TABLE 5

Doctoral scientists and engineers, by fine field of doctorate, residence location, and sex: 2021

(Number and SE)

Field of study	U.S. residing						Non-U.S. residing					
	All		Male		Female		All		Male		Female	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
All fields	1,023,650	1,925	640,350	1,950	383,250	1,050	162,100	1,650	118,000	1,825	44,100	1,000
Science	767,500	1,675	452,800	1,825	314,650	1,250	114,550	1,450	79,050	1,475	35,450	925
Biological, agricultural, and environmental life sciences	265,700	1,050	148,000	1,275	117,700	825	32,600	850	21,150	750	11,450	500
Agricultural and food sciences	21,050	350	14,600	350	6,450	225	6,350	300	4,800	325	1,550	150
Agricultural sciences	1,300	75	1,000	75	300	25	300	50	250	75	100	25
Animal sciences	5,500	175	4,050	175	1,500	100	1,300	150	1,000	150	300	75
Food sciences and technology	4,100	175	2,150	175	2,000	150	1,750	175	1,200	175	500	100
Plant sciences	7,450	225	5,500	225	1,950	125	2,400	200	1,850	200	550	75
Soil sciences	2,700	125	1,950	125	750	100	600	100	500	75	100	50
Biochemistry and biophysics	35,250	450	21,350	550	13,950	425	3,350	350	2,450	350	900	175
Biochemistry	29,250	425	17,200	525	12,050	400	2,700	350	2,050	325	650	150
Biophysics	6,000	150	4,150	175	1,850	150	650	150	400	125	200	100
Cell, cellular biology, and molecular biology	36,000	350	18,050	475	17,900	450	2,750	300	1,750	300	1,000	125
Microbiological sciences and immunology	28,750	300	14,650	400	14,100	375	2,500	275	1,300	200	1,200	200
Immunology	10,400	200	5,450	250	4,950	225	750	175	250	125	500	150
Microbiological sciences	18,350	250	9,200	350	9,150	325	1,700	225	1,050	175	650	125
Natural resources and conservation	11,150	225	7,500	225	3,650	150	2,550	225	1,900	175	650	125
Fish, fisheries, wildlife, and wildlands science and management	2,700	100	2,050	100	650	50	650	100	550	100	150	50
Forestry	3,300	125	2,500	125	800	75	800	100	700	100	100	25
Natural resource conservation, research, management, and policy	5,150	150	2,950	175	2,200	150	1,100	150	650	125	450	100
Zoology	9,100	200	6,350	200	2,800	150	1,500	200	1,100	200	400	75
Other biological sciences	124,400	675	65,500	825	58,900	625	13,600	575	7,850	450	5,750	375
Biomathematics, bioinformatics, and computational biology	6,600	125	3,950	150	2,650	125	650	125	400	125	250	75
Botany and plant biology	8,400	225	4,900	200	3,500	175	1,750	200	1,050	150	700	125
Epidemiology, ecology, and population biology	19,400	325	9,100	350	10,300	275	3,250	300	1,700	225	1,500	225
Genetics	10,100	200	5,050	225	5,050	225	1,350	175	850	175	500	100
Neurobiology and neuroscience	20,000	225	10,300	350	9,700	325	1,600	225	800	175	850	150
Nutrition sciences	4,850	150	1,300	125	3,550	175	800	150	250	100	500	125
Pharmacology and toxicology	15,050	175	8,800	300	6,300	250	700	125	300	75	400	125
Physiology, pathology, and related sciences	18,350	225	10,650	325	7,750	250	1,500	200	1,100	175	400	75
Biological and biomedical sciences, general	15,650	225	8,100	300	7,550	275	1,400	225	850	175	550	125
Biological and biomedical sciences, other	5,900	200	3,350	200	2,500	150	600	150	450	150	150	75
Computer and information sciences	36,650	400	29,450	425	7,200	275	5,450	400	4,350	350	1,100	225
Computer science	31,450	375	26,150	375	5,300	250	4,400	350	3,550	300	850	200
Information science, studies	3,050	125	1,850	125	1,200	100	550	125	400	100	150	75
Computer and information sciences, other	2,150	100	1,450	100	700	75	500	100	400	100	100	50

TABLE 5

Doctoral scientists and engineers, by fine field of doctorate, residence location, and sex: 2021

(Number and SE)

Field of study	U.S. residing						Non-U.S. residing					
	All		Male		Female		All		Male		Female	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
Mathematics and statistics	42,950	525	32,850	525	10,100	350	10,050	525	8,000	525	2,050	300
Applied mathematics	8,950	250	6,500	250	2,450	200	2,150	275	1,700	275	450	150
Mathematics	20,650	375	16,700	375	3,950	175	5,200	350	4,300	325	850	150
Statistics	8,400	300	5,800	300	2,600	225	1,600	300	1,100	250	550	200
Mathematics and statistics, other	4,950	125	3,850	150	1,100	100	1,100	125	900	125	200	50
Physical sciences, geosciences, atmospheric sciences, and ocean sciences	163,600	875	122,600	875	41,000	675	24,800	825	19,500	750	5,300	375
Astronomy and astrophysics	7,250	125	5,550	150	1,700	100	950	125	750	125	150	50
Chemistry, except biochemistry	80,500	650	56,800	725	23,700	550	8,800	550	6,350	475	2,450	275
Inorganic chemistry	10,500	175	7,400	225	3,150	200	1,150	175	900	150	300	75
Organic chemistry	21,750	350	16,750	375	5,000	250	2,400	300	1,950	275	450	150
Chemistry, other, except biochemistry	48,250	475	32,700	575	15,550	500	5,250	450	3,500	350	1,700	250
Geosciences, atmospheric sciences, and ocean sciences	26,950	275	18,550	300	8,350	225	5,250	275	3,750	275	1,500	175
Atmospheric sciences and meteorology	4,750	100	3,400	100	1,400	75	850	100	600	75	250	50
Geological and earth sciences, geosciences	16,950	250	11,950	275	5,000	175	3,000	250	2,300	250	700	125
Ocean sciences and marine sciences	2,750	75	1,600	75	1,150	75	300	75	200	50	100	50
Oceanography, chemical and physical	2,450	125	1,650	125	800	75	1,100	125	650	125	400	100
Physics	48,900	650	41,650	650	7,250	400	9,850	600	8,600	600	1,250	225
Psychology	137,550	550	52,100	825	85,500	775	6,950	450	2,550	250	4,400	400
Clinical psychology	47,450	350	16,550	450	30,900	475	1,350	275	250	75	1,100	250
Counseling and applied psychology	16,900	200	6,250	325	10,650	350	700	150	150	50	550	150
Educational and school psychology	17,700	250	5,950	275	11,800	300	950	150	250	75	650	150
Industrial and organizational psychology	5,800	175	2,350	175	3,450	175	450	150	50	25	400	150
Research and experimental psychology	34,700	250	14,950	400	19,750	350	2,600	200	1,350	175	1,300	150
Psychology, general	9,150	225	3,650	250	5,500	275	500	150	350	125	150	75
Psychology, other	5,900	125	2,400	175	3,450	150	400	100	150	75	250	50
Social sciences	121,000	950	67,800	850	53,200	650	34,700	900	23,500	775	11,200	525
Economics	32,250	550	22,850	575	9,400	375	13,850	500	10,650	475	3,200	300
Political science and government	24,050	550	14,850	475	9,200	375	5,450	500	3,550	425	1,900	275
Political science and government	18,950	550	12,150	450	6,800	350	4,600	500	3,050	425	1,550	275
Public policy analysis	5,100	100	2,700	150	2,400	125	800	125	450	100	350	75
Sociology, demography, and population studies	19,400	325	8,750	325	10,650	325	3,250	300	1,800	275	1,450	200
Other social sciences	45,300	525	21,350	475	23,950	450	12,150	475	7,550	425	4,600	325
Anthropology	14,000	250	5,850	300	8,150	275	2,150	225	1,100	200	1,050	150
Area, ethnic, cultural, gender, and group studies	4,900	125	1,950	150	2,950	150	500	100	150	75	300	75
Geography and cartography	5,300	225	3,200	175	2,100	150	1,650	225	1,050	175	550	150
International relations and national security studies	2,600	125	1,700	125	900	75	1,200	150	900	150	250	75

TABLE 5

Doctoral scientists and engineers, by fine field of doctorate, residence location, and sex: 2021

(Number and SE)

Field of study	U.S. residing						Non-U.S. residing					
	All		Male		Female		All		Male		Female	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
Linguistics	5,550	250	2,250	200	3,300	225	3,200	250	1,800	250	1,400	225
Urban studies, affairs	1,600	125	1,050	100	600	75	800	125	700	125	100	50
Social sciences, other	11,400	275	5,350	225	6,000	250	2,700	250	1,800	200	900	175
Engineering	206,100	1,150	169,600	1,200	36,500	700	41,650	1,050	36,300	1,000	5,300	375
Aerospace, aeronautical, and astronautical engineering	7,850	250	7,100	275	800	75	1,650	250	1,550	250	100	50
Chemical engineering	24,850	425	19,350	400	5,500	325	4,400	375	3,450	350	1,000	200
Civil engineering	21,800	550	17,250	450	4,600	275	6,850	525	5,850	475	1,000	200
Electrical and computer engineering	55,900	575	48,900	600	7,000	375	10,000	550	9,150	550	850	175
Computer engineering	7,850	250	6,900	250	950	100	1,750	225	1,450	225	300	100
Electrical, electronics, and communications engineering	48,000	525	42,000	550	6,050	375	8,250	525	7,700	500	550	125
Mechanical engineering	30,550	425	26,400	500	4,150	300	5,250	425	4,800	400	450	125
Metallurgical and materials engineering	19,750	375	16,050	400	3,700	250	3,900	375	3,400	375	500	100
Other engineering	45,350	450	34,600	525	10,750	375	9,500	450	8,100	450	1,400	200
Agricultural engineering	2,050	100	1,700	100	350	50	650	100	600	100	50	50
Bioengineering and biomedical engineering	16,050	250	10,900	325	5,150	275	1,500	250	1,100	225	400	125
Engineering mechanics, physics, and science	4,900	175	4,350	175	550	50	1,200	175	1,150	150	50	25
Industrial and manufacturing engineering	10,450	300	7,850	300	2,600	175	3,400	300	2,950	300	450	75
Nuclear engineering	3,550	125	3,100	125	450	50	750	125	700	125	50	50
Engineering, other	8,350	225	6,650	250	1,650	125	2,000	225	1,600	225	400	125
Health	50,050	450	17,950	450	32,100	525	5,950	425	2,650	300	3,350	325
Communication disorders sciences and services	3,900	125	1,100	100	2,850	125	350	100	S	S	200	75
Hospital and medical administration services	1,750	75	750	75	950	75	300	75	200	50	100	25
Pharmacy, pharmaceutical sciences, and administration	9,000	250	5,300	250	3,700	250	1,250	250	700	175	550	150
Public health	10,700	200	3,400	200	7,300	250	1,300	225	700	150	600	150
Registered nursing, nursing administration, nursing research	11,450	275	850	100	10,600	275	1,350	250	100	50	1,250	250
Health sciences, other	13,200	200	6,500	250	6,700	225	1,400	175	800	150	600	100

S = suppressed for reliability; coefficient of variation exceeds publication standards.

SE = standard error.

Note(s):
Numbers are rounded to the nearest 50. Standard errors are rounded up to the nearest 25. Detail may not add to total because of rounding. Residence location is based on reported living location on 1 February 2021.

Source(s):
National Center for Science and Engineering Statistics, Survey of Doctorate Recipients, 2021.