

TABLE 1-11c

**Postdoctoral appointees, by detailed fields: 2017–22**

(Number)

Detailed field	2017	2018	2019	2020	2021	2022
All fields	64,733	64,783	66,247	65,681	63,328	62,750
Science	38,241	37,564	38,503	38,741	37,189	36,673
Agricultural and veterinary sciences <sup>a</sup>	1,024	1,072	1,079	1,678	1,595	1,705
Agricultural sciences	1,024	1,072	1,079	1,046	1,086	1,201
Veterinary biomedical and clinical sciences <sup>b</sup>	na	na	na	632	509	504
Biological and biomedical sciences <sup>a</sup>	21,781	21,533	21,847	21,902	20,245	19,585
Biochemistry	1,933	1,943	1,912	1,863	1,743	1,756
Biology	2,167	2,108	2,203	2,169	1,979	2,064
Biomedical sciences	1,870	1,941	1,942	1,879	1,906	1,553
Biophysics	144	151	164	147	156	126
Biostatistics and bioinformatics	695	699	721	830	733	691
Biotechnology	103	86	87	96	101	155
Botany and plant biology	586	620	667	579	520	507
Cell, cellular biology, and anatomical sciences	1,859	1,814	1,785	1,661	1,663	1,599
Ecology and population biology	468	446	414	467	430	438
Epidemiology	244	230	285	307	329	377
Genetics	1,529	1,428	1,472	1,485	1,384	1,288
Microbiological sciences and immunology	2,065	2,078	1,985	2,028	1,865	1,811
Molecular biology	477	521	570	722	634	549
Neurobiology and neuroscience	2,137	2,103	2,216	2,075	1,980	1,932
Nutrition science	177	180	192	191	152	146
Pathology and experimental pathology	1,106	1,145	1,302	1,263	1,043	925
Pharmacology and toxicology	1,140	1,012	1,021	1,026	884	915
Physiology	1,851	1,766	1,640	1,804	1,537	1,512
Zoology and animal biology	394	428	406	397	376	411
Biological and biomedical sciences nec	836	834	863	913	830	830
Computer and information sciences	854	879	878	823	880	859
Computer science	468	502	487	466	521	496
Computer and information sciences <sup>c</sup>	256	225	263	224	217	212
Computer and information sciences <sup>d</sup>	NA	NA	NA	187	185	166
Artificial intelligence, informatics, and computer and information science topics <sup>d</sup>	NA	NA	NA	37	32	46
Computer and information sciences nec <sup>c</sup>	130	152	128	133	142	151
Computer and information systems security <sup>d</sup>	NA	NA	NA	6	9	11
Information science and studies <sup>d</sup>	NA	NA	NA	40	56	65
Information technology <sup>d</sup>	NA	NA	NA	18	6	3
Computer and information sciences nec <sup>d</sup>	NA	NA	NA	69	71	72
Geosciences, atmospheric sciences, and ocean sciences	2,089	1,726	1,778	1,790	1,797	1,787
Atmospheric sciences and meteorology	313	243	249	266	248	253
Geological and earth sciences	1,046	803	845	879	869	844
Ocean and marine sciences	433	401	393	360	373	414
Geosciences, atmospheric sciences, and ocean sciences nec	297	279	291	285	307	276
Mathematics and statistics	991	982	1,070	1,076	1,112	1,110
Mathematics and applied mathematics <sup>c</sup>	860	833	892	924	923	910
Applied mathematics <sup>d</sup>	NA	NA	NA	207	202	221
Mathematics <sup>d</sup>	NA	NA	NA	717	721	689
Statistics	131	149	178	152	189	200
Multidisciplinary and interdisciplinary sciences <sup>c</sup>	1,131	980	972	832	878	840
Biological and physical sciences <sup>d</sup>	NA	NA	NA	119	125	56
Computational science <sup>d</sup>	NA	NA	NA	26	28	31

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**Postdoctoral appointees, by detailed fields: 2017–22**

(Number)

Detailed field	2017	2018	2019	2020	2021	2022
Data science and data analytics <sup>d</sup>	NA	NA	NA	57	50	48
International and global studies <sup>d</sup>	NA	NA	NA	13	21	27
Multidisciplinary and interdisciplinary sciences nec <sup>d</sup>	NA	NA	NA	617	654	678
Natural resources and conservation	731	764	806	845	889	936
Environmental science and studies	270	258	277	279	312	339
Forestry, natural resources, and conservation	461	506	529	566	577	597
Physical sciences	7,211	6,976	7,159	6,937	6,823	6,877
Astronomy and astrophysics	484	536	571	544	561	634
Chemistry	3,435	3,320	3,383	3,294	3,163	3,157
Materials sciences	300	264	259	225	213	246
Physics	2,645	2,619	2,721	2,676	2,677	2,618
Physical sciences nec	347	237	225	198	209	222
Psychology <sup>a</sup>	1,082	1,145	1,152	1,312	1,325	1,308
Clinical psychology	74	73	72	84	63	56
Counseling and applied psychology <sup>c</sup>	135	165	167	123	120	123
Applied psychology <sup>d</sup>	NA	NA	NA	92	110	109
Counseling psychology <sup>d</sup>	NA	NA	NA	31	10	14
Human development <sup>b</sup>	na	na	na	122	106	119
Psychology, general	696	674	663	722	705	735
Research and experimental psychology	177	233	250	261	331	275
Social sciences <sup>a</sup>	1,347	1,507	1,762	1,546	1,645	1,666
Agricultural and natural resource economics	57	53	52	33	42	53
Anthropology	136	137	148	153	149	150
Criminal justice and safety studies	4	12	16	17	16	15
Economics (except agricultural and natural resource)	94	108	132	123	165	152
Geography and cartography	81	120	128	140	127	131
Human development <sup>b</sup>	123	135	156	na	na	na
International relations and national security studies	38	51	85	68	117	98
Linguistics	33	39	39	41	50	58
Political science and government	142	137	170	148	164	162
Public policy analysis	162	191	220	229	213	241
Sociology and population studies	141	149	159	155	168	166
Social sciences, nec <sup>c</sup>	336	375	457	439	434	440
Area, ethnic, cultural, gender, and group studies <sup>d</sup>	NA	NA	NA	226	230	235
Criminology <sup>d</sup>	NA	NA	NA	2	3	8
Urban studies and affairs <sup>d</sup>	NA	NA	NA	5	10	18
Social sciences, other <sup>d</sup>	na	na	na	206	191	179
History and philosophy of science and technology <sup>e</sup>	9	12	21	na	na	na
Social sciences, nec <sup>c</sup>	327	363	436	na	na	na
Engineering	7,839	7,914	8,266	8,462	8,340	8,335
Aerospace, aeronautical, and astronautical engineering	196	207	227	233	277	244
Biological, biomedical, and biosystems engineering	1,476	1,529	1,602	1,696	1,616	1,540
Bioengineering and biomedical engineering	1,398	1,433	1,515	na	na	na
Biological and biosystems engineering	78	96	87	na	na	na
Chemical, petroleum, and chemical-related engineering	1,262	1,205	1,229	1,157	1,167	1,239
Chemical engineering	1,197	1,142	1,157	1,108	1,133	1,215
Petroleum engineering	65	63	72	49	34	24
Civil, environmental, transportation and related engineering fields <sup>c</sup>	804	739	865	1,006	968	1,018

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(Number)

Detailed field	2017	2018	2019	2020	2021	2022
Civil engineering <sup>d</sup>	804	739	865	904	879	929
Architectural, environmental, construction and surveying engineering <sup>d</sup>	NA	NA	NA	102	89	89
Electrical, electronics, communications and computer engineering	1,170	1,197	1,305	1,302	1,275	1,217
Electrical, electronics, and communications engineering <sup>c</sup>	1,170	1,197	1,305	1,242	1,186	1,129
Computer engineering <sup>d</sup>	NA	NA	NA	60	89	88
Industrial, manufacturing, systems engineering and operations research	127	156	167	194	127	143
Industrial and manufacturing engineering <sup>c</sup>	127	156	167	83	73	72
Systems engineering and operations research <sup>d</sup>	NA	NA	NA	111	54	71
Mechanical engineering	1,089	1,069	1,142	1,149	1,200	1,189
Metallurgical, mining, materials and related engineering fields	565	575	665	630	562	542
Metallurgical and materials engineering <sup>e</sup>	550	549	642	na	na	na
Mining engineering <sup>e</sup>	15	26	23	na	na	na
Other engineering	1,150	1,237	1,064	1,095	1,148	1,203
Agricultural engineering	111	113	112	122	112	136
Engineering mechanics, physics, and science	316	354	180	199	253	265
Nuclear engineering	94	106	80	81	99	82
Engineering, other	na	na	na	693	684	720
Engineering, nec	544	530	541	na	na	na
Nanotechnology	85	134	151	na	na	na
Health	18,653	19,305	19,478	18,478	17,799	17,742
Clinical medicine <sup>a</sup>	16,100	16,563	16,650	16,287	15,561	15,630
Medical clinical sciences and clinical and medical laboratory sciences	NA	NA	NA	430	345	450
Public health	767	791	843	914	880	796
Anesthesiology	422	436	494	466	414	313
Cardiology and cardiovascular disease	824	841	788	706	660	672
Endocrinology, diabetes, and metabolism	331	351	345	334	319	355
Gastroenterology	273	279	287	277	315	310
Hematology	338	316	434	429	362	379
Neurology and neurosurgery	1,202	1,437	1,466	1,491	1,522	1,618
Obstetrics and gynecology	294	313	312	289	230	218
Oncology and cancer research	1,974	2,012	1,830	1,541	1,504	1,391
Ophthalmology	513	517	523	456	464	476
Otorhinolaryngology	265	306	275	314	279	267
Pediatrics	1,270	1,264	1,264	1,337	1,143	1,125
Psychiatry	949	991	1,004	1,088	1,109	951
Pulmonary disease	290	286	275	296	232	238
Radiological sciences	996	1,090	1,152	1,180	1,100	1,218
Surgery	1,247	1,352	1,376	1,193	1,197	1,213
Clinical medicine nec	4,145	3,981	3,982	3,546	3,486	3,640
Other health	2,553	2,742	2,828	2,191	2,238	2,112
Communication disorders sciences	79	83	75	82	88	72
Dental sciences	282	311	316	292	304	311
Nursing science	98	121	120	127	122	141
Pharmaceutical sciences	978	1,063	1,091	1,141	1,101	1,107
Veterinary biomedical and clinical sciences <sup>b</sup>	602	636	679	na	na	na
Other health nec <sup>c</sup>	na	na	na	549	623	481
Kinesiology and exercise science <sup>d</sup>	NA	NA	NA	84	67	71
Other health nec <sup>d</sup>	514	528	547	465	556	410

na = not applicable; NA = not available (data not collected at this level of detail).

nec = not elsewhere classified.

<sup>a</sup> Broad field is not comparable between 2019 and 2020 due to changes in detailed fields.

<sup>b</sup> Detailed field moved between broad fields between 2019 and 2020.

<sup>c</sup> Detailed field split into multiple fields in 2020; data after 2020 represent the aggregate counts of all the new detailed fields.

<sup>d</sup> New detailed field in 2020.

<sup>e</sup> Code reported under a different detailed field code in 2020 and later years.

**Note(s):**

Percentages may not add to total because of rounding. Field titles match the 2020 and later titles in the few cases where field titles changed. Prior to 2020, there were no broad fields in engineering. All fields have been moved to match the current broad field organization. For information on the current of fields and codes in the Survey of Graduate Students and Postdoctorates in Science and Engineering, see technical tables A-16 and A-17.

**Source(s):**

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