

Table SLBR-21

S&E doctorate holders employed in academia, by type of position and degree field: 1973–2019

(Thousands)

Position and field	1973	1977	1981	1983	1985	1987	1989	1991	1993	1995	1997	1999	2001	2003	2006	2008	2010	2013	2015	2017	2019
All positions																					
All fields	118.0	145.4	167.1	176.1	190.2	195.9	206.6	210.6	213.8	217.5	232.5	240.2	245.5	259.5	272.8	276.5	294.8	309.0	329.3	326.6	350.4
Physical sciences	25.5	29.2	30.0	29.9	32.2	32.8	33.6	33.7	35.0	35.7	37.5	38.7	38.6	39.9	39.6	39.9	43.7	44.9	48.4	46.9	50.5
Mathematics and statistics	9.7	11.7	12.4	12.9	13.6	13.8	14.5	15.2	15.5	14.6	15.6	15.2	14.9	16.7	17.4	18.0	18.7	19.0	20.9	20.6	21.7
Computer and information sciences	NA	NA	0.3	0.5	0.8	1.1	1.5	2.0	2.5	3.1	3.3	3.7	3.8	5.2	5.8	6.9	7.3	8.4	9.1	8.9	10.9
Life sciences	34.9	42.6	51.3	54.9	58.7	61.3	64.8	66.9	68.2	71.6	77.3	81.9	84.3	90.0	95.5	94.2	102.0	109.8	112.7	112.6	118.8
Psychology	12.2	16.2	20.1	21.0	23.1	23.7	25.0	25.2	25.0	26.1	27.3	29.0	30.4	31.8	35.0	34.5	35.4	36.3	38.7	38.0	39.9
Social sciences	23.4	31.1	36.9	38.9	42.0	42.2	44.5	44.8	44.4	42.5	44.9	46.2	46.9	48.1	50.0	52.5	54.9	55.9	59.7	59.9	64.4
Engineering	12.4	14.8	16.1	18.1	19.9	21.2	22.9	22.8	23.1	23.8	26.6	25.5	26.6	27.8	29.6	30.4	32.8	34.7	39.7	39.8	44.1
All full-time faculty																					
All fields	103.3	125.6	141.9	148.4	156.9	164.4	169.8	173.1	172.4	171.4	174.1	179.8	182.4	190.6	193.1	199.1	206.8	214.4	227.7	223.5	246.8
Physical sciences	20.8	23.6	24.3	24.2	25.4	26.4	26.2	26.2	25.8	25.6	25.6	26.7	26.4	27.6	26.9	27.6	29.3	29.5	31.2	29.7	33.5
Mathematics and statistics	9.3	10.9	11.7	12.3	12.7	12.9	13.5	14.2	14.7	13.0	13.4	12.9	12.3	14.0	14.0	14.8	15.1	15.5	16.7	16.3	17.3
Computer and information sciences	NA	NA	0.3	0.4	0.7	0.9	1.3	1.8	2.3	2.8	2.9	3.2	3.3	4.2	4.9	5.7	5.8	6.4	7.1	7.1	8.7
Life sciences	29.5	34.9	40.9	43.5	45.6	48.1	49.3	51.1	50.8	52.8	53.5	56.1	58.3	61.7	62.8	63.5	66.7	70.6	70.8	70.0	76.6
Psychology	10.8	13.9	16.4	17.3	18.5	19.2	20.2	20.7	19.5	20.1	19.6	21.0	21.7	21.4	23.2	23.1	23.3	24.1	25.9	26.3	28.0
Social sciences	21.6	28.8	33.7	34.4	36.1	37.7	39.0	39.0	39.2	37.1	37.3	38.7	38.7	39.6	39.2	42.1	43.1	43.5	46.6	46.0	50.1
Engineering	11.3	13.5	14.7	16.4	17.9	19.3	20.2	20.1	20.1	20.0	21.2	20.9	21.6	21.9	22.1	22.7	23.4	25.0	29.2	28.2	32.6
Full-time professors																					
All fields	42.6	51.0	64.4	69.9	72.8	79.1	83.1	82.5	80.0	77.7	80.9	83.1	84.8	87.7	85.3	90.5	93.6	95.3	98.9	94.7	109.1
Physical sciences	9.0	10.8	13.1	13.9	14.6	15.5	15.5	14.8	14.2	13.9	13.8	14.2	14.0	14.3	13.3	14.0	15.0	14.6	15.0	13.9	16.6
Mathematics and statistics	3.2	3.9	5.0	5.6	6.1	6.5	6.9	6.7	7.1	6.6	6.9	6.6	6.6	7.2	6.9	7.3	7.3	7.3	7.9	7.5	8.0
Computer and information sciences	NA	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.7	0.8	1.2	1.6	1.9	2.2	2.6	2.6	2.7	3.3
Life sciences	12.3	13.9	17.0	19.3	19.6	21.7	22.5	22.9	21.2	22.5	22.5	23.3	24.5	25.7	25.6	26.6	28.1	29.5	28.3	27.5	31.1
Psychology	3.9	4.8	6.5	7.0	7.6	8.3	9.1	9.5	8.7	8.7	9.5	9.4	9.9	9.8	9.8	10.0	9.9	10.4	10.9	10.8	12.2
Social sciences	9.4	11.3	14.7	15.1	15.9	16.8	18.5	18.6	18.4	16.6	17.1	18.2	18.2	18.6	17.5	19.2	19.6	19.2	20.6	19.7	22.6
Engineering	4.7	6.4	8.0	9.0	9.2	10.4	10.6	9.9	10.3	9.1	10.7	10.6	10.7	10.9	10.6	11.7	11.5	11.7	13.5	12.7	15.5
Full-time associate professors																					
All fields	31.4	39.7	42.9	45.7	46.9	48.2	47.9	50.5	48.6	49.6	51.0	53.6	52.2	54.3	54.1	57.0	59.1	62.7	69.3	67.7	72.9
Physical sciences	6.2	7.2	6.6	6.3	6.3	6.1	5.8	6.3	6.4	6.1	6.5	6.6	6.7	6.9	6.9	7.0	7.4	7.6	8.3	8.6	8.9
Mathematics and statistics	2.8	3.7	4.0	4.1	4.0	4.1	4.0	5.1	4.4	4.0	3.9	4.1	3.6	4.0	3.8	4.3	4.2	4.4	5.1	5.1	5.3
Computer and information sciences	NA	0.0	0.0	0.1	0.1	0.3	0.4	0.8	0.7	1.4	1.4	1.4	1.6	1.7	1.6	1.9	2.1	2.3	2.6	2.3	2.6
Life sciences	8.6	10.7	12.5	13.4	14.1	14.1	14.0	14.6	14.6	14.7	15.8	17.3	16.7	17.7	18.1	18.2	19.1	20.3	21.4	20.6	22.8
Psychology	3.3	4.3	5.2	5.9	5.9	6.0	5.9	5.9	5.6	5.8	5.8	6.2	6.0	5.9	6.3	7.0	7.0	7.6	8.2	8.8	8.5
Social sciences	6.5	9.4	10.2	11.2	11.8	12.7	12.6	12.0	11.6	11.5	11.7	11.9	11.4	12.1	11.8	12.8	13.1	13.8	15.3	14.6	16.2
Engineering	4.0	4.4	4.4	4.7	4.7	4.9	5.3	5.9	5.3	6.2	5.8	6.0	6.1	5.9	5.6	5.9	6.2	6.8	8.3	7.9	8.7

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(Thousands)

Position and field	1973	1977	1981	1983	1985	1987	1989	1991	1993	1995	1997	1999	2001	2003	2006	2008	2010	2013	2015	2017	2019
Full-time junior faculty ^a																					
All fields	29.3	34.9	34.6	32.8	37.2	37.2	38.7	40.1	43.8	44.0	42.2	43.1	45.4	48.6	53.7	51.6	54.1	56.4	59.5	61.1	64.8
Physical sciences	5.6	5.7	4.6	4.0	4.6	4.7	4.8	5.0	5.2	5.6	5.3	5.9	5.7	6.4	6.7	6.6	6.9	7.3	7.9	7.2	8.0
Mathematics and statistics	3.3	3.3	2.6	2.5	2.7	2.4	2.6	2.4	3.2	2.4	2.6	2.2	2.1	2.8	3.3	3.2	3.6	3.8	3.7	3.8	4.0
Computer and information sciences	NA	NA	0.2	0.3	0.6	0.6	0.9	1.0	1.4	1.2	1.2	1.1	0.9	1.3	1.7	1.9	1.5	1.5	1.9	2.1	2.9
Life sciences	8.5	10.3	11.3	10.8	11.9	12.3	12.8	13.7	15.0	15.6	15.2	15.5	17.1	18.3	19.1	18.7	19.5	20.8	21.1	22.0	22.8
Psychology	3.6	4.8	4.8	4.5	5.0	4.9	5.2	5.4	5.2	5.5	4.3	5.4	5.8	5.7	7.1	6.1	6.4	6.1	6.8	6.8	7.3
Social sciences	5.7	8.2	8.8	8.1	8.4	8.2	7.9	8.4	9.3	9.0	8.5	8.6	9.1	8.9	9.9	10.1	10.4	10.5	10.7	11.7	11.3
Engineering	2.6	2.7	2.3	2.7	4.0	4.0	4.3	4.3	4.5	4.8	4.7	4.3	4.8	5.1	5.9	5.1	5.7	6.5	7.4	7.6	8.5
Other full-time positions ^b																					
All fields	7.6	8.8	12.6	13.4	18.1	16.4	19.2	20.2	22.2	23.9	29.1	31.9	34.8	39.9	40.6	43.9	48.2	55.8	62.6	64.2	65.7
Physical sciences	2.2	2.4	2.9	3.0	3.7	3.4	4.0	4.1	4.8	4.9	6.6	7.3	7.7	8.4	7.2	7.4	7.9	8.8	11.1	11.3	11.2
Mathematics and statistics	0.2	0.4	0.4	0.3	0.5	0.4	0.5	0.6	0.5	0.6	1.0	0.8	1.1	1.4	1.3	1.7	1.8	2.1	2.5	2.3	2.3
Computer and information sciences	NA	NA	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.6	0.6	0.9	1.0	1.5	1.4	1.4	1.6
Life sciences	2.5	2.8	4.0	4.6	6.2	6.0	6.7	7.2	7.7	8.4	9.8	11.2	12.3	14.2	15.5	16.2	18.4	22.2	25.0	26.3	26.3
Psychology	0.8	1.2	2.2	2.2	2.9	2.8	2.9	2.8	3.9	3.9	4.3	4.6	4.9	6.3	6.5	6.8	7.1	6.9	7.9	7.4	7.8
Social sciences	1.0	1.2	2.0	2.2	3.2	2.6	3.5	3.5	3.7	3.6	4.0	4.4	4.7	5.0	6.1	6.2	6.9	7.7	8.3	8.0	9.1
Engineering	0.8	0.8	1.1	1.1	1.5	1.1	1.5	1.8	1.5	2.1	3.2	3.0	3.6	3.9	3.3	4.7	5.1	6.3	6.5	7.5	7.5
Postdoctorates																					
All fields	4.2	7.6	8.5	8.3	8.7	9.3	11.5	9.9	13.3	16.8	18.9	18.5	17.5	15.7	23.3	17.8	22.8	20.2	19.2	18.4	18.5
Physical sciences	1.8	2.4	2.1	1.6	2.1	2.3	2.7	2.2	3.5	4.4	3.8	3.4	3.0	2.6	3.9	3.3	4.6	4.0	3.3	3.4	3.6
Mathematics and statistics	0.0	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.0	0.5	0.5	0.6	0.8	0.5	1.0	0.5	0.7	0.4	0.5	0.5	0.7
Computer and information sciences	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.3	0.2	0.3	0.2	0.2
Life sciences	1.9	4.0	5.2	5.1	5.2	5.6	6.8	6.4	8.2	9.2	10.8	11.7	11.0	10.0	12.8	10.3	12.2	11.9	11.7	10.6	10.4
Psychology	0.2	0.5	0.6	0.6	0.7	0.7	0.8	0.5	0.4	1.1	1.3	1.2	1.2	0.9	1.7	1.0	1.1	1.0	0.8	0.7	0.9
Social sciences	0.1	0.3	0.3	0.6	0.3	0.1	0.4	0.3	0.2	0.4	0.7	0.5	0.6	0.5	0.9	0.3	0.8	0.4	0.4	0.6	0.5
Engineering	0.2	0.4	0.2	0.3	0.2	0.5	0.6	0.5	1.0	1.2	1.7	1.1	0.9	1.1	3.0	2.1	3.1	2.4	2.2	2.6	2.3
Part-time positions ^c																					
All fields	2.9	3.4	4.0	6.0	6.5	5.7	6.2	7.4	5.9	5.5	8.9	8.2	9.0	13.3	15.7	15.6	17.0	18.5	19.8	20.6	19.3
Physical sciences	0.7	0.7	0.7	1.1	1.1	0.8	0.7	1.2	1.0	0.9	1.2	1.0	1.0	1.1	1.5	1.6	2.0	2.5	2.8	2.6	2.3
Mathematics and statistics	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.5	0.7	0.7	0.6	0.9	1.2	1.0	1.1	1.1	1.2	1.6	1.4
Computer and information sciences	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.3	0.3	0.3	0.3	0.4
Life sciences	0.9	1.0	1.2	1.7	1.7	1.6	1.9	2.3	1.6	1.2	2.9	2.6	2.4	4.0	4.4	4.3	4.6	5.2	5.2	5.7	5.6
Psychology	0.4	0.6	0.8	1.0	1.0	1.0	1.0	1.2	1.2	1.1	1.1	1.3	1.8	3.2	3.6	3.7	3.8	4.2	4.1	3.6	3.2
Social sciences	0.7	0.8	1.0	1.6	2.2	1.8	1.7	2.0	1.3	1.3	2.6	2.2	2.7	3.1	3.7	4.0	4.0	4.2	4.4	5.4	4.6

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Engineering	0.1	0.1	0.2	0.4	0.3	0.3	0.5	0.5	0.5	0.4	0.3	0.4	0.4	0.8	1.1	0.9	1.2	1.1	1.8	1.5	1.7

NA = not available.

^a Full-time junior faculty include assistant professors and instructors from 1973 to 1995; from 1997 to 2017, full-time junior faculty include assistant professors.

^b Other full-time positions include those such as research associates, adjunct positions, lecturers, and administrative positions from 1973 to 1995; from 1997 to 2019, other full-time positions also include instructors.

^c Part-time positions exclude those employed part time because they are students or retired.

Note(s):

Academic employment is limited to U.S. doctorate holders employed at 2- or 4-year colleges or universities, medical schools, and university research institutes. Physical sciences include earth, atmospheric, and ocean sciences; life sciences include biological, agricultural, and environmental life and health sciences. Detail may not add to total because of rounding.

Source(s):

National Center for Science and Engineering Statistics, National Survey of Doctorate Recipients (SDR).

Science and Engineering Indicators