

NSF Higher Education Research and Development Survey FY 2017 to FY 2019

Institution Information

Institution Name	University of North Carolina at Wilmington, The
Institution ID	002984

Note:

Data tabulated on Tuesday, January 28, 2020 10:48 AM

U = Unavailable; respondent entered "Unavailable" on the questionnaire.

NA = not available; data were not collected in the respective year.

999.9% denotes a percent change of 999.9% or greater.

"i" denotes imputed data.

"e" denotes estimated data.

R&D expenditures by source and type

Question 1. R&D Expenditures by Source of Funds, FY 2017-2019

Source of Funds	R&D Expenditures (Dollars in thousands)			
	Fiscal Year			% Change 2018-19
	2019	2018	2017	
a. U.S. federal government	7,174	5,732	5,990	25.2%
b. State and local government	6,472	6,610	5,758	-2.1%
c. Business	964	1,350	923	-28.6%
d. Nonprofit organizations	396	381	401	3.9%
e. Institutional funds				
1. Institutionally financed research	964	1,184	1,325	-18.6%
2. Cost sharing	511	669	825	-23.6%
3. Unrecovered indirect costs	969	960	776	0.9%
4. Total institutional funds	2,444	2,813	2,926	-13.1%
f. All other sources	65	69	17	-5.8%
g. Total	17,515	16,955	16,015	3.3%

Question 1.1. Institutionally Financed R&D Expenditure Sources, FY 2017-2019

	Included in Question 1e1		
	Fiscal Year		
	2019	2018	2017
a. Competitively awarded internal grants for research	Yes	Yes	Yes
b. Startup packages/bridge funding/seed funding	Yes	Yes	Yes
c. Other departmental funds designated for research	Yes	Yes	Yes
d. Tuition assistance for student research personnel	Yes	Yes	Yes

Question 2. R&D Expenditures from Foreign Sources, FY 2017-2019

	R&D Expenditures (Dollars in thousands)			
	Fiscal Year			% Change 2018-19
	2019	2018	2017	
a. Foreign government	10	59	0	-83.1%
b. Business	0	5	0	-100.0%
c. Nonprofit organizations	54	0	9	999.9%
d. Higher education	1	5	8	-80.0%
e. All other sources	0	0	0	
f. Total	65	69	17	-5.8%

Question 3. Externally Funded R&D Expenditures by Type of Agreement, FY 2017-2019

Type of Agreement	R&D Expenditures (Dollars in thousands)			
	Fiscal Year			% Change 2018-19
	2019	2018	2017	
a. Contracts	6,790	1,900	2,056	↑ 257.4%
b. Grants, reimbursements, and all other agreements	8,281	12,242	11,033	-32.4%
c. Total	15,071	14,142	13,089	6.6%

FY 2019 Trend Variance Explanations:

R&D expenditures from contracts: UNCW has experienced a greater number and value of contracts with federal and business entities

Question 4. R&D Expenditures in the Institution's Medical School, FY 2017-2019

	R&D Expenditures (Dollars in thousands)			
	Fiscal Year			% Change 2018-19
	2019	2018	2017	
Total R&D expenditures in the university's medical school	0	0	0	

Question 5. R&D Expenditures for Phase I, Phase II, and Phase III Clinical Trials with Human Patients, FY 2017-2019

	R&D Expenditures (Dollars in thousands)											
	(1) Federal				(2) Nonfederal				(3) Total			
	Fiscal Year			% Change 2018-19	Fiscal Year			% Change 2018-19	Fiscal Year			% Change 2018-19
	2019	2018	2017		2019	2018	2017		2019	2018	2017	
Human Clinical Trials	0	0	3		0	0	0		0	0	3	

Question 6. R&D Expenditures by Type of R&D, FY 2017-2019

	R&D Expenditures (Dollars in thousands)											
	(1) Federal				(2) Nonfederal				(3) Total			
	Fiscal Year			Change in % of total 2018-19	Fiscal Year			Change in % of total 2018-19	Fiscal Year			Change in % of total 2018-19
	2019	2018	2017		2019	2018	2017		2019	2018	2017	
a. Basic research	4,247	3,594	3,273	-3.5%	7,408	8,502	8,319	-4.1%	11,655	12,096	11,592	-4.8%
b. Applied research	2,244	1,492	2,371	5.3%	2,135	1,520	1,106	7.1%	4,379	3,012	3,477	7.2%
c. Development	683	646	346	-1.7%	798	1,201	600	-3.0%	1,481	1,847	946	-2.4%
d. Total	7,174	5,732	5,990	0.0%	10,341	11,223	10,025	0.0%	17,515	16,955	16,015	0.0%

Pass-through and subrecipient R&D expenditures**Question 7. R&D Expenditures Received as a Subrecipient, FY 2017-2019**

	R&D Expenditures (Dollars in thousands)											
	(1) Federal				(2) Nonfederal				(3) Total			
	Fiscal Year			% Change 2018-19	Fiscal Year			% Change 2018-19	Fiscal Year			% Change 2018-19
	2019	2018	2017		2019	2018	2017		2019	2018	2017	
a. From higher education institutions	1,411	1,423	1,932	-0.8%	38	230	1	-83.5%	1,449	1,653	1,933	-12.3%
b. From businesses	1,025	975	854	5.1%	112	83	135	34.9%	1,137	1,058	989	7.5%
c. From nonprofit organizations	50	2	30	999.9%	23	59	9	-61.0%	73	61	39	19.7%
d. From other	477	428	485	11.4%	602	715	479	-15.8%	1,079	1,143	964	-5.6%
e. Total	2,963	2,828	3,301	4.8%	775	1,087	624	-28.7%	3,738	3,915	3,925	-4.5%

General Comments:

FY 2017: FY17 Revisions During FY18 Collection: Error was made calculating nonfederal awards received as subrecipient.

Question 8. R&D Expenditures Passed Through to Subrecipients, FY 2017-2019

	R&D Expenditures (Dollars in thousands)											
	(1) Federal				(2) Nonfederal				(3) Total			
	Fiscal Year			% Change 2018-19	Fiscal Year			% Change 2018-19	Fiscal Year			% Change 2018-19
	2019	2018	2017		2019	2018	2017		2019	2018	2017	
a. To higher education institutions	1,154	274	20	↑ 321.2%	0	6	134	-100.0%	1,154	280	154	312.1%
b. To businesses	0	0	83		474	806	395	-41.2%	474	806	478	-41.2%
c. To nonprofit organizations	26	27	87	-3.7%	0	5	0	-100.0%	26	32	87	-18.8%
d. To other	177	161	41	9.9%	0	0	55		177	161	96	9.9%
e. Total	1,357	462	231	193.7%	474	817	584	-42.0%	1,831	1,279	815	43.2%

FY 2019 Trend Variance Explanations:

Federal funds passed through to higher education: UNCW had two large federal awards with multiple collaborator/sub-recipients which represented the first full fiscal year of expenditures.

R&D expenditures from federal sources**Question 9. Federally Funded Federal R&D Expenditures by Field and Federal Agency, FY 2019**

R&D Fields	Federal R&D Expenditures (Dollars in thousands)							
	USDA	DoD	Energy	HHS*	NASA	NSF	Other	Total
A. Computer and Information Sciences	0	0	0	0	0	69	0	69
B. Engineering								
1. Aerospace, Aeronautical, and Astronautical Engineering	0	0	0	0	0	0	0	0
2. Bioengineering and Biomedical Engineering	0	0	0	0	0	0	0	0
3. Chemical Engineering	0	0	0	0	0	0	0	0
4. Civil Engineering	0	0	0	0	0	0	0	0
5. Electrical, Electronic, and Communications Engineering	0	315	138	0	0	0	31	484
6. Industrial and Manufacturing Engineering	0	0	0	0	0	0	0	0
7. Mechanical Engineering	0	0	0	0	0	0	0	0
8. Metallurgical and Materials Engineering	0	0	0	0	0	0	0	0
9. Other Engineering	0	0	0	0	0	0	0	0
10. Total	0	315	138	0	0	0	31	484
C. Geosciences, Atmospheric Sciences, and Ocean Sciences								
1. Atmospheric Science and Meteorology	0	0	0	0	0	0	0	0
2. Geological and Earth Sciences	0	0	0	0	0	41	741	782
3. Ocean Sciences and Marine Sciences	0	0	0	0	83	525	0	608
4. Other Geosciences, Atmospheric Sciences, and Ocean Sciences	0	0	0	0	0	8	0	8
5. Total	0	0	0	0	83	574	741	1,398
D. Life Sciences								
1. Agricultural Sciences	0	0	0	0	0	27	742	769
2. Biological and Biomedical Sciences	211	117	0	247	0	689	1,392	2,656
3. Health Sciences	0	0	0	108	0	0	0	108
4. Natural Resources and Conservation	0	0	0	0	0	0	25	25
5. Other Life Sciences	0	0	0	0	0	0	0	0
6. Total	211	117	0	355	0	716	2,159	3,558
E. Mathematics and Statistics	0	0	0	13	0	67	0	80
F. Physical Sciences								
1. Astronomy and Astrophysics	0	0	0	0	0	0	0	0
2. Chemistry	0	0	0	79	0	295	0	374
3. Materials Science	0	0	3	0	0	84	0	87
4. Physics	0	0	0	0	0	51	0	51
5. Other Physical Sciences	0	0	0	0	0	0	0	0
6. Total	0	0	3	79	0	430	0	512
G. Psychology	0	0	0	285	0	0	12	297
H. Social Sciences								
1. Anthropology	0	0	0	0	0	0	0	0
2. Economics	0	0	0	0	0	0	0	0
3. Political Science and Government	0	0	0	0	0	0	0	0
4. Sociology, Demography, and Population Studies	0	0	0	0	0	0	0	0
5. Other Social Sciences	0	0	0	0	0	0	0	0
6. Total	0	0	0	0	0	0	0	0
I. Other Sciences	0	0	0	0	0	0	7	7
J. Non-S&E Fields								
1. Business Management and Business Administration	0	4	0	0	0	0	255	259
2. Communication and Communications Technologies	0	0	0	0	0	0	0	0
3. Education	0	44	0	86	0	5	328	463
4. Humanities	0	0	0	0	0	0	0	0
5. Law	0	0	0	0	0	0	0	0
6. Social Work	0	0	0	35	0	0	0	35
7. Visual and Performing Arts	0	0	0	0	0	0	10	10
8. Other Non-S&E Fields	0	0	0	1	0	1	0	2
9. Total	0	48	0	122	0	6	593	769
K. Total for All Fields of R&D	211	480	141	854	83	1,862	3,543	7,174

* includes NIH

Question 9. Federally Funded Federal R&D Expenditures by Field and Federal Agency, FY 2018

R&D Fields	Federal R&D Expenditures (Dollars in thousands)							
	USDA	DoD	Energy	HHS*	NASA	NSF	Other	Total
A. Computer and Information Sciences	0	0	0	0	0	116	0	116
B. Engineering								
1. Aerospace, Aeronautical, and Astronautical Engineering	0	0	0	0	0	0	0	0
2. Bioengineering and Biomedical Engineering	0	0	0	0	0	0	0	0
3. Chemical Engineering	0	0	0	0	0	0	0	0
4. Civil Engineering	0	0	0	0	0	0	0	0
5. Electrical, Electronic, and Communications Engineering	0	196	82	0	0	0	253	531
6. Industrial and Manufacturing Engineering	0	0	0	0	0	0	0	0
7. Mechanical Engineering	0	0	0	0	0	0	0	0
8. Metallurgical and Materials Engineering	0	0	0	0	0	0	0	0
9. Other Engineering	0	0	0	0	0	0	0	0
10. Total	0	196	82	0	0	0	253	531
C. Geosciences, Atmospheric Sciences, and Ocean Sciences								
1. Atmospheric Science and Meteorology	0	0	0	0	0	0	0	0
2. Geological and Earth Sciences	0	0	0	0	0	22	577	599
3. Ocean Sciences and Marine Sciences	0	24	0	0	78	288	30	420
4. Other Geosciences, Atmospheric Sciences, and Ocean Sciences	0	0	0	0	0	0	0	0
5. Total	0	24	0	0	78	310	607	1,019
D. Life Sciences								
1. Agricultural Sciences	0	0	0	0	0	76	763	839
2. Biological and Biomedical Sciences	175	214	0	155	0	448	394	1,386
3. Health Sciences	0	0	0	27	0	0	0	27
4. Natural Resources and Conservation	0	0	0	233	0	0	0	233
5. Other Life Sciences	0	0	0	0	0	0	47	47
6. Total	175	214	0	415	0	524	1,204	2,532
E. Mathematics and Statistics	0	0	0	0	0	91	0	91
F. Physical Sciences								
1. Astronomy and Astrophysics	0	0	0	0	0	0	0	0
2. Chemistry	0	0	0	79	0	233	0	312
3. Materials Science	0	0	0	0	0	47	0	47
4. Physics	0	0	0	0	0	47	0	47
5. Other Physical Sciences	0	0	0	0	0	0	0	0
6. Total	0	0	0	79	0	327	0	406
G. Psychology	0	0	0	177	0	0	76	253
H. Social Sciences								
1. Anthropology	0	0	0	0	0	0	4	4
2. Economics	0	0	0	0	0	0	0	0
3. Political Science and Government	0	0	0	0	0	0	0	0
4. Sociology, Demography, and Population Studies	0	0	0	0	0	0	0	0
5. Other Social Sciences	0	0	0	0	0	0	0	0
6. Total	0	0	0	0	0	0	4	4
I. Other Sciences	0	0	0	0	0	0	49	49
J. Non-S&E Fields								
1. Business Management and Business Administration	0	0	0	0	0	0	185	185
2. Communication and Communications Technologies	0	0	0	0	0	0	0	0
3. Education	0	0	0	65	0	20	313	398
4. Humanities	0	0	0	0	0	0	9	9
5. Law	0	0	0	0	0	0	0	0
6. Social Work	0	0	0	0	0	0	20	20
7. Visual and Performing Arts	0	0	0	0	0	0	4	4
8. Other Non-S&E Fields	0	36	0	29	0	2	48	115
9. Total	0	36	0	94	0	22	579	731
K. Total for All Fields of R&D	175	470	82	765	78	1,390	2,772	5,732

* includes NIH

Question 9. Federally Funded Federal R&D Expenditures by Field and Federal Agency, FY 2017

R&D Fields	Federal R&D Expenditures (Dollars in thousands)							
	USDA	DoD	Energy	HHS*	NASA	NSF	Other	Total
A. Computer and Information Sciences	0	0	0	0	0	13	0	13
B. Engineering								
1. Aerospace, Aeronautical, and Astronautical Engineering	0	0	0	0	0	0	0	0
2. Bioengineering and Biomedical Engineering	0	0	0	0	0	0	0	0
3. Chemical Engineering	0	0	0	0	0	0	0	0
4. Civil Engineering	0	0	0	0	0	0	1	1
5. Electrical, Electronic, and Communications Engineering	0	122	99	0	0	0	0	221
6. Industrial and Manufacturing Engineering	0	0	0	0	0	0	0	0
7. Mechanical Engineering	0	0	0	0	0	0	0	0
8. Metallurgical and Materials Engineering	0	0	0	0	0	0	0	0
9. Other Engineering	0	0	0	0	0	0	0	0
10. Total	0	122	99	0	0	0	1	222
C. Geosciences, Atmospheric Sciences, and Ocean Sciences								
1. Atmospheric Science and Meteorology	0	0	0	0	0	22	0	22
2. Geological and Earth Sciences	0	0	23	0	0	82	543	648
3. Ocean Sciences and Marine Sciences	0	69	0	0	68	78	430	645
4. Other Geosciences, Atmospheric Sciences, and Ocean Sciences	0	0	0	0	0	0	0	0
5. Total	0	69	23	0	68	182	973	1,315
D. Life Sciences								
1. Agricultural Sciences	0	0	0	0	0	85	559	644
2. Biological and Biomedical Sciences	36	597	8	121	0	633	317	1,712
3. Health Sciences	0	0	0	3	0	0	0	3
4. Natural Resources and Conservation	0	0	0	137	0	0	50	187
5. Other Life Sciences	0	0	0	0	0	0	0	0
6. Total	36	597	8	261	0	718	926	2,546
E. Mathematics and Statistics	0	0	0	0	0	34	0	34
F. Physical Sciences								
1. Astronomy and Astrophysics	0	0	0	0	0	0	0	0
2. Chemistry	0	0	0	80	0	198	0	278
3. Materials Science	0	0	0	0	0	0	0	0
4. Physics	0	0	0	0	0	205	0	205
5. Other Physical Sciences	0	0	0	0	0	0	0	0
6. Total	0	0	0	80	0	403	0	483
G. Psychology	0	0	0	137	0	0	78	215
H. Social Sciences								
1. Anthropology	0	0	0	0	0	0	0	0
2. Economics	0	0	0	0	0	0	0	0
3. Political Science and Government	0	0	0	0	0	0	0	0
4. Sociology, Demography, and Population Studies	0	0	0	6	0	0	0	6
5. Other Social Sciences	0	0	0	0	0	0	0	0
6. Total	0	0	0	6	0	0	0	6
I. Other Sciences	0	0	0	0	0	0	0	0
J. Non-S&E Fields								
1. Business Management and Business Administration	0	0	0	0	0	0	154	154
2. Communication and Communications Technologies	0	0	0	0	0	0	0	0
3. Education	0	0	0	76	0	67	482	625
4. Humanities	0	0	0	0	0	0	13	13
5. Law	0	0	0	0	0	0	0	0
6. Social Work	0	0	0	0	0	0	0	0
7. Visual and Performing Arts	0	0	0	0	0	0	6	6
8. Other Non-S&E Fields	0	39	0	111	0	0	208	358
9. Total	0	39	0	187	0	67	863	1,156
K. Total for All Fields of R&D	36	827	130	671	68	1,417	2,841	5,990

* includes NIH

Question 9. Federally Funded Federal R&D Expenditures by Field and Federal Agency Percent Change FY 2018-2019

R&D Fields	Federal R&D Expenditures							Total
	USDA	DoD	Energy	HHS*	NASA	NSF	Other	
A. Computer and Information Sciences						-40.5%		-40.5%
B. Engineering								
1. Aerospace, Aeronautical, and Astronautical Engineering								
2. Bioengineering and Biomedical Engineering								
3. Chemical Engineering								
4. Civil Engineering								
5. Electrical, Electronic, and Communications Engineering		60.7%	68.3%				-87.7%	-8.9%
6. Industrial and Manufacturing Engineering								
7. Mechanical Engineering								
8. Metallurgical and Materials Engineering								
9. Other Engineering								
10. Total		60.7%	68.3%				-87.7%	-8.9%
C. Geosciences, Atmospheric Sciences, and Ocean Sciences								
1. Atmospheric Science and Meteorology								
2. Geological and Earth Sciences						86.4%	28.4%	30.6%
3. Ocean Sciences and Marine Sciences		-100.0%			6.4%	82.3%	-100.0%	44.8%
4. Other Geosciences, Atmospheric Sciences, and Ocean Sciences						999.9%		999.9%
5. Total		-100.0%			6.4%	85.2%	22.1%	37.2%
D. Life Sciences								
1. Agricultural Sciences						-64.5%	-2.8%	-8.3%
2. Biological and Biomedical Sciences	20.6%	-45.3%		59.4%		53.8%	253.3%	91.6%
3. Health Sciences				300.0%				300.0%
4. Natural Resources and Conservation				-100.0%			999.9%	-89.3%
5. Other Life Sciences							-100.0%	-100.0%
6. Total	20.6%	-45.3%		-14.5%		36.6%	79.3%	40.5%
E. Mathematics and Statistics				999.9%		-26.4%		-12.1%
F. Physical Sciences								
1. Astronomy and Astrophysics								
2. Chemistry				0.0%		26.6%		19.9%
3. Materials Science			999.9%			78.7%		85.1%
4. Physics						8.5%		8.5%
5. Other Physical Sciences								
6. Total			999.9%	0.0%		31.5%		26.1%
G. Psychology				61.0%			-84.2%	17.4%
H. Social Sciences								
1. Anthropology							-100.0%	-100.0%
2. Economics								
3. Political Science and Government								
4. Sociology, Demography, and Population Studies								
5. Other Social Sciences								
6. Total							-100.0%	-100.0%
I. Other Sciences							-85.7%	-85.7%
J. Non-S&E Fields								
1. Business Management and Business Administration		999.9%					37.8%	40.0%
2. Communication and Communications Technologies								
3. Education		999.9%		32.3%		-75.0%	4.8%	16.3%
4. Humanities							-100.0%	-100.0%
5. Law								
6. Social Work				999.9%			-100.0%	75.0%
7. Visual and Performing Arts							150.0%	150.0%
8. Other Non-S&E Fields		-100.0%		-96.6%		-50.0%	-100.0%	-98.3%
9. Total		33.3%		29.8%		-72.7%	2.4%	5.2%
K. Total for All Fields of R&D	20.6%	2.1%	72.0%	11.6%	6.4%	34.0%	27.8%	25.2%

* includes NIH

FY 2019 Trend Variance Explanations:**Other federally funded biological and biomedical sciences:** Due to increase in DOC-NOAA awards in Biological/Biomedical Science

Question 10. Federally Funded R&D Expenditures from Other Federal Agencies, FY 2017-2019 (Dollars in thousands)

FY 2019		FY 2018		FY 2017	
Federal Agency	R&D Expenditures	Federal Agency	R&D Expenditures	Federal Agency	R&D Expenditures
a. National Oceanic and Atmospheric Administration (NOAA)	1,853	a. National Oceanic and Atmospheric Administration (NOAA)	1,601	a. National Oceanic and Atmospheric Administration (NOAA)	1,736
b. Department of the Interior	1,026	b. Department of the Interior	176	b. Department of State (DOS)	270
c. Department of State (DOS)	278	c. Federal Bureau of Investigation (FBI)	329	c. Department of Education (ED)	213
d. Small Business Administration (SBA)	253	d. Department of State (DOS)	300	d. Small Business Administration (SBA)	154
e. Department of Justice (DOJ)	44	e. National Endowment for the Arts (NEA)	13	e. Federal Emergency Management Agency (FEMA)	129
f. Department of Education (ED)	29	f. Small Business Administration (SBA)	184	f. Environmental Protection Agency (EPA)	128
g. Department of Veterans Affairs (VA)	25	g. Department of Veterans Affairs (VA)	46	g. Department of Justice (DOJ)	79
h. Institute of Museum and Library Services (IMLS)	22	h. Environmental Protection Agency (EPA)	90	h. Department of the Interior	63
i. National Endowment for the Arts (NEA)	10	i. Department of Education (ED)	14	i. Veterans Health Administration (VHA)	50
j. Environmental Protection Agency (EPA)	3	j. Corporation for National and Community Service (CNCS)	19	j. National Endowment for the Humanities (NEH)	19
k. Other agencies not listed above		k. Other agencies not listed above		k. Other agencies not listed above	
l. Total	3,543	l. Total	2,772	l. Total	2,841

R&D expenditures from nonfederal sources**Question 11. Nonfederal R&D Expenditures by Field and Nonfederal Source, FY 2019**

R&D Fields	Nonfederal R&D Expenditures (Dollars in thousands)					Total
	State and local government	Business	Nonprofit organizations	Institutional funds	Other nonfederal sources	
A. Computer and Information Sciences	0	0	0	41	0	41
B. Engineering						
1. Aerospace, Aeronautical, and Astronautical Engineering	0	600	0	141	0	741
2. Bioengineering and Biomedical Engineering	0	0	0	0	0	0
3. Chemical Engineering	0	0	0	0	0	0
4. Civil Engineering	0	0	0	0	0	0
5. Electrical, Electronic, and Communications Engineering	0	0	0	1	0	1
6. Industrial and Manufacturing Engineering	0	0	0	0	0	0
7. Mechanical Engineering	0	0	0	0	0	0
8. Metallurgical and Materials Engineering	0	0	0	0	0	0
9. Other Engineering	0	0	0	0	0	0
10. Total	0	600	0	142	0	742
C. Geosciences, Atmospheric Sciences, and Ocean Sciences						
1. Atmospheric Science and Meteorology	0	0	0	0	0	0
2. Geological and Earth Sciences	0	0	0	52	10	62
3. Ocean Sciences and Marine Sciences	2,912	7	0	334	0	3,253
4. Other Geosciences, Atmospheric Sciences, and Ocean Sciences	480	0	0	0	0	480
5. Total	3,392	7	0	386	10	3,795
D. Life Sciences						
1. Agricultural Sciences	746	48	21	265	1	1,081
2. Biological and Biomedical Sciences	2,123	76	15	680	54	2,948
3. Health Sciences	0	24	23	4	0	51
4. Natural Resources and Conservation	7	126	1	10	0	144
5. Other Life Sciences	0	0	0	0	0	0
6. Total	2,876	274	60	959	55	4,224
E. Mathematics and Statistics	0	0	0	3	0	3
F. Physical Sciences						
1. Astronomy and Astrophysics	0	0	0	0	0	0
2. Chemistry	50	8	0	26	0	84
3. Materials Science	0	0	0	0	0	0
4. Physics	0	0	0	1	0	1
5. Other Physical Sciences	0	0	0	0	0	0
6. Total	50	8	0	27	0	85
G. Psychology	0	0	0	17	0	17
H. Social Sciences						
1. Anthropology	0	0	17	22	0	39
2. Economics	0	0	0	0	0	0
3. Political Science and Government	0	0	7	0	0	7
4. Sociology, Demography, and Population Studies	0	0	0	0	0	0
5. Other Social Sciences	77	7	191	69	0	344
6. Total	77	7	215	91	0	390
I. Other Sciences	0	0	0	337	0	337
J. Non-S&E Fields						
1. Business Management and Business Administration	0	40	41	222	0	303
2. Communication and Communications Technologies	0	0	0	0	0	0
3. Education	49	19	43	83	0	194
4. Humanities	0	0	0	0	0	0
5. Law	0	0	0	0	0	0
6. Social Work	4	0	0	4	0	8
7. Visual and Performing Arts	20	9	0	66	0	95
8. Other Non-S&E Fields	4	0	37	66	0	107
9. Total	77	68	121	441	0	707
K. Total for All Fields of R&D	6,472	964	396	2,444	65	10,341

Question 11. Nonfederal R&D Expenditures by Field and Nonfederal Source, FY 2018

R&D Fields	Nonfederal R&D Expenditures (Dollars in thousands)					
	State and local government	Business	Nonprofit organizations	Institutional funds	Other nonfederal sources	Total
A. Computer and Information Sciences	0	0	0	31	0	31
B. Engineering						
1. Aerospace, Aeronautical, and Astronautical Engineering	0	904	0	0	0	904
2. Bioengineering and Biomedical Engineering	0	0	0	0	0	0
3. Chemical Engineering	0	0	0	0	0	0
4. Civil Engineering	0	0	0	224	0	224
5. Electrical, Electronic, and Communications Engineering	0	0	0	0	0	0
6. Industrial and Manufacturing Engineering	0	0	0	0	0	0
7. Mechanical Engineering	0	0	0	0	0	0
8. Metallurgical and Materials Engineering	0	0	0	0	0	0
9. Other Engineering	0	0	0	0	0	0
10. Total	0	904	0	224	0	1,128
C. Geosciences, Atmospheric Sciences, and Ocean Sciences						
1. Atmospheric Science and Meteorology	0	0	0	0	0	0
2. Geological and Earth Sciences	0	0	0	45	0	45
3. Ocean Sciences and Marine Sciences	3,070	0	0	377	0	3,447
4. Other Geosciences, Atmospheric Sciences, and Ocean Sciences	0	0	0	0	0	0
5. Total	3,070	0	0	422	0	3,492
D. Life Sciences						
1. Agricultural Sciences	783	20	80	355	5	1,243
2. Biological and Biomedical Sciences	2,535	94	29	310	60	3,028
3. Health Sciences	0	33	6	0	0	39
4. Natural Resources and Conservation	0	88	61	0	0	149
5. Other Life Sciences	0	0	0	0	0	0
6. Total	3,318	235	176	665	65	4,459
E. Mathematics and Statistics	7	0	0	0	0	7
F. Physical Sciences						
1. Astronomy and Astrophysics	0	0	0	0	0	0
2. Chemistry	50	4	0	22	0	76
3. Materials Science	0	0	0	0	0	0
4. Physics	0	32	0	11	0	43
5. Other Physical Sciences	0	0	0	0	0	0
6. Total	50	36	0	33	0	119
G. Psychology	4	0	0	23	0	27
H. Social Sciences						
1. Anthropology	0	0	0	3	0	3
2. Economics	16	0	9	0	0	25
3. Political Science and Government	0	0	1	2	0	3
4. Sociology, Demography, and Population Studies	27	13	5	56	0	101
5. Other Social Sciences	0	0	0	0	0	0
6. Total	43	13	15	61	0	132
I. Other Sciences	0	6	0	656	0	662
J. Non-S&E Fields						
1. Business Management and Business Administration	0	29	0	229	4	262
2. Communication and Communications Technologies	0	0	0	0	0	0
3. Education	74	24	0	128	0	226
4. Humanities	0	0	0	37	0	37
5. Law	0	0	0	0	0	0
6. Social Work	0	0	11	78	0	89
7. Visual and Performing Arts	17	28	0	26	0	71
8. Other Non-S&E Fields	27	75	179	200	0	481
9. Total	118	156	190	698	4	1,166
K. Total for All Fields of R&D	6,610	1,350	381	2,813	69	11,223

Question 11. Nonfederal R&D Expenditures by Field and Nonfederal Source, FY 2017

R&D Fields	Nonfederal R&D Expenditures (Dollars in thousands)					
	State and local government	Business	Nonprofit organizations	Institutional funds	Other nonfederal sources	Total
A. Computer and Information Sciences	0	0	0	5	0	5
B. Engineering						
1. Aerospace, Aeronautical, and Astronautical Engineering	0	0	0	0	0	0
2. Bioengineering and Biomedical Engineering	0	436	0	109	0	545
3. Chemical Engineering	0	0	0	0	0	0
4. Civil Engineering	0	0	0	0	0	0
5. Electrical, Electronic, and Communications Engineering	0	0	0	11	0	11
6. Industrial and Manufacturing Engineering	0	0	0	0	0	0
7. Mechanical Engineering	0	0	0	0	0	0
8. Metallurgical and Materials Engineering	0	0	0	0	0	0
9. Other Engineering	0	0	0	0	0	0
10. Total	0	436	0	120	0	556
C. Geosciences, Atmospheric Sciences, and Ocean Sciences						
1. Atmospheric Science and Meteorology	0	0	0	0	0	0
2. Geological and Earth Sciences	0	0	0	23	0	23
3. Ocean Sciences and Marine Sciences	2,792	16	0	412	0	3,220
4. Other Geosciences, Atmospheric Sciences, and Ocean Sciences	0	0	0	0	0	0
5. Total	2,792	16	0	435	0	3,243
D. Life Sciences						
1. Agricultural Sciences	695	58	133	310	2	1,198
2. Biological and Biomedical Sciences	2,124	100	63	143	6	2,436
3. Health Sciences	0	75	0	0	0	75
4. Natural Resources and Conservation	6	93	0	328	0	427
5. Other Life Sciences	0	0	0	0	0	0
6. Total	2,825	326	196	781	8	4,136
E. Mathematics and Statistics	12	0	0	0	0	12
F. Physical Sciences						
1. Astronomy and Astrophysics	0	0	0	0	0	0
2. Chemistry	0	4	2	36	0	42
3. Materials Science	0	0	0	0	0	0
4. Physics	0	35	0	2	0	37
5. Other Physical Sciences	0	0	0	0	0	0
6. Total	0	39	2	38	0	79
G. Psychology	0	0	0	21	6	27
H. Social Sciences						
1. Anthropology	0	0	0	0	0	0
2. Economics	0	0	0	3	0	3
3. Political Science and Government	0	0	0	2	0	2
4. Sociology, Demography, and Population Studies	0	18	194	43	0	255
5. Other Social Sciences	0	0	0	0	0	0
6. Total	0	18	194	48	0	260
I. Other Sciences	0	0	0	848	0	848
J. Non-S&E Fields						
1. Business Management and Business Administration	0	17	0	149	0	166
2. Communication and Communications Technologies	0	0	0	0	0	0
3. Education	107	22	4	246	0	379
4. Humanities	0	0	0	36	0	36
5. Law	0	0	0	0	0	0
6. Social Work	0	0	0	39	0	39
7. Visual and Performing Arts	17	8	2	31	0	58
8. Other Non-S&E Fields	5	41	3	129	3	181
9. Total	129	88	9	630	3	859
K. Total for All Fields of R&D	5,758	923	401	2,926	17	10,025

Question 11. Nonfederal R&D Expenditures by Field and Nonfederal Source, Percent Change FY 2019 - 2018

R&D Fields	Nonfederal R&D Expenditures (Dollars in thousands)					
	State and local government	Business	Nonprofit organizations	Institutional funds	Other nonfederal sources	Total
A. Computer and Information Sciences				32.3%		32.3%
B. Engineering						
1. Aerospace, Aeronautical, and Astronautical Engineering		-33.6%		999.9%		-18.0%
2. Bioengineering and Biomedical Engineering						
3. Chemical Engineering						
4. Civil Engineering				-100.0%		-100.0%
5. Electrical, Electronic, and Communications Engineering				999.9%		999.9%
6. Industrial and Manufacturing Engineering						
7. Mechanical Engineering						
8. Metallurgical and Materials Engineering						
9. Other Engineering						
10. Total		-33.6%		-36.6%		-34.2%
C. Geosciences, Atmospheric Sciences, and Ocean Sciences						
1. Atmospheric Science and Meteorology						
2. Geological and Earth Sciences				15.6%	999.9%	37.8%
3. Ocean Sciences and Marine Sciences	-5.1%	999.9%		-11.4%		-5.6%
4. Other Geosciences, Atmospheric Sciences, and Ocean Sciences	999.9%					999.9%
5. Total	10.5%	999.9%		-8.5%	999.9%	8.7%
D. Life Sciences						
1. Agricultural Sciences	-4.7%	140.0%	-73.8%	-25.4%	-80.0%	-13.0%
2. Biological and Biomedical Sciences	-16.3%	-19.1%	-48.3%	119.4%	-10.0%	-2.6%
3. Health Sciences		-27.3%	283.3%	999.9%		30.8%
4. Natural Resources and Conservation	999.9%	43.2%	-98.4%	999.9%		-3.4%
5. Other Life Sciences						
6. Total	-13.3%	16.6%	-65.9%	44.2%	-15.4%	-5.3%
E. Mathematics and Statistics	-100.0%			999.9%		-57.1%
F. Physical Sciences						
1. Astronomy and Astrophysics						
2. Chemistry	0.0%	100.0%		18.2%		10.5%
3. Materials Science						
4. Physics		-100.0%		-90.9%		-97.7%
5. Other Physical Sciences						
6. Total	0.0%	-77.8%		-18.2%		-28.6%
G. Psychology	-100.0%			-26.1%		-37.0%
H. Social Sciences						
1. Anthropology			999.9%	633.3%		999.9%
2. Economics	-100.0%		-100.0%			-100.0%
3. Political Science and Government			600.0%	-100.0%		133.3%
4. Sociology, Demography, and Population Studies	-100.0%	-100.0%	-100.0%	-100.0%		-100.0%
5. Other Social Sciences	999.9%	999.9%	999.9%	999.9%		999.9%
6. Total	79.1%	-46.2%	999.9%	49.2%		195.5%
I. Other Sciences		-100.0%		-48.6%		-49.1%
J. Non-S&E Fields						
1. Business Management and Business Administration		37.9%	999.9%	-3.1%	-100.0%	15.6%
2. Communication and Communications Technologies						
3. Education	-33.8%	-20.8%	999.9%	-35.2%		-14.2%
4. Humanities				-100.0%		-100.0%
5. Law						
6. Social Work	999.9%		-100.0%	-94.9%		-91.0%
7. Visual and Performing Arts	17.6%	-67.9%		153.8%		33.8%
8. Other Non-S&E Fields	-85.2%	-100.0%	-79.3%	-67.0%		-77.8%
9. Total	-34.7%	-56.4%	-36.3%	-36.8%	-100.0%	-39.4%
K. Total for All Fields of R&D	-2.1%	-28.6%	3.9%	-13.1%	-5.8%	-7.9%

FY 2018 Trend Variance Explanations:

Business funded aerospace, aeronautical, and astronautical engineering: Award in Astronautical Engineering. The building costs and launch preparation costs of a satellite funded by private business grant which was launched Dec 4, 2018 in cooperation with NOAA-NASA-Space X. The satellite measures ocean water temperatures for which the data will be available to the public.

R&D expenditures by cost elements**Question 12 R&D Expenditures by Type of Cost, FY 2017-2019**

Source of Funds	R&D Expenditures (Dollars in thousands)			
	Fiscal Year			% Change 2018-19
	2019	2018	2017	
a. Salaries, wages, and fringe benefits	8,986	8,480	7,365	6.0%
b. Software purchases				
1. Noncapitalized software	6	23	24	-73.9%
2. Capitalized software	0	0	0	
c. Capitalized equipment	385	614	621	-37.3%
d. Pass-throughs to other universities or organizations	1,831	1,279	815	43.2%
e. Other direct costs	3,767	4,190	5,027	-10.1%
f. Indirect costs				
1. Recovered indirect costs	1,571	1,409	1,387	11.5%
2. Unrecovered indirect costs	969	960	776	0.9%
3. Total indirect costs	2,540	2,369	2,163	7.2%
g. Total	17,515	16,955	16,015	3.3%

Question 13. Capitalization Thresholds for Software and Equipment, FY 2017-2019

	(1) Software				(2) Equipment			
	Fiscal Year			% Change 2018-19	Fiscal Year			% Change 2018-19
	2019	2018	2017		2019	2018	2017	
Capitalization thresholds	100.0	100.0	100.0	0.0%	5.0	5.0	5.0	0.0%

DC = Don't Capitalize; respondent entered "Don't Capitalize" on the questionnaire

Question 14. Equipment Expenditures by Field, FY 2017-2019

R&D Field	R&D Expenditures (Dollars in thousands)											
	(1) Federal				(2) Nonfederal				(3) Total			
	Fiscal Year			% Change 2018-19	Fiscal Year			% Change 2018-19	Fiscal Year			% Change 2018-19
	2019	2018	2017		2019	2018	2017		2019	2018	2017	
A. Computer and Information Sciences	0	95	0	-100.0%	0	0	0		0	95	0	-100.0%
B. Engineering												
1. Aerospace, Aeronautical, and Astronautical Engineering	0	0	0		0	0	0		0	0	0	
2. Bioengineering and Biomedical Engineering	0	0	0		0	0	0		0	0	0	
3. Chemical Engineering	0	0	0		0	0	0		0	0	0	
4. Civil Engineering	0	0	0		0	0	0		0	0	0	
5. Electrical, Electronic, and Communications Engineering	55	0	0	999.9%	0	0	0		55	0	0	999.9%
6. Industrial and Manufacturing Engineering	0	0	0		0	0	0		0	0	0	
7. Mechanical Engineering	0	0	0		0	0	0		0	0	0	
8. Metallurgical and Materials Engineering	0	0	0		0	0	0		0	0	0	
9. Other Engineering	0	0	0		0	0	0		0	0	0	
10. Total	55	0	0	999.9%	0	0	0		55	0	0	999.9%
C. Geosciences, Atmospheric Sciences, and Ocean Sciences												
1. Atmospheric Science and Meteorology	0	0	0		0	0	0		0	0	0	
2. Geological and Earth Sciences	12	0	13	999.9%	14	0	0	999.9%	26	0	13	999.9%
3. Ocean Sciences and Marine Sciences	0	0	38		144	356	356	-59.6%	144	356	394	-59.6%
4. Other Geosciences, Atmospheric Sciences, and Ocean Sciences	0	0	0		0	0	0		0	0	0	
5. Total	12	0	51	999.9%	158	356	356	-55.6%	170	356	407	-52.2%
D. Life Sciences												
1. Agricultural Sciences	0	0	0		45	104	114	-56.7%	45	104	114	-56.7%
2. Biological and Biomedical Sciences	0	14	3	-100.0%	84	25	25	236.0%	84	39	28	115.4%
3. Health Sciences	0	0	0		0	0	0		0	0	0	
4. Natural Resources and Conservation	0	0	0		0	0	0		0	0	0	
5. Other Life Sciences	0	0	0		0	0	0		0	0	0	
6. Total	0	14	3	-100.0%	129	129	139	0.0%	129	143	142	-9.8%
E. Mathematics and Statistics	0	0	0		0	0	0		0	0	0	
F. Physical Sciences												
1. Astronomy and Astrophysics	0	0	0		0	0	0		0	0	0	
2. Chemistry	0	11	38	-100.0%	0	0	6		0	11	44	-100.0%
3. Materials Science	31	0	0	999.9%	0	0	0		31	0	0	999.9%
4. Physics	0	0	0		0	0	0		0	0	0	
5. Other Physical Sciences	0	0	0		0	0	0		0	0	0	
6. Total	31	11	38	181.8%	0	0	6		31	11	44	181.8%
G. Psychology	0	0	0		0	0	0		0	0	0	
H. Social Sciences												
1. Anthropology	0	0	0		0	0	0		0	0	0	
2. Economics	0	0	0		0	0	0		0	0	0	
3. Political Science and Government	0	0	0		0	0	0		0	0	0	
4. Sociology, Demography, and Population Studies	0	0	0		0	0	0		0	0	0	
5. Other Social Sciences	0	0	0		0	0	0		0	0	0	
6. Total	0	0	0		0	0	0		0	0	0	
I. Other Sciences	0	0	0		0	0	0		0	0	0	
J. Non-S&E Fields												
1. Business Management and Business Administration	0	0	0		0	0	0		0	0	0	
2. Communication and Communications Technologies	0	0	0		0	0	0		0	0	0	
3. Education	0	0	0		0	0	0		0	0	0	
4. Humanities	0	0	0		0	0	0		0	0	0	
5. Law	0	0	0		0	0	0		0	0	0	
6. Social Work	0	0	0		0	0	0		0	0	0	
7. Visual and Performing Arts	0	0	0		0	0	0		0	0	0	
8. Other Non-S&E Fields	0	9	28	-100.0%	0	0	0		0	9	28	-100.0%
9. Total	0	9	28	-100.0%	0	0	0		0	9	28	-100.0%
K. Total for All Fields of R&D	98	129	120	-24.0%	287	485	501	-40.8%	385	614	621	-37.3%

R&D personnel**Question 15. Principal Investigators and Other Personnel, FY 2017-2019**

	(1) Principal Investigators				(2) All other personnel				(3) Total			
	Fiscal Year			% Change	Fiscal Year			% Change	Fiscal Year			% Change
	2019	2018	2017	2018-19	2019	2018	2017	2018-19	2019	2018	2017	2018-19
Number of people (headcount)	200	172	186	16.3%	112	107	347	4.7%	312	279	533	11.8%

Fiscal year**Question 16. Fiscal Year**

	Month
In what month did your institution's fiscal year end?	June