

TABLE 4-4c

Citizenship, ethnicity, and race of doctoral students, by detailed field: 2020

(Number and percent)

Detailed field	Total		Hispanic or Latino		Not Hispanic or Latino												Unknown ethnicity and race		Temporary visa holders	
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All detailed fields	283,335	100.0	18,929	100.0	758	100.0	18,019	100.0	11,074	100.0	200	100.0	108,965	100.0	6,510	100.0	8,291	100.0	110,589	100.0
Science	196,742	69.4	14,856	78.5	617	81.4	12,542	69.6	7,925	71.6	150	75.0	82,872	76.1	4,951	76.1	6,369	76.8	66,460	60.1
Agricultural and veterinary sciences	4,313	1.5	197	1.0	7	0.9	128	0.7	99	0.9	1	0.5	1,794	1.6	78	1.2	87	1.0	1,922	1.7
Agricultural sciences	3,791	1.3	173	0.9	7	0.9	108	0.6	87	0.8	1	0.5	1,548	1.4	60	0.9	73	0.9	1,734	1.6
Veterinary biomedical and clinical sciences	522	0.2	24	0.1	0	0.0	20	0.1	12	0.1	0	0.0	246	0.2	18	0.3	14	0.2	188	0.2
Biological and biomedical sciences	54,905	19.4	4,978	26.3	186	24.5	4,838	26.8	2,215	20.0	53	26.5	25,932	23.8	1,543	23.7	1,746	21.1	13,414	12.1
Biochemistry	4,648	1.6	451	2.4	20	2.6	383	2.1	161	1.5	7	3.5	2,170	2.0	129	2.0	86	1.0	1,241	1.1
Biology	7,268	2.6	657	3.5	20	2.6	460	2.6	267	2.4	6	3.0	3,536	3.2	190	2.9	225	2.7	1,907	1.7
Biomedical sciences	4,514	1.6	432	2.3	18	2.4	433	2.4	273	2.5	6	3.0	2,100	1.9	143	2.2	135	1.6	974	0.9
Biophysics	860	0.3	68	0.4	2	0.3	109	0.6	14	0.1	1	0.5	346	0.3	19	0.3	29	0.3	272	0.2
Biostatistics and bioinformatics	3,339	1.2	119	0.6	3	0.4	417	2.3	72	0.7	2	1.0	1,047	1.0	70	1.1	139	1.7	1,470	1.3
Biotechnology	101	*	8	*	0	0.0	8	*	3	*	0	0.0	50	*	2	*	2	*	28	*
Botany and plant biology	1,255	0.4	109	0.6	3	0.4	57	0.3	28	0.3	1	0.5	575	0.5	33	0.5	35	0.4	414	0.4
Cell, cellular biology, and anatomical sciences	5,008	1.8	550	2.9	24	3.2	500	2.8	168	1.5	7	3.5	2,314	2.1	148	2.3	142	1.7	1,155	1.0
Ecology and population biology	2,725	1.0	238	1.3	8	1.1	110	0.6	78	0.7	4	2.0	1,634	1.5	76	1.2	108	1.3	469	0.4
Epidemiology	2,032	0.7	130	0.7	8	1.1	244	1.4	150	1.4	2	1.0	820	0.8	56	0.9	70	0.8	552	0.5
Genetics	2,182	0.8	198	1.0	11	1.5	192	1.1	73	0.7	3	1.5	1,088	1.0	63	1.0	47	0.6	507	0.5
Microbiological sciences and immunology	4,124	1.5	413	2.2	15	2.0	383	2.1	169	1.5	4	2.0	2,149	2.0	127	2.0	128	1.5	736	0.7
Molecular biology	1,240	0.4	142	0.8	3	0.4	138	0.8	31	0.3	0	0.0	557	0.5	28	0.4	32	0.4	309	0.3
Neurobiology and neuroscience	5,275	1.9	590	3.1	17	2.2	529	2.9	227	2.0	1	0.5	2,701	2.5	177	2.7	175	2.1	858	0.8
Nutrition science	989	0.3	65	0.3	1	0.1	62	0.3	52	0.5	0	0.0	461	0.4	27	0.4	17	0.2	304	0.3
Pathology and experimental pathology	753	0.3	71	0.4	4	0.5	64	0.4	36	0.3	0	0.0	309	0.3	22	0.3	58	0.7	189	0.2
Pharmacology and toxicology	2,174	0.8	201	1.1	6	0.8	233	1.3	144	1.3	2	1.0	946	0.9	73	1.1	85	1.0	484	0.4
Physiology	2,758	1.0	227	1.2	9	1.2	253	1.4	119	1.1	2	1.0	1,275	1.2	66	1.0	97	1.2	710	0.6
Zoology and animal biology	1,178	0.4	77	0.4	2	0.3	32	0.2	30	0.3	0	0.0	693	0.6	30	0.5	43	0.5	271	0.2
Biological and biomedical sciences nec	2,482	0.9	232	1.2	12	1.6	231	1.3	120	1.1	5	2.5	1,161	1.1	64	1.0	93	1.1	564	0.5
Computer and information sciences	18,174	6.4	448	2.4	14	1.8	1,220	6.8	468	4.2	8	4.0	3,931	3.6	270	4.1	508	6.1	11,307	10.2
Artificial intelligence, informatics, and computer and information science topics	956	0.3	27	0.1	2	0.3	55	0.3	40	0.4	0	0.0	222	0.2	12	0.2	26	0.3	572	0.5
Computer and information sciences	5,482	1.9	126	0.7	5	0.7	284	1.6	104	0.9	4	2.0	1,173	1.1	64	1.0	115	1.4	3,607	3.3
Computer and information systems security	270	0.1	23	0.1	1	0.1	27	0.1	53	0.5	2	1.0	107	0.1	5	0.1	5	0.1	47	*
Computer science	9,658	3.4	185	1.0	2	0.3	710	3.9	128	1.2	1	0.5	1,914	1.8	147	2.3	321	3.9	6,250	5.7

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					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Information science and studies	1,245	0.4	63	0.3	4	0.5	93	0.5	97	0.9	1	0.5	375	0.3	24	0.4	32	0.4	556	0.5
Information technology	405	0.1	17	0.1	0	0.0	35	0.2	28	0.3	0	0.0	90	0.1	11	0.2	9	0.1	215	0.2
Computer and information sciences nec	158	0.1	7	*	0	0.0	16	0.1	18	0.2	0	0.0	50	*	7	0.1	0	0.0	60	0.1
Geosciences, atmospheric sciences, and ocean sciences	6,515	2.3	447	2.4	14	1.8	246	1.4	119	1.1	1	0.5	3,333	3.1	196	3.0	212	2.6	1,947	1.8
Atmospheric sciences and meteorology	847	0.3	39	0.2	0	0.0	21	0.1	14	0.1	0	0.0	429	0.4	16	0.2	29	0.3	299	0.3
Geological and earth sciences	4,165	1.5	296	1.6	12	1.6	171	0.9	79	0.7	0	0.0	2,052	1.9	118	1.8	120	1.4	1,317	1.2
Ocean and marine sciences	1,503	0.5	112	0.6	2	0.3	54	0.3	26	0.2	1	0.5	852	0.8	62	1.0	63	0.8	331	0.3
Geosciences, atmospheric sciences, and ocean sciences nec	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne
Mathematics and statistics	13,687	4.8	625	3.3	13	1.7	833	4.6	204	1.8	3	1.5	4,488	4.1	251	3.9	376	4.5	6,894	6.2
Applied mathematics	2,211	0.8	120	0.6	2	0.3	127	0.7	57	0.5	0	0.0	773	0.7	58	0.9	42	0.5	1,032	0.9
Mathematics	8,089	2.9	433	2.3	6	0.8	486	2.7	104	0.9	1	0.5	3,041	2.8	151	2.3	252	3.0	3,615	3.3
Statistics	3,387	1.2	72	0.4	5	0.7	220	1.2	43	0.4	2	1.0	674	0.6	42	0.6	82	1.0	2,247	2.0
Multidisciplinary and interdisciplinary studies	3,553	1.3	249	1.3	9	1.2	243	1.3	209	1.9	6	3.0	1,576	1.4	77	1.2	125	1.5	1,059	1.0
Biological and physical sciences	815	0.3	49	0.3	1	0.1	56	0.3	34	0.3	5	2.5	364	0.3	14	0.2	27	0.3	265	0.2
Computational science	298	0.1	20	0.1	0	0.0	19	0.1	14	0.1	0	0.0	92	0.1	7	0.1	14	0.2	132	0.1
Data science and data analytics	42	*	0	0.0	0	0.0	3	*	2	*	0	0.0	7	*	0	0.0	0	0.0	30	*
International and global studies	173	0.1	31	0.2	1	0.1	3	*	20	0.2	0	0.0	56	0.1	1	*	5	0.1	56	0.1
Multidisciplinary and interdisciplinary studies nec	2,225	0.8	149	0.8	7	0.9	162	0.9	139	1.3	1	0.5	1,057	1.0	55	0.8	79	1.0	576	0.5
Natural resources and conservation	3,705	1.3	298	1.6	35	4.6	99	0.5	156	1.4	3	1.5	1,977	1.8	81	1.2	146	1.8	910	0.8
Environmental science and studies	1,799	0.6	184	1.0	16	2.1	57	0.3	95	0.9	3	1.5	896	0.8	32	0.5	89	1.1	427	0.4
Forestry, natural resources, and conservation	1,906	0.7	114	0.6	19	2.5	42	0.2	61	0.6	0	0.0	1,081	1.0	49	0.8	57	0.7	483	0.4
Physical sciences	36,341	12.8	2,272	12.0	55	7.3	2,041	11.3	758	6.8	14	7.0	14,957	13.7	769	11.8	961	11.6	14,514	13.1
Astronomy and astrophysics	1,430	0.5	124	0.7	4	0.5	103	0.6	33	0.3	0	0.0	731	0.7	58	0.9	36	0.4	341	0.3
Chemistry	19,389	6.8	1,338	7.1	34	4.5	1,171	6.5	449	4.1	11	5.5	8,070	7.4	411	6.3	528	6.4	7,377	6.7
Materials sciences	1,028	0.4	50	0.3	1	0.1	71	0.4	36	0.3	1	0.5	332	0.3	8	0.1	44	0.5	485	0.4
Physics	13,985	4.9	750	4.0	16	2.1	685	3.8	196	1.8	2	1.0	5,649	5.2	285	4.4	339	4.1	6,063	5.5
Physical sciences nec	509	0.2	10	0.1	0	0.0	11	0.1	44	0.4	0	0.0	175	0.2	7	0.1	14	0.2	248	0.2
Psychology	21,115	7.5	2,798	14.8	97	12.8	1,265	7.0	1,619	14.6	21	10.5	11,412	10.5	870	13.4	794	9.6	2,239	2.0
Applied psychology	4,833	1.7	716	3.8	34	4.5	245	1.4	522	4.7	6	3.0	2,539	2.3	170	2.6	132	1.6	469	0.4
Clinical psychology	3,668	1.3	669	3.5	13	1.7	230	1.3	206	1.9	2	1.0	1,977	1.8	212	3.3	220	2.7	139	0.1
Counseling psychology	1,360	0.5	185	1.0	5	0.7	106	0.6	205	1.9	1	0.5	662	0.6	46	0.7	51	0.6	99	0.1

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					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Human development	742	0.3	66	0.3	2	0.3	30	0.2	94	0.8	1	0.5	374	0.3	31	0.5	15	0.2	129	0.1
Psychology, general	6,601	2.3	825	4.4	31	4.1	371	2.1	416	3.8	9	4.5	3,807	3.5	278	4.3	285	3.4	579	0.5
Research and experimental psychology	3,911	1.4	337	1.8	12	1.6	283	1.6	176	1.6	2	1.0	2,053	1.9	133	2.0	91	1.1	824	0.7
Social sciences	34,434	12.2	2,544	13.4	187	24.7	1,629	9.0	2,078	18.8	40	20.0	13,472	12.4	816	12.5	1,414	17.1	12,254	11.1
Agricultural and natural resource economics	639	0.2	15	0.1	0	0.0	27	0.1	13	0.1	0	0.0	146	0.1	2	*	13	0.2	423	0.4
Anthropology	4,296	1.5	415	2.2	45	5.9	171	0.9	141	1.3	6	3.0	2,235	2.1	151	2.3	235	2.8	897	0.8
Area, ethnic, cultural, gender, and group studies	2,482	0.9	386	2.0	63	8.3	135	0.7	388	3.5	6	3.0	787	0.7	86	1.3	103	1.2	528	0.5
Criminal justice and safety studies	988	0.3	92	0.5	4	0.5	19	0.1	143	1.3	2	1.0	511	0.5	34	0.5	115	1.4	68	0.1
Criminology	318	0.1	38	0.2	0	0.0	12	0.1	19	0.2	0	0.0	201	0.2	6	0.1	7	0.1	35	*
Economics (except agricultural and natural resource)	7,959	2.8	205	1.1	4	0.5	388	2.2	123	1.1	2	1.0	1,750	1.6	69	1.1	169	2.0	5,249	4.7
Geography and cartography	1,652	0.6	125	0.7	8	1.1	60	0.3	52	0.5	2	1.0	724	0.7	31	0.5	75	0.9	575	0.5
International relations and national security studies	408	0.1	34	0.2	1	0.1	20	0.1	27	0.2	0	0.0	161	0.1	8	0.1	6	0.1	151	0.1
Linguistics	1,686	0.6	93	0.5	16	2.1	80	0.4	30	0.3	0	0.0	649	0.6	47	0.7	61	0.7	710	0.6
Political science and government	5,366	1.9	327	1.7	13	1.7	225	1.2	246	2.2	7	3.5	2,516	2.3	136	2.1	221	2.7	1,675	1.5
Public policy analysis	2,547	0.9	177	0.9	13	1.7	169	0.9	334	3.0	3	1.5	997	0.9	72	1.1	152	1.8	630	0.6
Sociology and population studies	5,067	1.8	575	3.0	17	2.2	281	1.6	488	4.4	7	3.5	2,320	2.1	152	2.3	195	2.4	1,032	0.9
Urban studies and affairs	405	0.1	23	0.1	0	0.0	15	0.1	54	0.5	0	0.0	158	0.1	6	0.1	30	0.4	119	0.1
Social sciences, other	621	0.2	39	0.2	3	0.4	27	0.1	20	0.2	5	2.5	317	0.3	16	0.2	32	0.4	162	0.1
Engineering	71,279	25.2	2,940	15.5	79	10.4	4,392	24.4	1,631	14.7	30	15.0	19,064	17.5	1,194	18.3	1,430	17.2	40,519	36.6
Aerospace, aeronautical, and astronautical engineering	2,645	0.9	116	0.6	4	0.5	183	1.0	48	0.4	5	2.5	1,073	1.0	75	1.2	44	0.5	1,097	1.0
Biological, biomedical, and biosystems engineering	8,239	2.9	573	3.0	15	2.0	1,002	5.6	262	2.4	10	5.0	3,240	3.0	246	3.8	239	2.9	2,652	2.4
Chemical, petroleum, and chemical-related engineering	7,612	2.7	307	1.6	12	1.6	560	3.1	143	1.3	3	1.5	2,329	2.1	136	2.1	119	1.4	4,003	3.6
Chemical engineering	7,031	2.5	302	1.6	12	1.6	544	3.0	131	1.2	3	1.5	2,273	2.1	132	2.0	107	1.3	3,527	3.2
Petroleum engineering	581	0.2	5	*	0	0.0	16	0.1	12	0.1	0	0.0	56	0.1	4	0.1	12	0.1	476	0.4
Civil, environmental, transportation and related engineering fields	7,485	2.6	288	1.5	10	1.3	243	1.3	162	1.5	3	1.5	1,549	1.4	86	1.3	121	1.5	5,023	4.5
Civil engineering	6,517	2.3	235	1.2	9	1.2	200	1.1	131	1.2	2	1.0	1,281	1.2	66	1.0	100	1.2	4,493	4.1
Architectural, environmental, construction and surveying engineering	968	0.3	53	0.3	1	0.1	43	0.2	31	0.3	1	0.5	268	0.2	20	0.3	21	0.3	530	0.5
Electrical, electronics, communications and computer engineering	17,720	6.3	458	2.4	7	0.9	956	5.3	300	2.7	1	0.5	3,099	2.8	161	2.5	347	4.2	12,391	11.2
Electrical, electronics, and communications engineering	14,694	5.2	397	2.1	3	0.4	803	4.5	234	2.1	1	0.5	2,553	2.3	129	2.0	261	3.1	10,313	9.3

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	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Surgery	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne
Clinical medicine nec	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne
Other health	10,518	3.7	651	3.4	23	3.0	696	3.9	903	8.2	8	4.0	5,026	4.6	213	3.3	336	4.1	2,662	2.4	
Communication disorders sciences	844	0.3	74	0.4	0	0.0	45	0.2	44	0.4	1	0.5	502	0.5	19	0.3	25	0.3	134	0.1	
Dental sciences	217	0.1	7	*	0	0.0	19	0.1	4	*	0	0.0	52	*	4	0.1	5	0.1	126	0.1	
Kinesiology and exercise science	1,024	0.4	63	0.3	3	0.4	34	0.2	51	0.5	0	0.0	601	0.6	26	0.4	20	0.2	226	0.2	
Nursing science	3,359	1.2	208	1.1	10	1.3	196	1.1	458	4.1	4	2.0	1,950	1.8	67	1.0	105	1.3	361	0.3	
Pharmaceutical sciences	2,893	1.0	144	0.8	2	0.3	226	1.3	126	1.1	1	0.5	792	0.7	51	0.8	88	1.1	1,463	1.3	
Other health nec	2,181	0.8	155	0.8	8	1.1	176	1.0	220	2.0	2	1.0	1,129	1.0	46	0.7	93	1.1	352	0.3	

* = value < 0.05%; ne = not eligible.

nec = not elsewhere classified.

^a Clinical medicine includes graduate students in public health and in medical clinical sciences and clinical and medical laboratory sciences.**Note(s):**

Percentages may not add to total because of rounding. Ethnicity and race data are available only for U.S. citizens and permanent residents. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering 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, 2020.