

TABLE 1-9c

## Doctorate-holding nonfaculty researchers in science broad fields: 1979–2023

(Number)

Year	Total	Agricultural and veterinary sciences <sup>a,b</sup>	Biological and biomedical sciences <sup>a</sup>	Communication <sup>a,c,d</sup>	Computer and information sciences	Family and consumer sciences and human sciences <sup>a,c,d</sup>	Geosciences, atmospheric, and ocean sciences	Mathematics and statistics	Multidisciplinary and interdisciplinary sciences <sup>a,d</sup>	Natural resources and conservation <sup>a</sup>	Neurobiology and neuroscience <sup>a,d</sup>	Physical sciences <sup>a</sup>	Psychology <sup>b,e</sup>	Social sciences <sup>a,b</sup>
1979	1,915	58	932	ne	44	ne	104	69	ne	NA	NA	464	63	181
1980	2,184	74	1,100	ne	51	ne	154	84	ne	NA	NA	475	103	143
1981	2,445	68	1,055	ne	57	ne	143	112	ne	NA	NA	632	156	222
1982	2,809	79	1,267	ne	47	ne	239	82	ne	NA	NA	809	150	136
1983	3,348	179	1,566	ne	61	ne	309	125	ne	NA	NA	759	158	191
1984	3,442	142	1,611	ne	58	ne	245	125	ne	NA	NA	856	221	184
1985	3,529	125	1,638	ne	78	ne	186	176	ne	NA	NA	967	210	149
1986	3,356	155	1,582	ne	97	ne	193	54	ne	NA	NA	924	216	135
1987	3,250	118	1,545	ne	123	ne	202	70	ne	NA	NA	848	256	88
1988	3,348	118	1,608	ne	98	ne	200	89	ne	NA	NA	960	174	101
1989	3,470	150	1,709	ne	68	ne	228	65	ne	NA	NA	991	180	79
1990	3,745	192	1,743	ne	61	ne	315	92	ne	NA	NA	1,006	198	138
1991	3,872	210	1,846	ne	50	ne	298	86	ne	NA	NA	1,007	192	183
1992	3,660	200	1,688	ne	42	ne	304	71	ne	NA	NA	1,071	152	132
1993	4,003	174	1,838	ne	67	ne	340	53	ne	NA	NA	1,225	171	135
1994	4,156	256	1,841	ne	49	ne	363	72	ne	NA	NA	1,244	203	128
1995	4,395	234	1,950	ne	66	ne	421	93	ne	NA	NA	1,381	146	104
1996	4,426	210	1,905	ne	107	ne	431	88	ne	NA	NA	1,291	232	162
1997	4,408	203	1,984	ne	87	ne	431	92	ne	NA	NA	1,208	225	178
1998	4,497	159	2,238	ne	125	ne	415	88	ne	NA	NA	1,083	252	137
1999	4,761	168	2,331	ne	133	ne	436	122	ne	NA	NA	1,157	250	164
2000	4,931	219	2,245	ne	153	ne	486	80	ne	NA	NA	1,271	326	151
2001	4,707	229	2,323	ne	150	ne	477	54	ne	NA	NA	1,081	254	139
2002	5,019	275	2,551	ne	123	ne	606	36	ne	NA	NA	1,089	210	129
2003	5,493	254	2,859	ne	127	ne	603	47	ne	NA	NA	1,245	240	118
2004	5,880	301	2,976	ne	170	ne	587	69	ne	NA	NA	1,374	249	154
2005	6,069	287	2,992	ne	152	ne	584	64	ne	NA	NA	1,576	257	157
2006	6,658	305	3,353	ne	184	ne	639	89	ne	NA	NA	1,615	261	212
2007old <sup>d</sup>	6,517	256	3,257	ne	195	ne	613	108	ne	NA	NA	1,643	277	168
2007new <sup>d</sup>	6,526	264	3,205	4	179	8	610	108	28	NA	14	1,670	268	168
2008	8,669	458	4,514	6	228	8	751	91	219	NA	23	1,826	297	248
2009	8,698	431	4,213	9	331	31	774	160	231	NA	77	1,773	291	377
2010 <sup>f,g</sup>	12,751	572	6,271	24	318	38	1,362	173	467	NA	191	2,251	467	617
2011 <sup>g</sup>	13,363	581	6,224	17	326	101	1,625	174	509	NA	378	2,322	434	672
2012	13,264	567	6,249	14	349	43	1,513	209	497	NA	356	2,296	431	740
2013	13,932	550	6,527	34	459	43	1,518	224	538	NA	417	2,312	457	853

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(Number)

Year	Total	Agricultural and veterinary sciences <sup>a,b</sup>	Biological and biomedical sciences <sup>a</sup>	Communication <sup>a,c,d</sup>	Computer and information sciences	Family and consumer sciences and human sciences <sup>a,c,d</sup>	Geosciences, atmospheric, and ocean sciences	Mathematics and statistics	Multidisciplinary and interdisciplinary sciences <sup>a,d</sup>	Natural resources and conservation <sup>a</sup>	Neurobiology and neuroscience <sup>a,d</sup>	Physical sciences <sup>a</sup>	Psychology <sup>b,e</sup>	Social sciences <sup>a,b</sup>
2014old <sup>h</sup>	14,283	609	6,492	34	450	57	1,499	221	658	NA	650	2,433	411	769
2014new <sup>h</sup>	14,674	616	6,841	34	450	59	1,500	221	661	NA	666	2,445	411	770
2015	15,667	747	6,948	31	459	74	1,754	235	630	NA	718	2,701	472	898
2016	15,940	767	7,058	29	470	120	1,635	213	727	NA	760	2,735	456	970
2017old <sup>a</sup>	na	na	na	na	na	na	na	na	na	NA	na	na	na	na
2017new <sup>a</sup>	17,268	496	8,203	ne	476	ne	1,794	240	806	364	NA	2,871	494	1,524
2018	18,278	565	8,250	ne	515	ne	2,106	266	832	580	NA	3,056	507	1,601
2019	18,819	645	8,229	ne	510	ne	2,177	305	820	582	NA	3,316	576	1,659
2020	18,212	964	8,112	ne	458	ne	2,150	201	679	573	NA	2,890	749	1,436
2021	18,728	902	8,187	ne	457	ne	2,308	235	816	620	NA	2,895	803	1,505
2022	19,423	1,068	8,207	ne	507	ne	2,448	251	931	605	NA	2,894	786	1,726
2023	20,600	1,238	8,589	ne	631	ne	2,455	307	818	663	NA	3,095	950	1,854

na = not applicable. NA = not available; these fields were collected as part of other fields in other years (see footnotes a and d). ne = not eligible; the fields collected have changed over time.

<sup>a</sup> As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended. Redesign includes the following: natural resources splitting from agricultural sciences; neurosciences being reported under biological and biomedical sciences; human development being reported under psychology; physical sciences adding materials sciences; social sciences no longer including public administration (no longer collected); and multidisciplinary and interdisciplinary sciences no longer including nanoscience.

<sup>b</sup> In 2020, for better alignment to the NCSES TOD and Classification of Instructional Programs, human development was moved from social sciences to psychology, and veterinary biomedical and clinical sciences was moved to agricultural sciences. The broad field of agricultural sciences was renamed to agricultural and veterinary sciences to reflect this change.

<sup>c</sup> The field communication and the field family and consumer sciences and human sciences were added as part of the 2007 field eligibility changes. These fields were dropped in 2017 to align the GSS with other NCSES surveys.

<sup>d</sup> In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. The science field communication and the science field and consumer sciences and human sciences were newly eligible in 2007; data for these two fields begin in 2007new. The science field multidisciplinary and interdisciplinary studies was also added to the GSS code list in 2007 (and changed from "studies" to "sciences" in 2022); some data reported in this field were reported under other fields before 2007 and are included in those fields in 2007old; neuroscience is reported as a separate field of science in 2007new; data were reported under health field neurology in 2007old and previous years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

<sup>e</sup> Beginning in 2008, more rigorous follow-up was done with institutions regarding the exclusion of practitioner-oriented graduate degree programs in psychology. This change may affect interpretation of trends in this field. This follow-up was discontinued in 2017.

<sup>f</sup> In 2010, the postdoctoral appointee (postdoc) and nonfaculty researcher (NFR) section of the survey was expanded and significant effort was made to ensure that appropriate personnel were providing postdoc and NFR data. Thus, it is unclear how much of the increases in 2010 and later years over 2009 and prior years are from growth in postdocs and NFRs and how much are from improved data collection. More information on the changes to the data collection is available at <https://www.nsf.gov/statistics/infbrief/nsf13334/>.

<sup>g</sup> Postdoc and NFR data from 2010 and 2011 were reimputed following the 2012 data collection; these data supersede those contained in previous reports.

<sup>h</sup> In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

**Note(s):**

For doctorate-holding NFRs, "field" refers to the field of the unit that reports information on these groups to the GSS. Sum of the broad fields may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see technical table A-17.

**Source(s):**

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