

TABLE 1-11

**U.S. citizen and permanent resident research doctorate recipients, by trend broad field of doctorate, ethnicity, and race: Selected years, 1978–2023**

(Number)

Field, ethnicity, and race	1978	1983	1988	1993	1998	2003	2008	2013	2018	2023
All fields	26,683	25,698	24,932	28,722	31,204	28,170	30,844	33,964	35,349	35,566
Hispanic or Latino	553	611	694	974	1,332	1,435	1,773	2,135	2,572	3,449
Not Hispanic or Latino										
American Indian or Alaska Native	60	82	94	120	190	136	115	119	115	115
Asian <sup>a</sup>	1,018	1,043	1,235	2,005	2,728	2,033	2,507	2,892	3,302	3,828
Black or African American	1,089	1,009	965	1,278	1,603	1,723	1,961	2,172	2,449	2,725
White	22,250	22,288	21,461	24,040	24,284	21,162	22,835	24,749	24,924	23,057
More than one race	na	na	na	na	na	363	506	858	1,100	1,296
Other race or race not reported <sup>b</sup>	153	94	139	135	416	354	343	279	371	459
Ethnicity not reported	1,560	571	344	170	651	964	804	760	516	637
Science and engineering	14,874	14,963	15,121	17,397	19,338	16,867	19,907	23,503	25,436	26,622
Hispanic or Latino	235	290	408	563	793	787	1,135	1,425	1,845	2,566
Not Hispanic or Latino										
American Indian or Alaska Native	23	33	46	48	101	73	62	71	76	66
Asian <sup>a</sup>	853	816	942	1,643	2,236	1,601	2,014	2,320	2,733	3,230
Black or African American	338	346	386	517	698	713	898	1,313	1,441	1,597
White	12,402	13,043	12,989	14,426	14,848	12,761	14,738	17,038	17,877	17,335
More than one race	na	na	na	na	na	228	338	622	826	1,048
Other race or race not reported <sup>b</sup>	92	57	89	95	271	246	230	180	288	342
Ethnicity not reported	931	378	261	105	391	458	492	534	350	438
Agricultural sciences and natural resources	724	841	775	647	708	628	675	769	823	845
Hispanic or Latino	14	12	22	22	39	30	27	55	51	70
Not Hispanic or Latino										
American Indian or Alaska Native	2	1	7	2	9	4	5	4	1	3
Asian <sup>a</sup>	45	42	35	37	67	32	45	30	44	48
Black or African American	18	13	26	21	27	26	31	43	46	33
White	608	752	666	563	541	504	533	609	634	638
More than one race	na	na	na	na	na	4	7	10	25	26
Other race or race not reported <sup>b</sup>	5	3	3	1	13	6	9	4	7	9
Ethnicity not reported	32	18	16	1	12	22	18	14	15	18
Biological and biomedical sciences	3,139	3,399	3,412	3,844	4,455	4,250	5,405	6,044	6,396	6,906
Hispanic or Latino	32	43	79	119	174	186	323	430	498	716
Not Hispanic or Latino										
American Indian or Alaska Native	5	4	8	7	12	11	20	17	11	12
Asian <sup>a</sup>	146	165	174	371	673	545	620	712	777	916

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(Number)

Field, ethnicity, and race	1978	1983	1988	1993	1998	2003	2008	2013	2018	2023
Black or African American	55	46	49	79	116	112	209	281	306	346
White	2,684	3,064	3,042	3,221	3,361	3,183	3,968	4,301	4,455	4,444
More than one race	na	na	na	na	na	63	99	169	210	328
Other race or race not reported <sup>b</sup>	27	9	12	22	62	58	62	47	77	74
Ethnicity not reported	190	68	48	25	57	92	104	87	62	70
Computer and information sciences	90	208	326	510	563	447	697	758	742	965
Hispanic or Latino	0	0	2	7	15	11	20	30	42	54
Not Hispanic or Latino										
American Indian or Alaska Native	0	1	1	1	4	2	0	0	2	1
Asian <sup>a</sup>	4	20	44	78	91	81	116	125	112	220
Black or African American	0	3	2	6	14	17	26	31	39	53
White	76	175	265	409	413	296	498	519	496	562
More than one race	na	na	na	na	na	9	8	20	21	27
Other race or race not reported <sup>b</sup>	1	2	2	4	6	8	8	11	10	21
Ethnicity not reported	9	7	10	5	20	23	21	22	20	27
Engineering	1,588	1,485	2,150	2,700	3,048	2,180	2,958	3,767	4,213	4,804
Hispanic or Latino	33	29	63	66	111	104	134	190	279	418
Not Hispanic or Latino										
American Indian or Alaska Native	2	1	4	2	13	12	7	5	8	5
Asian <sup>a</sup>	272	247	332	527	557	346	487	570	678	772
Black or African American	13	29	31	50	81	77	110	171	165	222
White	1,163	1,129	1,654	2,024	2,169	1,544	2,065	2,596	2,827	3,056
More than one race	na	na	na	na	na	16	45	87	129	182
Other race or race not reported <sup>b</sup>	8	7	17	15	44	29	36	30	59	63
Ethnicity not reported	97	43	49	16	73	52	74	118	68	86
Geosciences, atmospheric, and ocean sciences	499	474	494	463	534	451	536	654	760	782
Hispanic or Latino	4	9	6	11	17	14	17	36	49	61
Not Hispanic or Latino										
American Indian or Alaska Native	0	2	2	3	3	2	2	3	3	4
Asian <sup>a</sup>	22	22	13	21	45	22	25	22	42	57
Black or African American	2	1	2	4	5	13	9	10	11	16
White	429	419	457	417	443	377	466	550	617	602
More than one race	na	na	na	na	na	8	4	16	27	29
Other race or race not reported <sup>b</sup>	5	1	4	3	9	8	4	4	4	5
Ethnicity not reported	37	20	10	4	12	7	9	13	7	8

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## U.S. citizen and permanent resident research doctorate recipients, by trend broad field of doctorate, ethnicity, and race: Selected years, 1978–2023

(Number)

Field, ethnicity, and race	1978	1983	1988	1993	1998	2003	2008	2013	2018	2023
Health sciences	433	439	581	814	987	1,020	1,199	1,539	1,809	1,729
Hispanic or Latino	8	6	11	19	31	35	49	60	113	144
Not Hispanic or Latino										
American Indian or Alaska Native	1	3	3	6	4	2	4	9	9	7
Asian <sup>a</sup>	27	35	26	39	72	65	103	135	176	172
Black or African American	12	16	29	54	58	72	78	199	234	221
White	359	367	504	691	794	798	922	1,067	1,179	1,056
More than one race	na	na	na	na	na	14	18	33	50	56
Other race or race not reported <sup>b</sup>	2	1	4	3	12	8	8	12	20	23
Ethnicity not reported	24	11	4	2	16	26	17	24	28	50
Mathematics and statistics	666	459	388	590	673	517	673	873	994	977
Hispanic or Latino	7	7	4	16	27	17	29	35	51	67
Not Hispanic or Latino										
American Indian or Alaska Native	1	0	2	1	3	2	0	0	2	0
Asian <sup>a</sup>	42	34	33	79	72	51	62	108	119	142
Black or African American	13	3	4	8	16	16	29	26	25	26
White	561	397	332	476	528	405	523	653	735	679
More than one race	na	na	na	na	na	10	5	20	37	43
Other race or race not reported <sup>b</sup>	3	4	1	3	10	7	7	6	12	12
Ethnicity not reported	39	14	12	7	17	9	18	25	13	8
Physical sciences	2,167	2,189	2,239	2,317	2,444	1,953	2,138	2,593	3,008	3,176
Hispanic or Latino	23	27	63	79	55	72	100	132	172	298
Not Hispanic or Latino										
American Indian or Alaska Native	4	6	6	5	9	2	2	3	6	6
Asian <sup>a</sup>	179	136	137	259	334	184	212	205	314	351
Black or African American	35	25	33	40	56	54	65	80	92	97
White	1,745	1,924	1,927	1,901	1,901	1,530	1,642	2,034	2,287	2,212
More than one race	na	na	na	na	na	24	37	71	74	109
Other race or race not reported <sup>b</sup>	10	7	18	17	33	32	21	21	22	47
Ethnicity not reported	171	64	55	16	56	55	59	47	41	56
Psychology	2,862	3,116	2,730	3,161	3,275	2,867	2,892	3,067	3,309	3,249
Hispanic or Latino	53	95	93	131	208	172	278	224	326	391
Not Hispanic or Latino										
American Indian or Alaska Native	3	9	7	15	31	22	12	14	12	12
Asian <sup>a</sup>	26	44	47	73	113	118	144	158	199	242

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**U.S. citizen and permanent resident research doctorate recipients, by trend broad field of doctorate, ethnicity, and race: Selected years, 1978–2023**

(Number)

Field, ethnicity, and race	1978	1983	1988	1993	1998	2003	2008	2013	2018	2023
Black or African American	96	112	103	118	158	161	159	206	244	288
White	2,515	2,788	2,446	2,803	2,646	2,204	2,103	2,239	2,334	2,060
More than one race	na	na	na	na	na	43	62	87	114	142
Other race or race not reported <sup>b</sup>	16	8	12	11	36	44	27	16	30	41
Ethnicity not reported	153	60	22	10	83	103	107	123	50	73
Social sciences	2,706	2,353	2,026	2,351	2,651	2,554	2,734	3,439	3,382	3,189
Hispanic or Latino	61	62	65	93	116	146	158	233	264	347
Not Hispanic or Latino										
American Indian or Alaska Native	5	6	6	6	13	14	10	16	22	16
Asian <sup>a</sup>	90	71	101	159	212	157	200	255	272	310
Black or African American	94	98	107	137	167	165	182	266	279	295
White	2,262	2,028	1,696	1,921	2,052	1,920	2,018	2,470	2,313	2,026
More than one race	na	na	na	na	na	37	53	109	139	106
Other race or race not reported <sup>b</sup>	15	15	16	16	46	46	48	29	47	47
Ethnicity not reported	179	73	35	19	45	69	65	61	46	42
Non-science and engineering	11,809	10,735	9,811	11,325	11,866	11,303	10,937	10,461	9,913	8,944
Hispanic or Latino	318	321	286	411	539	648	638	710	727	883
Not Hispanic or Latino										
American Indian or Alaska Native	37	49	48	72	89	63	53	48	39	49
Asian <sup>a</sup>	165	227	293	362	492	432	493	572	569	598
Black or African American	751	663	579	761	905	1,010	1,063	859	1,008	1,128
White	9,848	9,245	8,472	9,614	9,436	8,401	8,097	7,711	7,047	5,722
More than one race	na	na	na	na	na	135	168	236	274	248
Other race or race not reported <sup>b</sup>	61	37	50	40	145	108	113	99	83	117
Ethnicity not reported	629	193	83	65	260	506	312	226	166	199
Business	572	578	694	843	853	615	703	831	740	681
Hispanic or Latino	8	4	9	14	22	30	23	51	31	40
Not Hispanic or Latino										
American Indian or Alaska Native	0	0	4	5	9	1	2	1	1	2
Asian <sup>a</sup>	18	45	65	69	67	49	65	107	102	128
Black or African American	19	20	19	25	46	59	67	68	108	64
White	498	499	584	723	672	431	500	550	454	402
More than one race	na	na	na	na	na	4	11	24	16	15
Other race or race not reported <sup>b</sup>	3	1	4	3	12	9	11	9	12	12
Ethnicity not reported	26	9	9	4	25	32	24	21	16	18

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(Number)

Field, ethnicity, and race	1978	1983	1988	1993	1998	2003	2008	2013	2018	2023
Education	6,635	6,408	5,478	5,969	5,748	5,650	5,584	4,118	4,025	3,755
Hispanic or Latino	165	186	158	222	290	341	351	270	298	395
Not Hispanic or Latino										
American Indian or Alaska Native	29	45	36	51	50	39	36	24	23	28
Asian <sup>a</sup>	85	120	130	142	177	148	202	219	204	206
Black or African American	597	523	416	556	655	707	714	518	582	660
White	5,393	5,423	4,669	4,961	4,409	3,994	4,001	2,876	2,714	2,267
More than one race	na	na	na	na	na	63	64	81	116	94
Other race or race not reported <sup>b</sup>	38	22	26	17	56	37	51	40	28	32
Ethnicity not reported	328	89	43	20	111	321	165	90	60	73
Humanities and arts	3,910	3,094	2,998	3,752	4,497	4,297	3,706	4,493	4,145	3,333
Hispanic or Latino	123	116	105	150	200	251	206	330	348	333
Not Hispanic or Latino										
American Indian or Alaska Native	6	4	6	12	22	15	11	20	12	15
Asian <sup>a</sup>	46	44	70	117	205	196	168	186	203	171
Black or African American	86	73	82	105	143	158	170	165	205	209
White	3,399	2,774	2,690	3,317	3,749	3,437	2,931	3,534	3,164	2,380
More than one race	na	na	na	na	na	58	82	114	111	92
Other race or race not reported <sup>b</sup>	17	12	19	20	68	56	37	42	29	57
Ethnicity not reported	233	71	26	31	110	126	101	102	73	76
Other non-science and engineering	692	655	641	761	768	741	944	1,019	1,003	1,175
Hispanic or Latino	22	15	14	25	27	26	58	59	50	115
Not Hispanic or Latino										
American Indian or Alaska Native	2	0	2	4	8	8	4	3	3	4
Asian <sup>a</sup>	16	18	28	34	43	39	58	60	60	93
Black or African American	49	47	62	75	61	86	112	108	113	195
White	558	549	529	613	606	539	665	751	715	673
More than one race	na	na	na	na	na	10	11	17	31	47
Other race or race not reported <sup>b</sup>	3	2	1	0	9	6	14	8	14	16
Ethnicity not reported	42	24	5	10	14	27	22	13	17	32

na = not applicable; doctorate recipients were instructed to indicate only one race before 2001.

<sup>a</sup> Asian includes Native Hawaiians or Other Pacific Islanders through 2000 but excludes them since 2001.<sup>b</sup> Before 2001, other race included doctorate recipients who selected more than one race. Since 2001, other race has included Native Hawaiians or Other Pacific Islanders, who previously had been included in the category Asian.

**Note(s):**

Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the trend fields were constructed using the SED-CIP code crosswalk in table A-6. Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the field taxonomy changes, see the "Technical Notes."

**Source(s):**

National Center for Science and Engineering Statistics, Survey of Earned Doctorates.