

Appendix table 5-34

(Page 1 of 3)

Estimates of total academic S&E doctoral employment, S&E doctoral researchers, and S&E graduate research assistants, by Carnegie institution type and work activity: 1973–2003

Institution type	All positions		Researchers		Research as primary activity		Research assistants	
	Thousands	Percent distribution	Thousands	Percent distribution	Thousands	Percent distribution	Thousands	Percent distribution
All universities and colleges								
1973	118.0	100.0	82.3	100.0	27.8	100.0	35.9	100.0
1975	134.1	100.0	90.6	100.0	30.8	100.0	40.0	100.0
1977	145.4	100.0	85.0	100.0	37.0	100.0	43.7	100.0
1979	155.3	100.0	90.0	100.0	41.3	100.0	49.0	100.0
1981	167.1	100.0	100.7	100.0	46.5	100.0	52.7	100.0
1983	176.1	100.0	104.7	100.0	48.9	100.0	54.9	100.0
1985	190.2	100.0	115.2	100.0	55.9	100.0	61.0	100.0
1987	195.9	100.0	144.0	100.0	66.5	100.0	70.2	100.0
1989	206.6	100.0	151.6	100.0	72.2	100.0	79.1	100.0
1991	210.6	100.0	156.6	100.0	73.9	100.0	85.2	100.0
1993	213.8	100.0	150.1	100.0	80.2	100.0	90.2	100.0
1995	217.5	100.0	153.5	100.0	83.0	100.0	89.9	100.0
1997	232.5	100.0	164.7	100.0	88.6	100.0	88.0	100.0
1999	240.2	100.0	168.1	100.0	91.4	100.0	91.3	100.0
2001	245.5	100.0	172.5	100.0	93.8	100.0	99.9	100.0
2003	258.3	100.0	178.7	100.0	102.9	100.0	114.3	100.0
Research universities								
1973	65.2	55.3	52.5	63.8	22.9	82.3	32.3	89.9
1975	73.4	54.7	58.0	64.0	25.5	82.8	35.6	89.0
1977	78.2	53.8	55.9	65.8	29.5	79.7	38.8	88.8
1979	83.5	53.8	59.0	65.6	32.1	77.7	42.6	86.9
1981	91.0	54.5	66.6	66.1	37.5	80.6	45.2	85.8
1983	89.9	51.1	66.3	63.3	37.4	76.5	47.1	85.8
1985	102.8	54.0	75.1	65.2	45.4	81.2	52.2	85.6
1987	106.9	54.6	90.0	62.5	53.7	80.8	59.9	85.3
1989	112.5	54.5	94.7	62.5	58.1	80.5	66.5	84.1
1991	111.6	53.0	93.8	59.9	57.9	78.3	70.1	82.3
1993	112.9	52.8	91.1	60.7	60.6	75.6	73.9	81.9
1995	112.8	51.9	92.0	59.9	62.4	75.2	73.1	81.3
1997	113.6	48.9	92.3	56.0	60.6	68.4	70.6	80.2
1999	117.2	48.8	95.5	56.8	64.3	70.4	73.1	80.1
2001	119.6	48.7	97.8	56.7	66.9	71.3	79.7	79.9
2003	127.3	49.3	102.4	57.3	73.4	71.4	91.1	79.7
Doctorate-granting institutions								
1973	14.0	11.9	9.9	12.0	1.7	6.2	3.1	8.6
1975	15.9	11.9	10.6	11.7	1.8	5.8	3.7	9.3
1977	17.2	11.8	9.4	11.1	2.4	6.5	4.0	9.2
1979	17.2	11.1	9.2	10.2	2.6	6.3	4.4	9.0
1981	18.8	11.3	10.5	10.4	2.6	5.6	5.0	9.5
1983	19.5	11.1	10.7	10.2	2.8	5.7	5.3	9.7
1985	21.2	11.1	12.4	10.8	3.5	6.3	5.8	9.5
1987	22.2	11.3	16.2	11.3	4.4	6.6	6.7	9.5
1989	23.5	11.4	16.8	11.1	4.9	6.8	7.9	10.0
1991	24.9	11.8	18.4	11.7	5.9	8.0	9.2	10.8
1993	24.2	11.3	17.4	11.6	6.7	8.4	9.9	11.0
1995	25.0	11.5	17.7	11.5	7.2	8.7	9.9	11.0
1997	25.8	11.1	19.1	11.6	8.2	9.3	10.3	11.7
1999	26.3	10.9	19.3	11.5	8.2	9.0	10.7	11.7
2001	26.3	10.7	18.8	10.9	7.7	8.2	12.2	12.3
2003	26.9	10.4	18.9	10.6	8.6	8.4	14.3	12.5

Appendix table 5-34

(Page 2 of 3)

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Institution type	All positions		Researchers		Research as primary activity		Research assistants	
	Thousands	Percent distribution	Thousands	Percent distribution	Thousands	Percent distribution	Thousands	Percent distribution
Comprehensive institutions								
1973	21.3	18.1	11.0	13.3	0.6	2.3	0.2	0.6
1975	24.8	18.5	12.5	13.8	0.8	2.7	0.4	0.9
1977	26.5	18.2	10.3	12.1	1.3	3.5	0.4	1.0
1979	26.9	17.3	10.3	11.5	1.7	4.1	1.4	2.9
1981	30.5	18.3	12.0	11.9	1.2	2.6	1.7	3.3
1983	31.6	17.9	12.8	12.2	1.4	2.9	1.9	3.5
1985	35.6	18.7	14.4	12.5	1.5	2.7	1.3	2.1
1987	36.0	18.4	20.1	14.0	1.8	2.7	1.6	2.2
1989	38.4	18.6	21.5	14.2	2.4	3.4	2.9	3.7
1991	39.5	18.8	24.0	15.3	2.8	3.9	3.8	4.5
1993	39.5	18.5	21.5	14.3	4.1	5.1	4.0	4.4
1995	41.5	19.1	23.0	15.0	4.3	5.2	4.5	5.0
1997	42.0	18.1	23.7	14.4	4.7	5.3	4.4	5.0
1999	43.6	18.2	23.5	14.0	3.9	4.2	4.8	5.2
2001	44.8	18.2	26.0	15.1	4.3	4.6	4.8	4.9
2003	46.6	18.0	25.9	14.5	4.8	4.7	5.6	4.9
Freestanding medical schools								
1973	3.3	2.8	2.6	3.1	1.5	5.3	0.3	0.8
1975	4.3	3.2	3.2	3.5	2.1	6.8	0.3	0.8
1977	4.9	3.4	3.5	4.1	2.5	6.8	0.3	0.7
1979	5.9	3.8	4.2	4.7	3.1	7.5	0.4	0.8
1981	7.2	4.3	5.3	5.3	4.1	8.8	0.5	0.9
1983	7.0	4.0	5.1	4.9	3.9	8.0	0.5	0.9
1985	8.3	4.4	5.9	5.1	4.5	8.1	0.7	1.1
1987	9.0	4.6	7.2	5.0	5.3	8.0	1.1	1.6
1989	9.7	4.7	7.6	5.0	5.6	7.8	1.6	2.0
1991	9.6	4.6	7.8	5.0	6.0	8.1	1.9	2.2
1993	10.8	5.1	8.2	5.5	6.4	8.0	2.2	2.4
1995	11.2	5.1	8.4	5.5	6.7	8.1	2.4	2.7
1997	9.8	4.2	7.4	4.5	5.9	6.7	2.5	2.8
1999	11.9	5.0	9.2	5.5	7.5	8.2	2.6	2.8
2001	12.6	5.1	9.5	5.5	7.7	8.2	2.9	2.9
2003	12.7	4.9	9.6	5.4	7.8	7.6	3.2	2.8
Liberal arts colleges								
1973	8.8	7.4	4.2	5.1	0.2	0.8	0.0	0.1
1975	10.4	7.8	4.6	5.1	0.2	0.8	0.0	0.1
1977	10.8	7.4	3.6	4.2	0.5	1.3	0.0	0.0
1979	11.3	7.3	3.5	3.9	0.4	1.0	0.1	0.1
1981	12.0	7.2	4.4	4.4	0.4	0.9	0.0	0.1
1983	12.6	7.2	4.1	3.9	0.3	0.6	0.0	0.1
1985	14.0	7.4	5.4	4.7	0.4	0.7	0.0	0.1
1987	14.6	7.5	7.7	5.4	0.6	0.9	0.0	0.0
1989	15.3	7.4	8.6	5.7	0.5	0.6	0.1	0.1
1991	15.8	7.5	9.0	5.7	0.4	0.5	0.0	0.1
1993	16.0	7.5	8.0	5.3	1.0	1.2	0.1	0.1
1995	15.8	7.3	7.9	5.2	0.7	0.9	0.1	0.1
1997	17.3	7.4	9.3	5.6	1.1	1.2	0.0	0.0
1999	18.5	7.7	9.1	5.4	0.9	1.0	0.1	0.1
2001	18.6	7.6	9.5	5.5	0.9	1.0	0.1	0.1
2003	19.1	7.4	9.8	5.5	1.3	1.3	0.1	0.1

Appendix table 5-34

(Page 3 of 3)

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Institution type	All positions		Researchers		Research as primary activity		Research assistants	
	Thousands	Percent distribution	Thousands	Percent distribution	Thousands	Percent distribution	Thousands	Percent distribution
All others								
1973	5.4	4.5	2.2	2.7	0.9	3.1	0.0	0.1
1975	5.3	4.0	1.7	1.8	0.3	1.1	0.0	0.1
1977	7.8	5.4	2.4	2.8	0.9	2.3	0.1	0.1
1979	10.5	6.8	3.8	4.3	1.4	3.3	0.1	0.1
1981	7.6	4.5	2.0	2.0	0.7	1.5	0.2	0.4
1983	15.5	8.8	5.8	5.5	3.0	6.2	0.1	0.2
1985	8.3	4.4	2.0	1.8	0.7	1.3	0.9	1.5
1987	7.2	3.7	2.7	1.9	0.6	1.0	0.9	1.3
1989	7.2	3.5	2.5	1.6	0.7	0.9	0.1	0.1
1991	9.2	4.4	3.6	2.3	0.9	1.2	0.1	0.1
1993	10.4	4.9	4.0	2.6	1.4	1.8	0.1	0.1
1995	11.2	5.1	4.4	2.9	1.8	2.2	0.1	0.1
1997	24.0	10.3	12.9	7.9	8.1	9.2	0.1	0.1
1999	22.7	9.5	11.4	6.8	6.6	7.2	0.1	0.1
2001	23.6	9.6	10.9	6.3	6.3	6.7	0.1	0.1
2003	25.6	9.9	12.1	6.8	6.9	6.7	0.2	0.2

NOTES: Researchers are those reporting basic or applied research, development, or design as either primary or secondary work activity. Graduate research assistants are full-time graduate students with research assistantships as primary mechanism of support. Institutions designated by 1994 Carnegie classification code. For information on these institutional categories, see Carnegie Foundation for the Advancement of Teaching, *A Classification of Institutions of Higher Education*, Princeton University Press (1994), and chapter 2 sidebar, "Carnegie Classification of Academic Institutions." Freestanding schools of engineering and technology included under comprehensive institutions. Employment at institutions without Carnegie code or with unknown administrative control included under "all others." Detail may not add to total because of rounding.

SOURCES: National Science Foundation, Division of Science Resources Statistics, Survey of Doctorate Recipients, special tabulations; and Survey of Graduate Students and Postdoctorates in Science and Engineering, special tabulations.