

TABLE 1-3d

**Citizenship of graduate students and postdoctoral appointees in health: 1980–2021**

(Number and percent)

Year	Graduate students					Postdoctoral appointees				
	Total	U.S. citizens and permanent residents		Temporary visa holders		Total	U.S. citizens and permanent residents		Temporary visa holders	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent
1980	41,478	39,435	95.1	2,043	4.9	4,376	3,283	75.0	1,093	25.0
1981	43,141	40,995	95.0	2,146	5.0	4,863	3,504	72.1	1,359	27.9
1982	43,425	40,405	93.0	3,020	7.0	4,685	3,413	72.8	1,272	27.2
1983	43,466	40,422	93.0	3,044	7.0	5,042	3,716	73.7	1,326	26.3
1984	45,028	42,099	93.5	2,929	6.5	5,353	3,861	72.1	1,492	27.9
1985	46,030	42,880	93.2	3,150	6.8	5,455	3,785	69.4	1,670	30.6
1986	47,538	44,188	93.0	3,350	7.0	5,804	3,921	67.6	1,883	32.4
1987	48,258	44,874	93.0	3,384	7.0	6,066	3,801	62.7	2,265	37.3
1988	49,360	45,717	92.6	3,643	7.4	6,409	3,976	62.0	2,433	38.0
1989	51,836	47,927	92.5	3,909	7.5	7,026	4,178	59.5	2,848	40.5
1990	55,072	50,801	92.2	4,271	7.8	7,762	4,446	57.3	3,316	42.7
1991	58,620	54,041	92.2	4,579	7.8	8,008	4,328	54.0	3,680	46.0
1992	63,005	58,522	92.9	4,483	7.1	8,864	4,616	52.1	4,248	47.9
1993	68,581	63,928	93.2	4,653	6.8	9,657	5,092	52.7	4,565	47.3
1994	73,257	68,826	94.0	4,431	6.0	10,590	5,517	52.1	5,073	47.9
1995	77,174	72,793	94.3	4,381	5.7	9,766	5,319	54.5	4,447	45.5
1996	78,898	74,020	93.8	4,878	6.2	10,538	5,482	52.0	5,056	48.0
1997	79,578	74,659	93.8	4,919	6.2	11,217	6,081	54.2	5,136	45.8
1998	80,771	75,681	93.7	5,090	6.3	12,210	6,744	55.2	5,466	44.8
1999	82,074	76,548	93.3	5,526	6.7	11,820	6,159	52.1	5,661	47.9
2000	79,775	74,243	93.1	5,532	6.9	12,891	6,825	52.9	6,066	47.1
2001	80,378	74,129	92.2	6,249	7.8	13,115	6,306	48.1	6,809	51.9
2002	85,570	78,297	91.5	7,273	8.5	13,097	6,139	46.9	6,958	53.1
2003	92,476	84,924	91.8	7,552	8.2	13,062	6,121	46.9	6,941	53.1
2004	98,590	91,196	92.5	7,394	7.5	13,175	6,187	47.0	6,988	53.0
2005	103,951	96,217	92.6	7,734	7.4	14,099	7,429	52.7	6,670	47.3
2006	111,356	103,022	92.5	8,334	7.5	14,456	7,036	48.7	7,420	51.3
2007old <sup>a</sup>	105,448	97,109	92.1	8,339	7.9	14,818	7,119	48.0	7,699	52.0
2007new <sup>a</sup>	103,300	95,203	92.2	8,097	7.8	14,617	6,996	47.9	7,621	52.1
2008	102,214	93,669	91.6	8,545	8.4	15,961	8,641	54.1	7,320	45.9
2009	85,960	77,306	89.9	8,654	10.1	17,001	8,930	52.5	8,071	47.5
2010 <sup>b,c</sup>	76,120	68,089	89.4	8,031	10.6	19,119	9,725	50.9	9,394	49.1
2011 <sup>c</sup>	65,879	58,363	88.6	7,516	11.4	18,518	9,372	50.6	9,146	49.4
2012	65,825	58,354	88.7	7,471	11.3	19,010	9,650	50.8	9,360	49.2
2013	62,710	55,071	87.8	7,639	12.2	18,547	9,289	50.1	9,258	49.9
2014old <sup>d</sup>	63,577	55,755	87.7	7,822	12.3	18,903	9,612	50.8	9,291	49.2
2014new <sup>d</sup>	64,703	56,797	87.8	7,906	12.2	18,970	9,642	50.8	9,328	49.2
2015	67,389	59,322	88.0	8,067	12.0	18,566	9,133	49.2	9,433	50.8
2016	64,336	56,390	87.6	7,946	12.4	18,975	9,605	50.6	9,370	49.4
2017old <sup>e</sup>	66,934	59,521	88.9	7,413	11.1	19,143	9,732	50.8	9,411	49.2
2017new <sup>e</sup>	67,963	60,264	88.7	7,699	11.3	18,653	9,467	50.8	9,186	49.2
2018	72,751	64,534	88.7	8,217	11.3	19,305	9,519	49.3	9,786	50.7
2019	72,422	64,154	88.6	8,268	11.4	19,478	9,419	48.4	10,059	51.6
2020	75,438	67,689	89.7	7,749	10.3	18,478	8,821	47.7	9,657	52.3
2021	82,322	73,483	89.3	8,839	10.7	17,799	8,988	50.5	8,811	49.5

TABLE 1-3d

**Citizenship of graduate students and postdoctoral appointees in health: 1980–2021**

(Number and percent)

Year	Graduate students					Postdoctoral appointees				
	Total	U.S. citizens and permanent residents		Temporary visa holders		Total	U.S. citizens and permanent residents		Temporary visa holders	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent
Master's students										
2017 <sup>new</sup> <sup>e</sup>	52,662	48,595	92.3	4,067	7.7	na	na	na	na	na
2018	56,820	52,428	92.3	4,392	7.7	na	na	na	na	na
2019	56,494	52,119	92.3	4,375	7.7	na	na	na	na	na
2020	60,124	55,985	93.1	4,139	6.9	na	na	na	na	na
2021	65,691	60,779	92.5	4,912	7.5	na	na	na	na	na
Doctoral students										
2017 <sup>new</sup> <sup>e</sup>	15,301	11,669	76.3	3,632	23.7	na	na	na	na	na
2018	15,931	12,106	76.0	3,825	24.0	na	na	na	na	na
2019	15,928	12,035	75.6	3,893	24.4	na	na	na	na	na
2020	15,314	11,704	76.4	3,610	23.6	na	na	na	na	na
2021	16,631	12,704	76.4	3,927	23.6	na	na	na	na	na

na = not applicable; master's and doctoral students were not reported separately until 2017.

<sup>a</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. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

<sup>b</sup> In 2010, the postdoctoral (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>c</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>d</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, 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. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

<sup>e</sup> As part of 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.

**Note(s):**

Percentages may not add to total because of rounding.

**Source(s):**

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