

TABLE 2-C

Transitions between out-of-field job and in-field job among doctoral scientists and engineers: 2015–19

(Number)

Demographic and degree characteristics	Total employed in all survey cycles (2015, 2017, and 2019)		In field in 2015										Out of field in 2015													
			In field in 2017		Out of field in 2017				In field in 2019		Out of field in 2019				In field in 2017		Out of field in 2017				In field in 2019		Out of field in 2019			
					Voluntarily		Involuntarily				Voluntarily		Involuntarily				Voluntarily		Involuntarily				Voluntarily		Involuntarily	
			Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
All employed for all survey cycles (2015, 2017, and 2019)	745,400	1,950	672,100	2,250	15,000	750	7,700	525	668,250	2,225	17,950	700	8,600	600	23,550	950	16,300	700	10,750	675	25,150	975	16,400	750	9,050	575
Gender																										
Male	494,200	1,650	444,000	1,950	10,450	650	5,250	450	441,150	1,900	12,450	600	6,100	525	16,250	825	11,200	650	7,050	600	17,250	850	11,300	675	6,000	500
Female	251,200	1,350	228,100	1,375	4,600	350	2,450	225	227,100	1,350	5,500	375	2,500	225	7,300	450	5,050	325	3,700	300	7,900	500	5,100	350	3,050	250
Ethnicity and race																										
Hispanic or Latino ^a	38,350	525	35,350	575	650	125	250	75	35,150	550	650	125	450	150	1,100	175	500	100	450	100	1,200	175	500	125	400	75
Not Hispanic or Latino ^b																										
American Indian or Alaska Native	2,150	200	1,900	175	D	D	D	D	1,900	175	D	D	D	D	S	S	D	D	D	D	100	50	D	D	D	D
Asian	211,250	1,400	190,750	1,375	3,450	350	2,300	300	188,650	1,425	5,250	450	2,600	325	6,950	550	4,350	425	3,400	375	7,050	550	4,500	450	3,200	350
Black or African American	25,450	425	22,550	450	700	125	400	100	22,500	425	800	150	350	100	800	125	600	100	400	125	950	125	600	125	250	75
White	459,300	2,025	413,500	2,150	10,100	575	4,500	375	412,200	2,075	10,900	625	4,950	425	14,350	750	10,600	550	6,250	525	15,600	825	10,550	600	5,050	400
More than one race ^c	9,000	425	8,050	450	150	50	150	50	7,900	450	300	100	200	75	200	75	200	50	250	100	350	100	150	50	150	50
Field of degree																										
Science	553,950	1,500	499,500	1,775	11,150	675	5,400	400	496,950	1,725	12,750	625	6,350	450	17,500	750	11,900	650	8,450	550	18,450	775	12,150	675	7,250	550
Biological, agricultural, and environmental life sciences	189,050	950	168,450	1,150	4,450	425	2,200	275	167,850	1,150	4,900	400	2,350	275	7,350	425	3,900	375	2,650	300	7,250	450	4,450	425	2,250	300
Computer and information sciences	26,100	375	24,650	375	300	100	200	75	24,550	375	450	125	150	75	350	125	450	150	150	75	600	150	250	100	D	D
Mathematics and statistics	33,650	475	30,650	525	500	125	450	125	30,500	525	650	200	450	100	950	225	650	150	500	175	1,150	225	650	175	250	125
Physical sciences, geosciences, atmospheric, and ocean sciences	120,550	625	102,000	850	3,750	425	1,800	250	101,250	825	4,100	400	2,200	250	5,600	425	4,300	350	3,150	300	5,800	450	4,050	325	3,150	325
Psychology	89,300	750	85,300	800	950	175	250	75	85,000	800	1,100	175	450	100	1,150	225	1,100	200	500	125	1,400	225	1,100	225	300	100
Social sciences	95,300	825	88,500	900	1,150	200	600	125	87,850	900	1,600	225	800	175	2,100	250	1,500	250	1,500	225	2,250	300	1,650	275	1,200	200
Engineering	159,650	975	142,800	1,125	3,250	325	1,950	300	141,500	1,175	4,500	350	2,000	275	5,500	500	3,950	375	2,150	300	6,000	500	4,000	400	1,600	225
Health	31,800	525	29,750	575	600	175	350	125	29,750	550	700	200	250	100	550	125	400	100	150	75	700	150	200	75	150	75
Years since degree																										
≤ 10 years	150,000	875	137,900	925	2,800	250	2,000	225	136,550	925	3,650	350	2,500	250	3,900	375	1,950	225	1,500	225	4,250	325	1,700	200	1,400	200
11–20 years	270,400	1,150	246,500	1,275	4,550	375	3,250	350	245,300	1,225	5,900	375	3,050	325	7,400	550	5,150	400	3,600	375	8,150	525	5,200	425	2,750	300
21–30 years	214,150	1,450	189,200	1,575	4,850	475	1,650	225	188,300	1,525	5,250	500	2,200	275	8,500	600	5,850	450	4,100	400	8,750	625	6,100	500	3,600	350
> 30 years	110,850	1,150	98,500	1,225	2,800	325	850	200	98,100	1,225	3,200	375	900	200	3,750	375	3,350	350	1,600	200	4,000	425	3,350	375	1,350	200
Residence location in 2015																										
U.S. residing	643,500	1,950	575,900	2,300	13,750	725	7,200	475	573,250	2,300	15,850	700	7,750	550	21,600	900	15,000	650	10,000	625	23,100	950	15,050	775	8,450	575
Non-U.S. residing	101,900	1,225	96,200	1,275	1,300	200	500	125	95,000	1,325	2,100	250	850	175	1,950	300	1,300	200	750	175	2,050	300	1,300	250	600	150
Disability status in 2015																										
With disability	58,050	1,200	52,300	1,125	950	225	700	150	51,850	1,100	1,350	250	800	200	2,550	350	900	175	650	125	2,400	325	1,050	200	650	150

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(Number)

Demographic and degree characteristics	Total employed in all survey cycles (2015, 2017, and 2019)		In field in 2015										Out of field in 2015													
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					Voluntarily		Involuntarily				Voluntarily		Involuntarily				Voluntarily		Involuntarily				Voluntarily		Involuntarily	
			Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
Without disability	687,350	2,250	619,750	2,450	14,050	725	7,000	500	616,400	2,350	16,600	650	7,800	575	21,000	850	15,400	700	10,150	675	22,750	925	15,350	725	8,400	550
Citizenship at graduation																										
U.S. citizen and permanent resident	513,900	2,075	459,550	2,275	11,850	625	5,250	375	458,200	2,300	12,600	625	5,900	475	17,250	725	12,500	600	7,500	525	18,550	800	12,350	650	6,400	425
Temporary visa holder	231,500	1,600	212,550	1,650	3,150	300	2,450	325	210,050	1,725	5,350	425	2,700	325	6,300	575	3,800	400	3,250	400	6,600	525	4,050	475	2,650	350

D = suppressed to avoid disclosure of confidential information. S = suppressed for reliability; coefficient of variation exceeds publication standards.

SE = standard error.

^a Hispanic or Latino may be of any race.

^b American Indian or Alaska Native, Asian, Black or African American, and White are single race.

^c Other race includes Native Hawaiian or Other Pacific Islander and persons reporting more than one race who are not of Hispanic or Latino ethnicity.

Note(s):

Numbers are rounded to the nearest 50. Standard errors are rounded up to the nearest 25. Detail may not add to total because of rounding. Residence location is based on reported living location on 1 February 2015. Survey asks degree of difficulty—none, slight, moderate, severe, or unable to do—an individual has in seeing (with glasses), hearing (with hearing aid), walking without assistance, lifting 10 pounds, or concentrating, remembering, or making decisions. Those respondents who answered "moderate," "severe," or "unable to do" for any activity were classified as having a disability.

Source(s):

National Center for Science and Engineering Statistics, Survey of Doctorate Recipients longitudinal panel 2015–25 (LSDR 2015–19 data file).