

Table 7-22

Primary source of support for U.S. citizen and permanent resident S&E doctorate recipients, by sex and broad field: 2015–19

(Percent distribution)

Primary source of support and sex	All S&E	Science ^a										Engineering
		All science	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Health sciences ^b	Mathematics and statistics	Physical sciences and earth sciences	Psychology	Social sciences	
All recipients (number) ^c	126,169	104,993	3,982	31,163	3,900	3,866	8,911	4,762	18,536	16,478	17,261	21,176
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	13.80	15.26	10.10	7.14	13.77	5.74	33.73	5.59	3.88	31.17	21.63	6.52
Loans	6.42	7.39	3.57	2.08	3.77	1.99	16.99	1.22	1.08	19.75	10.42	1.58
Savings	1.18	1.19	0.98	0.71	2.15	0.72	3.30	0.73	0.35	1.41	1.64	1.12
Other earnings in graduate school	2.91	3.02	3.19	1.66	5.62	1.89	8.01	1.51	0.97	3.05	4.89	2.36
Other family earnings or savings	3.29	3.65	2.36	2.70	2.23	1.14	5.43	2.12	1.48	6.95	4.69	1.46
Teaching assistantship	16.90	18.97	11.45	11.42	10.28	16.30	10.20	54.37	21.02	19.33	28.50	6.66
Research assistantship, traineeship, or internship	29.64	26.96	42.37	30.32	40.05	39.45	18.03	13.25	44.18	19.10	11.76	42.95
Research assistantship	26.78	23.81	40.81	24.99	38.82	38.54	14.07	12.20	43.37	14.46	10.49	41.53
Traineeship, internship or clinical residency, other assistantship	2.86	3.15	1.56	5.33	1.23	0.91	3.96	1.05	0.81	4.64	1.27	1.42
Fellowship, scholarship, or grant	28.96	28.72	23.68	43.42	20.67	31.40	21.75	17.60	23.80	17.14	28.15	30.18
Fellowship or scholarship	24.86	24.67	19.91	34.70	18.31	26.62	18.77	16.78	20.23	15.94	27.39	25.81
Grant ^d	4.10	4.05	3.77	8.71	2.36	4.79	2.97	0.82	3.57	1.20	0.76	4.37
Employer reimbursement or assistance	3.07	2.59	4.85	1.76	6.97	2.12	7.77	1.87	1.22	1.10	3.01	5.42
Other, foreign, or unknown source of support	7.63	7.50	7.56	5.94	8.26	4.99	8.52	7.33	5.89	12.16	6.95	8.26
Female (number)	60,005	54,545	1,987	16,694	919	1,796	6,459	1,245	6,387	11,771	9,083	5,460
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	17.43	18.67	9.96	7.91	15.67	4.57	36.77	5.78	3.52	32.27	22.57	5.05
Loans	8.75	9.52	3.37	2.36	4.68	1.56	18.28	1.20	0.97	20.35	11.43	1.04
Savings	1.25	1.30	1.06	0.70	1.96	0.67	3.75	0.64	0.39	1.33	1.33	0.73
Other earnings in graduate school	3.03	3.19	2.72	1.65	5.55	1.17	8.70	1.12	0.72	2.89	4.38	1.37

Table 7-22

Primary source of support for U.S. citizen and permanent resident S&E doctorate recipients, by sex and broad field: 2015–19

(Percent distribution)

Primary source of support and sex	All S&E	Science ^a										Engineering
		All science	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Health sciences ^b	Mathematics and statistics	Physical sciences and earth sciences	Psychology	Social sciences	
Other family earnings or savings	4.40	4.65	2.82	3.20	3.48	1.17	6.04	2.81	1.44	7.71	5.43	1.90
Teaching assistantship	16.34	17.30	12.18	11.12	11.86	16.76	8.24	52.61	21.42	17.91	28.24	6.72
Research assistantship, traineeship, or internship	25.44	24.20	40.36	29.94	30.47	36.36	16.07	13.01	39.58	19.64	11.89	37.86
Research assistantship	21.89	20.50	38.35	24.40	29.38	35.58	12.06	11.49	38.64	14.71	10.51	35.75
Traineeship, internship or clinical residency, other assistantship	3.56	3.70	2.01	5.55	1.09	0.78	4.01	1.53	0.94	4.94	1.38	2.11
Fellowship, scholarship, or grant	30.66	29.79	26.87	43.83	28.29	36.14	22.51	19.20	29.37	17.14	28.12	39.29
Fellowship or scholarship	26.66	25.83	23.20	35.18	25.90	31.68	19.72	18.71	26.01	15.91	27.27	34.95
Grant ^d	4.00	3.96	3.67	8.65	2.39	4.45	2.79	0.48	3.37	1.22	0.85	4.34
Employer reimbursement or assistance	2.62	2.57	4.13	1.75	4.57	1.73	8.42	1.93	0.88	0.93	2.79	3.08
Other, foreign, or unknown source of support	7.51	7.46	6.49	5.44	9.14	4.45	7.99	7.47	5.23	12.11	6.40	8.00
Male (number)	66,161	50,445	1,992	14,469	2,981	2,070	2,452	3,517	12,149	4,707	8,178	15,716
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	10.50	11.58	10.24	6.25	13.18	6.76	25.73	5.52	4.07	28.43	20.59	7.02
Loans	4.30	5.09	3.77	1.76	3.49	2.37	13.58	1.22	1.14	18.27	9.29	1.76
Savings	1.12	1.08	0.90	0.71	2.21	0.77	2.12	0.77	0.33	1.61	1.98	1.25
Other earnings in graduate school	2.81	2.84	3.66	1.66	5.64	2.51	6.20	1.65	1.10	3.46	5.45	2.70
Other family earnings or savings	2.27	2.57	1.91	2.13	1.85	1.11	3.83	1.88	1.50	5.08	3.86	1.31
Teaching assistantship	17.42	20.78	10.74	11.77	9.80	15.89	15.38	54.99	20.82	22.88	28.80	6.64

Table 7-22

Primary source of support for U.S. citizen and permanent resident S&E doctorate recipients, by sex and broad field: 2015–19

(Percent distribution)

Primary source of support and sex	All S&E	Science ^a										Engineering
		All science	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Health sciences ^b	Mathematics and statistics	Physical sciences and earth sciences	Psychology	Social sciences	
Research assistantship, traineeship, or internship	33.45	29.94	44.43	30.75	43.01	42.13	23.21	13.34	46.60	17.76	11.62	44.73
Research assistantship	31.22	27.38	43.32	25.68	41.73	41.11	19.37	12.45	45.86	13.85	10.45	43.54
Traineeship, internship or clinical residency, other assistantship	2.23	2.55	1.10	5.07	1.27	1.01	3.83	0.88	0.74	3.91	1.16	1.18
Fellowship, scholarship, or grant	27.43	27.55	20.53	42.94	18.32	27.29	19.74	17.03	20.87	17.14	28.19	27.02
Fellowship or scholarship	23.23	23.41	16.67	34.16	15.97	22.22	16.27	16.09	17.19	16.02	27.53	22.64
Grant ^d	4.20	4.14	3.87	8.78	2.35	5.07	3.47	0.94	3.68	1.13	0.66	4.38
Employer reimbursement or assistance	3.47	2.61	5.57	1.78	7.72	2.46	6.04	1.85	1.40	1.51	3.25	6.24
Other, foreign, or unknown source of support	7.73	7.54	8.48	6.51	7.98	5.46	9.91	7.28	6.24	12.28	7.56	8.35

S&E = science and engineering.

^a The fields presented under science contain both broad and selected subordinate fields of study. As a result, detail does not sum to the total.^b In previous years, health sciences was classified as non-S&E.^c Total may include doctorate recipients who did not report sex. As a result, detail may not sum to total.^d In 2017, survey response option was changed from "grant" to "dissertation grant."**Note(s):**

Includes all U.S. citizen and permanent resident S&E doctorate recipients; temporary visa holders are excluded. American Indian or Alaska Native doctorate recipients with unknown or refused citizenship status are counted as U.S. citizens and thus are included. Data in this table refer to research doctorates only and differ from doctoral degree data in this report that are based on the Integrated Postsecondary Education Data System Completions Survey. The greatest differences are in psychology, education, and medical or other health sciences, which are fields with many professional doctorates.

Source(s):

National Center for Science and Engineering Statistics, special tabulations (2020) of the 2019 Survey of Earned Doctorates.