

TABLE S2-3

Doctorate recipients' source of primary support, by field, sex, citizenship, ethnicity, and race: 2015–17

(Percent)

Source of primary support and field	Total ^a	Temporary visa holder	U.S. citizens and permanent residents											Ethnicity not reported
			Total	Male	Female	Hispanic or Latino ^b	Not Hispanic or Latino							
							American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported		
All fields (number) ^c	164,427	48,944	106,574	52,348	54,224	7,538	368	9,659	7,045	75,783	2,952	993	2,236	
Fellowship or traineeship	20.8	16.3	24.5	23.8	25.1	31.1	28.8	27.8	24.3	23.7	30.6	21.5	5.5	
Grant ^d	3.8	2.7	4.6	5.0	4.3	4.8	3.0	6.1	3.0	4.7	5.3	3.3	1.0	
Teaching assistantship	18.5	21.4	18.5	18.8	18.2	16.1	14.1	16.5	11.3	20.2	18.5	13.9	3.9	
Research assistantship	27.3	44.7	21.4	25.2	17.7	15.4	6.3	28.3	10.6	22.7	21.2	14.4	5.5	
Personal	13.6	3.2	19.5	15.3	23.5	21.1	31.3	10.6	37.2	19.3	17.9	14.5	5.3	
Other	4.4	5.2	4.3	4.6	3.9	3.4	4.9	3.3	4.9	4.6	3.3	2.8	1.3	
Unknown	11.6	6.5	7.3	7.3	7.3	8.1	11.7	7.4	8.6	4.9	3.2	29.6	77.6	
S&E (number)	125,067	42,717	76,030	39,980	36,048	5,270	222	7,931	4,171	53,858	2,223	714	1,641	
Fellowship or traineeship	20.9	14.3	26.2	24.4	28.2	34.8	36.5	27.1	29.3	25.5	32.1	20.7	5.4	
Grant ^d	4.7	3.0	6.1	6.2	5.9	6.4	s	7.3	4.3	6.1	6.7	s	1.3	
Teaching assistantship	17.1	20.4	16.6	16.9	16.2	13.9	12.6	15.1	11.7	17.9	17.1	13.0	3.4	
Research assistantship	33.0	48.7	26.6	30.8	22.0	18.8	s	31.6	13.0	28.6	25.5	s	6.8	
Personal	9.2	2.3	13.8	10.4	17.5	15.4	22.1	8.4	30.2	13.5	12.8	10.8	3.8	
Other	3.8	4.9	3.4	3.9	2.9	2.9	4.1	3.0	4.0	3.6	2.7	2.2	1.0	
Unknown	11.2	6.3	7.3	7.3	7.2	7.9	12.6	7.5	7.5	4.8	3.1	31.5	78.4	
Engineering (number)	29,177	15,022	12,739	9,533	3,206	851	25	2,023	506	8,497	342	132	363	
Fellowship or traineeship	15.9	8.5	26.2	22.9	36.1	35.7	40.0	22.9	37.4	26.1	31.9	18.2	5.0	
Grant ^d	4.2	2.7	6.4	6.3	6.6	6.3	s	6.8	s	6.7	6.1	2.3	1.4	
Teaching assistantship	8.5	11.4	5.9	5.9	5.6	6.6	s	6.7	s	5.8	6.1	1.5	0.8	
Research assistantship	51.2	64.2	41.2	43.1	35.3	32.9	24.0	45.8	26.5	43.4	40.1	31.1	8.0	
Personal	3.7	2.0	6.2	6.7	4.7	6.5	s	5.7	s	6.2	4.1	6.8	1.1	
Other	5.0	4.6	6.1	7.0	3.3	6.0	8.0	4.4	7.9	6.6	7.0	3.8	1.1	
Unknown	11.5	6.7	8.2	8.2	8.3	6.0	4.0	7.7	7.1	5.1	4.7	36.4	82.6	
Agricultural sciences (number)	4,063	1,536	2,318	1,165	1,152	141	8	146	95	1,786	52	24	66	
Fellowship or traineeship	17.8	15.4	21.0	16.9	25.1	30.5	s	16.4	22.1	20.8	s	8.3	4.5	
Grant ^d	4.2	2.5	5.8	6.1	5.5	6.4	0.0	6.2	s	6.0	s	4.2	1.5	
Teaching assistantship	9.8	9.0	11.0	10.0	12.0	12.1	s	10.3	s	11.5	9.6	12.5	1.5	
Research assistantship	41.3	52.0	37.7	41.2	34.3	26.2	0.0	44.5	32.6	40.0	38.5	8.3	9.1	
Personal	7.0	2.6	10.5	10.7	10.3	9.2	0.0	s	18.9	11.1	s	8.3	3.0	
Other	8.2	12.6	5.9	6.5	5.3	7.8	s	s	5.3	5.8	3.8	4.2	3.0	
Unknown	11.7	5.9	8.1	8.6	7.6	7.8	0.0	12.3	10.5	4.7	1.9	54.2	77.3	

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			Total	Male	Female	Hispanic or Latino ^b	Not Hispanic or Latino						
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Biological sciences (number)	25,352	6,590	17,730	8,347	9,383	1,376	37	2,109	728	12,486	588	142	264
Fellowship or traineeship	32.8	23.1	38.1	37.2	39.0	48.3	48.6	38.9	46.7	36.9	42.2	30.3	6.4
Grant ^d	11.4	6.8	13.7	13.8	13.6	13.5	13.5	15.2	15.4	13.5	15.3	14.8	3.0
Teaching assistantship	11.9	14.5	11.6	11.6	11.6	8.7	s	8.8	8.4	12.9	9.5	s	2.3
Research assistantship	28.6	44.8	24.2	24.8	23.6	16.0	s	25.7	14.0	25.8	24.8	s	8.3
Personal	4.0	1.1	5.3	5.0	5.7	6.1	s	4.4	7.0	5.3	4.9	s	3.8
Other	2.6	5.1	1.8	1.9	1.7	1.7	2.7	1.9	0.7	1.9	0.9	0.7	0.0
Unknown	8.6	4.7	5.3	5.9	4.8	5.7	10.8	5.1	7.8	3.6	2.4	19.0	76.1
Computer sciences (number)	6,074	3,399	2,353	1,838	515	111	s	367	103	1,595	64	s	77
Fellowship or traineeship	12.2	9.4	17.8	s	s	25.2	0.0	13.9	27.2	18.1	18.8	17.1	6.5
Grant ^d	2.7	2.3	3.7	s	s	0.0	0.0	4.4	0.0	4.3	0.0	0.0	1.3
Teaching assistantship	12.4	15.4	9.4	9.2	10.1	8.1	0.0	13.1	6.8	9.3	9.4	8.6	0.0
Research assistantship	49.0	59.8	39.9	42.5	30.5	32.4	0.0	44.4	16.5	41.9	54.7	28.6	11.7
Personal	6.6	1.7	14.5	13.6	17.7	18.9	0.0	9.3	27.2	15.2	10.9	5.7	9.1
Other	5.2	4.3	7.0	7.6	4.9	9.9	0.0	5.2	11.7	7.5	1.6	2.9	1.3
Unknown	11.9	7.1	7.8	7.5	9.1	5.4	s	9.8	10.7	3.8	4.7	s	70.1
Earth, atmospheric, and ocean sciences (number)	3,163	990	2,050	1,153	897	113	7	110	34	1,685	51	14	36
Fellowship or traineeship	21.4	13.6	26.3	22.5	31.2	36.3	s	23.6	44.1	25.4	s	35.7	5.6
Grant ^d	6.1	5.4	6.9	7.4	6.2	7.1	0.0	6.4	s	7.1	s	7.1	0.0
Teaching assistantship	14.2	13.4	15.4	14.2	16.9	15.9	s	13.6	s	16.0	15.7	s	5.6
Research assistantship	42.4	54.3	38.9	42.2	34.6	30.1	0.0	38.2	23.5	41.1	27.5	21.4	8.3
Personal	3.8	1.0	5.4	6.2	4.2	6.2	0.0	4.5	s	5.2	9.8	s	8.3
Other	3.6	6.7	2.3	2.8	1.8	0.9	0.0	5.5	2.9	2.0	7.8	0.0	8.3
Unknown	8.5	5.6	4.8	4.6	5.0	3.5	0.0	8.2	5.9	3.3	2.0	21.4	63.9
Mathematics (number)	5,543	2,505	2,785	2,037	748	139	s	330	78	2,010	86	s	98
Fellowship or traineeship	14.5	11.7	18.2	s	s	30.2	0.0	21.2	23.1	16.8	30.2	20.0	5.1
Grant ^d	0.9	0.6	1.3	s	s	s	0.0	s	s	1.3	s	0.0	0.0
Teaching assistantship	53.7	59.1	53.1	53.8	51.3	42.4	s	47.3	55.1	56.9	s	47.5	11.2
Research assistantship	14.4	18.2	12.2	12.3	11.8	7.9	0.0	12.4	6.4	13.2	10.5	2.5	6.1
Personal	3.4	1.3	5.5	5.1	6.7	6.5	0.0	5.5	s	5.7	s	s	3.1
Other	2.1	2.6	1.9	1.6	2.8	s	0.0	s	1.3	1.8	0.0	0.0	1.0

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							American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	
Unknown	11.0	6.6	7.8	7.9	7.6	7.9	75.0	9.7	3.8	4.2	1.2	27.5	73.5
Medical and other health sciences (number)	8,158	1,656	6,088	1,643	4,445	392	30	588	717	4,041	152	52	116
Fellowship or traineeship	21.8	20.9	23.4	20.9	24.3	30.4	s	28.2	22.9	22.6	s	13.5	3.4
Grant ^d	3.7	2.7	4.2	5.3	3.8	5.1	0.0	4.8	2.1	4.6	5.9	0.0	1.7
Teaching assistantship	10.1	15.9	9.1	13.0	7.7	8.2	s	8.8	4.3	10.4	s	7.7	1.7
Research assistantship	18.8	35.5	15.5	19.8	13.8	11.5	s	23.3	8.5	16.5	s	7.7	2.6
Personal	26.0	7.5	32.6	25.5	35.2	33.2	46.7	21.4	52.0	31.6	30.3	17.3	8.6
Other	8.4	11.4	8.1	6.9	8.6	5.9	6.7	5.6	5.6	9.5	7.9	5.8	0.0
Unknown	11.1	6.1	7.1	8.5	6.6	5.9	23.3	7.8	4.6	4.9	2.0	48.1	81.9
Physical sciences (number)	14,802	5,541	8,573	5,930	2,643	443	15	812	257	6,576	254	68	148
Fellowship or traineeship	14.1	7.9	19.1	16.8	24.2	33.2	33.3	16.4	30.0	18.2	22.0	14.7	4.7
Grant ^d	4.1	2.7	5.2	5.4	4.8	5.6	s	s	3.9	5.3	6.3	2.9	2.0
Teaching assistantship	23.5	28.8	21.7	21.3	22.6	18.7	s	23.5	30.4	21.5	s	16.2	4.7
Research assistantship	45.0	51.5	44.0	45.9	39.6	30.7	s	43.3	23.3	46.9	s	33.8	12.2
Personal	1.8	0.4	2.9	3.1	2.5	2.3	s	s	3.9	3.0	s	0.0	1.4
Other	1.4	1.9	1.2	1.4	0.7	1.1	6.7	1.7	1.2	1.1	0.8	1.5	0.7
Unknown	10.2	6.8	5.9	6.1	5.6	8.4	13.3	7.3	7.4	3.9	2.4	30.9	74.3
Psychology (number)	11,667	861	9,863	2,814	7,049	841	s	597	699	7,106	296	s	222
Fellowship or traineeship	16.2	21.8	17.2	18.0	16.8	20.2	28.1	22.8	18.9	16.4	20.3	12.9	4.5
Grant ^d	1.7	1.0	1.9	1.8	1.9	3.4	s	1.5	1.0	1.9	1.7	s	0.5
Teaching assistantship	18.5	28.5	19.3	23.1	17.8	12.0	21.9	21.1	10.4	21.4	19.9	12.9	3.2
Research assistantship	16.6	24.5	17.3	15.2	18.2	12.6	s	19.9	10.0	19.1	17.6	s	2.7
Personal	27.2	9.5	31.2	28.2	32.3	34.8	25.0	22.9	45.6	30.9	33.8	22.9	3.6
Other	1.5	5.3	1.3	2.0	1.1	0.7	3.1	0.5	2.1	1.4	1.4	0.0	0.0
Unknown	18.3	9.3	11.8	11.6	11.9	16.2	s	11.2	11.9	8.9	5.4	s	85.6
Social sciences (number)	17,068	4,617	11,531	5,520	6,010	863	63	849	954	8,076	338	137	251
Fellowship or traineeship	26.6	29.3	27.3	27.7	27.0	31.7	34.9	30.4	24.8	27.1	37.0	24.8	6.8
Grant ^d	0.8	0.7	0.8	0.7	1.0	s	s	0.9	0.8	0.9	s	2.2	0.0
Teaching assistantship	28.7	36.1	27.8	28.3	27.5	27.2	15.9	32.5	16.2	29.7	26.9	21.2	6.8
Research assistantship	12.4	16.4	11.6	11.7	11.6	9.8	s	13.8	5.7	12.8	s	4.4	3.6
Personal	16.8	5.7	22.5	21.3	23.6	21.7	31.7	13.5	41.5	21.9	21.3	21.9	5.2

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							American Indian or Alaska Native	Asian	Black or African American	White	More than one race		
Other	3.8	5.6	3.3	3.6	3.1	s	s	1.5	4.8	3.6	2.1	2.9	2.0
Unknown	10.9	6.3	6.5	6.8	6.1	6.8	9.5	7.3	6.1	4.1	2.4	22.6	75.7
Non-S&E (number)	39,360	6,227	30,544	12,368	18,176	2,268	146	1,728	2,874	21,925	729	279	595
Fellowship or traineeship	20.4	29.7	20.0	21.8	18.8	22.8	17.1	31.3	17.0	19.4	26.2	23.3	5.7
Grant ^d	0.9	1.1	1.0	0.8	1.1	0.9	s	0.8	1.0	1.0	1.2	s	0.2
Teaching assistantship	22.6	28.2	23.3	25.0	22.1	21.5	16.4	22.6	10.7	25.8	22.6	16.1	5.2
Research assistantship	9.2	17.0	8.3	7.2	9.1	7.5	s	13.4	7.2	8.4	8.0	s	1.8
Personal	27.7	9.1	33.6	31.0	35.3	34.4	45.2	20.7	47.5	33.4	33.3	24.0	9.4
Other	6.2	7.6	6.4	7.0	5.9	4.5	6.2	4.3	6.2	6.9	5.1	4.3	2.2
Unknown	13.0	7.4	7.5	7.3	7.6	8.5	10.3	6.8	10.3	5.1	3.6	24.7	75.5
Education (number)	15,067	1,638	12,544	3,814	8,730	966	80	629	1,866	8,396	274	93	240
Fellowship or traineeship	9.9	17.8	9.5	8.3	10.1	13.9	s	18.4	12.1	7.7	s	16.1	4.2
Grant ^d	1.3	1.2	1.4	1.0	1.5	0.9	s	s	1.0	1.5	s	s	0.4
Teaching assistantship	10.4	19.4	9.9	9.6	10.0	8.2	7.5	14.1	6.1	10.8	11.3	7.5	1.7
Research assistantship	13.7	27.4	12.8	12.1	13.2	13.3	s	20.8	9.6	13.3	s	s	2.5
Personal	40.8	12.9	47.0	47.1	47.0	48.4	51.3	29.1	53.2	47.9	47.8	35.5	12.9
Other	10.9	14.0	11.2	14.0	10.0	6.7	s	s	7.6	13.1	6.9	10.8	3.8
Unknown	12.9	7.4	8.1	7.9	8.2	8.6	11.3	7.9	10.4	5.6	4.4	21.5	74.6
Humanities and arts (number)	15,653	2,015	12,646	6,161	6,485	969	53	541	443	9,937	326	135	242
Fellowship or traineeship	30.4	42.6	30.6	30.4	30.7	32.3	15.1	42.0	38.8	29.8	38.0	31.1	6.6
Grant ^d	0.7	1.3	0.6	0.7	0.6	s	0.0	s	1.4	0.6	s	0.0	0.0
Teaching assistantship	35.1	35.8	37.6	36.6	38.6	36.3	34.0	34.9	24.8	39.4	33.7	23.0	9.5
Research assistantship	1.6	1.8	1.7	1.4	2.0	1.1	0.0	s	1.4	1.8	s	2.2	0.0
Personal	18.2	6.8	21.4	22.0	20.8	20.4	35.8	15.9	27.1	21.8	22.1	17.8	7.4
Other	2.1	4.4	1.9	2.5	1.5	s	5.7	s	1.4	2.1	2.5	0.0	0.8
Unknown	11.8	7.3	6.2	6.5	5.9	7.2	9.4	4.1	5.2	4.4	2.1	25.9	75.6
Other (number)	8,640	2,574	5,354	2,393	2,961	333	13	558	565	3,592	129	51	113
Fellowship or traineeship	20.4	27.2	19.5	20.9	18.4	20.7	s	35.5	16.1	17.8	s	15.7	7.1
Grant ^d	0.7	0.8	0.8	0.7	0.8	s	0.0	s	0.9	0.8	s	0.0	0.0
Teaching assistantship	21.3	27.9	20.8	20.0	21.5	16.8	0.0	20.1	14.9	23.0	18.6	13.7	3.5
Research assistantship	15.2	22.3	13.5	14.2	13.0	9.6	s	s	4.1	15.1	15.5	19.6	4.4
Personal	21.9	8.4	31.0	28.6	32.9	34.2	46.2	15.9	44.8	31.7	31.0	19.6	6.2

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							American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	
Other	5.2	6.0	5.5	7.4	3.9	s	s	3.0	5.5	5.8	7.8	3.9	1.8
Unknown	15.3	7.5	8.9	8.2	9.5	11.7	7.7	8.2	13.8	5.7	5.4	27.5	77.0

s = suppressed for reasons of confidentiality and/or reliability.

^a Total includes doctorate recipients for whom sex was not reported.

^b Hispanic may be any race; race categories exclude Hispanic origin.

^c Data include doctorate recipients whose field of study is unknown.

^d In 2017, the survey response option was changed from "grant" to "dissertation grant."

Note(s)

Data include only doctorate recipients who reported a primary source of support. Reporting categories for ethnicity and race were expanded in 2013; comparisons with data before 2013 should be made with caution. Personal support mechanisms include personal savings, other personal earnings, other family earnings or savings, and loans. Research assistantships include research assistantships and other assistantships. Traineeships include internships and residencies. Other support mechanisms include employer reimbursement or assistance, foreign support, and other sources. Percentages may not add to total because of rounding.

Source(s)

National Center for Science and Engineering Statistics, National Science Foundation, special tabulations (2018) of the Survey of Earned Doctorates (SED).