

TABLE 1-2b

Sex of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science: 1977–2022

(Number and percent)

Year	Graduate students					Postdoctoral appointees					Doctorate-holding nonfaculty researchers				
	Total	Male		Female		Total	Male		Female		Total	Male		Female	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent		Number	Percent	Number	Percent
1977	242,932	168,724	69.5	74,208	30.5	na	na	na	na	na	na	na	na	na	na
1978	236,465	NA	NA	NA	NA	na	na	na	na	na	na	na	na	na	na
1979	247,235	163,845	66.3	83,390	33.7	12,519	10,045	80.2	2,474	19.8	1,915	1,448	75.6	467	24.4
1980	251,265	163,212	65.0	88,053	35.0	13,042	10,427	79.9	2,615	20.1	2,184	1,662	76.1	522	23.9
1981	252,404	160,306	63.5	92,098	36.5	13,731	10,859	79.1	2,872	20.9	2,445	1,910	78.1	535	21.9
1982	255,146	160,354	62.8	94,792	37.2	13,698	10,538	76.9	3,160	23.1	2,809	2,177	77.5	632	22.5
1983	255,820	159,126	62.2	96,694	37.8	14,562	11,191	76.9	3,371	23.1	3,348	2,659	79.4	689	20.6
1984	256,903	159,672	62.2	97,231	37.8	14,979	11,446	76.4	3,533	23.6	3,442	2,654	77.1	788	22.9
1985	261,973	162,435	62.0	99,538	38.0	15,576	11,724	75.3	3,852	24.7	3,529	2,637	74.7	892	25.3
1986	266,077	164,075	61.7	102,002	38.3	16,512	12,288	74.4	4,224	25.6	3,356	2,456	73.2	900	26.8
1987	269,256	165,060	61.3	104,196	38.7	17,369	12,845	74.0	4,524	26.0	3,250	2,379	73.2	871	26.8
1988	272,309	164,199	60.3	108,110	39.7	18,024	13,282	73.7	4,742	26.3	3,348	2,483	74.2	865	25.8
1989	278,577	166,313	59.7	112,264	40.3	18,978	13,845	73.0	5,133	27.0	3,470	2,554	73.6	916	26.4
1990	289,383	170,340	58.9	119,043	41.1	19,853	14,426	72.7	5,427	27.3	3,745	2,804	74.9	941	25.1
1991	299,057	173,925	58.2	125,132	41.8	20,595	14,882	72.3	5,713	27.7	3,872	2,862	73.9	1,010	26.1
1992	312,478	179,486	57.4	132,992	42.6	21,514	15,336	71.3	6,178	28.7	3,660	2,727	74.5	933	25.5
1993	318,851	180,001	56.5	138,850	43.5	22,219	15,724	70.8	6,495	29.2	4,003	2,930	73.2	1,073	26.8
1994	318,118	177,057	55.7	141,061	44.3	23,181	16,218	70.0	6,963	30.0	4,156	3,022	72.7	1,134	27.3
1995	315,265	173,068	54.9	142,197	45.1	23,512	16,335	69.5	7,177	30.5	4,395	3,245	73.8	1,150	26.2
1996	311,957	168,540	54.0	143,417	46.0	23,892	16,585	69.4	7,307	30.6	4,426	3,185	72.0	1,241	28.0
1997	306,482	163,191	53.2	143,291	46.8	24,293	16,745	68.9	7,548	31.1	4,408	3,151	71.5	1,257	28.5
1998	304,818	160,379	52.6	144,439	47.4	25,023	17,080	68.3	7,943	31.7	4,497	3,182	70.8	1,315	29.2
1999	309,491	160,982	52.0	148,509	48.0	25,784	17,545	68.0	8,239	32.0	4,761	3,312	69.6	1,449	30.4
2000	309,424	159,691	51.6	149,733	48.4	26,911	18,456	68.6	8,455	31.4	4,931	3,447	69.9	1,484	30.1
2001	319,736	164,574	51.5	155,162	48.5	27,044	18,275	67.6	8,769	32.4	4,707	3,150	66.9	1,557	33.1
2002	335,166	171,516	51.2	163,650	48.8	28,371	18,844	66.4	9,527	33.6	5,019	3,369	67.1	1,650	32.9
2003	347,268	176,458	50.8	170,810	49.2	29,856	19,675	65.9	10,181	34.1	5,493	3,691	67.2	1,802	32.8
2004	352,307	177,714	50.4	174,593	49.6	30,116	19,835	65.9	10,281	34.1	5,880	3,877	65.9	2,003	34.1
2005	357,710	178,297	49.8	179,413	50.2	30,290	19,791	65.3	10,499	34.7	6,069	4,042	66.6	2,027	33.4
2006	363,246	180,084	49.6	183,162	50.4	30,245	19,542	64.6	10,703	35.4	6,658	4,460	67.0	2,198	33.0
2007old ^a	372,120	183,799	49.4	188,321	50.6	30,986	20,339	65.6	10,647	34.4	6,517	4,327	66.4	2,190	33.6
2007new ^a	384,523	187,722	48.8	196,801	51.2	31,281	20,532	65.6	10,749	34.4	6,526	4,332	66.4	2,194	33.6
2008	391,419	190,959	48.8	200,460	51.2	32,741	20,760	63.4	11,981	36.6	8,669	5,497	63.4	3,172	36.6
2009	401,008	196,577	49.0	204,431	51.0	34,388	21,616	62.9	12,772	37.1	8,698	5,421	62.3	3,277	37.7
2010 ^{b,c}	407,291	201,263	49.4	206,028	50.6	37,351	23,052	61.7	14,299	38.3	12,751	7,819	61.3	4,932	38.7
2011 ^c	414,440	205,449	49.6	208,991	50.4	37,335	23,027	61.7	14,308	38.3	13,363	8,245	61.7	5,118	38.3
2012	413,033	205,036	49.6	207,997	50.4	36,738	22,662	61.7	14,076	38.3	13,264	8,167	61.6	5,097	38.4
2013	417,251	208,262	49.9	208,989	50.1	36,289	22,340	61.6	13,949	38.4	13,932	8,534	61.3	5,398	38.7
2014old ^d	425,148	215,884	50.8	209,264	49.2	36,184	22,270	61.5	13,914	38.5	14,283	8,777	61.5	5,506	38.5
2014new ^d	437,395	223,592	51.1	213,803	48.9	37,316	22,953	61.5	14,363	38.5	14,674	8,977	61.2	5,697	38.8
2015	448,654	229,578	51.2	219,076	48.8	37,639	23,011	61.1	14,628	38.9	15,667	9,568	61.1	6,099	38.9
2016	452,046	231,826	51.3	220,220	48.7	37,941	23,225	61.2	14,716	38.8	15,940	9,681	60.7	6,259	39.3
2017old ^e	450,343	227,482	50.5	222,861	49.5	37,816	22,991	60.8	14,825	39.2	na	na	na	na	na
2017new ^e	415,568	214,568	51.6	201,000	48.4	38,241	23,262	60.8	14,979	39.2	17,268	10,346	59.9	6,922	40.1
2018	432,255	219,433	50.8	212,822	49.2	37,564	22,749	60.6	14,815	39.4	18,278	11,026	60.3	7,252	39.7
2019	453,691	226,904	50.0	226,787	50.0	38,503	23,069	59.9	15,434	40.1	18,819	11,253	59.8	7,566	40.2
2020	464,646	226,999	48.9	237,647	51.1	38,741	22,764	58.8	15,977	41.2	18,212	10,639	58.4	7,573	41.6
2021	509,784	246,910	48.4	262,874	51.6	37,189	21,594	58.1	15,595	41.9	18,728	10,964	58.5	7,764	41.5

TABLE 1-2b

Sex of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science: 1977–2022

(Number and percent)

Year	Graduate students					Postdoctoral appointees					Doctorate-holding nonfaculty researchers				
	Total	Male		Female		Total	Male		Female		Total	Male		Female	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent		Number	Percent	Number	Percent
2022	538,166	265,932	49.4	272,234	50.6	36,673	21,235	57.9	15,438	42.1	19,423	11,262	58.0	8,161	42.0
Master's students															
2017new ^e	229,169	115,056	50.2	114,113	49.8	na	na	na	na	na	na	na	na	na	na
2018	241,327	118,413	49.1	122,914	50.9	na	na	na	na	na	na	na	na	na	na
2019	259,795	125,525	48.3	134,270	51.7	na	na	na	na	na	na	na	na	na	na
2020	267,904	125,619	46.9	142,285	53.1	na	na	na	na	na	na	na	na	na	na
2021	305,796	143,605	47.0	162,191	53.0	na	na	na	na	na	na	na	na	na	na
2022	331,983	162,530	49.0	169,453	51.0	na	na	na	na	na	na	na	na	na	na
Doctoral students															
2017new ^e	186,399	99,512	53.4	86,887	46.6	na	na	na	na	na	na	na	na	na	na
2018	190,928	101,020	52.9	89,908	47.1	na	na	na	na	na	na	na	na	na	na
2019	193,896	101,379	52.3	92,517	47.7	na	na	na	na	na	na	na	na	na	na
2020	196,742	101,380	51.5	95,362	48.5	na	na	na	na	na	na	na	na	na	na
2021	203,988	103,305	50.6	100,683	49.4	na	na	na	na	na	na	na	na	na	na
2022	206,183	103,402	50.2	102,781	49.8	na	na	na	na	na	na	na	na	na	na

na = not applicable; master's and doctoral students were not reported separately until 2017, and data on postdoctoral appointees (postdocs) and nonfaculty researchers (NFRs) were not collected until 1979. NA = not available; master's-granting institutions were not surveyed in 1978, and the survey of doctorate-granting institutions did not collect data by sex.

^a 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.

^b In 2010, the postdoc and 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/>.

^c Postdoc and NFR data from 2010 and 2011 were reimputed following the 2012 data collection; these data supersede those contained in previous reports.

^d 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>.

^e 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. Due to changes in reporting, NFR estimates for 2017old are not available.

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.