

TABLE 77

Headcount of R&D personnel at higher education institutions, by state, institutional control, and institution: FYs 2016–19 and by detail for FY 2019

(Number)

State, institutional control, and institution	2016	2017	2018	2019		
				Total	Principal investigators	Other personnel
Alabama						
Public						
Alabama A&M U.	432 i	432 i	432 i	432	53	379
Alabama State U.	89	94	89	89 i	32 i	57 i
Auburn U., Auburn	1,690	2,229	2,380	4,200	1,200	3,000
Jacksonville State U.	61	16 i	16	17	4	13
U. Alabama, Birmingham	5,093	4,842	5,085	5,373	858	4,515
U. Alabama, Huntsville	1,134	1,258	1,151	1,207	203	1,004
U. Alabama, Tuscaloosa	1,223	1,258	1,323	1,499	339	1,160
U. South Alabama	464	425	416	500	144	356
Private						
Tuskegee U.	47	47	47	47	7	40
Alaska						
Public						
U. Alaska, Anchorage	274	283	255	270	59	211
U. Alaska, Fairbanks	1,258	1,183	1,159	1,156	220	936
U. Alaska, Southeast	23	26	19	21	2	19
Private						
Alaska Pacific U.	69	44	45	59	22	37
Arizona						
Public						
Arizona State U.	7,292	8,792	8,736	9,783	1,155	8,628
Dine C.	ne	ne	77	58	8	50
Northern Arizona U.	922 i	907	1,096	1,250	228	1,022
U. Arizona	7,884	7,968	8,412	8,681	1,539	7,142
Private						
Southwest C. of Naturopathic Medicine and Health Sciences	ne	ne	ne	3	1	2
Arkansas						
Public						
Arkansas State U., Jonesboro	314	279	265	295	40	255
U. Arkansas for Medical Sciences	1,213	1,145	1,099	1,163	428	735
U. Arkansas, Fayetteville	3,456	3,625	2,522	2,526	354	2,172
U. Arkansas, Little Rock	226	219	261	251	25	226
U. Arkansas, Pine Bluff	270	269	229	200	16	184
U. Central Arkansas	166	134	163	167	27	140
California						
Public						
California Polytechnic State U., San Luis Obispo	731	795	886	971	160	811
California State Polytechnic U., Pomona	385	414	418	412	62	350
California State U., Bakersfield	115	195	142	354	27	327
California State U., Channel Islands	76	18	30	32	7	25
California State U., Chico	181	177	157	209	56	153
California State U., Dominguez Hills	167	82	93	101	6	95
California State U., Fresno	413	433	436	437	95	342
California State U., Fullerton	511	360	367	574	54	520
California State U., Long Beach	567	893	874	744	106	638
California State U., Los Angeles	96	181	265	272	65	207
California State U., Maritime Academy	11	8	36	36	9	27
California State U., Monterey Bay	163	148	151	175	25	150

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California State U., Northridge	469	451	530	642	88	554
California State U., Sacramento	365	517	515	904	78	826
California State U., San Bernardino	377	686	976	710	65	645
California State U., San Marcos	213	215	301	302	64	238
California State U., Stanislaus	65	105	112	135	44	91
Humboldt State U.	878	939	1,064	1,017	57	960
Naval Postgraduate School	612	581	452	422	218	204
San Diego State U.	1,464	1,507	1,385	1,428	367	1,061
San Francisco State U.	747	732	731	1,026	455	571
San Jose State U.	647	674	765	747	102	645
U. California, Berkeley	9,755	9,439	9,574	9,575	1,144	8,431
U. California, Davis	10,723	10,561	10,552	10,727	1,197	9,530
U. California, Irvine	4,551	4,559	4,789	4,882	711	4,171
U. California, Los Angeles	11,748	11,759	11,949	11,582	1,335	10,247
U. California, Merced	723	819	926	926	171	755
U. California, Office of the President	102	90	87	95	0	95
U. California, Riverside	2,695	2,771	2,826	3,004	446	2,558
U. California, San Diego	10,745	10,843	10,935	11,195	1,130	10,065
U. California, San Francisco	8,727	8,939	9,163	9,463	601	8,862
U. California, Santa Barbara	3,450	3,302	3,447	3,770	419	3,351
U. California, Santa Cruz	2,429	2,299	2,297	2,319	242	2,077
Private						
Azusa Pacific U.	546	511	466	287	46	241
Biola U.	123	240	240	248	73	175
California Institute of Technology	2,350	2,467	1,955	2,450	323	2,127
California Lutheran U.	ne	ne	ne	11	8	3
Chapman U.	168	210	170	217	69	148
Charles R. Drew U. of Medicine and Science	185	185	210	63	39	24
Claremont Graduate U.	86	86	86	86	22	64
Claremont McKenna C.	30	434	434	434	26	408
Harvey Mudd C.	286	255	224	176	56	120
Keck Graduate Institute	48	249	70	78	74	4
La Sierra U.	47	49	28	31	17	14
Loma Linda U.	279	313	313	228	104	124
Loyola Marymount U.	407	428	433	423	89	334
Marshall B. Ketchum U.	13	124	123	139	44	95
Mills C.	11	14	13	22	6	16
Occidental C.	56	59	78	95	12	83
Pepperdine U.	143	236	219	201	52	149
Pomona C.	361	328	310	266	35	231
Santa Clara U.	121	205	214	212	49	163
Scripps Research Institute	2,145	2,498	2,122	1,934	211	1,723
Stanford U.	9,476	9,773	10,767	11,169	1,714	9,455
Touro U.	40	35	44	39	14	25
U. of the Pacific	84	54	75	61	20	41
U. San Diego	246	141	161	188	50	138
U. San Francisco	262	272	245	225	22	203
U. Southern California	6,689	6,973	8,696	11,344	1,680	9,664
Western U. of Health Sciences	74	77	79	80	17	63

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Colorado						
Public						
Colorado School of Mines	1,391	1,152	1,483	1,585	220	1,365
Colorado State U., Fort Collins	9,193 i	4,806 i	5,061 i	5,533 i	1,096	4,437 i
Colorado State U., Pueblo	ne	ne	ne	22 i	2 i	20 i
Fort Lewis C.	ne	ne	ne	156	26	130
U. Colorado Boulder	3,091	3,132	5,789	5,977	1,351	4,626
U. Colorado Colorado Springs	247	219	177	179	53	126
U. Colorado Denver and Anschutz Medical Campus	5,419	5,466	5,488	5,604	1,016	4,588
U. Northern Colorado	235	234	291	267	48	219
U.S. Air Force Academy	704 i	703 i	618 i	677 i	136	541 i
Private						
Colorado C.	48	63	68	49	15	34
U. Denver	348	443	696	806	121	685
Connecticut						
Public						
Central Connecticut State U.	114	105	ne	142	63	79
Eastern Connecticut State U.	70	70	82	75	30	45
Southern Connecticut State U.	175	165	165	255	133	122
U. Connecticut	4,892	5,034	5,388	5,363	798	4,565
Private						
Connecticut C.	17	15	14	21	10	11
Fairfield U.	92 i	92 i	92 i	92	10	82
Trinity C., Hartford	57	55	53	62	9	53
U. Hartford	41 i	41 i	35 i	40	19	21
U. New Haven	198	308	461	450	56	394
Wesleyan U.	204	200	243	232	30	202
Yale U.	8,425	7,882	7,119	6,475	1,194	5,281
Delaware						
Public						
Delaware State U.	278	227	236	236 i	37 i	199 i
U. Delaware	3,071	3,083	3,007	3,093	611	2,482
District of Columbia						
Public						
National Defense U.	46	47	30	26	19	7
U. of the District of Columbia	92	106	92	121	24	97
Private						
American U.	1,116	1,132	1,066	1,311	173	1,138
Catholic U. of America	406	450	205	235	67	168
Gallaudet U.	82	142	116	107	13	94
George Washington U.	2,797	2,806	2,695	3,039	917	2,122
Georgetown U.	2,281	2,413	2,584	2,710	373	2,337
Howard U.	710	660	682	629	115	514
Florida						
Public						
Florida A&M U.	1,572	1,437	899	908	108	800
Florida Atlantic U.	416	563	719	826	195	631
Florida Gulf Coast U.	572	542	509	552	105	447
Florida International U.	3,307	3,641	4,220	4,401	517	3,884

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Florida Polytechnic U.	ne	ne	ne	79	48	31
Florida State U.	5,129	4,690	4,639	4,305	584	3,721
U. Central Florida	3,269	3,362	3,509	3,740	560	3,180
U. Florida	9,744 i	9,372 i	9,569 i	10,316 i	1,706 i	8,610 i
U. North Florida	341	347	342	382	31	351
U. South Florida, Saint Petersburg	240	152	136	146	91	55
U. South Florida, Sarasota-Manatee	66	63	63	61	37	24
U. South Florida, Tampa	4,197	4,327	2,272	3,501	1,221	2,280
U. West Florida	387	592	286	339	50	289
Private						
Bethune-Cookman U.	ne	ne	50	60	15	45
Embry-Riddle Aeronautical U.	148	140	194	183	113	70
Florida Institute of Technology	431	463	426	433	75	358
Nova Southeastern U.	339	361	327	420	58	362
U. Miami	3,829	3,943	3,842	3,948	821	3,127
Georgia						
Public						
Albany State U.	53	40	43	32	14	18
Augusta U.	1,502	1,544	1,525	1,420	320	1,100
Fort Valley State U.	210	225	182	132	9	123
Georgia Institute of Technology	3,297 i	3,445	3,669	3,447	1,495	1,952
Georgia Southern U.	477	486	435	447	91	356
Georgia State U.	4,795	4,616	4,283	4,287	462	3,825
Kennesaw State U.	95	427	379	950	600	350
Savannah State U.	466	494	80	80	14	66
U. Georgia	7,593	7,927	8,366	8,381	1,272	7,109
U. North Georgia	ne	150	105	74	38	36
Private						
Clark Atlanta U.	149	211	159	154	15	139
Emory U.	7,360	6,150	6,373	6,660	1,400	5,260
Mercer U.	361	356	555	602	36	566
Morehouse C.	127	144	144	144	22	122
Morehouse School of Medicine	460	445	375	437	110	327
Spelman C.	43	89	118	148	46	102
Hawaii						
Public						
U. Hawaii, Hilo	264	174	127	134	16	118
U. Hawaii, Manoa	3,929	3,486	3,421	3,225	459	2,766
U. Hawaii, system office	ne	ne	48	51	0	51
Private						
Hawaii Pacific U.	46	48	70	73	18	55
Idaho						
Public						
Boise State U.	728 i	740 i	808 i	786 i	149 i	637 i
Idaho State U.	596	726	538	632	80	552
U. Idaho	2,289	2,490	2,584	2,447	387	2,060
Illinois						
Public						
Chicago State U.	14	ne	35	35 i	9 i	26 i

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Illinois State U.	721	771	820	810	61	749
Northeastern Illinois U.	ne	42	70	42	12	30
Northern Illinois U.	712	669	789	865	160	705
Southern Illinois U., Carbondale	1,564	1,193	1,053	1,115	288	827
Southern Illinois U., Edwardsville	228	334	386	412	227	185
U. Illinois, Chicago	5,624	5,785	5,574	5,678	1,288	4,390
U. Illinois, Springfield	82	72	62	79	7	72
U. Illinois, Urbana-Champaign	11,366	12,889	12,258	12,292	1,333	10,959
Western Illinois U.	ne	61	66	57	15	42
Private						
Bradley U.	154	157	158	130	22	108
DePaul U.	409	523	533	306	86	220
Erikson Institute	57	64	56	55	10	45
Illinois Institute of Technology	661	662	615	601	123	478
Loyola U., Chicago	907	854	782	835	173	662
Midwestern U.	431	493	438	455	14	441
Northwestern U.	7,947	9,333	9,603	10,096	1,337	8,759
Rosalind Franklin U. of Medicine and Science	186	194	182	181	41	140
Rush U.	776	748	815	824	314	510
Toyota Technological Institute, Chicago	31	53	71	80	20	60
U. Chicago	4,760	4,534	4,742	4,934	712	4,222
Wheaton C., Wheaton	ne	74	100	103	25	78
Indiana						
Public						
Ball State U.	361	404	346	345	100	245
Indiana State U.	76	83	90	121	19	102
Indiana U., Bloomington	7,360	7,675	7,878	9,197	1,302	7,895
Indiana U.-Purdue U., Indianapolis	1,396	1,516	1,580	1,878	303	1,575
Purdue U., Fort Wayne	229	257	192	222	32	190
Purdue U., Northwest	na	293	220	238	42	196
Purdue U., West Lafayette	10,076	10,608	11,328	13,143	1,472	11,671
Private						
U. Notre Dame	3,547	3,563	3,566	3,566	379	3,187
Iowa						
Public						
Iowa State U.	5,649	5,617	5,595	5,682	734	4,948
U. Iowa	6,672	6,652	6,516	6,588	1,048	5,540
U. Northern Iowa	332	296	225	276	18	258
Private						
Des Moines U.	140	87	95	96	11	85
Drake U.	0	0	0	0	0	0
Grinnell C.	205	236	263	189	10	179
Palmer C. of Chiropractic, Davenport	19	17	16	12	2	10
Kansas						
Public						
Fort Hays State U.	ne	ne	ne	49	9	40
Kansas State U.	4,331	4,440	4,818	4,671	398	4,273
Pittsburg State U.	68	68	112	126	26	100
U. Kansas	4,952	4,727	5,187	5,267	943	4,324

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Wichita State U.	1,127	1,042	1,312	1,149	119	1,030
Kentucky						
Public						
Eastern Kentucky U.	92	94	89	105	17	88
Kentucky State U.	162	234 ⁱ	234	222	36	186
Morehead State U.	10	10	26 ⁱ	21	15	6
Murray State U.	123	116	135	118	18	100
Northern Kentucky U.	181	159	156	213	23	190
U. Kentucky	5,576	6,042	6,106	6,179	1,656	4,523
U. Louisville	2,656	2,657	2,449	2,860	472	2,388
Western Kentucky U.	381	396	201	313	72	241
Louisiana						
Public						
Grambling State U.	46	71	62	64	40	24
Louisiana State U., Baton Rouge	3,536	3,185	3,316	3,301	591	2,710
Louisiana State U., Health Sciences Center, New Orleans	539	517	497	526	113	413
Louisiana State U., Health Sciences Center, Shreveport	301	286	425	388	49	339
Louisiana Tech U.	456	417	502	455	102	353
Northwestern State U. Louisiana	31	22	26	28	8	20
Southeastern Louisiana U.	65	57	52	55	14	41
Southern U. and A&M C., Agricultural Research and Extension Center	48	48 ⁱ	48	52	17	35
Southern U. and A&M C., Baton Rouge	135	144	149	166	28	138
U. Louisiana, Lafayette	926 ⁱ	876	985	1,009	118	891
U. Louisiana, Monroe	70	88	86	66	14	52
U. New Orleans	488	501	492	533	67	466
Private						
Dillard U.	105	137	131	32	10	22
Tulane U.	1,402	1,530	1,328	1,523	269	1,254
Xavier U. Louisiana	325	256	314	275	34	241
Maine						
Public						
Maine Maritime Academy	8	20	8	4	4	0
U. Maine	737	1,673	1,681	1,600	367	1,233
U. Southern Maine	314	283	305	381	46	335
Private						
Bates C.	105	103	98	149	22	127
Bowdoin C.	63	66	56	74	40	34
Colby C.	135	173	167	108	21	87
U. New England	220	187	175	138	24	114
Maryland						
Public						
Bowie State U.	106	133	132	115	0	115
Morgan State U.	301	308	317	328	54	274
Salisbury U.	280	277	257	269	73	196
Towson U.	98	162	228	226	69	157
U. Baltimore	135	128	162	135	20	115
U. Maryland ^a	na	na	na	16,538	1,638	14,900
U. Maryland Center for Environmental Science	399	408	334	308	96	212
U. Maryland, Baltimore County	1,265	1,479	1,389	1,463	263	1,200

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U. Maryland, Eastern Shore	127	190	88	101	22	79
U.S. Naval Academy	199	218	264	210	138	72
Uniformed Services U. of the Health Sciences	73	67	61	89	19	70
Private						
Johns Hopkins U. ^b	23,391 i	23,504 i	22,548 i	25,423 i	3,532 i	21,891 i
Massachusetts						
Public						
U. Massachusetts, Amherst	3,878	3,253	3,341	3,389	606	2,783
U. Massachusetts, Boston	1,403	1,306	1,229	1,228	157	1,071
U. Massachusetts, central office	69	79	83	78	7	71
U. Massachusetts, Dartmouth	473	308	288	279	79	200
U. Massachusetts, Lowell	1,445	1,417	1,473	1,564	382	1,182
U. Massachusetts, Medical School	2,780	2,869	2,939	2,743	592	2,151
Private						
Amherst C.	251	314	345	480	13	467
Babson C.	50 i	111 i	115 i	118 i	22 i	96 i
Boston C.	674	690	732	746	125	621
Boston U.	4,011	4,138	4,300	4,451	820	3,631
Brandeis U.	1,194	1,234	1,614	1,118	204	914
Clark U.	237	166	112	180	28	152
Emerson C.	95	75	75	79	49	30
Franklin W. Olin C. of Engineering	60	56	44	12	5	7
Harvard U.	7,573	7,496	7,575	7,579	1,090	6,489
Massachusetts Institute of Technology	9,978	10,013	9,988	9,028	1,016	8,012
MGH Institute of Health Professions	46	43	43	61	28	33
Mount Holyoke C.	152	152	178	178	25	153
New England C. of Optometry	18	ne	18	18	12	6
Northeastern U.	2,042	2,172	2,385	2,445	471	1,974
Smith C.	180	223	226	300	27	273
Tufts U.	3,196	1,913	3,516	4,007	53	3,954
Wellesley C.	386	334	326	309	68	241
Williams C.	115	115	110	91	35	56
Woods Hole Oceanographic Institution	789	777	797	801	241	560
Worcester Polytechnic Institute	723	692	715	801	183	618
Michigan						
Public						
Central Michigan U.	718	574	603	669	62	607
Eastern Michigan U.	176	255	193	93	25	68
Grand Valley State U.	344	311	240	272	35	237
Michigan State U.	6,931	7,548	7,840	7,935	1,137	6,798
Michigan Technological U.	1,734	1,741	1,761	1,769	242	1,527
Northern Michigan U.	96	33	94	83	22	61
Oakland U.	429	450	418	546	91	455
Saginaw Valley State U.	143	135	142	189	30	159
U. Michigan, Ann Arbor	20,950	21,999	22,863	23,007	5,575	17,432
U. Michigan, Dearborn	341	383	414	426	161	265
U. Michigan, Flint	ne	179	183	243	57	186
Wayne State U.	3,772	3,612	3,659	3,627	644	2,983
Western Michigan U. and Homer Stryker M.D. School of Medicine	576	516	553	326	100	226

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Private						
Albion C.	ne	5	3	5	4	1
Andrews U.	ne	ne	ne	17	8	9
Calvin U.	179	154	187	253	75	178
Hope C.	208	211	292	370	67	303
Kettering U.	144	101	109	94	42	52
Lawrence Technological U.	99	73	97	78	17	61
U. Detroit Mercy	91	96	162	142	48	94
Van Andel Research Institute	263	284	307	355	35	320
Minnesota						
Public						
Minnesota State U., Mankato	254 i	375 i	398 i	395 i	85 i	310 i
St. Cloud State U.	418	372	320	280	28	252
U. Minnesota, Duluth	650	655	616	603	134	469
U. Minnesota, Morris	91	92	ne	63	8	55
U. Minnesota, Twin Cities	14,103	14,117	14,477	14,681	2,855	11,826
Private						
Augsburg U.	64	35	31	32	6	26
C. of Saint Benedict	54	54	53	53 i	26 i	27 i
Carleton C.	369	416	422	375	20	355
Macalester C.	88	85	83	87	27	60
Saint John's U., Collegeville	53	53	60	60 i	27 i	33 i
St. Olaf C.	166	162	170	153	60	93
U. of St. Thomas (MN)	133	116	121	150	21	129
Mississippi						
Public						
Alcorn State U.	273	353	300	288	29	259
Jackson State U.	441	401	336	309	35	274
Mississippi State U.	4,024	3,883	3,992	4,044	605	3,439
U. Mississippi	2,152	2,378	1,933	2,080	467	1,613
U. Southern Mississippi	718	733	723	688	115	573
Private						
Tougaloo C.	25	60	33	63	9	54
Missouri						
Public						
Lincoln U., Jefferson City	146	133	95	129	32	97
Missouri State U.	151	136	106	139	25	114
Missouri U. of Science and Technology	1,012	1,051	1,120	1,137	188	949
U. Missouri, Columbia	4,625	4,466	4,335	4,310	691	3,619
U. Missouri, Kansas City	588	566	584	592	122	470
U. Missouri, Saint Louis	315	314	303	329	67	262
Private						
A. T. Still U.	118	2	ne	27	7	20
Saint Louis U.	1,541	1,561	1,493	1,425	228	1,197
Washington U., Saint Louis	7,810	7,998	8,223	8,405	1,521	6,884
Montana						
Public						
Montana State U., Bozeman	791	828	877	880	555	325
Montana Technological U.	160	250	160	200	50	150

TABLE 77

Headcount of R&D personnel at higher education institutions, by state, institutional control, and institution: FYs 2016–19 and by detail for FY 2019

(Number)

State, institutional control, and institution	2016	2017	2018	2019		
				Total	Principal investigators	Other personnel
U. Montana, Missoula	1,428	1,130	1,121	1,169	294	875
Private						
Salish Kootenai C.	38	64	55	74	12	62
Nebraska						
Public						
U. Nebraska, central administration	ne	ne	49	70	10	60
U. Nebraska, Kearney	164	151	145	193	30	163
U. Nebraska, Lincoln	6,441	6,464	6,683	6,755	852	5,903
U. Nebraska, Medical Center	1,921	2,092	2,180	2,738	696	2,042
U. Nebraska, Omaha	579	506	487	514	83	431
Private						
Creighton U.	331 i	442 i	227 i	224 i	103 i	121 i
Doane U.	ne	ne	81	93	9	84
Nevada						
Public						
Desert Research Institute	376	383	407	374	83	291
U. Nevada, Las Vegas	1,589	1,195	1,197	1,927	142	1,785
U. Nevada, Reno	2,160	2,203	2,186	2,284	597	1,687
Private						
Roseman U. of Health Sciences	82	95	103	103 i	30 i	73 i
New Hampshire						
Public						
Keene State C.	ne	79	ne	67	8	59
U. New Hampshire	2,455	2,412	2,460	2,746	312	2,434
Private						
Dartmouth C. and Dartmouth Hitchcock Medical Center	1,958	2,016	1,931	1,961	490	1,471
New Jersey						
Public						
Montclair State U.	224	281	340	363	59	304
New Jersey City U.	ne	53	53	53	18	35
New Jersey Institute of Technology	1,232	1,273	1,155	1,146	161	985
Rowan U.	369	205	453	631	31	600
Rutgers, State U. New Jersey, Camden	362 i	311 i	268 i	246 i	33	213 i
Rutgers, State U. New Jersey, New Brunswick	7,810 i	8,039 i	8,118 i	7,735 i	1,347	6,388 i
Rutgers, State U. New Jersey, Newark	592 i	598 i	612 i	580 i	103	477 i
Stockton U.	112	ne	158	192	69	123
William Paterson U.	237	266	202	186	138	48
Private						
Monmouth U.	57	ne	ne	78	12	66
Princeton U.	2,681	2,883	3,506	3,271	507	2,764
Rider U.	93	111	63	42	14	28
Seton Hall U.	143	148	141	148	46	102
Stevens Institute of Technology	502	490	517	490	110	380
New Mexico						
Public						
New Mexico Institute of Mining and Technology	560	513	473	520	66	454
New Mexico State U.	1,380	1,437	1,391	1,541	461	1,080
U. New Mexico	4,466	4,558	4,471	4,465	731	3,734
New York						

TABLE 77

Headcount of R&D personnel at higher education institutions, by state, institutional control, and institution: FYs 2016–19 and by detail for FY 2019

(Number)

State, institutional control, and institution	2016	2017	2018	2019		
				Total	Principal investigators	Other personnel
Public						
CUNY, Advanced Science Research Center	ne	62	117	144	6	138
CUNY, Baruch C.	222	132	205	148	3	145
CUNY, Brooklyn C.	249 i	238	216	216 i	5 i	211 i
CUNY, C. Staten Island	288	185 i	97 i	97	2	95
CUNY, City C.	810	1,443	1,405	1,322	236	1,086
CUNY, Graduate Center	204 i	204	202 i	208	23	185
CUNY, Graduate School of Public Health and Health Policy	na	na	222	277	47	230
CUNY, Hunter C.	510	481	490	495	155	340
CUNY, John Jay C. of Criminal Justice	333	416	576	754	86	668
CUNY, Lehman C.	139	170	171	195	72	123
CUNY, Medgar Evers C.	ne	89	111	84	16	68
CUNY, New York City C. of Technology	ne	ne	59	40	0	40
CUNY, Queens C.	398	364	29	360	14	346
CUNY, system office	32	41	23	30	5	25
CUNY, York C.	ne	ne	ne	40	2	38
SUNY, Binghamton U.	1,136	1,189	1,235	927	137	790
SUNY, Buffalo State	77	54	47	48	18	30
SUNY, C. Brockport	51	69	66	73	16	57
SUNY, C. of Environmental Science and Forestry	742	744	773	847	120	727
SUNY, C. of Optometry	38	29	30	20	8	12
SUNY, C. Plattsburgh	27	40	37	33	10	23
SUNY, Downstate Medical Center	165	147	242	211	36	175
SUNY, Geneseo	62	59	88	102	20	82
SUNY, Oswego	ne	59	49	61	17	44
SUNY, Polytechnic Institute	647	537	365	292	29	263
SUNY, Stony Brook U.	2,565	2,571	2,610	2,587	542	2,045
SUNY, U. Albany	679	1,191	1,313	1,378	362	1,016
SUNY, U. Buffalo	4,830 i	4,870 i	4,730 i	4,796 i	804 i	3,992 i
SUNY, Upstate Medical U.	374	386	415	344	77	267
U.S. Military Academy	90	60	60	40	15	25
Private						
Albany C. of Pharmacy and Health Sciences	74	38	88	84	13	71
Albany Medical C.	301 i	393 i	381 i	376 i	80 i	296 i
Albert Einstein C. of Medicine	2,111 i	2,111	1,521	1,208	344	864
Alfred U.	96	111	91	144	20	124
Barnard C.	116	106	103	100	19	81
Canisius C.	ne	124 i	86 i	89 i	11	78 i
Clarkson U.	280	363	418	406	90	316
Cold Spring Harbor Laboratory	938 i	1,075 i	1,033 i	1,089 i	241 i	848 i
Colgate U.	250	272	272	324	17	307
Columbia U. in the City of New York	9,226	10,568	9,395	9,525	1,621	7,904
Cornell U.	10,429	10,398	10,737	11,285	1,839	9,446
Fordham U.	312	324	311	359	131	228
Hamilton C.	127	125	65	73	4	69
Hobart and William Smith Colleges	ne	109	ne	159	16	143
Hofstra U.	42	42	61	80	29	51
Icahn School of Medicine at Mount Sinai	2,917	3,064	3,131	3,272	982	2,290
Long Island U.	59	58	56	96	38	58

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(Number)

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				Total	Principal investigators	Other personnel
Manhattan C.	ne	ne	ne	200	30	170
Memorial Sloan Kettering Cancer Center, Louis V. Gerstner Jr. Graduate S. of Biomedical Sciences	33	29	37	40	7	33
New School	362	420	384	370	39	331
New York Institute of Technology	42	30	81	61	36	25
New York Medical C.	339 i	339 i	337 i	337	87	250
New York U.	6,727	6,308	6,363	6,628	1,560	5,068
Niagara U.	131	118	122	109	50	59
Pace U.	152	171	203	174	67	107
Rensselaer Polytechnic Institute	1,884	2,102	1,636	1,580	239	1,341
Rochester Institute of Technology	1,382	1,572	1,589	1,596	205	1,391
Rockefeller U.	1,176	1,194	1,157	1,098	226	872
Skidmore C.	200	186	51	60	20	40
St. John's U., New York	135 i	253 i	78 i	85 i	74 i	11 i
Syracuse U.	2,005	1,730	1,717	1,641	279	1,362
Teachers C., Columbia U.	393 i	416 i	378 i	382 i	78	304 i
U. Rochester	4,326	4,114	4,076	4,110	935	3,175
Union C., Schenectady	75	69	80	80	13	67
Vassar C.	31	29	16	18 i	15	3 i
Yeshiva U.	982	50	52	70	15	55
North Carolina						
Public						
Appalachian State U.	169	151	180	156	74	82
East Carolina U.	630	715	1,594	1,563	260	1,303
Fayetteville State U.	469	471	463	457	41	416
North Carolina Agricultural and Technical State U.	1,000	1,004	1,001	1,207	196	1,011
North Carolina Central U.	487	525	526 i	526	106	420
North Carolina State U.	4,590	4,460	4,534	4,575	1,178	3,397
U. North Carolina, Asheville	112	118	118	103	41	62
U. North Carolina, Chapel Hill	9,388	9,354	9,298	9,320	1,888	7,432
U. North Carolina, Charlotte	971	840	925	1,045	193	852
U. North Carolina, general administration	7	6	3	4	2	2
U. North Carolina, Greensboro	725	793	622	527	86	441
U. North Carolina, Wilmington	478	533	279	312	200	112
Western Carolina U.	65	85	116	109	18	91
Winston-Salem State U.	54	62	84	120	40	80
Private						
Davidson C.	189	236	239	159	52	107
Duke U.	9,548	8,706	8,961	10,097	1,812	8,285
Elon U.	239	200	281	277	10	267
Johnson C. Smith U.	84	63	81	57	14	43
Wake Forest U.	1,816	1,934	1,966	2,651	805	1,846
North Dakota						
Public						
North Dakota State U.	3,103	2,748	2,444	2,595	649	1,946
U. North Dakota	248	1,722	1,646	1,632	528	1,104
Ohio						
Public						
Air Force Institute of Technology	352	515	501	449	114	335

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(Number)

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Bowling Green State U.	529	718	899	904	94	810
Central State U.	74	91	120	103	17	86
Cleveland State U.	1,272 i	1,289 i	1,259 i	1,216 i	219 i	997 i
Kent State U.	1,048	1,255	1,316	1,411	161	1,250
Miami U.	550	505	548	615	92	523
Northeast Ohio Medical U.	236	264	226	262	40	222
Ohio State U.	9,332	9,452	9,364	9,709	2,140	7,569
Ohio U.	1,542	1,706	1,422	1,387	263	1,124
U. Akron	1,240	1,099	874	865	129	736
U. Cincinnati	3,563	3,612	3,606	3,580	576	3,004
U. Toledo	1,031	854	962	895	295	600
Wright State U.	982	920	865	835	188	647
Youngstown State U.	83	98	113	124	20	104
Private						
C. Wooster	ne	100	64	135	51	84
Case Western Reserve U.	3,022	2,641	2,480	2,363	469	1,894
Heidelberg U.	20	17	10	9	3	6
Kenyon C.	ne	ne	39	50	9	41
Oberlin C.	96	93	116	116	11	105
U. Dayton	1,095	1,149	1,240	1,152	238	914
Oklahoma						
Public						
Langston U.	40	149 i	149 i	149	67	82
Oklahoma State U., Center for Health Sciences	54 i	54	71	81	26	55
Oklahoma State U., Stillwater	2,096	1,982	2,077	2,158	843	1,315
U. Central Oklahoma	310	22	50	47	19	28
U. Oklahoma, Norman and Health Science Center	3,607	3,277	3,306	3,320	690	2,630
U. Oklahoma, Tulsa	123	104	112	106	20	86
Private						
U. Tulsa	444	480	427	429	60	369
Oregon						
Public						
Oregon Health and Science U.	3,485	3,688	3,283	3,759	987	2,772
Oregon Institute of Technology	57	10 i	10	48	40	8
Oregon State U.	4,603	4,600	4,513	4,545	1,155	3,390
Portland State U.	1,285 i	1,285	883	1,289	212	1,077
U. Oregon	1,508	1,590	1,633	1,742	512	1,230
Private						
Lewis and Clark C.	366	194	210	171	35	136
National U. of Natural Medicine	ne	22	ne	20	3	17
Pacific U.	137 i	337 i	105 i	96 i	83 i	13 i
Reed C.	46	46	77	44	18	26
U. Portland	ne	ne	ne	190 i	50 i	140 i
Willamette U.	237 i	237	220	213	38	175
Pennsylvania						
Public						
Indiana U. Pennsylvania	98	125	283	230	121	109
Pennsylvania State U., Behrend	176 i	139 i	152 i	197 i	49	148 i
Pennsylvania State U., Harrisburg	313 i	241 i	233 i	281 i	46	235 i

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(Number)

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				Total	Principal investigators	Other personnel
Pennsylvania State U., University Park and Hershey Medical Center	13,322 i	13,605 i	11,613 i	12,559 i	2,456	10,103 i
Temple U.	3,431	3,267	3,532	3,649	636	3,013
U. Pittsburgh, Pittsburgh	9,049	10,174	10,179	10,855	2,009	8,846
U.S. Army War C.	ne	ne	ne	109 i	23 i	86 i
West Chester U. Pennsylvania	310	465	322	659	138	521
Private						
Allegheny C.	273	178	147	147	52	95
Bryn Mawr C.	173	138	150	170	159	11
Bucknell U.	271 i	271 i	271	297	47	250
Carnegie Mellon U.	4,622	4,571	3,700	3,857	459	3,398
Dickinson C.	134	81	ne	101	61	40
Drexel U.	2,337	2,373	2,203	2,205	496	1,709
Duquesne U.	446	390	448	329	27	302
Franklin and Marshall C.	323	286	335	341	38	303
Gettysburg C.	ne	65	78	73	23	50
Haverford C.	214	194	170	132	19	113
Lafayette C.	196	103	105	102	45	57
Lehigh U.	977	1,084	1,024	1,000	114	886
Mercyhurst U.	46	46 i	ne	103 i	73 i	30 i
Philadelphia C. of Osteopathic Medicine	28	29	37	34	4	30
Saint Joseph's U.	87	78	79	106	10	96
Salus U.	17	15	13	14	6	8
Swarthmore C.	259	295	247	171	21	150
Thomas Jefferson U.	1,512	1,531	1,598	1,640	328	1,312
U. of the Sciences Philadelphia	145	114	54	78	22	56
U. Pennsylvania	12,579	12,875	13,100	13,946	1,920	12,026
Villanova U.	207	213	193	373	66	307
Rhode Island						
Public						
Naval War C.	0	0 i	0	0	0	0
Rhode Island C.	119	124	110	116	50	66
U. Rhode Island	1,716	1,713	1,713	1,746	257	1,489
Private						
Brown U.	3,439 i	2,055 i	2,270 i	2,345 i	394 i	1,951 i
Providence C.	62	55	51	63	19	44
Rhode Island School of Design	225 i	121 i	119 i	135 i	43 i	92 i
Roger Williams U.	150	140	109	97	17	80
South Carolina						
Public						
C. Charleston	422	338	284	308	73	235
Clemson U.	1,885	1,494	1,169	647	112	535
Coastal Carolina U.	172	115	93	110	38	72
Medical U. South Carolina	1,639	1,649	1,647	1,733	765	968
South Carolina State U.	100 i	138	235 i	235	25	210
U. South Carolina, Aiken	20	119	116	82	3	79
U. South Carolina, Columbia	1,606	1,578	1,623	1,530	171	1,359
Winthrop U.	176	297	316	360	31	329
Private						
Benedict C.	50	81	72	31	11	20

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State, institutional control, and institution	2016	2017	2018	2019		
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Clafflin U.	96	146	95	47	7	40
Furman U.	77	95	123	47	28	19
South Dakota						
Public						
Black Hills State U.	91	72	74	65	16	49
Dakota State U.	54	36	42	68	15	53
South Dakota School of Mines and Technology	411	420	403	362	85	277
South Dakota State U.	1,633	1,577	1,535	1,436	249	1,187
U. South Dakota	279	277	269	412	69	343
Private						
Augustana U.	ne	64	82	90	20	70
Tennessee						
Public						
Austin Peay State U.	120	125	132	172	34	138
East Tennessee State U.	422	499	641	640	86	554
Middle Tennessee State U.	192	160	180	170	45	125
Tennessee State U.	510	454	442	385	61	324
Tennessee Technological U.	543	619	516	346	83	263
U. Memphis	1,610	1,598	1,764	1,805	141	1,664
U. Tennessee, Chattanooga	224	273	299	385	47	338
U. Tennessee, Health Science Center	1,011	1,041	1,038	1,140	207	933
U. Tennessee, Knoxville	3,708	3,768	4,351	4,358	445	3,913
U. Tennessee, Knoxville, Institute of Agriculture	1,404	1,436	1,442	1,431	142	1,289
Private						
Fisk U.	47	32	32	51	10	41
Meharry Medical C.	145	176	184	141	30	111
Vanderbilt U. and Vanderbilt U. Medical Center	6,162	6,603	6,643	6,906	1,142	5,764
Texas						
Public						
Lamar U.	135	146	271	279	96	183
Prairie View A&M U.	431	485	503	503	117	386
Sam Houston State U.	202	269	359	429	98	331
Stephen F. Austin State U.	269	198	192	182	53	129
Sul Ross State U.	84	88	84	81	6	75
Tarleton State U.	190	187	176	172	40	132
Texas A&M International U.	56	58	51	51	1	50
Texas A&M U., College Station and Health Science Center	12,996	13,016	13,189	13,778	2,524	11,254
Texas A&M U.-Central Texas	ne	ne	37	12	8	4
Texas A&M U.-Commerce	196	100	119	250	32	218
Texas A&M U.-Corpus Christi	565	527	566	573	139	434
Texas A&M U.-Kingsville	691	671	597	596	70	526
Texas Southern U.	46	38	60	36	16	20
Texas State U.	1,157	1,146	1,056	1,293	200	1,093
Texas Tech U.	3,702	3,593	3,760	3,785	334	3,451
Texas Tech U., Health Sciences Center	877	787	758	806	112	694
Texas Tech U., Health Sciences Center, El Paso	207	191	156	155	29	126
Texas Woman's U.	151	149	148	100	26	74
U. Houston	2,007	2,395	2,292	2,511	319	2,192
U. Houston-Clear Lake	133	82	70	70	6	64

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U. Houston-Downtown	86	71	63	109	13	96
U. North Texas, Denton	602	615	1,261	1,675	190	1,485
U. North Texas, Health Science Center	497	581	650	543	148	395
U. Texas Health Science Center, Houston	3,721	3,906	3,761	3,889	846	3,043
U. Texas Health Science Center, San Antonio	1,827	1,831	1,805	1,807	297	1,510
U. Texas Health Science Center, Tyler	114	93	93	275	50	225
U. Texas M. D. Anderson Cancer Center	6,738	6,739	6,817	6,748	743	6,005
U. Texas Medical Branch	1,617	1,540	1,578	1,509	254	1,255
U. Texas Rio Grande Valley	1,251	1,257	1,205	1,913	148	1,765
U. Texas Southwestern Medical Center	4,604	4,490	4,046	4,763	829	3,934
U. Texas, Arlington	1,428	1,810	1,802	1,777	412	1,365
U. Texas, Austin	3,825	3,777	3,753	3,753	829	2,924
U. Texas, Dallas	2,153	2,191	2,277	2,522	304	2,218
U. Texas, El Paso	1,757	1,881	2,860	2,147	230	1,917
U. Texas, San Antonio	824	2,621	1,763	1,818	332	1,486
U. Texas, Tyler	142	133	121	117	45	72
West Texas A&M U.	141	195	187	226	31	195
Private						
Baylor C. of Medicine	5,605	5,268	4,237	4,608	1,559	3,049
Baylor U.	546	690	638	697	100	597
Rice U.	2,551	2,517	2,634	2,675	255	2,420
Southern Methodist U.	520	475	465	540	106	434
St. Edward's U.	102	105	149	263	34	229
Texas Christian U.	273	268	247	255	33	222
Trinity U.	72	78	98	80	16	64
U. of the Incarnate Word	ne	ne	22	21	10	11
Utah						
Public						
U. Utah	7,140	5,491	7,390	7,974	1,228	6,746
Utah State U.	3,403	3,381	3,392	3,459	404	3,055
Private						
Brigham Young U., Provo	1,969	1,935	1,708	1,726	212	1,514
Vermont						
Public						
U. Vermont	1,587	1,572	1,528	1,530	339	1,191
Private						
Middlebury C.	60	118	132	123	25	98
Saint Michael's C.	121	86	122	108	26	82
Virginia						
Public						
Christopher Newport U.	121	170	137	130	38	92
Eastern Virginia Medical School	285	282	245	243	42	201
George Mason U.	1,958	2,183	2,333	2,421	491	1,930
James Madison U.	386	382	414	451	94	357
Norfolk State U.	151	190	55	69	25	44
Old Dominion U.	1,272	1,405	1,614	1,141	335	806
U. of Mary Washington	ne	ne	50	47	24	23
U. Virginia, Charlottesville	5,589	6,321	7,047	7,574	1,188	6,386
Virginia Commonwealth U.	2,971	3,631	3,285	3,206	654	2,552

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Virginia Polytechnic Institute and State U.	8,086	8,116	8,251	8,395	1,156	7,239
Virginia State U.	158	144	154	190	42	148
William & Mary	1,167	1,128	1,035	1,377	251	1,126
Private						
Edward Via C. of Osteopathic Medicine	75	39	69	88	37	51
Hampton U.	505	323	428	335	45	290
Liberty U.	ne	ne	ne	109 i	73 i	36 i
U. Richmond	141	159	156	126	24	102
Washington						
Public						
Central Washington U.	293	338	142	138	33	105
Eastern Washington U.	108 i	123 i	109 i	107 i	20	87 i
Northwest Indian C.	ne	ne	50	51	7	44
U. Washington, Bothell	149	160	129	143	28	115
U. Washington, Seattle	14,372	13,694	13,804	14,224	2,142	12,082
U. Washington, Tacoma	116	90	94	98	21	77
Washington State U.	5,383	5,912	5,472	5,283	1,036	4,247
Western Washington U.	382	541	468	403	87	316
Private						
Seattle U.	317	128	144	135	60	75
Whitman C.	ne	ne	ne	108	21	87
West Virginia						
Public						
Marshall U.	485	417	418	416	46	370
West Virginia State U.	115	113	109	116	33	83
West Virginia U.	3,659	3,575	3,557	3,504	533	2,971
Wisconsin						
Public						
U. Wisconsin-Eau Claire	145	141	140	129	29	100
U. Wisconsin-Green Bay	2 i	363 i	384 i	381 i	83 i	298 i
U. Wisconsin-La Crosse	282	247	279	267	116	151
U. Wisconsin-Madison	17,147	17,396	17,391	17,123	2,980	14,143
U. Wisconsin-Milwaukee	1,569	1,491	1,732	1,792	237	1,555
U. Wisconsin-Oshkosh	ne	113 i	385 i	376 i	82 i	294 i
U. Wisconsin-Platteville	ne	117 i	ne	110 i	23 i	87 i
U. Wisconsin-Stevens Point	204	204 i	403 i	395 i	85 i	310 i
U. Wisconsin-Superior	ne	ne	32	93	11	82
Private						
Marquette U.	996	1,226	1,274	1,272	140	1,132
Medical C. Wisconsin	2,044	2,050	2,195	2,391	493	1,898
Milwaukee School of Engineering	81	81	86	39	13	26
Wyoming						
Public						
U. Wyoming	1,232	2,809	2,678	780	338	442
American Samoa						
Public						
American Samoa Community C.	36	ne	ne	28	3	25
Guam						
Public						

TABLE 77

Headcount of R&D personnel at higher education institutions, by state, institutional control, and institution: FYs 2016–19 and by detail for FY 2019

(Number)

State, institutional control, and institution	2016	2017	2018	2019		
				Total	Principal investigators	Other personnel
U. Guam	241	226	254	189	42	147
Puerto Rico						
Public						
U. Puerto Rico, Cayey	18	40	55	51	9	42
U. Puerto Rico, Humacao	ne	ne	21	33	10	23
U. Puerto Rico, Mayaguez	468	222	216	224	116	108
U. Puerto Rico, Medical Sciences Campus	268	377	359	375	142	233
U. Puerto Rico, Rio Piedras	388	350	354	424	63	361
Private						
Polytechnic U. Puerto Rico	ne	ne	ne	33 ⁱ	7	26 ⁱ
Ponce Health Sciences U.	137	149	126	150	25	125
U. Ana G. Mendez, Cupey	168	98	118	56	4	52
U. Ana G. Mendez, Gurabo	168	182	109	145	41	104
U. Central del Caribe	133	132	112	135	32	103
Virgin Islands						
Public						
U. of the Virgin Islands	455	261	38	241	25	216

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, with 14,546 total personnel in FY 2019.

Source(s):

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