

TABLE 2-2

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health fields, by sex: 2019

(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female
All surveyed fields	690,117	47.1	408,228	49.6	281,889	43.5	66,247	40.9	30,349	40.8
U.S. citizens and permanent residents ^a	456,504	52.2	287,370	54.2	169,134	48.8	29,452	47.1	na	na
Hispanic or Latino	54,467	55.8	36,777	58.2	17,690	50.9	1,924	49.9	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	2,077	60.0	1,327	59.9	750	60.1	69	59.4	na	na
Asian	48,844	47.9	31,301	47.9	17,543	47.9	5,891	44.4	na	na
Black or African American	38,048	61.3	27,598	61.6	10,450	60.5	1,088	60.2	na	na
Native Hawaiian or Other Pacific Islander	744	53.8	542	53.1	202	55.4	52	50.0	na	na
White	272,545	50.8	163,836	53.0	108,709	47.4	16,972	47.1	na	na
More than one race	15,613	54.4	9,593	56.1	6,020	51.7	519	53.2	na	na
Unknown ethnicity and race	24,166	52.1	16,396	55.1	7,770	45.9	2,937	44.9	na	na
Temporary visa holders	233,613	37.2	120,858	38.7	112,755	35.6	36,795	35.9	na	na
Science	453,691	50.0	259,795	51.7	193,896	47.7	38,503	40.1	18,819	40.2
U.S. citizens and permanent residents ^a	312,368	53.4	185,378	55.0	126,990	51.2	17,344	45.5	na	na
Hispanic or Latino	38,193	58.0	24,330	60.4	13,863	53.7	1,123	48.7	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	1,526	59.8	902	59.2	624	60.6	40	55.0	na	na
Asian	31,482	49.6	19,529	48.4	11,953	51.6	3,029	43.5	na	na
Black or African American	26,450	61.6	18,996	61.5	7,454	61.8	537	59.8	na	na
Native Hawaiian or Other Pacific Islander	542	55.4	382	55.0	160	56.3	28	39.3	na	na
White	186,405	51.9	103,762	53.5	82,643	49.8	10,457	45.1	na	na
More than one race	10,902	56.1	6,339	57.4	4,563	54.3	315	53.7	na	na
Unknown ethnicity and race	16,868	52.4	11,138	55.1	5,730	47.2	1,815	43.6	na	na
Temporary visa holders	141,323	42.4	74,417	43.5	66,906	41.0	21,159	35.6	na	na
Agricultural sciences	9,518	55.5	5,629	57.8	3,889	52.2	1,079	42.4	645	43.9
U.S. citizens and permanent residents ^a	6,651	57.2	4,576	58.6	2,075	54.1	439	49.7	na	na
Hispanic or Latino	636	59.1	470	61.3	166	53.0	40	45.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	33	48.5	23	43.5	10	60.0	3	66.7	na	na
Asian	267	60.3	160	60.0	107	60.7	90	48.9	na	na
Black or African American	329	61.7	227	62.1	102	60.8	13	23.1	na	na

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Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health fields, by sex: 2019

(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female
Native Hawaiian or Other Pacific Islander	16	37.5	14	35.7	2	50.0	0	-	na	na
White	5,003	56.8	3,425	58.5	1,578	53.3	253	53.8	na	na
More than one race	186	60.8	134	63.4	52	53.8	2	50.0	na	na
Unknown ethnicity and race	181	47.0	123	43.1	58	55.2	38	36.8	na	na
Temporary visa holders	2,867	51.8	1,053	54.7	1,814	50.1	640	37.3	na	na
Biological and biomedical sciences	91,993	58.8	38,078	63.8	53,915	55.4	21,847	44.5	8,229	47.4
U.S. citizens and permanent residents ^a	73,093	59.2	32,928	63.5	40,165	55.6	9,557	48.9	na	na
Hispanic or Latino	8,450	59.0	3,817	64.0	4,633	54.8	671	49.9	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	276	62.7	120	65.8	156	60.3	22	50.0	na	na
Asian	8,819	58.4	4,197	62.1	4,622	55.0	1,903	46.1	na	na
Black or African American	5,270	67.0	3,210	68.8	2,060	64.1	307	62.2	na	na
Native Hawaiian or Other Pacific Islander	147	56.5	92	55.4	55	58.2	10	30.0	na	na
White	43,821	58.5	18,281	62.9	25,540	55.3	5,590	48.9	na	na
More than one race	2,630	60.8	1,193	64.2	1,437	57.9	160	59.4	na	na
Unknown ethnicity and race	3,680	57.4	2,018	62.2	1,662	51.5	894	47.9	na	na
Temporary visa holders	18,900	57.5	5,150	65.3	13,750	54.6	12,290	41.1	na	na
Computer and information sciences	101,284	31.1	84,092	32.1	17,192	26.3	878	21.4	510	23.9
U.S. citizens and permanent residents ^a	47,109	27.9	40,769	28.2	6,340	26.0	313	26.5	na	na
Hispanic or Latino	4,203	26.5	3,777	26.8	426	23.5	11	27.3	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	119	33.6	108	32.4	11	45.5	1	0.0	na	na
Asian	9,343	31.4	8,274	31.6	1,069	29.8	67	32.8	na	na
Black or African American	5,247	36.4	4,803	36.5	444	35.1	7	42.9	na	na
Native Hawaiian or Other Pacific Islander	69	31.9	58	29.3	11	45.5	0	-	na	na
White	23,620	24.2	19,908	24.3	3,712	23.8	179	23.5	na	na

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Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health fields, by sex: 2019

(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female
More than one race	1,587	30.4	1,347	31.1	240	26.7	5	20.0	na	na
Unknown ethnicity and race	2,921	31.2	2,494	32.0	427	26.9	43	27.9	na	na
Temporary visa holders	54,175	33.8	43,323	35.7	10,852	26.4	565	18.6	na	na
Geosciences, atmospheric sciences, and ocean sciences	11,878	47.5	5,327	48.4	6,551	46.8	1,778	38.2	2,177	31.0
U.S. citizens and permanent residents ^a	9,326	49.9	4,841	48.9	4,485	50.9	871	45.1	na	na
Hispanic or Latino	882	53.1	472	51.1	410	55.4	56	44.6	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	39	51.3	22	45.5	17	58.8	1	100.0	na	na
Asian	377	58.1	133	60.9	244	56.6	90	33.3	na	na
Black or African American	258	52.3	152	52.0	106	52.8	15	46.7	na	na
Native Hawaiian or Other Pacific Islander	9	44.4	7	42.9	2	50.0	1	100.0	na	na
White	7,080	48.6	3,722	47.9	3,358	49.3	589	45.7	na	na
More than one race	320	60.3	154	53.2	166	66.9	29	65.5	na	na
Unknown ethnicity and race	361	48.2	179	48.0	182	48.4	90	45.6	na	na
Temporary visa holders	2,552	38.9	486	43.6	2,066	37.8	907	31.5	na	na
Mathematics and statistics	33,159	37.4	19,594	43.1	13,565	29.1	1,070	25.3	305	29.8
U.S. citizens and permanent residents ^a	16,250	33.5	9,639	37.8	6,611	27.1	480	25.0	na	na
Hispanic or Latino	1,679	33.5	1,123	36.8	556	27.0	25	32.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	57	33.3	42	35.7	15	26.7	0	-	na	na
Asian	2,391	40.0	1,619	44.3	772	31.1	70	32.9	na	na
Black or African American	716	39.4	519	42.6	197	31.0	9	44.4	na	na
Native Hawaiian or Other Pacific Islander	7	28.6	5	20.0	2	50.0	1	100.0	na	na
White	9,913	31.5	5,425	35.6	4,488	26.4	323	23.2	na	na
More than one race	486	31.5	256	36.3	230	26.1	10	20.0	na	na
Unknown ethnicity and race	1,001	34.3	650	39.4	351	24.8	42	16.7	na	na

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Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health fields, by sex: 2019

(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female
Temporary visa holders	16,909	41.2	9,955	48.3	6,954	31.1	590	25.6	na	na
Multidisciplinary and interdisciplinary studies	11,181	53.0	8,203	53.6	2,978	51.3	972	43.9	820	35.0
U.S. citizens and permanent residents ^a	8,114	54.6	6,015	55.1	2,099	53.2	512	51.6	na	na
Hispanic or Latino	935	57.6	734	59.5	201	50.7	23	47.8	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	36	61.1	21	61.9	15	60.0	4	50.0	na	na
Asian	880	55.1	686	54.7	194	56.7	62	48.4	na	na
Black or African American	788	62.4	619	62.7	169	61.5	23	65.2	na	na
Native Hawaiian or Other Pacific Islander	20	60.0	13	61.5	7	57.1	2	0.0	na	na
White	4,807	52.4	3,450	52.5	1,357	52.2	346	50.9	na	na
More than one race	292	57.9	231	58.0	61	57.4	7	57.1	na	na
Unknown ethnicity and race	356	54.2	261	57.1	95	46.3	45	57.8	na	na
Temporary visa holders	3,067	48.8	2,188	49.5	879	47.0	460	35.4	na	na
Natural resources and conservation	11,743	56.9	8,066	57.9	3,677	54.7	806	46.9	582	38.3
U.S. citizens and permanent residents ^a	10,040	57.9	7,250	58.0	2,790	57.5	514	49.8	na	na
Hispanic or Latino	989	61.7	691	62.5	298	59.7	18	61.1	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	122	64.8	86	59.3	36	77.8	1	100.0	na	na
Asian	358	64.2	230	65.2	128	62.5	30	36.7	na	na
Black or African American	364	64.0	216	61.1	148	68.2	20	65.0	na	na
Native Hawaiian or Other Pacific Islander	23	69.6	21	71.4	2	50.0	3	33.3	na	na
White	7,388	56.5	5,442	56.7	1,946	55.9	349	49.3	na	na
More than one race	355	61.7	273	63.0	82	57.3	8	25.0	na	na
Unknown ethnicity and race	441	57.1	291	58.4	150	54.7	85	52.9	na	na
Temporary visa holders	1,703	51.4	816	57.4	887	46.0	292	41.8	na	na
Physical sciences	42,867	34.6	6,361	38.5	36,506	34.0	7,159	23.7	3,316	20.3

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	All graduate students		Master's		Doctoral					
	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female
American Indian or Alaska Native	479	61.8	273	58.2	206	66.5	4	75.0	na	na
Asian	3,631	59.5	1,996	60.2	1,635	58.7	108	63.9	na	na
Black or African American	6,231	64.1	4,206	64.6	2,025	63.3	80	76.3	na	na
Native Hawaiian or Other Pacific Islander	119	52.9	79	53.2	40	52.5	10	50.0	na	na
White	34,787	52.9	20,512	53.1	14,275	52.7	728	53.3	na	na
More than one race	2,054	60.6	1,250	61.4	804	59.3	34	55.9	na	na
Unknown ethnicity and race	3,257	49.5	1,969	49.3	1,288	49.7	152	46.7	na	na
Temporary visa holders	20,745	50.5	8,135	56.2	12,610	46.8	563	46.5	na	na
Engineering	164,004	26.3	91,939	26.0	72,065	26.8	8,266	24.0	3,909	23.5
U.S. citizens and permanent residents ^a	79,982	26.5	49,873	24.7	30,109	29.4	2,689	28.9	na	na
Hispanic or Latino	8,643	27.6	5,846	26.3	2,797	30.4	125	27.2	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	242	35.5	168	33.3	74	40.5	10	60.0	na	na
Asian	11,390	30.3	7,009	28.6	4,381	33.1	718	26.7	na	na
Black or African American	4,220	30.8	2,708	28.0	1,512	35.8	70	40.0	na	na
Native Hawaiian or Other Pacific Islander	95	26.3	69	20.3	26	42.3	1	0.0	na	na
White	48,892	24.7	30,121	23.0	18,771	27.5	1,415	30.5	na	na
More than one race	2,773	31.0	1,672	28.8	1,101	34.4	36	27.8	na	na
Unknown ethnicity and race	3,727	26.3	2,280	24.3	1,447	29.5	314	24.2	na	na
Temporary visa holders	84,022	26.2	42,066	27.4	41,956	25.0	5,577	21.6	na	na
Health	72,422	76.2	56,494	78.5	15,928	68.0	19,478	49.6	7,621	51.0
U.S. citizens and permanent residents ^a	64,154	78.0	52,119	79.6	12,035	71.3	9,419	55.3	na	na
Hispanic or Latino	7,631	77.1	6,601	78.4	1,030	68.5	676	56.2	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	309	80.3	257	79.8	52	82.7	19	68.4	na	na
Asian	5,972	72.5	4,763	74.3	1,209	65.5	2,144	51.4	na	na
Black or African American	7,378	77.6	5,894	77.4	1,484	78.7	481	63.6	na	na
Native Hawaiian or Other Pacific Islander	107	70.1	91	70.3	16	68.8	23	65.2	na	na
White	37,248	79.2	29,953	81.2	7,295	70.8	5,100	55.8	na	na

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Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female
More than one race	1,938	78.4	1,582	79.6	356	72.8	168	57.7	na	na
Unknown ethnicity and race	3,571	77.5	2,978	78.4	593	72.8	808	55.7	na	na
Temporary visa holders	8,268	61.7	4,375	65.2	3,893	57.7	10,059	44.2	na	na
Clinical medicine ^b	30,822	75.1	26,251	76.0	4,571	70.0	16,650	49.0	6,273	50.2
U.S. citizens and permanent residents ^a	27,556	76.3	23,932	76.9	3,624	72.4	7,916	53.8	na	na
Hispanic or Latino	3,433	75.5	3,004	76.2	429	70.2	580	54.8	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	177	80.2	156	78.8	21	90.5	16	62.5	na	na
Asian	3,119	72.7	2,743	72.8	376	71.5	1,853	51.5	na	na
Black or African American	4,393	78.5	3,799	78.8	594	77.1	407	63.9	na	na
Native Hawaiian or Other Pacific Islander	56	78.6	46	76.1	10	90.0	20	60.0	na	na
White	13,614	76.4	11,703	77.3	1,911	71.1	4,241	53.9	na	na
More than one race	971	79.3	842	78.7	129	82.9	142	52.8	na	na
Unknown ethnicity and race	1,793	75.5	1,639	76.3	154	66.2	657	53.0	na	na
Temporary visa holders	3,266	65.4	2,319	67.2	947	61.0	8,734	44.6	na	na
Other health	41,600	76.9	30,243	80.6	11,357	67.1	2,828	53.0	1,348	54.7
U.S. citizens and permanent residents ^a	36,598	79.3	28,187	81.9	8,411	70.8	1,503	63.1	na	na
Hispanic or Latino	4,198	78.4	3,597	80.3	601	67.4	96	64.6	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	132	80.3	101	81.2	31	77.4	3	100.0	na	na
Asian	2,853	72.3	2,020	76.3	833	62.8	291	50.9	na	na
Black or African American	2,985	76.3	2,095	74.9	890	79.8	74	62.2	na	na
Native Hawaiian or Other Pacific Islander	51	60.8	45	64.4	6	33.3	3	100.0	na	na
White	23,634	80.8	18,250	83.8	5,384	70.7	859	65.5	na	na
More than one race	967	77.5	740	80.7	227	67.0	26	84.6	na	na
Unknown ethnicity and race	1,778	79.5	1,339	81.0	439	75.2	151	67.5	na	na
Temporary visa holders	5,002	59.3	2,056	63.0	2,946	56.7	1,325	41.4	na	na

- = not calculable. na = not applicable; citizenship and race and ethnicity data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Clinical medicine includes graduate students in public health and clinical medicine not elsewhere classified (nec). Clinical medicine includes postdoctoral appointees and nonfaculty researchers in anesthesiology, cardiology, endocrinology, gastroenterology, hematology, neurology, obstetrics and gynecology, oncology and cancer research, ophthalmology, otorhinolaryngology, pediatrics, psychiatry, public health, pulmonary disease, radiology, surgery, and clinical medicine nec.

Note(s):

"Field" refers to the field of the unit that reports postdoctorates and doctorate-holding nonfaculty researchers to the Survey of Graduate Students and Postdoctorates in Science and Engineering. 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, 2019.