

TABLE 16

Doctorate recipients, by subfield of study and sex: 2017

(Number)

Subfield of study	Total ^a	Male	Female	% female
All fields	54,664	29,146	25,495	46.6
Life sciences	12,592	5,629	6,958	55.3
Agricultural sciences and natural resources	1,606	809	795	49.5
Agricultural economics	144	84	59	41.0
Agronomy, horticulture science, plant breeding, plant pathology, plant sciences-other	368	203	165	44.8
Animal nutrition, poultry science	51	25	26	51.0
Animal sciences, other	105	56	49	46.7
Environmental science	222	90	132	59.5
Fishing and fisheries sciences and management	69	37	32	46.4
Food science, food technology-other	177	85	92	52.0
Forest biology, forest management, wood science, forestry sciences- other	165	84	80	48.5
Natural resource and environmental policy	54	21	33	61.1
Natural resources and conservation, wildlife and range management	82	40	42	51.2
Soil chemistry and microbiology	43	13	30	69.8
Soil sciences, other	52	30	22	42.3
Agricultural sciences, aggregated	74	41	33	44.6
Biological and biomedical sciences	8,477	4,014	4,461	52.6
Anatomy, developmental biology	139	66	73	52.5
Bacteriology, parasitology, and virology	138	62	76	55.1
Biochemistry (biological sciences)	815	430	385	47.2
Bioinformatics	183	104	79	43.2
Biomedical sciences	341	154	187	54.8
Biometrics and biostatistics	216	107	108	50.0
Biophysics (biological sciences)	208	124	84	40.4
Botany, plant pathology, plant physiology	127	64	63	49.6
Cancer biology	364	156	208	57.1
Cell, cellular biology, and histology	234	118	116	49.6
Computational biology	147	95	52	35.4
Ecology	432	200	232	53.7
Endocrinology, human/animal pathology	90	32	58	64.4
Entomology	129	67	62	48.1
Environmental toxicology (biological sciences)	64	36	28	43.8
Epidemiology	351	103	248	70.7
Evolutionary biology	224	116	108	48.2
Genetics and genomics, human and animal	345	157	188	54.5
Immunology	401	178	223	55.6
Microbiology	410	192	218	53.2
Molecular biology	624	305	319	51.1
Molecular medicine	67	32	35	52.2
Neurosciences, neurobiology	985	482	503	51.1
Nutrition sciences	215	53	162	75.3
Pharmacology, human and animal	236	113	123	52.1
Physiology, human and animal	165	94	71	43.0
Plant genetics	49	26	23	46.9
Structural biology	55	33	22	40.0
Toxicology	81	29	52	64.2
Wildlife biology	62	29	33	53.2
Zoology	44	17	27	61.4
Biological and biomedical sciences, general	391	177	213	54.5
Biotechnology, biology/biomedical sciences-other	145	63	82	56.6
Health sciences	2,509	806	1,702	67.8
Environmental health	84	31	53	63.1

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(Number)

Subfield of study	Total ^a	Male	Female	% female
Health and behavior	82	22	60	73.2
Health services/systems administration	203	73	130	64.0
Kinesiology, exercise science	276	147	129	46.7
Medical physics, radiological science	89	61	28	31.5
Nursing science	552	62	490	88.8
Pharmaceutical sciences	292	147	145	49.7
Public health	446	112	334	74.9
Rehabilitation, therapeutic services	86	30	55	64.0
Speech-language pathology and audiology	128	27	101	78.9
Health sciences, aggregated	271	94	177	65.3
Physical sciences and earth sciences	6,081	4,068	2,011	33.1
Chemistry	2,697	1,669	1,026	38.0
Analytical chemistry	367	198	169	46.0
Chemical biology	142	66	76	53.5
Inorganic chemistry	339	212	127	37.5
Medicinal chemistry	69	42	27	39.1
Organic chemistry	523	357	166	31.7
Physical chemistry	332	229	102	30.7
Polymer chemistry	152	101	51	33.6
Theoretical chemistry	85	63	22	25.9
Chemistry, general	539	323	215	39.9
Chemistry, other	149	78	71	47.7
Geosciences, atmospheric sciences, and ocean sciences	1,165	645	520	44.6
Atmospheric science and meteorology	243	142	101	41.6
Atmospheric physics, meteorology	45	32	13	28.9
Atmospheric chemistry, atmospheric sciences-general, atmospheric sciences-other	198	110	88	44.4
Geological sciences	576	330	246	42.7
Geochemistry, mineralogy	78	42	36	46.2
Geology	124	81	43	34.7
Geomorphology, geological sciences-general, geological sciences-other	211	105	106	50.2
Geophysics and seismology	124	82	42	33.9
Paleontology, stratigraphy	39	20	19	48.7
Ocean and marine sciences	346	173	173	50.0
Marine biology and biological oceanography	111	41	70	63.1
Oceanography, chemical and physical	70	37	33	47.1
Ocean/marine sciences, aggregated	165	95	70	42.4
Physics and astronomy	2,219	1,754	465	21.0
Astronomy and astrophysics	336	228	108	32.1
Astronomy	121	74	47	38.8
Astrophysics	211	153	58	27.5
Astronomy and astrophysics, other	4	1	3	75.0
Physics	1,883	1,526	357	19.0
Acoustics, optics/photonics	213	173	40	18.8
Applied physics	178	134	44	24.7
Atomic physics, polymer physics	157	119	38	24.2
Biophysics (physics)	134	97	37	27.6
Condensed matter, low-temperature physics	343	299	44	12.8
Elementary particle physics	354	298	56	15.8
Nuclear physics	103	85	18	17.5
Plasma, high-temperature physics	65	57	8	12.3
Physics, general	248	194	54	21.8
Physics, other	88	70	18	20.5

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(Number)

Subfield of study	Total ^a	Male	Female	% female
Mathematics and computer sciences	3,843	2,866	976	25.4
Computer and information sciences	1,987	1,540	447	22.5
Computer science	1,587	1,284	303	19.1
Information science, systems	162	83	79	48.8
Computer and information sciences, general	123	89	34	27.6
Computer and information sciences, other	115	84	31	27.0
Mathematics and statistics	1,856	1,326	529	28.5
Algebra	103	82	21	20.4
Analysis and functional analysis	78	66	12	15.4
Applied mathematics, computing theory	497	355	142	28.6
Geometry, geometric analysis	63	49	14	22.2
Logic, topology/foundations	62	49	13	21.0
Number theory	55	47	8	14.5
Operations research, mathematics/statistics-general, mathematics/statistics-other	496	355	141	28.4
Statistics (mathematics)	502	323	178	35.5
Psychology and social sciences	9,079	3,693	5,381	59.3
Psychology	3,960	1,135	2,824	71.3
Behavioral analysis	51	17	34	66.7
Clinical psychology	1,149	267	882	76.8
Cognitive neuroscience	199	97	102	51.3
Cognitive psychology and psycholinguistics	121	52	69	57.0
Community psychology	38	8	30	78.9
Counseling	317	86	231	72.9
Developmental and child psychology	201	34	167	83.1
Educational psychology (psychology)	139	30	109	78.4
Experimental psychology	159	59	100	62.9
Family psychology, human development and family studies	211	51	160	75.8
Health, medical psychology	62	11	51	82.3
Industrial and organizational psychology	191	84	107	56.0
Marriage and family therapy, counseling	74	18	56	75.7
Neuropsychology, physiological psychology	42	15	27	64.3
School psychology (psychology)	372	97	274	73.7
Social psychology	213	71	142	66.7
Psychology, general	140	42	98	70.0
Psychology, aggregated	281	96	185	65.8
Social sciences	5,119	2,558	2,557	50.0
Anthropology	455	158	297	65.3
Anthropology, cultural	261	92	169	64.8
Anthropology, general	110	42	68	61.8
Anthropology, physical and biological	84	24	60	71.4
Economics	1,237	812	423	34.2
Econometrics, economics	1,184	778	404	34.1
Natural resources and environmental economics (social sciences)	53	34	19	35.8
Political science and government	752	454	298	39.6
Sociology	689	267	421	61.1
Other social sciences	1,986	867	1,118	56.3
American, U.S. studies	97	25	72	74.2
Applied linguistics	105	36	69	65.7
Area, ethnic, and cultural studies	168	61	107	63.7
Criminal justice and corrections	108	52	56	51.9
Criminology	94	39	55	58.5
Demography, gerontology, statistics, urban affairs, social sciences- general, social sciences-other	282	101	181	64.2

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(Number)

Subfield of study	Total ^a	Male	Female	% female
Gender and women's studies	49	5	44	89.8
Geography	284	164	120	42.3
Health policy analysis	54	25	29	53.7
International relations, international affairs	149	79	70	47.0
Linguistics	208	89	119	57.2
Public policy analysis	240	119	120	50.0
Urban, city, community and regional planning	148	72	76	51.4
Engineering	9,843	7,389	2,448	24.9
Aerospace, aeronautical, and astronautical engineering	378	334	44	11.6
Bioengineering and biomedical engineering	1,041	612	429	41.2
Chemical engineering	936	663	272	29.1
Civil engineering	741	520	219	29.6
Electrical, electronics, and communications engineering	1,900	1,541	359	18.9
Industrial and manufacturing engineering	253	169	83	32.8
Materials science engineering	958	706	252	26.3
Mechanical engineering	1,409	1,168	241	17.1
Other engineering	2,227	1,676	549	24.7
Computer engineering	419	359	59	14.1
Environmental, environmental health engineering	221	113	108	48.9
Nuclear engineering	159	139	20	12.6
Robotics	98	85	13	13.3
Structural engineering	103	78	25	24.3
Systems engineering	121	94	27	22.3
Other engineering, aggregated	1,106	808	297	26.9
Education	4,823	1,521	3,300	68.4
Education administration	1,023	372	651	63.6
Educational administration and supervision	176	67	109	61.9
Educational and human resource studies, development	172	46	126	73.3
Educational leadership	591	239	352	59.6
Urban education and leadership	84	20	64	76.2
Education research	2,405	768	1,636	68.0
Counseling education, counseling and guidance	269	84	185	68.8
Curriculum and instruction	514	129	384	74.7
Educational assessment, testing, measurement	41	16	25	61.0
Educational policy analysis	127	50	77	60.6
Educational psychology (education)	229	73	156	68.1
Educational statistics, research methods	83	29	54	65.1
Educational/instructional technology, media design	252	113	139	55.2
Higher education evaluation and research	434	144	290	66.8
International education	45	14	31	68.9
School psychology (education)	107	23	84	78.5
Social and philosophical foundations of education	66	32	34	51.5
Special education	238	61	177	74.4
Teacher education	112	22	89	79.5
Teaching fields	908	256	652	71.8
English as a second or foreign language	56	17	39	69.6
Health education	65	15	50	76.9
Literacy and reading education	139	15	124	89.2
Mathematics education	146	66	80	54.8
Music education	75	33	42	56.0
Science education	101	37	64	63.4
Teaching fields, aggregated	326	73	253	77.6

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(Number)

Subfield of study	Total ^a	Male	Female	% female
Other education	375	103	272	72.5
Workforce education and development	60	21	39	65.0
Education, general	145	36	109	75.2
Education, other	170	46	124	72.9
Humanities and arts	5,290	2,581	2,708	51.2
Foreign languages and literature	624	239	385	61.7
French	92	29	63	68.5
Germanic language and literature	72	23	49	68.1
Italian	45	14	31	68.9
Spanish language and literature	182	75	107	58.8
Other languages, aggregated	233	98	135	57.9
History	1,066	596	470	44.1
American history, United States and Canada	368	210	158	42.9
Asian history	55	29	26	47.3
European history	173	94	79	45.7
History, science and technology and society	160	85	75	46.9
Latin American history	61	37	24	39.3
Middle, Near East history	70	37	33	47.1
History, general	70	42	28	40.0
History, aggregated	109	62	47	43.1
Letters	1,465	591	874	59.7
American literature, United States and Canada	311	126	185	59.5
Classics	80	44	36	45.0
Comparative literature	166	72	94	56.6
English language	159	68	91	57.2
English literature, British and Commonwealth	369	132	237	64.2
Rhetoric and composition	227	75	152	67.0
Speech and rhetorical studies	42	19	23	54.8
Letters, aggregated	111	55	56	50.5
Other humanities and arts	2,135	1,155	979	45.9
Archaeology (humanities)	126	54	72	57.1
Art history, criticism, and conservation	247	57	190	76.9
Dance, drama	86	26	60	69.8
Film, cinema, video studies	79	33	46	58.2
Music	74	35	39	52.7
Musicology and ethnomusicology	157	73	84	53.5
Music performance	90	41	49	54.4
Music theory and composition	86	60	26	30.2
Philosophy, ethics	449	326	122	27.2
Religion/religious studies, Jewish/Judaic studies	338	220	118	34.9
Theology, religious education	166	115	51	30.7
Other humanities, aggregated	237	115	122	51.5
Other ^b	3,113	1,399	1,713	55.0
Business management and administration	1,522	846	675	44.3
Accounting	153	78	75	49.0
Business administration and management	273	164	108	39.6
Finance	188	135	53	28.2
Human resources, organizational behavior	296	132	164	55.4
Management information systems, business statistics	90	56	34	37.8
Marketing management and research	139	68	71	51.1
Other aggregated business fields	383	213	170	44.4
Communication	626	198	428	68.4

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Subfield of study	Total ^a	Male	Female	% female
Communication research	111	40	71	64.0
Mass communication, media studies	231	84	147	63.6
Communication, general	146	37	109	74.7
Communication, aggregated	138	37	101	73.2
Non-S&E fields nec	965	355	610	63.2
Architecture and environmental design	118	51	67	56.8
Family, consumer sciences and human sciences	79	25	54	68.4
Parks, sports, recreation, leisure and fitness	49	26	23	46.9
Public administration	185	94	91	49.2
Social work	298	57	241	80.9
Fields nec, aggregated	236	102	134	56.8

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

^a Includes 23 respondents who did not report sex.

^b Includes other non-S&E fields not shown separately.

Note(s)

See table A-5 in the technical notes for a listing of aggregated fields and their constituent fine fields.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2017.