

TABLE 4-5

**Units and institutions with graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field: 2019**

(Number)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions
All detailed fields	13,149	707	10,281	695	7,135	410	7,533	338	5,460	267
Science	9,451	685	7,119	668	5,148	378	4,287	331	3,109	255
Agricultural sciences	291	88	268	88	185	54	183	54	169	46
Biological and biomedical sciences	2,638	508	1,581	483	1,848	289	1,745	278	1,195	200
Biochemistry	190	154	93	87	158	131	132	114	103	84
Biology	386	348	338	320	166	150	201	175	126	102
Biomedical sciences	175	123	112	88	106	84	61	45	37	32
Biophysics	44	38	6	6	44	38	18	14	7	7
Biostatistics and bioinformatics	185	113	135	94	119	79	79	49	57	42
Biotechnology	76	65	71	60	8	8	19	18	12	10
Botany and plant biology	67	50	55	45	57	43	49	36	31	23
Cell, cellular biology, and anatomical sciences	187	124	79	65	154	109	119	89	88	66
Ecology and population biology	107	87	67	58	79	64	52	44	35	30
Epidemiology	85	70	58	53	65	59	41	38	20	20
Genetics	98	75	48	39	73	61	93	57	74	44
Microbiological sciences and immunology	174	126	79	66	146	110	156	106	115	77
Molecular biology	53	47	20	20	40	34	41	37	29	25
Neurobiology and neuroscience	178	131	44	41	160	123	146	95	96	67
Nutrition science	101	82	92	75	53	49	44	32	24	21
Pathology and experimental pathology	44	44	14	14	39	39	82	55	51	42
Pharmacology and toxicology	130	99	63	58	114	89	98	83	75	59
Physiology	179	129	97	85	132	97	167	91	107	67
Zoology and animal biology	75	52	62	47	65	45	46	36	35	27
Biological and biomedical sciences nec	104	69	48	38	70	50	101	51	73	39
Computer and information sciences	905	424	833	420	266	176	179	131	149	88
Computer science	264	226	248	217	111	102	75	71	56	47
Computer and information sciences, general	350	240	311	236	108	79	72	61	55	39
Computer and information sciences nec	291	192	274	187	47	38	32	27	38	28
Geosciences, atmospheric sciences, and ocean sciences	390	226	335	212	265	155	266	143	226	115
Atmospheric sciences and meteorology	49	47	39	39	43	41	43	31	41	27
Geological and earth sciences	264	198	228	184	169	134	142	113	126	88
Ocean and marine sciences	77	58	68	55	53	44	54	40	42	31
Geosciences, atmospheric sciences, and ocean sciences nec	ne	ne	ne	ne	ne	ne	27	11	17	10
Mathematics and statistics	659	351	571	342	326	194	182	129	76	52
Mathematics and applied mathematics	476	341	406	323	237	189	140	119	53	48

TABLE 4-5

**Units and institutions with graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field: 2019**

(Number)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions
Statistics	183	152	165	147	89	81	42	41	23	20
Multidisciplinary and interdisciplinary studies	300	189	232	162	113	87	177	82	177	70
Natural resources and conservation	356	208	312	198	148	100	148	92	133	73
Environmental science and studies	199	152	171	136	66	57	62	56	48	40
Forestry, natural resources, and conservation	157	90	141	88	82	54	86	49	85	43
Physical sciences	786	330	575	307	554	228	556	225	391	165
Astronomy and astrophysics	63	52	17	17	57	47	62	45	50	33
Chemistry	357	309	284	261	229	204	222	196	154	135
Materials sciences	51	42	36	34	40	34	31	26	21	16
Physics	288	241	219	200	216	190	222	182	145	111
Physical sciences nec	27	24	19	18	12	11	19	18	21	15
Psychology	1,029	467	735	405	465	240	214	145	129	92
Clinical psychology	128	119	63	60	76	72	18	15	5	5
Counseling and applied psychology	491	318	397	278	179	136	50	41	32	22
Psychology, general	287	265	215	208	125	111	110	102	73	67
Research and experimental psychology	123	99	60	51	85	72	36	31	19	16
Social sciences	2,097	415	1,677	403	978	210	637	151	464	134
Agricultural economics	46	41	38	38	25	23	22	19	19	17
Anthropology	175	160	127	123	106	101	59	57	35	30
Criminal justice and safety studies	110	105	107	103	22	22	8	7	7	7
Economics (except agricultural)	267	199	209	174	152	129	50	43	43	39
Geography and cartography	166	137	159	133	67	64	41	36	35	28
History and philosophy of science	15	15	8	8	14	14	12	10	2	2
Human development	67	63	59	58	26	25	41	30	32	24
International relations and national security studies	94	75	88	72	16	14	21	16	11	7
Linguistics	101	92	73	67	59	58	22	22	14	13
Political science and government	222	198	166	155	131	125	56	51	28	22
Public policy analysis	143	109	110	87	58	52	59	47	63	45
Sociology	235	207	162	149	130	121	69	56	46	37
Social sciences nec	456	208	371	189	172	97	177	75	129	51
Engineering	2,272	325	2,051	318	1,354	226	1,051	201	822	169
Aerospace, aeronautical, and astronautical engineering	64	60	62	60	49	48	31	29	24	22
Agricultural engineering	33	26	31	26	26	23	18	17	16	16
Bioengineering and biomedical engineering	193	167	168	152	140	130	130	107	91	77
Biological and biosystems engineering	15	14	10	10	14	13	15	13	11	10
Chemical engineering	159	142	145	134	128	120	118	108	79	73

TABLE 4-5

**Units and institutions with graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field: 2019**

(Number)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions
Civil engineering	330	202	308	200	185	139	157	117	120	86
Electrical, electronics, and communications engineering	421	260	395	258	225	174	169	137	128	94
Engineering mechanics, physics, and science	65	47	47	35	43	35	18	16	18	14
Industrial and manufacturing engineering	223	148	204	140	102	85	44	41	40	31
Mechanical engineering	263	228	253	226	164	155	145	132	105	94
Metallurgical and materials engineering	119	90	106	84	90	78	73	57	59	50
Mining engineering	25	16	24	16	15	10	10	9	13	11
Nanotechnology	7	7	4	4	3	3	16	13	17	16
Nuclear engineering	31	27	30	27	29	25	13	12	11	9
Petroleum engineering	26	24	24	24	15	15	14	11	10	10
Engineering nec	298	153	240	139	126	81	80	59	80	54
Health	1,426	434	1,111	413	633	220	2,195	169	1,529	146
Clinical medicine <sup>a</sup>	499	252	442	248	185	106	1,741	125	1,195	105
Anesthesiology	ne	ne	ne	ne	ne	ne	55	43	42	31
Cardiology	ne	ne	ne	ne	ne	ne	61	37	37	25
Endocrinology	ne	ne	ne	ne	ne	ne	44	36	29	25
Gastroenterology	ne	ne	ne	ne	ne	ne	41	32	19	19
Hematology	ne	ne	ne	ne	ne	ne	38	28	28	22
Neurology	ne	ne	ne	ne	ne	ne	111	58	73	42
Obstetrics and gynecology	ne	ne	ne	ne	ne	ne	53	37	31	26
Oncology and cancer research	ne	ne	ne	ne	ne	ne	133	43	69	31
Ophthalmology	ne	ne	ne	ne	ne	ne	73	56	42	36
Otorhinolaryngology	ne	ne	ne	ne	ne	ne	35	33	27	26
Pediatrics	ne	ne	ne	ne	ne	ne	129	57	96	47
Psychiatry	ne	ne	ne	ne	ne	ne	77	54	47	38
Public health	446	242	399	238	165	97	159	87	135	67
Pulmonary disease	ne	ne	ne	ne	ne	ne	32	28	22	19
Radiological sciences	ne	ne	ne	ne	ne	ne	103	46	61	36
Surgery	ne	ne	ne	ne	ne	ne	187	62	127	49
Clinical medicine nec	53	44	43	38	20	19	410	88	310	68
Other health	927	383	669	346	448	200	454	137	334	110
Communication disorders sciences	244	224	223	217	70	64	33	30	23	22
Dental sciences	87	41	78	39	20	18	55	33	35	22
Nursing science	125	118	18	17	117	112	46	41	38	29
Pharmaceutical sciences	119	83	77	63	92	64	99	65	77	50
Veterinary biomedical and clinical sciences	38	29	28	25	25	20	81	40	61	30
Other health nec	314	223	245	200	124	96	140	76	100	50

ne = not eligible; nec = not elsewhere classified.

<sup>a</sup> Clinical medicine includes graduate students in public health and clinical medicine nec. Clinical medicine includes postdoctoral appointees and nonfaculty researchers in anesthesiology, cardiology, endocrinology, gastroenterology, hematology, neurology, obstetrics and gynecology, oncology and cancer research, ophthalmology, otorhinolaryngology, pediatrics, psychiatry, public health, pulmonary disease, radiology, surgery, and clinical medicine nec.

**Note(s):**

"Field" refers to the field of the unit that reports postdoctoral appointees and doctorate-holding nonfaculty researchers to the Survey of Graduate Students and Postdoctorates in Science and Engineering. Unit counts do not sum across columns.

**Source(s):**

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2019.