TABLE 15-4

Employed U.S. residing doctoral scientists and engineers, by fine field of doctorate and primary work activity: 2021

(Number and SE)

Field of study	All employed		Primary work activity[a]			
			Any R&D[b]		Other[c]	
	Number	SE	Number	SE	Number	SE
All fields	872,100	2,425	333,250	2,225	538,850	2,800
Science	647,300	2,000	235,500	2,025	411,800	2,425
Biological, agricultural, and environmental life sciences	226,850	1,275	101,250	1,575	125,600	1,500
Agricultural and food sciences	16,600	350	7,700	350	8,900	325
Agricultural sciences	900	75	400	75	500	50
Animal sciences	4,650	200	1,750	150	2,900	200
Food sciences and technology	3,300	200	1,650	150	1,650	150
Plant sciences	5,800	250	2,900	225	2,850	200
Soil sciences	2,000	150	1,000	150	1,000	100
Biochemistry and biophysics	29,550	600	14,500	625	15,050	625
Biochemistry	24,350	550	11,750	600	12,550	575
Biophysics	5,200	200	2,750	200	2,450	200
Cell, cellular biology, and molecular biology	32,300	450	14,350	525	17,950	550
Microbiological sciences and immunology	24,750	425	11,400	475	13,400	525
Immunology	9,150	225	4,500	325	4,650	275
Microbiological sciences	15,650	350	6,900	400	8,750	450
Natural resources and conservation	9,000	225	3,100	150	5,850	250
Fish, fisheries, wildlife, and wildlands science and management	2,000	125	900	100	1,150	75
Forestry	2,550	150	950	100	1,650	125
Natural resource conservation, research, management, and policy	4,400	175	1,300	125	3,100	200
Zoology	6,850	250	2,450	225	4,400	250
Other biological sciences	107,800	850	47,750	950	60,050	900
Biomathematics, bioinformatics, and computational biology	6,200	150	3,800	200	2,400	150
Botany and plant biology	6,150	250	2,250	200	3,900	225
Epidemiology, ecology, and population biology	16,950	350	7,900	400	9,050	400
Genetics	8,750	225	4,200	225	4,550	275
Neurobiology and neuroscience	18,850	300	8,600	450	10,300	425
Nutrition sciences	4,100	150	1,450	150	2,650	175
Pharmacology and toxicology	13,100	300	5,800	350	7,300	425
Physiology, pathology, and related sciences	15,350	300	5,750	350	9,600	350
Biological and biomedical sciences, general	13,650	325	5,950	350	7,700	375
Biological and biomedical sciences, other	4,700	225	2,050	200	2,600	200
Computer and information sciences	33,600	425	11,650	450	22,000	500
Computer science	29,100	400	10,050	450	19,050	500
Information science, studies	2,500	125	850	125	1,650	125
Computer and information sciences, other	2,000	100	750	75	1,250	75
Mathematics and statistics	36,600	575	12,900	525	23,750	600
Applied mathematics	7,850	300	2,650	200	5,250	300
Mathematics	16,850	400	5,100	375	11,750	400
Statistics	7,450	325	3,750	350	3,700	325
Mathematics and statistics, other	4,450	150	1,400	175	3,050	150
Physical sciences, geosciences, atmospheric sciences, and ocean sciences	137,050	1,025	57,750	1,075	79,250	1,075
Astronomy and astrophysics	6,350	175	2,650	200	3,700	200
Chemistry, except biochemistry	66,350	800	28,050	850	38,300	825
Inorganic chemistry	8,500	275	3,300	250	5,200	250
Organic chemistry	17,650	400	8,000	425	9,650	425
Chemistry, other, except biochemistry	40,200	625	16,700	675	23,500	700
Geosciences, atmospheric sciences, and ocean sciences	22,050	325	9,450	275	12,600	325
Atmospheric sciences and meteorology	4,150	100	2,100	100	2,000	100

TABLE 15-4

Employed U.S. residing doctoral scientists and engineers, by fine field of doctorate and primary work activity: 2021

(Number and SE)

Field of study	All employed		Primary work activity[a]			
			Any R&D[b]		Other[c]	
	Number	SE	Number	SE	Number	SE
Geological and earth sciences, geosciences	13,550	300	5,450	250	8,050	325
Ocean sciences and marine sciences	2,400	75	950	75	1,450	75
Oceanography, chemical and physical	2,000	125	950	100	1,050	100
Physics	42,300	675	17,600	650	24,650	750
Psychology	113,500	825	21,250	675	92,250	925
Clinical psychology	40,650	600	4,550	425	36,100	650
Counseling and applied psychology	14,600	300	900	175	13,700	325
Educational and school psychology	13,300	325	1,850	175	11,450	325
Industrial and organizational psychology	4,950	175	1,050	150	3,900	200
Research and experimental psychology	27,700	425	9,900	400	17,850	500
Psychology, general	7,600	275	1,900	250	5,700	325
Psychology, other	4,700	150	1,100	125	3,600	175
Social sciences	99,700	1,000	30,750	800	68,950	1,100
Economics	27,300	550	11,600	525	15,700	550
Political science and government	20,500	550	5,750	375	14,750	525
Political science and government	16,150	550	4,350	350	11,850	550
Public policy analysis	4,300	150	1,400	125	2,900	175
Sociology, demography, and population studies	15,650	375	4,650	325	10,950	375
Other social sciences	36,300	575	8,750	325	27,550	575
Anthropology	10,900	275	2,900	225	8,000	300
Area, ethnic, cultural, gender, and group studies	4,050	150	500	100	3,550	150
Geography and cartography	4,400	225	1,350	125	3,000	200
International relations and national security studies	2,150	125	500	100	1,600	125
Linguistics	4,500	250	800	150	3,700	250
Urban studies, affairs	1,200	100	300	50	900	100
Social sciences, other	9,150	275	2,400	175	6,750	275
Engineering	183,100	1,325	82,950	1,200	100,200	1,350
Aerospace, aeronautical, and astronautical engineering	7,150	250	2,650	200	4,500	275
Chemical engineering	21,650	500	10,250	500	11,400	600
Civil engineering	19,750	575	5,800	400	13,950	525
Electrical and computer engineering	50,400	650	24,250	650	26,200	625
Computer engineering	7,150	275	3,000	250	4,200	250
Electrical, electronics, and communications engineering	43,250	600	21,250	625	22,000	600
Mechanical engineering	27,500	450	13,050	550	14,500	575
Metallurgical and materials engineering	17,450	400	9,150	450	8,250	450
Other engineering	39,250	525	17,800	525	21,450	525
Agricultural engineering	1,700	100	750	100	950	75
Bioengineering and biomedical engineering	14,900	275	7,700	375	7,200	350
Engineering mechanics, physics, and science	3,900	200	1,900	150	2,000	175
Industrial and manufacturing engineering	8,700	325	3,050	250	5,700	275
Nuclear engineering	3,100	125	1,400	125	1,700	125
Engineering, other	6,900	250	3,050	225	3,900	250
Health	41,650	525	14,800	500	26,850	550
Communication disorders sciences and services	3,100	125	900	125	2,200	150
Hospital and medical administration services	1,300	100	450	50	850	75
Pharmacy, pharmaceutical sciences, and administration	7,850	250	3,800	225	4,050	275
Public health	9,400	225	4,450	250	4,950	275
Registered nursing, nursing administration, nursing research	8,550	375	1,650	225	6,900	375

TABLE 15-4

Employed U.S. residing doctoral scientists and engineers, by fine field of doctorate and primary work activity: 2021

(Number and SE)

Field of study	All employed		Primary work activity[a]			
			Any R&D[b]		Other[c]	
	Number	SE	Number	SE	Number	SE
Health sciences, other	11,500	275	3,600	275	7,850	275

SE = standard error.

[a] Primary work activity on principal job.

[b] R&D is defined as applied research, basic research, and experimental development.

[c] Other work activities includes all non-R&D activities.

Note(s):
Numbers are rounded to the nearest 50. Standard errors are rounded up to the nearest 25. Detail may exceed total due to multiple responses. Primary and secondary work activities were self-defined by respondent in response to the question: "On which two activities...did you work the most hours during a typical week on this job?" 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.