169,384	176,455	179,560	200,935	214,517	224,655	343,559
U. Texas Health Science Center, Houston	78	240,772	261,172	236,250	233,256	233,737	234,299	237,016	246,060	258,411	271,525	273,862	308,823	342,633
Utah State U.	79	147,612	172,563	155,305	156,774	167,256	173,848	178,830	184,746	215,994	280,476	300,894	322,139	339,964
U. South Florida ^d	80	330,528	343,366	394,694	410,092	436,578	420,002	447,812	502,216	334,944	330,968	287,339	320,913	339,213
Louisiana State U., Baton Rouge	81	280,432	281,221	279,019	276,748	282,462	274,001	282,574	258,402	278,075	287,203	277,811	283,507	333,398
Virginia Commonwealth U.	82	176,422	185,566	179,310	175,880	177,540	196,412	202,150	210,827	222,757	230,882	255,589	291,853	327,324
U. New Mexico	83	207,906	217,206	216,218	220,840	221,817	224,321	227,591	236,623	245,400	233,310	237,249	327,382	325,361
Washington State U.	84	285,120	299,905	288,693	261,537	255,190	277,819	275,208	288,629	289,326	302,309	294,831	324,631	322,562
Thomas Jefferson U.	85	103,064	104,923	100,506	89,273	118,378	119,631	122,396	142,569	148,573	170,458	171,354	200,364	321,638
Medical C. Wisconsin	86	191,816	215,358	209,040	201,237	199,713	199,283	199,925	209,618	229,436	251,300	264,325	276,850	321,506
U. Kansas	87	251,992	248,076	256,310	267,050	251,186	257,766	241,656	251,140	269,494	282,642	292,485	304,800	318,765
Albert Einstein C. of Medicine	88	na	na	na	na	na	na	289,660	289,685	297,328	298,824	288,654	301,715	318,314
SUNY, Stony Brook U.	89	201,846	206,207	218,209	224,030	210,301	219,485	227,942	235,430	240,949	257,048	260,203	270,403	308,351
Dartmouth C. and Dartmouth Hitchcock Medical Center	90	193,608	210,274	195,251	198,995	204,360	203,660	224,497	277,638	287,951	284,843	285,551	292,979	305,348
U. Nebraska, Lincoln	91	211,385	220,141	238,472	245,171	254,877	260,152	264,485	270,749	275,161	284,544	284,935	284,757	300,961
Brown U.	92	201,116	223,455	234,906	222,945	291,917	286,332	235,373	201,253	233,689	245,883	256,871	264,138	297,930
U. Tennessee, Knoxville ^e	93	133,877	151,814	165,708	175,264	170,471	166,591	177,240	199,356	233,705	221,726	292,314	287,374	292,996
Oregon State U.	94	215,400	227,752	239,571	231,342	229,456	242,874	252,541	260,893	266,684	257,935	262,426	271,218	292,006
Medical U. South Carolina	95	224,632	213,346	236,586	245,451	242,594	243,534	260,098	262,267	282,253	295,600	272,590	277,761	284,553
Mississippi State U.	96	223,032	217,793	222,320	197,359	200,251	216,817	229,939	233,024	235,581	255,674	264,367	257,912	283,416
Temple U.	97	115,543	122,663	126,288	207,190	206,556	210,371	232,379	249,156	253,548	263,217	274,258	280,000	281,483
Uniformed Services U. of the Health Sciences	98	134,126	175,365	143,250	164,232	262,489	361,173	256,203	298,370	308,326	417,300	324,510	384,490	277,240

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Hawaii, Manoa	99	303,085	318,316	312,311	326,402	319,818	313,046	300,864	288,294	272,971	277,704	273,320	268,692	273,968
Georgetown U.	100	155,538	164,301	171,829	170,503	162,983	157,308	162,734	187,948	192,160	210,896	225,504	249,329	268,486
Florida State U.	101	208,834	216,869	208,005	224,425	231,390	237,427	243,327	247,319	260,486	257,656	270,051	250,915	267,537
U. California, Santa Barbara	102	217,952	217,877	222,916	225,976	225,614	213,537	219,907	225,767	223,349	230,097	241,523	232,800	266,443
Auburn U., Auburn	103	143,874	161,785	130,222	143,545	140,110	132,970	149,411	167,352	184,650	199,851	221,503	229,394	263,383
Wake Forest U.	104	192,034	208,460	203,730	182,721	176,380	171,538	169,533	181,876	190,991	236,494	241,271	259,165	261,740
George Washington U.	105	189,113	189,427	187,652	192,152	213,334	226,132	214,984	226,005	242,029	249,198	249,745	248,501	257,177
Woods Hole Oceanographic Institution	106	181,746	198,775	204,352	198,232	220,016	216,592	212,374	194,088	204,400	229,143	227,573	262,048	255,017
Florida International U.	107	92,250	97,804	83,639	92,463	107,487	124,631	133,831	146,431	165,748	191,754	210,258	215,873	249,706
Wichita State U.	108	51,068	51,862	50,108	52,831	53,614	49,902	53,092	65,491	66,916	113,618	139,670	174,661	245,510
U. Notre Dame	109	104,288	121,466	143,328	156,234	160,461	171,148	175,187	184,061	190,469	211,694	200,815	214,388	242,040
U. Texas Health Science Center, San Antonio	110	207,115	198,655	184,298	175,983	172,716	170,277	194,885	169,200	179,219	188,483	202,572	219,734	238,510
Wayne State U.	111	248,753	252,620	221,666	217,984	213,253	207,830	214,306	220,199	230,231	235,072	229,753	222,694	230,996
Tufts U.	112	153,113	154,760	159,140	154,694	156,411	162,510	181,011	216,895	197,478	196,559	209,283	221,029	226,775
U. Massachusetts, Amherst	113	164,850	176,545	178,207	172,217	183,210	197,183	193,863	194,030	193,495	203,885	204,998	201,187	223,427
U. Louisville	114	162,447	166,918	165,319	160,338	163,199	154,598	164,371	168,906	168,433	166,122	184,869	187,772	217,449
Northeastern U.	115	74,998	81,230	102,911	111,134	111,779	115,664	121,574	134,827	156,546	174,485	189,802	199,031	211,408
Rice U.	116	97,288	109,197	115,235	128,621	136,419	141,935	151,855	163,312	157,352	177,126	192,213	200,803	210,310
U. Dayton	117	91,943	89,037	79,877	82,349	83,409	93,319	111,363	127,207	143,636	163,924	162,216	189,741	209,436
U. Houston	118	106,646	98,231	105,844	112,469	122,163	125,973	142,081	149,795	158,543	168,909	174,582	177,843	208,653
Tulane U.	119	151,686	154,530	154,196	151,314	148,784	140,118	153,298	167,338	179,813	182,444	190,724	191,868	207,447
West Virginia U.	120	146,944	159,206	161,961	159,865	156,946	160,560	164,501	175,403	176,082	178,575	180,349	190,951	206,080
U. Arkansas for Medical Sciences	121	119,518	122,066	129,056	133,677	131,438	132,451	125,378	128,508	139,187	153,135	174,549	194,709	205,493
U. Nebraska, Medical Center	122	138,219	133,036	141,619	137,485	139,126	145,009	150,694	171,491	177,245	194,455	202,406	200,974	205,253
U. Texas Medical Branch	123	188,399	193,555	180,888	180,198	178,014	173,506	179,541	185,106	181,831	175,372	180,595	185,759	204,518
Clemson U.	124	144,562	135,681	110,493	116,138	116,871	120,858	133,342	144,728	160,361	165,227	174,342	183,496	204,021
George Mason U.	125	77,966	80,284	79,913	82,849	85,493	89,845	92,649	98,488	125,416	164,053	196,362	193,205	202,471

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Vermont	126	129,612	132,107	115,569	115,055	109,343	114,090	115,230	117,433	128,179	135,673	178,828	182,307	201,859
U. Alaska, Fairbanks	127	127,808	126,691	121,640	118,907	152,352	139,605	141,976	150,064	138,989	142,307	150,364	170,923	200,660
Kansas State U.	128	154,888	163,494	169,863	177,525	178,304	180,082	181,933	183,513	201,866	202,244	199,739	190,199	199,055
U. California, Riverside	129	121,541	125,902	129,609	126,916	128,506	136,493	147,268	159,305	162,054	172,146	177,921	183,414	193,235
U. New Hampshire	130	103,801	128,348	152,276	134,535	130,951	130,700	136,006	133,592	133,378	137,626	145,844	152,800	191,700
U. Central Florida	131	108,662	97,309	102,562	108,560	143,063	169,770	166,000	168,630	176,094	185,873	178,762	182,161	185,692
U. South Carolina, Columbia	132	218,771	196,820	186,559	178,800	181,363	181,742	183,478	180,127	145,739	136,433	178,990	168,442	184,190
Montana State U., Bozeman	133	124,227	114,244	113,235	103,144	104,646	98,467	102,179	118,221	114,496	140,359	147,443	174,739	180,951
U. California, Santa Cruz	134	136,964	149,702	149,824	145,092	147,536	147,518	146,237	119,990	123,221	138,455	146,771	156,839	171,771
Texas Tech U.	135	106,220	114,648	105,147	114,506	125,126	128,554	132,766	144,898	139,500	147,317	147,162	150,907	169,184
North Dakota State U.	136	125,294	132,717	133,874	144,069	148,352	148,934	152,106	149,230	140,507	145,723	149,867	149,983	165,968
U. Nevada, Reno	137	94,420	86,372	83,137	85,085	81,028	83,385	90,673	99,156	127,049	136,707	144,327	158,566	165,839
U. Louisiana, Lafayette	138	57,333	56,313	51,873	52,089	59,068	55,250	58,984	78,780	102,812	131,601	138,225	148,749	164,578
U. Arkansas, Fayetteville	139	104,336	110,310	111,502	112,296	111,703	120,679	132,648	135,925	146,029	148,960	141,283	142,272	164,018
U. Maine	140	106,238	111,129	91,673	77,169	100,493	78,608	78,576	98,748	105,810	121,621	124,999	136,719	161,080
U. Alabama, Huntsville	141	73,266	72,988	83,076	96,932	85,994	84,745	91,549	89,392	94,519	104,824	124,322	141,890	160,626
Oklahoma State U., Stillwater	142	147,094	162,786	166,523	134,500	126,543	126,607	150,167	152,605	154,418	150,021	153,586	151,936	159,739
New Jersey Institute of Technology	143	81,240	89,250	91,407	97,088	94,371	96,386	95,235	101,334	124,565	136,801	146,635	143,190	155,441
Georgia State U.	144	61,971	54,221	62,188	79,235	80,955	79,813	103,731	133,242	133,302	126,225	126,387	135,070	149,641
Drexel U.	145	115,458	109,729	112,390	118,754	124,464	122,366	120,789	132,507	148,107	140,907	134,792	144,102	142,544
U. North Dakota	146	76,262	74,636	79,792	68,636	67,199	63,590	69,145	91,958	100,061	100,841	102,047	132,941	136,282
U. Wyoming	147	53,957	55,320	63,812	63,149	48,736	54,928	108,552	121,927	112,857	79,928	91,738	92,230	132,538
U. Oregon	148	83,545	87,161	87,656	78,654	77,655	65,226	68,631	72,517	83,132	82,231	88,598	108,990	129,211
Augusta U.	149	na	na	na	64,033	64,116	67,736	71,338	99,637	99,043	96,396	103,886	116,415	125,126
U. Mississippi	150	100,712	113,281	109,897	98,354	97,286	89,707	102,660	114,674	117,390	137,475	115,972	104,529	123,477
U. Alabama, Tuscaloosa	151	39,992	52,601	52,021	49,728	47,920	51,555	53,395	52,151	59,911	68,032	72,260	99,710	122,764
U. Texas, Dallas	152	75,236	89,767	83,124	93,582	94,961	92,374	99,328	105,140	100,950	113,560	119,531	112,959	120,737
New Mexico State U.	153	146,364	137,301	135,214	136,254	129,124	127,000	103,871	99,975	93,993	100,033	105,817	109,520	120,064

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Cold Spring Harbor Laboratory	154	ne	89,913	84,072	78,236	76,733	84,653	88,943	97,288	115,870	126,773	115,051	114,885	118,034
U. Rhode Island	155	84,523	101,202	97,845	94,381	84,393	86,139	90,562	95,197	98,271	107,429	102,059	120,266	115,189
U. Tennessee, Health Science Center	156	81,900	i 81,216	77,749	71,897	67,841	65,771	71,547	73,393	79,460	96,979	99,716	109,562	115,161
Rush U.	157	73,398	79,212	80,300	81,770	80,551	79,048	73,351	74,062	89,101	96,267	94,438	107,398	114,874
Rensselaer Polytechnic Institute	158	83,601	84,346	92,348	92,365	104,844	102,122	93,907	96,533	94,221	99,326	114,386	110,580	114,332
U. Montana, Missoula	159	62,814	59,617	58,735	59,809	54,808	60,282	69,994	84,109	86,096	96,246	101,504	112,294	113,897
U. Texas, Arlington	160	62,410	60,003	64,684	72,571	74,261	74,702	82,355	82,065	87,257	100,734	107,017	105,993	113,736
U. Idaho	161	85,475	94,345	95,327	93,941	92,512	95,459	99,354	105,475	105,578	107,351	109,184	102,636	112,198
U. Texas, San Antonio	162	51,480	50,496	48,700	48,599	42,318	50,012	49,383	64,143	66,192	75,719	91,606	98,032	111,983
SUNY, Binghamton U.	163	66,512	65,816	73,098	67,892	63,960	70,367	75,332	88,735	105,017	93,446	105,920	110,490	110,499
U. Texas, El Paso	164	64,134	67,576	72,033	73,005	70,475	77,515	80,981	83,892	80,824	92,205	87,437	86,892	106,992
SUNY, U. Albany	165	356,517	146,987	135,673	135,879	129,434	110,284	105,605	140,392	151,303	161,613	120,484	100,353	104,873
U. Massachusetts, Lowell	166	55,120	55,257	53,980	51,465	52,595	57,435	58,437	60,735	65,060	76,770	85,346	87,311	102,312
U. Maryland, Baltimore County	167	81,894	83,155	65,628	62,887	64,329	67,944	69,404	69,926	70,358	76,918	79,669	81,658	100,757
San Diego State U.	168	95,064	91,789	75,670	69,338	77,474	76,131	74,504	70,862	69,858	74,733	78,865	86,282	97,311
Colorado School of Mines	169	43,403	45,816	55,925	57,778	58,498	57,425	59,576	58,175	58,288	67,310	74,763	79,464	90,864
Michigan Technological U.	170	60,183	66,812	67,977	66,192	64,791	66,135	68,863	68,681	75,194	76,853	74,731	78,507	87,980
New Mexico Institute of Mining and Technology	171	51,696	43,857	37,875	32,442	i 48,260	26,222	19,238	20,404	21,260	24,523	24,267	28,487	87,527
Brandeis U.	172	67,672	71,638	69,489	69,398	67,048	i 68,690	i 56,871	62,745	i 56,750	56,738	77,912	80,095	86,979
Syracuse U.	173	76,808	56,598	56,192	48,195	48,034	49,384	53,864	78,329	78,642	83,679	77,690	79,680	79,843
Saint Louis U.	174	46,589	52,134	48,303	47,174	42,316	40,831	40,426	53,643	55,913	61,907	66,858	75,470	79,565
Van Andel Research Institute	175	ne	ne	ne	ne	ne	40,502	i 40,040	i 44,578	i 55,171	61,738	58,982	65,789	78,626
Cleveland State U.	176	33,857	55,044	60,481	67,137	61,291	56,683	i 70,665	77,518	77,203	73,854	72,092	65,974	73,255
U. Nevada, Las Vegas	177	42,202	37,711	33,130	34,299	38,229	39,564	49,405	53,073	62,711	73,777	77,606	74,115	72,478
Howard U.	178	38,626	41,471	44,587	41,351	38,366	45,764	40,412	44,613	44,592	43,227	44,077	51,442	66,646
U. North Texas, Denton	179	22,762	34,421	40,796	43,342	39,453	38,001	30,858	35,443	37,731	54,523	57,764	56,738	66,521
U. Southern Mississippi	180	41,480	45,207	54,151	44,912	45,127	41,432	47,195	49,769	49,785	65,249	64,496	60,447	64,443

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Northern Arizona U.	181	27,281	28,581	27,078	30,134	30,903	34,731	38,800	45,572	52,105	57,763	62,548	67,558	64,332
William & Mary	182	51,453	48,835	46,547	48,183	49,428	52,642	54,491	54,197	54,508	55,687	55,857	58,063	64,142
CUNY, City C.	183	45,050	56,734	56,618	54,316	52,072	51,905	61,354	53,738	53,132	51,305	44,175	55,178	60,571
Old Dominion U.	184	76,710	80,696	79,305	76,187	52,832	48,418	53,097	54,635	51,747	59,858	58,862	58,478	59,895
U. Toledo	185	66,839	70,164	63,348	63,119	56,710	48,391	45,687	46,697	48,184	52,655	51,843	51,629	59,820
South Dakota State U.	186	67,269	69,646	68,554	63,751	58,199	57,433	60,582	63,328	63,287	66,462	60,600	51,153	59,064
Naval Postgraduate School	187	96,067	95,153	124,531	89,616	91,400	74,293	54,558	52,404	52,551	60,522	58,276	58,240	58,894
Florida Atlantic U.	188	41,896	47,027	46,782	22,594	21,760	19,718	25,158	42,918	44,634	46,399	50,002	54,980	58,593
Texas State U.	189	19,496	19,243	24,285	26,671	25,910	29,934	30,064	28,479	29,444	35,440	39,242	40,513	57,743
Indiana U.-Purdue U., Indianapolis	190	290,490	314,004	308,101	325,562	316,650	51,479	52,050	51,783	54,270	58,150	63,477	58,855	56,684
San Jose State U.	191	32,947	34,075	29,554	32,100	36,354	39,833	38,326	36,594	38,252	39,818	40,474	48,531	55,187
U. California, Office of the President	192	72,542	63,420	65,627	67,447	50,103	48,233	39,051	46,399	55,676	67,702	60,686	50,462	54,568
Rochester Institute of Technology	193	33,537	29,709	31,893	32,199	31,471	36,030	39,952	45,563	43,679	49,949	49,572	48,513	54,566
U. Memphis	194	40,589	39,315	41,841	39,306	44,351	37,539	40,374	41,192	50,819	47,225	54,193	50,121	54,238
Louisiana State U., Health Sciences Center, New Orleans	195	59,776	57,007	53,712	49,443	45,486	46,840	43,067	40,785	38,989	40,914	43,419	44,370	53,995
Worcester Polytechnic Institute	196	17,154	20,647	18,558	23,780	26,544	33,910	34,921	31,662	31,477	37,822	41,949	47,250	53,527
U. Maryland Center for Environmental Science	197	42,670	50,007	48,224	53,683	50,814	49,341	52,861	54,491	53,398	55,121	53,676	50,322	52,814
U. Texas Rio Grande Valley	198	na	na	na	na	na	na	27,400	28,547	25,623	42,714	47,610	48,450	52,702
Stevens Institute of Technology	199	32,230	39,973	29,893	26,788	28,917	33,042	34,413	34,018	31,565	35,477	42,640	41,313	51,988
Baylor U.	200	8,452	10,277	8,184	11,877	17,877	20,721	22,237	25,052	25,289	26,291	31,313	42,087	51,527
Missouri U. of Science and Technology	201	37,259	36,325	33,797	35,400	38,509	35,144	35,531	37,958	42,657	47,521	46,813	51,669	51,242
U. Missouri, Kansas City	202	24,461	27,000	23,902	23,521	26,452	24,097	23,955	22,806	22,857	30,096	34,695	31,756	50,685
SUNY, Upstate Medical U.	203	43,824	39,988	35,897	34,286	33,460	32,453	31,892	35,551	36,674	38,091	41,557	44,870	50,586

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Wisconsin-Milwaukee	204	58,417	56,845	52,271	47,568	51,316	55,883	50,661	48,017	53,585	50,950	54,782	49,581	50,505
Mercer U.	205	26,862	28,998	31,352	28,876	30,162	32,771	31,653	29,366	34,098	44,037	48,955	51,895	50,073
Lehigh U.	206	34,897	29,639	28,949	31,003	32,860	33,693	30,375	33,752	35,849	35,414	36,427	39,118	48,362
U. Puerto Rico, Medical Sciences Campus	207	39,134	64,017	45,649	43,374	40,444	43,316	46,232	42,423	41,216	45,014	37,217	44,111	47,578
Ohio U.	208	44,428	43,399	42,798	44,746	58,238	i 57,786	i 55,828	i 57,321	i 49,518	i 45,581	42,369	44,199	47,490
East Carolina U.	209	23,370	25,727	29,468	36,425	29,169	26,248	25,251	25,551	36,066	47,612	47,123	42,053	46,984
Southern Illinois U., Carbondale	210	69,924	71,130	71,097	70,854	65,256	57,509	53,172	48,416	49,636	41,729	41,617	47,210	46,967
Boston C.	211	36,960	i 30,446	30,436	30,700	28,326	26,123	40,724	43,825	42,801	44,768	43,168	45,726	46,563
Texas Tech U., Health Sciences Center	212	51,282	58,774	61,219	61,309	36,932	39,261	38,717	38,657	36,784	42,959	43,102	40,567	44,961
Boise State U.	213	18,045	23,519	26,885	24,027	25,351	29,955	30,384	32,279	37,959	35,528	38,919	43,167	44,696
Air Force Institute of Technology	214	28,318	30,090	30,609	26,234	23,335	26,323	29,722	35,703	33,360	34,016	35,584	45,703	44,391
Loyola U., Chicago	215	42,120	40,994	44,785	50,150	48,996	47,000	41,152	38,070	37,049	37,210	38,210	42,342	44,182
U. California, Merced	216	20,730	20,307	21,826	21,730	22,612	28,278	27,185	32,448	35,753	42,611	43,421	39,867	43,445
Morehouse School of Medicine	217	30,669	i 33,946	37,586	36,638	i 41,858	33,367	38,774	35,454	33,215	31,289	29,813	32,637	42,489
U. South Alabama	218	30,012	36,975	34,194	34,737	33,994	38,245	42,466	40,629	40,519	51,968	50,571	46,500	41,920
Florida A&M U.	219	30,282	33,719	31,375	33,538	29,895	31,676	32,856	33,024	34,437	36,605	34,194	35,945	41,786
North Carolina A&T State U.	220	35,216	34,725	33,963	33,251	34,160	34,514	31,782	35,285	34,714	33,297	31,382	35,189	41,426
Brigham Young U., Provo	221	27,766	29,980	26,499	30,076	30,797	31,849	35,512	36,791	34,276	33,275	33,810	39,753	40,734
U. North Carolina, Charlotte	222	28,216	24,323	22,504	21,744	20,646	21,836	23,610	24,190	34,870	42,697	45,181	47,458	38,264
U. Massachusetts, Boston	223	39,387	31,864	28,869	29,875	30,021	30,305	35,220	37,929	33,865	38,998	36,827	37,121	37,753
Southern Methodist U.	224	16,121	22,008	20,917	17,972	24,443	20,538	22,729	21,128	21,505	27,503	26,882	25,998	37,318
Oakland U.	225	11,796	14,725	15,439	14,033	12,515	15,015	14,083	12,757	11,961	17,226	12,851	19,663	37,108
U.S. Air Force Academy	226	54,509	70,285	43,512	49,471	41,539	i 35,157	50,659	40,635	33,467	34,940	33,308	32,086	36,504
Kent State U.	227	24,616	24,388	23,353	19,962	21,785	25,917	21,951	27,413	26,703	32,867	33,929	36,040	36,440
San Francisco State U.	228	24,959	25,772	29,447	31,948	28,710	26,178	25,149	26,712	27,841	29,667	31,177	i 32,882	34,059

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022												
U. Texas Health Science Center, Tyler	229	ne	ne	ne	ne	ne	12,191	11,799	16,292	17,949	i	19,606	i	21,265	27,928	33,872										
Portland State U.	230	40,203	41,692	40,939	38,785	39,134	36,355	38,717	36,595	36,526	38,726	33,654	33,096	33,017												
SUNY, C. of Environmental Science and Forestry	231	26,916	25,007	i	23,117	i	21,225	i	19,013	i	22,036	24,221	27,755	26,559	28,979	29,000	28,145	32,606	i							
Texas A&M U.-Corpus Christi	232	15,034	15,146	13,626	15,161	19,058	22,985	21,911	25,644	28,077	29,296	28,246	27,070	31,991												
U. Massachusetts, Dartmouth	233	24,312	23,708	21,556	25,559	25,879	23,875	24,363	24,336	24,536	26,554	25,326	27,986	31,852												
American U.	234	16,809	18,212	18,404	23,794	38,038	25,350	28,170	26,551	31,906	39,531	37,505	29,508	31,685												
Teachers C., Columbia U.	235	15,149	17,459	19,829	18,538	19,457	22,359	22,868	23,189	23,261	24,234	22,170	24,303	30,921												
SUNY, Downstate Health Sciences U.	236	32,512	41,993	43,257	39,354	33,331	28,652	33,735	31,873	34,661	36,015	33,204	34,459	30,918												
Marquette U.	237	13,124	16,525	15,208	16,257	17,267	19,985	21,968	23,692	24,623	28,856	29,152	29,369	30,871												
Catholic U. of America	238	20,871	24,933	24,275	22,795	22,009	23,817	24,360	23,337	24,269	23,402	24,099	26,557	30,035												
Rowan U.	239	2,610	3,185	3,657	2,729	8,118	7,921	10,113	12,710	15,818	21,980	25,269	26,086	29,723												
Illinois Institute of Technology	240	34,348	40,199	32,148	36,426	30,938	33,810	29,430	32,362	32,566	34,220	29,003	29,542	29,710												
Louisiana State U., Health Sciences Center, Shreveport	241	30,817	31,021	29,365	28,266	25,004	24,069	23,353	22,560	24,463	26,262	25,321	24,600	29,502												
California Polytechnic State U., San Luis Obispo	242	19,148	15,489	15,939	15,098	14,648	15,666	17,559	17,304	15,860	24,954	23,679	22,541	29,000												
Desert Research Institute	243	34,367	35,331	33,056	27,695	23,778	22,103	29,422	29,440	27,875	26,991	26,428	26,365	28,478												
Nova Southeastern U.	244	9,740	11,912	12,599	12,415	13,532	14,439	18,991	22,021	22,406	24,277	25,476	24,185	27,786												
CUNY, Hunter C.	245	35,751	35,645	36,085	36,741	35,702	33,483	33,508	26,496	29,752	32,773	33,951	30,854	27,656												
Embry-Riddle Aeronautical U.	246	12,189	10,705	14,225	11,575	14,741	11,528	16,409	13,133	16,601	12,307	17,436	19,054	27,382												
Wright State U.	247	48,396	47,795	45,901	49,760	54,456	53,881	55,241	59,263	67,615	63,779	48,974	25,852	27,217												
U. South Dakota	248	27,511	25,321	27,060	30,364	27,367	21,671	22,543	24,830	27,168	28,456	24,766	22,891	26,140												
Creighton U.	249	25,432	i	28,907	29,911	i	27,709	i	24,073	i	22,228	i	21,843	i	22,310	i	18,896	i	22,278	i	18,899	i	21,647	i	25,850	i
Morgan State U.	250	12,768	12,544	17,470	14,942	15,337	13,406	15,353	14,527	12,727	12,791	16,919	18,888	25,178												
U. Denver	251	12,348	13,018	11,575	12,716	11,216	10,614	16,858	18,327	21,618	21,642	22,612	21,373	24,694												

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Nebraska, central administration	252	ne	ne	ne	ne	ne	ne	ne	ne	12,713	17,697	22,814	20,931	24,578
Georgia Southern U.	253	3,164	3,505	5,185	17,287	19,584	16,456	16,465	15,221	12,150	9,634	10,049	25,292	24,155
Central Michigan U.	254	3,229	5,865	8,190	9,996	11,506	9,725	10,304	11,521	13,406	15,607	16,050	20,390	24,004
Delaware State U.	255	14,723	17,993	15,416	17,260	17,654	15,964	20,384	19,136	18,916	22,512	19,627	19,194	23,434
Rutgers, State U. New Jersey, Newark	256	25,953	31,714	31,287	29,110	23,235	19,913	18,412	21,586	23,190	21,291	23,118	20,252	23,306
Marshall U.	257	24,398	26,268	18,998	19,607	20,154	19,835	18,777	16,423	18,043	17,823	19,020	21,555	22,982
U. Minnesota, Duluth	258	20,237	22,301	20,863	20,818	21,122	26,958	26,949	24,452	24,693	26,859	25,634	23,276	22,937
U. Nebraska, Omaha	259	6,783	7,903	7,536	7,966	7,640	6,688	9,093	10,637	10,987	11,775	12,878	17,554	22,893
Miami U.	260	14,561	14,795	21,151	17,875	16,035	14,904	14,111	15,482	17,120	19,280	21,808	23,045	22,655
East Tennessee State U.	261	9,185	9,496	10,657	8,506	6,954	6,173	7,680	9,146	13,694	13,903	13,618	17,396	22,453
Albany Medical C.	262	22,953	20,876	17,735	15,093	16,093	18,043	20,166	20,443	21,187	23,028	23,510	22,443	22,297
U. North Carolina, Greensboro	263	12,818	16,230	12,590	12,629	15,735	16,673	16,129	14,416	14,374	16,500	15,364	18,992	22,203
Eastern Virginia Medical School	264	44,420	36,569	37,745	44,183	43,917	42,296	32,550	28,671	30,010	27,064	20,870	19,415	22,165
U. Puerto Rico, Rio Piedras	265	27,780	30,139	31,877	26,755	26,656	26,544	22,610	17,600	13,889	18,019	17,888	19,797	22,159
Tuskegee U.	266	14,258	14,321	13,188	17,094	24,066	20,704	16,508	16,508	13,402	20,562	20,973	21,355	21,897
Texas A&M U.-Kingsville	267	14,213	14,572	14,824	15,308	18,371	18,170	18,849	19,360	18,443	19,537	20,568	21,280	21,858
Chapman U.	268	2,135	2,098	2,396	2,734	3,189	3,074	5,023	8,568	9,895	12,498	13,951	16,594	21,500
Louisiana Tech U.	269	20,752	21,641	20,265	18,983	17,088	17,744	16,639	17,079	18,089	19,760	20,371	20,780	21,384
CUNY, Queens C.	270	16,233	22,831	22,067	18,601	22,053	18,332	18,538	15,522	15,969	17,643	15,606	14,946	21,027
Western Michigan U. and Homer Stryker M.D. School of Medicine	271	14,432	15,875	13,546	12,821	13,500	13,375	11,974	17,687	15,913	15,160	15,350	17,672	20,850
Montclair State U.	272	1,368	3,373	4,470	4,005	3,342	3,433	4,250	4,006	4,965	7,960	10,604	11,470	20,806
Northern Illinois U.	273	23,353	17,672	18,147	18,866	15,165	13,660	16,515	12,565	18,965	18,337	16,675	19,357	20,720
U.S. Military Academy	274	19,763	12,314	11,702	11,612	13,247	13,135	12,281	7,247	6,313	6,432	11,872	19,040	20,439
California State U., Sacramento	275	11,673	13,822	12,056	12,444	11,783	16,585	17,705	17,647	18,017	20,279	21,425	20,072	20,388
U. of the Virgin Islands	276	31,272	21,373	24,543	18,374	14,732	19,456	21,215	12,031	11,853	11,668	13,622	15,231	20,259

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
South Dakota School of Mines and Technology	277	28,572	32,010	18,991	12,156	10,472	14,970	15,396	15,541	15,092	12,973	14,490	15,746	20,061
U. Guam	278	5,555	5,477	5,975	5,873	6,790	5,919	7,351	8,803	11,053	12,001	12,674	17,212	19,708
U. Alaska, Anchorage	279	11,328	12,380	13,004	13,022	15,112	15,396	18,382	18,646	19,254	20,655	22,123	20,590	19,625
U. Akron	280	47,558	52,881	59,765	62,331	64,270	54,089	57,351	39,566	31,789	29,090	22,595	16,747	19,449
Clarkson U.	281	18,289	17,772	14,787	12,009	13,642	13,194	12,799	14,180	15,780	16,211	14,095	15,512	19,365
Villanova U.	282	9,191	9,281	7,831	6,931	11,645	12,208	12,934	15,189	16,376	18,225	20,414	19,197	18,882
Southern Illinois U., Edwardsville	283	30,958	33,318	25,608	24,594	17,215	18,248	17,243	15,559	16,914	15,513	14,260	13,603	18,193
Meharry Medical C.	284	27,001	29,055	25,559	22,532	18,997	13,998	14,768	16,782	16,980	18,286	13,870	15,840	17,960
Tennessee State U.	285	11,253	11,961	14,108	15,149	19,437	19,208	18,324	16,247	16,355	14,376	25,478	21,796	17,825
California State U., Northridge	286	16,747	9,795	15,619	9,466	12,628	12,053	12,471	15,336	17,036	18,758	19,405	15,220	17,724
U. North Carolina, Wilmington	287	20,618	19,961	17,015	15,490	12,212	13,166	13,597	14,000	15,058	16,039	15,005	15,051	17,634
Prairie View A&M U.	288	12,557	15,226	14,523	13,174	12,248	12,932	12,511	13,455	14,766	15,538	16,103	14,867	17,361
Florida Institute of Technology	289	11,427	9,749	9,187	9,195	10,564	11,201	15,196	18,040	16,343	16,847	17,276	22,238	16,928
Tarleton State U.	290	9,931	9,720	8,646	7,854	9,961	8,956	8,880	10,250	11,960	11,566	12,253	14,688	16,794
Alcorn State U.	291	10,280	11,397	11,515	11,315	10,060	9,396	8,204	16,129	13,834	14,435	13,710	14,188	16,725
CUNY, Advanced Science Research Center	292	na	na	na	na	na	569	ne	3,293	5,462	8,300	11,226	15,400	16,499
New York Medical C.	293	28,400	27,316	23,277	20,243	17,908	17,653	17,311	15,637	8,141	19,398	20,137	18,872	16,461
U. Tulsa	294	22,690	18,703	19,895	21,186	26,460	24,135	21,347	20,567	19,797	18,180	18,487	16,426	16,456
CUNY, Graduate School of Public Health and Health Policy	295	na	na	na	na	na	na	na	na	8,636	9,521	12,177	15,035	16,423
Idaho State U.	296	19,234	21,047	20,764	21,476	19,962	17,540	20,305	18,398	17,659	14,560	14,232	13,746	16,361
Kennesaw State U.	297	1,401	1,374	1,738	2,100	1,881	1,316	6,279	7,728	8,006	10,320	14,555	14,161	16,128
Jackson State U.	298	38,114	39,867	38,027	32,119	24,132	22,163	22,408	21,272	18,972	18,057	14,979	14,822	16,118
U. Puerto Rico, Mayaguez	299	25,536	33,509	31,143	28,041	25,920	26,986	24,908	25,328	23,764	26,092	25,896	16,322	15,914
California State U., Long Beach	300	14,762	14,006	13,250	12,494	9,746	8,108	14,175	16,993	18,408	17,459	15,900	14,210	15,781
Loma Linda U.	301	32,915	37,169	29,762	29,799	23,120	25,417	22,956	21,846	19,537	17,621	15,705	13,788	15,498
Texas Christian U.	302	3,815	3,841	5,105	5,342	5,132	5,095	4,053	4,330	3,279	4,291	13,590	13,075	15,427

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Tennessee Technological U.	303	16,152	11,809	9,138	8,705	9,410	9,804	9,776	11,467	12,227	13,107	13,613	14,616	15,248
California State Polytechnic U., Humboldt	304	7,505	9,520	9,464	7,999	8,242	11,173	16,084	15,914	14,983	14,891	13,899	13,649	14,985
Middle Tennessee State U.	305	3,370	2,825	5,491	3,384	1,522	1,965	3,971	4,092	3,735	4,474	4,780	14,240	14,731
U. New Orleans	306	25,932	23,290	22,275	19,790	17,182	16,980	14,551	13,436	12,148	12,713	13,686	13,398	14,689
Charles R. Drew U. of Medicine and Science	307	22,152	22,150	20,580	18,250	20,686	14,128	13,360	15,652	11,490	13,739	13,682	13,228	14,581
U. West Florida	308	4,079	3,551	2,559	4,004	5,080	5,180	12,310	12,461	15,710	12,173	11,122	11,069	14,445
North Carolina Central U.	309	6,870	9,043	10,573	8,190	10,158	10,971	10,539	11,689	11,299	13,352	13,699	11,840	14,414
Montana Technological U.	310	7,424	6,705	11,765	11,059	11,348	11,595	11,851	13,059	12,666	12,731	12,987	14,933	14,188
Xavier U. Louisiana	311	8,022	9,836	10,606	8,789	9,335	9,588	12,060	12,372	11,586	9,999	11,335	12,660	14,141
Long Island U.	312	630	672	671	676	ne	ne	611	1,602	1,731	4,858	10,148	10,652	13,678
Northeast Ohio Medical U.	313	10,819	13,581	13,358	12,722	15,916	17,103	18,823	19,216	18,218	18,007	15,756	13,853	13,465
Bowling Green State U.	314	8,030	8,834	8,426	12,808	8,630	6,263	10,999	9,374	9,570	10,112	11,699	12,417	13,363
U. Colorado Denver ^c	315	na	na	na	na	na	na	na	na	na	na	na	13,067	13,123
Texas Tech U., Health Sciences Center, El Paso	316	ne	ne	ne	ne	22,634	18,186	16,674	15,526	12,145	11,649	10,294	10,555	13,073
Rosalind Franklin U. of Medicine and Science	317	12,426	14,261	15,587	17,401	17,794	16,604	16,760	17,006	16,765	16,126	14,601	13,805	12,988
U. Hawaii, system office	318	ne	ne	ne	ne	ne	ne	ne	ne	12,340	12,159	13,568	12,918	12,645
New School	319	3,167	3,277	3,695	5,919	3,843	5,254	15,747	11,123	8,112	9,179	9,255	10,162	12,593
California State U., Fullerton	320	11,147	14,330	11,094	10,230	7,104	5,318	5,029	4,890	5,724	6,017	5,457	6,363	12,400
California State U., Fresno	321	8,117	8,296	8,283	7,117	7,303	7,248	7,431	7,228	8,414	8,241	8,347	8,284	12,062
Western Washington U.	322	6,630	7,738	6,501	6,577	6,768	7,619	7,997	9,294	10,912	9,896	10,315	11,045	11,769
Lincoln U., Jefferson City	323	8,475	8,518	7,899	6,585	6,742	6,296	5,826	5,164	4,215	4,581	5,777	7,621	11,500
Missouri State U.	324	7,737	5,576	4,340	3,879	3,677	3,516	3,027	3,104	4,391	5,669	13,020	9,994	11,156

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Midwestern U.	325	3,596	4,022	5,200	6,292	7,310	8,560	7,732	9,207	10,173	10,343	10,479	10,961	11,069
Hampton U.	326	14,455	12,292	15,290	12,620	11,153	14,767	13,572	15,908	13,669	12,943	10,842	11,181	11,049
James Madison U.	327	6,858	7,075	8,428	5,539	4,516	3,700	3,283	3,108	3,859	4,968	6,169	8,687	11,045
U.S. Naval Academy	328	11,093	10,543	9,156	10,476	10,661	9,609	11,364	13,524	14,057	13,481	12,827	10,747	10,664
Texas Southern U.	329	4,744	4,255	4,424	5,518	2,855	3,089	3,764	4,702	2,637	4,893	8,600	7,880	10,576
U. Tennessee, Chattanooga	330	8,786	7,308	8,865	5,928	4,627	5,318	3,962	4,814	5,834	7,337	9,060	9,380	10,514
U. North Texas, Health Science Center	331	38,862	45,943	46,865	44,904	47,002	46,335	50,567	48,476	49,503	50,124	42,766	50,698	10,439
Duquesne U.	332	12,078	13,603	12,858	12,385	13,019	13,767	14,211	14,396	14,121	13,176	13,851	7,589	10,379
Central State U.	333	3,060	3,694	3,490	2,769	2,025	1,508	1,643	2,008	3,615	3,766	6,107	8,751	10,274
U. Missouri, Saint Louis	334	10,050	12,344	12,840	13,156	14,632	9,991	10,876	10,411	10,708	12,865	12,676	11,484	10,179
Virginia State U.	335	6,907	8,094	10,060	9,213	8,175	7,657	7,948	8,053	8,674	9,223	7,826	8,784	10,152
Fort Valley State U.	336	4,586	3,850	3,665	3,688	4,547	4,320	5,138	5,374	3,916	4,562	4,921	4,842	9,969
U. of the District of Columbia	337	5,012	3,700	4,011	3,073	2,361	2,043	3,469	3,733	2,960	4,043	3,942	7,054	9,475
California State U., Los Angeles	338	7,178	8,682	6,876	7,192	4,881	4,461	4,860	8,031	9,487	12,083	10,188	8,892	9,320
Kentucky State U.	339	4,887	4,559	6,843	5,580	5,694	6,017	7,060	8,151	9,125	8,432	7,963	8,756	9,280
U. Maryland, Eastern Shore	340	8,692	8,664	7,265	8,786	8,982	9,631	8,175	7,403	4,941	7,128	8,092	8,636	9,274
Alabama A&M U.	341	30,297	28,813	28,573	28,335	28,095	27,855	23,784	19,887	15,989	12,089	8,237	8,725	9,225
U. North Florida	342	6,316	8,773	6,620	4,126	2,657	3,160	4,366	5,059	5,666	5,439	5,490	5,358	9,051
California State U., Monterey Bay	343	5,305	6,959	6,567	6,129	4,780	5,459	5,679	5,384	5,702	6,192	5,763	6,844	8,914
Clark Atlanta U.	344	8,515	8,205	10,405	9,156	9,172	9,929	8,482	7,948	7,810	8,508	8,259	8,712	8,779
West Texas A&M U.	345	5,741	4,307	4,346	4,122	3,663	3,924	3,776	4,690	4,441	5,021	5,488	9,014	8,744
Clark U.	346	5,237	6,032	7,041	5,481	5,644	6,357	6,404	7,408	7,650	9,426	9,795	7,750	8,570
California State U., San Marcos	347	5,049	5,044	5,040	5,034	4,470	4,637	5,212	4,962	7,185	9,446	11,918	9,220	8,384
Oklahoma State U., Center for Health Sciences	348	4,398	2,815	2,122	2,137	1,805	1,625	1,924	2,374	2,497	5,339	8,342	7,752	8,307
Arkansas State U., Jonesboro	349	11,043	13,339	14,064	10,320	7,956	8,391	8,158	7,936	8,238	8,906	8,637	8,379	8,141
U. Hawaii, Hilo	350	11,567	5,927	14,841	11,607	9,242	14,431	11,216	6,976	7,048	6,818	6,957	7,379	7,955
California State U., San Bernardino	351	2,630	7,266	7,472	10,872	12,572	14,342	9,725	10,319	11,535	12,419	7,415	7,999	7,847

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Illinois State U.	352	5,622	5,492	4,852	5,155	5,212	5,042	5,586	4,658	5,157	6,584	7,128	7,664	7,811
Sam Houston State U.	353	6,045	2,637	3,643	3,225	3,235	2,804	3,170	3,408	5,622	6,180	5,758	6,422	7,790
U. Michigan, Dearborn	354	6,377	7,025	5,720	6,419	7,744	7,179	7,050	7,664	7,411	8,092	8,141	7,174	7,766
Fordham U.	355	5,212	4,494	5,624	6,704	7,086	6,352	9,477	8,429	7,336	6,623	5,472	5,479	7,554
U. Arkansas, Pine Bluff	356	8,343	9,415	9,073	8,909	8,198	8,425	8,873	8,136	8,314	9,005	8,527	8,713	7,506
California State U., East Bay	357	1,312	1,644	1,039	934	ne	ne	837	ne	ne	ne	5,515	6,104	7,450
Ball State U.	358	4,780	9,159	4,701	3,616	4,364	4,810	5,689	5,215	6,412	7,025	6,771	6,262	7,404
Saint Joseph's U.	359	1,957	1,840	1,704	937	569	650	911	1,316	1,255	1,688	1,748	1,398	7,309
Wesleyan U.	360	7,599	9,356	8,162	7,280	6,017	6,330	6,760	7,589	8,529	7,714	5,971	5,596	7,234
Edward Via C. of Osteopathic Medicine	361	ne	2,453	2,576	4,992	2,633	2,237	5,692	8,119	7,601	7,225	7,475	6,629	7,121
Western Kentucky U.	362	9,527	8,003	10,259	8,744	7,398	6,936	7,480	9,062	8,003	7,872	7,022	6,092	7,103
Southern U. and A&M C., Agricultural Research and Extension Center	363	ne	6,143	8,122	5,530	5,606	4,761	4,704	5,000	i	5,296	5,448	4,475	6,164
Western U. of Health Sciences	364	1,283	900	2,773	2,218	2,384	2,219	3,717	5,740	4,063	3,936	4,866	5,598	7,043
California State Polytechnic U., Pomona	365	4,040	4,737	4,599	6,702	i	5,349	4,513	5,254	5,732	7,538	5,323	7,151	6,878
U. Colorado Colorado Springs	366	8,805	6,935	3,996	3,688	4,312	5,962	5,679	5,611	4,730	3,440	4,385	4,495	6,780
U. Arkansas, Little Rock	367	9,754	11,320	10,245	11,994	7,055	6,276	6,971	6,050	7,079	9,134	8,883	6,896	6,734
West Virginia State U.	368	3,770	4,176	5,087	4,467	6,689	7,364	5,224	6,305	6,535	5,763	5,775	6,438	6,703
Philadelphia C. of Osteopathic Medicine	369	1,278	2,401	1,898	2,614	2,209	2,561	2,458	2,969	3,059	3,162	3,360	6,186	6,667
U. New England	370	3,560	4,016	5,217	6,637	7,456	7,360	7,289	7,817	6,668	7,346	6,881	6,229	6,641
Amherst C.	371	2,622	3,230	3,618	i	4,007	3,171	3,401	3,072	3,105	3,546	5,380	3,991	4,226
Appalachian State U.	372	2,550	3,498	4,196	2,877	3,977	3,507	2,868	4,318	3,387	3,060	4,141	3,650	6,301
Roseman U. of Health Sciences	373	ne	840	ne	ne	3,021	3,287	3,433	4,167	3,973	4,176	i	4,380	5,893
Langston U.	374	4,492	5,206	5,326	4,932	8,512	8,126	10,941	10,592	i	10,459	i	10,326	13,954
Towson U.	375	3,002	3,570	2,529	2,795	2,265	2,200	1,945	2,593	3,033	3,245	3,259	3,290	6,225
Yeshiva U.	376	314,240	281,334	289,027	271,166	306,826	306,174	46,130	3,258	3,302	2,420	2,763	4,083	6,188
Grand Valley State U.	377	4,968	6,296	i	7,624	i	8,954	7,934	7,213	6,595	6,268	6,729	6,204	6,354

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
DePaul U.	378	4,302	5,256	5,344	4,828	5,681	8,506	8,590	7,590	6,325	5,241	5,754	5,293	6,129
Gallaudet U.	379	4,975	4,404	4,305	4,468	3,457	3,543	4,014	7,060	7,046	3,255	2,904	6,116	6,087
Abilene Christian U.	380	625	486	ne	ne	ne	ne	ne	ne	ne	ne	ne	4,412	6,073
Loyola Marymount U.	381	1,364	3,938	2,369	2,285	3,610	3,286	4,168	4,075	4,120	4,322	4,489	5,436	6,028
Florida Gulf Coast U.	382	3,841	3,611	3,190	2,943	2,150	1,967	2,112	1,888	1,742	1,470	3,454	5,057	6,017
Pennsylvania State U., Behrend	383	2,500	2,724	3,169	3,041	4,156	3,614	5,104	3,598	2,617	3,268	1,713	5,102	5,905
U. Central Oklahoma	384	1,786	1,537	998	1,058	1,207	1,619	1,214	1,054	1,228	1,429	1,422	1,489	5,712
Winston-Salem State U.	385	ne	743	1,280	436	ne	ne	1,069	1,175	1,289	1,468	4,378	6,890	5,678
Claremont McKenna C.	386	4,788	4,425	5,365	5,414	5,463	ne	6,054	5,818	5,299	5,923	5,403	4,204	5,545
Bryn Mawr C.	387	4,482	4,807	6,247	5,429	5,329	6,369	6,136	6,270	5,708	4,971	5,508	4,803	5,539
Hope C.	388	3,552	3,605	3,320	3,367	2,719	2,932	2,811	3,213	3,011	2,694	3,157	4,429	5,496
U.S. Army War C.	388	ne	ne	ne	ne	ne	ne	ne	ne	ne	2,146	ne	4,662	5,496
New York Institute of Technology	390	1,785	1,934	2,056	3,214	4,916	3,507	3,846	3,094	3,663	5,705	3,473	4,389	5,477
CUNY, Brooklyn C.	391	6,266	8,706	8,485	7,631	8,232	8,553	9,205	6,748	6,054	6,299	6,518	5,768	5,432
U. Southern Maine	392	3,125	7,236	13,682	11,527	6,723	5,095	3,465	6,550	6,696	6,058	5,180	5,341	5,298
C. Charleston	393	11,422	6,446	7,217	8,078	7,121	7,327	6,955	6,740	5,450	5,206	4,142	5,109	5,229
Rutgers, State U. New Jersey, Camden	394	2,573	2,792	2,278	4,923	4,691	4,440	4,192	2,912	2,050	1,889	3,351	3,883	5,192
U. San Diego	395	2,567	2,340	2,485	2,552	2,873	2,332	2,566	3,543	3,491	3,742	3,900	3,774	5,114
U. Detroit Mercy	396	1,084	1,127	933	ne	1,305	1,872	3,649	2,737	4,577	5,170	4,756	4,422	5,092
Oregon Institute of Technology	397	ne	258	ne	ne	ne	788	4,027	3,537	3,145	3,357	2,968	4,314	5,086
Des Moines U.	398	855	924	ne	ne	929	ne	1,206	1,355	1,351	1,643	4,395	4,911	5,080
Morehouse C.	399	7,704	8,280	8,856	9,169	6,973	5,836	4,199	3,663	4,365	4,427	4,686	4,102	5,056
U. Central del Caribe	400	7,122	7,515	7,313	7,095	7,181	6,964	7,090	5,634	4,111	3,953	3,931	3,831	5,053
Smith C.	401	4,215	4,156	3,777	3,688	4,047	5,006	4,124	5,211	5,360	5,330	4,047	3,633	5,036
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	402	ne	2,342	2,562	2,979	3,356	3,089	3,177	3,285	3,502	3,769	3,737	3,776	4,954
U. Washington, Tacoma	403	106	142	261	23	1	1,812	1,784	971	2,105	3,052	3,179	3,862	4,922

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CUNY, John Jay C. of Criminal Justice	404	4,354	4,125	5,001	3,799	3,726	3,515	3,252	3,738	5,893	2,986	4,557	1,908	4,881
Bucknell U.	405	5,169	4,618	3,623	3,867	4,143	3,790	4,005	4,321	4,639	4,061	4,645	4,136	4,874
Pacific U.	406	1,567	927	481	2,387	1,094	978	1,509	5,299	4,156	6,607	4,540	3,767	4,714
Barnard C.	407	3,240	3,916	3,611	2,893	2,403	2,562	3,103	3,108	2,938	3,539	3,449	4,124	4,693
Dakota State U.	408	ne	1,015	5,709	1,574	1,446	1,152	2,026	2,276	3,610	3,706	4,412	3,255	4,684
Texas Woman's U.	409	2,155	2,576	3,196	2,067	1,970	1,812	2,635	3,130	3,265	2,996	3,238	3,850	4,658
MGH Institute of Health Professions	410	ne	587	ne	ne	ne	3,931	2,228	1,839	2,957	3,494	3,014	2,500	4,628
Purdue U., Northwest	411	na	na	na	na	na	na	na	4,920	4,695	3,111	4,415	4,260	4,619
U. Wisconsin-Superior	412	5,890	6,187	6,041	ne	3,022	ne	ne	ne	3,060	2,250	2,295	2,598	4,601
Reed C.	413	1,904	1,839	1,837	2,395	3,091	3,050	3,213	1,415	2,607	3,240	3,662	3,682	4,525
Wellesley C.	414	5,271	4,130	5,253	6,156	6,537	5,653	6,896	5,489	4,896	5,076	4,957	4,701	4,514
Eastern Michigan U.	415	5,388	5,044	5,428	2,655	1,244	1,509	2,642	3,467	3,637	4,706	6,584	4,842	4,509
SUNY, C. of Optometry	416	3,529	3,738	3,466	3,637	3,481	3,906	4,169	3,304	3,120	2,968	3,477	3,460	4,497
Toyota Technological Institute, Chicago	417	ne	746	ne	ne	ne	2,543	2,710	2,880	3,251	3,681	5,887	4,967	4,470
U. New Haven	418	ne	595	456	728	511	518	2,535	985	5,577	5,045	3,736	4,015	4,401
Salisbury U.	419	844	880	2,689	2,587	3,677	4,180	4,523	3,679	4,867	4,870	4,432	4,956	4,352
U. of Health Sciences and Pharmacy in St. Louis	420	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	4,835	5,313	4,280
Williams C.	421	4,691	4,165	4,080	3,127	3,213	4,461	4,506	4,393	4,372	3,735	3,549	3,560	4,249
Lamar U.	422	5,316	4,685	3,570	2,564	2,439	2,218	1,824	3,359	3,316	3,196	2,339	3,154	4,222
Western Illinois U.	423	1,210	1,524	4,514	1,983	1,349	778	ne	1,904	2,414	2,307	2,297	3,394	4,166
Kean U.	424	ne	550	1,191	473	ne	1,064	400	ne	ne	ne	1,076	393	4,158
Youngstown State U.	425	4,518	4,625	3,533	3,713	3,410	3,331	2,333	4,416	4,435	4,368	3,996	2,290	4,074
Indiana U. Pennsylvania	426	767	967	958	337	414	ne	628	1,798	2,474	3,637	3,668	3,249	4,070
Occidental C.	427	2,154	1,803	1,592	1,634	2,177	1,426	1,907	1,764	1,432	2,458	2,657	3,523	4,068
Haverford C.	428	3,603	2,765	2,588	2,370	2,546	2,266	1,750	1,945	2,630	3,324	4,473	3,424	3,961
Hofstra U.	429	1,151	1,095	1,546	955	1,354	2,039	1,916	1,455	1,347	1,253	977	3,107	3,958
U. Oklahoma, Tulsa	430	ne	ne	ne	ne	ne	2,554	3,107	2,667	3,868	4,003	4,591	3,432	3,939
William Paterson U.	430	574	753	ne	ne	ne	ne	803	1,592	3,691	4,424	4,972	4,000	3,939
CUNY, Lehman C.	432	2,932	3,168	2,982	2,242	2,543	2,613	3,847	4,114	4,657	2,594	3,429	2,968	3,937
Fisk U.	433	7,686	4,631	4,058	5,429	7,366	7,247	7,681	4,333	2,781	4,606	3,904	4,143	3,877
Northern Kentucky U.	434	2,188	2,214	1,970	1,641	1,867	1,715	1,650	1,517	1,429	2,025	2,411	3,266	3,777

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. North Carolina, Asheville	435	2,322	2,603	2,575	2,189	1,597	2,046	2,794	2,418	2,641	2,226	2,932	3,149	3,732
U. Wisconsin-Stevens Point	436	6,674	6,063 i	5,452	4,300	3,876 i	3,404 i	2,933 i	3,377 i	3,822 i	4,266 i	4,713	4,393	3,729
Chicago State U.	437	1,598	2,014	565	ne	ne	ne	910	ne	1,154	894	ne	ne	3,701
Southern U. and A&M C., Baton Rouge	438	6,865	6,819 i	6,773	4,727	3,153	4,054	3,267	3,554	3,532	3,713	3,232	3,899	3,673
Carleton C.	439	2,916	3,081	3,529	4,768	4,426	2,718	1,451	1,794	1,918	3,946	2,758	2,984	3,671
Texas A&M U.-Commerce	440	2,147	1,316	1,550	1,758	1,606	1,972	1,409	2,250	2,558	2,428	2,544	2,031	3,574
California State U., Chico	441	2,710	2,288	2,430	2,833	2,284	1,676	2,152	1,474	2,298	2,562	3,671	3,634	3,571
Santa Clara U.	442	3,812	2,327	3,082	2,201	2,772	1,654	2,038	2,026	2,182	2,220	2,569	2,790	3,566
Milwaukee School of Engineering	443	3,944	4,347	4,599	4,351	4,410	4,524	3,930	3,374	3,232	4,026	3,190	3,193	3,545
South Carolina State U.	444	7,166	8,157 i	9,149	6,674 i	7,838 i	9,002 i	12,077 i	13,254	14,021 i	3,010	3,123 i	3,236 i	3,513 i
Citadel Military C. South Carolina	445	ne	305	ne	ne	ne	ne	ne	ne	ne	ne	693	1,497	3,506
Alfred U.	446	4,181	5,946	5,377	6,014	4,156	5,064	3,735	3,197	3,628	5,153	2,780	2,660	3,477
Sonoma State U.	447	858	787	ne	1,938	1,714	1,146	572	ne	ne	ne	1,459	2,878	3,456
U. Northern Iowa	448	2,077	3,451	3,302	3,395	3,510	3,281	3,559	3,248	2,946	3,601	2,870	3,180	3,443
National Defense U.	449	ne	ne	ne	4,906	6,712	4,832	5,720	5,723	2,219	2,155	2,583	2,586	3,420
Colgate U.	450	2,559	2,109	3,004	2,340	2,226	2,244	2,631	2,728	3,142	3,128	2,163	2,807	3,391
U. North Carolina, general administration	451	ne	ne	ne	ne	ne	4,197	4,137	3,721	4,779	4,154	3,932	3,805	3,385
U. Washington, Bothell	452	471	497	553	13	742	2,168	744	1,114	1,361	2,356	1,260	2,246	3,366
Murray State U.	453	3,384	3,713	3,341	2,179	2,053	2,341	2,092	2,438	2,860	3,676	2,993	3,757	3,345
Southern Connecticut State U.	454	0	899 i	1,034 i	632 i	2,472 i	2,058 i	1,406	1,481	1,684	2,756	3,526	2,867	3,303
C. New Jersey	455	809	420	ne	ne	ne	ne	ne	1,023	867	ne	1,389	1,828	3,301
Harvey Mudd C.	456	3,214	3,830	3,507	3,531	3,088	3,204	4,302	3,706	3,717	3,292	2,850	2,328	3,295
California State U., Channel Islands	457	ne	363	ne	1,101	3,324	1,640	1,282	1,002	1,170	1,517	1,399	2,262	3,292
St. John's U., New York	458	1,509	1,697	1,971	2,376	2,392	2,225	1,832	2,200	2,635	2,309	2,930	2,696	3,245
Norfolk State U.	459	5,944	6,930	8,336	6,179	6,780	5,122	7,196	7,237	6,877	7,935	7,121	4,308	3,234

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CUNY, C. Staten Island	460	3,137	2,162	3,151	2,477	i 2,089	1,907	2,780	2,988	3,644	i 3,517	3,534	2,726	3,198
U. Nebraska, Kearney	461	1,441	2,137	948	1,234	1,275	1,216	1,588	3,011	2,091	2,636	2,524	2,867	3,196
West Chester U. Pennsylvania	462	4,634	i 7,785	1,914	969	1,294	2,294	3,138	3,302	3,247	3,787	2,862	2,377	3,186
Alabama State U.	463	13,340	12,340	13,607	1,927	2,236	2,303	2,372	2,253	2,434	2,577	2,582	2,631	3,146
Central Washington U.	464	5,132	2,854	2,752	2,087	1,998	2,182	2,751	3,755	3,050	3,205	2,620	2,400	3,134
Bowie State U.	465	ne	1,910	1,739	1,422	1,761	1,497	1,507	987	1,100	876	1,368	980	3,112
U. Louisiana, Monroe	466	2,869	2,801	2,439	2,753	2,267	1,640	2,430	2,297	2,123	2,359	2,349	2,135	3,087
Hobart and William Smith Colleges	467	1,320	1,355	1,120	2,042	1,100	654	ne	923	ne	1,846	2,007	1,886	3,084
Trinity U.	468	1,387	1,355	1,611	2,815	2,499	2,225	2,096	2,712	2,637	3,185	2,834	2,598	3,076
U. Texas, Tyler	469	2,566	2,394	3,705	2,343	2,573	2,349	1,120	1,710	1,589	2,029	1,882	2,114	2,985
Coastal Carolina U.	470	2,383	2,035	2,232	2,411	2,079	1,750	1,585	1,875	1,629	2,042	1,903	2,062	2,955
California State U., Dominguez Hills	471	2,743	2,780	2,894	3,088	1,384	i 1,035	1,460	1,105	1,582	1,563	1,810	1,985	2,931
U. Baltimore	472	3,606	4,452	3,894	3,865	3,951	4,091	5,188	4,972	3,794	3,474	3,456	2,915	2,885
Pittsburg State U.	473	1,759	1,687	1,479	1,536	2,458	2,205	2,162	2,255	2,253	2,513	2,173	2,730	2,884
Swarthmore C.	474	2,381	2,364	2,684	2,744	2,657	2,215	2,310	2,643	2,690	2,795	2,540	2,396	2,883
Morehead State U.	475	1,882	2,000	2,064	2,376	1,433	1,420	2,089	2,564	2,223	1,624	1,862	1,735	2,880
CUNY, system office	476	ne	ne	819	435	652	828	820	444	2,940	1,713	1,470	1,664	2,860
Grinnell C.	477	1,797	1,072	2,001	2,603	2,336	2,091	2,055	3,174	3,798	3,655	2,921	2,129	2,841
Franklin and Marshall C.	478	3,444	3,140	2,543	2,855	2,123	3,045	2,447	2,876	2,911	3,092	1,919	2,199	2,829
Claremont Graduate U.	479	5,068	1,100	6,200	7,030	5,907	i 5,252	i 4,598	i 3,944	i 3,290	i 2,634	4,365	3,281	2,820
U. Wisconsin-La Crosse	480	3,852	3,366	i 2,879	2,815	3,121	2,948	2,795	2,840	3,178	2,355	2,570	2,847	2,778
Texas A&M International U.	481	1,596	1,336	1,225	1,349	1,450	925	1,617	2,974	3,729	4,034	1,713	2,336	2,701
California State U., Bakersfield	482	2,083	3,130	1,115	2,380	2,254	2,857	2,725	3,751	4,633	6,612	5,902	4,608	2,696
Pepperdine U.	483	239	1,134	i 1,455	i 1,107	i 1,298	1,725	1,820	897	691	1,025	1,153	1,564	2,693
Biola U.	484	ne	ne	ne	ne	ne	ne	1,959	i 2,024	i 2,124	i 2,262	i 2,323	i 2,433	i 2,641
U. Central Arkansas	485	1,700	1,457	1,563	1,444	2,201	2,037	2,132	2,167	2,253	2,150	2,107	1,939	2,627
Furman U.	486	2,202	2,023	1,889	1,994	1,513	1,748	1,864	2,029	2,015	1,628	2,079	1,776	2,617
Davidson C.	487	1,432	1,808	1,291	2,213	1,629	2,305	1,463	1,583	1,338	1,549	1,842	2,279	2,588

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Wisconsin-Green Bay	488	1,128	984 i	991 i	998 i	1,003 i	1,010 i	1,446 i	1,364 i	1,353 i	1,936 i	1,849 i	1,752 i	2,516 i
Hawaii Pacific U.	489	ne	592	1,016	983	1,524	1,221	2,351	2,155	2,094	1,960	1,796	1,817	2,474
Middlebury C.	490	2,284	2,358	3,015	2,083	1,371	1,574	1,822	2,043	1,822	1,657	1,720	2,927	2,467
Eastern Washington U.	491	3,171	3,780	2,538	2,027	1,820	2,973	3,276	1,964	2,506	1,971	2,221	1,918	2,430
Spelman C.	492	2,740	1,833	1,874	1,366	1,185	1,035	1,291	1,227	1,673	2,004	2,136	1,886	2,409
Stephen F. Austin State U.	493	7,536	4,664	3,370	2,877	3,207	3,920	2,968	2,801	2,599	3,241	2,456	2,520	2,407
U. Northern Colorado	494	2,029	1,801	2,012	2,174	3,252	2,670	2,866	3,220	3,722	3,157	2,362	2,309	2,402
Austin Peay State U.	495	ne	1,603	1,358	1,413	868	863	556	955	1,191	1,169	1,974	2,083	2,391
Franklin W. Olin C. of Engineering	496	ne	1,012	1,777	1,157	1,561	2,136	1,762	1,301	876	534	491	936	2,380
Bates C.	497	1,545	1,814	2,031	2,444	1,531	2,725	1,730	1,750	1,508	2,074	2,237	2,577	2,377
Christopher Newport U.	497	1,096	1,669	1,327	1,173	1,469	1,002	1,036	1,137	1,437	1,961	2,244	2,373	2,377
U. Texas of the Permian Basin	499	1,274	1,024	969	716	1,216	1,132	1,080	597	300	ne	939	2,268	2,374
U. Richmond	500	3,243	3,051	3,302	2,602	2,921	2,484	2,559	2,532	2,301	2,311	2,073	2,117	2,347
Pomona C.	501	2,377	3,115	2,694	3,364	3,412	3,234	3,447	2,787	2,425	2,239	2,582	1,878	2,327
Saginaw Valley State U.	502	585	925	748	576	ne	838	804	978	1,584	2,750	2,301	2,386 i	2,316 i
Bowdoin C.	503	2,532	2,633	4,277	4,025	2,950	2,873	3,079	2,200	2,506	2,677	2,554	2,112	2,290
Touro U., California	503	999	1,196	1,993	1,772	3,067	3,106	3,466	3,122	3,233	3,543	3,539	3,475	2,290
Western Carolina U.	505	2,353	1,419	1,768	1,011	1,048	1,145	1,305	1,431	1,430	2,518	2,352	2,441	2,278
Albany C. of Pharmacy and Health Sciences	506	3,074	3,496	2,639	2,637	3,200	2,520	1,789	2,561	2,730	3,381	3,765	3,687	2,276
Troy U.	507	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,589	1,394	2,271
CUNY, Baruch C.	508	1,860	1,342	2,143	967	900	1,379	2,315	1,843	1,736	1,987	2,243	2,297	2,222
Vassar C.	509	1,236	1,552	993	1,136	999	2,118 i	1,417	1,579	4,185 i	1,009	1,553	1,498	2,214
Fort Lewis C.	510	360	606	ne	ne	ne	ne	ne	ne	ne	1,460	1,370	1,906	2,192
Minnesota State U., Mankato	511	3,344	1,990	1,614	1,945	1,798	1,632	3,605	1,849	2,293	2,665	2,339	2,034	2,166
Framingham State U.	512	ne	ne	ne	ne	ne	ne	ne	1,875	131	ne	2,317	2,401 i	2,154 i
Pace U.	512	2,413	2,709	3,306	2,914	3,570	3,436	2,946	2,847	2,148	2,384	3,077	2,346	2,154
SUNY, Buffalo State	514	1,889	2,532	2,970	2,099	1,971	2,355	2,195	1,868	1,905	2,009	2,208	1,935	2,120
Tougaloo C.	515	2,978	2,542	1,865	1,857	1,894	1,868	1,747	2,252	2,860	2,293	2,102	2,092 i	2,098 i

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Dine C.	516	ne	911	i ne	ne	ne	ne	ne	ne	1,238	1,126	347	ne	2,091
U. Illinois, Springfield	517	1,808	1,536	2,155	2,205	1,852	2,040	1,293	2,246	2,104	1,727	2,859	2,286	2,082
Colby C.	518	1,515	1,528	1,709	1,571	1,475	1,573	1,639	1,643	1,948	1,641	1,390	1,133	2,081
U. San Francisco	519	1,546	1,734	3,405	2,233	2,208	1,848	1,718	1,009	1,169	1,195	1,157	1,007	2,079
Lake Superior State U.	520	ne	752	ne	ne	ne	1,122	991	1,066	630	ne	ne	ne	2,056
Western New England U.	521	ne	1,111	461	ne	ne	ne	1,254	551	ne	ne	ne	ne	2,052
Palmer C. of Chiropractic, Davenport	522	4,693	4,861	4,507	3,774	2,736	i 1,698	1,510	1,189	1,600	1,650	1,900	2,233	2,050
Sul Ross State U.	523	2,970	3,101	2,296	2,159	2,528	2,187	1,908	2,498	2,934	2,352	2,068	2,143	i 2,005
U. South Carolina, Aiken	524	337	i 750	ne	1,309	1,133	i 1,154	1,445	2,961	2,582	2,145	2,489	1,994	1,956
U. of St. Thomas (MN)	525	1,003	1,037	751	1,019	647	ne	909	929	1,344	1,395	2,047	4,471	1,936
Monmouth U.	526	2,195	1,956	904	ne	865	ne	900	ne	ne	1,294	1,729	1,667	1,928
St. Edward's U.	527	ne	3,299	2,480	2,640	1,745	4,200	3,720	7,161	2,813	5,813	5,377	4,789	1,914
Black Hills State U.	528	1,741	1,568	1,909	1,983	1,322	1,197	1,722	1,297	918	1,254	1,439	1,204	1,907
Azusa Pacific U.	529	ne	3,414	i 1,930	i ne	ne	3,953	4,996	4,330	4,207	2,731	3,609	2,466	1,891
Savannah State U.	530	1,874	2,700	1,996	2,613	2,210	1,801	2,261	1,405	1,793	1,720	1,804	1,804	1,888
California State U., Stanislaus	531	ne	1,419	i 1,758	1,104	892	1,078	1,108	1,326	1,371	1,435	1,769	2,056	1,883
CUNY, Graduate Center	532	6,799	4,964	6,861	8,835	5,719	4,144	4,979	i 5,727	4,145	4,163	3,613	3,352	1,881
Mount Holyoke C.	533	2,305	2,810	2,838	2,716	3,335	3,565	3,297	3,635	2,601	2,689	1,895	1,845	1,868
New England C. of Optometry	533	1,457	1,751	2,237	2,172	1,234	1,077	980	ne	1,026	1,223	1,150	1,978	1,868
SUNY, Geneseo	535	1,174	2,239	1,989	1,082	957	1,162	1,594	1,626	1,813	1,958	1,528	1,847	1,859
Utah Valley U.	536	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,850
Pennsylvania State U., Harrisburg	537	2,728	3,446	2,774	1,906	2,482	3,379	2,546	1,638	2,087	2,497	1,798	2,652	1,832
U. of the Pacific	537	4,429	3,241	3,753	3,479	1,877	1,488	2,289	1,592	2,228	2,387	1,690	1,370	1,832
CUNY, York C.	539	ne	2,134	1,153	826	ne	315	ne	ne	ne	1,574	1,648	1,060	1,805
Lafayette C.	540	1,544	1,720	1,308	1,269	973	1,201	959	1,459	1,239	1,101	1,185	859	1,803
U. of the Incarnate Word	541	ne	302	ne	ne	ne	576	ne	ne	1,057	1,428	1,408	1,895	1,789
Dillard U.	542	3,707	5,577	i 7,448	7,692	6,907	9,385	9,459	6,943	6,573	2,730	2,487	1,733	1,746
Fayetteville State U.	543	2,188	2,378	1,771	2,050	2,499	2,092	3,040	2,502	2,501	2,224	1,985	2,272	1,745

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
U. Houston-Clear Lake	544	831	1,273	1,253	1,175	1,013	853	1,067	1,146	1,227	1,113	1,128	1,399	1,712	
Southeastern Louisiana U.	545	2,172	1,638	1,733	1,642	1,408	1,984	1,550	1,606	1,304	1,140	1,564	1,071	1,700	
Roger Williams U.	546	1,174	1,616	1,369	1,283	1,927	1,450	1,815	1,900	1,665	1,459	1,285	1,470	1,689	
Virginia Military Institute	547	825	355	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,686	
Connecticut C.	548	1,532	1,801	1,740	1,842	1,966	1,900	1,972	1,875	1,349	1,894	1,598	1,244	1,683	
Northeastern Illinois U.	549	376	388	ne	ne	613	ne	ne	805	1,877	2,078	1,378	1,370	1,663	
Stockton U.	550	ne	1,226	609	ne	1,155	1,297	759	ne	2,560	2,630	3,198	1,246	1,657	
Colorado State U., Pueblo	551	413	364	ne	ne	ne	ne	ne	ne	ne	2,008	1,937	2,159	1,649	
Skidmore C.	552	2,632	1,941	1,758	1,733	1,646	1,620	1,208	1,741	2,451	2,924	2,316	2,269	1,605	
Northern Michigan U.	553	423	405	ne	ne	ne	ne	627	653	963	1,047	1,163	1,127	1,600	
U. Wisconsin-Eau Claire	554	1,774	1,287	1,225	1,132	798	ne	1,170	1,557	1,136	1,468	1,275	1,777	1,594	
U. Alaska, Southeast	555	1,620	1,147	1,107	1,241	1,484	1,588	1,725	1,621	1,640	1,341	1,257	1,176	1,570	
Alaska Pacific U.	556	434	518	ne	ne	ne	976	1,009	835	1,325	1,627	1,234	1,034	1,568	
Florida Polytechnic U.	557	na	na	na	na	na	212	ne	ne	ne	1,981	1,071	1,166	1,566	
Marshall B. Ketchum U.	558	ne	ne	ne	ne	1,030	1,468	1,491	1,512	i	1,451	i	1,430	i	
Calvin U.	559	3,720	2,045	2,370	3,408	2,627	1,772	i	1,331	1,306	1,793	1,521	1,243	i	
Colorado C.	559	543	751	701	398	896	1,423	1,003	1,346	1,294	1,053	828	686	1,527	
CUNY, New York City C. of Technology	561	133	284	ne	ne	ne	ne	ne	ne	2,358	2,576	1,902	1,029	1,524	
Butler U.	562	ne	397	i	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,493	
U. Wisconsin-Oshkosh	563	1,229	1,847	2,027	1,763	i	1,613	i	1,465	i	ne	1,338	i	1,361	i
Trinity C., Hartford	564	1,292	1,449	1,675	1,369	1,654	1,217	1,217	2,496	1,423	1,579	1,309	1,720	1,473	
U. Puerto Rico, Humacao	565	1,968	i	1,976	1,949	1,452	1,102	748	ne	ne	1,168	1,195	1,456	1,321	
SUNY, C. Brockport	566	831	1,248	1,487	1,183	1,130	1,329	1,331	1,270	1,268	1,372	1,713	1,111	1,447	
C. Wooster	567	938	1,110	880	ne	1,135	1,135	i	ne	1,379	1,338	1,586	823	1,150	i
Macalester C.	568	3,080	3,343	1,518	1,241	1,256	1,096	1,389	1,754	1,218	1,582	1,565	1,133	1,423	
Elizabeth City State U.	569	5,366	10,229	3,811	3,843	2,434	1,837	1,670	1,323	978	ne	1,010	1,319	1,390	
U. Puerto Rico, Cayey	570	713	1,067	1,817	1,726	1,795	1,521	1,415	1,109	1,359	1,870	i	1,974	1,881	
Rhode Island C.	571	ne	2,316	1,569	1,167	907	1,396	1,259	960	776	809	1,438	1,629	1,367	
Purdue U., Fort Wayne	572	4,832	5,206	4,563	5,080	4,348	4,013	3,930	3,317	3,401	1,220	1,380	1,317	1,363	

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Grambling State U.	573	993	2,085	1,523	1,327	1,165	1,098	1,454	1,554	1,343	927	855	1,238	1,345
West Virginia School of Osteopathic Medicine	574	594	528	ne	ne	ne	ne	ne	ne	ne	ne	1,303	1,245	1,327
Manhattan C.	575	498	521	ne	ne	ne	ne	ne	ne	ne	969	1,064	1,522	1,318
Union C., Schenectady	576	1,957	1,527	1,378	2,312	1,807	1,431	2,031	1,042	1,297	1,454	837	1,353	1,309
U. Ana G. Mendez, Gurabo	577	1,054	410	615	566	2,319	1,780	1,747	1,640	1,388	3,823	2,025	1,522	1,304
Keck Graduate Institute	578	ne	2,313	1,920	2,357	2,132	1,708	1,660	i 1,598	i 1,536	i 1,474	i 1,412	i 1,350	i 1,282
Kenyon C.	579	428	433	ne	ne	ne	ne	ne	ne	1,161	1,068	896	ne	1,261
Willamette U.	580	1,161	1,161	1,825	1,484	1,183	1,643	1,054	1,345	1,543	895	665	810	1,238
Northwestern State U. Louisiana	581	1,407	1,185	1,085	997	792	ne	1,202	1,023	1,199	1,275	1,341	1,244	1,234
SUNY, Cobleskill	582	1,404	909	ne	844	ne	ne	ne	ne	ne	ne	ne	ne	1,211
Seton Hall U.	583	3,030	5,560	679	691	688	736	825	850	724	810	539	1,003	1,206
Nevada State C.	584	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,191
SUNY, Oswego	585	783	977	ne	724	ne	ne	ne	1,626	1,953	1,679	1,500	966	1,185
Heidelberg U.	586	ne	1,219	i ne	1,129	1,537	1,107	1,286	1,619	1,280	1,237	1,125	1,725	1,184
Clafin U.	587	3,241	5,202	5,255	2,574	1,618	1,204	1,748	1,354	1,505	1,736	1,910	1,015	1,179
Texas A&M U.-San Antonio	588	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,169
Winthrop U.	589	ne	1,350	1,465	1,207	1,211	1,163	917	853	865	1,146	1,200	1,441	1,161
Canisius C.	590	221	205	ne	ne	ne	ne	ne	1,398	1,054	943	ne	1,036	1,160
New Mexico Highlands U.	591	1,463	1,444	1,241	1,209	979	ne	1,111	1,023	952	ne	1,090	1,129	i 1,137
U. Wisconsin-Platteville	592	681	715	i ne	ne	899	i 726	ne	812	i ne	829	i 843	i 950	i 1,123
Lewis and Clark C.	593	1,427	1,504	1,222	2,948	3,118	2,480	2,063	1,905	1,407	1,370	1,907	936	1,118
Whitman C.	594	1,407	1,142	849	ne	ne	ne	ne	ne	ne	1,039	865	ne	1,101
Seattle U.	595	1,190	i 1,274	642	ne	1,500	1,975	1,610	1,177	1,368	1,128	908	509	1,078
U. Hartford	596	1,137	2,414	1,736	1,448	1,305	1,350	1,478	1,572	460	1,528	1,239	1,247	1,055
SUNY, C. Plattsburgh	597	1,613	1,098	913	ne	1,008	1,087	1,020	1,003	1,604	1,649	1,419	1,229	1,043
Northland C.	598	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	881	i 1,011
Marymount U.	599	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,812	995
U. Puget Sound	600	329	331	ne	ne	ne	ne	ne	884	ne	ne	823	ne	989
Albion C.	601	ne	563	ne	ne	ne	ne	ne	807	738	753	866	868	i 956
U. North Georgia	602	ne	ne	ne	ne	ne	ne	ne	331	544	551	363	596	951

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Lawrence Technological U.	603	3,103	3,158	1,471	1,666	1,393	1,962	1,449	1,490	1,068	975	875	673	948
Robert Morris U.	604	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	946 i
Elon U.	605	ne	602 i	707 i	876 i	851	1,054	1,141	1,130	1,304	1,162	890	921	932
Naval War C.	606	ne	ne	0 i	0 i	0 i	0	0	4,240 i	5,270	679	724	794	929
Indiana State U.	607	1,526	1,980	1,857	1,230	1,434	1,459	1,487	929	977	1,250	1,068	677	928
Eastern Connecticut State U.	608	ne	96	ne	ne	574	606	464	770	588	871	1,057	851	912
Ithaca C.	609	1,046	963	1,079	1,141	1,079	836	ne	ne	ne	ne	1,129	966	909
U. Virginia's C. Wise	610	481	336	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,346	907
Drake U.	611	680	644	ne	863	ne	ne	1,147	759	563	485	ne	784	899
Saint John's U.	612	390	563	ne	763	907	745	909	738	568	560 i	531 i	773 i	892 i
St. Catherine U.	612	ne	468	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	892
Bentley U.	614	ne	ne	ne	ne	ne	ne	ne	562	ne	ne	ne	ne	875
East Stroudsburg U. Pennsylvania	615	ne	250	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	860
C. of Saint Benedict	616	ne	513	ne	738	769	662	854	660	520	512 i	487 i	742 i	856 i
Central Connecticut State U.	617	659	1,083	1,248	1,416	971	1,106	1,198	873	ne	966	989	1,007	831
Hamilton C.	618	1,431	1,476	1,136	1,660	1,178	627	897	1,036	880	841	785	781	815
Northwest Indian C.	619	2,271 i	2,557 i	2,590	2,760	2,503 i	1,575 i	ne	ne	1,649	2,201	572 i	683 i	791
St. Cloud State U.	620	2,326	1,992	1,489	1,418	1,511	2,148	1,576	1,676	1,694	1,435	1,040	1,179	716
Augustana U.	621	912	1,578	1,160	1,045	1,106	756	ne	958	1,128	841	ne	1,003	709
Plymouth State U.	622	1,241 i	2,010 i	1,550	1,391	1,550	1,531	1,331	1,118	990	ne	ne	ne	652
California Lutheran U.	623	ne	666	ne	ne	ne	ne	ne	ne	ne	670	498	ne	627
Babson C.	624	ne	367	ne	ne	ne	ne	92 i	81 i	1,224 i	0 i	0 i	0 i	555 i
U. Houston-Downtown	625	1,010	1,272	2,123	584	605	1,016	818	1,111	953	481	682	994	548
Sonoran U. Health Sciences	626	ne	ne	ne	ne	ne	ne	ne	ne	ne	230	ne	ne	520 i
Mercyhurst U.	627	1,106	581	588	474	887	631	307	976 i	ne	1,085 i	888 i	693 i	495
Kettering U.	628	6,275	4,936	3,215	2,806	2,728	2,685	2,650	3,245	2,060	1,613	1,771	387	475
California State U., Maritime Academy	629	ne	3,005 i	2,342	2,180	1,011	1,522	2,205	1,916	3,039	2,959	3,202	2,603	458
U. of Mary Washington	630	ne	563 i	90	ne	ne	266	ne	ne	336	280	449	436	423
Johnson C. Smith U.	631	ne	ne	ne	ne	ne	ne	641	628	1,425	1,034	1,087	421 i	394
Suffolk U.	632	ne	847	477	748	757	625	714 i	884 i	ne	ne	845	635	379

TABLE 79

Higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Charleston	633	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	217
La Sierra U.	634	ne	661	ne	ne	283	280	471	228	147	213	180	6	81
All other surveyed institutions	-	1,770,634	2,199,887	2,182,097	2,093,629	1,430,871	1,443,556	1,465,731	1,551,931	1,628,437	665,052	598,683	47,467	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$2,056,063 thousand in total R&D expenditures in science and engineering fields in FY 2022.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All institutions	-	36,510,431	39,648,595	38,939,996	38,264,373	36,824,264	36,775,605	37,675,543	39,032,187	40,612,582	43,217,463	44,868,504	47,760,101	52,480,716
Johns Hopkins U. ^a	1	1,731,818	1,875,410	1,845,845	1,881,959	1,936,953	1,988,993	2,100,097	2,173,734	2,246,705	2,479,371	2,679,737	2,772,522	2,968,175
U. Washington, Seattle	2	809,433	921,399	876,941	869,623	849,713	851,573	893,050	912,856	955,518	958,103	987,195	1,000,152	1,033,866
U. Michigan, Ann Arbor	3	729,779	801,194	773,766	802,114	733,779	728,712	780,080	822,436	841,158	879,954	877,379	882,167	961,590
U. California, San Diego	4	578,889	635,223	653,549	630,009	597,270	601,184	602,336	639,643	634,676	698,138	726,536	773,484	958,169
Georgia Institute of Technology	5	370,532	426,088	482,349	520,754	510,422	548,063	567,100	578,107	646,317	708,682	780,894	838,185	926,720
Duke U.	6	513,469	584,161	585,636	580,416	556,847	558,566	574,738	622,174	644,179	708,544	706,023	775,046	900,220
Columbia U. in the City of New York	7	561,531	634,973	631,961	619,557	591,523	577,833	585,578	632,994	673,792	724,232	743,915	804,534	875,383
U. Pennsylvania	8	626,816	689,571	656,425	623,939	606,115	597,791	638,336	653,405	671,796	702,747	705,791	776,072	853,506
Stanford U.	9	576,553	633,287	607,578	625,144	608,342	645,633	668,578	684,928	685,871	713,688	725,942	785,118	835,331
U. California, Los Angeles	10	522,423	545,882	527,899	489,820	458,157	482,771	479,718	479,799	557,986	587,740	642,219	706,193	828,111
U. Pittsburgh, Pittsburgh	11	581,148	647,060	620,070	601,358	565,409	554,658	575,281	612,754	643,129	671,380	682,715	719,750	810,167
U. North Carolina, Chapel Hill	12	541,910	592,541	597,629	614,627	601,933	577,574	624,131	657,879	681,581	701,623	685,851	727,045	796,847
U. California, San Francisco	13	514,693	570,116	559,329	566,117	544,697	535,457	602,705	606,768	669,470	671,047	676,331	683,179	780,318
U. Maryland ^b	14	na	na	na	na	na	na	na	na	na	678,126	669,023	693,294	730,658
U. Wisconsin-Madison	15	522,473	568,389	557,688	533,220	522,251	506,910	548,247	552,983	555,666	594,094	617,902	631,320	720,984
Yale U.	16	475,010	518,195	517,072	502,439	475,585	471,381	494,504	531,995	549,026	573,491	582,575	641,530	686,044
Pennsylvania State U., University Park and Hershey Medical Center	17	463,301	459,333	526,212	556,185	516,300	507,889	532,669	528,181	557,323	591,201	632,245	606,189	664,168
Washington U., Saint Louis	18	466,993	460,282	432,434	402,702	410,115	424,723	436,229	468,637	496,648	531,885	545,027	588,717	662,135
New York U.	19	250,006	289,172	300,271	283,382	314,712	326,691	332,483	369,947	395,445	416,137	433,598	534,552	652,614
Vanderbilt U. and Vanderbilt U. Medical Center	20	377,185	434,213	430,445	432,752	408,743	390,701	395,505	442,669	456,599	470,774	492,333	567,490	644,964
U. Minnesota, Twin Cities	21	420,102	482,639	480,531	489,318	483,542	468,482	462,570	448,814	455,294	483,898	503,414	562,697	643,362
Cornell U.	22	446,705	476,163	471,024	444,303	438,834	445,266	427,940	435,355	464,468	522,035	558,346	588,001	631,804

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Harvard U.	23	467,237	530,908	574,346	575,868	554,944	530,382	549,539	565,269	578,722	611,123	598,313	609,310	620,497
Northwestern U.	24	356,193	393,449	385,377	389,757	385,888	385,868	424,638	438,732	464,689	497,740	527,958	569,875	615,163
Icahn School of Medicine at Mount Sinai	25	302,770	296,835	271,722	277,517	300,667	329,641	342,104	367,522	398,656	443,745	480,452	554,582	610,646
Ohio State U.	26	384,633	471,331	416,304	425,547	416,177	406,941	418,887	427,154	439,594	465,081	505,626	523,826	594,323
U. Southern California	27	402,372	443,458	433,136	423,708	421,887	408,105	396,197	436,515	488,081	530,971	549,528	559,032	583,581
Emory U.	28	336,948	369,945	360,934	364,136	329,254	346,534	360,197	381,151	392,971	423,515	451,487	515,009	567,102
Massachusetts Institute of Technology	29	451,050	482,544	478,955	487,647	480,991	486,650	501,702	484,597	476,576	485,821	484,184	480,092	527,845
U. Texas, Austin	30	331,439	334,240	328,560	352,788	313,955	331,388	340,181	377,389	386,954	387,551	478,458	465,529	506,533
U. Colorado Boulder	31	282,008	313,531	319,019	309,072	302,877	341,828	360,827	359,462	376,870	397,709	412,476	444,381	491,940
Texas A&M U., College Station and Health Science Center	32	276,977	281,063	259,506	302,356	298,489	291,714	281,015	294,602	316,771	342,390	501,396	512,130	484,899
U. California, Davis	33	329,041	359,704	356,540	344,632	327,697	322,919	334,534	337,995	354,823	370,601	377,068	369,231	463,039
U. California, Berkeley	34	303,201	326,120	333,179	305,932	309,305	342,042	338,562	326,548	324,521	341,328	345,103	348,147	459,518
U. Florida	35	269,765	296,950	295,745	285,778	279,920	281,317	297,267	314,187	340,725	369,001	375,577	404,432	449,973
U. Chicago	36	348,537	365,824	329,119	294,862	276,237	290,776	293,557	302,361	297,824	327,837	347,734	390,098	449,456
U. Colorado Anschutz Medical Campus ^c	37	na	na	na	na	na	na	na	na	na	na	na	363,331	429,452
Baylor C. of Medicine	38	284,072	295,529	268,753	285,230	264,641	256,895	267,849	292,806	300,098	309,354	315,101	365,472	420,054
U. Alabama, Birmingham	39	320,704	340,342	303,677	286,873	276,112	325,008	346,190	356,303	370,401	395,910	397,206	421,209	418,667
U. Illinois, Urbana-Champaign	40	294,236	312,796	348,536	459,791	336,172	330,479	320,703	344,657	339,732	369,006	376,505	394,374	407,278
Boston U.	41	298,467	300,923	273,204	265,476	254,285	256,562	250,523	253,828	264,281	313,670	333,387	396,685	406,151
Case Western Reserve U.	42	333,438	352,938	358,722	347,628	328,548	307,960	320,402	325,354	346,935	355,970	356,751	339,658	379,602
U. Arizona	43	307,038	324,751	328,369	334,680	286,595	265,878	259,443	269,201	287,852	323,060	325,621	350,487	371,931
Michigan State U.	44	198,735	222,937	250,416	246,131	247,970	256,228	294,369	329,533	315,674	317,653	317,885	339,614	369,302
U. Utah	45	226,489	263,623	271,629	297,099	284,125	270,311	224,270	218,405	302,586	282,157	306,629	329,537	358,535
Indiana U., Bloomington	46	67,483	69,298	72,501	82,005	80,109	206,263	216,917	241,350	245,402	304,116	314,721	320,591	353,187
U. Cincinnati	47	261,982	286,003	266,507	256,816	243,705	250,457	229,761	239,659	246,400	249,656	283,059	306,411	347,321
Oregon Health and Science U.	48	247,054	268,777	242,219	244,867	246,050	243,876	230,608	243,495	264,492	298,227	321,572	329,016	346,724

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Rutgers, State U. New Jersey, New Brunswick	49	218,910	235,178	273,498	288,374	355,116	320,311	318,123	316,118	330,823	287,031	304,486	332,033	343,447
Purdue U., West Lafayette	50	221,679	246,116	255,691	258,596	227,857	209,005	214,373	224,965	230,208	231,188	257,641	277,663	335,125
U. Rochester	51	321,258	337,312	307,390	298,781	265,686	261,023	265,430	267,040	283,973	305,325	295,154	308,426	332,302
California Institute of Technology	52	325,751	340,131	322,295	272,223	276,447	269,156	260,489	272,323	268,765	278,846	309,386	287,810	322,107
Colorado State U., Fort Collins	53	205,890	230,661	245,573	213,355	206,958	213,685	227,624	232,405	257,355	276,173	276,863	296,067	310,004
U. Iowa	54	280,089	280,989	265,780	252,161	234,122	223,730	236,363	236,679	243,216	248,639	255,617	278,615	307,534
U. Virginia, Charlottesville	55	224,607	239,249	225,558	212,051	192,907	186,676	198,760	215,193	231,161	257,013	282,429	282,472	307,111
U. Texas Southwestern Medical Center	56	232,027	231,639	207,513	198,114	185,137	183,787	185,263	200,085	197,910	203,544	242,679	257,611	298,154
Arizona State U.	57	164,890	178,153	182,188	190,066	186,126	186,890	200,280	214,845	244,795	253,530	262,377	256,875	288,495
Utah State U.	58	89,750	112,611	107,054	106,074	114,075	119,811	124,981	137,295	158,576	219,912	241,433	263,341	278,857
U. California, Irvine	59	189,343	204,134	204,062	196,256	180,431	170,622	170,674	178,789	192,182	207,234	225,967	237,874	276,782
U. Miami	60	196,435	223,870	222,535	204,315	202,818	192,691	194,346	193,549	191,408	211,493	223,774	230,632	264,366
Carnegie Mellon U.	61	179,136	200,878	209,307	215,560	198,247	187,259	190,620	189,974	181,958	197,927	217,481	234,743	259,034
U. Massachusetts, Medical School	62	178,293	208,244	202,149	189,159	183,582	183,588	181,446	200,232	194,953	197,388	192,938	248,873	258,147
U. Kentucky	63	167,192	175,801	157,813	148,758	140,450	145,097	152,708	168,347	168,968	189,860	197,848	218,566	250,152
North Carolina State U.	64	137,124	152,790	171,464	174,440	177,722	196,058	197,261	213,544	214,440	224,471	227,964	234,181	245,159
U. Illinois, Chicago	65	229,131	245,323	243,622	219,473	201,646	192,930	175,302	188,730	189,322	200,926	215,990	230,140	243,243
Scripps Research Institute	66	313,746	317,201	309,471	308,628	292,268	274,097	242,489	250,090	267,088	267,122	243,502	272,181	242,135
Virginia Polytechnic Institute and State U.	67	161,636	187,269	181,371	197,462	198,092	191,080	190,975	181,379	195,140	206,208	208,952	214,291	231,144
U. New Mexico	68	147,003	161,950	159,302	155,684	151,082	151,619	153,100	159,583	167,315	156,865	158,882	239,587	229,987
U. Connecticut	69	128,700	141,252	150,402	146,400	139,594	135,349	143,955	141,977	139,022	153,496	160,763	180,758	227,351
U. Texas M. D. Anderson Cancer Center	70	206,664	236,400	196,753	182,971	158,986	161,171	155,044	166,552	173,206	176,156	186,488	217,073	225,659
Albert Einstein C. of Medicine	71	na	na	na	na	na	na	188,521	188,259	196,457	202,513	204,635	214,619	220,780
Princeton U.	72	149,164	162,491	160,985	156,070	163,805	157,867	161,562	175,485	179,659	192,747	202,447	204,430	217,505

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
SUNY, U. Buffalo	73	164,477	176,923	186,747	200,212	185,144	174,146	180,095	184,313	183,124	178,458	195,829	207,224	214,559
U. Georgia	74	117,225	134,200	133,525	127,487	122,145	127,825	138,374	153,279	144,926	156,628	167,347	184,847	214,505
Brown U.	75	120,749	123,649	127,665	120,977	125,005	127,886	131,751	141,864	161,384	175,849	183,180	195,302	212,899
Woods Hole Oceanographic Institution	76	153,066	165,819	161,115	158,672	177,616	172,995	166,010	148,491	163,003	184,995	191,186	222,351	211,550
U. Dayton	77	72,567	69,847	64,369	66,396	63,881	74,548	97,635	112,584	130,488	152,545	153,215	180,479	201,898
U. Oklahoma, Norman and Health Science Center	78	100,065	112,146	124,131	119,762	108,356	122,918	128,260	126,510	142,470	159,640	179,640	181,388	197,521
Uniformed Services U. of the Health Sciences	79	72,125	117,781	102,134	119,647	213,389	299,007	175,007	204,241	218,702	297,808	235,202	275,573	194,187
U. Delaware	80	102,637	112,523	110,760	114,048	111,933	109,258	108,378	113,031	113,582	128,651	139,682	152,665	189,374
U. South Florida ^d	81	219,634	220,931	218,772	207,441	205,155	196,215	210,823	234,871	163,013	164,662	142,086	161,278	187,491
Oregon State U.	82	135,081	146,069	155,667	148,174	143,815	150,625	156,437	157,708	166,354	162,781	161,646	173,532	186,756
U. Texas Health Science Center, Houston	83	150,324	156,790	146,424	144,235	136,145	125,890	121,098	124,461	128,232	132,647	133,624	165,139	184,205
SUNY, Stony Brook U.	84	120,090	124,938	123,198	118,432	111,386	115,031	118,296	125,150	134,802	143,258	145,526	161,552	182,212
Wake Forest U.	85	159,084	173,004	172,779	156,506	153,069	148,084	140,651	147,746	154,031	165,439	166,480	188,809	180,681
Iowa State U.	86	108,181	116,109	117,144	120,934	115,285	113,443	124,242	125,607	145,241	145,541	161,153	160,520	179,143
Thomas Jefferson U.	87	77,817	80,027	68,976	56,247	54,676	58,536	58,866	62,029	64,869	74,816	74,653	109,419	173,855
U. Hawaii, Manoa	88	196,275	201,700	193,722	225,263	202,574	199,818	189,683	181,750	166,398	167,432	163,091	156,953	168,711
U. Kansas	89	137,458	143,300	147,052	147,557	131,186	128,374	117,549	126,109	130,036	141,679	151,987	156,707	164,326
Washington State U.	90	105,333	115,775	120,146	119,921	112,568	121,627	122,275	133,308	131,229	137,424	135,023	162,455	163,595
Medical U. South Carolina	91	131,650	143,464	136,907	127,472	118,649	117,255	124,212	134,072	142,639	153,226	153,802	162,394	163,395
U. Missouri, Columbia	92	113,362	113,072	110,446	108,305	102,784	102,852	116,337	122,821	126,164	128,293	137,029	145,070	161,723
U. California, Santa Barbara	93	127,696	132,490	134,984	131,392	119,816	114,596	114,884	113,173	110,065	115,569	121,120	119,203	159,694
George Washington U.	94	120,844	115,463	111,068	119,441	139,148	135,667	138,735	144,567	153,412	152,562	154,026	158,475	159,372
Dartmouth C. and Dartmouth Hitchcock Medical Center	95	117,909	131,518	147,218	154,917	145,080	145,807	138,641	136,977	139,692	137,337	141,040	151,449	154,621
U. Alaska, Fairbanks	96	97,889	103,677	97,472	92,602	83,483	78,985	87,829	95,467	93,562	91,405	99,572	126,247	152,929
Medical C. Wisconsin	97	121,750	133,929	125,325	116,765	111,241	109,542	108,529	108,276	111,273	119,036	128,783	136,385	152,301
Tufts U.	98	115,159	120,864	120,042	112,495	115,046	120,181	124,363	138,004	128,404	136,088	145,473	165,222	148,667

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Tennessee, Knoxville ^e	99	83,491	99,712	103,147	104,558	106,778	101,608	106,930	115,320	116,028	121,549	136,741	133,073	145,653
Virginia Commonwealth U.	100	125,713	134,431	124,836	119,293	119,507	123,665	124,962	127,341	122,771	125,393	135,266	141,521	144,785
Northeastern U.	101	56,727	65,757	75,733	82,587	77,401	78,379	78,668	90,190	109,443	122,663	131,752	138,641	144,322
Florida State U.	102	127,571	136,332	131,998	132,583	140,995	133,569	118,294	118,359	129,435	131,472	141,229	127,509	139,147
Temple U.	103	76,170	85,021	85,062	124,764	118,892	119,945	134,132	143,636	141,505	150,201	146,564	146,101	138,403
Mississippi State U.	104	105,224	97,987	96,132	73,834	70,615	79,181	86,570	87,435	88,365	103,546	119,093	114,492	134,780
U. Alabama, Huntsville	105	71,461	70,197	75,715	83,396	73,913	66,564	68,882	68,259	74,315	84,689	103,599	116,441	131,443
U. New Hampshire	106	76,191	96,552	109,728	92,778	89,640	83,106	89,457	85,714	87,854	84,599	94,554	95,579	127,040
Tulane U.	107	106,021	110,222	101,130	97,873	94,287	84,143	89,028	93,747	102,090	104,187	107,216	113,434	126,990
Georgetown U.	108	119,509	122,802	113,229	113,703	99,567	87,268	82,819	93,224	88,778	93,004	98,138	128,798	126,625
Florida International U.	109	52,784	61,687	54,204	57,858	68,946	67,293	68,539	66,351	80,417	90,067	97,758	100,470	125,166
U. Massachusetts, Amherst	110	97,131	106,315	106,470	103,233	102,682	97,206	97,576	101,992	103,555	110,063	112,546	112,146	123,598
U. Texas Medical Branch	111	128,840	128,098	109,867	108,287	101,761	98,050	100,464	104,458	104,356	107,806	114,103	117,915	123,467
Wayne State U.	112	131,418	133,925	125,965	118,217	112,608	108,221	109,460	106,865	107,791	114,349	108,536	111,708	122,454
U. Texas Health Science Center, San Antonio	113	121,723	121,200	106,177	99,198	89,303	85,940	89,742	85,455	86,956	96,502	102,959	106,824	119,071
U. Notre Dame	114	61,645	79,003	82,244	79,268	79,192	82,615	85,870	90,038	92,144	102,335	99,743	104,905	117,559
U. Vermont	115	98,588	101,465	87,843	85,028	79,727	83,733	83,124	78,383	86,936	90,378	97,676	103,118	116,827
U. Nebraska, Medical Center	116	80,784	86,295	84,196	80,750	76,195	71,918	76,221	84,814	93,463	102,604	105,158	111,042	114,754
U. Louisville	117	83,593	84,557	79,252	72,047	63,258	66,368	69,781	69,722	77,281	83,421	83,626	91,928	114,628
George Mason U.	118	59,591	61,016	57,504	57,154	53,775	54,113	50,687	52,432	64,315	91,377	99,332	99,910	113,443
U. California, Riverside	119	58,159	59,351	61,304	57,032	56,327	62,642	69,924	75,920	75,990	79,666	90,235	95,480	112,776
U. Nebraska, Lincoln	120	97,538	106,575	105,440	98,534	93,190	94,763	93,532	99,956	102,078	108,207	104,794	104,032	109,630
Montana State U., Bozeman	121	84,735	78,431	78,409	66,451	66,770	62,827	61,490	66,449	67,705	80,955	84,960	104,973	109,264
Clemson U.	122	59,374	49,365	48,182	47,825	44,673	45,292	52,184	62,920	66,618	72,335	74,438	83,731	109,121
Louisiana State U., Baton Rouge	123	94,611	96,050	91,238	93,281	93,584	82,276	84,954	80,044	83,453	87,498	86,975	97,985	109,092
U. California, Santa Cruz	124	81,598	95,015	91,409	88,600	89,206	91,249	93,651	65,133	62,218	73,635	75,813	85,887	106,434

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Central Florida	125	67,795	66,736	72,620	68,691	64,323	81,788	80,365	82,777	89,504	90,851	94,617	102,599	102,637
Rice U.	126	69,176	78,249	76,431	79,742	73,782	73,817	82,643	83,894	77,607	83,105	86,675	93,114	102,307
Auburn U., Auburn	127	53,648	59,061	55,118	56,809	49,739	47,939	54,258	54,693	57,718	63,660	72,844	90,386	101,663
U. South Carolina, Columbia	128	119,890	100,045	93,237	87,562	87,844	84,723	88,231	89,565	80,948	88,052	83,386	82,827	100,973
U. Arkansas for Medical Sciences	129	72,217	75,924	69,883	64,856	55,556	50,603	48,999	51,298	57,523	63,498	70,508	83,387	95,080
Rockefeller U.	130	88,705	97,710	84,616	80,384	81,820	81,949	80,667	86,763	87,231	84,566	86,280	96,318	94,693
West Virginia U.	131	74,465	84,061	77,981	72,677	67,450	66,608	70,313	70,256	73,518	79,320	77,455	85,717	94,054
Drexel U.	132	75,339	81,424	85,584	74,047	75,557	67,226	65,193	69,326	80,074	81,957	77,965	88,198	93,094
Wichita State U.	133	13,633	15,425	14,267	10,161	8,100	6,397	7,947	19,507	16,522	26,633	50,042	72,487	91,757
U. Rhode Island	134	60,963	77,668	78,194	70,900	61,836	61,085	58,438	59,623	61,135	69,913	65,860	76,992	90,118
U. Nevada, Reno	135	58,115	55,374	55,150	53,898	50,904	49,977	51,630	53,438	59,879	60,967	63,827	76,240	82,904
U. Oregon	136	66,809	71,344	71,157	61,856	62,824	56,448	55,137	57,092	56,403	63,912	66,182	68,617	82,841
U. Maine	137	48,270	59,644	39,428	33,903	50,338	35,033	34,125	37,189	45,206	49,832	52,755	63,250	81,887
U. Mississippi	138	69,031	72,456	72,855	62,816	63,070	58,797	63,372	61,232	62,721	72,731	80,923	74,055	81,102
Rush U.	139	51,304	57,978	57,512	57,063	53,501	52,193	50,332	51,532	64,178	68,941	65,343	73,279	79,647
U. Houston	140	50,148	57,090	54,657	57,569	55,574	54,516	58,085	57,263	62,134	66,848	68,987	73,234	78,687
Kansas State U.	141	66,400	74,414	73,247	67,524	64,565	66,632	67,863	72,321	77,730	78,878	76,164	74,930	78,508
New Mexico State U.	142	98,050	90,283	90,338	86,546	80,247	78,253	61,494	59,087	53,417	57,183	60,056	64,235	71,377
New Mexico Institute of Mining and Technology	143	42,243	37,316	29,894	23,581	33,168	19,975	16,657	18,271	19,437	22,771	22,598	24,642	70,570
U. Wyoming	144	44,026	47,782	55,663	52,296	39,778	47,232	63,223	56,178	42,538	51,657	56,078	54,183	68,645
U. Montana, Missoula	145	40,116	38,176	35,590	33,825	30,164	33,617	38,726	44,465	51,975	52,919	58,745	66,840	68,546
New Jersey Institute of Technology	146	47,832	52,873	57,513	55,017	51,853	50,554	63,322	64,840	78,313	87,588	82,331	71,860	67,189
Colorado School of Mines	147	28,416	31,414	31,399	31,585	33,908	33,578	34,708	36,650	39,311	48,593	53,875	59,547	65,518
Georgia State U.	148	23,732	21,980	27,251	28,216	29,470	36,843	40,897	54,842	55,241	54,882	62,835	61,436	65,436
Augusta U.	149	na	na	na	47,913	47,771	50,585	50,294	48,921	48,800	47,031	55,797	61,943	64,609
U. Maryland, Baltimore County	150	58,597	61,110	44,669	44,257	46,993	47,591	50,645	52,008	52,934	54,740	58,178	58,317	63,336
U. Arkansas, Fayetteville	151	32,659	37,203	34,123	30,562	26,014	33,486	39,527	42,198	48,288	46,871	45,196	45,674	61,088
U. Massachusetts, Lowell	152	24,475	26,802	25,670	25,441	25,874	28,998	26,499	28,078	28,982	33,948	40,037	46,970	60,222

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Tennessee, Health Science Center	153	52,650	51,840	48,473	42,269	41,830	39,356	38,374	39,138	39,421	42,396	48,264	56,021	60,221
U. North Dakota	154	52,381	53,913	54,411	46,397	40,191	37,457	42,253	40,845	48,858	47,235	42,021	56,742	60,188
U. Texas, Dallas	155	30,019	32,355	34,088	31,903	32,096	30,776	34,532	35,244	39,010	47,443	55,225	57,778	60,073
U. Alabama, Tuscaloosa	156	25,945	32,387	32,515	27,963	25,477	28,029	27,019	24,344	27,660	33,233	37,198	46,389	59,703
Cold Spring Harbor Laboratory	157	51,529	51,529	43,874	41,002	41,845	49,063	50,478	54,260	67,139	73,854	62,068	56,889	59,163
U. Texas, El Paso	158	34,439	34,765	39,274	37,741	34,528	40,334	41,384	43,759	43,214	40,111	37,495	42,385	58,291
U. Louisiana, Lafayette	159	12,060	11,879	12,435	10,007	9,050	10,315	9,479	14,953	20,766	30,341	25,919	47,788	56,538
U. Idaho	160	45,082	52,812	53,765	52,430	49,423	49,591	50,083	48,879	47,475	48,462	49,818	49,306	54,581
U. Texas, Arlington	161	29,671	28,190	30,473	28,588	24,079	26,858	24,853	30,588	34,063	39,198	42,157	44,134	52,942
Cleveland State U.	162	24,894	42,292	46,205	50,002	44,139	41,721	49,659	52,317	54,987	50,982	53,234	46,838	52,514
Oklahoma State U., Stillwater	163	56,998	81,855	85,876	44,200	36,687	38,498	41,186	42,331	40,052	38,757	38,419	45,243	51,084
U. Texas, San Antonio	164	27,036	28,011	29,168	28,066	22,518	23,108	24,493	28,650	28,943	32,986	32,512	41,177	51,075
SUNY, U. Albany	165	123,404	124,848	112,161	113,736	104,861	78,824	74,092	82,551	84,561	91,225	66,162	55,478	50,471
Rensselaer Polytechnic Institute	166	54,559	58,951	62,063	60,765	58,940	59,417	48,887	47,749	46,385	47,245	47,934	49,836	48,950
Michigan Technological U.	167	27,407	32,508	32,835	31,734	30,214	28,581	29,609	28,332	32,366	34,488	35,912	41,123	48,500
San Diego State U.	168	53,746	59,769	51,690	45,175	44,807	43,526	42,062	37,226	37,873	37,595	39,049	40,387	46,973
U. Southern Mississippi	169	36,729	40,764	34,487	28,324	25,956	24,710	23,952	26,104	30,331	45,687	41,791	43,078	46,255
North Dakota State U.	170	51,198	52,543	45,326	37,128	35,308	35,037	34,792	34,134	34,485	34,693	31,109	37,647	44,254
Brandeis U.	171	43,282	47,793	44,061	43,963	45,800	46,764	47,708	44,819	37,371	40,333	40,815	42,725	43,870
Texas Tech U.	172	32,680	32,881	27,698	25,153	26,161	25,458	24,586	23,426	24,503	29,857	29,685	32,129	43,014
Northern Arizona U.	173	14,990	17,687	15,946	15,533	18,044	20,111	22,997	25,615	29,137	35,156	38,492	40,890	41,925
Saint Louis U.	174	33,655	38,206	35,841	31,230	29,396	27,343	26,323	27,005	27,694	33,941	34,163	40,628	41,625
Stevens Institute of Technology	175	26,366	31,269	25,794	23,004	22,130	25,054	28,090	26,438	25,521	27,703	32,141	32,625	41,047
Naval Postgraduate School	176	86,765	88,950	120,209	86,538	89,284	71,987	50,560	42,246	41,151	49,168	48,709	49,366	40,536
CUNY, City C.	177	32,170	39,064	39,063	39,756	39,860	37,900	37,359	34,718	36,402	32,975	30,038	34,100	38,028
Howard U.	178	32,211	35,632	37,336	33,403	32,052	38,051	32,967	33,893	32,573	29,422	28,785	34,907	36,696
Florida A&M U.	179	26,311	30,771	27,951	28,446	25,313	26,700	28,021	27,899	29,861	32,117	30,022	31,669	36,409

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U.S. Air Force Academy	180	43,803	60,292	36,316	42,303	32,284	29,417	44,567	34,664	27,650	34,940	33,308	31,818	35,826
U. Puerto Rico, Medical Sciences Campus	181	29,813	54,381	35,173	31,037	30,197	31,889	33,348	29,869	30,597	34,570	27,033	33,262	35,050
Lehigh U.	182	22,084	20,485	20,419	20,878	20,677	20,680	19,512	22,640	23,649	24,282	25,574	27,483	33,809
U. Toledo	183	36,984	42,680	38,563	37,539	31,648	26,428	24,860	22,371	25,056	27,802	27,412	32,411	33,765
Louisiana State U., Health Sciences Center, New Orleans	184	46,142	45,581	40,637	36,886	34,637	36,027	31,526	28,018	26,988	31,290	31,381	34,272	33,087
Worcester Polytechnic Institute	185	12,705	14,773	12,161	16,275	18,310	25,743	24,854	18,559	18,084	22,144	25,320	29,202	32,552
Mercer U.	186	18,778	17,904	19,963	19,411	19,666	21,563	21,120	19,772	18,999	27,035	31,572	34,413	32,504
Air Force Institute of Technology	187	13,514	18,986	17,919	17,614	16,342	16,369	19,660	25,558	23,393	21,856	22,854	27,025	32,479
SUNY, Polytechnic Institute	188	na	na	na	na	21,208	14,641	21,380	41,247	41,753	38,222	27,993	25,427	32,375
Morehouse School of Medicine	189	25,855	i 28,128	31,786	34,511	i 33,020	30,012	28,678	28,792	24,326	22,461	22,500	25,181	31,339
Boston C.	190	31,351	23,845	23,685	22,780	19,462	17,409	23,184	26,937	27,674	28,017	25,213	28,738	30,840
U. Missouri, Kansas City	191	16,139	18,748	17,219	15,406	14,613	12,810	12,739	11,145	10,396	18,400	21,921	20,784	30,571
Boise State U.	192	14,237	18,423	19,446	15,181	15,183	17,562	16,112	18,754	23,157	22,354	25,121	30,053	30,559
Brigham Young U., Provo	193	18,373	19,741	17,381	19,931	20,214	20,769	24,791	23,631	21,367	21,977	22,789	28,614	29,844
San Jose State U.	194	21,576	23,207	21,830	24,574	28,475	31,250	30,021	30,063	31,592	33,072	32,061	29,856	29,488
Van Andel Research Institute	195	ne	ne	ne	ne	ne	8,138	i 11,970	13,108	14,285	18,259	18,538	22,231	29,424
Missouri U. of Science and Technology	196	28,239	27,961	23,731	25,551	21,474	17,306	18,811	19,534	21,793	22,337	22,853	26,164	28,773
Syracuse U.	197	26,971	25,272	25,327	22,564	24,163	26,769	28,793	31,902	33,045	32,143	27,538	29,354	28,489
Rochester Institute of Technology	198	19,493	18,546	17,435	16,186	16,765	17,479	22,545	23,913	22,692	22,195	24,079	27,703	28,420
William & Mary	199	22,478	23,502	25,349	24,619	27,232	27,722	28,771	28,062	27,836	27,112	25,460	24,533	27,979
SUNY, Upstate Medical U.	200	27,959	28,663	27,013	23,730	21,334	19,213	18,942	19,991	20,391	22,028	23,940	24,974	27,737
Florida Atlantic U.	201	16,457	14,793	14,926	12,480	12,317	10,402	14,443	16,430	18,076	21,050	22,787	27,479	27,717
U. Nevada, Las Vegas	202	31,497	29,642	24,567	23,980	26,585	26,970	24,683	28,460	32,711	27,172	28,187	25,764	27,244

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Indiana U.-Purdue U., Indianapolis	203	147,375	154,966	165,374	151,962	142,589	18,090	19,507	19,630	22,071	25,672	30,289	28,541	27,169
East Carolina U.	204	15,587	17,636	16,946	17,789	16,992	14,926	13,057	11,386	11,654	15,544	16,583	19,633	26,813
Catholic U. of America	205	15,837	19,651	17,350	17,154	17,061	19,548	19,451	19,364	20,423	21,408	22,244	22,886	26,126
Loyola U., Chicago	206	27,953	27,588	27,786	32,008	29,989	27,380	24,916	22,861	21,131	22,919	23,277	25,824	26,005
Illinois Institute of Technology	207	27,780	33,016	27,515	28,255	25,506	25,479	23,542	26,191	27,742	28,753	24,152	24,649	25,938
Old Dominion U.	208	30,534	34,084	31,877	30,478	30,568	27,857	27,556	32,898	28,792	27,633	26,904	23,158	25,424
Portland State U.	209	25,853	29,660	30,090	27,899	26,147	23,389	25,310	23,645	23,437	26,301	24,752	24,097	25,176
SUNY, Downstate Health Sciences U.	210	25,023	33,964	34,884	31,972	25,802	20,779	25,941	22,496	26,302	26,914	26,454	27,620	25,081
U. North Carolina, Charlotte	211	15,444	14,358	16,997	18,257	16,637	17,028	18,733	19,436	21,366	24,917	26,335	25,804	24,965
North Carolina A&T State U.	212	23,878	22,499	21,468	20,956	22,609	21,802	19,808	23,046	22,212	20,924	19,170	21,835	24,797
U. Wisconsin-Milwaukee	213	23,641	28,336	26,424	23,872	23,726	24,222	22,519	21,673	24,348	22,909	24,713	23,944	23,481
SUNY, Binghamton U.	214	20,766	20,443	20,151	16,749	14,757	16,038	18,363	20,601	22,964	23,626	24,027	22,012	23,413
U. Nebraska, central administration	215	ne	ne	ne	ne	ne	ne	ne	ne	12,561	17,360	22,246	20,349	23,048
South Dakota State U.	216	38,309	41,876	41,941	33,226	29,454	28,488	29,605	27,940	27,013	29,530	22,387	18,505	22,800
Embry-Riddle Aeronautical U.	217	8,241	9,257	12,126	9,906	12,614	9,940	13,957	10,501	12,584	8,890	11,391	14,258	22,699
U. South Alabama	218	14,343	16,259	13,294	13,361	13,478	15,025	17,131	15,856	14,572	19,383	21,359	22,924	22,586
U. North Texas, Denton	219	11,997	12,255	15,921	14,974	15,054	14,286	11,524	14,043	17,514	16,094	12,019	16,810	21,799
U. California, Merced	220	9,192	9,744	10,741	10,733	10,506	12,607	12,166	14,660	14,041	16,513	19,505	16,980	21,418
U. Memphis	221	17,726	16,738	19,113	15,747	18,344	16,250	16,784	16,958	23,463	17,074	15,927	17,538	21,029
Morgan State U.	222	10,035	9,878	15,279	13,301	14,131	12,693	14,305	13,215	11,450	11,844	14,016	15,207	20,739
Wright State U.	223	24,785	27,422	25,519	26,496	27,523	26,814	30,093	35,514	43,359	41,362	35,267	19,393	20,418
Ohio U.	224	18,209	21,938	20,340	20,134	16,425	17,140	14,421	16,017	13,512	14,453	15,466	19,048	20,360
U.S. Military Academy	225	19,763	12,314	11,702	11,612	13,247	13,135	12,281	7,247	6,313	6,432	8,068	13,657	19,344
U. of the Virgin Islands	226	27,291	15,717	22,605	15,627	10,475	19,456	20,951	10,701	10,748	9,903	11,778	13,099	19,127
Delaware State U.	227	9,967	11,901	11,053	11,802	12,464	12,075	14,613	13,909	12,039	11,936	10,841	12,461	19,019
CUNY, Hunter C.	228	17,543	21,191	22,078	21,465	18,825	19,018	19,597	18,179	20,053	21,188	23,638	21,275	18,940
Texas State U.	229	6,815	5,971	6,770	11,088	9,696	11,318	9,786	10,739	12,298	13,503	13,298	15,936	18,755

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Rowan U.	230	1,737	2,071	2,295	1,875	4,588	4,665	5,239	7,110	9,568	11,909	15,276	17,211	18,502
U. Texas Rio Grande Valley	231	na	na	na	na	na	na	16,821	14,766	13,308	13,320	12,590	12,355	17,733
Eastern Virginia Medical School	232	29,291	25,319	24,694	28,728	28,532	28,637	21,459	21,209	21,356	19,408	15,748	14,774	17,616
Desert Research Institute	233	28,307	28,489	27,294	22,814	19,932	16,511	18,883	18,839	17,911	16,745	15,791	16,641	17,341
U. Nebraska, Omaha	234	4,128	5,034	5,589	5,230	4,979	4,484	6,657	7,038	7,043	7,655	8,626	12,949	17,133
U. Puerto Rico, Rio Piedras	235	21,130	24,336	24,867	17,190	17,489	18,177	15,870	11,137	9,826	13,670	13,767	14,953	16,716
U. Guam	236	4,962	5,242	5,311	5,390	6,321	5,455	6,576	8,051	8,425	9,104	9,364	13,862	16,303
Marshall U.	237	18,218	21,433	13,154	13,468	12,684	11,080	9,077	9,036	8,519	9,579	11,070	12,522	15,875
U. Denver	238	10,180	10,463	9,135	10,082	8,794	8,134	8,895	9,681	12,938	13,157	14,551	13,513	15,544
Baylor U.	239	2,842	3,386	3,289	3,435	3,991	3,839	4,214	5,255	5,749	6,885	8,684	10,879	15,512
Louisiana State U., Health Sciences Center, Shreveport	240	13,890	15,316	13,504	11,753	8,490	6,321	6,478	7,055	9,235	12,185	11,452	12,359	15,503
U. North Carolina, Greensboro	241	10,857	12,155	10,943	10,520	10,589	11,106	12,279	10,845	10,441	11,527	10,579	12,357	15,462
South Dakota School of Mines and Technology	242	25,172	28,051	14,338	7,853	7,029	9,286	10,370	10,639	10,240	9,283	10,659	11,587	15,100
Meharry Medical C.	243	24,302	26,779	23,467	21,135	17,754	13,068	13,528	15,613	14,515	16,443	12,573	13,784	15,048
Marquette U.	244	9,115	10,898	9,557	8,491	7,988	9,139	10,136	10,111	10,451	12,613	12,981	13,470	14,883
Tuskegee U.	245	10,986	11,033	11,243	13,132	14,102	12,265	10,386	10,386	10,386	14,825	15,122	15,424	14,880
San Francisco State U.	246	15,407	17,337	17,075	18,638	16,753	14,336	12,277	13,782	13,346	15,149	15,514	15,670	14,868
U. Massachusetts, Boston	247	17,787	15,040	17,649	13,471	14,544	15,464	17,326	16,308	16,852	16,117	15,007	14,938	14,823
U. Alaska, Anchorage	248	8,485	9,352	10,041	8,799	7,212	8,015	11,282	11,592	12,530	13,665	15,128	14,852	14,809
Southern Methodist U.	249	12,142	17,819	15,839	13,516	18,427	11,806	12,910	11,978	11,568	15,219	15,559	14,803	14,798
California State U., Northridge	250	11,122	8,729	13,965	7,778	11,007	10,889	10,136	12,952	13,822	15,543	16,478	13,363	14,692
Rutgers, State U. New Jersey, Newark	251	12,243	17,503	19,296	12,420	11,014	11,118	12,662	15,171	15,129	14,063	14,725	14,891	14,641
CUNY, Queens C.	252	13,496	15,491	14,829	14,689	15,809	13,532	13,966	11,780	11,882	12,862	12,208	11,779	14,611
Texas Tech U., Health Sciences Center	253	12,950	14,790	13,944	14,804	9,480	9,949	9,943	8,995	7,477	11,262	12,977	12,114	14,602

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Texas Health Science Center, Tyler	254	ne	ne	ne	ne	ne	3,713	3,757	5,792	6,438	i 7,084	i 7,732	12,007	14,362
Jackson State U.	255	34,927	36,460	33,342	27,285	19,898	18,449	19,934	18,997	16,990	16,156	13,560	12,939	14,261
U. Maryland Center for Environmental Science	256	12,123	18,007	16,081	16,852	13,202	11,993	12,156	14,482	14,276	16,573	14,622	13,242	14,240
Kent State U.	257	13,311	13,334	13,425	10,009	9,350	9,594	8,733	9,204	10,265	12,576	13,406	13,620	14,228
California Polytechnic State U., San Luis Obispo	258	11,396	8,296	9,618	9,442	8,903	9,651	10,966	10,035	9,313	9,574	9,765	10,785	14,172
U. Puerto Rico, Mayaguez	259	12,505	18,269	19,536	13,830	13,638	15,313	14,403	13,585	14,092	15,653	15,842	12,683	13,923
Texas A&M U.-Corpus Christi	260	7,647	7,225	5,387	5,990	7,085	9,155	7,078	9,057	11,694	13,131	12,453	9,782	13,622
Southern Illinois U., Carbondale	261	22,209	23,696	22,055	18,398	16,288	14,895	14,574	13,421	12,733	12,625	12,735	12,655	13,582
U. South Dakota	262	16,353	14,337	13,601	14,991	11,932	8,464	8,827	11,117	12,346	13,312	12,899	11,541	13,503
Albany Medical C.	263	15,758	13,884	11,845	10,278	9,716	9,481	10,714	11,040	10,243	11,827	12,940	13,166	13,384
CUNY, Advanced Science Research Center	264	na	na	na	na	na	257	ne	2,355	4,027	6,859	9,208	11,840	12,580
North Carolina Central U.	265	6,870	9,043	10,573	7,750	9,320	10,293	9,691	10,627	10,728	12,235	11,883	9,831	12,561
U. Hawaii, system office	266	ne	ne	ne	ne	ne	ne	ne	ne	12,328	12,052	13,367	12,688	12,511
CUNY, Graduate School of Public Health and Health Policy	267	na	na	na	na	na	na	na	na	5,080	5,572	8,722	12,254	11,880
Creighton U.	268	11,850	14,080	14,209	i 13,272	i 11,427	i 9,164	i 10,406	i 7,787	i 5,601	i 8,113	i 7,444	i 8,426	i 11,799
Xavier U. Louisiana	269	5,669	6,673	7,177	5,856	7,077	7,735	10,487	10,901	9,971	8,526	9,628	11,074	11,718
Prairie View A&M U.	270	8,623	11,041	10,561	9,077	8,259	7,958	7,896	8,674	8,386	9,246	9,134	9,315	11,425
California State U., Long Beach	271	12,096	11,570	i 11,044	i 10,517	7,689	6,047	10,960	12,991	13,704	13,380	11,846	10,849	11,132
Hampton U.	272	14,455	12,292	15,290	12,620	11,153	14,619	13,572	15,908	13,669	12,943	10,842	11,181	11,049
U. Akron	273	11,943	12,833	16,605	19,600	20,187	14,510	25,362	16,124	12,280	11,627	10,509	8,953	11,015
Tennessee State U.	274	6,936	7,732	9,393	9,354	11,886	10,920	11,590	9,226	9,336	8,449	19,052	15,066	i 10,859
Charles R. Drew U. of Medicine and Science	275	20,430	20,679	19,733	17,144	19,412	12,992	12,089	14,461	10,198	10,427	9,863	9,945	10,656

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Chapman U.	276	1,429	1,215	1,465	2,227	2,170	2,348	2,951	3,414	3,780	5,359	7,313	7,881	10,454
Florida Institute of Technology	277	8,903	7,387	7,189	7,112	7,706	8,251	8,714	8,440	8,333	10,043	10,448	12,386	10,429
American U.	278	6,263	6,549	5,254	5,613	7,426	8,444	8,280	7,601	11,237	13,762	13,491	9,064	10,345
U. Colorado Denver ^c	279	na	na	na	na	na	na	na	na	na	na	na	9,058	10,245
U. Massachusetts, Dartmouth	280	11,236	12,253	10,329	8,076	8,413	7,134	6,463	7,118	6,595	6,957	6,066	7,626	10,239
Teachers C., Columbia U.	281	6,478	8,433	10,120	8,492	8,909	12,666	11,373	10,194	8,925	8,054	7,614	8,521	10,177
U.S. Naval Academy	282	10,750	10,243	8,868	10,142	10,216	8,978	11,006	12,946	13,331	12,851	12,281	10,247	10,147
Missouri State U.	283	6,051	4,756	3,697	3,129	3,027	3,141	2,633	2,659	3,977	4,907	12,232	8,928	10,082
Central Michigan U.	284	2,301	4,315	4,965	5,325	5,982	5,108	4,883	5,550	7,121	8,100	7,429	6,919	9,764
Northern Illinois U.	285	16,907	11,226	12,311	12,178	8,697	8,915	9,679	6,164	6,925	6,705	6,025	9,014	9,725
East Tennessee State U.	286	6,121	7,705	8,052	6,825	4,865	4,664	5,655	5,870	7,168	7,688	7,329	8,310	9,714
Northeast Ohio Medical U.	287	4,009	4,081	3,816	5,244	6,582	7,607	9,181	10,043	9,743	10,107	10,684	9,999	9,400
Oakland U.	288	7,024	9,001	8,168	6,855	5,986	5,339	6,154	6,414	5,733	6,690	5,058	7,426	9,369
Alcorn State U.	289	9,256	8,655	8,598	8,321	7,447	6,784	6,387	8,634	7,372	7,540	7,023	7,593	9,360 i
Nova Southeastern U.	290	5,669	6,829	6,570	5,334	5,906	5,856	6,922	7,672	7,772	8,911	10,452	10,386	9,253
Miami U.	291	11,546	11,476	12,447	11,314	10,311	9,278	7,699	7,568	7,924	7,680	8,829	8,854	9,147
Loma Linda U.	292	27,175	30,899	23,447	24,991	19,044	21,082	16,118	15,192	13,806 i	12,548 i	11,289 i	10,031	9,134
New York Medical C.	293	21,095	21,013	16,471	13,806	11,421	11,326	10,772	9,000 i	8,141 i	11,061 i	12,106	10,739	9,070
U. Maryland, Eastern Shore	294	8,583	8,587	6,955	8,511	8,902	9,284	7,853	7,265	4,890	6,983	8,084	8,346	9,062
Lincoln U., Jefferson City	295	5,984	7,084	6,306	4,989	5,460	5,492	4,953	4,148	2,498	2,700	3,636	5,621	8,988
Idaho State U.	296	13,591	16,821	15,711	12,738	10,566	11,510	11,827	11,084	9,737	7,222	7,693	7,059	8,925
Alabama A&M U.	297	22,154	21,355 i	21,322 i	21,290 i	21,257 i	21,222 i	17,863 i	14,566 i	11,267 i	7,968 i	5,432 i	7,152 i	8,874 i
U. of the District of Columbia	298	1,946	2,313	2,430	2,168	1,627	1,434	2,451	2,659	2,021	2,526	2,020	5,801	8,555
Clarkson U.	299	9,408	9,531	7,061	5,275	5,462	5,436	6,183	6,538	7,814	8,350	6,876	6,872	8,342
California State U., Los Angeles	300	7,027	8,296	6,739	6,948	4,788	3,794	3,452	6,499	8,530	9,088	8,088	6,932	8,146
Western Michigan U. and Homer Stryker M.D. School of Medicine	301	10,120	11,444	8,295	7,547	7,185	7,216	6,863	7,447	6,948	5,654	5,374	7,853	7,736

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
SUNY, C. of Environmental Science and Forestry	302	8,907	8,732	8,557	8,382	5,564	7,784	8,109	7,658	6,854	7,632	7,718	6,863	7,678
Tennessee Technological U.	303	6,958	5,119	4,154	3,566	3,662	3,508	4,015	4,808	5,269	5,996	6,338	7,261	7,612
Rosalind Franklin U. of Medicine and Science	304	8,350	9,317	10,084	11,202	9,754	9,368	8,478	8,828	9,249	8,865	8,504	9,357	7,292
Fort Valley State U.	305	4,586	3,452	3,334	3,329	4,249	4,079	4,844	5,068	3,700	4,433	4,806	4,429	7,265
California State U., San Marcos	306	3,548	3,548	3,548	3,550	3,177	3,709	4,591	4,869	6,373	8,007	10,310	7,926	7,193
Texas A&M U.-Kingsville	307	5,067	4,765	4,980	4,988	6,415	5,483	5,910	5,827	5,640	6,874	8,253	7,822	6,834
Texas Southern U.	308	3,638	3,806	4,287	4,741	2,764	2,801	2,825	3,654	2,368	3,238	5,590	4,952	6,768
Western U. of Health Sciences	309	885	900	1,268	1,130	1,368	1,099	2,299	2,714	2,562	2,573	4,055	5,020	6,202
U. North Carolina, Wilmington	310	13,026	12,933	10,032	7,599	4,480	4,519	4,595	4,834	5,001	6,405	5,984	6,114	6,147
California State U., Fullerton	311	6,710	7,957	6,477	6,264	6,325	4,640	3,651	3,865	4,610	4,117	4,102	4,535	6,124
U. Minnesota, Duluth	312	6,427	8,372	7,560	7,264	5,940	10,025	8,055	6,033	5,520	7,082	6,393	5,282	6,094
U. Arkansas, Little Rock	313	6,578	7,995	7,894	6,076	4,559	3,736	4,473	4,220	4,942	6,114	6,660	6,438	6,043
Clark Atlanta U.	314	7,229	7,040	8,447	7,576	7,241	7,439	6,017	5,752	5,611	5,550	5,213	5,282	5,895
California State U., Sacramento	315	5,032	6,145	4,878	6,893	4,769	5,148	4,773	5,876	5,620	5,238	4,892	4,319	5,884
California State U., Fresno	316	3,089	3,589	3,517	2,682	2,852	3,040	2,979	3,162	3,925	2,897	3,004	3,593	5,838
Illinois State U.	317	3,449	3,264	2,954	3,203	3,463	2,872	2,878	2,742	2,742	4,390	3,639	5,194	5,797
U. New Orleans	318	14,185	12,475	11,481	9,729	8,716	6,787	6,617	5,502	5,246	4,272	3,741	3,566	5,764
Virginia State U.	319	5,080	5,642	6,852	6,108	5,321	4,848	5,017	4,357	4,814	5,486	4,630	3,991	5,751
U. West Florida	320	2,310	1,505	809	646	883	1,061	684	793	1,149	1,210	2,688	3,689	5,733
Western Washington U.	321	4,137	4,153	3,714	3,287	3,425	3,879	3,972	4,216	3,884	3,842	3,838	3,963	5,660
Montana Technological U.	322	5,321	4,999	3,293	3,507	3,202	3,420	3,916	5,019	4,691	4,926	4,322	6,133	5,600
Villanova U.	323	6,367	6,817	5,518	4,218	5,008	4,563	4,334	3,968	3,955	3,956	4,476	5,105	5,591
Central State U.	324	2,544	3,475	3,340	2,686	2,000	1,508	1,546	1,491	2,299	2,517	3,097	4,165	5,576
Louisiana Tech U.	325	9,715	10,351	8,296	7,593	6,577	5,433	5,013	5,438	5,710	6,303	7,000	6,234	5,568

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Tulsa	326	6,819	7,547	6,615	6,041	5,487	5,885	6,037	5,816	4,440	3,891	4,555	5,524	5,565
Duquesne U.	327	5,032	5,103	4,614	3,289	3,980	4,394	4,973	4,959	4,944	4,316	4,579	4,435	5,562
U.S. Army War C.	328	ne	ne	ne	ne	ne	ne	ne	ne	ne	2,146	ne	4,662	5,496
Texas Christian U.	329	2,161	2,483	3,253	3,767	3,690	3,291	2,671	2,523	2,311	2,211	2,840	3,984	5,481
Bowling Green State U.	330	4,963	6,162	6,957	9,287	6,520	4,067	4,221	3,565	3,275	3,878	4,555	5,189	5,437
U. Hawaii, Hilo	331	10,491	5,243	14,195	10,989	8,522	12,718	9,401	5,461	5,264	4,924	5,274	5,510	5,292
Morehouse C.	332	7,704	8,280	8,856	9,169	6,919	5,836	4,199	3,663	4,365	4,427	4,686	4,102	5,056
Tarleton State U.	333	6,379	6,036	5,086	3,525	3,565	3,801	4,484	4,602	4,288	4,632	4,139	4,620	5,055
California State U., Monterey Bay	334	3,167	4,713	4,341	4,961	3,862	3,459	3,654	3,574	3,607	3,746	3,889	3,813	5,051
U. Tennessee, Chattanooga	335	4,866	2,929	3,199	2,056	1,486	1,949	1,092	1,144	1,490	2,393	3,915	4,416	5,031
Kentucky State U.	336	3,501	3,146	4,919	3,906	4,335	4,590	5,146	5,382	5,618	4,691	4,456	3,716	4,739
California State Polytechnic U., Pomona	337	2,523	2,964	2,635	2,945	2,165	1,826	2,199	3,225	4,181	3,131	5,300	4,267	4,643
U. Detroit Mercy	338	629	602	508	ne	317	890	2,565	2,296	4,385	4,908	4,201	3,815	4,640
Ball State U.	339	1,712	1,701	2,171	1,267	1,617	1,828	2,813	2,083	2,749	2,607	2,290	2,099	4,635
MGH Institute of Health Professions	340	ne	408	ne	ne	ne	3,766	2,228	1,839	2,957	3,494	3,014	2,500	4,628
U. Colorado Colorado Springs	341	6,453	5,420	2,935	2,471	3,150	3,791	3,717	4,267	3,734	2,752	3,110	3,681	4,606
CUNY, Brooklyn C.	342	5,002	6,724	6,305	5,831	5,709	5,439	5,836	4,968	4,149	4,210	4,385	4,335	4,448
Winston-Salem State U.	343	ne	743	1,280	436	ne	ne	1,069	1,175	1,289	1,468	3,234	4,190	4,442
Wesleyan U.	344	4,475	5,361	4,612	3,930	3,313	3,582	3,393	3,817	3,990	4,211	3,559	3,452	4,390
U. Washington, Tacoma	345	47	108	130	0	0	1,386	1,595	727	1,523	2,451	2,899	3,130	4,331
C. Charleston	346	10,105	4,438	5,259	5,354	4,114	4,863	5,026	5,020	3,653	3,689	2,781	3,839	4,305
U. Missouri, Saint Louis	347	5,886	8,214	7,990	6,821	5,293	3,984	4,343	4,710	5,889	6,759	5,840	5,299	4,278
West Virginia State U.	347	2,759	3,193	3,945	3,292	5,646	5,561	4,126	5,072	5,361	4,526	3,993	4,119	4,278
Southern U. and A&M C., Agricultural Research and Extension Center	349	ne	4,049	5,926	3,481	3,363	2,514	2,415	2,736	3,057	3,057	2,085	3,588	4,261
CUNY, John Jay C. of Criminal Justice	350	3,079	3,410	2,786	2,839	2,164	2,342	2,467	1,833	2,949	1,154	2,472	750	4,162

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Middle Tennessee State U.	351	2,428	1,595	4,207	1,897	1,022	1,609	2,564	2,212	2,206	1,572	1,896	4,098	4,088
Western Illinois U.	352	658	742	3,855	1,183	735	350	ne	1,198	1,535	1,486	1,781	3,163	4,032
Florida Gulf Coast U.	353	2,661	2,740	1,902	1,553	1,153	1,139	1,377	1,105	764	944	2,639	2,410	4,008
Dakota State U.	354	ne	402	3,555	831	908	765	1,448	1,989	3,273	3,006	3,957	2,603	3,976
Arkansas State U., Jonesboro	355	6,169	8,591	9,595	6,268	3,849	4,315	4,826	4,396	4,371	4,867	4,712	4,249	3,932
Montclair State U.	356	1,113	2,552	3,265	2,944	1,900	2,116	2,301	1,974	2,942	3,050	2,766	2,816	3,917
California State U., San Bernardino	357	2,119	i 6,212	5,914	5,633	6,004	5,628	5,920	5,423	5,436	5,991	3,574	3,263	3,857
Chicago State U.	358	1,598	2,014	565	ne	ne	ne	910	ne	1,154	894	ne	ne	3,699
U. New England	359	2,829	3,242	3,359	4,271	4,762	4,856	5,298	5,918	4,976	5,269	5,064	3,864	3,660
U. Wisconsin-Superior	360	5,197	5,638	i 5,302	i ne	1,941	i ne	ne	ne	1,916	1,527	1,382	1,843	3,635
Barnard C.	361	2,702	3,226	3,122	2,530	2,190	2,166	2,794	2,645	2,291	2,701	2,680	3,422	3,605
Southern U. and A&M C., Baton Rouge	362	5,920	6,057	i 6,194	3,998	2,714	3,258	2,778	2,812	2,902	2,680	2,567	3,395	3,545
South Carolina State U.	363	6,333	6,797	i 7,261	2,958	i 2,231	i 1,503	4,376	i 13,254	13,846	i 3,010	3,123	i 3,236	i 3,513
Langston U.	364	3,313	3,778	3,957	4,153	5,816	5,621	8,941	7,960	i 7,146	i 6,331	8,584	2,899	3,484
Fisk U.	365	7,686	4,631	4,058	5,429	i 7,366	7,123	i 7,512	4,327	2,781	4,473	3,811	3,926	3,472
Hope C.	366	2,523	2,414	1,912	1,993	1,834	1,436	1,251	1,157	1,088	1,349	1,126	1,957	3,468
Youngstown State U.	367	2,067	3,304	2,159	1,825	1,867	2,346	1,083	3,257	3,634	2,878	3,190	1,717	3,464
National Defense U.	368	ne	ne	ne	4,906	6,712	4,832	5,720	5,723	2,219	2,155	2,583	2,586	3,420
Fordham U.	369	3,426	3,086	3,193	3,748	3,239	2,789	4,760	4,750	4,210	3,171	2,834	3,113	3,384
Rutgers, State U. New Jersey, Camden	370	1,765	1,259	1,248	1,511	1,728	1,984	2,637	2,322	1,495	1,096	1,952	2,841	3,349
Oklahoma State U., Center for Health Sciences	371	817	377	83	61	31	321	697	984	959	944	2,602	2,304	3,327
U. North Florida	372	4,516	5,048	3,760	1,424	1,045	1,184	1,333	1,287	1,325	1,243	1,167	1,917	3,309
U. Arkansas, Pine Bluff	373	3,947	4,696	4,540	4,550	3,875	3,912	4,233	3,747	3,648	4,299	4,393	3,960	3,306
CUNY, Lehman C.	374	2,348	i 2,700	2,208	1,874	2,247	2,371	3,625	3,713	4,177	2,181	2,614	2,606	3,276
Sam Houston State U.	375	4,887	2,098	2,422	1,729	1,733	1,488	1,830	1,872	2,200	2,316	2,444	2,472	3,216
U. North Texas, Health Science Center	376	25,847	26,132	26,627	24,187	21,943	22,422	27,163	26,368	27,579	27,260	25,917	32,464	3,172
U. Washington, Bothell	377	435	363	323	0	711	1,222	546	747	917	1,800	1,260	1,903	3,145

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022			
Western Kentucky U.	378	6,606	6,079	5,639	4,161	2,916	2,983	3,346	3,285	2,860	3,128	2,977	2,306	3,127			
Bowie State U.	379	ne	1,910	1,739	1,422	1,761	1,497	1,507	987	1,100	876	1,368	980	3,112			
Citadel Military C. South Carolina	379	ne	157	ne	ne	ne	ne	ne	ne	ne	ne	470	1,258	3,112			
DePaul U.	381	3,874	4,601	4,800	4,236	4,818	4,436	4,601	5,393	4,496	4,331	5,024	4,466	3,084			
Norfolk State U.	382	5,413	6,345	7,739	5,465	6,381	4,918	6,947	7,101	6,877	7,935	7,121	3,976	3,082			
Gallaudet U.	383	4,584	3,876	3,712	3,916	2,586	2,064	2,133	2,273	2,142	1,105	899	2,130	3,014			
New York Institute of Technology	384	250	369	950	2,097	3,049	2,070	1,536	983	1,439	3,072	1,485	1,970	2,988			
Alabama State U.	385	13,340	12,340	13,607	1,927	2,236	2,303	2,372	2,253	2,434	2,577	2,582	2,338	2,930			
Wellesley C.	386	3,406	2,461	2,895	3,130	3,579	2,971	5,065	3,725	3,668	3,447	4,024	3,469	2,915			
CUNY, C. Staten Island	387	949	1,470	1,242	1,302	1,241	1,021	1,694	1,524	1,737	i	2,120	2,262	2,875			
Amherst C.	388	966	1,775	1,810	i	1,846	1,543	1,835	1,207	1,228	1,630	2,118	1,775	2,862			
Pennsylvania State U., Behrend	389	887	1,029	1,232	1,341	1,596	1,474	2,397	1,658	1,025	1,424	543	2,014	2,850			
Towson U.	390	1,806	2,630	1,771	2,015	1,870	1,325	1,449	1,453	2,133	2,141	1,999	1,743	2,809			
U. Central del Caribe	391	6,504	6,613	6,304	5,946	6,407	6,147	6,290	4,866	2,937	2,705	2,743	2,492	2,807			
Kennesaw State U.	392	1,105	983	1,127	i	1,271	1,397	713	1,037	1,182	1,306	1,738	1,696	2,753			
Sonoma State U.	393	690	559	ne	1,800	1,581	964	531	ne	ne	ne	936	2,212	2,730			
James Madison U.	394	5,563	5,218	6,476	4,604	2,997	2,418	2,189	2,172	1,640	2,075	1,973	2,189	2,724			
Haverford C.	395	2,698	1,851	1,478	1,547	1,309	1,476	972	1,031	1,660	2,339	2,680	2,455	2,722			
Southern Illinois U., Edwardsville	396	4,140	3,946	2,808	2,896	2,066	2,111	3,077	3,472	2,907	2,951	2,564	2,800	2,629			
Purdue U., Northwest	397	na	na	na	na	na	na	na	2,218	1,927	1,513	1,969	2,165	2,621			
Long Island U.	398	545	i	590	i	577	i	567	ne	ne	346	1,183	1,416	1,647	1,277	2,538	2,589
Northern Kentucky U.	399	1,476	1,573	1,474	1,239	1,396	1,246	1,061	1,047	780	1,223	1,415	2,155	2,585			
Occidental C.	400	644	898	1,079	1,105	1,365	853	1,260	701	888	1,614	1,567	2,284	2,551	i		
Bucknell U.	401	2,626	2,600	1,514	1,581	1,724	1,489	1,368	i	1,317	i	1,266	1,403	1,730	i	1,696	2,532
U. Michigan, Dearborn	402	2,801	4,291	2,881	3,103	2,882	1,844	2,035	1,860	1,341	1,722	2,244	2,366	2,528			
U. of Health Sciences and Pharmacy in St. Louis	403	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	3,767	4,063	2,523			
U. San Diego	404	1,332	1,139	1,903	2,002	2,435	1,799	2,121	2,299	2,362	2,494	2,048	1,997	2,504			
Clark U.	405	3,243	3,776	2,970	2,649	2,643	2,297	1,930	2,465	2,949	3,489	3,350	2,754	2,500			
U. New Haven	406	ne	199	235	728	344	i	183	2,157	474	3,853	2,786	1,440	2,069	2,447		

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
California State Polytechnic U., Humboldt	407	2,965	3,292	3,575	2,819	2,498	3,280	4,455	3,796	3,024	2,103	2,399	1,975	2,421
St. John's U., New York	408	1,161	1,181	1,095	868	879	942	868	961	1,528	1,666	1,805	1,931	2,416
Central Washington U.	409	4,038	2,238	1,840	1,242	1,108	1,575	1,580	2,287	1,840	2,159	1,701	1,778	2,415
Spelman C.	410	2,740	1,833	1,874	1,366	1,185	1,035	1,291	1,227	1,673	2,004	2,136	1,886	2,409
California State U., East Bay	411	643	921	536	310	ne	ne	479	ne	ne	ne	1,018	1,431	2,382
Appalachian State U.	412	1,662	2,398	2,264	1,722	2,186	1,795	1,896	2,629	1,840	1,298	1,375	1,313	2,372
Georgia Southern U.	413	1,882	1,520	1,341	1,990	3,123	2,923	2,540	2,826	1,758	1,765	1,759	3,298	2,356
Smith C.	414	2,755	3,101	2,626	2,824	3,042	3,575	2,563	3,352	3,288	2,887	2,483	2,249	2,252
Santa Clara U.	415	3,494	1,992	1,953	1,641	1,992	1,224	1,634	1,406	1,520	1,266	1,487	1,756	2,249
Middlebury C.	416	2,245	2,289	2,513	1,760	1,320	1,535	1,736	2,002	1,701	1,558	1,546	2,639	2,248
U. Southern Maine	417	2,498	3,592	5,415	4,515	3,071	i 2,460	i 1,848	2,252	2,237	2,275	2,128	2,020	2,201
Toyota Technological Institute, Chicago	418	ne	496	ne	ne	ne	1,392	1,410	1,581	1,759	1,934	3,038	3,090	2,199
Murray State U.	419	2,074	2,471	1,904	816	601	793	555	1,200	1,587	2,607	1,911	2,641	2,161
Troy U.	420	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,536	1,341	2,150
California State U., Dominguez Hills	421	2,658	2,671	2,689	2,738	1,384	i 1,035	1,124	753	1,072	1,135	1,360	1,528	2,143
U. Northern Iowa	422	499	1,597	1,982	2,146	2,007	1,847	2,267	2,153	1,697	2,343	1,792	1,978	2,132
Saint Joseph's U.	423	960	683	565	292	147	169	160	129	163	261	775	652	2,122
Tougaloo C.	424	2,978	2,542	1,865	1,857	1,894	1,868	1,747	2,252	2,860	2,293	2,102	2,092	i 2,098
Dine C.	425	ne	911	i ne	ne	ne	ne	ne	ne	1,238	1,126	347	ne	2,091
Morehead State U.	426	1,291	1,656	1,591	1,798	961	1,064	1,668	2,051	1,672	1,471	1,657	1,709	2,086
SUNY, C. of Optometry	427	2,829	3,336	3,162	2,757	2,567	2,490	2,487	2,073	1,944	1,823	1,688	2,105	2,080
Fort Lewis C.	428	325	511	ne	ne	ne	ne	ne	ne	ne	1,284	1,228	1,730	2,053
U. North Carolina, Asheville	428	1,367	1,519	1,565	1,505	1,174	1,452	2,202	1,714	1,309	1,262	1,848	1,775	2,053
U. Louisiana, Monroe	430	1,470	1,971	1,752	976	1,705	1,479	2,016	1,838	1,789	1,949	2,025	1,465	1,993
Harvey Mudd C.	431	2,049	2,594	2,038	2,004	1,457	1,633	2,320	1,521	1,762	1,619	1,748	1,443	1,956
Saginaw Valley State U.	432	77	525	330	203	ne	223	228	595	1,215	2,332	1,809	1,899	i 1,940
Reed C.	433	796	772	678	897	1,092	1,638	1,690	415	1,065	1,423	1,635	1,735	i 1,921
Carleton C.	434	1,643	2,132	2,212	3,326	3,046	1,077	832	727	933	1,891	1,236	1,493	1,907
Pacific U.	435	565	75	198	1,669	539	350	708	2,830	1,559	2,731	1,719	1,528	1,903

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Savannah State U.	436	1,774	2,518	1,874	2,514	2,127	1,796	2,245	1,388	1,778	1,709	1,804	1,804	1,881
C. New Jersey	437	447	188	ne	ne	ne	ne	ne	874	778	ne	888	1,016	1,860
West Texas A&M U.	438	2,100	1,340	1,785	1,314	1,324	1,635	1,523	1,108	1,104	1,278	1,253	1,915	1,850
Hawaii Pacific U.	439	ne	525	858	850	1,116	789	2,071	1,921	1,905	1,809	1,699	1,741	1,848
Eastern Michigan U.	440	3,375	3,802	3,081	2,194	932	1,274	1,200	1,005	1,137	1,971	2,520	2,029	1,828
Hofstra U.	441	920	948	1,117	666	997	1,836	1,762	1,307	1,060	915	606	960	1,820
CUNY, Baruch C.	442	1,010	1,025	1,209	547	548	838	1,214	1,027	1,154	1,359	1,470	1,682	1,819
Grand Valley State U.	443	1,078	1,610	i 2,142	i 2,675	2,151	2,033	1,479	1,365	1,719	1,663	1,783	1,407	1,802
Indiana U. Pennsylvania	444	489	616	669	101	169	ne	321	1,303	891	1,773	1,221	1,432	1,797
U. Nebraska, Kearney	445	289	1,018	714	838	652	513	870	975	1,014	1,227	1,259	1,286	1,794
Loyola Marymount U.	446	894	2,759	1,139	1,154	906	809	638	705	616	982	997	1,339	1,786
Bates C.	447	971	1,485	1,555	1,390	1,114	2,004	1,156	1,053	1,121	1,607	1,885	2,079	1,785
Texas Tech U., Health Sciences Center, El Paso	448	ne	ne	ne	ne	5,316	2,689	2,953	2,329	2,489	2,238	1,675	1,566	1,751
California State U., Chico	449	1,466	1,209	1,332	1,668	1,085	743	851	577	1,051	1,359	1,943	1,706	1,725
Bowdoin C.	450	1,806	1,876	3,300	3,240	2,330	2,154	2,452	1,811	2,026	1,777	1,862	1,767	1,702
Yeshiva U.	451	163,399	197,032	201,397	193,831	186,885	180,791	30,266	816	683	380	772	1,509	1,695
Franklin and Marshall C.	452	1,857	1,397	1,116	879	867	991	945	1,711	1,760	1,580	1,202	1,363	1,680
California State U., Bakersfield	453	637	727	641	1,721	1,140	1,854	1,662	2,416	3,243	4,245	4,244	3,167	1,675
Christopher Newport U.	454	1,035	1,587	1,230	1,083	1,263	938	779	859	1,068	1,285	1,347	1,487	1,674
U. Central Oklahoma	455	1,059	1,146	750	765	993	1,422	1,081	850	1,048	1,277	1,266	i 1,329	i 1,668
Northeastern Illinois U.	456	288	311	ne	ne	588	ne	ne	805	1,877	2,078	1,378	1,370	1,663
CUNY, York C.	457	ne	1,507	812	693	ne	288	ne	ne	ne	1,477	1,480	889	1,638
California State U., Channel Islands	458	ne	311	ne	316	520	825	244	122	269	500	513	953	1,621
Swarthmore C.	459	901	1,005	1,115	1,203	1,261	1,352	1,393	1,402	1,343	1,367	1,011	1,329	1,612
Texas A&M International U.	460	1,481	1,191	985	868	977	658	911	1,722	1,980	1,814	941	1,203	1,611
U. Richmond	460	2,050	1,705	2,097	1,747	2,004	1,738	1,924	1,870	1,628	1,545	1,588	1,522	1,611
Midwestern U.	462	285	438	427	369	517	654	1,060	1,184	1,278	1,045	936	1,506	1,609

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
New England C. of Optometry	462	726	1,236	1,685	1,588	533	419	618	ne	837	928	785	1,623	1,609
Black Hills State U.	464	1,355	1,097	1,118	1,123	662	635	1,127	812	813	860	1,234	1,048	1,600
Des Moines U.	465	62	91	ne	ne	224	ne	363	842	897	805	425	1,019	1,589
U. Texas, Tyler	466	1,689	977	2,084	1,325	280	309	352	613	718	813	774	929	1,585
Colgate U.	467	1,519	1,058	1,497	1,320	1,153	1,109	1,217	1,096	1,389	1,202	858	1,440	1,570
Palmer C. of Chiropractic, Davenport	468	3,009	3,344	2,906	1,991	1,775	i	1,558	1,485	1,189	1,100	1,100	1,400	1,733
U. Texas of the Permian Basin	469	627	692	786	716	489	595	510	328	50	ne	736	1,610	1,538
SUNY, Geneseo	470	679	1,278	1,499	609	455	635	908	992	998	1,184	950	1,187	1,514
Mount Holyoke C.	471	1,346	1,883	1,790	1,775	2,374	2,314	2,848	3,168	2,210	2,074	1,442	1,539	1,511
Texas A&M U.-Commerce	472	1,078	941	1,182	1,319	1,067	1,121	582	604	956	780	1,004	1,085	1,494
Texas Woman's U.	472	822	942	1,058	588	423	299	573	407	326	677	882	1,009	1,494
U. Central Arkansas	474	1,560	1,300	1,314	1,033	1,145	1,222	931	1,183	1,113	1,347	1,374	1,135	1,482
Pace U.	475	627	952	1,469	1,054	1,155	1,329	1,170	862	610	1,537	2,120	1,522	1,472
Western Carolina U.	476	1,273	691	931	647	669	740	873	963	992	1,650	1,615	1,625	1,462
U. Alaska, Southeast	477	1,150	941	887	1,001	1,158	1,341	1,502	1,480	1,636	1,235	1,092	1,046	1,392
Colby C.	478	1,015	1,002	1,148	989	943	1,038	1,061	1,038	1,188	1,058	787	623	1,387
CUNY, New York City C. of Technology	479	59	145	ne	ne	ne	ne	ne	ne	1,978	1,795	1,359	884	1,383
Davidson C.	480	1,153	1,053	651	1,574	1,166	1,703	810	1,099	738	895	1,254	1,112	1,370
U. of the Pacific	481	1,667	1,414	749	823	985	1,019	1,879	1,403	2,057	2,144	1,362	1,106	1,351
Trinity U.	482	964	1,046	1,222	1,989	1,535	1,151	956	977	1,116	878	1,195	1,078	1,345
William Paterson U.	483	105	140	ne	ne	ne	ne	299	178	195	626	1,072	1,240	1,318
U. Northern Colorado	484	1,606	1,513	1,117	956	1,867	1,230	1,674	1,752	1,745	1,518	1,233	1,362	1,300
Rhode Island C.	485	ne	1,195	1,140	993	851	726	1,107	860	669	726	1,102	1,470	1,298
U. Ana G. Mendez, Gurabo	486	212	377	446	362	1,008	346	357	423	418	951	946	926	1,292
Lafayette C.	487	1,223	1,421	1,149	1,145	853	1,052	858	1,303	968	838	745	499	1,291
CUNY, Graduate Center	488	2,663	1,652	1,849	2,180	2,127	1,707	1,004	i	830	2,313	2,785	2,206	2,251
Furman U.	489	1,245	984	1,044	1,108	857	1,071	1,068	1,292	1,110	1,106	847	1,028	1,280
Utah Valley U.	489	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,280
Colorado State U., Pueblo	491	364	354	ne	ne	ne	ne	ne	ne	ne	1,282	1,161	1,508	1,278

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Hobart and William Smith Colleges	492	1,030	1,206	914	1,786	666	378	ne	528	ne	1,047	1,072	758	1,264
Bryn Mawr C.	493	932	1,469	1,619	1,853	1,346	1,713	1,641	1,432	1,265	1,052	833	774	1,257
SUNY, Buffalo State	494	1,247	1,958	2,348	1,336	1,076	846	849	860	1,040	1,203	1,240	977	1,255
U. Wisconsin-Stevens Point	495	4,455	3,752	i 3,049	2,131	1,740	i 1,349	i 957	i 1,266	i 1,575	i 1,884	i 2,193	1,776	1,235
Pennsylvania State U., Harrisburg	496	963	1,288	1,161	377	194	565	270	215	292	80	437	1,597	1,234
Butler U.	497	ne	173	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,227
Pomona C.	498	1,038	1,769	1,528	2,144	1,789	1,074	1,579	1,038	867	861	1,123	930	1,217
Seton Hall U.	499	2,206	1,259	679	691	688	736	825	850	724	810	539	1,003	1,185
Lake Superior State U.	500	ne	133	ne	ne	ne	327	272	726	237	ne	ne	ne	1,184
Clafin U.	501	3,226	5,103	5,090	2,556	1,511	1,158	1,726	1,344	1,491	1,735	1,907	1,005	1,179
Nevada State C.	502	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,167
Pittsburg State U.	502	999	1,280	989	791	1,006	448	270	316	195	339	477	759	1,167
Williams C.	504	2,330	2,117	2,029	1,498	1,029	1,700	1,614	1,703	1,458	1,131	1,086	i 1,152	i 1,165
New School	505	1,376	1,512	1,830	2,370	1,892	2,106	2,366	2,126	1,665	1,790	986	960	1,164
U. Puerto Rico, Humacao	506	1,950	i 1,976	1,949	1,452	1,102	669	ne	ne	882	828	1,279	1,137	1,160
Elizabeth City State U.	507	5,352	10,176	3,673	3,767	1,956	1,644	1,619	1,305	960	ne	992	1,266	1,150
Virginia Military Institute	508	451	133	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,137
U. Wisconsin-Oshkosh	509	769	1,100	1,140	971	i 1,005	i 1,040	i ne	1,068	i 1,061	i 1,054	i 1,048	i 1,039	1,114
Albany C. of Pharmacy and Health Sciences	510	1,380	1,634	1,182	1,333	1,643	1,065	380	566	1,092	1,690	1,938	1,900	1,110
New Mexico Highlands U.	511	963	986	704	741	969	ne	1,086	1,015	741	ne	1,034	1,085	i 1,104
U. Oklahoma, Tulsa	512	ne	ne	ne	ne	ne	882	1,046	883	1,531	1,415	1,559	681	1,098
U. Baltimore	513	1,518	2,328	2,391	2,063	2,513	2,390	3,479	2,922	1,642	1,309	1,024	848	1,092
U. of the Incarnate Word	514	ne	111	ne	ne	ne	403	ne	ne	868	1,075	869	1,076	1,078
Coastal Carolina U.	515	1,533	1,439	1,474	1,691	1,281	1,041	858	1,028	1,031	1,294	1,211	944	1,076
Southeastern Louisiana U.	516	942	735	794	815	692	1,212	757	1,027	830	586	884	582	1,074
Claremont McKenna C.	517	1,102	1,061	1,082	i 1,081	i 1,080	i ne	604	754	555	730	741	637	1,070
Fayetteville State U.	518	2,188	1,810	1,421	1,690	2,185	1,792	2,740	2,202	2,251	1,974	799	979	1,060

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
California State U., Stanislaus	519	ne	1,037	i 1,070	650	341	174	221	478	734	964	1,284	1,354	1,056
Trinity C., Hartford	520	1,026	1,217	1,432	1,040	1,313	889	893	2,084	794	1,077	1,019	1,348	1,049
Kenyon C.	521	413	358	ne	ne	ne	ne	ne	ne	764	776	714	ne	1,021
St. Edward's U.	522	ne	3,073	2,450	2,640	1,633	4,200	3,600	5,560	1,596	4,893	4,568	3,980	1,010
U. Wisconsin-Green Bay	523	724	631	i 592	i 552	i 512	i 470	i 833	i 604	i 526	i 792	i 859	i 845	i 1,009
Alfred U.	524	1,645	1,964	1,625	1,447	1,310	1,305	1,318	883	1,403	1,580	947	939	1,008
Dillard U.	525	2,711	5,019	i 7,325	7,692	6,889	8,851	7,585	5,592	5,503	1,390	1,164	841	992
Roger Williams U.	526	1,056	1,391	1,362	1,206	1,454	1,124	1,215	1,183	854	828	844	972	982
Milwaukee School of Engineering	527	1,177	1,181	1,207	1,245	1,500	1,335	1,164	775	680	764	613	751	969
U. Wisconsin-La Crosse	528	2,150	2,013	i 1,876	1,240	1,095	1,006	1,250	1,158	1,171	775	809	895	968
Touro U., California	529	999	1,196	1,390	1,351	1,374	1,332	1,199	1,196	1,410	1,540	1,546	1,375	964
Vassar C.	530	1,236	1,552	993	1,136	999	954	1,417	1,579	4,185	i 909	1,055	918	952
Abilene Christian U.	531	537	427	ne	ne	ne	ne	ne	ne	ne	ne	ne	757	934
Calvin U.	532	2,031	556	664	731	1,208	1,034	i 795	880	1,332	900	927	i 928	i 930
Naval War C.	533	ne	ne	0	i 0	i 0	i 0	0	3,797	i 4,384	679	724	794	929
U. Hartford	534	820	1,571	1,450	1,165	1,080	992	1,172	1,178	62	1,019	842	766	886
U. Illinois, Springfield	535	332	373	554	503	405	307	527	1,169	1,108	966	971	1,056	881
Austin Peay State U.	536	ne	729	481	364	189	334	301	347	599	295	475	597	870
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	537	ne	106	179	340	523	264	643	206	201	191	342	376	858
U. South Carolina, Aiken	538	122	i 592	ne	937	759	i 689	1,155	2,697	2,437	2,063	2,328	1,880	857
Macalester C.	539	1,044	1,455	1,075	871	878	708	771	970	553	805	647	617	852
Eastern Washington U.	540	46	559	725	1,226	885	955	1,244	1,181	997	811	1,092	772	848
U. Houston-Clear Lake	541	301	818	730	875	739	541	756	753	894	718	632	865	841
West Chester U. Pennsylvania	542	3,531	i 5,691	788	513	392	500	453	618	425	704	575	486	835
Stephen F. Austin State U.	543	4,704	1,385	953	1,055	1,118	1,565	1,011	835	785	1,297	884	814	833

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Franklin W. Olin C. of Engineering	544	ne	666	1,090	946	1,050	1,103	782	473	425	111	255	636	805
Skidmore C.	545	1,872	1,562	1,334	1,448	1,170	969	732	1,179	1,878	2,261	1,827	1,739	796
Northwest Indian C.	546	1,943	1,993	2,044	2,216	1,705	1,154	ne	ne	1,649	2,201	572	683	791
U. Virginia's C. Wise	547	76	38	ne	ne	ne	ne	ne	ne	ne	ne	ne	1,307	786
CUNY, system office	548	ne	ne	819	397	352	828	774	420	1,977	1,347	869	768	764
U. Puerto Rico, Cayey	549	601	871	1,515	1,168	1,143	959	1,105	704	632	963	1,210	1,202	757
Union C., Schenectady	550	1,427	959	867	1,863	1,385	1,080	1,680	554	872	964	462	976	750
Lewis and Clark C.	551	818	684	718	1,490	1,378	872	636	723	834	931	1,268	702	746
U. Puget Sound	552	86	186	ne	ne	ne	ne	ne	459	ne	ne	397	ne	743
Northwestern State U. Louisiana	553	635	683	609	590	494	ne	490	458	490	579	598	738	742
C. Wooster	554	249	512	183	ne	404	386	ne	736	744	456	283	505	730
Stockton U.	555	ne	405	160	ne	380	198	221	ne	246	549	663	486	728
SUNY, C. Brockport	556	521	677	989	755	564	535	639	747	672	638	781	500	723
Augustana U.	557	889	1,169	1,007	809	737	647	ne	890	981	784	ne	1,003	709
Southern Connecticut State U.	558	0	899	605	446	1,620	1,205	981	1,004	766	718	885	613	707
Ithaca C.	559	617	627	774	788	763	570	ne	ne	ne	ne	981	685	703
Colorado C.	560	412	362	307	269	511	570	320	585	259	202	91	197	702
Northland C.	561	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	615	686
U. Wisconsin-Eau Claire	562	1,271	826	786	646	393	ne	660	925	690	742	647	909	681
Claremont Graduate U.	563	4,888	1,050	6,200	7,030	5,517	4,696	3,876	3,056	2,236	1,414	803	626	649
Western New England U.	564	ne	931	325	ne	ne	ne	580	214	ne	ne	ne	ne	648
Keck Graduate Institute	565	ne	1,744	1,671	1,227	1,302	937	895	853	811	769	727	685	643
Florida Polytechnic U.	566	na	na	na	na	na	203	ne	ne	ne	338	252	424	631
Winthrop U.	567	ne	871	935	651	594	676	490	391	442	634	697	679	628
Lamar U.	568	4,184	3,959	3,057	1,604	1,118	297	218	917	1,280	1,604	1,157	1,157	625
U. North Georgia	569	ne	ne	ne	ne	ne	ne	ne	257	198	222	183	435	597
Lawrence Technological U.	570	2,809	2,425	1,106	985	739	971	326	569	457	294	296	252	588
Willamette U.	571	441	419	911	646	672	730	757	739	807	435	222	486	587
SUNY, C. Plattsburgh	572	1,187	726	454	ne	459	717	545	455	1,254	1,142	930	786	584
Indiana State U.	573	990	1,352	1,268	858	1,005	925	954	510	629	821	635	292	579

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Minnesota State U., Mankato	574	2,001	812	667	297	296	357	1,189	522	639	708	525	575	575
Robert Morris U.	575	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	567 i
Connecticut C.	576	954	1,005	1,130	833	514	756	817	777	505	752	483	439	554
Plymouth State U.	576	1,012 i	1,402 i	1,315	1,116	1,261	1,224	925	827	794	ne	ne	ne	554
Sul Ross State U.	578	1,595	1,672	1,073	735	546	333	272	440	553	339	481	505 i	547 i
U. San Francisco	578	335	313	1,842	858	738	503	280	405	310	198	148	255	547
SUNY, Oswego	580	644	871	ne	673	ne	ne	ne	669	661	628	492	415	544
Alaska Pacific U.	581	283	349	ne	ne	ne	532	322	252	217	304	121	187	542
Monmouth U.	582	2,190	1,873	714	ne	635	ne	173	ne	ne	120	110	174	535
Drake U.	583	361	229	ne	560	ne	ne	830	486	262	220	ne	371	525
Northern Michigan U.	584	287	124	ne	ne	ne	ne	228	96	151	258	418	366	513
Grambling State U.	585	993	1,515	1,298	1,077	1,065	915	974	846	778	558	359	436	483 i
Edward Via C. of Osteopathic Medicine	586	ne	707	502	517	250	89	88	94	195	749	566	537	482
U. of St. Thomas (MN)	587	656	720	557	570	352	ne	195	212	320	313	450	1,321	472
Central Connecticut State U.	588	351	662	666	601	433	193	131	208	ne	328	518	508	470
Salisbury U.	589	422	586	360	674	1,155	967	841	806	369	658	204	416	469
West Virginia School of Osteopathic Medicine	590	22	17	ne	ne	ne	ne	ne	ne	ne	ne	414	418	468
Canisius C.	591	154	181	ne	ne	ne	ne	ne	1,330	1,044	943	ne	597	454
Seattle U.	592	467 i	622	530	ne	848	890	809	748	873	574	487	262	452
Manhattan C.	593	166	245	ne	ne	ne	ne	ne	ne	ne	245	398	397	440
Whitman C.	594	1,072	957	398	ne	ne	ne	ne	ne	ne	701	558	ne	434
U. Wisconsin-Platteville	595	46	50 i	ne	ne	287 i	266 i	ne	299 i	ne	294 i	292 i	321 i	396 i
Texas A&M U.-San Antonio	596	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	394
Kean U.	597	ne	550	1,191	347	ne	244	8	ne	ne	ne	522	242	388
Marshall B. Ketchum U.	598	ne	ne	ne	ne	48	224	375	368 i	354 i	336 i	323 i	343 i	383 i
SUNY, Cobleskill	599	1,382	909	ne	844	ne	ne	ne	ne	ne	ne	ne	ne	379
Johnson C. Smith U.	600	ne	ne	ne	ne	ne	ne	483	603	994	913	1,087	405 i	370
Pepperdine U.	601	199	172	428	465	586	724	966	343	289	399	261	410	364
Elon U.	602	ne	40	111	161	143	92	194	213	285	264	106	138	361

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
U. Houston-Downtown	603	905	1,178	1,824	464	496	773	620	828	703	130	274	504	345
Oregon Institute of Technology	604	ne	193	ne	ne	ne	63	1,268	694	217	437	326	252	340
Suffolk U.	604	ne	299	198	351	313	217	411	573	ne	ne	842	634	340
Hamilton C.	606	812	1,085	1,070	848	413	202	173	48	78	88	61	259	329
U. North Carolina, general administration	607	ne	ne	ne	ne	ne	337	174	161	98	213	562	342	319
St. Catherine U.	608	ne	265	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	300
California Lutheran U.	609	ne	171	ne	ne	ne	ne	ne	ne	ne	159	203	ne	298
Azusa Pacific U.	610	ne	970	609	ne	ne	323	606	334	199	125	128	206	282
Purdue U., Fort Wayne	611	1,231	1,490	1,132	1,121	806	956	742	688	766	476	561	379	280
Albion C.	612	ne	113	ne	ne	ne	ne	ne	210	114	180	272	289	277
Heidelberg U.	613	ne	266	ne	349	199	272	294	428	163	164	188	308	262
U. of Mary Washington	614	ne	563	79	ne	ne	187	ne	ne	46	128	207	246	237
Bentley U.	615	ne	ne	ne	ne	ne	ne	ne	110	ne	ne	ne	ne	223
U. Charleston	616	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	217
Grinnell C.	617	1,155	287	648	372	414	546	340	582	588	326	617	309	209
Framingham State U.	618	ne	ne	ne	ne	ne	ne	ne	4	17	ne	179	188	200
Marymount U.	619	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	337	178
U. California, Office of the President	620	121	483	1,048	599	248	181	295	288	343	319	217	379	158
California State U., Maritime Academy	621	ne	1,200	1,748	1,257	122	23	71	225	550	617	621	450	135
East Stroudsburg U. Pennsylvania	622	ne	250	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	128
St. Cloud State U.	623	501	380	215	420	797	1,299	561	554	494	515	141	273	90
Mercyhurst U.	624	703	174	145	134	97	77	95	405	ne	382	276	171	64
C. of Saint Benedict	625	ne	0	ne	72	71	53	38	44	47	45	43	42	47
Eastern Connecticut State U.	626	ne	0	ne	ne	6	17	27	19	36	181	177	108	42
Philadelphia C. of Osteopathic Medicine	627	812	850	694	277	104	192	150	260	260	346	422	318	40
Roseman U. of Health Sciences	628	ne	0	ne	ne	131	0	0	0	18	37	56	53	30
Babson C.	629	ne	187	ne	ne	ne	ne	0	0	0	0	0	0	16

TABLE 80

Federally financed higher education R&D expenditures in science and engineering fields, ranked by FY 2022 R&D expenditures: FYs 2010–22

(Dollars in thousands)

Institution	Rank	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Kettering U.	630	4,477	3,452	1,985	1,084	908	666	817	1,395	883	321	423	17	10
All other surveyed institutions	-	1,101,329	1,249,718	1,215,909	1,125,171	901,360	879,195	906,189	947,037	1,004,856	410,456	373,266	29,611	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

^a Johns Hopkins University includes the Applied Physics Laboratory, with \$1,983,078 thousand in federally financed R&D expenditures in science and engineering fields in FY 2022.

^b The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

^c The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

^d The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

^e The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2022 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see [table 6](#).

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 81

Higher education R&D expenditures in science and engineering fields, by state: FYs 2010–22

(Dollars in thousands)

State	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
United States	58,387,551	61,988,017	62,198,981	63,342,770	63,733,283	64,906,285	67,603,238	70,847,375	74,382,109	78,633,252	81,266,294	84,580,554	91,822,920
Alabama	829,363	878,622	804,713	807,180	784,855	868,160	912,302	942,186	986,864	1,055,431	1,110,640	1,188,117	1,327,000
Alaska	141,190	140,736	135,751	133,170	168,948	157,565	163,092	171,166	161,208	165,930	174,978	193,723	223,423
Arizona	901,697	951,223	987,123	1,013,898	987,348	1,031,313	1,072,623	1,139,852	1,284,772	1,346,997	1,401,055	1,404,585	1,530,037
Arkansas	255,537	270,576	275,503	278,640	268,551	278,259	284,160	288,722	311,100	331,290	343,986	362,908	394,519
California	7,579,752	7,927,260	8,102,898	8,056,392	8,121,682	8,330,954	8,559,613	8,887,137	9,768,877	10,105,735	10,513,989	10,780,830	11,595,228
Colorado	1,128,509	1,240,906	1,249,413	1,200,521	1,184,397	1,226,205	1,326,252	1,402,890	1,486,702	1,539,154	1,569,639	1,670,248	1,809,304
Connecticut	866,600	922,694	924,773	1,041,810	1,029,748	1,062,809	1,143,663	1,210,466	1,251,620	1,352,731	1,370,202	1,463,045	1,560,405
Delaware	161,927	178,496	176,743	187,730	187,295	183,868	189,768	195,591	198,476	223,447	234,144	243,849	366,993
District of Columbia	430,944	446,448	455,063	463,042	487,260	488,789	483,863	524,970	547,181	575,707	590,359	621,093	673,011
Florida	1,778,300	1,896,576	1,930,189	1,921,895	2,019,460	2,080,940	2,217,780	2,348,688	2,285,505	2,366,988	2,385,208	2,443,548	2,721,350
Georgia	1,611,447	1,657,919	1,711,596	1,789,112	1,850,346	1,918,019	2,029,544	2,177,129	2,283,980	2,460,830	2,574,883	2,756,632	3,057,858
Hawaii	314,652	325,915	328,168	338,992	330,584	328,698	314,431	297,425	294,453	298,641	295,641	291,663	297,042
Idaho	122,754	139,392	142,976	139,444	137,825	142,954	150,043	156,152	161,196	157,439	162,335	159,549	173,255
Illinois	2,146,061	2,264,226	2,269,727	2,407,183	2,238,266	2,284,059	2,265,419	2,369,632	2,438,295	2,577,826	2,637,429	2,794,799	3,025,370
Indiana	1,048,218	1,141,830	1,150,327	1,200,697	1,169,076	1,191,841	1,235,217	1,294,203	1,331,646	1,511,310	1,592,757	1,569,076	1,718,313
Iowa	689,831	705,684	695,465	693,052	743,656	726,233	774,017	786,287	838,401	837,341	829,217	870,733	943,254
Kansas	460,629	466,851	479,721	499,788	485,562	489,955	478,843	502,399	540,529	601,894	635,019	673,119	766,214
Kentucky	538,189	555,579	546,893	515,406	505,815	499,960	526,377	561,729	576,050	589,110	614,163	631,075	707,191
Louisiana	657,569	667,523	653,885	632,537	627,547	609,102	630,012	633,514	687,619	728,488	737,195	757,416	858,967
Maine	118,832	129,236	118,589	103,373	120,628	98,607	97,680	120,471	126,229	141,775	143,241	154,111	179,767
Maryland	3,094,055	3,366,663	3,308,014	3,376,440	3,514,719	3,704,962	3,744,025	3,967,074	4,112,572	4,555,760	4,660,788	4,829,448	5,068,102
Massachusetts	2,628,804	2,806,845	3,010,696	3,246,125	3,218,358	3,406,239	3,521,012	3,631,981	3,717,256	3,986,389	4,059,512	4,259,896	4,507,796
Michigan	1,903,476	2,029,656	2,076,947	2,134,096	2,115,363	2,202,000	2,320,601	2,497,196	2,604,342	2,712,101	2,693,967	2,654,289	2,887,473
Minnesota	802,840	866,304	840,731	869,824	885,306	882,516	912,843	917,633	951,455	1,011,132	1,037,129	1,072,582	1,195,186
Mississippi	418,235	431,365	437,775	385,916	378,750	381,383	412,153	437,120	438,422	493,183	475,626	453,990	506,277
Missouri	964,192	984,357	1,055,960	1,028,703	1,014,509	1,046,359	1,112,509	1,146,069	1,213,421	1,318,262	1,383,261	1,508,463	1,632,661
Montana	195,619	182,326	184,754	175,054	172,201	171,530	184,756	216,170	214,221	250,102	262,328	301,966	309,036
Nebraska	383,260	393,395	419,164	419,565	428,017	435,767	447,703	478,198	498,045	534,272	545,352	549,429	582,731
Nevada	170,989	160,254	149,323	147,079	146,056	148,339	172,933	185,836	221,608	241,651	252,741	264,939	274,271
New Hampshire	298,650	341,848	349,891	335,518	337,909	336,857	361,834	413,173	422,319	423,530	432,458	446,698	497,700
New Jersey	1,022,690	1,091,890	1,060,469	1,120,119	1,081,018	1,048,622	1,067,318	1,137,993	1,231,456	1,227,813	1,308,824	1,261,263	1,429,172
New Mexico	407,429	400,121	390,548	390,745	400,180	377,543	352,296	358,025	361,605	357,866	368,423	466,518	534,089
New York	4,782,174	5,105,083	5,157,872	5,327,470	5,450,410	5,449,862	5,817,824	6,048,744	6,271,932	6,714,700	6,793,694	7,211,185	7,815,365
North Carolina	2,422,947	2,603,702	2,618,572	2,669,329	2,741,270	2,744,906	2,847,296	2,991,666	3,104,305	3,275,092	3,257,648	3,369,009	3,718,119
North Dakota	202,626	209,430	213,666	212,705	215,551	212,524	221,251	241,188	240,568	246,564	251,914	282,924	302,250

TABLE 81

Higher education R&D expenditures in science and engineering fields, by state: FYs 2010–22

(Dollars in thousands)

State	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Ohio	1,963,559	2,107,830	2,017,370	2,048,353	2,043,780	2,017,358	2,055,047	2,164,145	2,249,451	2,382,832	2,396,135	2,667,300	2,932,213
Oklahoma	383,110	418,373	412,978	384,729	391,926	392,480	428,939	440,486	455,130	472,673	538,006	521,183	554,968
Oregon	663,378	701,228	680,956	667,974	670,105	679,739	701,813	731,137	771,348	812,126	846,674	880,461	950,009
Pennsylvania	3,026,823	3,201,566	3,125,789	3,237,847	3,210,166	3,249,295	3,710,218	3,948,483	4,162,865	4,396,905	4,562,113	4,678,719	5,190,411
Rhode Island	287,708	330,272	335,689	320,663	379,144	376,956	330,514	304,898	341,552	357,966	364,094	389,299	417,104
South Carolina	616,972	576,881	563,599	567,300	565,820	571,747	605,162	617,864	618,354	615,442	644,108	647,829	694,880
South Dakota	126,562	132,295	123,383	113,284	100,343	97,179	102,269	108,230	111,203	113,692	105,707	95,252	112,565
Tennessee	879,994	952,398	968,317	973,486	1,079,491	1,022,308	1,037,952	1,133,255	1,209,155	1,244,917	1,307,526	1,515,424	1,576,218
Texas	4,220,820	4,427,560	4,413,601	4,585,482	4,658,686	4,794,484	4,994,430	5,192,867	5,312,828	5,600,114	6,186,567	6,433,519	6,972,115
Utah	551,607	614,316	608,199	673,095	674,070	715,106	537,012	540,493	784,478	862,465	912,369	959,210	935,032
Vermont	132,519	136,623	119,802	120,178	113,711	118,957	119,665	121,257	131,483	138,530	181,505	185,234	204,326
Virginia	1,134,387	1,300,258	1,283,852	1,323,095	1,287,075	1,302,589	1,356,482	1,436,045	1,540,781	1,665,152	1,763,756	1,752,594	1,892,886
Washington	1,304,992	1,438,349	1,376,467	1,390,618	1,366,825	1,401,988	1,493,125	1,578,678	1,654,786	1,674,824	1,688,927	1,762,281	1,843,810
West Virginia	178,435	195,952	189,225	184,992	184,291	187,867	188,571	198,131	200,660	202,161	206,447	220,189	237,309
Wisconsin	1,230,932	1,338,580	1,330,338	1,277,944	1,271,868	1,227,594	1,336,139	1,401,938	1,439,377	1,558,846	1,639,168	1,671,344	1,853,010
Wyoming	53,957	55,320	63,812	63,149	48,736	54,928	108,552	121,927	112,857	79,928	91,738	92,230	132,538
American Samoa	ne	ne	ne	ne	ne	1,337	793	ne	ne	860	ne	815	ne
Guam	5,555	5,477	5,975	5,873	6,790	5,919	7,351	8,803	11,053	12,001	12,674	17,212	19,708
Puerto Rico	114,982	152,435	141,188	123,784	117,258	121,299	116,936	108,032	98,665	113,669	105,413	112,510	94,830
Virgin Islands	31,272	21,373	24,543	18,374	14,732	19,456	21,215	12,031	11,853	11,668	13,622	15,231	20,259

ne = not eligible; no institutions within the state met the criteria for inclusion.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 82

Higher education R&D expenditures at institutions in the short form survey population in FY 2022, by state, institutional control, and institution: FYs 2019–22

(Dollars in thousands)

State, institutional control, and institution	2019	2020	2021	2022
Alabama				
Public				
Auburn U., Montgomery	325	312	442	698
Jacksonville State U.	2,429	1,244	275	197
U. North Alabama	ne	ne	539	650
U. West Alabama	462	465	239	604
Private				
Alabama C., Osteopathic Medicine	370	303	184	236
Oakwood U.	666	538	474	340
Arkansas				
Public				
Arkansas Tech U.	961	856	751	921
Southern Arkansas U.	329	275	611	281
Private				
Arkansas C. of Health Education	ne	900	672	301
Hendrix C.	902	649	651	709
Ouachita Baptist U.	318 i	268 i	217	309
California				
Private				
Dominican U. California	828 i	786 i	823 i	901 i
Life Chiropractic C.-West	ne	ne	ne	350
Mills C.	1,643	1,541	850	439
Palo Alto U.	290	417	428	426
Pitzer C.	468	313	225	287
Point Loma Nazarene U.	265	237	505	565
Southern California U. of Health Sciences	443 i	420 i	418	246
Westmont C.	376	211	295	340 i
Whittier C.	388	248	300	346 i
Colorado				
Public				
Colorado Mesa U.	372	452	823	802
Metropolitan State U. of Denver	574	496	416	666
Western Colorado U.	460	571	559	826
Private				
Regis U.	706	311	476	744
Connecticut				
Public				
U.S. Coast Guard Academy	708	398	155	1,019
Western Connecticut State U.	713	539	353	399
Private				
Fairfield U.	1,279	1,210	849	1,097
Hartford International U. for Religion and Peace	ne	345	512	1,105
Quinnipiac U.	980 i	930 i	926 i	1,069 i
Sacred Heart U.	563	1,298	972	3,741
Florida				
Public				
New C. Florida	962	999	960	1,252
Private				
Barry U.	295	237	343	367
Bethune-Cookman U.	735	636	928	707

TABLE 82

Higher education R&D expenditures at institutions in the short form survey population in FY 2022, by state, institutional control, and institution: FYs 2019–22

(Dollars in thousands)

State, institutional control, and institution	2019	2020	2021	2022
Eckerd C.	435	406	367	596
Jacksonville U.	365	459	460	162
Keiser U.	450	423	443 i	485 i
Rollins C.	626	414	533	532
Stetson U.	476	670	611	580
U. Tampa	489	559	551	886
Georgia				
Public				
Albany State U.	1,491	1,060	880	1,059
Clayton State U.	330	346	616	600
Columbus State U.	ne	261	206	271
Georgia C. and State U.	548	270	247	216
Georgia Gwinnett C.	610	478	489	367
U. West Georgia	508	483	396 i	309
Valdosta State U.	424	496	423	262
Private				
Agnes Scott C.	229	152	351	433
Berry C.	553	646	371	541
Life U.	207	429	364	419
Hawaii				
Public				
U. Hawaii, Maui C.	833	1,033	967	1,147
Idaho				
Public				
Lewis-Clark State C.	599	660	401	582
Private				
Northwest Nazarene U.	447	408	442	509
Illinois				
Public				
Eastern Illinois U.	700	540	529	553
Private				
Augustana C.	237	205	271	353
Benedictine U.	175	ne	ne	150
Bradley U.	1,357	851	416	240
Elmhurst U.	224	209	464	676
Illinois C. of Optometry	326	478	490	831
Lake Forest C.	416 i	372	267	493
Wheaton C., Wheaton	2,173	1,322	729	1,784
Indiana				
Public				
Indiana U., Kokomo	393	483	441	490
Indiana U., Northwest	509	488	553	495
Indiana U., South Bend	968	1,249	898	1,075
Indiana U., Southeast	557	582	591	523
Private				
DePauw U.	308	253	304	175
Earlham C.	456	165	287	405
Indiana Wesleyan U.	706	316	878	722
Manchester U.	541	286	266	303
Taylor U.	225	232	214	204

TABLE 82

Higher education R&D expenditures at institutions in the short form survey population in FY 2022, by state, institutional control, and institution: FYs 2019–22

(Dollars in thousands)

State, institutional control, and institution	2019	2020	2021	2022
U. Evansville	350	245	284	285
Valparaiso U.	763	718	925	688
Wabash C.	320	ne	ne	465
Iowa				
Private				
Coe C.	699	561	538	614
Cornell C.	397 i	370	464	409
Dordt U.	920	1,106	696	679
Loras C.	ne	ne	ne	150 i
Luther C.	451	365	289 i	212
Kansas				
Public				
Emporia State U.	777	594	586	510
Fort Hays State U.	1,143	1,172	800	641
Kentucky				
Public				
Eastern Kentucky U.	1,125	1,010	986	1,089
Private				
Centre C.	506	376	265	314
Louisiana				
Public				
Louisiana State U., Shreveport	572	494	462	723
McNeese State U.	370	585	664	432
Nicholls State U.	738	650	551	687
Southern U., New Orleans	596	310	297	1,317
Private				
Loyola U., New Orleans	443	338	476	911
Maine				
Public				
Maine Maritime Academy	358	ne	ne	198
U. Maine Farmington	526	961	996 i	1,174 i
U. Maine, Presque Isle	ne	ne	ne	161
Maryland				
Public				
Coppin State U.	243	202	299	398
St. Mary's C. Maryland	369	556	349	1,063
Private				
Loyola U., Maryland	663	672	628	866
Maryland Institute C. of Art	494	618	634	407
Massachusetts				
Public				
Bridgewater State U.	331	345	522	954
Private				
C. of the Holy Cross	477	321	445	688
Emerson C.	1,145	919	581	581
Hult International Business School	959 i	910 i	953 i	1,043 i
MCPHS U.	606	473	346	290
Merrimack C.	1,097	503	407	1,010
Simmons U.	472	604	487	668
Stonehill C.	1,019	833	695	772

TABLE 82

Higher education R&D expenditures at institutions in the short form survey population in FY 2022, by state, institutional control, and institution: FYs 2019–22

(Dollars in thousands)

State, institutional control, and institution	2019	2020	2021	2022
Michigan				
Public				
Ferris State U.	366	394	853	1,929
U. Michigan, Flint	1,448	1,247	752	933
Private				
Andrews U.	1,126	1,033	802	1,043
Kalamazoo C.	635 i	603 i	600 i	692 i
Minnesota				
Public				
Metropolitan State U.	150 i	156 i	162 i	176 i
Minnesota State U., Moorhead	209	169	462	502 i
U. Minnesota, Morris	1,234	1,004	855	805
U. Minnesota, Rochester	639	733	730	784
Private				
Augsburg U.	991	883	815	815
Concordia C., Moorhead	ne	275	308	291
Gustavus Adolphus C.	808	843	953	1,136
Hamline U.	ne	ne	493	162
Saint Mary's U. Minnesota	603	610	640	889
St. Olaf C.	1,010	1,032	816	1,532
Mississippi				
Public				
Delta State U.	204	592	238	673
Mississippi Valley State U.	986	653	391	344
Missouri				
Public				
Northwest Missouri State U.	192	239	190	231
Southeast Missouri State U.	372	232	228	228
Truman State U.	285	296	237	327
U. Central Missouri	415	401	495	642
Private				
A. T. Still U. of Health Sciences	644	656	448	517
Graduate School of the Stowers Institute for Medical Research	ne	416	555	780
Montana				
Public				
Aaniiih Nakoda C.	ne	ne	ne	864
Montana State U., Billings	545	399	522	685
Montana State U., Northern	236	322	372	214
Salish Kootenai C.	1,252	807	596	782
Nebraska				
Private				
Doane U.	1,093	896 i	699 i	502
Nevada				
Public				
C. Southern Nevada	232	194	335	303
Truckee Meadows Community C.	ne	ne	ne	334
Western Nevada C.	ne	ne	ne	171
Private				
Touro U., Nevada	ne	ne	ne	697
New Hampshire				

TABLE 82

Higher education R&D expenditures at institutions in the short form survey population in FY 2022, by state, institutional control, and institution: FYs 2019–22

(Dollars in thousands)

State, institutional control, and institution	2019	2020	2021	2022
Public				
Keene State C.	1,061	1,063	919	770
New Jersey				
Public				
Ramapo C. New Jersey	351	441	408	365
Private				
Fairleigh Dickinson U.	791	656	318	225
Rider U.	228	170	322	353
New Mexico				
Public				
Eastern New Mexico U., Portales	292	358	355	303
Northern New Mexico C.	581	404	350	239
New York				
Public				
CUNY, Medgar Evers C.	1,397	882	694	595
SUNY, C. Cortland	527	255	381	530
SUNY, C. Old Westbury	ne	335 i	347 i	428
SUNY, Farmingdale State C.	ne	589	606	611
SUNY, Maritime C.	ne	ne	ne	258
SUNY, New Paltz	494	330	329	308
SUNY, Oneonta	623	214	214	288
SUNY, Potsdam	235	ne	540	622
Private				
Adelphi U.	359	351 i	342	377
Bard C.	235	242	248	255
Cooper Union	710	501	545	501
D'Youville C.	383	382	306	178
Iona C.	ne	239	411	650
Niagara U.	2,057	1,124	509	440
Siena C.	944	884	923	675
St. Bonaventure U.	1,049	585	378	642
Touro U., New York	470	439	419	576
Utica U.	598	549	466	562
North Carolina				
Public				
U. North Carolina, Pembroke	620	344	243	290
Private				
Shaw U.	ne	ne	ne	259
North Dakota				
Public				
Minot State U.	251	253	512	187
Private				
United Tribes Technical C.	379	976	441	1,270
Ohio				
Private				
Antioch U.	ne	ne	ne	263
Baldwin Wallace U.	221	ne	210	167
Denison U.	577	727	786 i	845
John Carroll U.	658	522	374	738
Oberlin C.	2,076	1,182	776	1,036

TABLE 82

Higher education R&D expenditures at institutions in the short form survey population in FY 2022, by state, institutional control, and institution: FYs 2019–22

(Dollars in thousands)

State, institutional control, and institution	2019	2020	2021	2022
Ohio Northern U.	316	348	471	250
Ohio Wesleyan U.	325	323	404	267
Wittenberg U.	267	297	445	508
Oklahoma				
Public				
East Central U.	310	i 251	242	480
Northeastern State U.	432	406	279	351
Southwestern Oklahoma State U.	504	484	614	531
Oregon				
Public				
Eastern Oregon U.	472	172	162	206
Southern Oregon U.	424	493	534	447
Private				
Linfield U.	464	319	239	154
National U. of Natural Medicine	1,245	1,428	850	1,013
U. Portland	942	737	718	811
Pennsylvania				
Public				
Bloomsburg U. Pennsylvania	734	735	348	365
Kutztown U. Pennsylvania	464	472	292	450
Millersville U. Pennsylvania	782	402	931	395
Pennsylvania State U., Abington	ne	ne	369	323
Pennsylvania State U., Altoona	680	714	678	1,296
Pennsylvania State U., Berks	273	372	382	564
Pennsylvania State U., Great Valley School of Graduate Professional Studies	419	ne	927	432
Pennsylvania State U., Greater Allegheny	ne	ne	216	189
Pennsylvania State U., Wilkes-Barre	ne	ne	250	267
Slippery Rock U. Pennsylvania	213	390	295	323
Private				
American C. of Financial Services	ne	ne	ne	338
Arcadia U.	522	1,072	889	1,488
Bryn Athyn C.	305	432	316	317
Delaware Valley U.	ne	ne	182	265
Dickinson C.	1,037	929	767	798
Gannon U.	555	351	972	569
Gettysburg C.	1,664	913	648	1,030
Juniata C.	560	937	380	545
La Salle U.	1,135	818	829	917
Lake Erie C. of Osteopathic Medicine	565	472	502	484
Moravian U.	273	309	255	386
Muhlenberg C.	539	398	288	447
Saint Francis U.	829	878	872	533
Salus U.	854	650	677	680
Susquehanna U.	368	496	360	333
U. Scranton	450	595	630	1,207
Ursinus C.	768	497	835	1,044
Widener U., Chester	764	586	417	600
Wilkes U.	549	968	372	423
Rhode Island				
Private				

TABLE 82

Higher education R&D expenditures at institutions in the short form survey population in FY 2022, by state, institutional control, and institution: FYs 2019–22

(Dollars in thousands)

State, institutional control, and institution	2019	2020	2021	2022
Bryant U.	353	302	347	534
Providence C.	1,042	1,092	766	2,012
Rhode Island School of Design	1,027 i	975 i	971 i	1,120 i
Salve Regina U.	495	591	624	813
South Carolina				
Public				
Francis Marion U.	362	216	207	402
U. South Carolina Upstate	257	437	496	594
U. South Carolina, Beaufort	532	599	976	1,041
Private				
Benedict C.	1,269	649	745	1,059
Converse U.	317	185	294	254
South Dakota				
Public				
Northern State U.	225	240	190	305
Oglala Lakota C.	683	516	473	424
Tennessee				
Public				
U. Tennessee, Martin	363	305	199	162
Private				
Lincoln Memorial U.	ne	ne	ne	1,330
Lipscomb U.	ne	307 i	321	1,251
Sewanee: U. of the South	867	864	668	547
Texas				
Public				
Angelo State U.	815	798	943	740
Midwestern State U.	1,100	891	882	886
Texas A&M U.-Central Texas	428	623	814	894
Private				
Austin C.	376	342	302	349
LeTourneau U.	239	271	346	239
Southwestern U.	334	261	408	520
U. Dallas	ne	ne	249	564
Utah				
Public				
Southern Utah U.	812	955	773	846
Weber State U.	1,081	676	822	813
Vermont				
Public				
Castleton U.	ne	ne	ne	598
Private				
Norwich U.	992	749	890	1,405
Saint Michael's C.	1,200	957	876	754
Virginia				
Public				
Longwood U.	353	368	544	249
Radford U.	879	774	832	1,056
Private				
Liberty U.	1,780	1,894	937	1,736
Roanoke C.	826	606	738	955

TABLE 82

Higher education R&D expenditures at institutions in the short form survey population in FY 2022, by state, institutional control, and institution: FYs 2019–22

(Dollars in thousands)

State, institutional control, and institution	2019	2020	2021	2022
U. Lynchburg	ne	ne	150 i	164 i
Washington and Lee U.	241	214	256	249
Washington				
Public				
Evergreen State C.	563	390	783	586
Private				
Gonzaga U.	187	506	212	640
Pacific Lutheran U.	342	449	370	495
Saint Martin's U.	ne	201	299	305
Seattle Pacific U.	724	643	683	742
Whitworth U.	421	660	403	465 i
West Virginia				
Public				
Bluefield State U.	595	485	506	642
West Liberty U.	908	738	738	815
Private				
Future Generations U.	286	271 i	270 i	312 i
Wisconsin				
Public				
U. Wisconsin-River Falls	1,130	1,107	999	1,546
U. Wisconsin-Stout	668	555	406	367
U. Wisconsin-Whitewater	757	736	760	713
Private				
Alverno C.	216	237	215	228
Concordia U., Wisconsin	248	293	439	168
Lawrence U.	508	423	536	671
St. Norbert C.	354	304	412	741
Wyoming				
Public				
Central Wyoming C.	ne	ne	ne	504
American Samoa				
Public				
American Samoa Community C.	860	1,536	815	961 i
Puerto Rico				
Public				
U. Puerto Rico, Aguadilla	465	562	639	823
U. Puerto Rico, Ponce	651	616 i	580	1,369
Private				
Polytechnic U. Puerto Rico	2,118	813	821	620
Pontifical Catholic U. Puerto Rico, Ponce	287	239	350	334
San Juan Bautista School of Medicine	896	612	598	662
U. Ana G. Mendez, Carolina	1,099	647	602	645
U. Ana G. Mendez, Cupey	624	818	739	728

i = imputed. ne = not eligible; institution did not meet the criteria for inclusion.

Note(s):

Institutions are included in the short form population if they reported less than \$1 million in total R&D expenditures during the previous fiscal year. Institutions can move between the short form and standard form populations as their R&D expenditures increase or decrease; therefore, prior year amounts listed for some institutions may be represented in the aggregate totals for the standard form.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE 83

Higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
United States	161,529	7,149	9,705	57,774	3,220	21,582	3,811	12,526	4,800	7,614	33,348
Public	66,287	4,151	4,389	26,731	1,251	8,553	935	5,168	2,005	2,779	10,325
Private	95,242	2,998	5,316	31,043	1,969	13,029	2,876	7,358	2,795	4,835	23,023
Alabama	2,725	40	109	1,014	261	304	25	30	160	232	550
Public	2,149	40	109	757	261	304	25	30	69	15	539
Auburn U., Montgomery	698	40	0	126	107	155	5	3	5	0	257
Jacksonville State U.	197	0	71	111	0	0	0	0	0	6	9
U. North Alabama	650	0	38	0	154	149	20	7	0	9	273
U. West Alabama	604	0	0	520	0	0	0	20	64	0	0
Private	576	0	0	257	0	0	0	0	91	217	11
Alabama C., Osteopathic Medicine	236	0	0	236	0	0	0	0	0	0	0
Oakwood U.	340	0	0	21	0	0	0	0	91	217	11
Arkansas	2,521	20	0	883	52	654	0	353	24	287	248
Public	1,202	20	0	252	52	259	0	353	24	48	194
Arkansas Tech U.	921	12	0	225	52	171	0	353	24	12	72
Southern Arkansas U.	281	8	0	27	0	88	0	0	0	36	122
Private	1,319	0	0	631	0	395	0	0	0	239	54
Arkansas C. of Health Education	301	0	0	301	0	0	0	0	0	0	0
Hendrix C.	709	0	0	330	0	215	0	0	0	110	54
Ouachita Baptist U.	309	0	0	0	0	180	0	0	0	129	0
California	3,900	56	27	1,907	152	303	458	447	61	26	463
Private	3,900	56	27	1,907	152	303	458	447	61	26	463
Dominican U. California	901	i 56	i 0	i 815	i 0	i 0	i 0	i 0	i 1	i 0	i 29
Life Chiropractic C.-West	350	0	0	350	0	0	0	0	0	0	0
Mills C.	439	0	27	0	137	98	0	0	0	0	177
Palo Alto U.	426	0	0	0	0	0	426	0	0	0	0
Pitzer C.	287	0	0	37	7	0	30	96	0	0	117
Point Loma Nazarene U.	565	0	0	225	0	0	0	280	60	0	0
Southern California U. of Health Sciences	246	0	0	246	0	0	0	0	0	0	0
Westmont C.	340	i 0	i 0	i 112	i 8	i 170	i 2	i 22	i 0	i 26	i 0
Whittier C.	346	i 0	i 0	i 122	i 0	i 35	i 0	i 49	i 0	i 0	i 140
Colorado	3,038	3	65	1,721	58	307	12	228	236	1	407
Public	2,294	0	65	1,268	58	241	0	112	217	1	332
Colorado Mesa U.	802	0	27	502	0	160	0	112	0	1	0

TABLE 83

Higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Metropolitan State U. of Denver	666	0	3	8	58	81	0	0	217	0	299
Western Colorado U.	826	0	35	758	0	0	0	0	0	0	33
Private	744	3	0	453	0	66	12	116	19	0	75
Regis U.	744	3	0	453	0	66	12	116	19	0	75
Connecticut	8,430	591	331	1,367	454	454	180	807	91	297	3,858
Public	1,418	320	133	321	255	12	12	220	0	108	37
U.S. Coast Guard Academy	1,019	320	133	0	255	0	0	199	0	108	4
Western Connecticut State U.	399	0	0	321	0	12	12	21	0	0	33
Private	7,012	271	198	1,046	199	442	168	587	91	189	3,821
Fairfield U.	1,097	50	0	92	129	219	21	64	91	74	357
Hartford International U. for Religion and Peace	1,105	0	0	0	0	0	0	0	0	0	1,105
Quinnipiac U.	1,069	29	56	449	25	149	43	67	0	54	197
Sacred Heart U.	3,741	192	142	505	45	74	104	456	0	61	2,162
Florida	5,567	117	1,481	2,006	61	722	69	521	23	47	520
Public	1,252	104	29	776	25	54	0	181	0	0	83
New C. Florida	1,252	104	29	776	25	54	0	181	0	0	83
Private	4,315	13	1,452	1,230	36	668	69	340	23	47	437
Barry U.	367	0	0	264	0	0	0	0	0	0	103
Bethune-Cookman U.	707	0	514	193	0	0	0	0	0	0	0
Eckerd C.	596	0	456	75	11	10	0	44	0	0	0
Jacksonville U.	162	0	122	23	17	0	0	0	0	0	0
Keiser U.	485	13	0	338	4	0	5	28	0	47	50
Rollins C.	532	0	0	68	0	184	38	95	23	0	124
Stetson U.	580	0	360	109	0	0	0	107	0	0	4
U. Tampa	886	0	0	160	4	474	26	66	0	0	156
Georgia	4,477	337	600	1,697	254	443	157	528	112	4	345
Public	3,084	268	519	880	70	443	157	333	112	4	298
Albany State U.	1,059	0	146	589	0	126	0	0	0	2	196
Clayton State U.	600	6	0	0	12	156	141	201	72	0	12
Columbus State U.	271	219	0	21	0	0	0	0	24	2	5
Georgia C. and State U.	216	0	0	97	0	23	14	52	16	0	14
Georgia Gwinnett C.	367	43	12	143	53	107	2	3	0	0	4
U. West Georgia	309	0	188	0	5	24	0	39	0	0	53
Valdosta State U.	262	0	173	30	0	7	0	38	0	0	14

TABLE 83

Higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Private	1,393	69	81	817	184	0	0	195	0	0	47
Agnes Scott C.	433	0	0	367	3	0	0	22	0	0	41
Berry C.	541	69	81	31	181	0	0	173	0	0	6
Life U.	419	0	0	419	0	0	0	0	0	0	0
Hawaii	1,147	191	249	411	0	55	0	0	0	0	241
Public	1,147	191	249	411	0	55	0	0	0	0	241
U. Hawaii, Maui C.	1,147	191	249	411	0	55	0	0	0	0	241
Idaho	1,091	109	0	683	0	63	0	0	0	204	32
Public	582	58	0	492	0	0	0	0	0	0	32
Lewis-Clark State C.	582	58	0	492	0	0	0	0	0	0	32
Private	509	51	0	191	0	63	0	0	0	204	0
Northwest Nazarene U.	509	51	0	191	0	63	0	0	0	204	0
Illinois	5,080	41	111	1,985	38	790	148	847	76	112	932
Public	553	21	8	441	0	14	35	0	25	0	9
Eastern Illinois U.	553	21	8	441	0	14	35	0	25	0	9
Private	4,527	20	103	1,544	38	776	113	847	51	112	923
Augustana C.	353	0	8	51	3	100	0	27	0	0	164
Benedictine U.	150	8	0	33	10	21	0	5	51	0	22
Bradley U.	240	12	0	53	10	53	0	0	0	112	0
Elmhurst U.	676	0	0	121	0	0	0	0	0	0	555
Illinois C. of Optometry	831	0	0	831	0	0	0	0	0	0	0
Lake Forest C.	493	0	0	184	4	165	16	22	0	0	102
Wheaton C., Wheaton	1,784	0	95	271	11	437	97	793	0	0	80
Indiana	5,830	135	38	1,665	202	1,280	326	105	292	40	1,747
Public	2,583	0	37	383	3	398	234	58	292	0	1,178
Indiana U., Kokomo	490	0	0	20	0	21	2	14	0	0	433
Indiana U., Northwest	495	0	37	213	3	0	26	13	86	0	117
Indiana U., South Bend	1,075	0	0	137	0	301	206	9	177	0	245
Indiana U., Southeast	523	0	0	13	0	76	0	22	29	0	383
Private	3,247	135	1	1,282	199	882	92	47	0	40	569
DePauw U.	175	25	0	50	19	51	1	29	0	0	0
Earlham C.	405	19	0	131	0	56	0	4	0	0	195
Indiana Wesleyan U.	722	8	0	191	0	138	57	0	0	0	328
Manchester U.	303	0	0	277	0	10	0	8	0	0	8

TABLE 83

Higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Taylor U.	204	83	0	38	14	26	11	2	0	16	14
U. Evansville	285	0	0	59	146	54	15	4	0	0	7
Valparaiso U.	688	0	1	290	12	361	0	0	0	24	0
Wabash C.	465	0	0	246	8	186	8	0	0	0	17
Iowa	2,064	9	225	633	152	644	57	75	4	67	198
Private	2,064	9	225	633	152	644	57	75	4	67	198
Coe C.	614	0	0	6	0	495	0	42	0	0	71
Cornell C.	409	3	108	153	10	45	14	9	4	33	30
Dordt U.	679	0	117	330	134	5	31	0	0	34	28
Loras C.	150 i	4 i	0 i	68 i	4 i	24 i	6 i	12 i	0 i	0 i	32 i
Luther C.	212	2	0	76	4	75	6	12	0	0	37
Kansas	1,151	10	78	564	6	273	5	34	31	0	150
Public	1,151	10	78	564	6	273	5	34	31	0	150
Emporia State U.	510	9	0	232	6	144	0	0	0	0	119
Fort Hays State U.	641	1	78	332	0	129	5	34	31	0	31
Kentucky	1,403	10	0	832	8	221	25	3	0	2	302
Public	1,089	10	0	637	8	102	25	3	0	2	302
Eastern Kentucky U.	1,089	10	0	637	8	102	25	3	0	2	302
Private	314	0	0	195	0	119	0	0	0	0	0
Centre C.	314	0	0	195	0	119	0	0	0	0	0
Louisiana	4,070	1,260	0	1,179	1	257	10	475	286	191	411
Public	3,159	1,260	0	1,093	0	202	2	0	0	191	411
Louisiana State U., Shreveport	723	441	0	235	0	23	0	0	0	0	24
McNeese State U.	432	0	0	55	0	0	2	0	0	191	184
Nicholls State U.	687	0	0	508	0	179	0	0	0	0	0
Southern U., New Orleans	1,317	819	0	295	0	0	0	0	0	0	203
Private	911	0	0	86	1	55	8	475	286	0	0
Loyola U., New Orleans	911	0	0	86	1	55	8	475	286	0	0
Maine	1,533	142	85	546	26	101	20	68	0	410	135
Public	1,533	142	85	546	26	101	20	68	0	410	135
Maine Maritime Academy	198	0	7	0	0	0	0	0	0	191	0
U. Maine Farmington	1,174 i	54 i	78 i	473 i	26 i	101 i	20 i	68 i	0 i	219 i	135 i
U. Maine, Presque Isle	161	88	0	73	0	0	0	0	0	0	0
Maryland	2,734	36	21	434	32	316	35	247	196	57	1,360

TABLE 83

Higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Public	1,461	36	21	298	21	296	0	243	137	57	352
Coppin State U.	398	36	0	298	3	0	0	4	0	57	0
St. Mary's C. Maryland	1,063	0	21	0	18	296	0	239	137	0	352
Private	1,273	0	0	136	11	20	35	4	59	0	1,008
Loyola U., Maryland	866	0	0	136	11	20	35	4	59	0	601
Maryland Institute C. of Art	407	0	0	0	0	0	0	0	0	0	407
Massachusetts	6,006	507	210	2,219	32	470	248	349	468	49	1,454
Public	954	0	0	590	0	264	0	64	0	0	36
Bridgewater State U.	954	0	0	590	0	264	0	64	0	0	36
Private	5,052	507	210	1,629	32	206	248	285	468	49	1,418
C. of the Holy Cross	688	0	0	382	31	205	35	0	0	0	35
Emerson C.	581	1	0	121	0	0	0	65	0	0	394
Hult International Business School	1,043	i 437	i 0	i 0	i 0	i 0	i 121	i 0	i 1	i 0	i 484
MCPHS U.	290	0	0	210	0	0	80	0	0	0	0
Merrimack C.	1,010	0	0	725	0	0	0	0	0	49	236
Simmons U.	668	69	4	191	1	1	12	220	120	0	50
Stonehill C.	772	0	206	0	0	0	0	0	347	0	219
Michigan	4,597	44	48	2,413	96	413	0	691	86	59	747
Public	2,862	26	0	2,048	58	102	0	48	85	11	484
Ferris State U.	1,929	0	0	1,833	58	17	0	21	0	0	0
U. Michigan, Flint	933	26	0	215	0	85	0	27	85	11	484
Private	1,735	18	48	365	38	311	0	643	1	48	263
Andrews U.	1,043	0	48	45	22	205	0	581	1	48	93
Kalamazoo C.	692	i 18	i 0	i 320	i 16	i 106	i 0	i 62	i 0	i 0	i 170
Minnesota	7,092	81	579	2,251	164	2,108	52	201	522	0	1,134
Public	2,267	14	166	1,079	4	144	12	8	1	0	839
Metropolitan State U.	176	i 6	i 10	i 120	i 3	i 13	i 3	i 6	i 0	i 0	i 15
Minnesota State U., Moorhead	502	i 0	i 56	i 95	i 0	i 0	i 9	i 0	i 1	i 0	i 341
U. Minnesota, Morris	805	8	100	102	1	131	0	2	0	0	461
U. Minnesota, Rochester	784	0	0	762	0	0	0	0	0	0	22
Private	4,825	67	413	1,172	160	1,964	40	193	521	0	295
Augsburg U.	815	0	137	19	101	156	0	0	402	0	0
Concordia C., Moorhead	291	0	0	162	0	61	0	58	10	0	0
Gustavus Adolphus C.	1,136	0	190	74	8	635	8	48	0	0	173

TABLE 83

Higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Hamline U.	162	0	0	35	0	0	0	18	109	0	0
Saint Mary's U. Minnesota	889	0	0	0	0	889	0	0	0	0	0
St. Olaf C.	1,532	67	86	882	51	223	32	69	0	0	122
Mississippi	1,017	177	369	111	0	82	0	0	56	220	2
Public	1,017	177	369	111	0	82	0	0	56	220	2
Delta State U.	673	0	369	111	0	0	0	0	0	193	0
Mississippi Valley State U.	344	177	0	0	0	82	0	0	56	27	2
Missouri	2,725	18	26	1,899	101	122	9	21	0	0	529
Public	1,428	18	26	602	101	122	9	21	0	0	529
Northwest Missouri State U.	231	0	0	0	100	0	0	0	0	0	131
Southeast Missouri State U.	228	8	0	165	0	41	0	6	0	0	8
Truman State U.	327	10	0	153	1	81	9	15	0	0	58
U. Central Missouri	642	0	26	284	0	0	0	0	0	0	332
Private	1,297	0	0	1,297	0	0	0	0	0	0	0
A. T. Still U. of Health Sciences	517	0	0	517	0	0	0	0	0	0	0
Graduate School of the Stowers Institute for Medical Research	780	0	0	780	0	0	0	0	0	0	0
Montana	2,545	0	551	1,029	0	116	64	47	0	98	640
Public	2,545	0	551	1,029	0	116	64	47	0	98	640
Aaniiih Nakoda C.	864	0	551	313	0	0	0	0	0	0	0
Montana State U., Billings	685	0	0	530	0	0	0	47	0	0	108
Montana State U., Northern	214	0	0	0	0	116	0	0	0	98	0
Salish Kootenai C.	782	0	0	186	0	0	64	0	0	0	532
Nebraska	502	107	0	255	0	123	2	0	0	15	0
Private	502	107	0	255	0	123	2	0	0	15	0
Doane U.	502	107	0	255	0	123	2	0	0	15	0
Nevada	1,505	0	0	1,397	0	108	0	0	0	0	0
Public	808	0	0	700	0	108	0	0	0	0	0
C. Southern Nevada	303	0	0	195	0	108	0	0	0	0	0
Truckee Meadows Community C.	334	0	0	334	0	0	0	0	0	0	0
Western Nevada C.	171	0	0	171	0	0	0	0	0	0	0
Private	697	0	0	697	0	0	0	0	0	0	0
Touro U., Nevada	697	0	0	697	0	0	0	0	0	0	0
New Hampshire	770	0	0	523	0	148	0	0	0	99	0
Public	770	0	0	523	0	148	0	0	0	99	0

TABLE 83

Higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Keene State C.	770	0	0	523	0	148	0	0	0	99	0
New Jersey	943	82	233	246	70	0	5	306	1	0	0
Public	365	50	0	6	0	0	2	306	1	0	0
Ramapo C. New Jersey	365	50	0	6	0	0	2	306	1	0	0
Private	578	32	233	240	70	0	3	0	0	0	0
Fairleigh Dickinson U.	225	32	0	190	0	0	3	0	0	0	0
Rider U.	353	0	233	50	70	0	0	0	0	0	0
New Mexico	542	17	0	285	2	0	0	10	0	225	3
Public	542	17	0	285	2	0	0	10	0	225	3
Eastern New Mexico U., Portales	303	0	0	285	2	0	0	10	0	3	3
Northern New Mexico C.	239	17	0	0	0	0	0	0	0	222	0
New York	8,496	429	334	2,412	137	2,497	255	743	222	138	1,329
Public	3,640	70	334	960	49	1,633	42	164	124	22	242
CUNY, Medgar Evers C.	595	70	0	226	43	194	1	45	0	0	16
SUNY, C. Cortland	530	0	0	303	0	112	0	23	0	0	92
SUNY, C. Old Westbury	428	0	0	0	0	303	25	22	78	0	0
SUNY, Farmingdale State C.	611	0	0	0	0	591	0	1	0	10	9
SUNY, Maritime C.	258	0	258	0	0	0	0	0	0	0	0
SUNY, New Paltz	308	0	47	73	6	75	13	47	0	12	35
SUNY, Oneonta	288	0	0	104	0	22	3	24	46	0	89
SUNY, Potsdam	622	0	29	254	0	336	0	2	0	0	1
Private	4,856	359	0	1,452	88	864	213	579	98	116	1,087
Adelphi U.	377	0	0	101	0	37	152	0	13	0	74
Bard C.	255	51	0	22	11	67	41	16	47	0	0
Cooper Union	501	0	0	394	45	0	0	0	0	60	2
D'Youville C.	178	0	0	130	0	13	0	35	0	0	0
Iona C.	650	0	0	0	0	316	0	303	0	0	31
Niagara U.	440	2	0	78	0	88	2	127	6	0	137
Siena C.	675	139	0	64	32	244	12	14	32	0	138
St. Bonaventure U.	642	167	0	216	0	56	0	0	0	0	203
Touro U., New York	576	0	0	345	0	0	0	0	0	0	231
Utica U.	562	0	0	102	0	43	6	84	0	56	271
North Carolina	549	0	0	226	0	290	0	30	0	0	3
Public	290	0	0	0	0	290	0	0	0	0	0

TABLE 83

Higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. North Carolina, Pembroke	290	0	0	0	0	290	0	0	0	0	0
Private	259	0	0	226	0	0	0	30	0	0	3
Shaw U.	259	0	0	226	0	0	0	30	0	0	3
North Dakota	1,457	0	0	442	56	228	0	0	0	731	0
Public	187	0	0	182	5	0	0	0	0	0	0
Minot State U.	187	0	0	182	5	0	0	0	0	0	0
Private	1,270	0	0	260	51	228	0	0	0	731	0
United Tribes Technical C.	1,270	0	0	260	51	228	0	0	0	731	0
Ohio	4,074	392	250	627	12	1,271	659	225	150	143	345
Private	4,074	392	250	627	12	1,271	659	225	150	143	345
Antioch U.	263	187	22	22	0	0	30	2	0	0	0
Baldwin Wallace U.	167	9	0	0	0	94	2	60	2	0	0
Denison U.	845	21	188	31	1	445	6	44	0	3	106
John Carroll U.	738	0	0	245	2	0	437	54	0	0	0
Oberlin C.	1,036	175	11	74	7	405	100	54	148	0	62
Ohio Northern U.	250	0	0	30	0	0	80	0	0	140	0
Ohio Wesleyan U.	267	0	0	225	2	25	4	11	0	0	0
Wittenberg U.	508	0	29	0	0	302	0	0	0	0	177
Oklahoma	1,362	30	56	439	7	379	20	130	120	27	154
Public	1,362	30	56	439	7	379	20	130	120	27	154
East Central U.	480	8	52	81	7	66	8	129	102	27	0
Northeastern State U.	351	0	4	98	0	219	12	0	18	0	0
Southwestern Oklahoma State U.	531	22	0	260	0	94	0	1	0	0	154
Oregon	2,631	14	9	1,232	6	506	0	464	138	165	97
Public	653	14	9	0	0	237	0	369	19	0	5
Eastern Oregon U.	206	0	9	0	0	197	0	0	0	0	0
Southern Oregon U.	447	14	0	0	0	40	0	369	19	0	5
Private	1,978	0	0	1,232	6	269	0	95	119	165	92
Linfield U.	154	0	0	31	0	83	0	23	0	0	17
National U. of Natural Medicine	1,013	0	0	1,013	0	0	0	0	0	0	0
U. Portland	811	0	0	188	6	186	0	72	119	165	75
Pennsylvania	17,008	280	858	5,939	531	1,689	332	1,518	126	1,475	4,260
Public	4,604	153	105	1,404	115	699	181	161	26	564	1,196
Bloomsburg U. Pennsylvania	365	28	29	84	14	5	158	20	0	0	27

TABLE 83

Higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields	
Kutztown U. Pennsylvania	450	2	1	50	4	248	5	31	0	0	109	
Millersville U. Pennsylvania	395	0	75	172	0	18	0	78	26	0	26	
Pennsylvania State U., Abington	323	13	0	1	72	0	9	29	0	9	190	
Pennsylvania State U., Altoona	1,296	0	0	858	0	79	0	0	0	359	0	
Pennsylvania State U., Berks	564	57	0	8	0	326	0	0	0	139	34	
Pennsylvania State U., Great Valley School of Graduate Professional Studies	432	35	0	0	22	0	2	0	0	45	328	
Pennsylvania State U., Greater Allegheny	189	0	0	0	0	0	0	0	0	0	189	
Pennsylvania State U., Wilkes-Barre	267	0	0	0	0	0	0	0	0	0	267	
Slippery Rock U. Pennsylvania	323	18	0	231	3	23	7	3	0	12	26	
Private	12,404	127	753	4,535	416	990	151	1,357	100	911	3,064	
American C. of Financial Services	338	0	0	0	0	0	0	338	0	0	0	
Arcadia U.	1,488	6	0	167	0	0	0	0	0	0	1,315	
Bryn Athyn C.	317	0	0	47	22	0	5	46	0	0	197	
Delaware Valley U.	265	0	0	235	0	0	0	30	0	0	0	
Dickinson C.	798	61	163	154	9	58	72	74	0	0	207	
Gannon U.	569	4	10	89	0	0	0	3	0	446	17	
Gettysburg C.	1,030	11	63	390	4	144	30	272	0	0	116	
Juniata C.	545	0	90	300	0	9	0	23	0	45	78	
La Salle U.	917	0	0	91	0	0	0	101	0	0	725	
Lake Erie C. of Osteopathic Medicine	484	0	0	484	0	0	0	0	0	0	0	
Moravian U.	386	4	0	128	121	18	10	71	0	0	34	
Muhlenberg C.	447	4	0	139	0	42	12	131	99	0	20	
Saint Francis U.	533	9	12	0	217	0	0	0	1	98	196	
Salus U.	680	0	0	680	0	0	0	0	0	0	0	
Susquehanna U.	333	0	22	266	0	10	0	20	0	0	15	
U. Scranton	1,207	28	377	269	5	399	22	28	0	0	79	
Ursinus C.	1,044	0	0	761	29	253	0	1	0	0	0	
Widener U., Chester	600	0	10	81	0	13	0	206	0	268	22	
Wilkes U.	423	0	6	254	9	44	0	13	0	54	43	
Rhode Island	4,479	0	86	1,551	11	331	170	56	337	21	1,916	
Private	4,479	0	86	1,551	11	331	170	56	337	21	1,916	
Bryant U.	534	0	11	75	11	194	126	21	7	0	89	
Providence C.	2,012	0	75	764	0	36	44	35	330	21	707	
Rhode Island School of Design	1,120	i	0	i	0	i	0	i	0	i	0	i

TABLE 83

Higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Salve Regina U.	813	0	0	712	0	101	0	0	0	0	0
South Carolina	3,350	163	483	1,221	30	452	16	49	0	701	235
Public	2,037	142	235	962	8	101	16	49	0	334	190
Francis Marion U.	402	0	0	194	3	101	11	0	0	93	0
U. South Carolina Upstate	594	46	0	358	0	0	5	35	0	42	108
U. South Carolina, Beaufort	1,041	96	235	410	5	0	0	14	0	199	82
Private	1,313	21	248	259	22	351	0	0	0	367	45
Benedict C.	1,059	21	248	259	22	142	0	0	0	367	0
Converse U.	254	0	0	0	0	209	0	0	0	0	45
South Dakota	729	0	0	510	0	212	0	0	7	0	0
Public	729	0	0	510	0	212	0	0	7	0	0
Northern State U.	305	0	0	298	0	0	0	0	7	0	0
Oglala Lakota C.	424	0	0	212	0	212	0	0	0	0	0
Tennessee	3,290	0	97	438	30	20	19	20	89	184	2,393
Public	162	0	0	128	30	0	0	0	0	4	0
U. Tennessee, Martin	162	0	0	128	30	0	0	0	0	4	0
Private	3,128	0	97	310	0	20	19	20	89	180	2,393
Lincoln Memorial U.	1,330	0	0	0	0	0	0	0	0	0	1,330
Lipscomb U.	1,251	0	0	208	0	0	0	0	0	180	863
Sewanee: U. of the South	547	0	97	102	0	20	19	20	89	0	200
Texas	4,192	809	86	1,446	16	818	51	262	42	319	343
Public	2,520	809	86	1,060	0	166	19	40	42	101	197
Angelo State U.	740	0	0	479	0	109	19	33	42	0	58
Midwestern State U.	886	26	86	581	0	57	0	0	0	10	126
Texas A&M U.-Central Texas	894	783	0	0	0	0	0	7	0	91	13
Private	1,672	0	0	386	16	652	32	222	0	218	146
Austin C.	349	0	0	84	0	228	0	0	0	0	37
LeTourneau U.	239	0	0	0	0	15	0	0	0	218	6
Southwestern U.	520	0	0	166	16	120	32	83	0	0	103
U. Dallas	564	0	0	136	0	289	0	139	0	0	0
Utah	1,659	48	635	280	42	79	13	28	182	208	144
Public	1,659	48	635	280	42	79	13	28	182	208	144
Southern Utah U.	846	0	526	151	0	11	0	28	0	121	9
Weber State U.	813	48	109	129	42	68	13	0	182	87	135

TABLE 83

Higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Vermont	2,757	0	501	1,012	0	27	79	346	178	289	325
Public	598	0	0	264	0	0	0	334	0	0	0
Castleton U.	598	0	0	264	0	0	0	334	0	0	0
Private	2,159	0	501	748	0	27	79	12	178	289	325
Norwich U.	1,405	0	187	536	0	27	0	5	36	289	325
Saint Michael's C.	754	0	314	212	0	0	79	7	142	0	0
Virginia	4,409	79	133	1,666	13	100	16	312	375	221	1,494
Public	1,305	72	6	370	0	2	5	192	375	0	283
Longwood U.	249	0	0	151	0	0	0	46	0	0	52
Radford U.	1,056	72	6	219	0	2	5	146	375	0	231
Private	3,104	7	127	1,296	13	98	11	120	0	221	1,211
Liberty U.	1,736	0	0	922	0	0	0	50	0	221	543
Roanoke C.	955	0	29	120	12	83	9	43	0	0	659
U. Lynchburg	164 i	7 i	5 i	122 i	1 i	13 i	2 i	5 i	0 i	0 i	9 i
Washington and Lee U.	249	0	93	132	0	2	0	22	0	0	0
Washington	3,233	37	148	857	18	574	25	481	19	220	854
Public	586	0	0	324	0	22	0	240	0	0	0
Evergreen State C.	586	0	0	324	0	22	0	240	0	0	0
Private	2,647	37	148	533	18	552	25	241	19	220	854
Gonzaga U.	640	0	0	389	0	78	0	44	0	90	39
Pacific Lutheran U.	495	11	31	15	2	189	4	89	0	0	154
Saint Martin's U.	305	0	117	36	0	0	0	108	19	22	3
Seattle Pacific U.	742	0	0	47	0	43	4	0	0	0	648
Whitworth U.	465 i	26 i	0 i	46 i	16 i	242 i	17 i	0 i	0 i	108 i	10 i
West Virginia	1,769	0	0	1,189	0	0	0	0	0	0	580
Public	1,457	0	0	1,189	0	0	0	0	0	0	268
Bluefield State U.	642	0	0	374	0	0	0	0	0	0	268
West Liberty U.	815	0	0	815	0	0	0	0	0	0	0
Private	312	0	0	0	0	0	0	0	0	0	312
Future Generations U.	312 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	312 i
Wisconsin	4,434	108	138	2,117	89	541	245	236	27	30	903
Public	2,626	31	23	1,455	45	202	37	153	12	30	638
U. Wisconsin-River Falls	1,546	5	0	1,178	0	186	0	0	0	23	154
U. Wisconsin-Stout	367	0	0	51	20	2	37	70	12	7	168

TABLE 83

Higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Wisconsin-Whitewater	713	26	23	226	25	14	0	83	0	0	316
Private	1,808	77	115	662	44	339	208	83	15	0	265
Alverno C.	228	0	0	0	0	0	0	0	0	0	228
Concordia U., Wisconsin	168	14	0	72	0	67	0	0	15	0	0
Lawrence U.	671	29	91	265	0	96	147	6	0	0	37
St. Norbert C.	741	34	24	325	44	176	61	77	0	0	0
Wyoming	504	0	155	189	0	0	0	160	0	0	0
Public	504	0	155	189	0	0	0	160	0	0	0
Central Wyoming C.	504	0	155	189	0	0	0	160	0	0	0
American Samoa	961	0	0	0	0	0	0	961	0	0	0
Public	961	0	0	0	0	0	0	961	0	0	0
American Samoa Community C.	961 i	0 i	0 i	0 i	0 i	0 i	0 i	961 i	0 i	0 i	0 i
Puerto Rico	5,181	620	300	1,826	0	691	4	112	63	0	1,565
Public	2,192	0	300	923	0	691	0	48	48	0	182
U. Puerto Rico, Aguadilla	823	0	300	370	0	0	0	48	48	0	57
U. Puerto Rico, Ponce	1,369	0	0	553	0	691	0	0	0	0	125
Private	2,989	620	0	903	0	0	4	64	15	0	1,383
Polytechnic U. Puerto Rico	620	620	0	0	0	0	0	0	0	0	0
Pontifical Catholic U. Puerto Rico, Ponce	334	0	0	241	0	0	4	64	15	0	10
San Juan Bautista School of Medicine	662	0	0	662	0	0	0	0	0	0	0
U. Ana G. Mendez, Carolina	645	0	0	0	0	0	0	0	0	0	645
U. Ana G. Mendez, Cupey	728	0	0	0	0	0	0	0	0	0	728

i = imputed.

nec = not elsewhere classified; S&E = science and engineering.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 84
Federally financed higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
United States	81,137	4,773	6,304	29,625	2,161	14,069	1,684	4,652	1,322	5,269	11,278
Public	37,755	2,585	3,007	14,817	1,124	6,126	429	3,037	627	2,022	3,981
Private	43,382	2,188	3,297	14,808	1,037	7,943	1,255	1,615	695	3,247	7,297
Alabama	1,780	37	71	709	250	264	0	0	91	223	135
Public	1,417	37	71	654	250	264	0	0	0	6	135
Auburn U., Montgomery	464	37	0	99	99	123	0	0	0	0	106
Jacksonville State U.	113	0	71	35	0	0	0	0	0	6	1
U. North Alabama	320	0	0	0	151	141	0	0	0	0	28
U. West Alabama	520	0	0	520	0	0	0	0	0	0	0
Private	363	0	0	55	0	0	0	0	91	217	0
Alabama C., Osteopathic Medicine	34	0	0	34	0	0	0	0	0	0	0
Oakwood U.	329	0	0	21	0	0	0	0	91	217	0
Arkansas	1,834	0	0	537	52	604	0	342	0	231	68
Public	850	0	0	186	52	215	0	342	0	30	25
Arkansas Tech U.	737	0	0	186	52	132	0	342	0	0	25
Southern Arkansas U.	113	0	0	0	0	83	0	0	0	30	0
Private	984	0	0	351	0	389	0	0	0	201	43
Arkansas C. of Health Education	46	0	0	46	0	0	0	0	0	0	0
Hendrix C.	629	0	0	305	0	209	0	0	0	72	43
Ouachita Baptist U.	309	0	0	0	0	180	0	0	0	129	0
California	1,629	53	27	1,040	20	89	205	0	1	0	194
Private	1,629	53	27	1,040	20	89	205	0	1	0	194
Dominican U. California	794	i 53	i 0	i 723	i 0	i 0	i 0	i 0	i 1	i 0	i 17
Life Chiropractic C.-West	0	0	0	0	0	0	0	0	0	0	0
Mills C.	224	0	27	0	20	0	0	0	0	0	177
Palo Alto U.	205	0	0	0	0	0	205	0	0	0	0
Pitzer C.	0	0	0	0	0	0	0	0	0	0	0
Point Loma Nazarene U.	1	0	0	1	0	0	0	0	0	0	0
Southern California U. of Health Sciences	204	0	0	204	0	0	0	0	0	0	0
Westmont C.	201	i 0	i 0	i 112	i 0	i 89	i 0	i 0	i 0	i 0	i 0
Whittier C.	0	i 0	i 0	i 0	i 0	i 0	i 0	i 0	i 0	i 0	i 0
Colorado	1,947	3	33	1,350	56	303	0	49	0	0	153
Public	1,453	0	33	923	56	239	0	49	0	0	153
Colorado Mesa U.	676	0	0	467	0	160	0	49	0	0	0

TABLE 84
Federally financed higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Private	713	69	81	260	181	0	0	122	0	0	0
Agnes Scott C.	260	0	0	260	0	0	0	0	0	0	0
Berry C.	453	69	81	0	181	0	0	122	0	0	0
Life U.	0	0	0	0	0	0	0	0	0	0	0
Hawaii	1,087	179	210	402	0	55	0	0	0	0	241
Public	1,087	179	210	402	0	55	0	0	0	0	241
U. Hawaii, Maui C.	1,087	179	210	402	0	55	0	0	0	0	241
Idaho	906	91	0	645	0	45	0	0	0	125	0
Public	550	58	0	492	0	0	0	0	0	0	0
Lewis-Clark State C.	550	58	0	492	0	0	0	0	0	0	0
Private	356	33	0	153	0	45	0	0	0	125	0
Northwest Nazarene U.	356	33	0	153	0	45	0	0	0	125	0
Illinois	1,837	8	61	733	5	272	30	22	0	48	658
Public	320	0	0	290	0	0	30	0	0	0	0
Eastern Illinois U.	320	0	0	290	0	0	30	0	0	0	0
Private	1,517	8	61	443	5	272	0	22	0	48	658
Augustana C.	158	0	0	22	0	33	0	22	0	0	81
Benedictine U.	64	8	0	21	5	8	0	0	0	0	22
Bradley U.	88	0	0	27	0	13	0	0	0	48	0
Elmhurst U.	676	0	0	121	0	0	0	0	0	0	555
Illinois C. of Optometry	46	0	0	46	0	0	0	0	0	0	0
Lake Forest C.	37	0	0	21	0	16	0	0	0	0	0
Wheaton C., Wheaton	448	0	61	185	0	202	0	0	0	0	0
Indiana	1,986	23	1	725	158	812	9	4	63	35	156
Public	588	0	0	140	0	225	0	4	63	0	156
Indiana U., Kokomo	75	0	0	0	0	0	0	0	0	0	75
Indiana U., Northwest	203	0	0	140	0	0	0	0	63	0	0
Indiana U., South Bend	297	0	0	0	0	225	0	4	0	0	68
Indiana U., Southeast	13	0	0	0	0	0	0	0	0	0	13
Private	1,398	23	1	585	158	587	9	0	0	35	0
DePauw U.	48	15	0	0	0	33	0	0	0	0	0
Earlham C.	0	0	0	0	0	0	0	0	0	0	0
Indiana Wesleyan U.	187	8	0	110	0	68	1	0	0	0	0
Manchester U.	100	0	0	100	0	0	0	0	0	0	0

TABLE 84
Federally financed higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Taylor U.	16	0	0	0	0	0	0	0	0	16	0
U. Evansville	171	0	0	11	146	14	0	0	0	0	0
Valparaiso U.	572	0	1	233	12	307	0	0	0	19	0
Wabash C.	304	0	0	131	0	165	8	0	0	0	0
Iowa	1,184	3	207	316	125	465	17	2	0	34	15
Private	1,184	3	207	316	125	465	17	2	0	34	15
Coe C.	401	0	0	0	0	401	0	0	0	0	0
Cornell C.	116	0	90	1	0	3	14	0	0	0	8
Dordt U.	552	0	117	279	122	0	0	0	0	34	0
Loras C.	70 i	3 i	0 i	36 i	3 i	16 i	3 i	2 i	0 i	0 i	7 i
Luther C.	45	0	0	0	0	45	0	0	0	0	0
Kansas	633	9	24	395	6	156	2	15	0	0	26
Public	633	9	24	395	6	156	2	15	0	0	26
Emporia State U.	291	9	0	191	6	62	0	0	0	0	23
Fort Hays State U.	342	0	24	204	0	94	2	15	0	0	3
Kentucky	724	0	0	521	8	195	0	0	0	0	0
Public	551	0	0	467	8	76	0	0	0	0	0
Eastern Kentucky U.	551	0	0	467	8	76	0	0	0	0	0
Private	173	0	0	54	0	119	0	0	0	0	0
Centre C.	173	0	0	54	0	119	0	0	0	0	0
Louisiana	1,265	389	0	616	0	91	0	7	7	8	147
Public	1,236	389	0	610	0	82	0	0	0	8	147
Louisiana State U., Shreveport	568	389	0	179	0	0	0	0	0	0	0
McNeese State U.	22	0	0	14	0	0	0	0	0	8	0
Nicholls State U.	301	0	0	219	0	82	0	0	0	0	0
Southern U., New Orleans	345	0	0	198	0	0	0	0	0	0	147
Private	29	0	0	6	0	9	0	7	7	0	0
Loyola U., New Orleans	29	0	0	6	0	9	0	7	7	0	0
Maine	1,103	49	69	376	22	84	15	40	0	375	73
Public	1,103	49	69	376	22	84	15	40	0	375	73
Maine Maritime Academy	198	0	7	0	0	0	0	0	0	191	0
U. Maine Farmington	862 i	49 i	62 i	333 i	22 i	84 i	15 i	40 i	0 i	184 i	73 i
U. Maine, Presque Isle	43	0	0	43	0	0	0	0	0	0	0
Maryland	1,173	0	21	292	3	195	0	144	104	57	357

TABLE 84
Federally financed higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Public	874	0	21	215	3	195	0	144	49	57	190
Coppin State U.	275	0	0	215	3	0	0	0	0	57	0
St. Mary's C. Maryland	599	0	21	0	0	195	0	144	49	0	190
Private	299	0	0	77	0	0	0	0	55	0	167
Loyola U., Maryland	206	0	0	77	0	0	0	0	55	0	74
Maryland Institute C. of Art	93	0	0	0	0	0	0	0	0	0	93
Massachusetts	3,794	371	206	1,756	31	460	159	39	117	27	628
Public	821	0	0	566	0	255	0	0	0	0	0
Bridgewater State U.	821	0	0	566	0	255	0	0	0	0	0
Private	2,973	371	206	1,190	31	205	159	39	117	27	628
C. of the Holy Cross	653	0	0	382	31	205	0	0	0	0	35
Emerson C.	122	1	0	121	0	0	0	0	0	0	0
Hult International Business School	506	i 322	i 0	i 0	i 0	i 0	i 79	i 0	i 1	i 0	i 104
MCPHS U.	80	0	0	0	0	0	80	0	0	0	0
Merrimack C.	804	0	0	541	0	0	0	0	0	27	236
Simmons U.	383	48	0	146	0	0	0	39	116	0	34
Stonehill C.	425	0	206	0	0	0	0	0	0	0	219
Michigan	1,233	10	42	629	68	266	0	9	85	48	76
Public	687	0	0	493	58	0	0	2	85	0	49
Ferris State U.	549	0	0	489	58	0	0	2	0	0	0
U. Michigan, Flint	138	0	0	4	0	0	0	0	85	0	49
Private	546	10	42	136	10	266	0	7	0	48	27
Andrews U.	295	0	42	0	0	205	0	0	0	48	0
Kalamazoo C.	251	i 10	i 0	i 136	i 10	i 61	i 0	i 7	i 0	i 0	i 27
Minnesota	2,852	43	401	805	77	1,080	20	39	0	0	387
Public	583	4	96	157	3	9	11	2	0	0	301
Metropolitan State U.	94	i 4	i 7	i 64	i 2	i 9	i 2	i 2	i 0	i 0	i 4
Minnesota State U., Moorhead	246	i 0	i 24	i 0	i 0	i 0	i 9	i 0	i 0	i 0	i 213
U. Minnesota, Morris	150	0	65	0	1	0	0	0	0	0	84
U. Minnesota, Rochester	93	0	0	93	0	0	0	0	0	0	0
Private	2,269	39	305	648	74	1,071	9	37	0	0	86
Augsburg U.	370	0	137	19	64	150	0	0	0	0	0
Concordia C., Moorhead	32	0	0	0	0	32	0	0	0	0	0
Gustavus Adolphus C.	468	0	125	0	0	228	0	33	0	0	82

TABLE 84
Federally financed higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Hamline U.	35	0	0	35	0	0	0	0	0	0	0
Saint Mary's U. Minnesota	638	0	0	0	0	638	0	0	0	0	0
St. Olaf C.	726	39	43	594	10	23	9	4	0	0	4
Mississippi	991	177	369	111	0	82	0	0	56	194	2
Public	991	177	369	111	0	82	0	0	56	194	2
Delta State U.	661	0	369	111	0	0	0	0	0	181	0
Mississippi Valley State U.	330	177	0	0	0	82	0	0	56	13	2
Missouri	914	0	26	445	100	56	0	6	0	0	281
Public	633	0	26	164	100	56	0	6	0	0	281
Northwest Missouri State U.	100	0	0	0	100	0	0	0	0	0	0
Southeast Missouri State U.	61	0	0	22	0	31	0	6	0	0	2
Truman State U.	73	0	0	48	0	25	0	0	0	0	0
U. Central Missouri	399	0	26	94	0	0	0	0	0	0	279
Private	281	0	0	281	0	0	0	0	0	0	0
A. T. Still U. of Health Sciences	281	0	0	281	0	0	0	0	0	0	0
Graduate School of the Stowers Institute for Medical Research	0	0	0	0	0	0	0	0	0	0	0
Montana	2,207	0	551	903	0	30	64	45	0	13	601
Public	2,207	0	551	903	0	30	64	45	0	13	601
Aaniiih Nakoda C.	864	0	551	313	0	0	0	0	0	0	0
Montana State U., Billings	518	0	0	404	0	0	0	45	0	0	69
Montana State U., Northern	43	0	0	0	0	30	0	0	0	13	0
Salish Kootenai C.	782	0	0	186	0	0	64	0	0	0	532
Nebraska	430	105	0	212	0	113	0	0	0	0	0
Private	430	105	0	212	0	113	0	0	0	0	0
Doane U.	430	105	0	212	0	113	0	0	0	0	0
Nevada	852	0	0	772	0	80	0	0	0	0	0
Public	780	0	0	700	0	80	0	0	0	0	0
C. Southern Nevada	275	0	0	195	0	80	0	0	0	0	0
Truckee Meadows Community C.	334	0	0	334	0	0	0	0	0	0	0
Western Nevada C.	171	0	0	171	0	0	0	0	0	0	0
Private	72	0	0	72	0	0	0	0	0	0	0
Touro U., Nevada	72	0	0	72	0	0	0	0	0	0	0
New Hampshire	770	0	0	523	0	148	0	0	0	99	0
Public	770	0	0	523	0	148	0	0	0	99	0

TABLE 84
Federally financed higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Keene State C.	770	0	0	523	0	148	0	0	0	99	0
New Jersey	741	82	129	219	42	0	0	269	0	0	0
Public	319	50	0	0	0	0	0	269	0	0	0
Ramapo C. New Jersey	319	50	0	0	0	0	0	269	0	0	0
Private	422	32	129	219	42	0	0	0	0	0	0
Fairleigh Dickinson U.	222	32	0	190	0	0	0	0	0	0	0
Rider U.	200	0	129	29	42	0	0	0	0	0	0
New Mexico	509	17	0	268	0	0	0	2	0	222	0
Public	509	17	0	268	0	0	0	2	0	222	0
Eastern New Mexico U., Portales	270	0	0	268	0	0	0	2	0	0	0
Northern New Mexico C.	239	17	0	0	0	0	0	0	0	222	0
New York	3,787	336	65	878	93	1,599	185	442	0	37	152
Public	1,800	41	65	537	39	985	19	95	0	10	9
CUNY, Medgar Evers C.	380	41	0	144	39	144	0	12	0	0	0
SUNY, C. Cortland	396	0	0	261	0	112	0	23	0	0	0
SUNY, C. Old Westbury	243	0	0	0	0	202	19	22	0	0	0
SUNY, Farmingdale State C.	185	0	0	0	0	166	0	0	0	10	9
SUNY, Maritime C.	0	0	0	0	0	0	0	0	0	0	0
SUNY, New Paltz	139	0	45	0	0	56	0	38	0	0	0
SUNY, Oneonta	3	0	0	3	0	0	0	0	0	0	0
SUNY, Potsdam	454	0	20	129	0	305	0	0	0	0	0
Private	1,987	295	0	341	54	614	166	347	0	27	143
Adelphi U.	316	0	0	87	0	37	152	0	0	0	40
Bard C.	69	34	0	0	0	21	14	0	0	0	0
Cooper Union	202	0	0	130	45	0	0	0	0	27	0
D'Youville C.	0	0	0	0	0	0	0	0	0	0	0
Iona C.	650	0	0	0	0	316	0	303	0	0	31
Niagara U.	54	0	0	0	0	0	0	44	0	0	10
Siena C.	291	94	0	0	9	188	0	0	0	0	0
St. Bonaventure U.	386	167	0	105	0	52	0	0	0	0	62
Touro U., New York	19	0	0	19	0	0	0	0	0	0	0
Utica U.	0	0	0	0	0	0	0	0	0	0	0
North Carolina	458	0	0	168	0	290	0	0	0	0	0
Public	290	0	0	0	0	290	0	0	0	0	0

TABLE 84
Federally financed higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. North Carolina, Pembroke	290	0	0	0	0	290	0	0	0	0	0
Private	168	0	0	168	0	0	0	0	0	0	0
Shaw U.	168	0	0	168	0	0	0	0	0	0	0
North Dakota	1,012	0	0	227	21	73	0	0	0	691	0
Public	143	0	0	143	0	0	0	0	0	0	0
Minot State U.	143	0	0	143	0	0	0	0	0	0	0
Private	869	0	0	84	21	73	0	0	0	691	0
United Tribes Technical C.	869	0	0	84	21	73	0	0	0	691	0
Ohio	2,485	256	215	448	7	1,003	333	42	76	105	0
Private	2,485	256	215	448	7	1,003	333	42	76	105	0
Antioch U.	187	187	0	0	0	0	0	0	0	0	0
Baldwin Wallace U.	7	7	0	0	0	0	0	0	0	0	0
Denison U.	645	16	186	11	0	432	0	0	0	0	0
John Carroll U.	529	0	0	241	0	0	246	42	0	0	0
Oberlin C.	492	46	0	69	7	269	25	0	76	0	0
Ohio Northern U.	197	0	0	30	0	0	62	0	0	105	0
Ohio Wesleyan U.	97	0	0	97	0	0	0	0	0	0	0
Wittenberg U.	331	0	29	0	0	302	0	0	0	0	0
Oklahoma	958	21	37	312	7	304	8	123	97	27	22
Public	958	21	37	312	7	304	8	123	97	27	22
East Central U.	447	8	37	75	7	66	8	122	97	27	0
Northeastern State U.	208	0	0	24	0	184	0	0	0	0	0
Southwestern Oklahoma State U.	303	13	0	213	0	54	0	1	0	0	22
Oregon	1,150	14	0	694	0	230	0	64	18	95	35
Public	325	14	0	0	0	230	0	63	18	0	0
Eastern Oregon U.	190	0	0	0	0	190	0	0	0	0	0
Southern Oregon U.	135	14	0	0	0	40	0	63	18	0	0
Private	825	0	0	694	0	0	0	1	0	95	35
Linfield U.	7	0	0	7	0	0	0	0	0	0	0
National U. of Natural Medicine	685	0	0	685	0	0	0	0	0	0	0
U. Portland	133	0	0	2	0	0	0	1	0	95	35
Pennsylvania	7,277	217	556	2,050	234	1,175	138	536	26	846	1,499
Public	2,236	118	74	163	94	561	138	30	26	415	617
Bloomsburg U. Pennsylvania	207	20	9	42	0	0	127	0	0	0	9

TABLE 84
Federally financed higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Kutztown U. Pennsylvania	351	0	0	17	0	238	0	25	0	0	71
Millersville U. Pennsylvania	213	0	65	101	0	0	0	0	26	0	21
Pennsylvania State U., Abington	184	13	0	0	72	0	9	5	0	9	76
Pennsylvania State U., Altoona	222	0	0	0	0	0	0	0	0	222	0
Pennsylvania State U., Berks	507	53	0	0	0	323	0	0	0	131	0
Pennsylvania State U., Great Valley School of Graduate Professional Studies	251	32	0	0	22	0	2	0	0	45	150
Pennsylvania State U., Greater Allegheny	23	0	0	0	0	0	0	0	0	0	23
Pennsylvania State U., Wilkes-Barre	267	0	0	0	0	0	0	0	0	0	267
Slippery Rock U. Pennsylvania	11	0	0	3	0	0	0	0	0	8	0
Private	5,041	99	482	1,887	140	614	0	506	0	431	882
American C. of Financial Services	0	0	0	0	0	0	0	0	0	0	0
Arcadia U.	747	6	0	126	0	0	0	0	0	0	615
Bryn Athyn C.	0	0	0	0	0	0	0	0	0	0	0
Delaware Valley U.	7	0	0	7	0	0	0	0	0	0	0
Dickinson C.	238	56	27	107	0	38	0	10	0	0	0
Gannon U.	150	0	0	5	0	0	0	0	0	145	0
Gettysburg C.	333	0	0	48	0	47	0	222	0	0	16
Juniata C.	442	0	76	243	0	0	0	0	0	45	78
La Salle U.	0	0	0	0	0	0	0	0	0	0	0
Lake Erie C. of Osteopathic Medicine	0	0	0	0	0	0	0	0	0	0	0
Moravian U.	185	0	0	15	111	0	0	59	0	0	0
Muhlenberg C.	27	0	0	27	0	0	0	0	0	0	0
Saint Francis U.	221	9	0	0	0	0	0	0	0	57	155
Salus U.	417	0	0	417	0	0	0	0	0	0	0
Susquehanna U.	31	0	0	14	0	0	0	17	0	0	0
U. Scranton	892	28	377	124	0	363	0	0	0	0	0
Ursinus C.	743	0	0	561	29	153	0	0	0	0	0
Widener U., Chester	474	0	2	81	0	13	0	198	0	180	0
Wilkes U.	134	0	0	112	0	0	0	0	0	4	18
Rhode Island	3,135	0	86	1,342	11	295	147	0	330	21	903
Private	3,135	0	86	1,342	11	295	147	0	330	21	903
Bryant U.	394	0	11	75	11	194	103	0	0	0	0
Providence C.	1,649	0	75	555	0	0	44	0	330	21	624
Rhode Island School of Design	279	i	0	i	0	i	0	i	0	i	279

TABLE 84
Federally financed higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
Salve Regina U.	813	0	0	712	0	101	0	0	0	0	0
South Carolina	2,353	55	325	827	25	452	0	0	0	608	61
Public	1,087	34	77	570	3	101	0	0	0	241	61
Francis Marion U.	289	0	0	185	3	101	0	0	0	0	0
U. South Carolina Upstate	358	19	0	285	0	0	0	0	0	42	12
U. South Carolina, Beaufort	440	15	77	100	0	0	0	0	0	199	49
Private	1,266	21	248	257	22	351	0	0	0	367	0
Benedict C.	1,057	21	248	257	22	142	0	0	0	367	0
Converse U.	209	0	0	0	0	209	0	0	0	0	0
South Dakota	598	0	0	386	0	212	0	0	0	0	0
Public	598	0	0	386	0	212	0	0	0	0	0
Northern State U.	174	0	0	174	0	0	0	0	0	0	0
Oglala Lakota C.	424	0	0	212	0	212	0	0	0	0	0
Tennessee	350	0	1	60	30	0	0	1	0	180	78
Public	61	0	0	31	30	0	0	0	0	0	0
U. Tennessee, Martin	61	0	0	31	30	0	0	0	0	0	0
Private	289	0	1	29	0	0	0	1	0	180	78
Lincoln Memorial U.	0	0	0	0	0	0	0	0	0	0	0
Lipscomb U.	283	0	0	28	0	0	0	0	0	180	75
Sewanee: U. of the South	6	0	1	1	0	0	0	1	0	0	3
Texas	1,736	783	50	406	0	130	0	124	42	169	32
Public	1,289	783	50	340	0	42	0	0	42	0	32
Angelo State U.	85	0	0	19	0	24	0	0	42	0	0
Midwestern State U.	416	0	50	321	0	18	0	0	0	0	27
Texas A&M U.-Central Texas	788	783	0	0	0	0	0	0	0	0	5
Private	447	0	0	66	0	88	0	124	0	169	0
Austin C.	110	0	0	55	0	55	0	0	0	0	0
LeTourneau U.	169	0	0	0	0	0	0	0	0	169	0
Southwestern U.	11	0	0	11	0	0	0	0	0	0	0
U. Dallas	157	0	0	0	0	33	0	124	0	0	0
Utah	1,103	48	531	88	42	22	1	2	82	190	97
Public	1,103	48	531	88	42	22	1	2	82	190	97
Southern Utah U.	603	0	426	57	0	11	0	2	0	107	0
Weber State U.	500	48	105	31	42	11	1	0	82	83	97

TABLE 84
Federally financed higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields	
Vermont	1,947	0	245	967	0	7	79	265	0	289	95	
Public	522	0	0	264	0	0	0	258	0	0	0	
Castleton U.	522	0	0	264	0	0	0	258	0	0	0	
Private	1,425	0	245	703	0	7	79	7	0	289	95	
Norwich U.	940	0	33	516	0	7	0	0	0	289	95	
Saint Michael's C.	485	0	212	187	0	0	79	7	0	0	0	
Virginia	1,380	5	78	658	1	11	1	131	0	57	438	
Public	208	0	0	90	0	1	0	117	0	0	0	
Longwood U.	47	0	0	1	0	0	0	46	0	0	0	
Radford U.	161	0	0	89	0	1	0	71	0	0	0	
Private	1,172	5	78	568	1	10	1	14	0	57	438	
Liberty U.	897	0	0	405	0	0	0	0	0	57	435	
Roanoke C.	3	0	2	0	0	0	0	0	0	0	1	
U. Lynchburg	93	i	5	i	3	i	70	i	1	i	10	i
Washington and Lee U.	179	0	73	93	0	0	0	13	0	0	0	
Washington	1,459	0	86	226	2	286	0	164	0	54	641	
Public	119	0	0	75	0	22	0	22	0	0	0	
Evergreen State C.	119	0	0	75	0	22	0	22	0	0	0	
Private	1,340	0	86	151	2	264	0	142	0	54	641	
Gonzaga U.	226	0	0	102	0	12	0	42	0	54	16	
Pacific Lutheran U.	170	0	11	0	2	157	0	0	0	0	0	
Saint Martin's U.	203	0	75	28	0	0	0	100	0	0	0	
Seattle Pacific U.	639	0	0	21	0	0	0	0	0	0	618	
Whitworth U.	102	i	0	i	0	i	95	i	0	i	7	
West Virginia	1,004	0	0	872	0	0	0	0	0	0	132	
Public	1,004	0	0	872	0	0	0	0	0	0	132	
Bluefield State U.	506	0	0	374	0	0	0	0	0	0	132	
West Liberty U.	498	0	0	498	0	0	0	0	0	0	0	
Private	0	0	0	0	0	0	0	0	0	0	0	
Future Generations U.	0	i	0	i	0	i	0	i	0	i	0	
Wisconsin	1,734	67	60	651	40	400	103	72	0	23	318	
Public	824	5	13	235	28	198	0	36	0	23	286	
U. Wisconsin-River Falls	318	5	0	106	0	184	0	0	0	23	0	
U. Wisconsin-Stout	61	0	0	22	3	0	0	36	0	0	0	

TABLE 84
Federally financed higher education R&D expenditures at institutions in the short form survey population, by state, institutional control, institution, and R&D field: FY 2022

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
U. Wisconsin-Whitewater	445	0	13	107	25	14	0	0	0	0	286
Private	910	62	47	416	12	202	103	36	0	0	32
Alverno C.	0	0	0	0	0	0	0	0	0	0	0
Concordia U., Wisconsin	150	14	0	69	0	67	0	0	0	0	0
Lawrence U.	286	28	35	97	0	15	79	0	0	0	32
St. Norbert C.	474	20	12	250	12	120	24	36	0	0	0
Wyoming	504	0	155	189	0	0	0	160	0	0	0
Public	504	0	155	189	0	0	0	160	0	0	0
Central Wyoming C.	504	0	155	189	0	0	0	160	0	0	0
American Samoa	961	0	0	0	0	0	0	961	0	0	0
Public	961	0	0	0	0	0	0	961	0	0	0
American Samoa Community C.	961 i	0 i	0 i	0 i	0 i	0 i	0 i	961 i	0 i	0 i	0 i
Puerto Rico	4,262	620	219	1,358	0	524	0	35	37	0	1,469
Public	1,706	0	219	795	0	524	0	35	37	0	96
U. Puerto Rico, Aguadilla	617	0	219	283	0	0	0	35	37	0	43
U. Puerto Rico, Ponce	1,089	0	0	512	0	524	0	0	0	0	53
Private	2,556	620	0	563	0	0	0	0	0	0	1,373
Polytechnic U. Puerto Rico	620	620	0	0	0	0	0	0	0	0	0
Pontifical Catholic U. Puerto Rico, Ponce	97	0	0	97	0	0	0	0	0	0	0
San Juan Bautista School of Medicine	466	0	0	466	0	0	0	0	0	0	0
U. Ana G. Mendez, Carolina	645	0	0	0	0	0	0	0	0	0	645
U. Ana G. Mendez, Cupey	728	0	0	0	0	0	0	0	0	0	728

i = imputed.

nec = not elsewhere classified; S&E = science and engineering.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE 85

Higher education R&D expenditures received from and passed through to other U.S. higher education institutions, at institutions in the short form survey population, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Received as a subrecipient			Passed through to subrecipients		
	Total	Federally financed	Nonfederally financed	Total	Federally financed	Nonfederally financed
United States	21,262	19,170	2,092	3,321	2,588	733
Alabama						
Public						
Auburn U., Montgomery	58	58	0	0	0	0
Jacksonville State U.	0	0	0	2	2	0
U. North Alabama	0	0	0	7	7	0
U. West Alabama	16	16	0	35	35	0
Private						
Alabama C., Osteopathic Medicine	0	0	0	0	0	0
Oakwood U.	112	112	0	0	0	0
Arkansas						
Public						
Arkansas Tech U.	129	129	0	0	0	0
Southern Arkansas U.	112	112	0	0	0	0
Private						
Arkansas C. of Health Education	14	14	0	0	0	0
Hendrix C.	251	251	0	0	0	0
Ouachita Baptist U.	309	309	0	0	0	0
California						
Private						
Dominican U. California	54 i	54 i	0 i	0 i	0 i	0 i
Life Chiropractic C.-West	0	0	0	0	0	0
Mills C.	0	0	0	0	0	0
Palo Alto U.	171	171	0	0	0	0
Pitzer C.	0	0	0	0	0	0
Point Loma Nazarene U.	0	0	0	0	0	0
Southern California U. of Health Sciences	80	39	41	0	0	0
Westmont C.	81 i	81 i	0 i	0 i	0 i	0 i
Whittier C.	0 i	0 i	0 i	0 i	0 i	0 i
Colorado						
Public						
Colorado Mesa U.	42	42	0	12	0	12
Metropolitan State U. of Denver	0	0	0	183	183	0
Western Colorado U.	0	0	0	0	0	0
Private						
Regis U.	13	13	0	0	0	0
Connecticut						
Public						
U.S. Coast Guard Academy	0	0	0	0	0	0
Western Connecticut State U.	0	0	0	49	49	0
Private						
Fairfield U.	32	21	11	0	0	0
Hartford International U. for Religion and Peace	0	0	0	0	0	0
Quinnipiac U.	64 i	61 i	3 i	44 i	41 i	3 i
Sacred Heart U.	0	0	0	156	156	0
Florida						
Public						
New C. Florida	6	6	0	0	0	0

TABLE 85

Higher education R&D expenditures received from and passed through to other U.S. higher education institutions, at institutions in the short form survey population, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Received as a subrecipient			Passed through to subrecipients		
	Total	Federally financed	Nonfederally financed	Total	Federally financed	Nonfederally financed
Private						
Barry U.	52	30	22	0	0	0
Bethune-Cookman U.	299	299	0	0	0	0
Eckerd C.	8	8	0	18	18	0
Jacksonville U.	0	0	0	0	0	0
Keiser U.	0 i	0 i	0 i	0 i	0 i	0 i
Rollins C.	46	46	0	3	3	0
Stetson U.	146	146	0	0	0	0
U. Tampa	14	0	14	0	0	0
Georgia						
Public						
Albany State U.	297	223	74	16	0	16
Clayton State U.	218	213	5	0	0	0
Columbus State U.	0 i	0 i	0 i	0	0	0
Georgia C. and State U.	50	0	50	0	0	0
Georgia Gwinnett C.	19	19	0	0	0	0
U. West Georgia	161	151	10	2	2	0
Valdosta State U.	43	43	0	0	0	0
Private						
Agnes Scott C.	0	0	0	0	0	0
Berry C.	17	17	0	0	0	0
Life U.	0	0	0	0	0	0
Hawaii						
Public						
U. Hawaii, Maui C.	0	0	0	0	0	0
Idaho						
Public						
Lewis-Clark State C.	550	550	0	0	0	0
Private						
Northwest Nazarene U.	198	198	0	0	0	0
Illinois						
Public						
Eastern Illinois U.	109	79	30	0	0	0
Private						
Augustana C.	22	22	0	0	0	0
Benedictine U.	37	37	0	5 i	5 i	0
Bradley U.	88	88	0	0	0	0
Elmhurst U.	0	0	0	148	148	0
Illinois C. of Optometry	0	0	0	0	0	0
Lake Forest C.	16	16	0	0	0	0
Wheaton C., Wheaton	190	17	173	173	173	0
Indiana						
Public						
Indiana U., Kokomo	79	75	4	0	0	0
Indiana U., Northwest	9	9	0	0	0	0
Indiana U., South Bend	134	44	90	42	32	10
Indiana U., Southeast	3	0	3	0	0	0
Private						

TABLE 85

Higher education R&D expenditures received from and passed through to other U.S. higher education institutions, at institutions in the short form survey population, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Received as a subrecipient			Passed through to subrecipients		
	Total	Federally financed	Nonfederally financed	Total	Federally financed	Nonfederally financed
DePauw U.	0	0	0	0	0	0
Earlham C.	0	0	0	0	0	0
Indiana Wesleyan U.	0	0	0	20	20	0
Manchester U.	0	0	0	0	0	0
Taylor U.	16	16	0	0	0	0
U. Evansville	11	11	0	0	0	0
Valparaiso U.	133	133	0	0	0	0
Wabash C.	0	0	0	0	0	0
Iowa						
Private						
Coe C.	0	0	0	2	0	2
Cornell C.	35	20	15	0	0	0
Dordt U.	0	0	0	0	0	0
Loras C.	9 i	8 i	1 i	5 i	5 i	0 i
Luther C.	6	5	1	0	0	0
Kansas						
Public						
Emporia State U.	231	231	0	0	0	0
Fort Hays State U.	238	231	7	0	0	0
Kentucky						
Public						
Eastern Kentucky U.	234	188	46	99	95	4
Private						
Centre C.	28	28	0	0	0	0
Louisiana						
Public						
Louisiana State U., Shreveport	568	568	0	0	0	0
McNeese State U.	55	22	33	0	0	0
Nicholls State U.	66	66	0	0	0	0
Southern U., New Orleans	11	11	0	0	0	0
Private						
Loyola U., New Orleans	0	0	0	0	0	0
Maine						
Public						
Maine Maritime Academy	85	85	0	0	0	0
U. Maine Farmington	40 i	36 i	4 i	17 i	14 i	3 i
U. Maine, Presque Isle	5	5	0	0	0	0
Maryland						
Public						
Coppin State U.	36	32	4	0	0	0
St. Mary's C. Maryland	0	0	0	0	0	0
Private						
Loyola U., Maryland	48	48	0	480	0	480
Maryland Institute C. of Art	91	68	23	0	0	0
Massachusetts						
Public						
Bridgewater State U.	591	591	0	0	0	0
Private						

TABLE 85

Higher education R&D expenditures received from and passed through to other U.S. higher education institutions, at institutions in the short form survey population, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Received as a subrecipient			Passed through to subrecipients		
	Total	Federally financed	Nonfederally financed	Total	Federally financed	Nonfederally financed
C. of the Holy Cross	46	11	35	34	34	0
Emerson C.	121	121	0	10	0	10
Hult International Business School	74 i	70 i	4 i	28 i	27 i	1 i
MCPHS U.	0	0	0	0	0	0
Merrimack C.	138	138	0	131	131	0
Simmons U.	39	39	0	38	38	0
Stonehill C.	226	226	0	0	0	0
Michigan						
Public						
Ferris State U.	107	107	0	0	0	0
U. Michigan, Flint	29	29	0	0	0	0
Private						
Andrews U.	87	87	0	59	59	0
Kalamazoo C.	0 i	0 i	0 i	0 i	0 i	0 i
Minnesota						
Public						
Metropolitan State U.	6 i	5 i	1 i	6 i	6 i	0 i
Minnesota State U., Moorhead	21 i	9 i	12 i	0 i	0 i	0 i
U. Minnesota, Morris	0	0	0	0	0	0
U. Minnesota, Rochester	17	17	0	0	0	0
Private						
Augsburg U.	137	137	0	0	0	0
Concordia C., Moorhead	32	32	0	0	0	0
Gustavus Adolphus C.	141	125	16	0	0	0
Hamline U.	35	35	0	0	0	0
Saint Mary's U. Minnesota	0	0	0	0	0	0
St. Olaf C.	37	37	0	220	220	0
Mississippi						
Public						
Delta State U.	292	292	0	0	0	0
Mississippi Valley State U.	95	95	0	0	0	0
Missouri						
Public						
Northwest Missouri State U.	0	0	0	0	0	0
Southeast Missouri State U.	7	7	0	0	0	0
Truman State U.	73	73	0	0	0	0
U. Central Missouri	0	0	0	0	0	0
Private						
A. T. Still U. of Health Sciences	40	40	0	43	43	0
Graduate School of the Stowers Institute for Medical Research	0	0	0	0	0	0
Montana						
Public						
Aaniiih Nakoda C.	0	0	0	0	0	0
Montana State U., Billings	285	285	0	21	21	0
Montana State U., Northern	0	0	0	12	12	0
Salish Kootenai C.	90	90	0	23	23	0
Nebraska						
Private						

TABLE 85

Higher education R&D expenditures received from and passed through to other U.S. higher education institutions, at institutions in the short form survey population, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Received as a subrecipient			Passed through to subrecipients		
	Total	Federally financed	Nonfederally financed	Total	Federally financed	Nonfederally financed
Doane U.	252	252	0	0	0	0
Nevada						
Public						
C. Southern Nevada	275	275	0	0	0	0
Truckee Meadows Community C.	334	334	0	0	0	0
Western Nevada C.	171	171	0	0	0	0
Private						
Touro U., Nevada	0	0	0	0	0	0
New Hampshire						
Public						
Keene State C.	233	233	0	50	50	0
New Jersey						
Public						
Ramapo C. New Jersey	0	0	0	0	0	0
Private						
Fairleigh Dickinson U.	11	11	0	0	0	0
Rider U.	40	40	0	15	15	0
New Mexico						
Public						
Eastern New Mexico U., Portales	191	181	10	0	0	0
Northern New Mexico C.	153	153	0	0	0	0
New York						
Public						
CUNY, Medgar Evers C.	107	107	0	0	0	0
SUNY, C. Cortland	205	190	15	6	0	6
SUNY, C. Old Westbury	20	20	0	0	0	0
SUNY, Farmingdale State C.	10	10	0	0	0	0
SUNY, Maritime C.	0	0	0	0	0	0
SUNY, New Paltz	44	7	37	0	0	0
SUNY, Oneonta	5	0	5	0	0	0
SUNY, Potsdam	6	0	6	14	14	0
Private						
Adelphi U.	11	11	0	0	0	0
Bard C.	0	0	0	0	0	0
Cooper Union	130	130	0	0	0	0
D'Youville C.	0	0	0	0	0	0
Iona C.	0	0	0	31	31	0
Niagara U.	0	0	0	0	0	0
Siena C.	42	0	42	0	0	0
St. Bonaventure U.	0	0	0	37	37	0
Touro U., New York	19	19	0	0	0	0
Utica U.	0	0	0	0	0	0
North Carolina						
Public						
U. North Carolina, Pembroke	0	0	0	0	0	0
Private						
Shaw U.	33	0	33	52	9	43
North Dakota						

TABLE 85

Higher education R&D expenditures received from and passed through to other U.S. higher education institutions, at institutions in the short form survey population, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Received as a subrecipient			Passed through to subrecipients		
	Total	Federally financed	Nonfederally financed	Total	Federally financed	Nonfederally financed
Public						
Minot State U.	157	143	14	0	0	0
Private						
United Tribes Technical C.	143	0	143	4	4	0
Ohio						
Private						
Antioch U.	0	0	0	0	0	0
Baldwin Wallace U.	0	0	0	0	0	0
Denison U.	21	11	10	0	0	0
John Carroll U.	51	51	0	0	0	0
Oberlin C.	31	8	23	0	0	0
Ohio Northern U.	45	45	0	30	30	0
Ohio Wesleyan U.	6	0	6	0	0	0
Wittenberg U.	29	29	0	0	0	0
Oklahoma						
Public						
East Central U.	122	122	0	78	78	0
Northeastern State U.	288	208	80	0	0	0
Southwestern Oklahoma State U.	0	0	0	0	0	0
Oregon						
Public						
Eastern Oregon U.	0	0	0	0	0	0
Southern Oregon U.	94	94	0	28	28	0
Private						
Linfield U.	7	7	0	0	0	0
National U. of Natural Medicine	68	68	0	0	0	0
U. Portland	120	120	0	0	0	0
Pennsylvania						
Public						
Bloomsburg U. Pennsylvania	62	62	0	0	0	0
Kutztown U. Pennsylvania	17	17	0	15	15	0
Millersville U. Pennsylvania	0	0	0	10	10	0
Pennsylvania State U., Abington	0	0	0	0	0	0
Pennsylvania State U., Altoona	431	177	254	0	0	0
Pennsylvania State U., Berks	1	1	0	0	0	0
Pennsylvania State U., Great Valley School of Graduate Professional Studies	28	28	0	0	0	0
Pennsylvania State U., Greater Allegheny	0	0	0	0	0	0
Pennsylvania State U., Wilkes-Barre	0	0	0	0	0	0
Slippery Rock U. Pennsylvania	8	8	0	0	0	0
Private						
American C. of Financial Services	0	0	0	0	0	0
Arcadia U.	291	291	0	44	27	17
Bryn Athyn C.	0	0	0	0	0	0
Delaware Valley U.	0	0	0	0	0	0
Dickinson C.	345	162	183	0	0	0
Gannon U.	99	24	75	0	0	0
Gettysburg C.	0	0	0	94	0	94

TABLE 85

Higher education R&D expenditures received from and passed through to other U.S. higher education institutions, at institutions in the short form survey population, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Received as a subrecipient			Passed through to subrecipients		
	Total	Federally financed	Nonfederally financed	Total	Federally financed	Nonfederally financed
Juniata C.	36	36	0	28	28	0
La Salle U.	0	0	0	0	0	0
Lake Erie C. of Osteopathic Medicine	0	0	0	0	0	0
Moravian U.	0	0	0	0	0	0
Muhlenberg C.	0	0	0	0	0	0
Saint Francis U.	0	0	0	0	0	0
Salus U.	21	21	0	0	0	0
Susquehanna U.	0	0	0	0	0	0
U. Scranton	69	69	0	14	14	0
Ursinus C.	80	80	0	0	0	0
Widener U., Chester	59	13	46	0	0	0
Wilkes U.	21	21	0	0	0	0
Rhode Island						
Private						
Bryant U.	292	292	0	0	0	0
Providence C.	583	583	0	0	0	0
Rhode Island School of Design	204 i	204 i	0 i	0 i	0 i	0 i
Salve Regina U.	792	792	0	0	0	0
South Carolina						
Public						
Francis Marion U.	0	0	0	0	0	0
U. South Carolina Upstate	23	0	23	0	0	0
U. South Carolina, Beaufort	192	97	95	139	139	0
Private						
Benedict C.	276	276	0	63	63	0
Converse U.	206	206	0	0	0	0
South Dakota						
Public						
Northern State U.	174	174	0	0	0	0
Oglala Lakota C.	136	136	0	0	0	0
Tennessee						
Public						
U. Tennessee, Martin	0 i	0	0 i	16	16	0
Private						
Lincoln Memorial U.	0	0	0	0	0	0
Lipscomb U.	102	28	74	0	0	0
Sewanee: U. of the South	1	1	0	0	0	0
Texas						
Public						
Angelo State U.	0	0	0	5	0	5
Midwestern State U.	0	0	0	0	0	0
Texas A&M U.-Central Texas	0	0	0	0	0	0
Private						
Austin C.	0	0	0	0	0	0
LeTourneau U.	0	0	0	0	0	0
Southwestern U.	11	11	0	0	0	0
U. Dallas	137	123	14	0	0	0
Utah						

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Higher education R&D expenditures received from and passed through to other U.S. higher education institutions, at institutions in the short form survey population, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Received as a subrecipient			Passed through to subrecipients		
	Total	Federally financed	Nonfederally financed	Total	Federally financed	Nonfederally financed
Public						
Southern Utah U.	58	58	0	0	0	0
Weber State U.	61	50	11	0	0	0
Vermont						
Public						
Castleton U.	157	157	0	0	0	0
Private						
Norwich U.	1,000	940	60	0	0	0
Saint Michael's C.	442	442	0	0	0	0
Virginia						
Public						
Longwood U.	0	0	0	0	0	0
Radford U.	56	56	0	19	0	19
Private						
Liberty U.	6	6	0	140	140	0
Roanoke C.	0	0	0	0	0	0
U. Lynchburg	9 i	8 i	1 i	8 i	7 i	1 i
Washington and Lee U.	29	0	29	6	6	0
Washington						
Public						
Evergreen State C.	53	53	0	0	0	0
Private						
Gonzaga U.	129	129	0	0	0	0
Pacific Lutheran U.	75	75	0	0	0	0
Saint Martin's U.	7	0	7	0	0	0
Seattle Pacific U.	263	263	0	3	0	3
Whitworth U.	16 i	16 i	0 i	0 i	0 i	0 i
West Virginia						
Public						
Bluefield State U.	323	323	0	0	0	0
West Liberty U.	360	360	0	0	0	0
Private						
Future Generations U.	0 i	0 i	0 i	0 i	0 i	0 i
Wisconsin						
Public						
U. Wisconsin-River Falls	52	52	0	53	49	4
U. Wisconsin-Stout	46	19	27	0	0	0
U. Wisconsin-Whitewater	225	204	21	0	0	0
Private						
Alverno C.	0	0	0	0	0	0
Concordia U., Wisconsin	84	84	0	79	79	0
Lawrence U.	55	55	0	0	0	0
St. Norbert C.	0	0	0	0	0	0
Wyoming						
Public						
Central Wyoming C.	351	351	0	0	0	0
American Samoa						
Public						

TABLE 85

Higher education R&D expenditures received from and passed through to other U.S. higher education institutions, at institutions in the short form survey population, by state, institutional control, institution, and source of funds: FY 2022

(Dollars in thousands)

State, institutional control, and institution	Received as a subrecipient			Passed through to subrecipients		
	Total	Federally financed	Nonfederally financed	Total	Federally financed	Nonfederally financed
American Samoa Community C.	0	i	0	i	0	i
Puerto Rico						
Public						
U. Puerto Rico, Aguadilla	43	27	16	0	0	0
U. Puerto Rico, Ponce	0	0	0	0	0	0
Private						
Polytechnic U. Puerto Rico	90	90	0	0	0	0
Pontifical Catholic U. Puerto Rico, Ponce	40	40	0	0	0	0
San Juan Bautista School of Medicine	0	0	0	0	0	0
U. Ana G. Mendez, Carolina	0	0	0	97	97	0
U. Ana G. Mendez, Cupey	0	0	0	0	0	0

i = imputed.

Note(s):

Institutions are included in the short form population if they reported less than \$1 million in total R&D expenditures during the previous fiscal year.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

Technical Notes

Survey Overview (FY 2022 Survey Cycle)

Purpose. The Higher Education Research and Development (HERD) Survey is the primary source of information on separately accounted-for R&D expenditures within higher education institutions in the United States and outlying areas.

Data collection authority. The information is solicited under the authority of the National Science Foundation Act of 1950, as amended, and the America COMPETES Reauthorization Act of 2010. The Office of Management and Budget control number is 3145-0100, with an expiration date of 31 July 2025.

Survey contractor. ICF.

Survey sponsor. The HERD Survey is sponsored by the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation.

Key Survey Information

Frequency. Annual.

Initial survey year. In 2010, the HERD Survey replaced a previous annual collection, the Survey of Research and Development Expenditures at Universities and Colleges (Academic R&D Expenditures Survey), which was conducted from FY 1972 through FY 2009.

Reference period. The academic fiscal year ending in 2022; for most institutions, this was 1 July 2021 to 30 June 2022.

Response unit. Establishment; U.S. academic institutions reporting at least \$150,000 in R&D expenditures in the previous fiscal year.

Sample or census. Census.

Population size. A total of 900 institutions.

Sample size. The survey was a census of all known eligible universities and colleges.

Survey Design

Target population. Public and private nonprofit postsecondary institutions in the United States, Guam, Puerto Rico, and the U.S. Virgin Islands that granted a bachelor's degree or higher in any field; expended at least \$150,000 in separately accounted-for R&D in FY 2022; and were geographically separate campuses headed by a president, chancellor, or equivalent. A list of all accredited, degree-granting institutions in the United States (the *Higher Education Directory*) was obtained from Higher Education Publications (HEP). More information about HEP and its sources can be found at <https://hepinc.com/about/>.

The survey population was reviewed before data collection began to ensure that each institutional classification was accurate. Characteristics of the schools were reviewed before and during the survey to determine whether changes had occurred (e.g., name; highest degree granted; school openings, closings, or mergers). **Table A-1** shows all institution name changes or mergers between the FY 2021 and FY 2022 surveys.

After data collection closed, institutions were reviewed to verify that only those reporting at least \$150,000 in separately accounted-for R&D were included in the population. Of the 919 institutions surveyed, 19 completed the survey but reported total R&D expenditures of less than \$150,000. These institutions were excluded from the population, and their data are not included in the FY 2022 survey totals. The total and federally funded R&D expenditures for these 19 institutions are listed in [table A-2](#).

Sampling frame. The frame for the FY 2022 HERD Survey included (1) all institutions considered in scope for the FY 2021 survey, (2) institutions that granted a bachelor's degree or higher and reported an amount greater than \$0 for research on the Integrated Postsecondary Education Data System (IPEDS) 2020 Finance Survey, (3) all U.S. service institutions that granted a bachelor's degree or higher and were not already part of the HERD Survey population, and (4) institutions that granted doctoral degrees but did not report to IPEDS and were not already part of the HERD Survey population. The information in the *Higher Education Directory* was used to locate institutions meeting the conditions listed in 3 and 4. When FY 2021 R&D expenditures were not known, institutions in the frame were sent a brief questionnaire asking whether the institution had R&D expenditures during FY 2021 and FY 2022 and whether those expenditures were less than \$150,000, were \$150,000 to \$999,999, or were \$1 million or more.

The population review screener was sent to 106 institutions. A total of 22 institutions were added to the survey population during the population review. One other institution was added when representatives of university systems contacted data collection staff about a campus that newly qualified for the survey. During data collection, 31 institutions were removed from the population after they indicated that their R&D expenditures were less than \$150,000 for FY 2022, or that they did not qualify for the survey for another reason. After accounting for these additions and subtractions, the number of academic institutions in the final population decreased from 908 in FY 2021 to 900 in FY 2022 ([table A-3](#)).

Sample design. The FY 1997 survey was the last one conducted as a sample survey. Since FY 1998, the survey has been a census of all known eligible universities and colleges.

Data Collection and Processing Methods

Data collection. The FY 2022 questionnaires were sent by e-mail in November 2022. Respondents could choose to submit a questionnaire downloaded from the Web or use the Web-based data collection system. Every effort was made to maintain close contact with respondents to preserve both the consistency and continuity of the resulting data. Survey data reports for each institution were available on the survey website; these showed comparisons between the current and 2 prior years of data and noted any substantive disparities. Questionnaires were carefully examined for completeness upon receipt. Respondents were sent personalized e-mail messages asking them to provide any necessary revisions before the final processing and tabulation of data. These e-mail messages included a link to the HERD Survey Web-based data collection system, allowing respondents to view and correct their data online.

Respondents were asked to explain significant differences between current-year reporting and established patterns of reporting verified for prior years. They were encouraged to correct prior-year data, if necessary. When respondents updated or amended figures from past years, NCSSES made corresponding changes to trend data in the 2022 data tables and to the underlying microdata. For accurate historical data, use only the most recently released data tables.

Mode. Respondents could choose to submit a questionnaire downloaded from the Web or use the Web-based questionnaire. All institutions submitted data using the Web-based questionnaire.

Response rates. By the survey's closing date in July 2023, forms had been received from 864 universities and colleges out of a population of 900—a response rate of 96.0%. Responses were received from 98.4% of all doctorate-granting institutions. The R&D expenditures reported by these doctoral institutions constituted 99.1% of the estimated national R&D expenditures for FY 2022. [Table A-4](#) displays a detailed breakdown of response rates by survey form and highest degree granted, and [table A-5](#) displays a breakdown of response rates for each survey question.

Data editing. The HERD Survey was subject to very little editing. Respondents were contacted and asked to resolve possible self-reporting issues themselves. Questionnaires were carefully examined by survey staff upon receipt. Reviews focused on unexplained missing data, expenditures that were outliers compared to those of peer institutions, and explanations provided for changes in reporting patterns. If additional explanations or data revisions were needed, respondents were sent personalized e-mail messages asking them to provide any necessary revisions before the final processing and tabulation of data.

Imputation. Missing values were imputed based on the previous year's data and the reported data of peer institutions in the current cycle. For the 34 institutions that had not responded by the closing date of the survey and had been included in the FY 2021 HERD Survey population, R&D expenditures were imputed by applying inflator and deflator factors to the prior year's key totals. The key totals for FY 2022 included total R&D expenditures, federal R&D expenditures, expenditures received as a subrecipient from higher education sources, expenditures received as a subrecipient from non-higher education sources, expenditures passed through to higher education entities, and expenditures passed through to non-higher education entities. Imputation factors were ratios derived from the 2-year-trend data of responding institutions with similar characteristics, including highest degree granted, type of institutional control (public or private), and level of total R&D expenditures. Other values that were not identified as key totals were imputed by applying ratios from the previous year's data.

For two institutions that were new to the survey population, no past-year data were available. For these institutions, total R&D expenditures were assumed to be \$150,000 or \$1,000,000 based on the institutions' responses to the population review screener. Other values were then imputed as a proportion of total R&D expenditures based on the data of institutions with similar characteristics. Data for partial nonresponse were imputed using similar techniques.

[Table A-6](#) through [table A-18](#) present imputed amounts for each applicable survey variable. The dollar amount imputed is displayed, along with the percentage it represents of the national estimate for universities and colleges for a variable. The imputed total R&D was \$87.5 million, or 0.1%, of the \$97.8 billion in total R&D expenditures ([table A-6](#)).

Several surveyed institutions have responded intermittently in past years. For years in which no response was received, data have been imputed as previously described. Although the imputation algorithm accurately reflects national trends, it cannot account for specific trends at individual institutions. For this reason, a re-imputation of institutional data for prior years is also performed. For each institution, previously imputed values from the HERD Survey (FYs 2010–21) were recomputed to ensure that the imputed data are consistent with reporting patterns from the FY 2022 survey. These procedures result in much more consistent reporting trends for individual institutions but have little effect on aggregate figures reflecting national totals. In the data tables, the letter *i* is used to identify imputed data.

R&D expenditures from unspecified federal agencies (Question 10) and capitalization thresholds for software and equipment (Question 13) were not imputed. Response summaries for these questions can be found in [table A-19](#) and [table A-20](#).

Weighting. Survey data were not weighted.

Variance estimation. No variance estimation techniques were used.

Survey Quality Measures

Sampling error. Because the FY 2022 survey was a census of all eligible institutions, there was no sampling error.

Coverage error. Coverage error of large research institutions is minimal because of comprehensive lists. These institutions are easily identified using the NCSES Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions. However, institutions with smaller amounts of R&D expenditures have been more difficult to identify because they often do not receive federal funding for science and engineering (S&E) R&D.

Nonresponse error. Thirty-six universities and colleges did not respond in FY 2022, out of a total of 900 eligible institutions, for a nonresponse rate of 4.0%. [Table A-4](#) displays a detailed breakdown of response rates by survey population and highest degree granted.

Nonresponse rates were less than 5.0% for all but three questions. Question 6, R&D expenditures by type of R&D (basic research, applied research, and experimental development); Question 15, R&D personnel headcount; and Question 16, R&D full-time equivalents (FTEs) had nonresponse rates of 6.3%, 11.8%, and 29.5%, respectively. [Table A-5](#) displays a breakdown of response rates for each question in each of the two surveys. See section “Imputation” for mitigation of item nonresponses. [Table A-6](#) through [table A-18](#) present imputed amounts for each applicable survey variable.

Measurement error. The most likely source of measurement error is institutional records containing categories different from those on the survey. For example, institutions were asked to report all R&D expenditures by field. The NCSES-designed fields do not always translate to an institution’s departmental structure, and adjustments must be made by the institution to complete the survey. Fields were revised for the FY 2016 survey to better reflect the R&D currently being conducted at universities and colleges and make HERD Survey fields more consistent with those used by other NCSES surveys as well as with the National Center for Education Statistics Classification of Instructional Programs (CIP) codes. Details of this change are included in the methodology report and technical notes for the FY 2016 survey. Minor revisions were also made in FY 2020.

Another source of error is the survey’s category of institutionally funded research. The survey requests that institutions report discretionary internal funds used for research. NCSES discovered through debriefings conducted at the conclusion of the FY 2010 survey that there were varying definitions of what should be included on the HERD Survey as institutionally funded research. Some institutions included all expenditures from separate accounts designated for research; others included only internal R&D projects that are competitively awarded and have detailed budgets. A workshop was held in summer 2012 to discuss these differences in definitional interpretation. Based on the findings from the workshop, the FY 2012 survey was modified to clarify that all expenditures designated for research can be included in this category. This includes expenditures for organized research and expenditures of other funds designated for research but not categorized as organized research. A checklist question (Question 1.1) was also added to encourage the inclusion of all eligible expenditures and to determine the full extent of the variations in reporting across institutions. This question has been on the survey since FY 2012. An analysis of Question 1.1 responses from FY 2022 indicated that some institutions still could not report institutionally funded research that was not organized research (6.3% could not report startup packages, bridge funding, or seed funding and 8.1% were unable to identify other departmental funds designated for research). Therefore, survey totals are missing expenditures for R&D that come from multipurpose accounts, and as such, they represent an undercount of the total amount of internal discretionary funding that institutions make available to conduct R&D.

The reporting of unrecovered indirect costs is another known source of error. The survey requests that the total amount of indirect costs associated with a research grant or contract be calculated and reported, including costs that were not reimbursed by the external funding source. The unrecovered indirect cost is calculated by multiplying the institution’s negotiated indirect cost rate by the corresponding base and then subtracting the actual indirect cost recovery, preferably on a project-by-project basis. In FY 2022, 5.1% of respondents reported unrecovered indirect costs as unavailable. Respondents who were unable to provide values were asked to provide information on their nonresponse. Based on the collected information, survey guidance is revised to encourage response.

The reporting of expenditures from projects that are not R&D is another possible source of error. The R&D definition in the HERD Survey excludes public service and outreach programs, curriculum development (unless included as part of an overall research project), and training grants supporting work on non-research projects. As part of a federal government effort to reduce administrative burdens associated with research grants and contracts, agencies began adopting Research Terms and Conditions (RTC) to be consistent with Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards issued by the U.S. Office of Management and Budget (OMB) in the Federal

Register [80 FR 61849, October 14, 2015]. In these RTCs, agencies employed a broader definition of research, resulting in many institutions reporting projects as research that do not match HERD Survey definitions. Additionally, in recent years R&D expenditure data have been used more frequently in university and college benchmarking, which may encourage institutions to employ broader definitions of research than those provided on the survey.

It should also be noted that because institutions were asked to include funds passed through to higher education institutions as well as subrecipient funding from higher education institutions, there is double counting included in national and group totals. For example, Institution A's survey included the \$2 million passed through to Institution B, and Institution B's survey also included the \$2 million in subrecipient funding that it received from Institution A. Overall, institutions reported \$4.7 billion in expenditures from subrecipient funding received from other universities in FY 2022 and \$4.7 billion in funds passed through to higher education subrecipients in FY 2022. Adjustments are made to R&D totals presented in the NCSES *National Patterns of R&D Resources* publications (<https://nces.gov/data-collections/national-patterns/>).

Data Comparability (Changes)

Annual data are available for FYs 1972–2022. When the review for consistency between each year's data and submissions in prior years reveals discrepancies, it is sometimes necessary to modify prior years' data. This is especially likely to affect trends for certain institutions that fail to report every year, because current-year data are used to impute prior-year data. For accurate historical data, use only the most recently released data tables. Individuals wishing to analyze trends other than those in the most recent data tables are encouraged to contact the Survey Manager for more information about comparability of data over time.

Changes in survey coverage and population. Before FY 2010, the population included only institutions with R&D expenditures and degree programs in S&E fields. Institutions that performed R&D in only non-S&E fields were excluded from the population. Although not a change in the coverage or population, each campus headed by a campus-level president, chancellor, or equivalent began completing a separate survey in 2010 rather than combining its response with the responses of other campuses in the university system. As a result, the overall number of academic institutions in the population increased from 711 in FY 2009 to 742 in FY 2010.

To compare HERD Survey data across university systems by aggregating member campuses, [table 6](#) shows all institutions in the FY 2022 population by state, institutional control, and system.

Universities and colleges can merge or separate, possibly resulting in large changes in data from previous years.

- For FY 2015, the Indiana University School of Medicine (IUSM) reporting line was changed from the Chancellor of the Indiana University-Purdue University, Indianapolis (IUPUI) campus to the President of Indiana University. As such, the research expenditures for IUSM are now included in the Indiana University–Bloomington figures, resulting in an increase in total R&D expenditures of approximately \$280 million for this campus. IUPUI total R&D expenditures decreased from \$324 million in FY 2014 to \$56 million in FY 2015.
- In September 2015, Yeshiva University relinquished control of Albert Einstein College of Medicine to Montefiore Health System. As a result, FY 2016 data for Yeshiva University included only 2 months (July–August 2015) of R&D expenditures from the college of medicine. Albert Einstein College of Medicine reported separately for its entire FY 2016 (January–December 2016). Because of this change, FY 2016 research expenditures for Yeshiva University decreased by \$260 million. For FY 2017, Yeshiva University included no expenditures from the college of medicine, and total research expenditures decreased by \$43 million.

- In 2016, the Maryland General Assembly approved legislation to create a strategic partnership between University of Maryland (UMD) College Park and UMD Baltimore. The two schools began reporting as one unit, University of Maryland, in FY 2019. In FY 2018, UMD Baltimore reported over \$475 million in total R&D expenditures, and UMD College Park reported over \$540 million in total R&D expenditures. In FY 2019, the new combined institution reported \$1,096 million in total R&D expenditures.
- In 2019, University of Tennessee reorganized University of Tennessee, Knoxville, Institute of Agriculture, and University of Tennessee, Knoxville. The two schools began reporting as one unit, University of Tennessee, Knoxville, in FY 2020. In 2019, University of Tennessee, Institute of Agriculture reported over \$71 million in total R&D expenditures, and University of Tennessee, Knoxville reported over \$240 million in total R&D expenditures. In FY 2020, the new combined institution reported \$320 million in total R&D expenditures.
- In 2021, the University of South Florida consolidated its three separate institutions, University of South Florida, Tampa; University of South Florida, St. Petersburg; and University of South Florida, Sarasota-Manatee, into one, singularly-accredited university. The three schools began reporting as one unit, University of South Florida, in FY 2021. In FY 2020, University of South Florida, Tampa reported over \$333 million in total R&D expenditures, University of South Florida, St. Petersburg reported over \$18 million in total R&D expenditures, and University South Florida, Sarasota-Manatee reported over \$2 million in total R&D expenditures. In FY 2021, the new combined institution reported over \$405 million in total R&D expenditures.
- In FY 2021, the University of Colorado Denver and Anschutz Medical Campus began reporting to the survey separately. Prior to FY 2021, the two campuses reported as one unit. In FY 2020, the combined unit reported over \$554 million in total R&D expenditures. In FY 2021, University of Colorado Anschutz Medical Campus reported over \$562 million in total R&D expenditures and University of Colorado Denver reported over \$18 million in total R&D expenditures.

Changes in questionnaire. Tables include data from the Academic R&D Expenditures Survey (FYs 1972–2009) and the HERD Survey (FYs 2010–20). Analysts should be cautious when examining trend data. Although many variables are similar across the two surveys because of clarification of which funds are to be included in the definition of R&D and the inclusion of non-S&E expenditures, exact comparisons may be misleading. In prior years, the Academic R&D Expenditures Survey collected expenditures for S&E and non-S&E fields separately. Institutions were not always able to provide non-S&E expenditures, and those data were not imputed previously. Also, revisions to the instructions on what types of activities are included as R&D in 2010 may have influenced reported values to varying degrees, depending on the number of clinical trials and training grants at an institution. Specific changes are described below:

- For the FY 2012 data collection, NCSES modified the survey instructions to clarify what types of institutionally funded activities should be included in reported data. The instructions explained that all expenditures for R&D from an institution's current operating funds that are separately accounted for should be reported. This includes expenditures separately budgeted for organized research and expenditures of other funds designated for research but not categorized as organized research. The instructions also specified that funds from an institution's 501(c)3 foundation should be reported under institutionally financed research.
- For the FY 2013 collection, the instructions were revised to clarify that funds from foreign and U.S. universities and colleges should be reported under All other sources (Question 1, row f). The instructions also specified that gifts designated by donors for research should be included in Question 1, row f.
- Several changes were made to the FY 2016 questionnaire:
 - Question 16 on the FY 2015 questionnaire, regarding the number of postdocs paid from R&D expenditures, was removed from the survey. Question 2, regarding foreign funding of R&D, was expanded to identify sources of foreign funding. The question now collects R&D expenditures funded by foreign governments, businesses, nonprofit organizations, and higher education (see *foreign sources* in the “Definitions” section for more information).

- Questions 9, 11, and 14 include revisions to the fields of R&D that better reflect the R&D currently being conducted at universities and colleges. The revisions make the HERD Survey fields more consistent with those used by other NCSES surveys as well as with the CIP codes.
- For the FY 2017 collection, the instructions were revised to clarify that funding from federally funded R&D centers (FFRDCs) should be reported as direct federal funding from the FFRDC's sponsoring agency.
- For the FY 2018 collection, the instructions were revised to clarify that expenditures for institution research administration and support (e.g., office of sponsored programs) should be excluded from the institutionally financed research totals.
- Several changes were made to the FY 2020 questionnaire:
 - Question 15, which asked for a headcount of research personnel, was revised to ask for a headcount by three R&D functions (see "[Definitions](#)" for more information), as well as sex, citizenship status, and education level, for those functioning as researchers.
 - Question 16, which asked for the full-time equivalents (FTEs) by three R&D functions, was added to the survey.
 - Institutions were given guidance to include throughout the survey equipment-only R&D awards, such as Major Research Instrumentation grants.
 - Questions 9, 11, and 14 include revisions to the fields of R&D that better reflect the R&D currently being conducted at universities and colleges. The revisions make the HERD Survey fields more consistent with those used by other NCSES surveys.

Changes in reporting procedures or classification. To reduce the burden for institutions with minimal amounts of R&D expenditures, NCSES introduced a shorter version of the HERD Survey, beginning with the FY 2012 collection. The short-form survey includes four core questions. For the FY 2022 cycle, the short-form population included 263 institutions that reported R&D expenditures between \$150,000 and \$1 million during FY 2021. The remainder of the institutions (637) received the full version of the survey.

Short-form survey data for FYs 2012–2022 appear only in those tables that specify in their title that the data presented include data from the short-form version of the survey. Data from the short-form survey population are included in the year totals prior to FY 2012, aggregated under "all other surveyed institutions." The total FY 2022 R&D expenditures reported by institutions in the short-form survey population (\$161.5 million) represent 0.2% of the expenditures reported by all institutions (\$97.8 billion).

Definitions

- *Clinical trials.* Research studies designed to answer specific questions about the effects of drugs, vaccines, medical devices, tests, treatments, or other therapies for patients. Clinical trials are used to determine safety and effectiveness. Includes Phase I, Phase II, and Phase III clinical trials with human patients but excludes Phase IV clinical trials.
- *Contracts.* Legal commitments in which a good or service was provided by the reporting institution and benefited the sponsor. The sponsor specified the deliverables and gained the rights to the results.
- *Federal agency.* Any agency of the U.S. government. Expenditures were reported by six specific agency funding sources (the Department of Agriculture; Department of Defense; Department of Energy; Department of Health and Human Services, including the National Institutes of Health; National Aeronautics and Space Administration; and National Science Foundation). Any expenditures funded by other federal agencies were reported under Other. The names of agencies included in the Other category are also requested.

- *Fields of R&D.* A list of the 40 fields of R&D reported on can be found on the survey questionnaire. In the data tables, the fields are grouped into 10 major areas: computer and information sciences; engineering; geosciences, atmospheric sciences, and ocean sciences; life sciences; mathematics and statistics; physical sciences; psychology; social sciences; other sciences; and non-science and engineering.
- *Fiscal year.* Institution's financial year.
- *Foreign sources:*
 - *Foreign government.* All levels of foreign government, including national, regional, municipal, or other local government.
 - *Business.* Foreign for-profit organizations. Projects sponsored by a U.S. location of a foreign company were not considered foreign. Funds from a company's nonprofit foundation were not reported here; they were reported under Nonprofit organizations.
 - *Nonprofit organizations.* Foreign nonprofit foundations and organizations, except higher education institutions. Funds from foreign universities were reported under Higher education.
 - *Higher education.* Foreign colleges and universities and units owned, operated, and controlled by such institutions.
 - *All other sources.* International governmental organizations located in the United States, such as the United Nations, the World Bank, and the International Monetary Fund, and all other entities sending funds to the United States from a location outside the United States and its territories.
- *Full-time equivalents (FTEs).* Calculated as the total working effort spent on research during a specific period divided by the total effort representing a full-time schedule within the same period.
- *Medical schools.* A medical school awards MD or DO degrees. Expenditures from projects assigned to the medical school or to research centers that were organizationally part of the medical school were included.
- *Pass-through entity.* Organizations that pass through grant or contract funds to subrecipient organizations. Vendor relationships were not included.
- *Research and development (R&D).* R&D activity is creative and systematic work undertaken to increase the stock of knowledge—including knowledge of humankind, culture, and society—and to devise new applications of available knowledge. R&D covers three activities: basic research, applied research, and experimental development. R&D does not include public service or outreach programs, curriculum development (unless included as part of an overall research project), or non-research training grants. R&D as measured on this survey does not include capital projects (i.e., construction or renovation of research facilities).
- *R&D expenditures.* Expenditures for R&D activities from the institution's current operating funds that were separately accounted for. For the purposes of the survey, R&D includes expenditures for organized research as defined by 2 CFR 220 Part 200 Appendix III and expenditures from funds designated for research. Expenditures came from internal or external funding and included recovered and unrecovered indirect costs. Funds passed through to subrecipient organizations were also included. R&D was excluded if it was conducted by university faculty or staff at outside institutions and was not accounted for in the reporting institution's financial records.
- *R&D functions:*
 - *Researchers.* Professionals engaged in the conception or creation of new knowledge, products, processes, methods, and systems and also in the management of the projects concerned. Researchers contribute more to the creative aspects of R&D, whereas technicians provide technical support.

- *R&D technicians.* Persons whose main tasks require technical knowledge and experience in one or more fields of science or engineering, but who contribute to R&D by performing technical tasks such as computer programming, data analysis, ensuring accurate testing, operating lab equipment, and preparing and processing samples under the supervision of researchers.
- *R&D support staff.* Employees not directly involved with the conduct of a research project, but support the researchers and technicians. These employees might include clerical staff, financial and personnel administrators, report writers, patent agents, safety trainers, equipment specialists, and other related employees.
- *Sources of funds:*
 - *U.S. federal government.* Any agency of the U.S. government. Federal funds that were passed through to the reporting institution from another institution were included.
 - *State and local government.* Any state, county, municipality, or other local government entity in the United States, including state health agencies. State funds that supported R&D at agricultural and other experiment stations were included. Public institutions reported state appropriations restricted for R&D activities in this category.
 - *Business.* Domestic or foreign for-profit organizations. Funds from a company's nonprofit foundation were not reported here; they were reported under Nonprofit organizations.
 - *Nonprofit organizations.* Domestic or foreign nonprofit foundations and organizations, except universities and colleges. Funds from the reporting institution's 501(c)3 foundation were reported under Institutional funds. Funds from other universities and colleges were reported under All other sources.
 - *Institutional funds.* Includes institutionally financed research (all R&D funded by the institution from accounts that are only used for research, excluding institution research administration and support), cost sharing (committed), and unrecovered indirect costs (the portion of indirect costs associated with a sponsored project that was not reimbursed by the sponsor in accordance with the institution's negotiated indirect cost rate).
 - *All other sources.* Sources not reported in other categories, such as funds from foreign governments, foreign or U.S. universities, and gifts designated by the donors for research.
- *Subrecipient.* The subrecipient for an award carries out the work but receives the funds from a pass-through entity rather than directly from the original funding source. Subrecipients tend to be the coauthors of publications, writers of technical reports discussing findings, inventors, and similar. Vendor relationships were not included.
- *Type of cost.* R&D expenditures were reported in the following categories:
 - *Salaries, wages, and fringe benefits.* Includes compensation for all R&D personnel whether full time or part time; temporary or permanent; including salaries, wages, and fringe benefits paid from institution funds and from external support.
 - *Software purchases, noncapitalized and capitalized.* Includes payments for all software—both purchases of software packages and license fees for systems.
 - *Capitalized equipment.* Includes payments for movable equipment exceeding the institution's capitalization threshold, including ancillary costs such as delivery and setup.
 - *Pass-throughs to other organizations.* See the definition for *subrecipient*.
 - *Other direct costs.* Other costs that do not fit into one of the above categories, including (but not limited to) travel, tuition waivers, services such as consulting, computer usage fees, and supplies.
 - *Indirect costs.* Includes both recovered and unrecovered indirect costs.

- *Type of R&D.* R&D expenditures were reported in the following categories:
 - *Basic research.* Experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view.
 - *Applied research.* Original investigation undertaken to acquire new knowledge. It is directed primarily toward a specific, practical aim or objective.
 - *Experimental development.* Systematic work, drawing on knowledge gained from research and practical experience and producing additional knowledge, which is directed toward producing new products or processes or toward improving existing products or processes.

Technical Tables

Table	Title
A-1	Institution name changes between FY 2021 and FY 2022 Higher Education Research and Development Survey
A-2	Total and federally financed higher education R&D expenditures at surveyed institutions reporting less than \$150,000 in separately accounted for R&D expenditures: FY 2022
A-3	Institutions surveyed for the Higher Education Research and Development Survey, by highest degree granted and survey population: FYs 2017–22

Response rates: FY 2022

Table	Title
A-4	Response rates for the Higher Education Research and Development Survey, by survey population, highest degree granted, and institutional control: FY 2022
A-5	Response rates for the Higher Education Research and Development Survey, by survey form and question: FY 2022

Imputed amounts for higher education R&D expenditures: FY 2022

Table	Title
A-6	Imputed amounts for total higher education R&D expenditures, by survey population and highest degree granted: FY 2022
A-7	Imputed amounts for total higher education R&D expenditures, by survey population and source of funds: FY 2022
A-8	Imputed amounts for higher education R&D expenditures from foreign sources, by source of funds: FY 2022
A-9	Imputed amounts for externally financed higher education R&D expenditures, by type of agreement: FY 2022
A-10	Imputed amounts for higher education R&D expenditures in a medical school, by institutional control: FY 2022
A-11	Imputed amounts for higher education R&D expenditures in clinical trials, by source of funds: FY 2022

Imputed amounts for federally funded higher education R&D expenditures: FY 2022

Table	Title
A-12	Imputed amounts for total and federally financed higher education R&D expenditures, by type of R&D: FY 2022

Table	Title
A-13	Imputed amounts for total and federally financed higher education R&D expenditures received as a subrecipient, by survey population and type of pass-through entity: FY 2022
A-14	Imputed amounts for total and federally financed higher education R&D expenditures passed through, by survey population and type of subrecipient: FY 2022
A-15	Imputed amounts for total and federally financed higher education R&D expenditures at institutions in the standard form population, by R&D field: FY 2022
A-16	Imputed amounts for total and federally financed higher education R&D expenditures at institutions in the short form population, by R&D field: FY 2022
A-17	Imputed amounts for higher education R&D expenditures, by type of cost: FY 2022
A-18	Imputed amounts for total and federally financed higher education R&D equipment expenditures, by R&D field: FY 2022

Response details: FY 2022

Table	Title
A-19	Federally financed higher education R&D expenditures from federal agencies not specified in question 9: FY 2022
A-20	Response summary for question 13, capitalization thresholds, by highest degree granted, institutional control, and capitalization threshold: FY 2022

TABLE A-1

Institution name changes between FY 2021 and FY 2022 Higher Education Research and Development Survey

(Institution name)

FY 2021 survey	FY 2022 survey
Bluefield State C.	Bluefield State U.
Converse C.	Converse U.
Humboldt State U.	California State Polytechnic U., Humboldt
Moravian C.	Moravian U.
Touro C.	Touro U., New York
Touro U.	Touro U., California
Utica C.	Utica U.
Multiple campuses	Saint Joseph's U.
Saint Joseph's U.	
U. of the Sciences Philadelphia	

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE A-2

Total and federally financed higher education R&D expenditures at surveyed institutions reporting less than \$150,000 in separately accounted for R&D expenditures: FY 2022

(Dollars in thousands)

Institution	Total	Federally financed
All institutions	1,921	1,070
Albizu U.	113	0
California U. of Science and Medicine	119	19
Eastern Mennonite U.	144	144
Fielding Graduate U.	115	40
Goucher C.	149	70
Governors State U.	143	143
Mayville State U.	116	102
McMurry U.	123	94
Millsaps C.	118	98
Missouri Western State U.	119	82
Northeast C. of Health Sciences	91	0
Parker U.	144	0
Philander Smith C.	68	68
St. Thomas U.	98	80
SUNY, C. of Technology, Canton	53	53
Texas A&M U.-Texarkana	34	24
U. Houston system administration	0	0
U. Southern Indiana	134	13
Wheaton C., Norton	40	40

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE A-3

Institutions surveyed for the Higher Education Research and Development Survey, by highest degree granted and survey population: FYs 2017–22

(Number)

Highest degree granted	2017		2018		2019		2020		2021		2022	
	Short form population ^a	Standard form population	Short form population ^a	Standard form population	Short form population ^a	Standard form population	Short form population ^a	Standard form population	Short form population ^a	Standard form population	Short form population ^a	Standard form population
All respondents	255	643	265	646	267	647	261	655	260	648	263	637
Doctorate	66	464	76	467	73	473	77	474	81	478	83	473
Professional	42	35	44	34	45	32	44	37	42	37	41	37
Master's	101	105	96	102	104	95	96	98	92	93	97	85
Bachelor's	46	39	49	43	45	47	44	46	45	40	42	42

^a Institutions reporting less than \$1 million received a shorter version of the survey questionnaire in FYs 2017–22.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE A-4

Response rates for the Higher Education Research and Development Survey, by survey population, highest degree granted, and institutional control: FY 2022

(Number)

Survey population and type of institution	Number in survey universe	Complete responses	Partial responses	Total responses	Response rate (%)
All respondents	900	542	322	864	96.0
Standard form institutions	637	306	311	617	96.9
Doctorate	473	217	253	470	99.4
Professional	37	19	14	33	89.2
Master's	85	45	29	74	87.1
Bachelor's	42	25	15	40	95.2
Public	410	187	213	400	97.6
Private	227	119	98	217	95.6
Short form institutions	263	236	11	247	93.9
Doctorate	83	74	3	77	92.8
Professional	41	36	4	40	97.6
Master's	97	88	3	91	93.8
Bachelor's	42	38	1	39	92.9
Public	111	104	3	107	96.4
Private	152	132	8	140	92.1

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE A-5

Response rates for the Higher Education Research and Development Survey, by survey form and question: FY 2022

(Number)

Survey form and question	All respondents	Complete question responses	Partial question responses	Total question responses	Question nonresponses	Response rate (%)
Standard form						
Question 1	617	555	62	617	0	100.0
Question 2	617	597	8	605	12	98.1
Question 3	617	595	0	595	22	96.4
Question 4	617	615	0	615	2	99.7
Question 5	617	612	1	613	4	99.4
Question 6	617	568	10	578	39	93.7
Question 7	617	572	38	610	7	98.9
Question 8	617	577	33	610	7	98.9
Question 9	617	610	7	617	0	100.0
Question 10	617	612	1	613	4	99.4
Question 11	617	592	24	616	1	99.8
Question 12	617	481	132	613	4	99.4
Question 13	617	606	1	607	10	98.4
Question 14	617	597	5	602	15	97.6
Question 15	617	511	33	544	73	88.2
Question 16	617	421	14	435	182	70.5
Short form						
Question 1	247	237	10	247	0	100.0
Question 2	247	247	0	247	0	100.0
Question 3	247	245	1	246	1	99.6
Question 4	247	246	1	247	0	100.0

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE A-6

Imputed amounts for total higher education R&D expenditures, by survey population and highest degree granted: FY 2022

(Dollars in thousands)

Survey population and highest degree granted	All R&D expenditures	Imputed amount	Imputed amount as % of total
All universities and colleges	97,842,057	87,456	0.1
Standard form institutions	97,680,528	77,556	0.1
Doctorate-granting institutions	96,904,532	7,576	0.0
Nondoctorate-granting institutions	775,996	69,980	9.0
Short form institutions	161,529	9,900	6.1
Doctorate-granting institutions	51,070	3,271	6.4
Nondoctorate-granting institutions	110,459	6,629	6.0

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE A-7

Imputed amounts for total higher education R&D expenditures, by survey population and source of funds: FY 2022

(Dollars in thousands)

Survey population and source of funds	All R&D expenditures	Imputed amount	Imputed amount as % of total
Standard form institutions			
All sources	97,680,528	77,556	0.1
Federal government	53,971,468	37,219	0.1
State and local government	4,907,199	11,855	0.2
Institution funds	24,492,663	18,151	0.1
Institutionally financed research	16,612,295	14,305	0.1
Cost sharing	1,706,532	910	0.1
Unrecovered indirect costs	6,173,836	2,936	0.0
Business	5,701,656	1,580	0.0
Nonprofit organizations	5,974,155	5,267	0.1
All other sources	2,633,387	3,144	0.1
Short form institutions			
All sources	161,529	9,900	6.1
Federal government	81,137	4,989	6.1
State and local government	10,788	885	8.2
Institution funds	43,782	2,407	5.5
Institutionally financed research	36,869	2,150	5.8
Cost sharing	2,320	65	2.8
Unrecovered indirect costs	4,593	192	4.2
Business	5,012	417	8.3
Nonprofit organizations	15,922	1,107	7.0
All other sources	4,888	95	1.9

Note(s):

Imputation rate at total level is lower than imputation rates at detail levels because some institutions could provide totals but not details.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE A-8

Imputed amounts for higher education R&D expenditures from foreign sources, by source of funds: FY 2022

(Dollars in thousands)

Source of foreign funding	All R&D expenditures	Imputed amount	Imputed amount as % of total
All foreign funds	1,479,275	42,938	2.9
Foreign government	309,062	3,477	1.1
Business	708,214	31,530	4.5
Nonprofit organizations	333,327	11,804	3.5
Higher education institutions	101,329	3,651	3.6
All other sources	27,343	2,798	10.2

Note(s):

This table includes only institutions reporting \$1 million or more in total R&D expenditures in FY 2021. Institutions reporting less than \$1 million in total R&D expenditures in FY 2021 completed a shorter version of the survey form in FY 2022 that did not include this question.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE A-9

Imputed amounts for externally financed higher education R&D expenditures, by type of agreement: FY 2022

(Dollars in thousands)

Type of agreement	All R&D expenditures	Imputed amount	Imputed amount as % of total
All agreements	73,187,865	59,405	0.1
Contracts	17,403,926	511,857	2.9
Grants, reimbursements, and all other agreements	55,783,939	1,844,269	3.3

Note(s):

Imputation rate at total level is lower than imputation rates at detail levels because some institutions could provide totals but not details. This table includes only institutions reporting \$1 million or more in total R&D expenditures in FY 2021. Institutions reporting less than \$1 million in total R&D expenditures in FY 2021 completed a shorter version of the survey form in FY 2022 that did not include this question.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY2022.

TABLE A-10

Imputed amounts for higher education R&D expenditures in a medical school, by institutional control: FY 2022

(Dollars in thousands)

Institutional control	All R&D expenditures	Imputed amount	Imputed amount as % of total
All institutions	35,944,348	16,877	0.0
Public	19,335,012	784	0.0
Private	16,609,336	16,093	0.1

Note(s):

This table includes only institutions reporting \$1 million or more in total R&D expenditures in FY 2021. Institutions reporting less than \$1 million in total R&D expenditures in FY 2021 completed a shorter version of the survey form in FY 2022 that did not include this question.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

TABLE A-11

Imputed amounts for higher education R&D expenditures in clinical trials, by source of funds: FY 2022

(Dollars in thousands)

Source of funds	All R&D expenditures	Imputed amount	Imputed amount as % of total
All sources	4,142,673	26,018	0.6
Federally financed	1,892,665	27,051	1.4
Nonfederally financed	2,250,008	45,604	2.0

Note(s):

Imputation rate at total level is lower than imputation rates at detail levels because some institutions could provide totals but not details. This table includes only institutions reporting \$1 million or more in total R&D expenditures in FY 2021. Institutions reporting less than \$1 million in total R&D expenditures in FY 2021 completed a shorter version of the survey form in FY 2022 that did not include this question.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE A-12

Imputed amounts for total and federally financed higher education R&D expenditures, by type of R&D: FY 2022

(Dollars in thousands)

Type of R&D	Total			Federally financed		
	All R&D expenditures	Imputed amount	Imputed amount as % of total	All R&D expenditures	Imputed amount	Imputed amount as % of total
All types of R&D	97,680,528	77,556	0.1	53,971,468	37,219	0.1
Basic research	61,698,057	7,913,176	12.8	34,673,895	5,304,554	15.3
Applied research	26,722,947	3,525,216	13.2	14,880,303	2,144,953	14.4
Experimental development	9,259,524	1,128,430	12.2	4,417,270	583,179	13.2

Note(s):

Imputation rate at total level is lower than imputation rates at detail levels because some institutions could provide totals but not details. This table includes only institutions reporting \$1 million or more in total R&D expenditures in FY 2021. Institutions reporting less than \$1 million in total R&D expenditures in FY 2021 completed a shorter version of the survey form in FY 2022 that did not include this question.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE A-13

Imputed amounts for total and federally financed higher education R&D expenditures received as a subrecipient, by survey population and type of pass-through entity: FY 2022

(Dollars in thousands)

Survey population and type of pass-through entity	Total			Federally financed		
	All R&D expenditures	Imputed amount	Imputed amount as % of total	All R&D expenditures	Imputed amount	Imputed amount as % of total
Standard form institutions						
All pass-through entities ^a	9,705,518	1,149,598	11.8	8,444,853	56,246	0.7
From educational pass-through entities	4,693,719	469,182	10.0	4,274,260	32,387	0.8
From business	1,542,805	206,570	13.4	1,273,237	9,102	0.7
From nonprofit organizations	1,963,694	227,103	11.6	1,600,008	12,446	0.8
From other pass-through entities	1,505,300	161,744	10.7	1,297,348	12,932	1.0
Short form institutions ^b						
From educational pass-through entities	21,262	578	2.7	19,170	552	2.9

^a Imputation rate at total level is lower than imputation rates at detail levels because some institutions could provide totals but not details.

^b Institutions in the short form population were asked to provide R&D expenditures received as a subrecipient from educational pass-through entities only.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY2022.

TABLE A-14

Imputed amounts for total and federally financed higher education R&D expenditures passed through, by survey population and type of subrecipient: FY 2022

(Dollars in thousands)

Survey population and type of subrecipient	Total			Federally financed		
	All R&D expenditures	Imputed amount	Imputed amount as % of total	All R&D expenditures	Imputed amount	Imputed amount as % of total
Standard form institutions						
All subrecipients ^a	8,521,194	15,596	0.2	7,336,299	18,044	0.2
To educational subrecipients	4,680,744	676,979	14.5	4,205,105	567,616	13.5
To businesses	1,583,550	214,430	13.5	1,283,633	172,899	13.5
To nonprofit organizations	1,518,369	182,373	12.0	1,284,950	146,927	11.4
To other pass-through entities	738,531	180,262	24.4	562,611	143,611	25.5
Short form institutions ^b						
To educational subrecipients	3,321	113	3.4	2,588	105	4.1

^a Imputation rate at total level is lower than imputation rates at detail levels because some institutions could provide totals but not details.

^b Institutions in the short form population were asked to provide R&D expenditures passed through to educational subrecipients only.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE A-15

Imputed amounts for total and federally financed higher education R&D expenditures at institutions in the standard form population, by R&D field: FY 2022

(Dollars in thousands)

R&D field	Total			Federally financed		
	All R&D expenditures	Imputed amount	Imputed amount as % of total	All R&D expenditures	Imputed amount	Imputed amount as % of total
All R&D fields	97,680,528	77,216	0.1	53,971,468	37,219	0.1
All science and engineering	91,822,920	844,263	0.9	52,480,716	269,266	0.5
Computer and information sciences	3,224,949	15,596	0.5	2,184,767	2,511	0.1
Geosciences, atmospheric sciences, and ocean sciences	3,690,235	138,856	3.8	2,478,702	130,373	5.3
Atmospheric science and meteorology	668,918	31,078	4.6	528,068	26,210	5.0
Geological and earth sciences	1,370,650	77,107	5.6	875,493	54,528	6.2
Ocean sciences and marine sciences	1,211,130	50,287	4.2	785,545	40,586	5.2
Geosciences, atmospheric sciences, and ocean sciences nec	439,537	17,140	3.9	289,596	9,049	3.1
Life sciences	56,498,207	431,758	0.8	30,958,717	29,825	0.1
Agricultural sciences	3,935,731	11,518	0.3	1,265,977	5,139	0.4
Biological and biomedical sciences	18,161,442	119,760	0.7	10,949,628	11,731	0.1
Health sciences	31,869,957	285,669	0.9	17,494,324	12,583	0.1
Natural resources and conservation	1,012,919	14,125	1.4	480,042	243	0.1
Life sciences nec	1,518,158	686	0.0	768,746	129	0.0
Mathematics and statistics	879,526	5,990	0.7	537,322	978	0.2
Physical sciences	6,167,583	27,253	0.4	4,212,405	6,134	0.1
Astronomy and astrophysics	813,900	2,452	0.3	581,652	225	0.0
Chemistry	2,126,741	8,314	0.4	1,322,328	2,965	0.2
Materials science	286,461	614	0.2	195,404	1	0.0
Physics	2,669,076	13,073	0.5	1,941,833	2,257	0.1
Physical sciences nec	271,405	2,800	1.0	171,188	686	0.4
Psychology	1,443,894	4,797	0.3	875,330	1,206	0.1
Social sciences	3,165,440	22,234	0.7	1,075,470	11,219	1.0
Anthropology	132,764	246	0.2	40,119	50	0.1
Economics	667,707	9,662	1.4	194,381	4,517	2.3
Political science and government	488,480	1,332	0.3	95,363	370	0.4
Sociology, demography, and population studies	616,142	1,438	0.2	272,683	222	0.1
Social sciences nec	1,260,347	9,556	0.8	472,924	6,060	1.3
Sciences nec	1,156,452	3,939	0.3	463,625	5	0.0
Engineering	15,596,634	150,373	1.0	9,694,378	87,015	0.9
Aerospace, aeronautical, and astronautical engineering	1,647,191	14,607	0.9	1,246,002	8,416	0.7
Bioengineering and biomedical engineering	1,726,307	10,314	0.6	1,100,258	152	0.0
Chemical engineering	1,108,245	1,945	0.2	646,644	290	0.0
Civil engineering	1,647,038	13,290	0.8	784,286	9,032	1.2
Electrical, electronic, and communications engineering	3,436,892	68,219	2.0	2,484,203	44,355	1.8
Industrial and manufacturing engineering	615,228	3,595	0.6	434,246	149	0.0
Mechanical engineering	2,062,508	36,080	1.7	1,409,792	23,018	1.6
Metallurgical and materials engineering	886,681	4,679	0.5	589,129	218	0.0
Engineering nec	2,466,544	4,963	0.2	999,818	1,622	0.2
All non-science and engineering	5,857,608	23,304	0.4	1,490,752	3,539	0.2

TABLE A-15

Imputed amounts for total and federally financed higher education R&D expenditures at institutions in the standard form population, by R&D field: FY 2022

(Dollars in thousands)

R&D field	Total			Federally financed		
	All R&D expenditures	Imputed amount	Imputed amount as % of total	All R&D expenditures	Imputed amount	Imputed amount as % of total
Business management and business administration	1,081,380	2,690	0.2	97,962	388	0.4
Communication and communications technologies	213,000	442	0.2	42,707	50	0.1
Education	1,740,784	3,705	0.2	783,518	1,846	0.2
Humanities	713,685	12,866	1.8	68,956	607	0.9
Law	358,693	336	0.1	32,391	62	0.2
Social work	363,079	830	0.2	181,943	111	0.1
Visual and performing arts	224,572	1,226	0.5	21,188	96	0.5
Non-science and engineering nec	1,162,415	1,209	0.1	262,087	379	0.1

nec = not elsewhere classified.

Note(s):

Imputation rate at total level is lower than imputation rates at detail levels because some institutions could provide totals but not details. This table includes only institutions reporting \$1 million or more in total R&D expenditures in FY 2021. Institutions reporting less than \$1 million in total R&D expenditures in FY 2021 completed a shorter version of the survey form in FY 2022 that did not include this question.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE A-16

Imputed amounts for total and federally financed higher education R&D expenditures at institutions in the short form population, by R&D field: FY 2022

(Dollars in thousands)

R&D field	Total			Federally financed		
	All R&D expenditures	Imputed amount	Imputed amount as % of total	All R&D expenditures	Imputed amount	Imputed amount as % of total
All R&D fields	161,529	9,900	6.1	81,137	4,989	6.1
All science and engineering	128,181	6,856	5.3	69,859	4,211	6.0
Computer and information sciences	7,149	650	9.1	4,773	467	9.8
Geosciences, atmospheric sciences, and ocean sciences	9,705	205	2.1	6,304	127	2.0
Life sciences	57,774	3,080	5.3	29,625	1,721	5.8
Mathematics and statistics	3,220	103	3.2	2,161	57	2.6
Physical sciences	21,582	853	4.0	14,069	466	3.3
Psychology	3,811	228	6.0	1,684	136	8.1
Social sciences	12,526	1,280	10.2	4,652	1,026	22.1
Sciences nec	4,800	3	0.1	1,322	2	0.2
Engineering	7,614	454	6.0	5,269	209	4.0
All non-science and engineering	33,348	3,044	9.1	11,278	778	6.9

nec = not elsewhere classified.

Note(s):

Imputation rate at total level is lower than imputation rates at detail levels because some institutions could provide totals but not details.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE A-17

Imputed amounts for higher education R&D expenditures, by type of cost: FY 2022

(Dollars in thousands)

Type of cost	All R&D expenditures	Imputed amount	Imputed amount as % of total
All costs	97,680,528	77,556	0.1
Direct costs	75,399,863	2,846,301	3.8
Salaries, wages, and fringe benefits	43,076,988	388,888	0.9
Software purchases	192,819	3,954	2.1
Noncapitalized	178,059	3,695	2.1
Capitalized	14,760	259	1.8
Capitalized equipment	2,700,652	9,844	0.4
Passed through to subrecipients	8,521,194	15,596	0.2
Other direct costs	20,908,210	584,840	2.8
Indirect costs	22,280,665	136,454	0.6

Note(s):

Imputation rate at total level is lower than imputation rates at detail levels because some institutions could provide totals but not details. This table includes only institutions reporting \$1 million or more in total R&D expenditures in FY 2021. Institutions reporting less than \$1 million in total R&D expenditures in FY 2021 completed a shorter version of the survey form in FY 2022 that did not include this question.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE A-18

Imputed amounts for total and federally financed higher education R&D equipment expenditures, by R&D field: FY 2022

(Dollars in thousands)

R&D field	Total			Federally financed		
	All R&D expenditures	Imputed amount	Imputed amount as % of total	All R&D expenditures	Imputed amount	Imputed amount as % of total
All R&D fields	2,700,652	9,844	0.4	1,336,692	6,231	0.5
All science and engineering	2,646,967	101,573	3.8	1,326,448	33,595	2.5
Computer and information sciences	136,868	10,917	8.0	78,813	2,246	2.8
Geosciences, atmospheric sciences, and ocean sciences	136,651	5,001	3.7	85,617	1,174	1.4
Atmospheric science and meteorology	23,944	705	2.9	18,413	108	0.6
Geological and earth sciences	47,613	1,929	4.1	22,360	351	1.6
Ocean sciences and marine sciences	52,689	1,788	3.4	36,435	329	0.9
Geosciences, atmospheric sciences, and ocean sciences nec	12,405	579	4.7	8,409	386	4.6
Life sciences	1,056,808	19,185	1.8	429,317	11,346	2.6
Agricultural sciences	120,530	475	0.4	33,636	318	0.9
Biological and biomedical sciences	485,746	10,508	2.2	231,374	6,261	2.7
Health sciences	408,455	7,950	1.9	149,025	4,646	3.1
Natural resources and conservation	13,797	235	1.7	5,278	116	2.2
Life sciences nec	28,280	17	0.1	10,004	5	0.0
Mathematics and statistics	10,648	4,212	39.6	5,277	1,189	22.5
Physical sciences	408,769	14,028	3.4	262,166	4,307	1.6
Astronomy and astrophysics	27,500	1,564	5.7	17,656	623	3.5
Chemistry	139,819	3,039	2.2	78,071	1,456	1.9
Materials science	22,064	24	0.1	16,928	24	0.1
Physics	198,354	7,804	3.9	136,324	2,032	1.5
Physical sciences nec	21,032	1,597	7.6	13,187	172	1.3
Psychology	14,616	333	2.3	6,886	218	3.2
Social sciences	21,001	1,082	5.2	6,247	582	9.3
Anthropology	2,944	17	0.6	308	7	2.3
Economics	2,346	441	18.8	1,191	214	18.0
Political science and government	1,640	90	5.5	740	38	5.1
Sociology, demography, and population studies	1,882	216	11.5	263	65	24.7
Social sciences nec	12,189	318	2.6	3,745	258	6.9
Sciences nec	58,822	1,692	2.9	12,089	423	3.5
Engineering	802,784	45,123	5.6	440,036	12,110	2.8
Aerospace, aeronautical, and astronautical engineering	72,887	5,805	8.0	48,599	1,293	2.7
Bioengineering and biomedical engineering	67,216	1,940	2.9	33,218	1,098	3.3
Chemical engineering	62,492	735	1.2	33,584	273	0.8
Civil engineering	48,545	346	0.7	24,667	99	0.4
Electrical, electronic, and communications engineering	181,826	19,790	10.9	124,371	4,657	3.7
Industrial and manufacturing engineering	26,538	3,562	13.4	16,102	796	4.9
Mechanical engineering	100,619	9,125	9.1	62,624	3,014	4.8
Metallurgical and materials engineering	66,604	859	1.3	43,734	198	0.5
Engineering nec	176,057	2,961	1.7	53,137	682	1.3
All non-science and engineering	53,685	834	1.6	10,244	200	2.0

TABLE A-18

Imputed amounts for total and federally financed higher education R&D equipment expenditures, by R&D field: FY 2022

(Dollars in thousands)

R&D field	Total			Federally financed		
	All R&D expenditures	Imputed amount	Imputed amount as % of total	All R&D expenditures	Imputed amount	Imputed amount as % of total
Business management and business administration	8,885	151	1.7	916	29	3.2
Communication and communications technologies	4,102	13	0.3	900	8	0.9
Education	4,331	226	5.2	1,294	86	6.6
Humanities	3,092	260	8.4	237	50	21.1
Law	779	55	7.1	110	2	1.8
Social work	530	46	8.7	160	13	8.1
Visual and performing arts	2,563	46	1.8	99	3	3.0
Non-science and engineering nec	29,403	37	0.1	6,528	9	0.1

nec = not elsewhere classified.

Note(s):

Imputation rate at total level is lower than imputation rates at detail levels because some institutions could provide totals but not details. This table includes only institutions reporting \$1 million or more in total R&D expenditures in FY 2021. Institutions reporting less than \$1 million in total R&D expenditures in FY 2021 completed a shorter version of the survey form in FY 2022 that did not include this question.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE A-19

Federally financed higher education R&D expenditures from federal agencies not specified in question 9: FY 2022

(Dollars in thousands)

Federal agency	R&D expenditures
All other federal agencies	3,634,675
Agency for International Development	199,750
Appalachian Regional Commission	1,416
Central Intelligence Agency	1,927
Consumer Financial Protection Bureau	24
Consumer Product Safety Commission	1,131
Corporation for National and Community Service	5,998
Delta Regional Authority	56
Department of Agriculture ^a	11
Department of Commerce	793,601
Department of Defense ^a	3,101
Department of Education	638,700
Department of Health and Human Services ^a	1,785
Department of Homeland Security	163,987
Department of Housing and Urban Development	18,265
Department of Justice	119,191
Department of Labor	37,932
Department of State	53,033
Department of the Interior	328,902
Department of the Treasury	30,995
Department of Transportation	490,920
Department of Veterans Affairs	105,035
Election Assistance Commission	103
Environmental Protection Agency	93,621
Executive Office of the President	5,373
Federal Communications Commission	1,562
Federal Trade Commission	635
General Services Administration	1,044
Institute of Museum and Library Services	7,304
Institute of Peace	61
Millennium Challenge Corporation	2,774
National Aeronautics and Space Administration ^a	284
National Archives and Records Administration	1,751
National Endowment for the Arts	2,200
National Endowment for the Humanities	17,549
National Gallery of Art	242
Northern Border Regional Commission	18
Nuclear Regulatory Commission	7,907
Office of Personnel Management	3,241
Office of the Director of National Intelligence	32,762
Postal Service	134
Securities and Exchange Commission	662
Small Business Administration	29,949
Smithsonian Institution	2,266
Social Security Administration	14,449
Tennessee Valley Authority	2,170
Other agencies not listed ^b	410,854

^a This table includes a small amount of expenditures that originated from the Departments of Agriculture, Defense, and Health and Human Services and the National Aeronautics and Space Administration that are explicitly included in Question 9. These expenditures were submitted by four institutions that did not move those expenditures to Question 9 before survey close.

^b Some funding sources were not identified for security reasons or because the original source was not known.

Note(s):

This table includes only institutions reporting \$1 million or more in total R&D expenditures in FY 2021. Institutions reporting less than \$1 million in total R&D expenditures in FY 2021 completed a shorter version of the survey form in FY 2022 that did not include this question.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

TABLE A-20

Response summary for question 13, capitalization thresholds, by highest degree granted, institutional control, and capitalization threshold: FY 2022

(Number)

Capitalization thresholds	All institutions	Highest degree granted		Institutional control	
		Doctorate	Nondoctorate	Public	Private
Equipment					
Do not capitalize	8	4	4	5	3
500	2	2	0	0	2
1,000	11	8	3	3	8
1,500	1	1	0	0	1
2,000	4	2	2	1	3
2,500	7	5	2	1	6
3,000	12	10	2	1	11
3,500	1	1	0	1	0
5,000	526	413	113	371	155
7,500	1	1	0	0	1
10,000	15	10	5	3	12
15,000	1	0	1	0	1
25,000	9	3	6	1	8
50,000	1	1	0	0	1
100,000	1	0	1	1	0
250,000	4	2	2	4	0
1,000,000	1	1	0	0	1
5,000,000	1	0	1	0	1
Software					
Do not capitalize	97	70	27	59	38
500	1	1	0	0	1
1,000	11	6	5	3	8
1,500	1	1	0	0	1
2,000	1	1	0	0	1
2,500	3	2	1	0	3
3,000	12	8	4	3	9
5,000	270	199	71	164	106
7,500	1	1	0	0	1
10,000	18	11	7	6	12
15,000	1	0	1	0	1
20,000	1	0	1	0	1
25,000	13	8	5	3	10
50,000	11	11	0	5	6
75,000	2	2	0	1	1
100,000	98	84	14	91	7
140,000	1	1	0	1	0
200,000	3	3	0	3	0
250,000	17	15	2	14	3
300,000	1	1	0	0	1
400,000	3	3	0	3	0
500,000	14	14	0	11	3
1,000,000	22	18	4	21	1
4,000,000	2	2	0	2	0
5,000,000	1	1	0	1	0

Note(s):

This table includes only institutions reporting \$1 million or more in total R&D expenditures in FY 2021. Institutions reporting less than \$1 million in total R&D expenditures in FY 2021 completed a shorter version of the survey form in FY 2022 that did not include this question.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2022.

Acknowledgments and Suggested Citation

Acknowledgments

Michael T. Gibbons of the National Center for Science and Engineering Statistics (NCSES) developed and coordinated this report under the guidance of Amber Levanon Seligson, NCSES Program Director, and the leadership of Emilda B. Rivers, NCSES Director; Christina Freyman, NCSES Deputy Director; and John Finamore, NCSES Chief Statistician. Jock Black (NCSES) reviewed the report.

Under contract to NCSES, ICF conducted the survey and prepared the data. ICF staff members who made significant contributions include Kathryn Harper, Project Director; Madelyn Roeder, Deputy Project Director; Jennifer Greer, Data Management Lead; Sindhura Geda, Data Management Specialist; Bridget Beavers, Data Management Specialist; Alison Celigo, Data Management Specialist; Cameron Shanton, Data Collection Specialist; Audrey Nankobogo, Data Collection Specialist; Henry LeVee, Data Collection Specialist; Vladimer Shioshvili, Survey Systems Lead.

NCSES thanks the research-performing academic institutions that provided information for this report.

Suggested Citation

National Center for Science and Engineering Statistics (NCSES). 2023. *Higher Education Research and Development: Fiscal Year 2022*. NSF 24-308. Alexandria, VA: National Science Foundation. Available at <https://nces.nsf.gov/surveys/higher-education-research-development/2022>.

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