



## Influx of Foreign Graduate Students and Inclusion of Newly Eligible Institutions Lead to a Significant Increase in U.S. Graduate Enrollment in Science and Engineering

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**T**he number of science and engineering (S&E) graduate students increased by 5.5% between 2013 and 2014, rising from 570,300 to 601,883. Much of this growth stems from a continuing increase in the enrollment of foreign graduate students on temporary visas, which grew by 7.4% between 2012 and 2013, and by 16.0% between 2013 and 2014 (table 1).<sup>3</sup>

Between 2009 and 2014 full-time S&E graduate enrollments grew by 12.2%, from 398,498 students to 447,096 students. Institutional funding increased at a similar pace (11.7%) during this period. However, the number of graduate students primarily supported by federal sources declined by 8.2%, while those primarily on self-support increased by 26.7% (figure 1).

These and other findings presented herein are from the 2014 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS), cosponsored by the National Center for Science and Engineering Statistics (NCSES) at the National Science Foundation (NSF) and by the National

Institutes of Health (NIH). This report focuses primarily on the graduate students and postdoctoral researchers (postdocs) within S&E fields, though totals in selected health fields are presented for comparison. Further analysis of GSS graduate enrollment data for selected health fields can be obtained from NIH.

### Changes to the GSS Institutional Frame

In 2014, the survey frame was updated following a comprehensive frame evaluation study that identified potentially eligible but not previously surveyed U.S. academic institutions with master's- or doctorate-granting science, engineering, and selected health (SEH) programs. The frame update added 21,703 graduate students in SEH fields from 151 newly eligible institutions, and excluded two private for-profit institutions that enrolled 6,981 students in primarily practitioner oriented graduate programs in 2013. See "Data Sources and Limitations" for more information.

Because of these changes, this InfoBrief and all data tables associated with

the 2014 GSS data are presented in two ways:

- "2014old" counts allow for trend comparisons with prior years.
- "2014new" counts show totals for the expanded survey frame.

Many of the overall trends in 2014 continue to reflect those seen in 2012 and 2013.<sup>4</sup>

### Graduate Student Enrollment in S&E

In 2014, a total of 601,883 graduate students were enrolled in S&E master's or doctorate programs (table 1; see 2014new). Graduate enrollment within previously eligible extant GSS institutions rose by 3.0% (16,861 students) from 2013 (2013–14old), while the institutional frame update led to a net increase of 14,722 S&E graduate students (2014old–14new).

Foreign graduate enrollment continued to rise in 2014. The 13.1% increase in temporary visa holders within extant institutions was the largest single-year increase since the survey began collecting citizenship data in 1980.

TABLE 1. Graduate enrollment in science and engineering fields, by enrollment status, sex, citizenship, race, and ethnicity: 2009–14

Characteristic	2009	2010	2011	2012	2013	2014old <sup>a</sup>	2014new <sup>a</sup>	% change			
								2009–14old	2013–14old	2013–14new	2014old–new
All surveyed fields	631,645	632,652	626,820	627,243	633,010	650,738	666,586	3.0	2.8	5.3	2.4
Science and engineering	545,685	556,532	560,941	561,418	570,300	587,161	601,883	7.6	3.0	5.5	2.5
Full-time enrollment	398,498	409,107	411,168	414,384	424,508	440,523	447,096	10.5	3.8	5.3	1.5
First time	115,755	118,492	120,135	121,856	127,725	134,896	137,783	16.5	5.6	7.9	2.1
Part-time enrollment	147,187	147,425	149,773	147,034	145,792	146,638	154,787	-0.4	0.6	6.2	5.6
Male	307,936	316,051	318,209	318,870	324,913	338,940	348,390	10.1	4.3	7.2	2.8
Female	237,749	240,481	242,732	242,548	245,387	248,221	253,493	4.4	1.2	3.3	2.1
U.S. citizens and permanent residents <sup>b</sup>	382,342	390,403	392,160	385,343	381,225	373,378	382,512	-2.3	-2.1	0.3	2.4
Full-time enrollment	256,503	263,871	262,043	258,477	256,211	251,858	253,886	-1.8	-1.7	-0.9	0.8
First time	75,321	77,242	75,394	73,704	72,731	70,898	72,170	-5.9	-2.5	-0.8	1.8
Part-time enrollment	125,839	126,532	130,117	126,866	125,014	121,520	128,626	-3.4	-2.8	2.9	5.8
Hispanic or Latino	27,265	28,609	30,808	31,406	32,819	33,146	35,132	21.6	1.0	7.0	6.0
Not Hispanic or Latino											
American Indian or Alaska Native	2,549	2,500	2,392	2,188	2,198	2,048	2,112	-19.7	-6.8	-3.9	3.1
Asian <sup>c</sup>	31,754	32,185	33,147	32,700	32,917	32,981	33,745	3.9	0.2	2.5	2.3
Black or African American	29,973	31,094	32,197	31,338	30,911	29,714	30,482	-0.9	-3.9	-1.4	2.6
Native Hawaiian or Other Pacific Islander <sup>c</sup>	1,125	1,088	1,008	920	882	876	902	-22.1	-0.7	2.3	3.0
White	250,443	255,256	256,096	250,783	246,518	240,295	245,103	-4.1	-2.5	-0.6	2.0
More than one race <sup>c</sup>	2,300	4,989	6,103	7,578	8,015	9,136	9,335	297.2	14.0	16.5	2.2
Unknown race and ethnicity	36,933	34,682	30,409	28,430	26,965	25,182	25,701	-31.8	-6.6	-4.7	2.1
Temporary visa holders	163,343	166,129	168,781	176,075	189,075	213,783	219,371	30.9	13.1	16.0	2.6
Full-time enrollment	141,995	145,236	149,125	155,907	168,297	188,665	193,210	32.9	12.1	14.8	2.4
First time	40,434	41,250	44,741	48,152	54,994	63,998	65,613	58.3	16.4	19.3	2.5
Part-time enrollment	21,348	20,893	19,656	20,168	20,778	25,118	26,161	17.7	20.9	25.9	4.2
Health <sup>d</sup>	85,960	76,120	65,879	65,825	62,710	63,577	64,703	-26.0	1.4	3.2	1.8

<sup>a</sup> In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed U.S. academic institutions with master's- or doctorate-granting programs in science, engineering, or 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.

<sup>b</sup> Race and ethnicity data are available for U.S. citizens and permanent residents only.

<sup>c</sup> Reporting of race and ethnicity in 2008–14 has been affected by changes in the reporting of race and ethnicity in the Integrated Postsecondary Education Data System (IPEDS). Starting in 2008, IPEDS respondents were asked to use a new classification that included a category for two or more races and separate reporting of Native Hawaiians or Other Pacific Islanders from Asians. The new classification was optional in 2008 and 2009 IPEDS but mandatory beginning in 2010 and may have contributed to a significant increase in the reporting of Not Hispanic or Latino, more than one race.

<sup>d</sup> More rigorous follow-up was done in recent years with institutions regarding the exclusion of practitioner-oriented graduate degree programs in psychology and in other health (a subfield of health). This change may affect interpretation of trends in these fields.

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

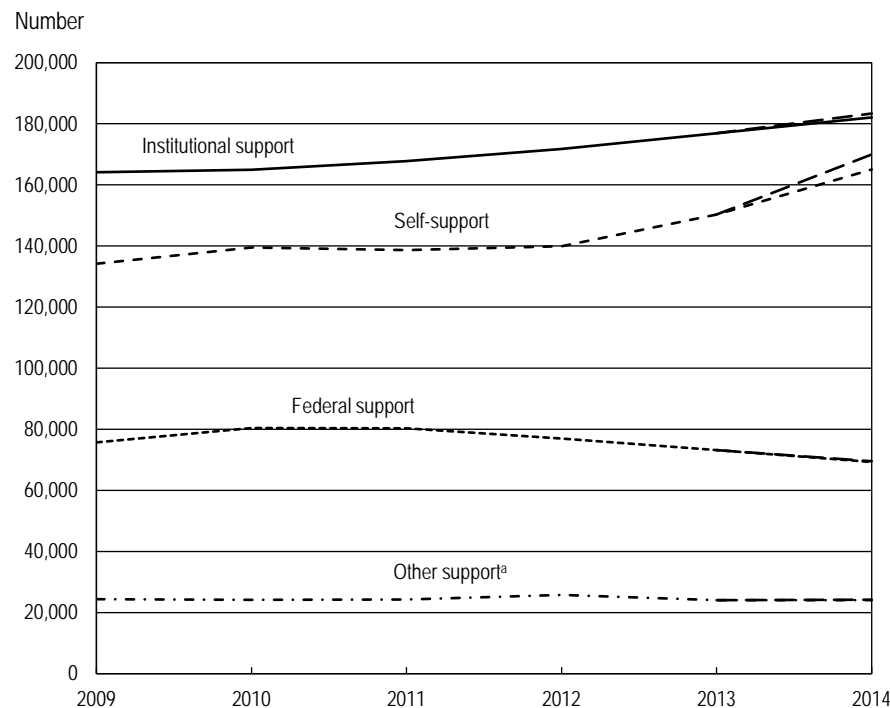
The influx of nearly 25,000 foreign graduate students overshadowed the 2.1% decline in domestic graduate enrollment; 7,847 fewer U.S. citizens and permanent residents were enrolled in S&E graduate programs than in 2013. The proportion of foreign S&E graduate students on temporary visas in extant institutions was 36.4%, 6.5

percentage points higher than the proportion (29.9%) in 2009.

Sources of full-time graduate student support have shifted from federal sources toward self-support as the number of students has grown (figure 1). Since 2009, the percent of self-supported full-time students in extant

institutions increased from 33.7% to 37.5%, while the percent of students receiving federal support declined from 19.0% to 15.7%. The number of graduate students supported by federal funding declined by 6,462. In the last year alone (2013–14old), the percent of graduate students supported by federal funding declined by 5.3%. Institutional

FIGURE 1. Full-time graduate enrollment in science and engineering, by primary source of financial support: 2009–14



<sup>a</sup> Includes other U.S. sources and foreign sources.

NOTES: The long dash lines from 2013 to 2014 show the impact of the frame expansion on the counts of full-time graduate students by primary source of support. In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed U.S. academic institutions with master's- or doctorate-granting programs in science, engineering, or 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.

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

support since 2009 has remained stable at about 40.2%, even with graduate enrollment growing. Compounding the trend toward self-support, there was a 1.3% decline in “other” sources of support (figure 1).

Overall, the number of men enrolled in S&E graduate programs increased by 7.2% over 2013, with 2.8% stemming from the 2014 frame update (table 1). The number of women enrolled in S&E graduate programs in 2014 (253,493) represented a 3.3% increase from 2013, with 2.1% coming from the frame update. In the last 5 years, the growth of male S&E graduate students

has exceeded that of female graduate students, resulting in a decline in the proportion of female S&E graduate students from 43.6% in 2009 to 42.3% in 2014old. Foreign enrollment has contributed to this decline: almost two-thirds (65.3%) of foreign S&E graduate students from 2009 through 2014old were men compared with just over half (53.0%) of the U.S. citizen and permanent resident S&E graduate students.

The rise in computer sciences and electrical engineering enrollments in 2013 continued in 2014. Among previously eligible institutions, graduate enrollment in computer sciences

increased by 22.1% and electrical engineering increased by 9.9% (table 2; 2013–14old). These fields also saw the greatest increases from the frame update. More than half of the net difference in total S&E graduate enrollments resulting from the frame update was in computer sciences (7,780 of 14,722). Through enrollment growth and frame expansion, computer science graduate enrollment rose by a combined 35.9% in 2014, from 56,339 to 76,546. Electrical engineering graduate enrollment had the second-largest overall growth at 13.9% (6,347 students) from 2013 to 2014, with an increase of 4,489 students within extant institutions and 1,858 students enrolled at new institutions.

Graduate enrollment in most of the engineering fields has grown by at least 20% over the last 5 years (2009–14old). The field with the largest enrollment decline over the same period was architecture, but this drop is likely due to the exclusion of landscape architecture as an eligible field starting in 2011. Enrollment in the “other engineering” field, which includes petroleum engineering and other smaller engineering fields, grew by 11.9% in 2013–14old.

Graduate enrollment in psychology and the social sciences declined 5.8% and 2.6%, respectively, from 2013 to 2014old. Even with the influx of 1,279 graduate students in the social sciences from the frame update, the field’s overall graduate enrollment remained lower than in 2013. The frame update also resulted in a net decline of 2,105 graduate students in psychology, leading to a 9.7% overall decline in graduate enrollments from 2013 to 2014new.

## Postdoctoral Appointees in S&E

The GSS also collects information about postdocs employed at U.S. postsecondary institutions (and their affiliates, such as research centers and hospitals) with SEH graduate programs.

TABLE 2. Graduate enrollment in science and engineering, by field: 2009–14

Characteristic	2009	2010	2011	2012	2013	2014old <sup>a</sup>	2014new <sup>a</sup>	% change			
								2009–14old	2013–14old	2013–14new	2014old–new
Science and engineering	545,685	556,532	560,941	561,418	570,300	587,161	601,883	7.6	3.0	5.5	2.5
Science	401,008	407,291	414,440	413,033	417,251	425,148	437,395	6.0	1.9	4.8	2.9
Agricultural sciences	15,200	15,656	16,129	16,234	16,429	16,947	17,505	11.5	3.2	6.5	3.3
Biological sciences	73,304	74,928	75,423	76,447	76,649	76,029	78,490	3.7	-0.8	2.4	3.2
Computer sciences	51,161	51,546	51,234	51,789	56,339	68,766	76,546	34.4	22.1	35.9	11.3
Earth, atmospheric, and ocean sciences	14,839	15,655	15,820	16,069	15,816	15,423	15,710	3.9	-2.5	-0.7	1.9
Mathematics and statistics	22,226	23,136	23,801	24,575	24,804	25,502	25,874	14.7	2.8	4.3	1.5
Physical sciences	38,149	38,973	39,694	39,928	40,019	40,196	40,332	5.4	0.4	0.8	0.3
Psychology	56,184	53,419	54,486	54,117	54,102	50,938	48,833	-9.3	-5.8	-9.7	-4.1
Social sciences	107,820	109,220	111,661	108,169	107,278	104,445	105,742	-3.1	-2.6	-1.4	1.2
Other sciences <sup>b</sup>	22,125	24,758	26,192	25,705	25,815	26,902	28,363	21.6	4.2	9.9	5.4
Engineering	144,677	149,241	146,501	148,385	153,049	162,013	164,488	12.0	5.9	7.5	1.5
Aerospace engineering	5,266	5,540	5,691	5,069	5,181	5,116	5,116	-2.8	-1.3	-1.3	0.0
Architecture	6,804	6,795	3,111	2,363	2,176	1,812	1,817	-73.4	-16.7	-16.5	0.3
Biomedical engineering	7,904	8,497	9,175	9,157	9,198	9,510	9,510	20.3	3.4	3.4	0.0
Chemical engineering	8,188	8,668	8,828	9,222	9,698	9,853	9,870	20.3	1.6	1.8	0.2
Civil engineering	18,638	19,559	19,596	19,922	20,110	20,660	20,789	10.8	2.7	3.4	0.6
Electrical engineering	41,218	41,336	41,580	42,347	45,562	50,051	51,909	21.4	9.9	13.9	3.7
Industrial and manufacturing engineering	15,825	15,205	14,494	14,469	14,363	14,659	14,845	-7.4	2.1	3.4	1.3
Mechanical engineering	21,243	22,509	21,883	23,088	24,087	25,508	25,651	20.1	5.9	6.5	0.6
Metallurgical and materials engineering	5,863	6,274	6,649	6,985	7,144	7,473	7,518	27.5	4.6	5.2	0.6
Other engineering	13,728	14,858	15,494	15,763	15,530	17,371	17,463	26.5	11.9	12.4	0.5

<sup>a</sup> In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed U.S. academic institutions with master's- or doctorate-granting programs in science, engineering, or 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.

<sup>b</sup> Includes communication, family and consumer sciences and human sciences, neuroscience, and multidisciplinary and interdisciplinary studies.

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

A total of 63,593 SEH postdocs were reported in 2014 with 44,623 postdocs working in S&E (table 3; 2014new). These counts represent a 2.7% in total SEH postdocs and a 2.8% increase in S&E postdocs over the 2013 totals (2013–2014new). In contrast to the graduate student enrollments, the change in postdoc counts is primarily because of the institution frame update. Only 437 (26.5%) of the overall 1,651 new SEH postdocs were from extant institutions.

The frame update added 1,147 S&E postdocs, resulting in a 2.6% increase in the number of S&E postdocs (2014old–new). The frame update increased the number of women S&E postdocs by 2.9%, compared with

2.5% for men. Foreign S&E postdocs increased by 3.0%, compared with 2.2% for U.S. citizen and permanent resident postdocs. The number of S&E postdocs who were U.S. citizens or permanent residents, white, or in the biological sciences and physical sciences all declined within the extant institutions (2013–14old), but rose overall because of data from the new institutions included in the frame update (2014new).

Looking at the 4-year trends (2010–14old), the growth of black or African American and Hispanic or Latino S&E postdocs outpaced the growth of S&E postdocs among all other ethnic and racial groups. Since 2010, the number of black or African American postdocs

in S&E has increased by 22.3%, and the number of Hispanic or Latino postdocs in S&E has increased by 20.3%. Despite this growth, these groups are still underrepresented in the S&E postdoc population. In 2014, there were 1,020 Hispanic or Latino and 702 black or African American postdocs in S&E, representing only 8.4% of total U.S. citizen and permanent resident postdocs in S&E.

The overall number of postdocs in the sciences remained relatively stable from 2013 to 2014, but there was variation in their composition by field. For the fourth straight year, the number of postdocs in the agricultural sciences; earth, atmospheric, and ocean sciences; mathematics and statistics; social sciences;

TABLE 3. Postdoctoral appointees in science, engineering, and health, by sex, citizenship, race, ethnicity, and field: 2010–14

Characteristic	2010 <sup>a, b</sup>	2011 <sup>b</sup>	2012	2013	2014old <sup>c</sup>	2014new <sup>c</sup>	% change			
							2010–14old	2013–14old	2013–14new	2014old–14new
All survey fields	63,439	62,639	62,851	61,942	62,379	63,593	-1.7	0.7	2.7	1.9
Science and engineering	44,320	44,121	43,841	43,395	43,476	44,623	-1.9	0.2	2.8	2.6
Male	28,531	28,314	28,176	27,858	27,920	28,618	-2.1	0.2	2.7	2.5
Female	15,789	15,807	15,665	15,537	15,556	16,005	-1.5	0.1	3.0	2.9
U.S. citizens and permanent residents <sup>d</sup>	20,430	20,340	20,214	20,257	20,018	20,453	-2.0	-1.2	1.0	2.2
Hispanic or Latino	813	901	862	961	978	1,020	20.3	1.8	6.1	4.3
Not Hispanic or Latino										
American Indian or Alaska Native	62	66	51	71	63	65	1.6	-11.3	-8.5	3.2
Asian	3,592	3,502	3,330	3,526	3,374	3,489	-6.1	-4.3	-1.0	3.4
Black or African American	564	610	615	667	690	702	22.3	3.4	5.2	1.7
Native Hawaiian or Other Pacific Islander	53	53	63	50	52	53	-1.9	4.0	6.0	1.9
White	11,980	11,965	11,835	11,953	11,739	11,994	-2.0	-1.8	0.3	2.2
More than one race	81	161	112	165	162	168	100.0	-1.8	1.8	3.7
Unknown ethnicity and race	3,285	3,082	3,346	2,864	2,960	2,962	-9.9	3.4	3.4	0.1
Temporary visa holders	23,890	23,781	23,627	23,138	23,458	24,170	-1.8	1.4	4.5	3.0
Science	37,351	37,335	36,738	36,289	36,184	37,316	-3.1	-0.3	2.8	3.1
Agricultural sciences	1,190	1,256	1,290	1,319	1,395	1,402	17.2	5.8	6.3	0.5
Biological sciences	21,726	21,107	20,086	19,330	18,749	19,554	-13.7	-3.0	1.2	4.3
Computer sciences	763	759	760	765	833	834	9.2	8.9	9.0	0.1
Earth, atmospheric, and ocean sciences	1,740	1,774	1,956	2,032	2,059	2,061	18.3	1.3	1.4	0.1
Mathematics and statistics	791	830	902	932	956	959	20.9	2.6	2.9	0.3
Physical sciences	7,583	7,490	7,430	7,197	7,089	7,277	-6.5	-1.5	1.1	2.7
Psychology	1,132	1,124	1,132	1,023	1,062	1,066	-6.2	3.8	4.2	0.4
Social sciences	711	774	799	938	1,050	1,051	47.7	11.9	12.0	0.1
Other sciences <sup>e</sup>	1,715	2,221	2,383	2,753	2,991	3,112	74.4	8.6	13.0	4.0
Engineering	6,969	6,786	7,103	7,106	7,292	7,307	4.6	2.6	2.8	0.2
Aerospace engineering	212	202	170	202	220	220	3.8	8.9	8.9	0.0
Architecture	10	16	6	17	14	14	40.0	-17.6	-17.6	0.0
Biomedical engineering	1,023	1,069	1,161	1,103	1,196	1,198	16.9	8.4	8.6	0.2
Chemical engineering	1,077	1,137	1,098	1,230	1,244	1,244	15.5	1.1	1.1	0.0
Civil engineering	571	551	590	587	629	629	10.2	7.2	7.2	0.0
Electrical engineering	1,095	1,035	1,152	1,180	1,177	1,179	7.5	-0.3	-0.1	0.2
Industrial and manufacturing engineering	151	121	127	133	131	131	-13.2	-1.5	-1.5	0.0
Mechanical engineering	1,021	889	985	1,034	1,055	1,058	3.3	2.0	2.3	0.3
Metallurgical and materials engineering	841	860	854	809	776	780	-7.7	-4.1	-3.6	0.5
Other engineering	968	906	960	811	850	854	-12.2	4.8	5.3	0.5
Health	19,119	18,518	19,010	18,547	18,903	18,970	-1.1	1.9	2.3	0.4

<sup>a</sup> In 2010, the postdoctorate (postdoc) section of the survey was expanded, and significant effort was made to ensure that appropriate personnel were providing postdoc data. Thus, the comparisons between 2010 and later years are likely to show the actual growth in postdoctoral appointments compared to the earlier years. More information on the changes to the postdoc data collection is available at <http://www.nsf.gov/statistics/infbrief/nsf13334/>.

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

<sup>c</sup> In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed U.S. academic institutions with master's- or doctorate-granting programs in science, engineering, or 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.

<sup>d</sup> Race and ethnicity data are available for U.S. citizens and permanent residents only.

<sup>e</sup> Includes communication, family and consumer sciences and human sciences, neuroscience, and multidisciplinary and interdisciplinary studies.

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

and other sciences (including multidisciplinary and interdisciplinary studies) increased. Postdocs in the computer sciences also grew substantially by 9% from 2013. Extant institutions reported more than 1,000 postdocs in the social sciences for the first time, making the social sciences one of the fastest-growing postdoc fields (up 11.9% from 2013 and 47.7% from 2010 to 2014old).

Biological sciences (almost 20,000 postdocs) and physical sciences (more than 7,000 postdocs) still dominate the S&E postdoc fields yet continued to show a slow decline. From 2013 to 2014old, the number of postdocs in biological sciences dropped by 3.0% while physical sciences declined by 1.5%. Since 2010, postdocs in these two traditional fields have declined 13.7% and 6.5%, respectively.

The 2.8% increase in engineering postdocs was largely (2.6%) due to growth from extant institutions. Chemical, biomedical, electrical, and mechanical engineering fields employed the largest number of postdocs (more than 1,000 in each field).

## Data Sources and Limitations

Conducted since 1966, the GSS is an annual survey of all academic institutions in the United States that grant research-based master's or doctoral degrees in SEH fields. The 2014 GSS collected data from 14,845 organizational units (departments, programs, affiliated research centers, and health care facilities) at 706 eligible institutions and their affiliates in the United States, Puerto Rico, and Guam. The institutional response rate was 99.0%.

An overview of the survey is available at <http://www.nsf.gov/statistics/srvygradpostdoc/>.

In 2014, 151 newly eligible institutions were added, and two private for-profit institutions that offer predominantly practitioner-oriented degree programs were removed. Of the 1,275 new units added in 2014, 791 units were from extant institutions and 484 units were from new institutions. See “Technical Information” in *Graduate Students and Postdoctorates in Science and Engineering: Fall 2014* data tables and a forthcoming report examining the impact of frame changes on GSS trend data at <http://www.nsf.gov/statistics/gradpostdoc/> for more information.

GSS health fields are collected under the advisement of NIH. These GSS fields make up about one-third of all health fields in the U.S. Department of Education's Classification of Instructional Programs (CIP) taxonomy.<sup>5</sup> NIH information on trends seen within these selected health fields can be found at <http://www.report.nih.gov/nihdatabook/>.

In 2011, the GSS field taxonomy was updated to conform to the 2010 CIP. The impact on overall GSS counts as a result of this change was minimal. See appendix A, “Technical Notes” in *Graduate Students and Postdoctorates in Science and Engineering: Fall 2011* (NSF 13-331) for additional information about the 2011 GSS field taxonomy updates.

Data tables from the 2014 GSS are available at <http://www.nsf.gov/statistics/srvygradpostdoc/>. For more information, contact NCSES author Kelly Kang.

## Notes

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3. In 2014, the survey frame was updated following a comprehensive frame evaluation study. 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. This frame update added a net total of 14,722 students in science and engineering, an increase of 2.5% over the previous frame.
4. See “Technical Information” in *Graduate Students and Postdoctorates in Science and Engineering: Fall 2014* data tables and a forthcoming report examining the impact of frame changes on GSS trend data at <http://www.nsf.gov/statistics/gradpostdoc/> for more information.
5. The CIP provides a taxonomic scheme that supports the consistent reporting of fields of study and program completions activity. CIP was originally developed by the U.S. Department of Education's National Center for Education Statistics in 1980, with revisions occurring in 1985, 1990, 2000, and 2010; see <http://nces.ed.gov/ipeds/cipcode/>.

Errata: Due to an editorial error, the original publication omitted the word “increased” from the sentence beginning “For the fourth straight year...” in the Postdoctoral Appointees in S&E section.



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