



**Georgia Tech**  **Institutional Research and Planning**



# Research & Development Expenditures (R&D) and Trends FY2016-2020

Prepared by Institutional Research and Planning

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# Executive Summary

## Purpose and Rationale

This report is intended to provide insights regarding Georgia Institute of Technology's Research and Development (R&D) expenditures. The Office of Institutional Research and Planning conducted a trend analysis of Georgia Tech's R&D expenditures using the National Center for Science and Engineering Statistics (NCSES) through the National Science Foundation's (NSF) Higher Education Research and Development Survey (HERD) data for FY2020 for Georgia Tech and FY2015-2019 data for peer institutions. In addition to Georgia Tech's peer institutions, other research institutions whose R&D expenditures ranked among the top 25 nationally were also included in this report as basis for comparing (a) overall R&D expenditures, (b) sources of funding, (c) funding agencies, and (d) expenditures by discipline. The FY2020 HERD survey data for peer institutions have not been released yet; therefore, FY2020 R&D expenditures among the top research institutions cannot be compared at this time.

## Summary of Findings

- Nationally, Georgia Tech ranked 21st in Research and Development expenditures in FY2019 at \$960.17M, and is expected to increase in ranking for FY2020 with a record \$1,048.99M in Research and Development expenditures reported for FY2020. National rankings for FY2020 are expected to be released in Fall 2021.
- Georgia Tech's R&D expenditures have continued to increase each year with the greatest increase reported in FY2020 at \$1,048.99M, which is a \$88.82M increase over prior year FY2019 (See Figures 1 and 2).
- Georgia Tech's U.S. Federal funding has continued to increase since FY2016 with the greatest increase in FY2020 by \$74.31M over the prior year. State & Local Government funding has also continued to increase since FY2017 with \$107.48M reported for FY2020 (See Table 1).
- As previously described in the FY2019 report, the decrease in Institutional funding for FY2017 (\$91.53M) could be related to an increase in both U.S. Federal and State & Local Government funding (See Table 1). Research that was previously funded by the institution was later funded by U.S. Federal and/or State & Local Government. Additionally, there was an error in the HERD survey's category of institutionally financed research. NSF-NCSES discovered varying definitions of what should be included on the HERD Survey as institutionally funded research. Therefore, some adjustments were made based on differences in definitional interpretations. The FY2018 and FY2019 survey instrument was revised to include further guidance around funding sources and disciplines.
- For FY2019 Georgia Tech ranked 2<sup>nd</sup> among peer institutions in Department of Defense (DoD) funding for the third consecutive year. DoD funding has \$56.85M to \$580.25M. (See Table 1 and Figure 8). Nonfederal funding has increased by \$14.51M, with steady year-over-year increases, with the exception of a small decrease in FY2017.
- Engineering accounts for the majority of Georgia Tech's R&D Expenditures at 69.18%, followed by Computer & Information Sciences at 16.07% (See Figure 7).

(Summary of Findings continued on next page)

(Summary of Findings continued)

- Other Sciences, Social Sciences, and certain Non-S&E Fields expenditures were reclassified by discipline based on the changes in the definitions provided by the National Center for Science and Engineering Statistics (NCSES). Prior to FY2017 Psychology, Other Life Science, and certain Physical Sciences disciplines were grouped and reported with either Social Sciences or Non-S&E Fields. Thus, increases in certain disciplines are the result of the reclassification of NSF R&D disciplines and fields of study, which may also have impacted the decrease in R&D expenditures for Social Sciences seen in FY2017 – FY2019.
- Likewise, disciplines that were previously grouped and reported under Other Sciences are now reported as disciplines classified as either Social Sciences, Life Sciences, or Physical Sciences, which may be an attributing factor to the increase in Social Sciences for FY2020.

### *FY2019 R&D Rankings among Top Research Institutions*

- For FY2019 Georgia Tech ranked 8th in R&D Expenditures funded by the State and Local Government, and 8th for U.S. Federal Government, which are also Georgia Tech’s largest types of sponsored awards (See Table 2).
- Among the top research institutions, Georgia Tech ranked 2nd in R&D expenditures funded by the U.S. Department of Defense (DoD), which is also the institution’s largest source of federal funds.
- For FY2019 Georgia Tech ranked 2nd in Engineering expenditures and 3rd in Computer and Information Sciences expenditures.

R&D (\$) by Funding Source	R&D (\$) by Funding Agency	R&D (\$) by Discipline
<ul style="list-style-type: none"> <li>• U.S. Federal Gov. (\$716.21M) – 8<sup>th</sup></li> <li>• State and Local Government (\$92.59M) – 8<sup>th</sup></li> <li>• Business (\$66.78M) – 20<sup>th</sup></li> <li>• Institutional Funds (\$70.90M) – 92<sup>nd</sup></li> <li>• Nonprofit Organizations (\$13.39M) – 94<sup>th</sup></li> <li>• All Other Sources (\$0.3M) – 233<sup>rd</sup></li> </ul>	<ul style="list-style-type: none"> <li>• DoD (\$523.40M) – 2<sup>nd</sup></li> <li>• NASA (\$39.94M) – 7<sup>th</sup></li> <li>• NSF (\$75.69M) – 16<sup>th</sup></li> <li>• ENERGY (\$16.08M) – 34<sup>th</sup></li> <li>• HHS (\$41.45M) – 108<sup>th</sup></li> <li>• USDA (\$1.06M) – 110<sup>th</sup></li> <li>• Other Federal Agencies (\$18.59M) – 50<sup>th</sup></li> <li>• Nonfederal (\$243.96M) – 53<sup>rd</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Engineering (\$664.70M) – 2<sup>nd</sup></li> <li>• Computer &amp; Info Sciences (\$164.66M) – 3<sup>rd</sup></li> <li>• Mathematics &amp; Statistics (\$8.06M) – 22<sup>nd</sup></li> <li>• Geo, Atmos, and Ocean Sciences (\$12.26M) – 59<sup>th</sup></li> <li>• Physical Sciences (\$38.23M) – 38<sup>th</sup></li> <li>• Non-S&amp;E Fields (\$29.09M) – 52<sup>nd</sup></li> <li>• Life Sciences (\$33.85M) – 158<sup>th</sup></li> <li>• Social Sciences (\$5.77M) – 101<sup>st</sup></li> <li>• Psychology (\$3.55M) – 104<sup>th</sup></li> </ul>

## Research Questions

- RQ1. What are Georgia Institute of Technology’s Research and Development trends for FY2016 – FY2020 in terms of (a) overall R&D expenditures, (b) source of funding, (c) funding agency, and (d) expenditures by discipline?
- RQ2. How does Georgia Institute of Technology’s Research and Development compare to its national peers in terms of **overall expenditures** for FY2016 – FY2019?

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(Research Questions Continued)

RQ3. How does Georgia Institute of Technology's Research and Development compare to its national peers in terms of **source of funding** for FY2015 – FY2019?

RQ4. How does Georgia Institute of Technology's Research and Development compare to its national peers in terms of **funding agency** for FY2015 – FY2019?

RQ5. How does Georgia Institute of Technology's Research and Development compare to its national peers in terms of **research disciplines** for FY2015 – FY2019?

## Results

### R&D Trends at Georgia Institute of Technology

RQ1. *What are Georgia Institute of Technology's Research and Development trends for FY2016 – FY2020 in terms of (a) overall R&D expenditures, (b) source of funding, (c) funding agency, and (d) expenditures by discipline?*

#### Overall R&D Expenditures

- Georgia Tech's R&D expenditures have increased each year, with the greatest increase in FY2020 at \$88.82M (See Figure 1).
- While there were some decreases in expenditures by funding source for certain disciplines, such as Physical Sciences, other disciplines have seen a large increase. There was a significant increase in Social Sciences from \$5.77M in FY2019 to \$33.65M in FY2020.
- Computer & Information Sciences, Engineering, Life Sciences, and Non-S&E Fields have all continued to trend upward in R&D expenditures (See Tables 2; See also Figure 7, 8 &10).

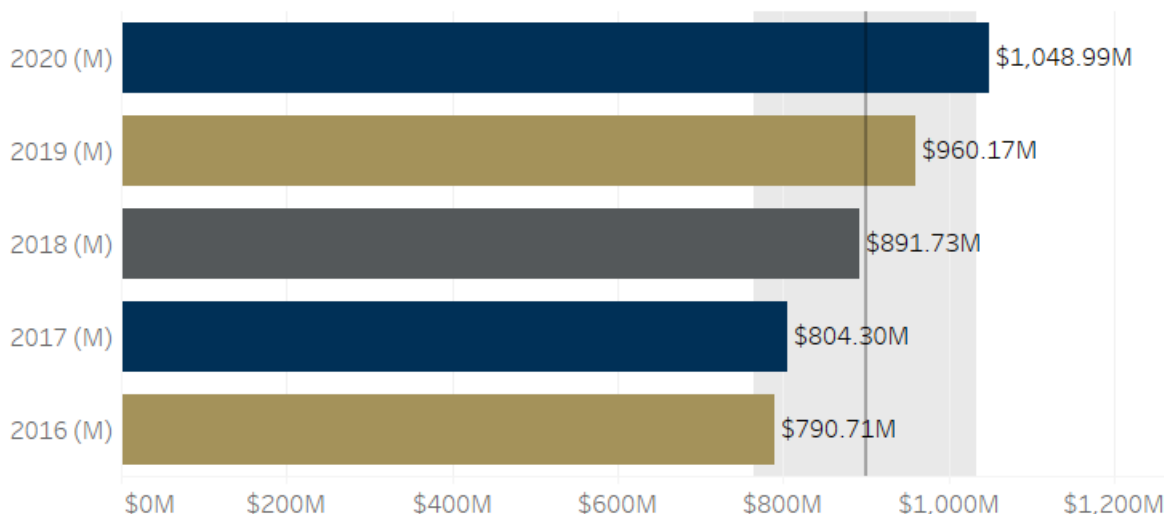


Figure 1: Georgia Tech's R&D Expenditures (FY2016-2020)



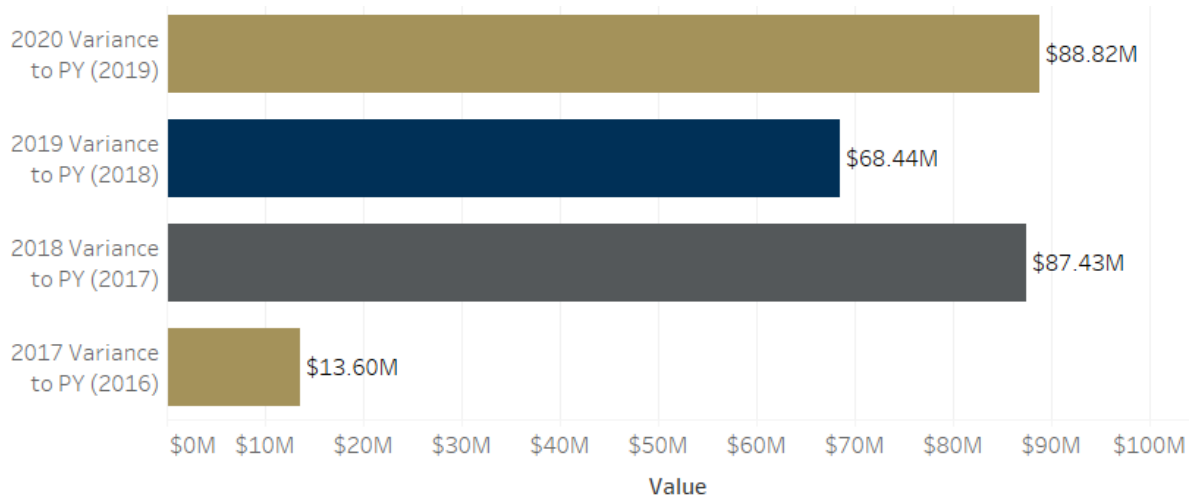


Figure 2: Changes in Georgia Tech’s R&D Expenditures (FY2016-2020)

### Source of Funding

- Georgia Tech’s R&D expenditures funded by the U.S. Federal Government have increased since FY2016 with the greatest increase in FY2020 by \$74.31M. Likewise, State & Local Government, Business, and Nonprofit funding have also continued to increase (See Table 1).
- As previously described in the FY2019 report, the decrease in Institutional funding for FY2017 (\$91.53M) could be related to an increase in both U.S. Federal and State & Local Government funding (See Table 1). Research that was previously funded by the institution was later funded by U.S. Federal and/or State & Local Government. Additionally, there was an error in the HERD survey’s category of institutionally financed research. NSF-NCSES discovered varying definitions of what should be included on the HERD Survey as institutionally funded research. Therefore, some adjustments were made based on differences in definitional interpretations. The FY2018 and FY2019 survey instrument was revised to include further guidance around funding sources and disciplines

Year		R&D Types of Funding					
		U.S. Federal Gov.	State & Local Gov.	Institutional Funds	Business	Nonprofit Org.	All Other Sources
FY2020	2020	\$790.52 M	\$107.48 M	\$71.37 M	\$63.12 M	\$14.20 M	\$2.30 M
	Var. to PY	\$74.31 M	\$14.89 M	\$0.48 M	(\$3.66M)	\$0.81 M	\$2.00 M
FY2019	2019	\$716.21 M	\$92.59 M	\$70.90 M	\$66.78 M	\$13.39 M	\$0.30 M
	Var. to PY	\$61.33 M	\$6.40 M	\$2.95 M	\$9.18 M	(\$10.67M)	(\$0.75M)
FY2018	2018	\$654.88 M	\$86.19 M	\$67.95 M	\$57.60 M	\$24.06 M	\$1.05 M
	Var. to PY	\$69.99 M	\$0.52 M	\$6.97 M	\$3.32 M	\$11.61 M	(\$4.98M)
FY2017	2017	\$584.89 M	\$85.67 M	\$60.99 M	\$54.28 M	\$12.45 M	\$6.03 M
	Var. to PY	\$16.46 M	\$78.18 M	(\$91.53M)	\$7.81 M	\$1.51 M	\$1.17 M
FY2016	2016	\$568.43 M	\$7.49 M	\$152.52 M	\$46.48 M	\$10.94 M	\$4.86 M
Average (μ)		\$662.98 M	\$75.88 M	\$84.75 M	\$57.65 M	\$15.01 M	\$2.91 M

Table 1: R&D Expenditures by Funding Type (FY2016-2020)

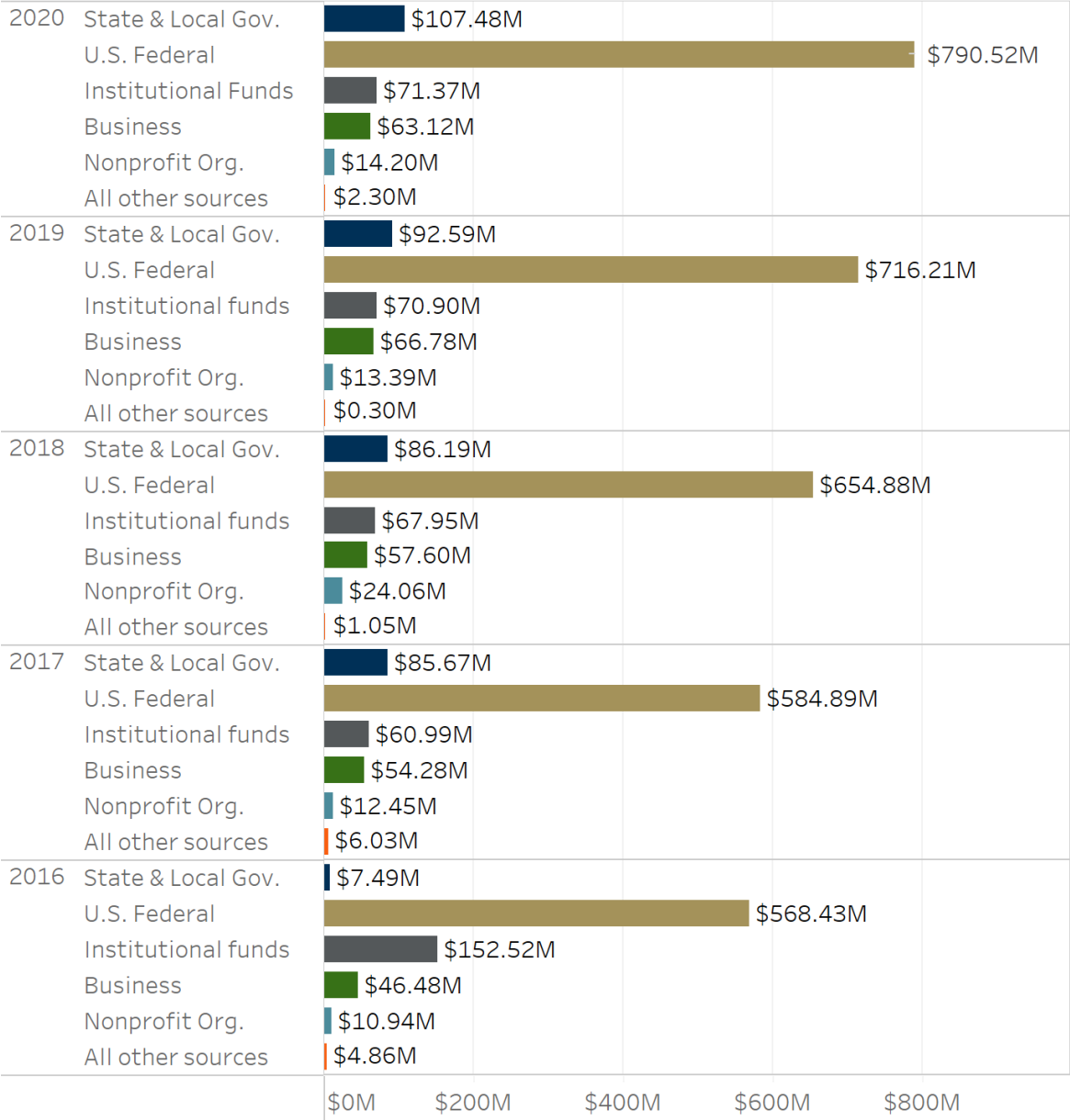


Figure 3: Georgia Tech’s R&D Expenditures by Funding Type (FY2016-2020)



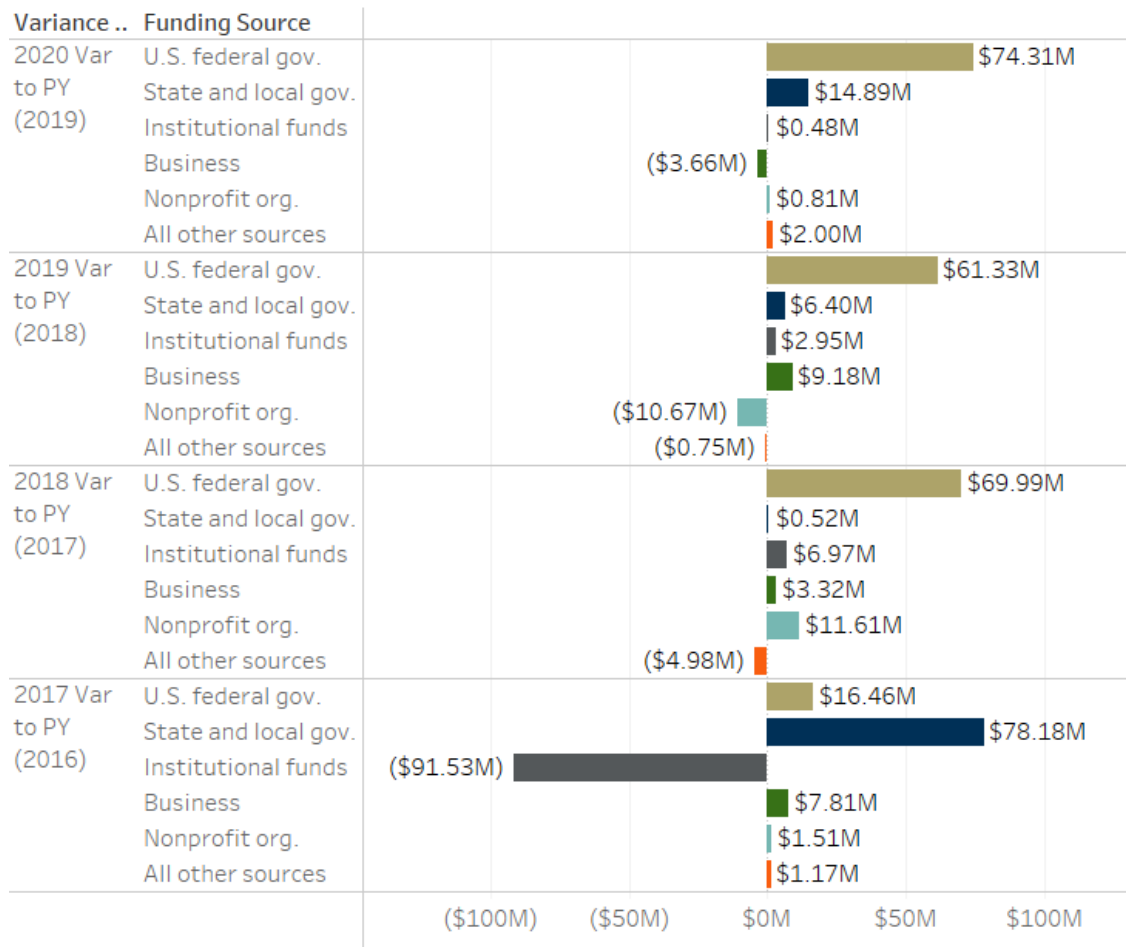


Figure 4: Changes in Georgia Tech’s R&D Expenditures by Funding Type (FY2016-2020)

### Funding Agencies

- R&D expenditures funded by USDA, NASA, and NSF have remained stable, however, there was a noticeable increase in NASA funding in FY2019.
- With the exception of FY2017, R&D funded by DoD (\$580.25M for FY2020) has continued to increase with the greatest increase in FY2019 at \$523.40M, which was an 18.05% increase (\$80.00M) over FY2018. Similarly, with the exception of FY2017 Nonfederal funding has continued to increase with the greatest increase in FY2020 up by \$14.51M (5.95%) from FY2019.

**Note:**

- **Nonfederal** sources refers to sources not funded by a U.S. federal agency and includes sources such as Business, Institutional, State and Local Government, Nonprofit Organizations, and other sources not funded by the federal government.
- **Other** refers to other U.S. federal agencies not listed as one of the seven major agencies for R&D expenditures as identified by the National Science Foundation (NSF).

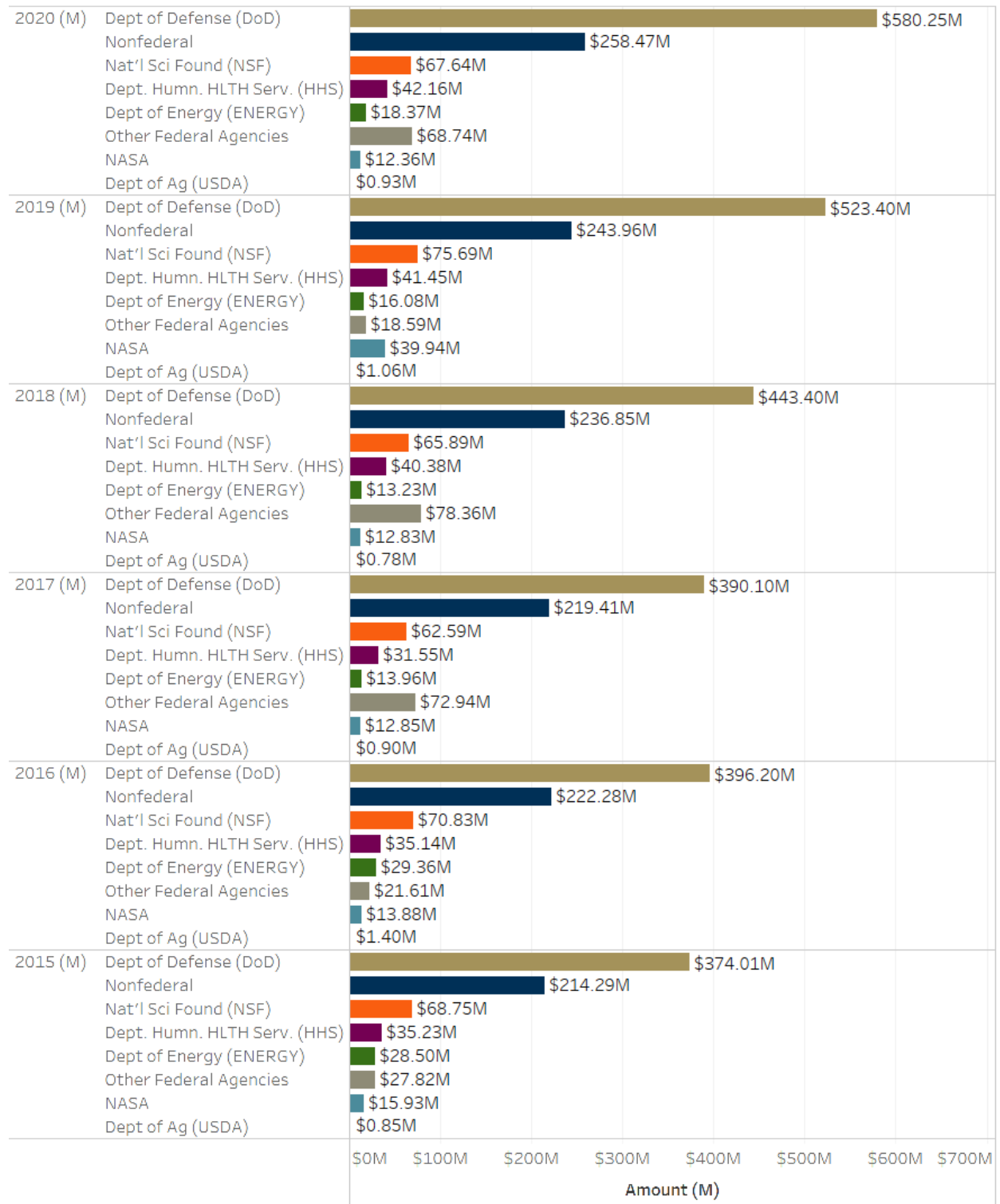


Figure 5: Georgia Tech's R&D Expenditures by Funding Agency (FY2016-2020)

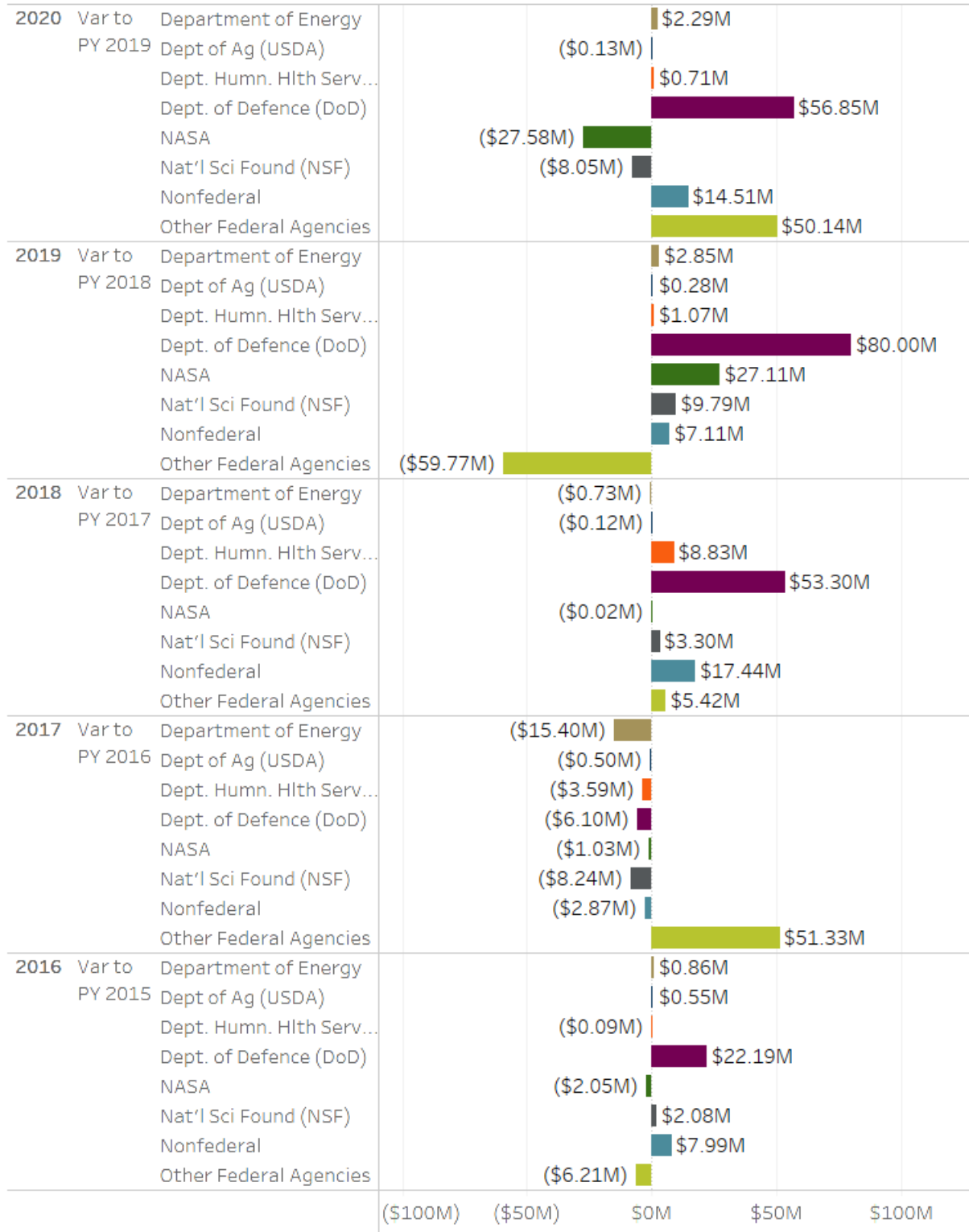


Figure 6: Changes in Georgia Tech's R&D Expenditures  
by Funding Agency (FY2016-2020)

## Expenditures by Discipline

- Georgia Tech's R&D expenditures increased across all disciplines FY2016-FY2020, with a notable increase in Computer & Information Sciences (61.51%), Engineering (24.53%), Geosciences, Atmospheric and Ocean Sciences (13.56%). Life Sciences continue to trend upwards and amount to \$43.87M for FY2020, an increase of 83.11% over the FY2016 amount of \$23.92M. (See Table 2; See also Figure 7).
- Other Sciences, Social Sciences, and certain Non-S&E Fields expenditures were reclassified by discipline based on the changes in the definitions provided by the National Center for Science and Engineering Statistics (NCSES). Prior to FY2017 Psychology, Other Life Science, and certain Physical Sciences disciplines were grouped and reported with either Social Sciences or Non-S&E Fields. Thus, increases in certain disciplines are the result of the reclassification of NSF R&D disciplines and fields of study, which may also have impacted the decrease in R&D expenditures for Social Sciences seen in FY2017 – FY2019.
- Likewise, disciplines that were previously grouped and reported under Other Sciences are now reported as disciplines classified as either Social Sciences, Life Sciences, or Physical Sciences, which may be an attributing factor to the increase in Social Sciences for FY2020.
- With (a) an increase in R&D expenditures across all disciplines and (b) the reclassification of certain NSF R&D disciplines and fields of study, the distribution of expenditures by discipline also changed (See figure 7). Engineering and Computer & Information Sciences are still proportionately larger and account for 85.25% of Georgia Tech's R&D expenditures, however, Physical Sciences, Life Sciences, and Non-S&E Fields now account for 4.17%, 3.55%, and 2.71% of R&D expenditures respectively (See Figure 7).

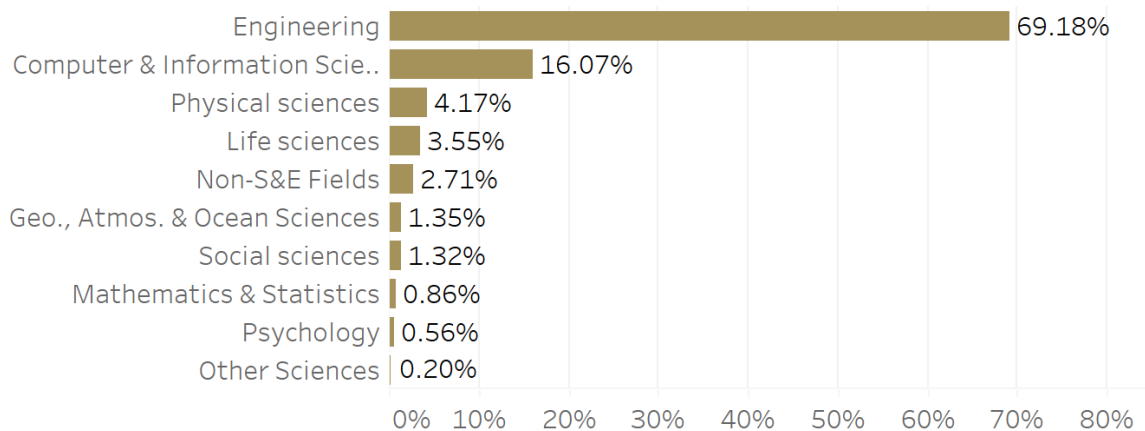


Figure 7: Distribution of Georgia Tech's R&D Expenditures by Discipline (FY2016-2020)

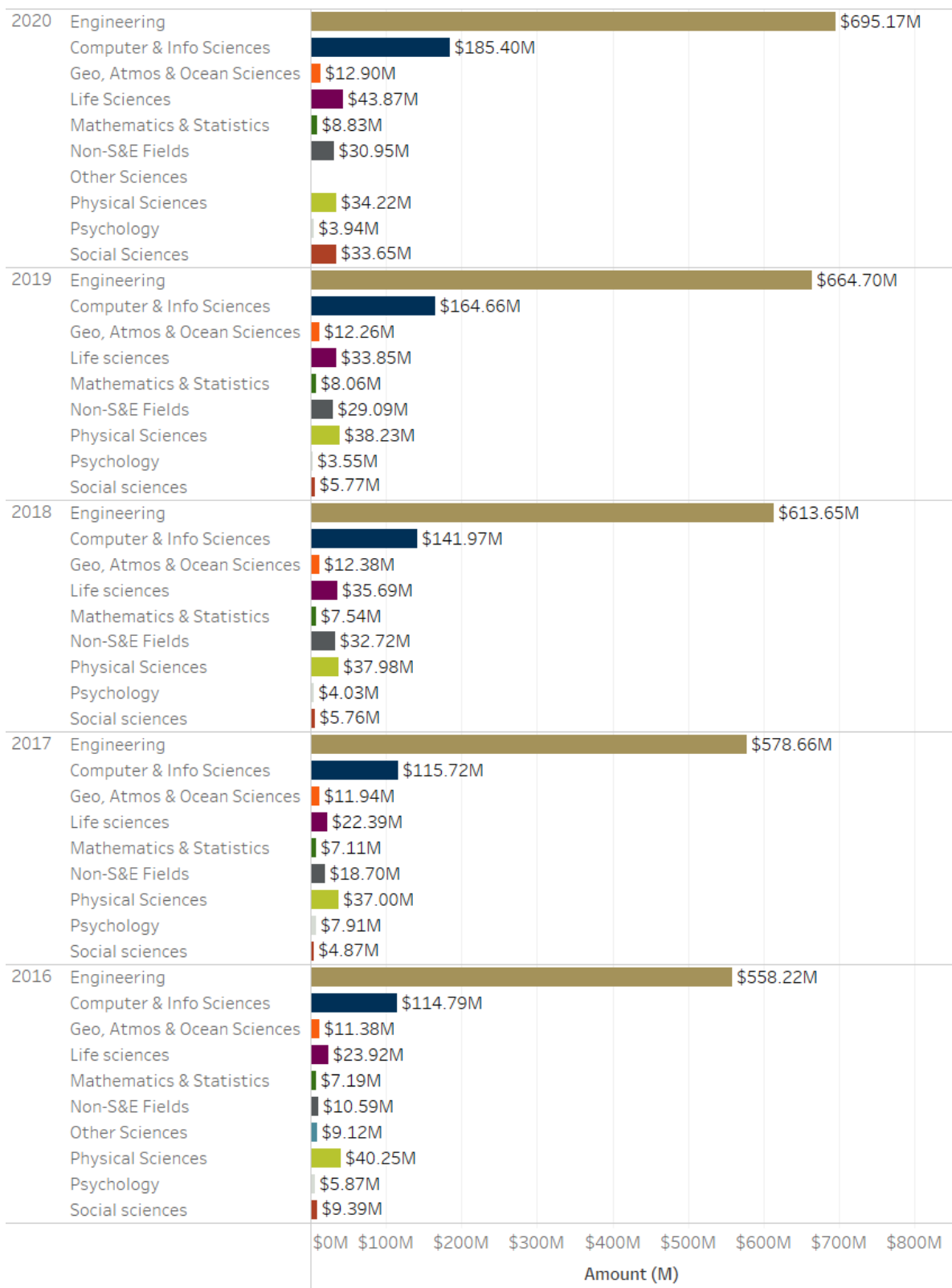


Figure 8: Georgia Tech's R&D Expenditures by Discipline (FY2016-2020)

Year		R&D Expenditures by Discipline								
		Computer & Information Sciences	Engineering	Geo, Atmos & Ocean Sciences	Life Sciences	Mathematics & Statistics	Non - S&E Fields	Physical Sciences	Psychology	Social Sciences
FY2020	2020	\$185.40	\$679.07	\$12.90	\$43.86	\$8.83	\$31.00	\$34.23	\$3.95	\$33.66
	Var. to PY	\$20.74	\$14.31	\$0.62	\$10.00	\$0.76	\$1.89	(\$4.01)	\$0.40	\$27.87
FY2019	2019	\$164.66	\$664.76	\$12.28	\$33.86	\$8.07	\$29.11	\$38.24	\$3.55	\$5.79
	Var. to PY	\$22.69	\$51.07	(\$0.10)	(\$1.81)	\$0.52	(\$3.62)	\$0.25	(\$0.48)	(\$0.01)
FY2018	2018	\$141.97	\$613.69	\$12.38	\$35.67	\$7.55	\$32.73	\$37.99	\$4.03	\$5.80
	Var. to PY	\$26.26	\$35.00	\$0.43	\$13.30	\$0.44	\$14.01	\$0.98	(\$3.87)	\$0.92
FY2017	2017	\$115.71	\$578.69	\$11.95	\$22.37	\$7.11	\$18.72	\$37.01	\$7.90	\$4.88
	Var. to PY	\$0.91	\$20.47	\$0.56	(\$1.55)	(\$0.08)	\$8.13	(\$3.24)	\$2.03	(\$4.51)
FY2016	2016	\$114.80	\$558.22	\$11.39	\$23.92	\$7.19	\$10.59	\$40.25	\$5.87	\$9.39
	Var. to PY	\$8.11	\$24.88	(\$7.70)	\$4.05	\$0.50	\$2.33	\$7.03	\$1.57	\$0.25
FY2015	2015	\$106.69	\$533.34	\$19.09	\$19.87	\$6.69	\$8.26	\$47.28	\$7.44	\$9.14
Avg (μ)		\$138.21	\$604.63	\$13.33	\$29.93	\$7.57	\$21.74	\$39.17	\$5.46	\$11.44

Table 2: R&D Expenditures by Discipline (FY2016-2020)

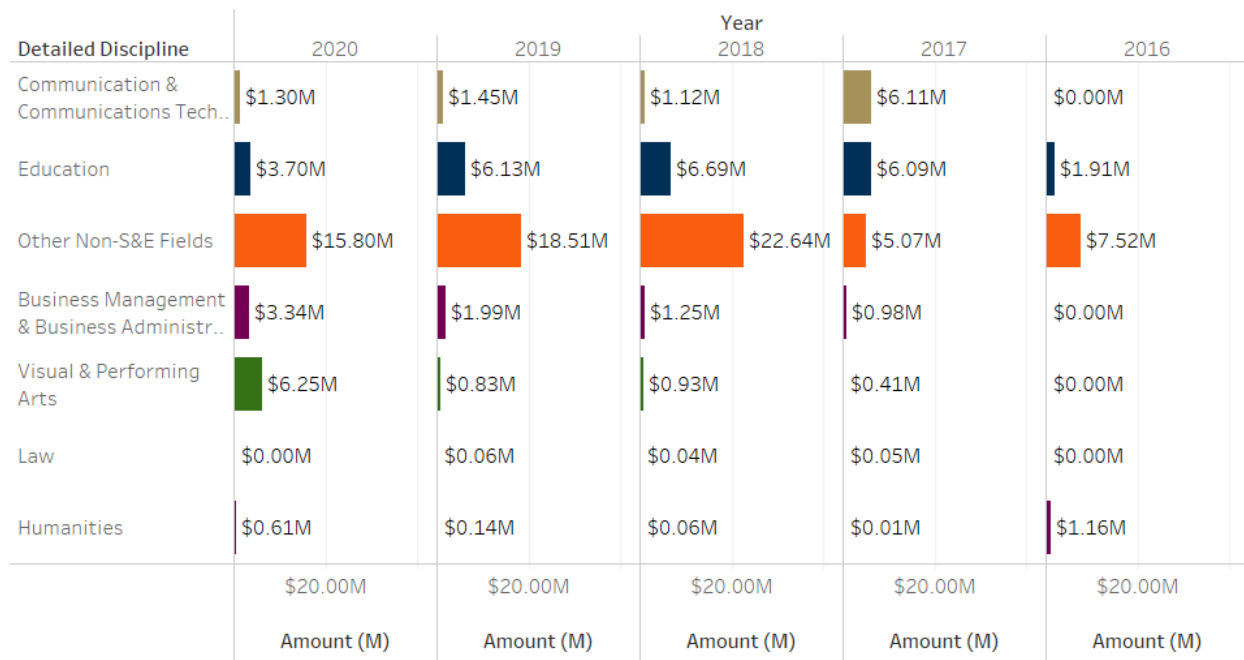


Figure 9: Breakdown of Non-S&E (Science and Engineering) R&D Expenditures by Discipline (FY2016-2020)

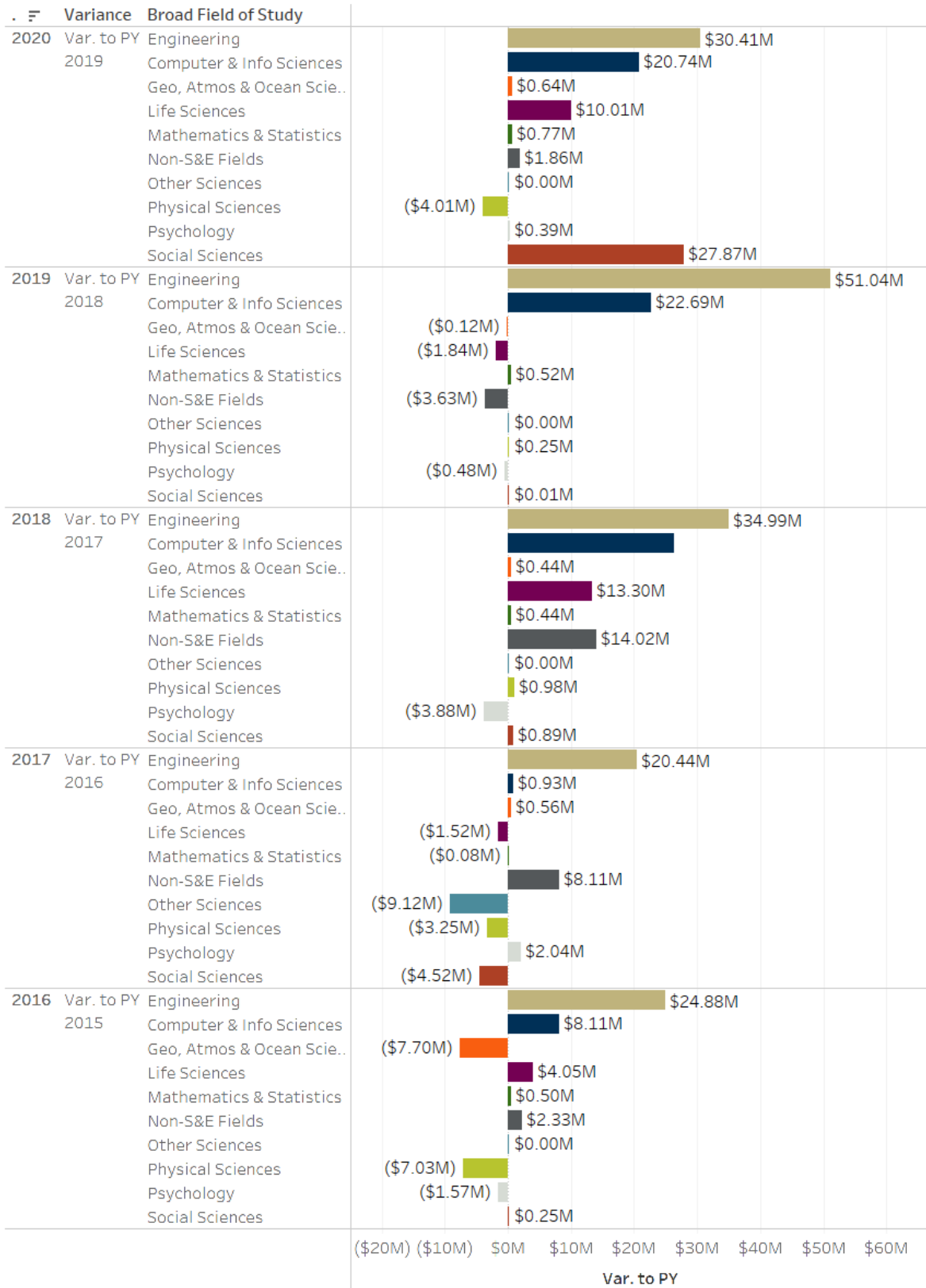


Figure 10: Changes in Georgia Tech's R&D Expenditures by Discipline (FY2016-2020)



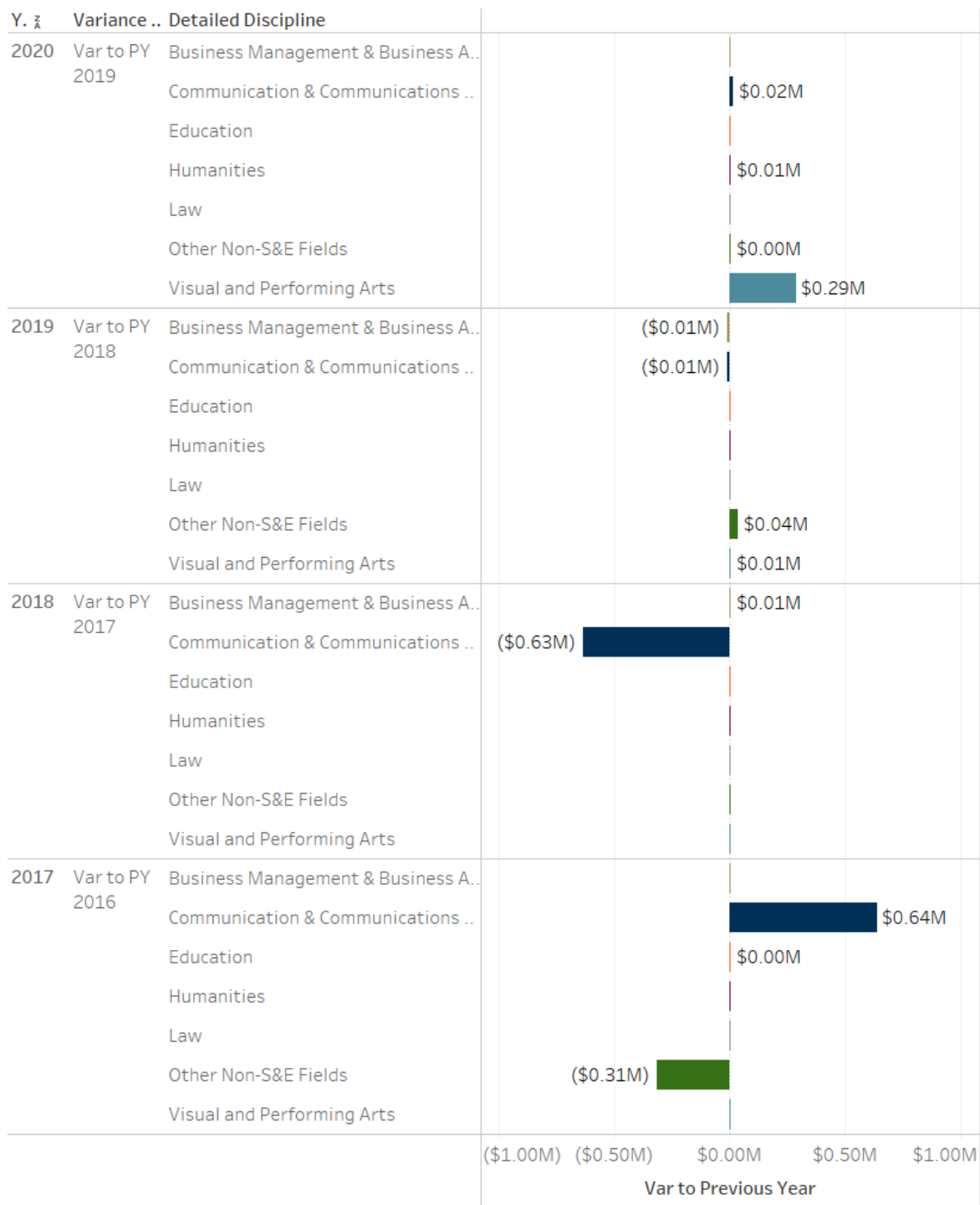


Figure 11: Changes in Non-S&E (Science and Engineering) R&D Expenditures by Discipline (FY2016-2020)

## R&D Trends Compared with Georgia Tech's Peer Institutions

- RQ2. How does Georgia Institute of Technology's Research and Development compare to its national peers in terms of **overall expenditures** for FY2015 – FY2019?
- RQ3. How does Georgia Institute of Technology's Research and Development compare to its national peers in terms of **sources of funding** for FY2015 – FY2019?
- RQ4. How does Georgia Institute of Technology's Research and Development compare to its national peers in terms of **funding agency** for FY2015 – FY2019?
- RQ5. How does Georgia Institute of Technology's Research and Development compare to its national peers in terms of **research disciplines** for FY2015 – FY2019?

### Overall R&D Expenditures Compared with Peer Institutions

- Among its peers Georgia Tech ranks 21<sup>st</sup> in overall R&D expenditures with an average of \$899.18M for FY2016-2020. Georgia Tech's R&D expenditures have increased each fiscal year, with the greatest increase in FY2020. Total R&D expenditures are in the amount \$1048.99M- an \$88.82M increase over the previous year. (See Figure 1).
- NSF-R&D data from the FY2020 HERD survey have not been released yet, therefore, FY2020 R&D expenditures among Georgia Tech and its peer institutions cannot be compared at this time.

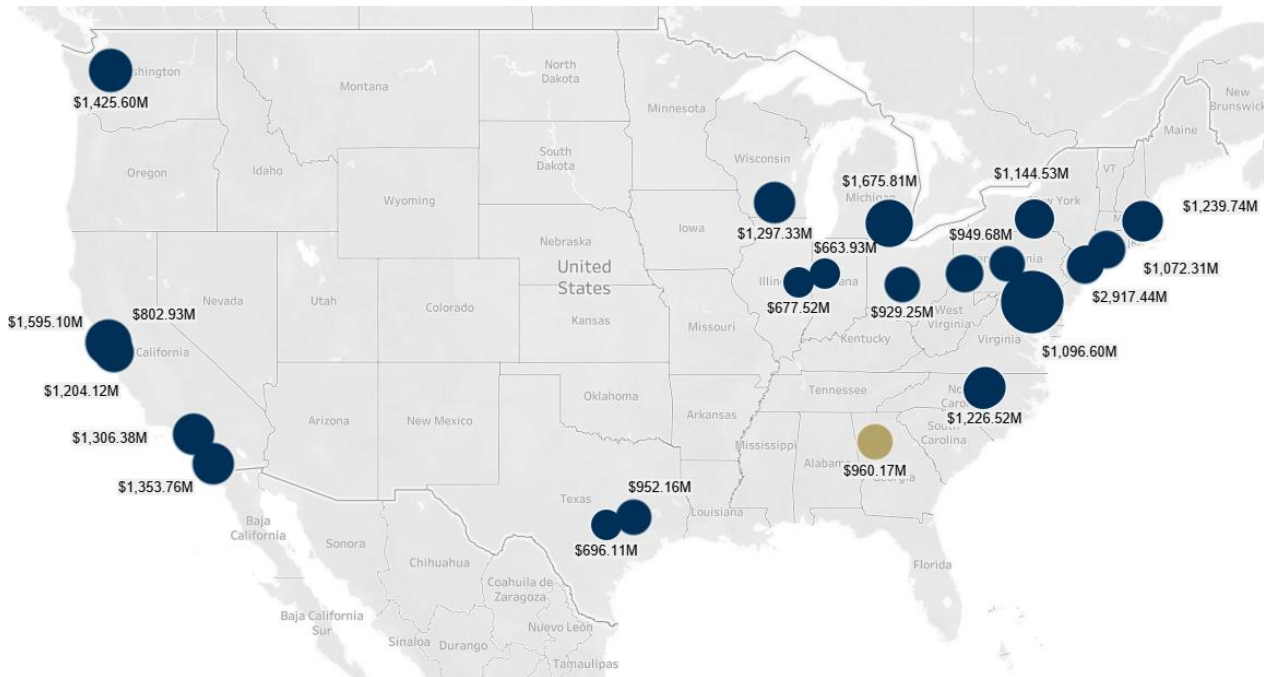


Figure 12-A: R&D Expenditures among Top Research Institutions (FY2015-2019)



Figure 12-B: R&D Expenditures among Top Research Institutions (FY2015-2019)

## Sources of Funding among Top Research Institutions for FY2019

- For FY2019 Georgia Tech ranked 8<sup>th</sup> in R&D Expenditures funded by the State and Local Government, and 8<sup>th</sup> for U.S. Federal Government, which are also Georgia Tech's largest types of sponsored awards (See Table 3).
- Other sources of funding and Georgia Tech's rank among top research institutions include:
  - Business (\$66.78M) – 20<sup>th</sup>
  - Institutional Funds (\$70.90M) – 92<sup>nd</sup>
  - Nonprofit Organizations (\$13.39M) – 94<sup>th</sup>
  - All Other Sources (\$0.3M) – 233<sup>rd</sup>

Table 3: Top Research Institutions by R&D Funding Source for FY2019

US Federal Gov. 2019			State and Local Gov. 2019		
		Ranking			Ranking
Johns Hopkins Univ.	\$2,482.13M	1	Texas A&M Univ., College Station	\$190.47M	2
Univ. of Washington, Seattle	\$992.64M	2	Univ. of Wisconsin-Madison	\$94.86M	6
Univ. of Michigan, Ann Arbor	\$886.85M	3	Cornell Univ.	\$92.70M	7
Stanford Univ.	\$738.96M	4	<b>Georgia Institute of Technology</b>	<b>\$92.59M</b>	<b>8</b>
Columbia Univ., New York	\$736.54M	5	Univ. of California, Los Angeles	\$70.02M	13
Univ. of North Carolina, Chapel Hill	\$720.61M	6	Ohio State Univ.	\$62.75M	16
<b>Georgia Institute of Technology</b>	<b>\$716.21M</b>	<b>8</b>	Pennsylvania State Univ.	\$51.66M	21
Duke Univ.	\$709.71M	9	Univ. of California, San Diego	\$44.79M	26
Univ. of California, San Diego	\$698.93M	10	Purdue Univ., West Lafayette	\$38.74M	29
Univ. of Maryland	\$696.88M	11	Stanford Univ.	\$38.01M	32
Univ. of Pittsburgh, Pittsburgh	\$677.56M	12	Univ. of California, Berkeley	\$35.00M	38
Univ. of California, San Francisco	\$671.05M	13	Univ. of Maryland	\$34.24M	39
Harvard Univ.	\$618.41M	14	Univ. of California, San Francisco	\$30.39M	42
Univ. of Wisconsin-Madison	\$608.93M	15	Univ. of Washington, Seattle	\$27.13M	44
Univ. of California, Los Angeles	\$600.71M	16	Univ. of Illinois, Urbana-Champaign	\$25.35M	48
Pennsylvania State Univ.	\$600.49M	17	New York Univ.	\$22.94M	54
Yale Univ.	\$576.78M	18	Univ. of Texas, Austin	\$21.57M	56
Cornell Univ.	\$525.18M	21	Univ. of Pittsburgh, Pittsburgh	\$9.70M	98
Ohio State Univ.	\$497.65M	23	Univ. of North Carolina, Chapel Hill	\$9.46M	99
Massachusetts Institute of Tech	\$489.35M	26	Yale Univ.	\$8.04M	107
New York Univ.	\$436.85M	28	Columbia Univ., New York	\$7.98M	108
Univ. of Texas, Austin	\$407.98M	31	Johns Hopkins Univ.	\$7.53M	114
Univ. of Illinois, Urbana-Champaign	\$382.21M	34	Massachusetts Institute of Tech	\$2.71M	183
Texas A&M Univ., College Station	\$359.61M	36	Univ. of Michigan, Ann Arbor	\$2.71M	184
Univ. of California, Berkeley	\$347.60M	39	Carnegie Mellon Univ.	\$2.59M	188
California Institute of Technology	\$287.20M	51	California Institute of Technology	\$1.37M	245
Purdue Univ., West Lafayette	\$249.83M	58	Harvard Univ.	\$0.98M	273
Carnegie Mellon Univ.	\$197.98M	67	Duke Univ.	\$0.50M	334

Table 3 (Continued): Top Research Institutions by R&D Funding Source for FY2019

Business 2019			Institutional Funds 2019		
		Ranking			Ranking
Duke Univ.	\$236.29M	1	Univ. of Michigan, Ann Arbor	\$608.03M	1
Massachusetts Institute of Tech	\$196.81M	2	Univ. of Wisconsin-Madison	\$415.63M	3
Ohio State Univ.	\$157.89M	4	Univ. of California, San Francisco	\$394.74M	4
Stanford Univ.	\$136.07M	6	Harvard Univ.	\$381.60M	5
Johns Hopkins Univ.	\$105.81M	8	Yale Univ.	\$318.20M	7
Univ. of California, San Francisco	\$103.46M	9	Univ. of California, San Diego	\$301.30M	8
Univ. of Michigan, Ann Arbor	\$99.00M	10	Univ. of North Carolina, Chapel Hill	\$293.56M	10
Univ. of California, San Diego	\$86.87M	12	Univ. of California, Los Angeles	\$285.01M	11
Columbia Univ., New York	\$78.23M	14	Univ. of Maryland	\$279.37M	12
Univ. of California, Los Angeles	\$76.22M	15	Texas A&M Univ., College Station	\$274.54M	13
Univ. of Texas, Austin	\$75.64M	16	Purdue Univ., West Lafayette	\$242.64M	17
Univ. of California, Berkeley	\$75.01M	17	New York Univ.	\$229.17M	20
Yale Univ.	\$74.58M	18	Cornell Univ.	\$227.32M	21
Georgia Institute of Technology	\$66.78M	20	Pennsylvania State Univ.	\$207.21M	30
Purdue Univ., West Lafayette	\$60.41M	22	Univ. of Pittsburgh, Pittsburgh	\$187.20M	34
Univ. of Washington, Seattle	\$58.21M	24	Univ. of Illinois, Urbana-Champaign	\$185.28M	35
Cornell Univ.	\$56.46M	25	Univ. of California, Berkeley	\$166.87M	37
New York Univ.	\$50.28M	32	Duke Univ.	\$154.08M	42
Harvard Univ.	\$48.17M	34	Johns Hopkins Univ.	\$152.04M	43
Univ. of North Carolina, Chapel Hill	\$44.96M	36	Univ. of Texas, Austin	\$144.16M	45
Texas A&M Univ., College Station	\$41.35M	39	Ohio State Univ.	\$136.92M	47
Univ. of Illinois, Urbana-Champaign	\$40.13M	42	Stanford Univ.	\$124.71M	56
Carnegie Mellon Univ.	\$36.41M	46	Univ. of Washington, Seattle	\$117.34M	61
Pennsylvania State Univ.	\$32.95M	48	Massachusetts Institute of Tech	\$116.76M	62
Univ. of Maryland	\$30.78M	53	Carnegie Mellon Univ.	\$107.84M	63
Univ. of Wisconsin-Madison	\$26.52M	54	Columbia Univ., New York	\$74.95M	88
Univ. of Pittsburgh, Pittsburgh	\$25.31M	58	Georgia Institute of Technology	\$70.90M	92
California Institute of Technology	\$15.05M	78	California Institute of Technology	\$42.68M	131

Table 3 (Continued): Top Research Institutions by R&D Funding Source for FY2019

Nonprofit Org. 2019			All Other Sources 2019		
		Ranking			Ranking
Univ. of California, San Francisco	\$232.09M	1	Univ. of California, San Francisco	\$163.36M	1
Univ. of California, Los Angeles	\$197.34M	2	Cornell Univ.	\$124.87M	3
Univ. of Washington, Seattle	\$194.30M	3	Univ. of California, San Diego	\$122.55M	4
Harvard Univ.	\$166.59M	4	New York Univ.	\$115.34M	5
Johns Hopkins Univ.	\$166.57M	5	Univ. of Pittsburgh, Pittsburgh	\$114.16M	6
Stanford Univ.	\$159.04M	6	Massachusetts Institute of Tech.	\$95.88M	8
Univ. of California, Berkeley	\$128.48M	7	Univ. of California, Los Angeles	\$77.08M	9
Cornell Univ.	\$118.00M	9	Univ. of California, Berkeley	\$49.97M	15
Univ. of Wisconsin-Madison	\$115.77M	10	Univ. of Washington, Seattle	\$35.99M	19
Massachusetts Institute of Tech.	\$107.96M	11	Purdue Univ., West Lafayette	\$35.80M	21
Duke Univ.	\$105.78M	12	Univ. of Wisconsin-Madison	\$35.62M	22
Columbia Univ., New York	\$103.54M	13	Texas A&M Univ., College Station	\$26.40M	24
Univ. of California, San Diego	\$99.34M	14	California Institute of Technology	\$24.36M	27
Yale Univ.	\$86.50M	16	Ohio State Univ.	\$24.36M	28
New York Univ.	\$80.14M	18	Harvard Univ.	\$24.00M	29
Univ. of Michigan, Ann Arbor	\$68.76M	20	Duke Univ.	\$20.17M	32
Univ. of North Carolina, Chapel Hill	\$67.77M	21	Univ. of Illinois, Urbana-Champaign	\$19.96M	34
Univ. of Pittsburgh, Pittsburgh	\$67.01M	22	Univ. of North Carolina, Chapel Hill	\$17.41M	38
Texas A&M Univ., College Station	\$59.80M	26	Univ. of Michigan, Ann Arbor	\$10.47M	54
Pennsylvania State Univ.	\$56.18M	29	Yale Univ.	\$8.22M	65
Univ. of Maryland	\$50.56M	34	Stanford Univ.	\$7.34M	73
Ohio State Univ.	\$49.68M	36	Carnegie Mellon Univ.	\$7.01M	76
Univ. of Texas, Austin	\$40.39M	45	Univ. of Texas, Austin	\$6.37M	77
Purdue Univ., West Lafayette	\$36.50M	46	Univ. of Maryland	\$4.77M	92
California Institute of Technology	\$29.27M	57	Johns Hopkins Univ.	\$3.36M	105
Univ. of Illinois, Urbana-Champaign	\$24.60M	61	Columbia Univ., New York	\$2.38M	115
<b>Georgia Institute of Technology</b>	<b>\$13.39M</b>	<b>94</b>	Pennsylvania State Univ.	\$1.19M	156
Carnegie Mellon Univ.	\$7.89M	123	<b>Georgia Institute of Technology</b>	<b>\$0.30M</b>	<b>233</b>

### Funding Agencies among Top Research Institutions

- For FY2019 Georgia Tech ranked 2<sup>nd</sup> in R&D expenditures funded by the U.S. Department of Defense (DoD), which is also the institution's largest source of federal funds.
- Other sources of funding and Georgia Tech's rank among its peer institutions include:
  - NASA (\$12.85M) – 7<sup>th</sup>
  - NSF (\$75.69M) – 16<sup>st</sup>
  - ENERGY (\$13.96M) – 34<sup>th</sup>
  - Other (Federal) Sources (\$18.59M) – 50<sup>th</sup>
  - Nonfederal (\$243.96M) – 53<sup>rd</sup>
  - HHS (\$41.00M) – 108<sup>th</sup>
  - USDA (\$1.06M) – 110<sup>th</sup>

Table 4: Top Research Institutions by R&D Funding Agency for FY2019

Dept. of Agriculture (USDA) 2019			Dept. of Defence (DoD) 2019		
		Ranking			Ranking
Cornell U.	\$37.79M	4	Johns Hopkins U.	\$1,262.99M	1
Texas A&M U., College Station	\$37.40M	5	<b>Georgia Institute of Technology</b>	<b>\$523.40M</b>	<b>2</b>
Ohio State U.	\$33.91M	9	Pennsylvania State U., University Park	\$300.26M	3
Pennsylvania State U., University Park	\$32.34M	10	U. Texas, Austin	\$156.35M	5
U. Maryland	\$26.76M	15	Massachusetts Institute of Tech.	\$139.92M	7
Purdue U., West Lafayette	\$23.79M	17	U. California, San Diego	\$98.92M	9
U. Wisconsin-Madison	\$22.38M	19	U. Maryland	\$94.08M	10
U. Illinois, Urbana-Champaign	\$19.68M	21	U. Washington, Seattle	\$93.84M	11
U. Washington, Seattle	\$6.65M	49	U. Michigan, Ann Arbor	\$83.88M	13
U. California, Berkeley	\$3.69M	70	Carnegie Mellon U.	\$73.26M	14
U. North Carolina, Chapel Hill	\$2.62M	76	Stanford U.	\$69.47M	16
U. Michigan, Ann Arbor	\$1.77M	91	Duke U.	\$64.37M	17
Johns Hopkins U.	\$1.31M	102	Harvard U.	\$57.39M	18
U. California, San Diego	\$1.18M	104	U. California, Los Angeles	\$50.41M	22
<b>Georgia Institute of Technology</b>	<b>\$1.06M</b>	<b>110</b>	U. Illinois, Urbana-Champaign	\$50.40M	23
Duke U.	\$0.95M	116	Columbia U. in the City of New York	\$48.60M	25
New York U.	\$0.85M	120	U. Pittsburgh, Pittsburgh	\$47.30M	27
Carnegie Mellon U.	\$0.69M	128	Ohio State U.	\$39.55M	29
Yale U.	\$0.54M	145	Cornell U.	\$39.52M	30
U. Texas, Austin	\$0.46M	157	Purdue U., West Lafayette	\$39.47M	31
Stanford U.	\$0.24M	197	U. California, Berkeley	\$38.21M	33
U. California, Los Angeles	\$0.22M	203	U. Wisconsin-Madison	\$36.64M	35
Harvard U.	\$0.17M	221	California Institute of Technology	\$34.32M	39
Columbia U. in the City of New York	\$0.09M	256	U. California, San Francisco	\$29.64M	52
U. Pittsburgh, Pittsburgh	\$0.02M	343	Yale U.	\$28.51M	55
California Institute of Technology	\$0.02M	333	Texas A&M U., College Station	\$27.95M	56
U. California, San Francisco	\$0.01M	359	New York U.	\$23.85M	60
Massachusetts Institute of Tech.	<1M	-	U. North Carolina, Chapel Hill	\$13.44M	96



Table 4 (Continued): Top Research Institutions by R&D Funding Agency for FY2019

Dept. of Energy (ENERGY) 2019			Dept. Humm. Hlth Serv. (HHS) 2019		
		Ranking			Ranking
U. Wisconsin-Madison	\$71.13M	3	Johns Hopkins U.	\$674.00M	1
Massachusetts Institute of Tech.	\$67.34M	4	U. Washington, Seattle	\$656.00M	2
U. Illinois, Urbana-Champaign	\$66.55M	5	U. California, San Francisco	\$623.00M	3
U. California, Berkeley	\$42.92M	7	U. Michigan, Ann Arbor	\$616.00M	4
U. Michigan, Ann Arbor	\$40.72M	8	U. Pittsburgh, Pittsburgh	\$582.00M	6
U. Texas, Austin	\$35.77M	9	Duke U.	\$572.00M	7
Texas A&M U., College Station	\$33.43M	10	U. North Carolina, Chapel Hill	\$555.00M	8
U. Washington, Seattle	\$31.61M	12	Columbia U. in the City of New York	\$548.00M	9
Pennsylvania State U., University Park	\$29.61M	14	Stanford U.	\$545.00M	10
U. California, San Diego	\$28.04M	15	Yale U.	\$495.00M	11
Purdue U., West Lafayette	\$27.01M	17	Harvard U.	\$476.00M	13
Ohio State U.	\$26.72M	18	U. California, San Diego	\$436.00M	14
U. California, Los Angeles	\$25.79M	19	U. California, Los Angeles	\$424.00M	16
Cornell U.	\$23.75M	22	New York U.	\$353.00M	20
Columbia U. in the City of New York	\$21.17M	26	U. Maryland	\$350.00M	21
California Institute of Technology	\$21.10M	27	U. Wisconsin-Madison	\$348.00M	22
Stanford U.	\$18.33M	30	Cornell U.	\$282.00M	28
U. Maryland	\$16.67M	32	Ohio State U.	\$278.00M	30
<b>Georgia Institute of Technology</b>	<b>\$16.08M</b>	<b>34</b>	Massachusetts Institute of Tech.	\$136.00M	53
Duke U.	\$15.39M	37	Pennsylvania State U., University Park	\$133.00M	55
Harvard U.	\$14.59M	41	U. California, Berkeley	\$124.00M	57
Carnegie Mellon U.	\$13.67M	45	U. Texas, Austin	\$89.00M	73
Yale U.	\$11.21M	54	Texas A&M U., College Station	\$83.00M	76
U. Pittsburgh, Pittsburgh	\$8.98M	60	California Institute of Technology	\$78.00M	80
Johns Hopkins U.	\$8.32M	63	U. Illinois, Urbana-Champaign	\$69.00M	87
U. North Carolina, Chapel Hill	\$6.66M	75	Purdue U., West Lafayette	\$59.00M	94
New York U.	\$4.09M	105	<b>Georgia Institute of Technology</b>	<b>\$41.45M</b>	<b>108</b>
U. California, San Francisco	\$0.78M	174	Carnegie Mellon U.	\$33.00M	119

Table 4 (Continued): Top Research Institutions by R&D Funding Agency for FY2019

NASA 2019			Nat'l Sci Found (NSF) 2019		
		Ranking			Ranking
Johns Hopkins U.	\$312.07M	1	U. Illinois, Urbana-Champaign	\$141.08M	1
U. Maryland	\$65.26M	4	Cornell U.	\$115.53M	2
California Institute of Technology	\$64.95M	5	Texas A&M U., College Station	\$114.59M	3
<b>Georgia Institute of Technology</b>	<b>\$39.94M</b>	<b>7</b>	U. Washington, Seattle	\$114.58M	4
U. California, Berkeley	\$37.11M	8	Massachusetts Institute of Tech.	\$96.00M	6
Massachusetts Institute of Tech.	\$34.46M	9	U. California, San Diego	\$88.75M	7
U. Michigan, Ann Arbor	\$25.56M	11	Columbia U. in the City of New York	\$86.12M	8
U. California, Los Angeles	\$25.28M	12	California Institute of Technology	\$82.56M	10
Stanford U.	\$22.65M	14	U. Michigan, Ann Arbor	\$81.46M	12
U. Washington, Seattle	\$20.80M	17	U. Wisconsin-Madison	\$80.30M	13
Columbia U. in the City of New York	\$20.50M	18	U. Texas, Austin	\$78.38M	14
Pennsylvania State U., University Park	\$18.52M	20	Stanford U.	\$75.89M	15
U. Texas, Austin	\$17.53M	24	<b>Georgia Institute of Technology</b>	<b>\$75.69M</b>	<b>16</b>
U. California, San Diego	\$13.22M	27	U. California, Berkeley	\$71.03M	17
Cornell U.	\$12.03M	29	Purdue U., West Lafayette	\$69.72M	18
U. Wisconsin-Madison	\$11.86M	30	Pennsylvania State U., University Park	\$67.44M	20
Ohio State U.	\$10.01M	34	U. California, Los Angeles	\$63.91M	22
Harvard U.	\$8.45M	36	U. Maryland	\$58.69M	24
U. Illinois, Urbana-Champaign	\$8.40M	37	Carnegie Mellon U.	\$56.35M	26
Purdue U., West Lafayette	\$7.77M	40	Ohio State U.	\$51.07M	30
Texas A&M U., College Station	\$6.77M	43	Harvard U.	\$46.32M	36
Yale U.	\$4.44M	60	New York U.	\$39.53M	41
Duke U.	\$3.27M	79	Johns Hopkins U.	\$37.18M	45
Carnegie Mellon U.	\$3.04M	81	U. North Carolina, Chapel Hill	\$35.91M	48
U. North Carolina, Chapel Hill	\$2.17M	98	Duke U.	\$35.36M	50
New York U.	\$1.35M	129	Yale U.	\$26.83M	65
U. Pittsburgh, Pittsburgh	\$1.31M	133	U. Pittsburgh, Pittsburgh	\$26.55M	66
U. California, San Francisco	\$0.45M	195	U. California, San Francisco	\$8.48M	134

Table 4 (Continued): Top Research Institutions by R&D Funding Agency for FY2019

Nonfederal 2019			Other Federal 2019		
		Ranking			Ranking
U. California, San Francisco	\$924.05M	1	Johns Hopkins U.	\$186.51M	1
U. Michigan, Ann Arbor	\$788.95M	3	U. North Carolina, Chapel Hill	\$105.31M	2
U. California, Los Angeles	\$705.66M	5	U. Maryland	\$85.47M	4
U. Wisconsin-Madison	\$688.41M	6	U. Washington, Seattle	\$69.62M	6
U. California, San Diego	\$654.84M	7	Ohio State U.	\$58.69M	7
Harvard U.	\$621.33M	8	Texas A&M U., College Station	\$56.49M	8
Cornell U.	\$619.35M	9	U. Wisconsin-Madison	\$38.92M	13
Texas A&M U., College Station	\$592.55M	10	U. Michigan, Ann Arbor	\$37.94M	14
Massachusetts Institute of Tech.	\$520.12M	12	U. California, San Diego	\$32.84M	19
Duke U.	\$516.81M	14	U. California, Berkeley	\$30.53M	20
New York U.	\$497.87M	15	U. Texas, Austin	\$30.43M	21
Yale U.	\$495.53M	16	U. Illinois, Urbana-Champaign	\$26.68M	26
Stanford U.	\$465.16M	17	Purdue U., West Lafayette	\$23.37M	36
U. California, Berkeley	\$455.33M	18	Pennsylvania State U., University Park	\$19.59M	46
Johns Hopkins U.	\$435.31M	19	Duke U.	\$18.76M	49
U. North Carolina, Chapel Hill	\$433.16M	20	<b>Georgia Institute of Technology</b>	<b>\$18.59M</b>	<b>50</b>
U. Washington, Seattle	\$432.96M	21	Carnegie Mellon U.	\$18.10M	52
Ohio State U.	\$431.60M	22	Harvard U.	\$15.69M	58
Purdue U., West Lafayette	\$414.10M	24	Massachusetts Institute of Tech.	\$15.33M	59
U. Pittsburgh, Pittsburgh	\$403.39M	26	Cornell U.	\$14.10M	68
U. Maryland	\$399.72M	27	New York U.	\$13.89M	70
Pennsylvania State U., University Park	\$349.19M	35	Columbia U. in the City of New York	\$12.01M	75
U. Illinois, Urbana-Champaign	\$295.32M	44	U. Pittsburgh, Pittsburgh	\$11.88M	76
U. Texas, Austin	\$288.13M	46	U. California, Los Angeles	\$11.47M	80
Columbia U. in the City of New York	\$267.08M	50	Yale U.	\$10.02M	99
<b>Georgia Institute of Technology</b>	<b>\$243.96M</b>	<b>53</b>	U. California, San Francisco	\$8.59M	106
Carnegie Mellon U.	\$161.74M	71	Stanford U.	\$7.62M	117
California Institute of Technology	\$112.73M	105	California Institute of Technology	\$6.14M	134

### Expenditures by Discipline among Top Research Institutions

- For FY2019 Georgia Tech ranked 2<sup>nd</sup> in Engineering expenditures (\$664.70M) and 3<sup>rd</sup> in Computer and Information Sciences expenditures (\$164.66M).
- Below are Georgia Tech's R&D expenditures by discipline, as well as Georgia Tech's ranking amount its peer institutions:
  - Mathematics & Statistics (\$8.06M) – 22<sup>nd</sup>
  - Physical Sciences (\$38.23M) – 38<sup>th</sup>
  - Non-S&E Fields (\$29.09M) – 52<sup>nd</sup>
  - Geo, Atmos, and Ocean Sciences (\$12.26M) – 59<sup>th</sup>
  - Social Sciences (\$5.77M) – 101<sup>st</sup>
  - Psychology (\$3.55M) – 104<sup>th</sup>
  - Life Sciences (\$33.85M) – 158<sup>th</sup>

Table 5: Top Research Institutions by R&D Discipline for FY2019

Computer & Information Sciences			Engineering		
		Ranking			Ranking
Johns Hopkins U.	\$199.77M	1	Johns Hopkins U.	\$1,147.34M	1
Carnegie Mellon U.	\$171.11M	2	<b>Georgia Institute of Technology</b>	<b>\$664.70M</b>	<b>2</b>
<b>Georgia Institute of Technology</b>	<b>\$164.66M</b>	<b>3</b>	Massachusetts Institute of Technology	\$450.92M	3
U. Illinois, Urbana-Champaign	\$106.43M	5	Pennsylvania State U., University Park	\$350.39M	5
Massachusetts Institute of Technology	\$96.68M	6	Texas A&M U., College Station	\$321.37M	6
Pennsylvania State U., University Park	\$69.64M	7	U. Michigan, Ann Arbor	\$291.89M	7
U. Texas, Austin	\$66.13M	8	Purdue U., West Lafayette	\$270.53M	8
U. Maryland	\$47.84M	9	U. Texas, Austin	\$249.79M	10
Cornell U.	\$29.33M	14	U. Illinois, Urbana-Champaign	\$201.03M	12
U. California, San Diego	\$28.30M	16	U. California, Berkeley	\$200.12M	13
U. Washington, Seattle	\$24.97M	20	Ohio State U.	\$177.52M	14
Columbia U. in the City of New York	\$24.73M	21	U. California, San Diego	\$172.92M	16
Stanford U.	\$24.58M	22	U. Maryland	\$158.81M	17
Ohio State U.	\$23.39M	24	U. Washington, Seattle	\$155.08M	19
Purdue U., West Lafayette	\$23.18M	25	Stanford U.	\$134.59M	22
U. North Carolina, Chapel Hill	\$23.15M	26	U. Wisconsin-Madison	\$126.59M	23
Texas A&M U., College Station	\$21.80M	29	Cornell U.	\$110.55M	26
U. Wisconsin-Madison	\$20.37M	30	Duke U.	\$100.38M	30
U. California, Los Angeles	\$15.87M	38	New York U.	\$99.71M	31
Harvard U.	\$15.23M	40	U. California, Los Angeles	\$95.80M	32
New York U.	\$14.61M	46	Harvard U.	\$95.65M	33
California Institute of Technology	\$14.41M	47	Carnegie Mellon U.	\$95.50M	34
U. Michigan, Ann Arbor	\$12.98M	49	Columbia U. in the City of New York	\$72.60M	52
U. California, Berkeley	\$12.13M	53	California Institute of Technology	\$46.97M	74
U. Pittsburgh, Pittsburgh	\$9.73M	65	U. Pittsburgh, Pittsburgh	\$46.08M	77
Yale U.	\$6.00M	88	Yale U.	\$36.59M	91
Duke U.	\$5.85M	92	U. North Carolina, Chapel Hill	\$31.83M	102
U. California, San Francisco	<1M	-	U. California, San Francisco	<1M	-

Table 5 (Continued): Top Research Institutions by R&D Discipline for FY2019

Mathematics & Statistics			Non-S&E Fields		
		Rankings			Rankings
Johns Hopkins U.	\$85.87M	1	Harvard U.	\$110.58M	2
Pennsylvania State U., University Park	\$25.06M	2	U. Michigan, Ann Arbor	\$104.49M	3
Harvard U.	\$22.13M	3	New York U.	\$89.47M	4
U. Michigan, Ann Arbor	\$18.48M	6	U. Wisconsin-Madison	\$88.11M	5
U. Texas, Austin	\$17.22M	7	U. Washington, Seattle	\$77.93M	6
U. California, Los Angeles	\$13.12M	10	U. Texas, Austin	\$76.18M	7
Carnegie Mellon U.	\$12.39M	11	Massachusetts Institute of Technology	\$69.39M	12
New York U.	\$12.00M	12	Purdue U., West Lafayette	\$65.52M	16
Massachusetts Institute of Technology	\$11.77M	13	U. California, Los Angeles	\$56.84M	19
Duke U.	\$10.32M	16	Ohio State U.	\$52.85M	21
Texas A&M U., College Station	\$8.70M	20	U. California, Berkeley	\$51.35M	23
U. California, Berkeley	\$8.18M	21	U. Maryland	\$49.32M	25
<b>Georgia Institute of Technology</b>	<b>\$8.06M</b>	<b>22</b>	Stanford U.	\$45.43M	29
Ohio State U.	\$6.42M	28	Texas A&M U., College Station	\$40.78M	32
U. Wisconsin-Madison	\$6.41M	29	Cornell U.	\$40.72M	33
U. Washington, Seattle	\$6.10M	32	U. North Carolina, Chapel Hill	\$40.12M	35
Columbia U. in the City of New York	\$5.73M	33	Columbia U. in the City of New York	\$37.92M	38
U. California, San Diego	\$5.47M	35	U. Illinois, Urbana-Champaign	\$36.64M	40
U. Illinois, Urbana-Champaign	\$5.07M	40	<b>Georgia Institute of Technology</b>	<b>\$29.09M</b>	<b>52</b>
Stanford U.	\$4.84M	42	Pennsylvania State U., University Park	\$25.65M	60
U. Maryland	\$4.69M	43	California Institute of Technology	\$24.37M	65
U. Pittsburgh, Pittsburgh	\$4.44M	45	Yale U.	\$15.67M	91
Yale U.	\$3.83M	51	Duke U.	\$13.59M	104
Cornell U.	\$3.34M	58	Carnegie Mellon U.	\$13.36M	105
Purdue U., West Lafayette	\$3.19M	60	U. Pittsburgh, Pittsburgh	\$12.21M	111
U. North Carolina, Chapel Hill	\$3.05M	64	U. California, San Diego	\$9.58M	126
California Institute of Technology	\$1.53M	105	Johns Hopkins U.	\$4.16M	196
U. California, San Francisco	<1M	-	U. California, San Francisco	<1M	-

Table 5 (Continued): Top Research Institutions by R&D Discipline for FY2019

Geosciences			Life Sciences		
		Ranking			Ranking
U. California, San Diego	\$180.63M	1	U. California, San Francisco	\$1,529.16M	1
U. Washington, Seattle	\$123.30M	3	Johns Hopkins U.	\$1,053.40M	3
Texas A&M U., College Station	\$113.46M	5	Duke U.	\$1,018.20M	4
Columbia U. in the City of New York	\$75.90M	9	U. Michigan, Ann Arbor	\$955.65M	5
U. Wisconsin-Madison	\$58.70M	12	U. Washington, Seattle	\$954.06M	6
U. Maryland	\$52.82M	13	U. Pittsburgh, Pittsburgh	\$935.76M	7
U. Texas, Austin	\$51.16M	14	U. California, Los Angeles	\$925.45M	8
Pennsylvania State U., University Park	\$46.39M	18	Yale U.	\$912.80M	9
Harvard U.	\$43.66M	20	U. North Carolina, Chapel Hill	\$846.63M	11
Johns Hopkins U.	\$42.59M	21	Stanford U.	\$837.07M	12
U. California, Los Angeles	\$38.11M	23	U. California, San Diego	\$819.17M	13
California Institute of Technology	\$37.10M	24	U. Wisconsin-Madison	\$814.12M	14
Massachusetts Institute of Technology	\$34.02M	26	Cornell U.	\$789.23M	16
Stanford U.	\$17.62M	44	Columbia U. in the City of New York	\$727.78M	17
U. North Carolina, Chapel Hill	\$16.92M	46	Harvard U.	\$704.46M	20
U. Michigan, Ann Arbor	\$15.71M	50	New York U.	\$630.25M	24
U. Pittsburgh, Pittsburgh	\$13.19M	57	U. Maryland	\$601.63M	26
<b>Georgia Institute of Technology</b>	<b>\$12.26M</b>	<b>59</b>	Ohio State U.	\$550.46M	30
Duke U.	\$11.08M	63	Texas A&M U., College Station	\$351.40M	45
U. California, Berkeley	\$9.43M	72	Pennsylvania State U., University Park	\$266.14M	59
Ohio State U.	\$9.03M	74	U. California, Berkeley	\$239.46M	63
Purdue U., West Lafayette	\$7.12M	84	Purdue U., West Lafayette	\$237.32M	64
Yale U.	\$7.00M	85	U. Illinois, Urbana-Champaign	\$222.99M	67
U. Illinois, Urbana-Champaign	\$6.87M	87	Massachusetts Institute of Technology	\$143.02M	92
Cornell U.	\$6.53M	92	U. Texas, Austin	\$117.72M	101
Carnegie Mellon U.	\$0.99M	214	California Institute of Technology	\$87.51M	117
New York U.	\$0.43M	263	<b>Georgia Institute of Technology</b>	<b>\$33.85M</b>	<b>158</b>
U. California, San Francisco	<1M	-	Carnegie Mellon U.	\$15.37M	202

Table 5 (Continued): Top Research Institutions by R&D Discipline for FY2019

Physical Sciences			Social Sciences		
		Ranking			Ranking
Johns Hopkins U.	\$323.62M	1	U. Michigan, Ann Arbor	\$191.34M	1
California Institute of Technology	\$188.04M	2	Harvard U.	\$141.32M	2
Massachusetts Institute of Tech.	\$136.60M	5	U. North Carolina, Chapel Hill	\$108.10M	3
U. California, Berkeley	\$130.90M	6	U. Maryland	\$66.69M	5
Cornell U.	\$122.97M	7	U. California, Berkeley	\$61.37M	6
U. Maryland	\$102.72M	10	U. California, Los Angeles	\$58.05M	8
Pennsylvania State U., University Park	\$99.49M	11	U. Wisconsin-Madison	\$48.02M	12
Stanford U.	\$95.08M	12	Massachusetts Institute of Tech.	\$46.53M	13
Harvard U.	\$94.52M	13	Duke U.	\$34.53M	18
U. California, San Diego	\$85.32M	15	New York U.	\$31.00M	19
U. Texas, Austin	\$81.36M	17	Texas A&M U., College Station	\$30.69M	20
U. Wisconsin-Madison	\$75.23M	18	Cornell U.	\$29.18M	22
U. Illinois, Urbana-Champaign	\$69.53M	19	Pennsylvania State U., University Park	\$27.94M	23
U. California, San Francisco	\$65.94M	20	Stanford U.	\$24.04M	28
Yale U.	\$62.25M	22	U. Texas, Austin	\$20.47M	35
U. Michigan, Ann Arbor	\$61.02M	24	U. California, San Diego	\$20.18M	36
U. California, Los Angeles	\$60.07M	26	Columbia U. in the City of New York	\$19.05M	38
U. Washington, Seattle	\$58.17M	27	Ohio State U.	\$17.78M	43
Texas A&M U., College Station	\$55.92M	28	U. Washington, Seattle	\$16.44M	47
Ohio State U.	\$46.22M	31	Yale U.	\$14.40M	50
<b>Georgia Institute of Technology</b>	<b>\$38.23M</b>	<b>38</b>	Carnegie Mellon U.	\$14.31M	51
Purdue U., West Lafayette	\$38.08M	39	Purdue U., West Lafayette	\$10.04M	76
U. North Carolina, Chapel Hill	\$37.06M	40	Johns Hopkins U.	\$8.92M	80
Columbia U. in the City of New York	\$35.37M	41	U. Illinois, Urbana-Champaign	\$6.85M	94
U. Pittsburgh, Pittsburgh	\$30.20M	49	<b>Georgia Institute of Technology</b>	<b>\$5.77M</b>	<b>101</b>
New York U.	\$26.10M	59	U. Pittsburgh, Pittsburgh	\$4.66M	119
Duke U.	\$21.18M	69	U. California, San Francisco	\$0.00M	488
Carnegie Mellon U.	\$19.51M	72	California Institute of Technology	\$0.00M	488



Table 5 (Continued): Top Research Institutions by R&D Discipline for FY2019

Other Sciences			Psychology		
		Ranking			Ranking
U. California, Berkeley	\$72.05M	2	U. North Carolina, Chapel Hill	\$46.81M	1
U. Wisconsin-Madison	\$47.29M	3	Pennsylvania State U., University Park	\$38.98M	2
Johns Hopkins U.	\$46.78M	4	New York U.	\$30.00M	4
Ohio State U.	\$37.73M	5	Stanford U.	\$20.09M	9
U. California, Los Angeles	\$26.04M	7	U. Michigan, Ann Arbor	\$19.16M	10
Massachusetts Institute of Tech.	\$20.03M	8	U. California, San Diego	\$18.93M	12
U. California, San Diego	\$13.27M	16	U. California, Berkeley	\$17.96M	15
U. Pittsburgh, Pittsburgh	\$10.54M	22	U. California, Los Angeles	\$17.04M	19
U. Illinois, Urbana-Champaign	\$7.64M	29	U. Illinois, Urbana-Champaign	\$14.47M	25
Carnegie Mellon U.	\$6.59M	35	U. Pittsburgh, Pittsburgh	\$14.15M	27
Harvard U.	\$5.36M	43	Yale U.	\$13.21M	29
U. Michigan, Ann Arbor	\$5.10M	47	Cornell U.	\$12.68M	31
Texas A&M U., College Station	\$4.50M	50	Univ. of Texas, Austin	\$12.54M	32
Univ. of Texas, Austin	\$3.56M	59	U. Wisconsin-Madison	\$12.50M	33
Purdue U., West Lafayette	\$2.78M	71	Duke U.	\$11.23M	36
U. Maryland	\$2.45M	76	Carnegie Mellon U.	\$10.60M	41
New York U.	\$1.15M	104	U. Maryland	\$9.62M	47
Stanford U.	\$0.79M	118	U. Washington, Seattle	\$9.55M	48
Yale U.	\$0.57M	133	Ohio State U.	\$7.86M	57
Duke U.	\$0.18M	181	Harvard U.	\$6.83M	63
U. North Carolina, Chapel Hill	\$0.12M	190	Purdue U., West Lafayette	\$6.19M	66
U. Washington, Seattle	\$0.00M	244	Johns Hopkins U.	\$5.00M	79
U. California, San Francisco	<1M	-	Columbia U. in the City of New York	\$4.55M	86
Pennsylvania State U., University Park	<1M	-	<b>Georgia Institute of Technology</b>	<b>\$3.55M</b>	<b>104</b>
<b>Georgia Institute of Technology</b>	<b>&lt;1M</b>	<b>-</b>	Texas A&M U., College Station	\$3.54M	105
Cornell U.	<1M	-	Massachusetts Institute of Tech.	\$0.52M	212
Columbia U. in the City of New York	<1M	-	U. California, San Francisco	<1M	-
California Institute of Technology	<1M	-	California Institute of Technology	<1M	-

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