

Appendix table 5-1. Scientists and engineers in the labor force, by occupation, sex, and highest degree: 1993

Field of occupation	Total		Bachelor's		Master's		Doctorate		Other	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Total science and engineering.....	2,493,000	720,000	1,421,000	358,000	677,000	244,000	364,000	108,000	31,000	10,000
Computer/mathematical sciences.....	667,000	296,000	423,000	204,000	193,000	81,000	46,000	10,000	4,000	-
Computer science.....	592,000	255,000	405,000	192,000	165,000	59,000	19,000	3,000	3,000	-
Mathematical science.....	30,000	18,000	11,000	8,000	11,000	8,000	7,000	3,000	-	-
Computer/mathematics teachers.....	45,000	23,000	7,000	5,000	17,000	14,000	21,000	4,000	-	-
Life sciences.....	212,000	104,000	68,000	37,000	41,000	32,000	87,000	30,000	17,000	4,000
Agricultural/food science.....	34,000	10,000	19,000	6,000	8,000	2,000	7,000	2,000	-	-
Biological sciences.....	110,000	69,000	28,000	25,000	21,000	18,000	55,000	22,000	6,000	3,000
Environmental science.....	21,000	3,000	15,000	2,000	5,000	1,000	1,000	-	-	-
Life science teachers.....	48,000	21,000	6,000	4,000	7,000	9,000	24,000	7,000	11,000	1,000
Physical sciences.....	212,000	55,000	81,000	25,000	56,000	15,000	75,000	14,000	1,000	1,000
Chemistry.....	80,000	28,000	40,000	16,000	16,000	6,000	24,000	6,000	-	1,000
Earth/geology/oceanography.....	57,000	10,000	27,000	4,000	20,000	4,000	10,000	2,000	-	-
Physics and astronomy.....	32,000	3,000	6,000	-	9,000	1,000	17,000	2,000	-	-
Other physical science.....	11,000	4,000	5,000	1,000	4,000	2,000	1,000	1,000	-	-
Physical science teachers.....	32,000	9,000	3,000	3,000	7,000	2,000	22,000	4,000	-	-
Social sciences.....	167,000	161,000	18,000	21,000	62,000	85,000	83,000	51,000	4,000	4,000
Economics.....	23,000	7,000	5,000	3,000	10,000	4,000	7,000	1,000	-	-
Political science.....	5,000	3,000	2,000	2,000	2,000	-	1,000	1,000	-	-
Psychology.....	68,000	100,000	4,000	10,000	27,000	58,000	35,000	29,000	2,000	2,000
Sociology/anthropology.....	6,000	8,000	1,000	3,000	3,000	3,000	2,000	2,000	-	-
Other social science.....	12,000	14,000	4,000	3,000	5,000	8,000	3,000	1,000	-	1,000
Social science teachers.....	54,000	30,000	2,000	2,000	15,000	11,000	35,000	17,000	2,000	-
Engineering.....	1,236,000	105,000	832,000	70,000	325,000	31,000	73,000	4,000	5,000	-
Aero engineering.....	80,000	6,000	49,000	4,000	25,000	2,000	5,000	-	-	-
Chemical engineering.....	64,000	10,000	39,000	5,000	17,000	4,000	7,000	-	-	-
Civil engineering.....	166,000	15,000	117,000	11,000	44,000	4,000	4,000	-	1,000	-
Electrical engineering.....	333,000	17,000	222,000	11,000	94,000	5,000	16,000	1,000	2,000	-
Industrial engineering.....	60,000	6,000	45,000	5,000	15,000	1,000	1,000	-	-	-
Mechanical engineering.....	228,000	12,000	171,000	8,000	49,000	3,000	6,000	1,000	1,000	-
Other engineering.....	278,000	36,000	186,000	24,000	73,000	11,000	18,000	1,000	1,000	-
Engineering teachers.....	27,000	3,000	3,000	1,000	7,000	1,000	16,000	1,000	-	-

KEY: - = fewer than 500 estimated

NOTES: Teachers include only postsecondary teachers. Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 National Survey of College Graduates.

Appendix table 5-2. Scientists and engineers in the labor force, by sex, occupation, highest degree, and race/ethnicity: 1993

Sex and field of occupation	Total					Bachelor's				
	White	Asian	Black	Hispanic	American Indian	White	Asian	Black	Hispanic	American Indian
Total science and engineering.....	2,718,000	286,000	111,000	90,000	6,000	1,536,000	113,000	73,000	52,000	4,000
Computer/mathematical sciences.....	808,000	86,000	41,000	25,000	1,000	538,000	39,000	31,000	18,000	1,000
Computer science.....	713,000	76,000	35,000	21,000	1,000	514,000	38,000	28,000	16,000	1,000
Mathematical science.....	39,000	4,000	3,000	2,000	-	15,000	1,000	2,000	1,000	-
Computer/mathematics teachers...	56,000	6,000	3,000	2,000	-	9,000	1,000	1,000	1,000	-
Life sciences.....	265,000	31,000	10,000	9,000	-	92,000	5,000	4,000	3,000	-
Agricultural/food science.....	40,000	3,000	1,000	1,000	-	24,000	1,000	1,000	-	-
Biological sciences.....	143,000	23,000	6,000	6,000	-	45,000	3,000	3,000	2,000	-
Environmental science.....	23,000	-	-	1,000	-	16,000	-	-	-	-
Life science teachers.....	59,000	5,000	3,000	2,000	-	8,000	1,000	1,000	-	-
Physical sciences.....	226,000	26,000	7,000	7,000	1,000	92,000	6,000	5,000	3,000	1,000
Chemistry.....	87,000	14,000	4,000	2,000	-	46,000	4,000	3,000	1,000	-
Earth/geology/oceanography.....	61,000	3,000	-	2,000	-	29,000	-	-	1,000	-
Physics and astronomy.....	30,000	5,000	-	1,000	-	6,000	-	-	-	-
Other physical science.....	12,000	1,000	1,000	-	-	6,000	-	1,000	-	-
Physical science teachers.....	35,000	3,000	1,000	2,000	-	5,000	1,000	-	1,000	-
Social sciences.....	291,000	10,000	16,000	10,000	1,000	31,000	1,000	4,000	2,000	-
Economics.....	25,000	2,000	1,000	1,000	-	6,000	-	1,000	-	-
Political science.....	6,000	1,000	-	-	-	3,000	-	-	-	-
Psychology.....	152,000	2,000	7,000	5,000	1,000	11,000	-	2,000	1,000	-
Sociology/anthropology.....	12,000	-	1,000	1,000	-	3,000	-	1,000	-	-
Other social science.....	22,000	1,000	2,000	1,000	-	6,000	-	1,000	-	-
Social science teachers.....	73,000	5,000	5,000	2,000	-	3,000	-	-	-	-
Engineering.....	1,128,000	132,000	37,000	39,000	3,000	783,000	62,000	29,000	26,000	2,000
Aero engineering.....	74,000	7,000	2,000	2,000	-	47,000	3,000	1,000	1,000	-
Chemical engineering.....	61,000	9,000	2,000	2,000	-	39,000	4,000	1,000	1,000	-
Civil engineering.....	149,000	22,000	4,000	7,000	-	108,000	12,000	3,000	4,000	-
Electrical engineering.....	285,000	43,000	11,000	11,000	1,000	196,000	21,000	9,000	7,000	-
Industrial engineering.....	56,000	5,000	4,000	2,000	-	42,000	2,000	3,000	2,000	-
Mechanical engineering.....	204,000	23,000	6,000	6,000	1,000	158,000	12,000	5,000	4,000	-
Other engineering.....	276,000	20,000	9,000	8,000	1,000	189,000	8,000	7,000	6,000	1,000
Engineering teachers.....	23,000	4,000	1,000	1,000	-	3,000	-	-	-	-
Men:										
Total science and engineering.....	2,126,000	220,000	73,000	68,000	5,000	1,246,000	82,000	48,000	41,000	3,000
Computer/mathematical sciences..	569,000	56,000	23,000	17,000	1,000	239,000	30,000	18,000	8,000	-
Life sciences.....	182,000	18,000	6,000	6,000	-	83,000	13,000	4,000	4,000	-
Physical sciences.....	182,000	20,000	5,000	5,000	1,000	73,000	3,000	3,000	2,000	-
Social sciences.....	147,000	6,000	8,000	4,000	1,000	15,000	-	1,000	1,000	-
Engineering.....	1,045,000	120,000	31,000	36,000	2,000	727,000	55,000	24,000	24,000	2,000
Women:										
Total science and engineering.....	591,000	66,000	38,000	22,000	2,000	290,000	30,000	25,000	11,000	1,000
Computer/mathematical sciences..	239,000	30,000	18,000	8,000	-	371,000	23,000	17,000	12,000	1,000
Life sciences.....	83,000	13,000	4,000	4,000	-	61,000	2,000	3,000	2,000	-
Physical sciences.....	44,000	7,000	2,000	2,000	-	19,000	3,000	2,000	1,000	-
Social sciences.....	143,000	4,000	8,000	5,000	1,000	17,000	1,000	3,000	1,000	-
Engineering.....	82,000	13,000	6,000	3,000	-	56,000	7,000	5,000	2,000	-

See explanatory information and SOURCE at end of table.

Appendix table 5-3. Scientists and engineers in the labor force, by occupation, highest degree, and disability status: 1993

Field of occupation	Total		Bachelor's		Master's		Doctorate		Other	
	Persons without disabilities	Persons with disabilities								
Total science and engineering.....	3,036,000	175,000	1,676,000	101,000	875,000	45,000	446,000	26,000	38,000	2,000
Computer/mathematical sciences.....	911,000	50,000	594,000	33,000	260,000	14,000	53,000	3,000	4,000	-
Computer science.....	803,000	43,000	566,000	31,000	213,000	11,000	21,000	1,000	3,000	-
Mathematical science.....	45,000	2,000	18,000	1,000	18,000	1,000	9,000	-	-	-
Computer/mathematics teachers.....	63,000	5,000	10,000	2,000	29,000	2,000	23,000	1,000	1,000	-
Life sciences.....	300,000	15,000	99,000	5,000	69,000	4,000	112,000	6,000	20,000	1,000
Agricultural/food science.....	43,000	2,000	25,000	1,000	10,000	1,000	8,000	-	-	-
Biological sciences.....	171,000	8,000	51,000	2,000	38,000	2,000	73,000	3,000	9,000	-
Environmental science.....	22,000	2,000	15,000	2,000	6,000	-	1,000	-	-	-
Life science teachers.....	65,000	4,000	9,000	-	16,000	1,000	29,000	2,000	11,000	1,000
Physical sciences.....	254,000	12,000	101,000	5,000	68,000	3,000	84,000	4,000	1,000	-
Chemistry.....	103,000	5,000	53,000	3,000	20,000	1,000	29,000	1,000	1,000	-
Earth/geology/oceanography.....	64,000	3,000	29,000	1,000	23,000	1,000	11,000	1,000	-	-
Physics and astronomy.....	35,000	1,000	7,000	-	10,000	-	18,000	1,000	-	-
Other physical science.....	14,000	-	6,000	-	6,000	-	2,000	-	-	-
Physical science teachers.....	39,000	2,000	6,000	-	9,000	1,000	24,000	1,000	-	-
Social sciences.....	308,000	20,000	37,000	3,000	139,000	8,000	125,000	9,000	8,000	-
Economics.....	29,000	1,000	7,000	-	13,000	-	8,000	-	-	-
Political science.....	7,000	-	3,000	-	2,000	-	2,000	-	-	-
Psychology.....	157,000	11,000	12,000	2,000	80,000	5,000	61,000	3,000	4,000	-
Sociology/anthropology.....	13,000	1,000	4,000	-	6,000	-	3,000	1,000	-	-
Other social science.....	24,000	1,000	7,000	-	12,000	1,000	4,000	-	1,000	-
Social science teachers.....	79,000	6,000	4,000	-	25,000	1,000	48,000	4,000	2,000	-
Engineering.....	1,262,000	78,000	846,000	56,000	339,000	17,000	72,000	5,000	6,000	-
Aero engineering.....	80,000	5,000	49,000	4,000	26,000	1,000	5,000	-	-	-
Chemical engineering.....	68,000	5,000	42,000	3,000	19,000	1,000	7,000	-	-	-
Civil engineering.....	170,000	11,000	120,000	8,000	45,000	3,000	4,000	-	1,000	-
Electrical engineering.....	331,000	19,000	218,000	14,000	95,000	4,000	15,000	1,000	2,000	-
Industrial engineering.....	64,000	3,000	47,000	2,000	16,000	1,000	1,000	-	-	-
Mechanical engineering.....	227,000	12,000	169,000	10,000	50,000	2,000	7,000	-	1,000	-
Other engineering.....	294,000	20,000	197,000	13,000	79,000	5,000	17,000	2,000	1,000	-
Engineering teachers.....	27,000	2,000	3,000	1,000	8,000	-	16,000	1,000	-	-

KEY: - = fewer than 500 estimated

NOTES: Teachers include only postsecondary teachers. Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 National Survey of College Graduates.

Appendix table 5-4. Scientists and engineers in the labor force, by sex, race/ethnicity, disability status, and year of degree: 1993

Sex, race/ethnicity, and disability status	Before 1970	1970 to 1979	1980 to 1989	1990 or later
Total.....	564,000	915,000	1,445,000	287,000
Sex:				
Men.....	499,000	748,000	1,051,000	194,000
Women.....	64,000	168,000	394,000	93,000
Race/ethnicity:				
White.....	497,000	794,000	1,203,000	224,000
Asian.....	44,000	70,000	131,000	41,000
Black.....	12,000	30,000	59,000	10,000
Hispanic.....	10,000	20,000	49,000	11,000
American Indian.....	1,000	1,000	3,000	1,000
Disability status:				
Persons without disabilities..	511,000	859,000	1,390,000	276,000
Persons with disabilities.....	53,000	56,000	55,000	11,000

NOTE: Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 National Survey of College Graduates.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 1996

Appendix table 5-5. Number of doctoral scientists and engineers in the U.S. labor force, by field of doctorate and sex: 1993

Field of doctorate	All	Men	Women	Percent women
Total science and engineering.....	470,500	375,210	95,290	20.3
Sciences.....	394,070	302,060	92,010	23.3
Computer/mathematical sciences.....	28,260	24,830	3,430	12.1
Computer/information sciences.....	5,190	4,400	790	15.2
Mathematical science.....	23,070	20,430	2,640	11.4
Life sciences.....	126,460	93,900	32,560	25.7
Agricultural/food science.....	15,390	13,430	1,950	12.7
Biological/health science.....	107,180	76,880	30,310	28.3
Environmental science.....	3,880	3,580	300	7.7
Physical sciences.....	100,660	90,500	10,160	10.1
Chemistry, except biochemistry.....	52,710	45,900	6,800	12.9
Geology/oceanography.....	12,890	11,550	1,340	10.4
Physics/astronomy.....	33,930	32,120	1,810	5.3
Other (including earth).....	1,140	930	210	18.4
Social sciences.....	138,690	92,830	45,860	33.1
Economics.....	19,690	17,110	2,580	13.1
Political science.....	14,580	11,930	2,650	18.2
Psychology.....	71,950	42,750	29,200	40.6
Sociology/anthropology.....	20,110	12,650	7,460	37.1
Other.....	12,350	8,380	3,960	32.1
Engineering.....	76,440	73,160	3,280	4.3
Aerospace/aeronautical.....	3,120	3,090	--	--
Chemical.....	11,340	10,820	520	4.6
Civil.....	7,100	6,870	230	3.2
Electrical/computer.....	19,780	19,090	690	3.5
Industrial.....	1,950	1,680	270	13.8
Mechanical.....	9,560	9,300	260	2.7
Other.....	23,580	22,300	1,280	5.4

KEY: -- = fewer than 50 estimated

NOTE: Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-6. Number of 1992 bachelor's science and engineering graduates, by field of degree, sex, employment status, and graduate school status: 1993

Field of degree and sex	Total graduates	Employment status					Graduate school status		
		Full-time employed in field ¹	Full-time employed outside field	Part-time employed	Not employed but seeking work	Not employed and not seeking work	Part-time student	Full-time student	Nonstudent
Total science and engineering.....	330,900	148,400	63,700	27,100	11,200	8,600	28,100	71,900	231,000
Men.....	184,000	88,800	33,800	12,600	6,700	3,600	14,300	38,500	131,200
Women.....	146,900	59,600	29,900	14,600	4,500	5,000	13,800	33,300	99,800
Agricultural sciences.....	4,900	2,700	500	300	200	100	200	1,000	3,700
Men.....	3,100	1,900	300	200	200	-	100	500	2,500
Women.....	1,800	900	200	100	100	100	100	500	1,200
Biological/life sciences.....	47,200	15,100	6,600	5,300	1,000	1,800	3,600	17,400	26,200
Men.....	23,900	7,000	3,800	2,000	500	700	1,400	10,000	12,500
Women.....	23,400	8,000	2,800	3,300	500	1,100	2,200	7,500	13,700
Computer and information sciences.....	25,700	18,600	2,800	1,500	1,200	200	2,200	1,400	22,100
Men.....	16,800	12,200	1,700	900	700	-	1,200	1,200	14,400
Women.....	8,900	6,400	1,100	500	500	200	1,000	200	7,700
Mathematics.....	14,100	6,400	1,800	1,600	400	400	1,200	3,500	9,400
Men.....	6,900	2,800	1,100	800	200	300	400	1,600	4,900
Women.....	7,100	3,600	600	800	100	200	800	1,800	4,500
Physical sciences.....	17,600	7,000	1,800	1,000	300	300	900	7,200	9,500
Men.....	12,100	4,600	1,200	800	200	200	600	5,100	6,400
Women.....	5,500	2,300	600	200	100	100	300	2,100	3,100
Psychology.....	61,000	22,700	13,400	6,600	2,400	2,300	6,400	13,600	41,000
Men.....	17,500	5,900	4,200	1,900	1,300	300	1,400	3,900	12,200
Women.....	43,600	16,800	9,200	4,700	1,100	2,000	5,000	9,800	28,800
Social sciences.....	102,600	38,100	30,900	8,600	3,800	2,800	8,200	18,400	76,000
Men.....	53,700	21,900	16,100	4,100	1,900	1,500	4,600	8,100	41,000
Women.....	48,900	16,100	14,800	4,500	1,900	1,300	3,600	10,300	35,000
Engineering.....	57,800	37,900	5,800	2,300	2,000	600	5,400	9,300	43,100
Men.....	50,100	32,400	5,300	1,900	1,800	600	4,600	8,200	37,300
Women.....	7,600	5,500	500	400	200	-	700	1,100	5,800

¹ Current work is "closely related" or "somewhat related" to degree field.

KEY: - = fewer than 500 estimated

NOTES: Employment status excludes full-time students. Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 National Survey of Recent College Graduates.

Appendix table 5-7. Number of unemployed 1992 bachelor's science and engineering graduates, by reason for not working and sex: 1993

Reason for not working	Total	Men	Women
Total not working.....	19,800	10,300	9,500
Reason for not working:			
Layoff.....	1,600	900	700
Student.....	2,100	1,100	1,000
Family responsibility.....	2,800	100	2,800
Illness or disability.....	800	600	200
No suitable job.....	7,500	4,300	3,200
Did not want/need to work.....	2,600	1,600	1,000
Other reason.....	4,800	2,900	1,900

NOTES: Because respondents may indicate multiple reasons and because of rounding, details may not add to totals. Table does not include full-time graduate students.

SOURCE: National Science Foundation/SRS. 1993 National Survey of Recent College Graduates.

Women, Minorities, and Persons With Disabilities in Science and Engineering: 1996

Appendix table 5-8. Number of employed 1992 bachelor's science and engineering graduates, by occupation and sex: 1993

Field of occupation	Total	Men		Women	
		Number	Percent	Number	Percent
Total employed graduates.....	239,200	135,100	100.0	104,100	100.0
Total scientists and engineers.....	65,700	47,000	34.8	18,800	18.1
Computer and mathematical scientists.....	18,800	12,900	9.5	5,900	5.7
Life and related scientists.....	5,400	2,800	2.1	2,700	2.6
Physical scientists.....	5,600	3,900	2.9	1,700	1.6
Social and related scientists.....	5,800	2,300	1.7	3,400	3.3
Engineers.....	30,100	25,100	18.6	5,100	4.9
Total non-science and -engineering.....	173,400	88,000	65.1	85,400	82.0
Managers and related.....	23,900	15,200	11.3	8,700	8.4
Health and related.....	6,200	1,800	1.3	4,400	4.2
Educators other than S&E postsecondary.....	16,800	7,100	5.3	9,700	9.3
Social services and related.....	14,000	3,300	2.4	10,700	10.3
Technicians, computer programmers.....	18,500	11,700	8.7	6,800	6.5
Sales and marketing.....	28,300	15,600	11.5	12,700	12.2
Other occupations.....	65,700	33,300	24.6	32,400	31.1

NOTES: Does not include full-time graduate students. A more detailed breakdown of the "other occupational category reveals that approximately two-thirds are in service (food service, protective service, or "other" service) or clerical occupations. Approximately equal numbers of men and women are in service occupations, but women predominate in the clerical occupations. Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 National Survey of Recent College Graduates.

Appendix table 5-9. Labor force participation and unemployment rates for doctoral scientists and engineers, by year of doctorate and sex: 1993

Year of doctorate and sex	Total	Labor force	Working for pay or profit	Labor force participation rate	Unemployment rate
Total.....	513,460	470,500	462,870	91.6	1.6
Men.....	410,190	375,210	369,260	91.5	1.6
Women.....	103,270	95,290	93,610	92.3	1.8
Total, 1991–1992 graduates.....	41,910	41,080	40,260	98.0	2.0
Men.....	28,090	27,820	27,240	99.0	2.1
Women.....	13,820	13,260	13,020	95.9	1.8
Total, 1985–1990 graduates.....	106,220	104,120	102,690	98.0	1.4
Men.....	72,930	72,340	71,450	99.2	1.2
Women.....	33,290	31,780	31,240	95.5	1.7
Total, 1980–1984 graduates.....	80,310	78,440	77,240	97.7	1.5
Men.....	58,880	58,330	57,440	99.1	1.5
Women.....	21,430	20,110	19,810	93.8	1.5
Total, 1970–1979 graduates.....	158,870	153,560	151,230	96.7	1.5
Men.....	133,310	129,760	127,860	97.3	1.5
Women.....	25,570	23,800	23,380	93.1	1.8
Total, 1960–1969 graduates.....	88,560	76,200	74,890	86.0	1.7
Men.....	81,760	70,840	69,620	86.6	1.7
Women.....	6,800	5,370	5,260	79.0	2.0
Total, pre-1960 graduates.....	37,580	17,100	16,560	45.5	3.2
Men.....	35,220	16,140	15,660	45.8	3.0
Women.....	2,370	960	900	40.5	6.3

NOTE: Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-10. Doctoral scientists and engineers, by occupation, sex, and employment status: 1993

Field of occupation and sex	Total	Full-time employed in field ¹		Full-time employed outside field		Part-time employed		Not employed		Not in labor force	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total science and engineering:											
Men.....	410,210	326,460	79.6	26,080	6.4	16,730	4.1	5,960	1.5	34,980	8.5
Women.....	103,270	75,860	73.5	4,940	4.8	12,810	12.4	1,680	1.6	7,980	7.7
Physical sciences:											
Men.....	100,830	75,250	74.6	9,410	9.3	4,040	4.0	1,800	1.8	10,330	10.2
Women.....	11,340	7,890	69.6	970	8.6	980	8.6	320	2.8	1,180	10.4
Computer/math:											
Men.....	26,070	22,320	85.6	1,500	5.8	740	2.8	280	1.1	1,230	4.7
Women.....	3,650	2,850	78.1	170	4.7	360	9.9	40	1.1	230	6.3
Agriculture:											
Men.....	15,370	11,660	75.9	690	4.5	820	5.3	270	1.8	1,930	12.6
Women.....	2,080	1,650	79.3	120	5.8	160	7.7	20	1.0	130	6.3
Biosciences:											
Men.....	84,370	68,510	81.2	4,750	5.6	2,590	3.1	1,030	1.2	7,490	8.9
Women.....	33,290	25,290	76.0	1,640	4.9	2,850	8.6	520	1.6	2,990	9.0
Environmental:											
Men.....	4,020	3,200	79.6	260	6.5	120	3.0	--	--	440	10.9
Women.....	300	250	83.3	--	--	--	--	30	10.0	20	6.7
Psychology:											
Men.....	46,060	37,590	81.6	1,570	3.4	2,970	6.4	620	1.3	3,310	7.2
Women.....	31,030	21,870	70.5	670	2.2	6,360	20.5	310	1.0	1,820	5.9
Social sciences:											
Men.....	55,490	43,890	79.1	2,940	5.3	2,530	4.6	730	1.3	5,400	9.7
Women.....	18,080	13,210	73.1	1,290	7.1	1,810	10.0	340	1.9	1,430	7.9
Engineering:											
Men.....	78,090	64,030	82.0	4,960	6.4	2,930	3.8	1,230	1.6	4,940	6.3
Women.....	3,470	2,850	82.1	80	2.3	270	7.8	80	2.3	190	5.5

¹ Current work is "closely related" or "somewhat related" to degree.

KEY: -- = fewer than 50 estimated

NOTE: Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-11. Doctoral scientists and engineers who are employed part-time, by year of doctorate, reason for part-time status, and sex: 1993

Year of doctorate and reason for part-time status	All	Men	Women
Total.....	29,540	16,730	12,810
Retired or semi-retired.....	10,500	9,440	1,060
Student.....	770	430	350
Family responsibilities.....	7,190	860	6,330
Chronic illness/disability.....	570	270	300
Suitable job not available.....	7,920	4,700	3,220
Didn't need or want to work.....	8,710	4,020	4,700
Other.....	2,220	1,400	820
Total, 1991–1992 graduates.....	2,300	930	1,370
Retired or semi-retired.....	---	---	---
Student.....	160	90	70
Family responsibilities.....	730	110	630
Chronic illness/disability.....	60	---	60
Suitable job not available.....	1,270	740	530
Didn't need or want to work.....	420	---	390
Other.....	230	100	140
Total, 1985–1990 graduates.....	5,530	1,150	4,380
Retired or semi-retired.....	150	90	60
Student.....	300	120	180
Family responsibilities.....	2,750	120	2,630
Chronic illness/disability.....	---	---	---
Suitable job not available.....	1,560	600	960
Didn't need or want to work.....	1,690	200	1,480
Other.....	430	200	230
Total, 1980–1984 graduates.....	3,780	1,210	2,570
Retired or semi-retired.....	140	---	110
Student.....	120	90	20
Family responsibilities.....	1,620	160	1,460
Chronic illness/disability.....	100	---	100
Suitable job not available.....	1,270	730	540
Didn't need or want to work.....	1,270	250	1,020
Other.....	300	170	130
Total, Pre-1970 graduates.....	17,930	13,430	4,480
Retired or semi-retired.....	10,160	9,300	860
Student.....	160	90	70
Family responsibilities.....	2,090	480	1,610
Chronic illness/disability.....	380	270	100
Suitable job not available.....	3,820	2,630	1,190
Didn't need or want to work.....	5,340	3,530	1,810
Other.....	1,250	930	320

KEY: --- = Less than 50 weighted cases

NOTE: Because respondents may indicate multiple reasons and because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-12. Employment status of doctoral scientists and engineers, by sex and dependent children: 1993

Employment status	Men			Women		
	Children under 18	No children under 18	Total	Children under 18	No children under 18	Total
Total labor force.....	170,600	203,900	374,500	37,900	57,200	95,100
Percent.....	45.6	54.4	100.0	39.9	60.1	100.0
Unemployed.....	1,700	3,600	5,300	800	700	1,500
Percent.....	1.0	1.8	1.4	2.1	1.2	1.6
Total employed.....	168,900	200,300	369,300	37,100	56,500	93,600
Percent.....	45.8	54.2	100.0	39.6	60.4	100.0
Full-time.....	165,700	18,680	352,500	29,500	51,300	80,800
Percent.....	98.1	93.3	95.5	79.5	90.8	86.3
Part-time.....	3,300	13,500	16,700	7,600	5,200	12,800
Percent.....	1.9	6.7	4.5	20.5	9.2	13.7

NOTES: Because of rounding, details may not add to totals.
 "Unemployed" includes only those who are not currently employed and who are seeking employment.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-13. Labor force participation and unemployment rates for doctoral scientists and engineers, by field of doctorate and sex: 1993

Field of doctorate and sex	Total	Labor force	Working for pay or profit	Labor force participation rate	Unemployment rate
Total science and engineering.....	513,460	470,500	462,870	91.6	1.6
Men.....	410,190	375,210	369,260	91.5	1.6
Women.....	103,270	95,290	93,610	92.3	1.8
Sciences.....	431,890	394,070	387,740	91.2	1.6
Men.....	332,090	302,060	297,330	91.0	1.6
Women.....	99,800	92,010	90,410	92.2	1.7
Computer and mathematical sciences.....	29,720	28,260	27,940	95.1	1.1
Men.....	26,070	24,830	24,560	95.2	1.1
Women.....	3,660	3,430	3,390	93.7	1.5
Life and related sciences.....	139,460	126,460	124,590	90.7	1.5
Men.....	103,750	93,900	92,600	90.5	1.4
Women.....	35,700	32,560	31,990	91.2	1.8
Physical and related sciences.....	112,170	100,660	98,540	89.7	2.1
Men.....	100,830	90,500	88,700	89.8	2.0
Women.....	11,340	10,160	9,840	89.6	3.2
Social and related sciences.....	150,540	138,690	136,680	92.1	1.4
Men.....	101,450	92,830	91,480	91.5	1.5
Women.....	49,090	45,860	45,200	93.4	1.4
Engineering.....	81,570	76,440	75,120	93.7	1.7
Men.....	78,100	73,160	71,930	93.7	1.7
Women.....	3,470	3,280	3,200	94.5	2.4

NOTE: Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-14. Bachelor's scientists and engineers in the labor force, by employment sector, sex, race/ethnicity, and disability status:

Employment sector	Total	Sex		Race/ethnicity					Disability status	
		Men	Women	White	Asian	Black	Hispanic	American Indian	Persons without disabilities	Persons with disabilities
Total.....	1,723,000	1,374,000	349,000	1,493,000	107,000	70,000	50,000	4,000	1,627,000	96,000
2-year college.....	17,000	10,000	6,000	14,000	1,000	1,000	1,000	-	15,000	2,000
4-year college.....	67,000	41,000	26,000	53,000	7,000	4,000	3,000	-	63,000	4,000
Other education.....	14,000	8,000	6,000	11,000	1,000	1,000	-	-	13,000	1,000
Government.....	276,000	226,000	50,000	227,000	19,000	19,000	10,000	1,000	260,000	16,000
Private, not-for-profit.....	43,000	26,000	18,000	38,000	2,000	1,000	1,000	-	40,000	3,000
Private, for-profit.....	1,239,000	1,010,000	229,000	1,088,000	74,000	42,000	33,000	2,000	1,174,000	65,000
Self-employed.....	53,000	44,000	9,000	48,000	2,000	2,000	1,000	-	48,000	5,000
Other.....	14,000	11,000	4,000	13,000	1,000	-	-	-	13,000	1,000
Percent distribution										
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2-year college.....	1.0	0.7	1.7	0.9	0.9	1.4	2.0	-	0.9	2.1
4-year college.....	3.9	3.0	7.4	3.5	6.5	5.7	6.0	-	3.9	4.2
Other education.....	0.8	0.6	1.7	0.7	0.9	1.4	-	-	0.8	1.0
Government.....	16.0	16.4	14.3	15.2	17.8	27.1	20.0	25.0	16.0	16.7
Private, not-for-profit.....	2.5	1.9	5.2	2.5	1.9	1.4	2.0	-	2.5	3.1
Private, for-profit.....	71.9	73.5	65.6	72.9	69.2	60.0	66.0	50.0	72.2	67.7
Self-employed.....	3.1	3.2	2.6	3.2	1.9	2.9	2.0	-	3.0	5.2
Other.....	0.8	0.8	6.0	0.9	0.9	-	-	-	0.8	1.0

KEY: - = fewer than 500 estimated/percent distribution not available

NOTE: Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 National Survey of College Graduates.

Appendix table 5-15. Master's scientists and engineers in the labor force, by employment sector, sex, race/ethnicity, and disability status:

Employment sector	Total	Sex		Race/ethnicity					Disability status	
		Men	Women	White	Asian	Black	Hispanic	American Indian	Persons without disabilities	Persons with disabilities
Total.....	889,000	653,000	236,000	732,000	105,000	26,000	25,000	2,000	847,000	43,000
2-year college.....	39,000	23,000	16,000	35,000	1,000	2,000	1,000	-	36,000	3,000
4-year college.....	112,000	71,000	41,000	86,000	19,000	3,000	4,000	-	106,000	6,000
Other education.....	31,000	13,000	18,000	27,000	1,000	2,000	2,000	-	29,000	2,000
Government.....	126,000	98,000	28,000	103,000	12,000	7,000	4,000	-	117,000	9,000
Private, not-for-profit.....	36,000	17,000	19,000	32,000	2,000	1,000	1,000	-	34,000	2,000
Private, for-profit.....	502,000	409,000	93,000	410,000	68,000	10,000	13,000	1,000	482,000	19,000
Self-employed.....	38,000	18,000	20,000	35,000	1,000	-	1,000	-	36,000	2,000
Other.....	6,000	5,000	1,000	5,000	1,000	-	-	-	6,000	-
Percent distribution										
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2-year college.....	4.4	3.5	6.8	4.8	1.0	7.7	4.0	-	4.3	7.0
4-year college.....	12.6	10.9	17.4	11.7	18.1	11.5	16.0	-	12.5	14.0
Other education.....	3.5	2.0	7.6	3.7	1.0	7.7	8.0	-	3.4	4.7
Government.....	14.2	15.0	11.9	14.1	11.4	26.9	16.0	-	13.8	20.9
Private, not-for-profit.....	4.0	2.6	8.1	4.4	1.9	3.8	4.0	-	4.0	4.7
Private, for-profit.....	56.5	62.6	39.4	56.0	64.8	38.5	52.0	50.0	56.9	44.2
Self-employed.....	4.3	2.8	8.5	4.8	1.0	-	4.0	-	4.3	4.7
Other.....	0.7	0.8	0.4	0.7	1.0	-	-	-	0.7	-

KEY: - = fewer than 500 estimated/percent distribution not available

NOTE: Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 National Survey of College Graduates.

Appendix table 5-16. Doctoral scientists and engineers in the labor force, by employment sector, sex, race/ethnicity, and disability

Employment sector	Total	Sex		Race/ethnicity					Disability status	
		Men	Women	White	Black	Hispanic	Asian	American Indian	Persons without disabilities	Persons with disabilities
Total.....	462,870	369,260	93,610	390,430	9,620	9,420	51,670	1,730	439,690	23,180
Universities & 4-year colleges.....	210,070	165,550	44,520	178,840	5,200	4,880	20,270	890	199,370	10,700
Other educational institutions.....	11,720	7,730	3,990	10,210	420	370	650	70	11,030	690
Private, for-profit.....	141,190	121,940	19,250	112,680	1,950	2,300	23,860	400	134,870	6,320
Self-employed.....	28,270	18,620	9,660	26,280	350	430	1,090	120	26,160	2,120
Private, not-for-profit.....	23,610	16,900	6,720	20,530	490	450	2,090	--	22,570	1,040
Federal government.....	33,800	27,970	5,830	29,890	690	640	2,470	110	32,310	1,490
State and local government.....	12,810	9,360	3,450	11,020	480	250	960	90	12,020	790
Other sector.....	1,390	1,190	200	970	50	110	260	--	1,360	--
Percent distribution										
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Universities & 4-year colleges.....	45.4	44.8	47.6	45.8	54.1	51.8	39.2	51.4	45.3	46.2
Other educational institutions.....	2.5	2.1	4.3	2.6	4.4	3.9	1.3	4.0	2.5	3.0
Private, for-profit.....	30.5	33.0	20.6	28.9	20.3	24.4	46.2	23.1	30.7	27.3
Self-employed.....	6.1	5.0	10.3	6.7	3.6	4.6	2.1	6.9	5.9	9.1
Private, not-for-profit.....	5.1	4.6	7.2	5.3	5.1	4.8	4.0	--	5.1	4.5
Federal government.....	7.3	7.6	6.2	7.7	7.2	6.8	4.8	6.4	7.3	6.4
State and local government.....	2.8	2.5	3.7	2.8	5.0	2.7	1.9	5.2	2.7	3.4
Other sector.....	0.3	0.3	0.2	0.2	0.5	1.2	0.5	--	0.3	--

KEY: -- = fewer than 50 estimated/percent distribution not available

NOTE: Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-17. Employed doctoral scientists and engineers, by field of doctorate, sex, and employment sector: 1993

Field of doctorate and sex	Total employed	Business/industry		Self-employed		University/4-yr college		Other educational institutions		Government		Other	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total science and engineering....	462,870	141,190	30.5	28,270	6.1	210,070	45.4	11,720	2.5	46,600	10.1	25,010	5.4
Men.....	369,260	121,940	33.0	18,620	5.0	165,550	44.8	7,730	2.1	37,330	10.1	18,090	4.9
Women.....	93,610	19,250	20.6	9,660	10.3	44,520	47.6	3,990	4.3	9,270	9.9	6,920	7.4
Physical sciences.....	98,530	43,670	44.3	2,660	2.7	36,410	37.0	2,190	2.2	9,490	9.6	4,110	4.2
Men.....	88,700	39,390	44.4	2,380	2.7	32,730	36.9	1,830	2.1	8,720	9.8	3,660	4.1
Women.....	9,840	4,280	43.5	290	2.9	3,690	37.5	360	3.7	770	7.8	450	4.6
Computer science/math.....	27,940	7,370	26.4	610	2.2	17,320	62.0	640	2.3	1,220	4.4	780	2.8
Men.....	24,560	6,550	26.7	540	2.2	15,310	62.3	440	1.8	1,050	4.3	660	2.7
Women.....	3,390	820	24.2	80	2.4	2,010	59.3	200	5.9	160	4.7	120	3.5
Biosciences.....	105,630	24,040	22.8	3,180	3.0	58,360	55.2	2,400	2.3	11,660	11.0	5,990	5.7
Men.....	75,850	18,590	24.5	2,270	3.0	40,900	53.9	1,500	2.0	8,700	11.5	3,890	5.1
Women.....	29,780	5,450	18.3	910	3.1	17,460	58.6	900	3.0	2,960	9.9	2,100	7.1
Agriculture.....	15,100	4,660	30.9	620	4.1	7,110	47.1	320	2.1	1,900	12.6	480	3.2
Men.....	13,160	4,090	31.1	590	4.5	6,160	46.8	280	2.1	1,630	12.4	420	3.2
Women.....	1,930	570	29.5	--	--	960	49.7	50	2.6	280	14.5	50	2.6
Environmental science.....	3,850	860	22.3	80	2.1	1,430	37.1	60	1.6	1,370	35.6	60	1.6
Men.....	3,580	820	22.9	80	2.2	1,360	38.0	--	--	1,230	34.4	60	1.7
Women.....	270	--	--	--	--	70	25.9	--	--	140	51.9	--	--
Psychology.....	71,020	13,390	18.9	15,660	22.1	23,350	32.9	3,870	5.4	8,180	11.5	6,570	9.3
Men.....	42,130	8,510	20.2	8,200	19.5	14,040	33.3	2,000	4.7	5,430	12.9	3,940	9.4
Women.....	28,890	4,880	16.9	7,460	25.8	9,310	32.2	1,860	6.4	2,740	9.5	2,630	9.1
Social sciences.....	65,660	7,400	11.3	2,950	4.5	41,350	63.0	1,840	2.8	7,400	11.3	4,720	7.2
Men.....	49,350	5,750	11.7	2,140	4.3	31,470	63.8	1,260	2.6	5,500	11.1	3,230	6.5
Women.....	16,320	1,650	10.1	820	5.0	9,880	60.5	580	3.6	1,890	11.6	1,490	9.1
Engineering.....	75,120	39,820	53.0	2,510	3.3	24,720	32.9	390	0.5	5,390	7.2	2,290	3.0
Men.....	71,930	38,240	53.2	2,430	3.4	23,590	32.8	380	0.5	5,070	7.0	2,210	3.1
Women.....	3,200	1,570	49.1	80	2.5	1,130	35.3	--	--	320	10.0	80	2.5

KEY: -- = fewer than 50 estimated/percent not available

NOTE: Because of rounding and "no reports," details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-18. All faculty, by sex, race/ethnicity, and field: 1993

Sex and race/ethnicity	Total	Science and engineering	Agriculture	Bioscience	Physical sciences	Mathematics	Computer science	Psychology	Social sciences	Engineering	Non-S&E programs
Total.....	899,800	294,400	12,900	48,000	38,200	47,500	25,100	31,200	56,600	35,100	605,300
White, non-Hispanic.....	783,600	255,100	12,200	42,600	33,600	40,200	21,400	28,400	48,800	27,900	528,500
Asian.....	43,100	19,400	-	2,600	3,000	3,500	2,100	500	2,300	5,200	23,700
Black, non-Hispanic.....	43,400	11,700	-	1,800	900	2,200	700	1,500	3,500	800	31,700
Hispanic.....	25,100	6,800	-	900	800	1,300	500	700	1,600	900	18,300
American Indian.....	4,600	1,400	-	-	-	-	-	-	-	-	3,200
Men.....	565,200	224,500	11,600	34,900	32,900	32,500	20,000	17,700	41,800	32,900	340,700
White, non-Hispanic.....	492,700	194,100	11,000	31,100	28,900	26,800	17,000	16,200	36,700	26,400	298,600
Asian.....	30,800	16,400	-	1,700	2,600	3,100	1,900	-	1,800	4,700	14,400
Black, non-Hispanic.....	23,100	7,600	-	1,300	800	1,500	-	600	2,000	700	15,500
Hispanic.....	15,700	5,300	-	600	700	900	500	-	1,100	900	10,400
American Indian.....	2,900	1,100	-	-	-	-	-	-	-	-	1,700
Women.....	334,500	69,900	1,300	13,100	5,300	14,900	5,000	13,400	14,800	2,200	264,600
White, non-Hispanic.....	290,900	61,000	1,200	11,500	4,700	13,400	4,400	12,200	12,100	1,500	229,800
Asian.....	12,300	3,000	-	900	-	-	-	-	500	-	9,300
Black, non-Hispanic.....	20,300	4,100	-	500	-	600	-	800	1,500	-	16,200
Hispanic.....	9,300	1,500	-	-	-	-	-	-	500	-	7,800
American Indian.....	1,700	-	-	-	-	-	-	-	-	-	1,400
Percent distribution											
White, non-Hispanic.....	87.1	86.7	94.6	88.8	88.0	84.6	85.3	91.0	86.2	79.5	87.3
Asian.....	4.8	6.6	-	5.4	7.9	7.4	8.4	1.6	4.1	14.8	3.9
Black, non-Hispanic.....	4.8	4.0	-	3.8	2.4	4.6	2.8	4.8	6.2	2.3	5.2
Hispanic.....	2.8	2.3	-	1.9	2.1	2.7	2.0	2.2	2.8	2.6	3.0
American Indian.....	0.5	0.5	-	-	-	-	-	-	-	-	0.5
Men.....	62.8	76.3	89.9	72.7	86.1	68.4	79.7	56.7	73.9	93.7	56.3
Women.....	37.2	23.7	10.1	27.3	13.9	31.4	19.9	42.9	26.1	6.3	43.7

KEY: - = fewer than 500 estimated/percent distribution not available

NOTES: Because of rounding, details may not add to totals. Data are preliminary.

SOURCE: U.S. Department of Education/NCES. 1993 National Study of Postsecondary Faculty.

Appendix table 5-19. Science and engineering faculty, by institutional type, sex, and race/ethnicity: 1993

Institutional type	Total	Men	Women	White	Asian	Black	Hispanic	American Indian
Total.....	294,400	224,500	69,900	255,100	19,400	11,700	6,800	1,400
Research.....	77,300	65,100	12,200	67,500	7,000	1,600	1,200	-
Doctorate.....	39,800	31,400	8,400	34,900	2,900	1,000	800	-
Comprehensive.....	65,300	49,800	15,500	54,400	4,700	4,000	1,700	400
Liberal arts.....	19,100	13,100	5,900	16,800	600	1,300	-	-
Public, 2-year.....	80,800	55,300	25,500	70,700	3,200	3,600	2,600	800
Other.....	12,200	9,800	2,400	10,800	1,000	-	-	-
Percent distribution								
Research.....	26.3	29.0	17.5	26.5	36.1	13.7	17.6	-
Doctorate.....	13.5	14.0	12.0	13.7	14.9	8.5	11.8	-
Comprehensive.....	22.2	22.2	22.2	21.3	24.2	34.2	25.0	28.6
Liberal arts.....	6.5	5.8	8.4	6.6	3.1	11.1	-	-
Public, 2-year.....	27.4	24.6	36.5	27.7	16.5	30.8	38.2	57.1
Other.....	4.1	4.4	3.4	4.2	5.2	-	-	-

KEY: - = fewer than 500 estimated/percent distribution not available

NOTES: Because of rounding, details may not add to totals. Data are preliminary.

SOURCE: U.S. Department of Education/NCES. 1993 National Study of Postsecondary Faculty.

Appendix table 5-20. Science and engineering faculty, by employment status, contract length, sex, and race/ethnicity: 1993

Employment status and contract length	Total	Men	Women	White	Asian	Black	Hispanic	American Indian
Total.....	294,400	224,500	69,900	255,100	19,400	11,700	6,800	1,400
Full-time.....	211,000	169,200	41,800	181,600	15,600	8,100	4,800	800
Part-time.....	83,400	55,300	28,100	73,500	3,800	3,600	2,000	600
Tenured.....	133,500	115,400	18,100	117,800	9,100	4,200	2,200	-
One academic term.....	62,300	41,200	21,000	54,500	2,900	2,800	1,700	-
One academic year.....	52,300	36,000	16,400	43,300	4,100	2,600	1,800	500
Two or more years.....	19,900	14,300	5,500	16,700	1,900	700	500	-
Unspecified duration.....	21,000	14,200	6,800	18,200	1,000	1,000	600	-
Other.....	5,500	3,400	2,100	4,600	-	-	-	-
Percent distribution								
Full-time.....	71.7	75.4	59.8	71.2	80.4	69.2	70.6	57.1
Part-time.....	28.3	24.6	40.2	28.8	19.6	30.8	29.4	42.9
Tenured.....	45.3	51.4	25.9	46.2	46.9	35.9	32.4	-
One academic term.....	21.2	18.4	30.0	21.4	14.9	23.9	25.0	-
One academic year.....	17.8	16.0	23.5	17.0	21.1	22.2	26.5	35.7
Two or more years.....	6.8	6.4	7.9	6.5	9.8	6.0	7.4	-
Unspecified duration.....	7.1	6.3	9.7	7.1	5.2	8.5	8.8	-
Other.....	1.9	1.5	3.0	1.8	-	-	-	-

KEY: - = fewer than 500 estimated/percent distribution not available

NOTES: Because of rounding, details may not add to totals. Data are preliminary.

SOURCE: U.S. Department of Education/NCES. 1993 National Study of Postsecondary Faculty.

Appendix table 5-21. All faculty, by institutional type, employment status, and sex: 1993

[Percent distribution]

Institutional type	Total	Total		Men		Women	
		Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Total faculty.....	899,800	66.2	33.8	70.7	29.3	58.5	41.5
Research.....	204,700	83.9	16.1	87.1	12.9	75.7	24.3
Doctorate.....	122,300	76.1	23.9	78.6	21.4	70.5	29.5
Comprehensive.....	204,000	69.8	30.2	74.5	25.5	62.2	37.8
Liberal arts.....	63,500	67.8	32.2	73.3	26.7	60.5	39.5
Public, 2-year.....	264,600	44.8	55.2	45.3	54.7	44.3	55.7
Other.....	40,600	65.0	35.0	69.9	30.1	54.8	45.2
Total faculty with a Ph.D.....	460,800	83.3	16.7	84.4	15.6	80.1	19.9
Research.....	163,100	89.7	10.3	91.0	9.0	85.4	14.6
Doctorate.....	93,000	82.3	17.7	82.7	17.3	81.0	19.0
Comprehensive.....	117,000	85.5	14.5	86.7	13.3	82.6	17.4
Liberal arts.....	30,900	83.9	16.1	85.9	14.1	80.1	19.9
Public, 2-year.....	38,600	56.6	43.4	54.9	45.1	60.1	39.9
Other.....	18,200	72.5	27.5	75.0	25.0	62.1	37.9

NOTE: Data are preliminary.

SOURCE: U.S. Department of Education/NCES. 1993 National Study of Postsecondary Faculty.

Appendix table 5-22. Science and engineering faculty, by highest degree, sex, and race/ethnicity: 1993

Highest degree	Total	Men	Women	White	Asian	Black	Hispanic	American Indian
Total.....	294,400	224,500	69,900	251,100	19,400	11,700	6,800	1,400
Ph.D.....	173,300	143,200	30,200	148,800	14,500	5,900	3,700	-
1st Professional.....	12,200	9,700	2,500	10,100	1,100	500	500	-
Master's.....	83,700	54,400	29,300	74,200	3,100	4,400	1,600	500
Bachelor's.....	20,400	13,700	6,800	18,000	500	800	900	-
Less than bachelor's.....	3,000	2,300	700	2,800	-	-	-	-
Not reported.....	1,700	1,200	500	1,300	-	-	-	-
	Percent distribution							
Ph.D.....	58.9	63.8	43.2	59.3	74.7	50.4	54.4	-
1st Professional.....	4.1	4.3	3.6	4.0	5.7	4.3	7.4	-
Master's.....	28.4	24.2	41.9	29.5	16.0	37.6	23.5	35.7
Bachelor's.....	6.9	6.1	9.7	7.2	2.6	6.8	13.2	-
Less than bachelor's.....	1.0	1.0	1.0	1.1	-	-	-	-
Not reported.....	0.6	0.5	0.7	0.5	-	-	-	-

KEY: - = fewer than 500 estimated/percent distribution not available

NOTES: Because of rounding, details may not add to totals. Data are preliminary.

SOURCE: U.S. Department of Education/NCES. 1993 National Study of Postsecondary Faculty.

Appendix table 5-23. Full-time science and engineering faculty, by sex, type of school, and actual and preferred time in activities: 1993

[In percentages]

Sex and type of school	Total	Actual time allocation				Preferred time allocation			
		Teaching	Research	Administration	Other activity	Teaching	Research	Administration	Other activity
Total.....	211,000	49.9	25.3	12.8	11.8	44.9	32.1	7.8	14.9
Research.....	70,200	33.3	42.2	13.2	11.1	30.9	48.1	7.4	13.3
Doctorate.....	32,400	41.3	34.8	11.9	11.8	37.1	41.6	6.8	14.2
Comprehensive.....	48,500	59.5	15.6	12.7	11.9	50.9	25.0	8.2	15.5
Liberal arts.....	14,700	62.0	13.5	13.9	10.1	55.1	22.3	8.0	14.3
Public, 2-year.....	36,500	70.0	4.2	12.1	13.7	65.1	8.8	8.4	17.7
Other.....	8,700	58.0	15.0	15.1	11.9	52.0	21.3	10.2	16.5
Men.....	169,200	48.6	26.3	13.1	11.7	44.1	33.1	8.0	14.6
Research.....	60,300	33.5	41.8	13.5	11.0	31.3	47.8	7.6	13.1
Doctorate.....	26,700	40.6	35.1	12.4	11.6	37.0	41.8	7.1	13.8
Comprehensive.....	38,700	58.7	16.1	13.0	12.0	50.5	25.2	8.5	15.5
Liberal arts.....	10,400	60.6	14.0	14.4	10.4	55.3	21.8	8.2	14.7
Public, 2-year.....	25,800	69.9	4.3	12.1	13.7	65.1	9.1	8.5	17.4
Other.....	7,300	57.5	16.4	15.1	11.1	51.3	22.6	10.4	15.7
Women.....	41,800	55.0	20.9	11.5	12.3	48.4	28.1	7.0	16.1
Research.....	9,900	31.7	44.7	11.0	11.9	28.5	50.2	5.8	14.9
Doctorate.....	5,800	44.6	33.1	9.5	12.7	37.8	40.8	5.5	15.9
Comprehensive.....	9,700	62.8	13.7	11.4	11.7	52.3	24.2	7.0	15.8
Liberal arts.....	4,300	65.4	12.3	12.5	9.3	54.6	23.4	7.6	13.3
Public, 2-year.....	10,700	70.1	3.9	12.1	13.8	65.3	8.0	8.3	18.4
Other.....	1,400	60.7	7.8	15.2	16.4	56.2	14.2	9.1	20.6

NOTES: Because of rounding, details may not add to totals. Data are preliminary.

SOURCE: U.S. Department of Education/NCES. 1993 National Study of Postsecondary Faculty.

Appendix table 5-24. Full-time science and engineering faculty, by sex, race/ethnicity, funded research, and PI or Co-PI for grants: 1993

Sex and race/ethnicity	Total	Engaged in funded research			Respondent PI or Co-PI for any grants		
		Yes	No	Percent yes	Yes	No	Percent yes
Total.....	211,000	86,000	125,000	40.8	76,100	134,900	36.1
Men.....	169,200	72,900	96,200	43.1	65,500	103,700	38.7
Women.....	41,800	13,100	28,700	31.3	10,700	31,200	25.6
White, non-Hispanic.....	181,600	74,300	107,300	40.9	65,800	115,800	36.2
Asian.....	15,600	7,300	8,300	46.8	6,600	9,000	42.3
Black, non-Hispanic.....	8,100	2,200	5,900	27.2	1,800	6,300	22.2
Hispanic.....	4,800	2,000	2,900	41.7	1,700	3,100	35.4
American Indian.....	800	-	600	-	-	600	-

KEY: - = fewer than 500 estimated
 PI = principal investigator

NOTES: Because of rounding, details may not add to totals. Data are preliminary.

SOURCE: U.S. Department of Education/NCES. 1993 National Study of Postsecondary Faculty.

Appendix table 5-25. Full-time science and engineering faculty, by sex, age, institution type, and mean number of presentations and publications in the past 2 years: 1993

Sex, age, and institution type	Refereed articles	Nonrefereed articles	Creative works	Book reviews and chapters	Textbooks, books, monographs, and reports	Presentations	Patents and software
Men.....	2.82	0.86	0.38	0.82	1.58	3.61	0.19
Younger than 35.....	2.82	0.67	0.36	0.56	1.11	3.75	0.23
35 to 44 years old.....	3.54	0.73	0.39	0.93	1.70	4.27	0.19
45 to 54 years old.....	2.50	0.91	0.38	0.79	1.93	3.35	0.24
55 to 64 years old.....	2.34	1.04	0.33	0.77	1.27	3.60	0.13
65 to 70 years old.....	3.78	0.54	0.58	1.04	0.94	1.80	0.18
71 years old or older.....	1.88	0.67	0.02	0.67	0.37	1.36	0.01
Research.....	4.93	1.39	0.41	1.25	2.14	5.43	0.23
Doctorate.....	3.86	0.95	0.44	0.98	2.04	4.68	0.24
Comprehensive.....	1.34	0.59	0.40	0.53	1.22	2.48	0.17
Liberal arts.....	1.24	0.51	0.45	0.75	0.77	2.49	0.15
Public, 2-year.....	0.15	0.12	0.16	0.15	0.66	0.87	0.10
Other.....	1.17	0.61	0.40	0.58	1.65	2.02	0.21
Women.....	1.65	0.51	0.31	0.68	0.94	3.26	0.12
Younger than 35.....	1.00	0.29	0.12	0.48	0.91	2.57	0.04
35 to 44 years old.....	2.29	0.73	0.45	0.74	1.28	3.84	0.11
45 to 54 years old.....	1.32	0.43	0.24	0.64	0.69	3.13	0.17
55 to 64 years old.....	1.39	0.31	0.30	0.84	0.43	2.96	0.05
65 to 70 years old.....	0.92	0.24	0.00	0.66	1.16	1.09	0.31
71 years old or older.....	0.45	0.00	0.00	0.00	1.62	2.22	0.34
Research.....	3.84	1.19	0.58	1.16	1.44	5.74	0.27
Doctorate.....	2.51	0.62	0.35	0.93	1.61	4.61	0.04
Comprehensive.....	1.02	0.28	0.16	0.62	0.63	2.48	0.13
Liberal arts.....	0.79	0.15	0.12	0.57	0.65	2.28	0.08
Public, 2-year.....	0.22	0.20	0.24	0.23	0.52	1.40	0.04
Other.....	0.48	0.27	0.30	0.34	1.00	2.97	0.07

NOTE: Data are preliminary.

SOURCE: U.S. Department of Education/NCES. 1993 National Study of Postsecondary Faculty.

Appendix table 5-26. Full-time science and engineering faculty, by sex, race/ethnicity, and whether or not department chair: 1993

Sex and race/ethnicity	Total	Chair	Not chair
Total.....	211,000	27,700	183,300
Men.....	169,200	23,100	146,100
Women.....	41,800	4,600	37,300
White, non-Hispanic.....	181,600	24,000	157,700
Asian.....	15,600	1,800	13,800
Black, non-Hispanic.....	8,100	1,100	7,000
Hispanic.....	4,800	700	4,200
American Indian.....	800	-	700
	Percent distribution		
Men.....	100.0	13.7	86.3
Women.....	100.0	10.9	89.1
White, non-Hispanic.....	100.0	13.2	86.8
Asian.....	100.0	11.5	88.5
Black, non-Hispanic.....	100.0	13.6	86.4
Hispanic.....	100.0	14.6	87.5
American Indian.....	100.0	-	87.5

KEY: - = fewer than 500 estimated/percent distribution not available

NOTES: Because of rounding, details may not add to totals. Data are preliminary.

SOURCE: U.S. Department of Education/NCES. 1993 National Study of Postsecondary Faculty.

Appendix table 5-27. Full-time ranked science and engineering faculty, by rank, years since doctorate, sex, and race/ethnicity: 1993

Rank and years since doctorate	Total	Men	Women	White	Asian	Black	Hispanic	American Indian
All ranks.....	150,400	126,100	24,300	129,300	12,600	4,900	3,100	500
Less than 7 years.....	25,600	18,400	7,200	20,200	3,300	1,100	800	-
7 to 12 years.....	27,900	21,500	6,400	23,700	1,900	1,400	900	-
13 years or more.....	96,900	86,300	10,700	85,400	7,500	2,400	1,500	-
Full professor.....	71,500	64,900	6,600	63,200	5,200	1,600	1,400	-
Less than 7 years.....	800	500	-	600	-	-	-	-
7 to 12 years.....	2,900	2,500	500	2,500	-	-	-	-
13 years or more.....	67,800	61,900	5,900	60,100	5,000	1,400	1,200	-
Associate professor.....	42,100	34,400	7,700	36,200	3,500	1,800	500	100
Less than 7 years.....	2,900	2,400	500	2,300	-	-	-	-
7 to 12 years.....	14,500	11,500	3,000	12,500	1,000	800	-	-
13 years or more.....	24,600	20,500	4,200	21,400	2,000	900	-	-
Assistant professor.....	36,900	26,800	10,000	29,900	4,000	1,500	1,200	-
Less than 7 years.....	22,000	15,500	6,500	17,300	2,800	900	800	-
7 to 12 years.....	10,400	7,500	2,900	8,800	800	-	-	-
13 years or more.....	4,500	3,900	600	3,800	-	-	-	-
	Percent distribution							
All ranks.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 7 years.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-
7 to 12 years.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-
13 years or more.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-
Full professor.....	47.5	51.5	27.2	48.9	41.3	32.7	45.2	-
Less than 7 years.....	3.1	2.7	-	3.0	-	-	-	-
7 to 12 years.....	10.4	11.6	7.8	10.5	-	-	-	-
13 years or more.....	70.0	71.7	55.1	70.4	66.7	58.3	80.0	-
Associate professor.....	28.0	27.3	31.7	28.0	27.8	36.7	16.1	20.0
Less than 7 years.....	11.3	13.0	6.9	11.4	-	-	-	-
7 to 12 years.....	52.0	53.5	46.9	52.7	52.6	57.1	-	-
13 years or more.....	25.4	23.8	39.3	25.1	26.7	37.5	-	-
Assistant professor.....	24.5	21.3	41.2	23.1	31.7	30.6	38.7	-
Less than 7 years.....	85.9	84.2	90.3	85.6	84.8	81.8	100.0	-
7 to 12 years.....	37.3	34.9	45.3	37.1	42.1	-	-	-
13 years or more.....	4.6	4.5	5.6	4.4	-	-	-	-

KEY: - = fewer than 500 estimated/percent distribution not available

NOTES: Because of rounding, details may not add to totals. Data are preliminary.

SOURCE: U.S. Department of Education/NCES. 1993 National Study of Postsecondary Faculty.

Appendix table 5-28. Full-time ranked science and engineering faculty, by tenure status, sex, and race/ethnicity:

Tenure status	Total	Men	Women	White	Asian	Black	Hispanic	American Indian
Total.....	211,000	169,100	41,800	181,800	15,200	7,400	4,200	-
Tenured.....	130,900	113,100	17,800	115,800	8,700	4,000	2,200	-
Tenure track.....	43,100	30,600	12,500	34,500	4,100	2,200	2,000	-
Not tenure track.....	17,500	11,900	5,600	14,000	1,800	1,200	-	-
No tenure for faculty status.....	7,300	5,100	2,200	6,300	600	-	-	-
No tenure at institution.....	12,200	8,400	3,700	11,200	-	-	-	-
Percent distribution								
Tenured.....	62.0	66.9	42.6	63.7	57.2	54.1	52.4	-
Tenure track.....	20.4	18.1	29.9	19.0	27.0	29.7	47.6	-
Not tenure track.....	8.3	7.0	13.4	7.7	11.8	16.2	-	-
No tenure for faculty status.....	3.5	3.0	5.3	3.5	3.9	-	-	-
No tenure at institution.....	5.8	5.0	8.9	6.2	-	-	-	-

KEY: - = fewer than 500 estimated/percent distribution not available

NOTES: Because of rounding, details may not add to totals. Data are preliminary.

SOURCE: U.S. Department of Education/NCES. 1993 National Study of Postsecondary Faculty.

Appendix 5-29. Primary work activity of employed bachelor's and master's scientists and engineers, by age and sex: 1993

Primary work activity and age	Bachelor's			Master's		
	Total	Men	Women	Total	Men	Women
Total, all activities, all ages.....	1,556,000	1,260,000	297,000	673,000	521,000	152,000
Younger than 30 years old.....	189,000	139,000	52,000	51,000	36,000	14,000
30 to 39 years old.....	674,000	518,000	153,000	258,000	191,000	69,000
40 to 49 years old.....	422,000	351,000	67,000	225,000	181,000	46,000
50 to 59 years old.....	188,000	169,000	19,000	101,000	86,000	17,000
60 years old or older.....	86,000	80,000	5,000	37,000	29,000	5,000
Accounting, finance, total.....	36,000	28,000	8,000	12,000	9,000	2,000
Younger than 30 years old.....	2,000	2,000	1,000	1,000	-	-
30 to 39 years old.....	14,000	10,000	3,000	4,000	3,000	1,000
40 to 49 years old.....	11,000	8,000	3,000	4,000	4,000	-
50 to 59 years old.....	6,000	5,000	1,000	2,000	2,000	1,000
60 years old or older.....	2,000	2,000	-	-	-	-
Applied research, total.....	125,000	97,000	28,000	90,000	69,000	21,000
Younger than 30 years old.....	17,000	12,000	5,000	8,000	6,000	2,000
30 to 39 years old.....	61,000	45,000	16,000	39,000	28,000	11,000
40 to 49 years old.....	27,000	22,000	5,000	26,000	21,000	5,000
50 to 59 years old.....	14,000	12,000	2,000	12,000	11,000	2,000
60 years old or older.....	7,000	6,000	1,000	5,000	4,000	-
Basic research, total.....	23,000	18,000	5,000	9,000	7,000	2,000
Younger than 30 years old.....	4,000	3,000	1,000	1,000	1,000	-
30 to 39 years old.....	11,000	8,000	3,000	3,000	2,000	1,000
40 to 49 years old.....	5,000	4,000	1,000	2,000	2,000	-
50 to 59 years old.....	2,000	2,000	-	1,000	1,000	-
60 years old or older.....	1,000	1,000	-	1,000	1,000	-
Computer applications, total.....	451,000	332,000	119,000	160,000	122,000	38,000
Younger than 30 years old.....	65,000	45,000	20,000	15,000	11,000	5,000
30 to 39 years old.....	216,000	154,000	62,000	66,000	49,000	17,000
40 to 49 years old.....	121,000	93,000	28,000	54,000	41,000	13,000
50 to 59 years old.....	39,000	32,000	7,000	19,000	17,000	3,000
60 years old or older.....	10,000	8,000	2,000	6,000	5,000	1,000
Development, total.....	121,000	105,000	16,000	55,000	48,000	7,000
Younger than 30 years old.....	17,000	13,000	4,000	5,000	4,000	1,000
30 to 39 years old.....	51,000	44,000	7,000	24,000	20,000	4,000
40 to 49 years old.....	29,000	26,000	3,000	16,000	14,000	1,000
50 to 59 years old.....	15,000	14,000	1,000	8,000	7,000	1,000
60 years old or older.....	8,000	8,000	-	3,000	2,000	-
Design of equipment, total.....	238,000	217,000	21,000	86,000	78,000	9,000
Younger than 30 years old.....	29,000	25,000	4,000	7,000	6,000	1,000
30 to 39 years old.....	101,000	88,000	12,000	35,000	30,000	5,000
40 to 49 years old.....	60,000	56,000	3,000	26,000	25,000	2,000
50 to 59 years old.....	31,000	30,000	1,000	13,000	12,000	1,000
60 years old or older.....	18,000	17,000	1,000	6,000	5,000	-
Employee relations, total.....	16,000	10,000	7,000	9,000	6,000	3,000
Younger than 30 years old.....	2,000	1,000	1,000	2,000	1,000	1,000
30 to 39 years old.....	6,000	3,000	3,000	2,000	1,000	1,000
40 to 49 years old.....	6,000	4,000	2,000	3,000	2,000	1,000
50 to 59 years old.....	2,000	1,000	1,000	1,000	1,000	-
60 years old or older.....	-	-	-	-	-	-

See explanatory information and SOURCE at end of table.

Appendix table 5-30. Doctoral scientists and engineers employed in business or industry, by primary work activity, year of doctorate, and sex: 1993

Primary work activity and year of doctorate	All	Men		Women	
		Number	Percent	Number	Percent
Total, all work activities.....	141,190	121,940	100.0	19,250	100.0
1991–1992 graduates.....	11,150	8,490	100.0	2,660	100.0
1985–1990 graduates.....	30,920	24,370	100.0	6,550	100.0
1980–1984 graduates.....	25,590	21,020	100.0	4,570	100.0
1970–1979 graduates.....	48,120	43,510	100.0	4,610	100.0
Pre-1970 graduates.....	25,410	24,550	100.0	860	100.0
Research and development.....	71,850	63,420	52.0	8,430	43.8
1991–1992 graduates.....	7,420	6,010	70.8	1,410	53.0
1985–1990 graduates.....	19,580	16,120	66.1	3,450	52.7
1980–1984 graduates.....	13,170	11,270	53.6	1,890	41.4
1970–1979 graduates.....	20,650	19,230	44.2	1,420	30.8
Pre-1970 graduates.....	11,030	10,790	44.0	240	27.9
Teaching.....	810	530	0.4	270	1.4
1991–1992 graduates.....	70	--	--	--	--
1985–1990 graduates.....	140	60	0.2	90	1.4
1980–1984 graduates.....	110	80	0.4	--	--
1970–1979 graduates.....	250	180	0.4	60	1.3
Pre-1970 graduates.....	240	180	0.7	60	7.0
Management, sales, & administration.....	34,910	30,910	25.3	4,000	20.8
1991–1992 graduates.....	710	520	6.1	200	7.5
1985–1990 graduates.....	3,880	2,910	11.9	970	14.8
1980–1984 graduates.....	6,060	4,920	23.4	1,140	24.9
1970–1979 graduates.....	15,620	14,120	32.5	1,500	32.5
Pre-1970 graduates.....	8,630	8,450	34.4	180	20.9
Computer applications.....	12,560	11,440	9.4	1,120	5.8
1991–1992 graduates.....	1,350	1,160	13.7	190	7.1
1985–1990 graduates.....	3,070	2,810	11.5	260	4.0
1980–1984 graduates.....	2,640	2,280	10.8	370	8.1
1970–1979 graduates.....	4,080	3,820	8.8	260	5.6
Pre-1970 graduates.....	1,420	1,380	5.6	--	--
Other activities.....	21,070	15,630	12.8	5,440	28.3
1991–1992 graduates.....	1,600	780	9.2	830	31.2
1985–1990 graduates.....	4,240	2,470	10.1	1,780	27.2
1980–1984 graduates.....	3,610	2,470	11.8	1,140	24.9
1970–1979 graduates.....	7,520	6,150	14.1	1,370	29.7
Pre-1970 graduates.....	4,090	3,760	15.3	340	39.5

KEY: -- = fewer than 50 estimated/percent not available

NOTES: The business or industry classification excludes individuals who reported self-employment.
Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-31. Median annual salaries of full-time employed bachelor's and master's scientists and engineers, by occupation, sex, and age: 1993

[In dollars]

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Degree, sex, and field of occupation	Total	Younger than 30	30–39	40–49	50 and older
Bachelor's					
Men:					
Mathematical/computer science.....	48,000	38,400	46,500	52,000	52,400
Life sciences.....	36,000	24,600	35,000	36,500	45,000
Physical sciences.....	41,800	32,000	38,000	48,000	52,800
Social sciences.....	35,800	-	31,500	43,000	-
Engineering.....	50,000	39,000	48,000	52,500	60,000
Women:					
Mathematical/computer science.....	40,000	35,400	40,800	42,400	44,000
Life sciences.....	33,000	24,000	33,500	42,000	42,000
Physical sciences.....	38,000	33,400	38,000	42,600	38,100
Social sciences.....	29,100	22,000	29,100	34,200	-
Engineering.....	43,900	40,000	45,000	45,000	48,000
Master's					
Men:					
Mathematical/computer science.....	45,000	52,000	58,000	57,000	53,000
Life sciences.....	23,400	36,000	42,000	50,400	40,200
Physical sciences.....	30,000	44,300	56,000	55,000	48,000
Social sciences.....	-	32,000	43,200	45,000	40,000
Engineering.....	43,000	52,000	60,600	64,800	57,000
Women:					
Mathematical/computer science.....	42,000	46,000	48,000	46,800	46,000
Life sciences.....	23,500	33,500	39,900	40,900	34,700
Physical sciences.....	-	46,000	41,100	-	41,100
Social sciences.....	30,000	35,500	38,000	41,900	37,000
Engineering.....	42,000	50,000	52,000	50,500	49,400

KEY: - = fewer than 500 estimated

NOTE: Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 National Survey of College Graduates.

Appendix table 5-32: Variable means and percent of the doctoral science and engineering salary gaps, as explained for women compared with men, and persons with disabilities compared with persons without

Characteristics	Variable means					Percent of salary gap explained		
	Sex		Disability			Women compared with men	Disability at degree compared with no disability	Disability after degree compared with no disability
	Men	Women	None	At degree	After degree			
Salary.....	\$63,600	\$50,200	\$60,800	\$59,200	\$66,500			
Dependent variable:								
Log of salary.....	11.1	10.8	11.0	11.0	11.1			
Independent variables.....						89.6%	24.2%	120.5%
Years since receipt of Ph.D.1.....						24.3%	-27.7%	85.2%
Years since receipt of Ph.D.....	15.7	10.4	14.5	15.3	21.8	39.5%	-47.4%	142.5%
Years since receipt of Ph.D. squared.....	333.5	165.0	296.8	320.8	536.0	-15.3%	19.7%	-57.2%
Field of degree.....						11.2%	13.2%	-18.3%
Main effects.....						19.9%	19.2%	-5.7%
Computer science.....	1.3%	1.0%	1.3%	1.5%	0.1%	0.4%	-3.3%	-3.9%
Mathematical sciences.....	5.8%	3.1%	5.2%	5.6%	6.7%	1.0%	-1.2%	1.5%
Agricultural sciences.....	3.5%	2.4%	3.3%	4.0%	2.3%	-0.1%	0.5%	0.2%
{Biological sciences}**.....	21.2%	35.9%	23.9%	23.1%	22.3%	--	--	--
Environmental sciences.....	1.0%	0.4%	0.9%	0.9%	1.4%	0.1%	0.0%	0.1%
Chemistry.....	12.7%	8.1%	11.9%	9.8%	12.9%	1.6%	6.5%	0.9%
Geosciences.....	3.1%	1.5%	2.8%	2.3%	2.3%	0.5%	1.3%	-0.4%
Physics/astronomy.....	8.9%	2.1%	7.7%	6.4%	8.3%	3.8%	6.4%	0.9%
Other physical sciences.....	0.3%	0.3%	0.3%	0.7%	0.3%	0.0%	-0.8%	0.0%
Economics.....	4.6%	3.1%	4.3%	5.4%	5.0%	1.1%	-7.5%	1.4%
Political science.....	3.1%	3.2%	3.0%	5.7%	5.4%	0.0%	-2.4%	0.6%
Psychology.....	8.9%	22.4%	11.3%	11.8%	12.5%	-1.1%	-0.4%	0.3%
Sociology/anthropology.....	3.4%	8.3%	4.3%	4.3%	4.8%	1.1%	0.1%	-0.3%
Other social sciences.....	2.3%	4.3%	2.6%	5.2%	1.3%	-0.5%	-5.3%	-0.8%
Aeroengineering.....	0.8%	0.0%	0.7%	0.3%	0.3%	0.5%	2.3%	-0.6%
Chemical engineering.....	3.0%	0.6%	2.6%	3.4%	0.9%	2.2%	-6.3%	-4.2%
Electrical engineering.....	6.7%	0.9%	5.7%	3.9%	5.1%	4.8%	13.4%	-1.2%
Industrial engineering.....	0.4%	0.4%	0.4%	0.1%	0.4%	0.1%	2.8%	-0.1%
Mechanical engineering.....	2.5%	0.3%	2.1%	0.9%	2.6%	1.6%	8.0%	0.9%
Other engineering.....	6.5%	1.7%	5.7%	4.8%	5.1%	3.0%	5.3%	-1.0%
Interaction with years since degree.....						-8.7%	-6.1%	-12.6%
Computer science.....	0.08	0.05	0.08	0.08	0.01	-0.1%	0.1%	0.6%
Mathematical sciences.....	1.00	0.40	0.88	0.95	1.49	-0.5%	0.5%	-1.3%
Agricultural sciences.....	0.52	0.20	0.47	0.53	0.41	-0.4%	0.7%	0.2%
{Biological sciences}**.....	3.22	3.73	3.26	3.59	4.99	--	--	--
Environmental sciences.....	0.15	0.02	0.12	0.08	0.25	-0.1%	-0.5%	-0.4%
Chemistry.....	2.23	0.85	1.96	1.66	3.17	-1.9%	-3.7%	-4.5%
Geosciences.....	0.49	0.12	0.42	0.43	0.50	-0.2%	0.0%	-0.1%
Physics/astronomy.....	1.55	0.23	1.29	1.22	2.04	-1.5%	-0.8%	-2.3%
Other physical sciences.....	0.02	0.01	0.02	0.03	0.04	0.0%	0.2%	-0.1%
Economics.....	0.72	0.37	0.65	0.58	0.94	0.0%	-0.1%	-0.1%
Political science.....	0.51	0.39	0.46	1.04	1.04	0.0%	-1.8%	0.5%
Psychology.....	1.37	2.36	1.52	1.66	2.53	1.1%	1.3%	-2.9%
Sociology/anthropology.....	0.55	0.96	0.61	0.68	0.99	-0.1%	-0.2%	0.4%
Other social sciences.....	0.34	0.43	0.35	0.75	0.21	0.2%	6.1%	0.6%

See explanatory information and SOURCE at end of table.

Appendix table 5-32: Variable means and percent of the doctoral science and engineering salary gaps, as explained for women compared with men, and persons with disabilities compared with persons without

Characteristics	Variable means					Percent of salary gap explained		
	Sex		Disability			Women compared with men	Disability at degree compared with no disability	Disability after degree compared with no disability
	Men	Women	None	At degree	After degree			
Aeroengineering.....	0.13	0.01	0.11	0.02	0.05	-0.2%	-1.4%	0.3%
Chemical engineering.....	0.47	0.03	0.40	0.51	0.19	-0.9%	2.1%	1.1%
Electrical engineering.....	0.99	0.06	0.82	0.55	1.21	-2.2%	-5.7%	-2.4%
Industrial engineering.....	0.06	0.02	0.06	0.01	0.08	-0.1%	-0.5%	-0.1%
Mechanical engineering.....	0.35	0.03	0.28	0.14	0.59	-0.5%	-2.0%	-1.2%
Other engineering.....	0.93	0.12	0.78	0.73	1.06	-1.2%	-0.6%	-1.1%
Other work-related characteristics.....						18.7%	-35.6%	53.6%
Age when doctorate received.....						5.0%	30.6%	0.4%
Age at Ph.D.....	31.0	32.9	31.3	32.6	31.2	26.9%	160.7%	4.4%
Age at Ph.D. squared.....	976.8	1119.2	1000.7	1094.4	990.9	-21.9%	-130.1%	-4.0%
Whether attended professional society meeting or conference within the past year*.....	81.2%	84.9%	82.1%	81.8%	74.3%	-0.7%	0.5%	-3.7%
Number of professional societies or associations belonged to.....	2.6	2.8	2.7	3.0	2.8	-0.8%	-18.9%	1.6%
Highest degree since doctorate*.....						0.2%	0.1%	0.2%
MBA.....	0.9%	0.6%	0.9%	0.6%	1.6%	0.1%	0.5%	0.4%
Master's.....	1.0%	1.3%	1.1%	1.6%	0.7%	0.1%	1.4%	0.3%
Other doctorate.....	0.3%	0.2%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%
JD,LLB,LLM.....	0.4%	0.5%	0.4%	0.9%	0.2%	-0.1%	-2.8%	-0.3%
MD.....	1.2%	1.1%	1.2%	0.9%	1.0%	0.1%	1.8%	-0.3%
Other professional degree.....	0.2%	0.4%	0.2%	0.0%	0.1%	0.1%	-0.6%	0.1%
Other degree.....	0.1%	0.2%	0.1%	0.0%	0.1%	0.0%	-0.3%	0.0%
Bachelor's degree.....	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%	0.0%
{No degree}**.....	95.9%	95.7%	95.9%	95.8%	96.0%	--	--	--
Taken courses since last degree?*.....	22.7%	24.6%	22.8%	24.4%	30.7%	0.2%	1.2%	-1.8%
Previously retired?*.....	2.7%	1.3%	2.4%	3.8%	4.2%	-0.5%	4.6%	-1.7%
Full-time experience.....						13.3%	-47.6%	50.3%
Years full-time experience.....	17.8	12.9	16.7	18.6	23.9	23.3%	-80.4%	90.3%
Years full-time experience squared.....	417.0	235.5	376.1	441.8	649.6	-10.0%	32.8%	-39.9%
Have employment-related license?*.....	15.2%	24.9%	16.9%	19.2%	14.8%	-1.1%	-2.3%	-0.6%
Same occupation?*.....	73.7%	60.9%	71.0%	72.0%	86.0%	2.2%	-1.5%	6.7%
Employed in 1988?*.....	95.2%	90.7%	94.2%	95.4%	98.1%	1.0%	-2.3%	2.2%
Employer characteristics.....						9.9%	69.6%	-25.2%
Type of employer***.....						11.6%	53.7%	-21.1%
2-year college.....	1.2%	1.8%	1.3%	1.2%	1.5%	0.7%	-1.4%	-0.5%
Research institution I.....	20.8%	23.6%	21.4%	23.1%	18.3%	2.0%	11.6%	5.9%
Research institution II.....	4.5%	3.7%	4.4%	3.2%	5.5%	-0.7%	-9.7%	-2.7%
Doctorate granting I.....	2.6%	2.8%	2.5%	4.3%	4.5%	0.2%	15.9%	-5.2%
Doctorate granting II.....	3.1%	3.1%	3.1%	3.4%	3.5%	0.0%	3.0%	-1.1%
Comprehensive I.....	8.1%	9.5%	8.3%	10.9%	11.0%	1.5%	25.5%	-7.8%

See explanatory information and SOURCE at end of table.

Appendix table 5-32: Variable means and percent of the doctoral science and engineering salary gaps, as explained for women compared with men, and persons with disabilities compared with persons without disabilities: 1993

Characteristics	Variable means					Percent of salary gap explained		
	Sex		Disability			Women compared with men	Disability at degree compared with no disability	Disability after degree compared with no disability
	Men	Women	None	At degree	After degree			
Comprehensive II.....	0.6%	0.9%	0.6%	0.5%	1.5%	0.4%	-1.7%	-3.2%
Liberal arts I.....	1.8%	3.0%	2.0%	2.5%	2.2%	1.2%	4.8%	-0.6%
Liberal arts II.....	1.6%	2.0%	1.7%	1.4%	1.4%	0.6%	-3.8%	1.4%
Medical school (Carnegie classification).....	2.2%	4.4%	2.6%	2.3%	2.5%	1.5%	-2.0%	0.2%
Medical school (self-classification).....	7.0%	12.7%	8.1%	6.3%	5.4%	-0.5%	1.4%	-0.6%
Health related schools that are not medical schools.....	0.3%	0.9%	0.4%	0.5%	0.1%	0.0%	0.0%	0.0%
Univ.-affiliated research institute.....	4.7%	3.9%	4.5%	5.9%	6.2%	0.0%	0.5%	-0.2%
Other educational institution.....	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%
Elementary/mid/secondary school.....	0.8%	2.4%	1.0%	1.8%	0.8%	1.5%	6.3%	0.5%
Private, for-profit company.....	33.1%	21.0%	31.2%	26.5%	26.3%	--	--	--
Private, not-for-profit organization.....	4.9%	7.4%	5.3%	5.2%	5.4%	1.7%	-1.1%	0.0%
Local government.....	0.8%	1.5%	0.9%	0.8%	1.1%	1.0%	-1.7%	-0.6%
State government.....	1.9%	2.5%	2.0%	2.1%	4.0%	0.8%	2.4%	-7.7%
U.S. military service.....	0.6%	0.4%	0.5%	0.3%	0.1%	-0.1%	-1.2%	0.6%
U.S. government (civilian employee).....	7.8%	7.1%	7.7%	8.5%	6.8%	-0.3%	3.2%	1.0%
Other employer type.....	0.4%	0.3%	0.3%	0.2%	0.2%	0.1%	1.6%	-0.5%
Region of employment.....						-1.7%	15.9%	-4.1%
New England.....	7.5%	9.0%	7.8%	8.2%	7.4%	0.2%	0.5%	0.1%
(Middle Atlantic)**.....	17.0%	19.2%	17.5%	16.7%	14.7%	--	--	--
East North Central.....	14.4%	13.6%	14.3%	12.1%	14.3%	-0.2%	-4.9%	0.0%
West North Central.....	6.2%	5.8%	6.1%	7.4%	5.5%	-0.1%	4.0%	0.6%
South Atlantic.....	19.0%	20.0%	19.2%	17.4%	19.9%	0.2%	-3.8%	-0.5%
East South Central.....	4.4%	3.4%	4.2%	4.5%	4.4%	-0.6%	1.4%	-0.3%
West South Central.....	8.5%	6.9%	8.1%	10.7%	11.2%	-0.6%	8.0%	-2.8%
Mountain.....	6.5%	5.0%	6.1%	7.8%	7.9%	-0.5%	5.5%	-1.7%
Pacific.....	16.1%	16.7%	16.3%	14.2%	14.4%	0.0%	0.0%	0.0%
Other U.S.....	0.2%	0.4%	0.2%	1.0%	0.3%	0.1%	7.2%	-0.1%
Non-U.S.....	0.1%	0.1%	0.1%	0.0%	0.0%	-0.1%	-2.1%	0.5%
Type of work.....						14.9%	-0.2%	20.6%
Occupation.....						2.6%	-9.6%	11.3%
Computer scientist.....	2.9%	1.4%	2.6%	3.0%	2.9%	-0.1%	0.3%	-0.1%
Mathematical scientist.....	1.2%	0.9%	1.2%	0.4%	0.7%	0.0%	0.4%	-0.1%
Postsecondary teacher—math/computers.....	4.5%	2.6%	4.2%	4.7%	4.5%	0.1%	-0.3%	0.0%
Agricultural scientist.....	1.8%	1.2%	1.7%	2.0%	1.6%	-0.3%	1.4%	0.1%
Biological scientist.....	8.9%	15.6%	10.3%	8.1%	5.2%	3.3%	-9.9%	6.6%
Environmental scientist.....	0.2%	0.1%	0.2%	0.2%	0.2%	0.0%	0.0%	0.0%
Postsecondary teacher—life sciences.....	6.9%	7.6%	6.9%	8.7%	8.2%	0.1%	2.6%	-0.6%
Chemist.....	5.4%	3.5%	5.1%	3.5%	4.1%	-0.8%	-5.8%	1.1%
Geoscientist.....	1.9%	0.9%	1.8%	1.2%	1.3%	-0.4%	-1.9%	0.5%
Physicist/astronomer.....	3.4%	0.9%	3.0%	1.6%	2.3%	-0.8%	-3.9%	0.6%
Other physical scientist.....	0.4%	0.1%	0.3%	0.2%	0.6%	-0.1%	-0.4%	-0.2%
Postsecondary teacher—physical sciences.....	5.3%	2.6%	4.8%	5.2%	5.9%	-0.6%	0.8%	-0.6%

See explanatory information and SOURCE at end of table.

Appendix table 5-32: Variable means and percent of the doctoral science and engineering salary gaps, as explained for women compared with men, and persons with disabilities compared with persons without

Characteristics	Variable means					Percent of salary gap explained		
	Sex		Disability			Women compared with men	Disability at degree compared with no disability	Disability after degree compared with no disability
	Men	Women	None	At degree	After degree			
Economist.....	1.1%	1.2%	1.2%	0.9%	0.3%	0.0%	-0.5%	0.5%
Political scientist.....	0.1%	0.2%	0.2%	0.2%	0.2%	0.0%	0.0%	0.0%
Psychologist.....	3.1%	8.8%	4.1%	4.3%	2.1%	1.7%	0.4%	1.6%
Sociologist/anthropologist.....	0.4%	1.1%	0.5%	0.3%	0.2%	0.0%	-0.1%	0.0%
Other social scientist.....	0.3%	0.7%	0.4%	0.6%	0.3%	0.2%	1.1%	0.1%
Postsecondary teacher—social sciences.....	8.4%	13.7%	9.2%	12.1%	14.0%	0.2%	1.0%	-0.5%
Aeronautical, aerospace engineer.....	0.8%	0.1%	0.7%	0.3%	1.0%	-0.2%	-1.0%	-0.2%
Chemical engineer.....	1.5%	0.4%	1.3%	1.2%	0.4%	-0.4%	-0.3%	1.0%
Civil engineer.....	0.6%	0.1%	0.5%	0.8%	0.4%	-0.3%	2.0%	0.1%
Electrical/electronic engineer.....	2.5%	0.5%	2.2%	1.5%	2.3%	-0.2%	-0.6%	0.0%
Industrial engineer.....	0.1%	0.0%	0.1%	0.3%	0.0%	0.0%	0.6%	0.1%
Mechanical engineer.....	1.4%	0.1%	1.1%	1.1%	0.5%	-0.4%	-0.1%	0.6%
Other engineer.....	3.4%	1.6%	3.0%	4.2%	1.9%	-0.6%	3.8%	1.1%
Engineering teacher.....	4.4%	1.0%	3.8%	2.2%	5.5%	0.9%	3.6%	1.2%
Non-S&E ("low status").....	6.7%	9.8%	7.2%	6.5%	8.9%	1.4%	-2.9%	-1.9%
{Non-S&E ("high status")}**.....	22.4%	22.9%	22.4%	24.6%	24.7%	--	--	--
How closely job is related to degree.....						-0.5%	4.5%	-1.8%
{Closely related}**.....	67.4%	71.0%	68.3%	64.4%	63.0%	--	--	--
Somewhat related.....	26.0%	23.5%	25.4%	28.2%	29.2%	-0.2%	2.1%	-0.8%
Not related.....	6.7%	5.5%	6.4%	7.4%	7.8%	-0.3%	2.3%	-1.0%
Primary work activity.....						0.8%	18.8%	-8.3%
Accounting, finance, contracts.....	0.8%	0.7%	0.8%	1.1%	1.0%	0.0%	-0.3%	0.1%
{Applied research}**.....	22.1%	19.0%	21.8%	16.7%	16.6%	--	--	--
Basic research.....	15.0%	17.1%	15.6%	13.4%	10.9%	0.1%	-1.3%	0.8%
Computer applications, programming, systems development.....	4.6%	2.1%	4.1%	4.3%	3.1%	-0.6%	0.4%	0.7%
Development.....	5.7%	3.2%	5.2%	5.3%	4.8%	-0.1%	0.0%	0.1%
Design of equipment, processes, structures, models.....	2.6%	0.9%	2.3%	2.0%	2.8%	-0.3%	-0.4%	-0.2%
Employee relations.....	0.7%	1.1%	0.8%	0.9%	0.6%	0.0%	0.1%	0.0%
Management and administration.....	15.3%	12.3%	14.6%	15.3%	19.6%	-0.3%	0.5%	-1.3%
Production, operations, maintenance.....	0.3%	0.2%	0.3%	0.6%	0.1%	-0.1%	3.3%	0.5%
Professional services.....	6.3%	12.6%	7.5%	7.7%	6.2%	0.1%	0.0%	0.1%
Sales, purchasing, marketing.....	1.2%	0.7%	1.1%	2.3%	0.6%	0.0%	-0.4%	-0.1%
Quality or productivity management.....	0.9%	0.8%	0.9%	0.6%	1.0%	0.0%	-0.2%	0.0%
Teaching.....	22.6%	26.9%	23.1%	27.3%	31.0%	1.9%	16.6%	-9.1%
Other work activity.....	1.9%	2.5%	2.0%	2.5%	1.8%	0.1%	0.5%	0.1%
Secondary work activity.....						1.0%	-0.2%	0.2%
Accounting, finance, contracts.....	2.3%	1.4%	2.1%	3.1%	2.5%	0.1%	-1.0%	0.1%
Applied research.....	17.9%	16.5%	17.7%	17.7%	15.9%	0.1%	0.0%	-0.2%
{Basic research}.....	14.5%	14.9%	14.6%	14.7%	14.2%	--	--	--
Computer applications, programming, systems development.....	8.2%	5.1%	7.6%	6.6%	8.3%	-0.2%	-0.6%	-0.1%
Development.....	7.3%	4.7%	6.8%	5.3%	7.3%	0.2%	1.0%	0.1%

See explanatory information and SOURCE at end of table.

Appendix table 5-32: Variable means and percent of the doctoral science and engineering salary gaps, as explained for women compared with men, and persons with disabilities compared with persons without

Characteristics	Variable means					Percent of salary gap explained		
	Sex		Disability			Women compared with men	Disability at degree compared with no disability	Disability after degree compared with no disability
	Men	Women	None	At degree	After degree			
Design of equipment, processes, structures, models.....	4.6%	2.1%	4.1%	4.0%	4.6%	-0.1%	0.0%	0.0%
Employee relations.....	4.4%	5.7%	4.6%	4.9%	4.0%	0.1%	0.2%	0.1%
Management and administration.....	13.6%	14.9%	13.9%	13.4%	11.9%	0.1%	-0.2%	0.2%
Production, operations, maintenance.....	0.4%	0.2%	0.4%	0.1%	0.2%	-0.1%	-1.9%	0.2%
Professional services.....	2.6%	4.5%	2.9%	3.2%	2.1%	-0.1%	-0.1%	-0.1%
Sales, purchasing, marketing.....	1.8%	1.0%	1.6%	1.7%	3.3%	0.1%	-0.1%	0.7%
Quality or productivity management.....	1.7%	1.5%	1.7%	1.8%	1.9%	0.0%	0.2%	-0.1%
Teaching.....	11.9%	13.8%	12.2%	12.6%	12.7%	0.2%	0.4%	-0.1%
Other work activity.....	1.7%	2.6%	1.9%	1.7%	2.2%	0.0%	0.0%	0.0%
No secondary activity.....	7.1%	10.9%	7.7%	9.0%	8.8%	0.7%	2.1%	-0.5%
Managerial position.....	11.9%	9.0%	11.3%	10.9%	14.7%	0.9%	1.2%	2.7%
Log number of direct supervisees.....	0.6357	0.4725	0.6043	0.6106	0.6743	1.8%	-0.6%	2.0%
Log number of indirect supervisees.....	0.1759	-0.1305	0.1216	0.1092	0.0817	3.7%	1.3%	-1.3%
Postdoctoral appointment*.....	3.7%	7.1%	4.5%	3.2%	0.2%	4.7%	-15.5%	15.7%
"Life choices".....						10.6%	5.0%	4.7%
Marital status.....						6.6%	15.1%	2.6%
{Married}**.....	83.5%	63.4%	79.9%	74.4%	82.1%	--	0.0%	0.0%
Widowed.....	0.5%	1.3%	0.6%	0.8%	0.8%	0.3%	0.7%	-0.2%
Separated.....	1.2%	1.3%	1.2%	1.6%	1.1%	0.0%	0.8%	0.1%
Divorced.....	5.8%	12.7%	6.9%	9.8%	9.5%	1.9%	7.1%	-1.8%
Never married.....	9.1%	21.4%	11.4%	13.5%	6.5%	4.4%	6.5%	4.6%
Spouse's work status.....						2.2%	-5.0%	0.3%
Spouse work full-time?*.....	37.7%	54.5%	40.8%	39.4%	40.3%	3.3%	-2.5%	0.3%
Spouse work part-time?*.....	17.1%	3.9%	14.8%	11.5%	14.7%	-1.1%	-2.5%	0.0%
{Spouse not working or no spouse}**.....	45.2%	41.7%	44.4%	49.1%	45.0%	--	0.0%	0.0%
Spouse in natural science/engineering?*.....	16.1%	32.5%	19.2%	17.4%	15.2%	1.1%	-1.1%	0.7%
Reason not working in Ph.D. field:								
Family-related reasons.....	1.1%	1.7%	1.2%	1.0%	1.5%	0.2%	-0.8%	-0.2%
Reasons for changing employer/occupation:								
Working conditions.....	11.7%	17.4%	12.8%	16.0%	7.4%	-0.7%	-3.7%	-1.9%
School-related reasons.....	9.3%	17.3%	11.0%	10.3%	2.1%	0.8%	-0.6%	2.3%
Reasons that would increase interest in research abroad:								
Better financial support.....	57.1%	61.0%	57.9%	59.1%	54.8%	0.4%	1.1%	0.8%
Reasons for taking workshops or seminars:								
Required by employer.....	21.1%	20.6%	21.1%	22.8%	15.5%	0.0%	1.1%	1.0%
Reasons for taking college or university courses:								
Further education before starting career.....	2.5%	2.9%	2.6%	2.5%	2.8%	0.1%	-0.1%	-0.1%
Change in occupation/field.....	5.4%	6.4%	5.5%	4.6%	8.1%	0.1%	-1.0%	-0.8%

KEY: *Dummy variables. All dummy variables are named so that 1 indicates possession of the trait and 0 its absence, e.g., 1 on MBA indicates the person's highest degree after completion of the doctorate was an MBA.

** This dummy variable was omitted from the regression equation to avoid overspecification of the model. The regression coefficients for the remaining dummy variables listed for this variable can accordingly be interpreted as deviations from this omitted category.

*** Type of employer sums to more than 100 percent, because it merges two closely related SDR variables. See the Technical Notes for more information.

-- = No parameters for cell because variable excluded from model.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-33. Doctoral scientists and engineers in the U.S. labor force, by race/ethnicity, field of doctorate, and citizenship status: 1993

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Race/ethnicity and field of doctorate	All	U.S. native	U.S. naturalized	Non-U.S., permanent visa	Non-U.S., temporary visa
All races/ethnicities:					
Total science and engineering.....	470,500	383,030	48,900	29,360	9,210
Sciences.....	394,070	335,440	32,570	19,500	6,550
Computer and mathematical sciences.....	28,260	21,210	3,090	2,960	1,000
Life and related sciences.....	126,460	108,580	10,480	5,200	2,200
Physical and related sciences.....	100,660	81,570	10,950	5,740	2,390
Social and related sciences.....	138,690	124,080	8,050	5,600	960
Engineering.....	76,440	47,590	16,340	9,860	2,660
White:					
Total science and engineering.....	396,700	364,610	19,400	10,530	2,160
Sciences.....	342,440	318,820	14,490	7,550	1,580
Computer and mathematical sciences.....	22,740	20,430	1,170	900	240
Life and related sciences.....	110,370	103,620	4,300	1,980	460
Physical and related sciences.....	85,010	78,490	4,290	1,750	480
Social and related sciences.....	124,330	116,280	4,740	2,910	400
Engineering.....	54,260	45,790	4,910	2,980	580
Black:					
Total science and engineering.....	9,760	6,810	1,170	1,440	340
Sciences.....	8,730	6,370	880	1,200	270
Computer and mathematical sciences.....	400	250	--	90	--
Life and related sciences.....	2,410	1,700	350	230	120
Physical and related sciences.....	1,060	720	60	210	90
Social and related sciences.....	4,850	3,710	420	680	--
Engineering.....	1,030	440	290	240	70
Hispanic:					
Total science and engineering.....	9,600	5,530	2,270	1,450	350
Sciences.....	8,190	5,010	1,820	1,110	250
Computer and mathematical sciences.....	740	290	180	220	50
Life and related sciences.....	2,250	1,380	520	250	110
Physical and related sciences.....	1,870	1,070	430	320	50
Social and related sciences.....	3,330	2,280	690	320	--
Engineering.....	1,410	520	460	340	100
Asian:					
Total science and engineering.....	52,660	4,380	26,010	15,920	6,360
Sciences.....	33,100	3,680	15,340	9,640	4,440
Computer and mathematical sciences.....	4,310	180	1,700	1,750	680
Life and related sciences.....	11,030	1,490	5,300	2,730	1,500
Physical and related sciences.....	12,430	1,040	6,150	3,460	1,780
Social and related sciences.....	5,340	980	2,190	1,690	480
Engineering.....	19,560	700	10,670	6,290	1,910
American Indian:					
Total science and engineering.....	1,780	1,710	50	--	--
Sciences.....	1,610	1,560	--	--	--
Computer and mathematical sciences.....	70	70	--	--	--
Life and related sciences.....	410	390	--	--	--
Physical and related sciences.....	290	260	--	--	--
Social and related sciences.....	840	840	--	--	--
Engineering.....	180	150	--	--	--

KEY: -- = fewer than 50 estimated

NOTE: Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-34. 1992 bachelor's science and engineering graduates, by sex, race/ethnicity, disability status, employment status, and graduate school status: 1993

Sex, race/ethnicity, and disability status	Total graduates	Employment status					Graduate school status		
		Full-time employed in field ¹	Full-time employed outside field	Part-time employed	employed but seeking work	employed and not seeking work	Part-time student	Full-time student	Non-student
Total science and engineering.....	330,900	148,400	63,700	27,100	11,200	8,600	28,100	71,900	231,000
Sex:									
Men.....	184,000	88,800	33,800	12,600	6,700	3,600	14,300	38,500	131,200
Women.....	146,900	59,600	29,900	14,600	4,500	5,000	13,800	33,300	99,800
Race/ethnicity:									
White, non-Hispanic.....	266,900	120,900	52,600	21,600	9,000	7,400	22,200	55,400	189,300
Black, non-Hispanic.....	23,900	10,200	5,200	2,800	600	-	2,200	4,900	16,800
Hispanic.....	13,800	5,900	2,400	800	-	-	1,300	3,800	8,700
Asian.....	25,400	11,000	3,100	1,800	1,200	600	2,500	7,700	15,200
American Indian.....	900	-	-	-	-	-	-	-	900
Disability status:									
Persons with disabilities.....	34,700	16,500	6,300	3,700	1,300	800	3,000	6,000	25,700
Persons without disabilities.....	296,200	131,900	57,300	23,400	10,000	7,800	25,100	65,800	205,300

¹ Current work is "closely related" or "somewhat related" to degree field.

KEY: - = fewer than 500 estimated

NOTES: Employment status excludes full-time students. Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 National Survey of Recent College Graduates.

Appendix table 5-35. Employed 1992 bachelor's science and engineering graduates, by occupation, race/ethnicity, and disability status: 1993

Field of occupation	Total	Race/ethnicity					Disability status	
		White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian	American Indian	Persons with disabilities	Persons without disabilities
Total employed graduates.....	239,200	195,100	18,200	9,200	15,900	900	26,600	212,600
Science and engineering.....	65,700	51,700	3,900	2,700	5,000	-	6,800	58,300
Computer and mathematical sciences.....	18,800	13,100	2,100	900	2,700	-	2,300	16,500
Life and related sciences.....	5,400	4,600	-	-	-	-	-	5,100
Physical sciences.....	5,600	4,800	-	-	-	-	-	5,300
Social and related sciences.....	5,800	4,400	700	-	-	-	1,000	4,800
Engineering.....	30,100	24,800	1,100	1,800	2,300	-	3,500	26,600
Non-science and -engineering.....	173,400	143,400	13,800	4,800	10,200	600	18,900	154,400
Management and related.....	23,900	20,100	1,200	-	2,200	-	2,500	21,400
Health and related.....	6,200	4,800	700	-	600	-	600	5,600
Education other than S&E postsecondary.....	16,800	13,600	2,000	800	500	-	1,700	15,100
Social services and related.....	14,000	10,300	2,300	900	500	-	2,200	11,700
Technical, computer programming.....	18,500	15,600	900	-	1,600	-	1,500	17,000
Sales and marketing.....	28,300	24,100	1,600	900	1,800	-	2,100	26,200
Other occupations.....	65,700	54,900	5,100	2,200	3,000	500	8,300	57,400

KEY: - = fewer than 500 estimated

NOTES: Employment status excludes full-time students. Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 National Survey of Recent College Graduates.

Appendix table 5-36. Labor force participation and unemployment rates for doctoral scientists and engineers, by race/ethnicity and disability status: 1993

Race/ethnicity and disability status	Total	Labor force	Not in labor force	Working for pay or profit	Full-time employed	Part-time employed	Labor force participation rate	Unemployment rate
Total.....	513,460	470,500	42,960	462,870	433,330	29,540	91.6	1.6
Race/ethnicity:								
White.....	436,820	396,700	40,120	390,430	363,720	26,710	90.8	1.6
Asian.....	54,590	52,660	1,930	51,670	49,900	1,770	96.5	1.9
Black.....	10,140	9,760	380	9,620	9,180	440	96.3	1.3
Hispanic.....	10,040	9,600	440	9,420	8,880	540	95.6	1.9
American Indian.....	1,870	1,780	90	1,730	1,650	80	95.2	2.8
Disability status:								
Persons without disabilities.....	482,241	446,760	35,481	439,688	412,709	26,980	92.6	1.6
Persons with disabilities.....	31,222	23,743	7,479	23,178	20,621	2,557	76.0	2.4

NOTE: Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-37. Full-time science and engineering faculty, by race/ethnicity, age, institution type, and number of presentations and publications in the past 2 years: 1993

Race/ethnicity, age, and institution type	Refereed articles	Nonrefereed articles	Creative works	Book reviews and chapters	Textbooks, books, monographs, and reports	Presentations	Patents and software
White, non-Hispanic.....	2.56	0.80	0.35	0.82	1.43	3.58	0.18
Younger than 35 years old.....	2.18	0.57	0.27	0.57	1.05	3.20	0.18
35 to 44 years old.....	3.21	0.75	0.38	0.90	1.42	4.18	0.15
45 to 54 years old.....	2.24	0.83	0.36	0.80	1.75	3.36	0.24
55 to 64 years old.....	2.24	0.94	0.30	0.80	1.19	3.68	0.13
65 to 70 years old.....	3.64	0.52	0.43	1.07	0.90	1.76	0.21
71 years old or older.....	1.66	0.45	0.02	0.57	0.71	1.51	0.10
Research.....	4.71	1.37	0.47	1.29	2.02	5.56	0.23
Doctorate.....	3.49	0.90	0.40	0.98	1.95	4.64	0.22
Comprehensive.....	1.22	0.50	0.24	0.54	1.02	2.42	0.17
Liberal arts.....	1.16	0.42	0.36	0.73	0.71	2.53	0.15
Public, 2-year.....	0.17	0.15	0.17	0.19	0.62	0.97	0.09
Other.....	1.09	0.60	0.42	0.59	1.44	2.32	0.15
Asian.....	3.85	0.88	0.30	0.55	1.59	3.50	0.20
Younger than 35 years old.....	3.55	0.62	0.29	0.49	1.54	4.70	0.11
35 to 44 years old.....	4.13	0.67	0.46	0.65	2.22	3.87	0.34
45 to 54 years old.....	4.07	1.07	0.08	0.50	1.13	3.17	0.21
55 to 64 years old.....	3.29	1.23	0.04	0.45	1.17	2.70	0.05
65 to 70 years old.....	4.23	0.68	2.46	1.00	0.92	1.65	0.00
71 years old or older.....	0.48	1.44	0.00	0.50	1.92	1.44	0.00
Research.....	5.79	1.51	0.21	0.71	2.16	4.59	0.29
Doctorate.....	5.80	0.96	0.36	0.86	2.10	5.54	0.11
Comprehensive.....	1.86	0.33	0.54	0.40	0.66	2.24	0.13
Liberal arts.....	0.72	0.23	0.29	0.21	0.52	1.20	0.00
Public, 2-year.....	0.16	0.13	0.09	0.12	0.31	0.78	0.07
Other.....	1.08	0.35	0.16	0.16	3.29	1.20	0.59
Black, non-Hispanic.....	1.12	0.45	0.53	0.53	1.05	2.83	0.10
Younger than 35 years old.....	0.64	0.51	1.01	0.23	0.65	3.14	0.17
35 to 44 years old.....	1.55	0.48	0.32	0.95	1.57	4.01	0.17
45 to 54 years old.....	1.11	0.54	0.76	0.43	0.84	2.41	0.08
55 to 64 years old.....	0.72	0.31	0.39	0.32	0.87	2.05	0.01
65 to 70 years old.....	1.40	0.19	0.00	0.13	0.96	0.96	0.00
71 years old or older.....	0.00	0.00	0.00	0.00	0.00	0.24	0.00
Research.....	2.90	0.67	0.17	1.14	1.84	6.41	0.24
Doctorate.....	1.69	0.83	1.64	1.20	1.67	4.05	0.08
Comprehensive.....	0.97	0.49	0.63	0.35	0.85	2.42	0.10
Liberal arts.....	0.72	0.28	0.33	0.51	1.31	1.57	0.00
Public, 2-year.....	0.10	0.17	0.27	0.10	0.48	1.24	0.05
Other.....	0.00	0.00	0.00	0.00	0.00	0.00	0.31

See explanatory information and SOURCE at end of table.

Appendix table 5-37. Full-time science and engineering faculty, by race/ethnicity, age, institution type, and number of presentations and publications in the past 2 years: 1993

Race/ethnicity, age, and institution type	Refereed articles	Nonrefereed articles	Creative works	Book reviews and chapters	Textbooks, books, monographs, and reports	Presentations	Patents and software
Hispanic.....	2.01	0.80	0.96	0.89	2.49	3.37	0.13
Younger than 35 years old.....	2.43	0.31	0.00	0.42	0.34	3.59	0.23
35 to 44 years old.....	2.60	0.51	1.26	0.90	4.11	3.46	0.16
45 to 54 years old.....	1.34	0.34	0.33	0.47	2.12	2.98	0.06
55 to 64 years old.....	1.91	3.66	3.50	2.94	2.38	3.97	0.00
65 to 70 years old.....	0.89	0.25	0.76	0.58	3.58	2.43	0.48
71 years old or older.....	1.00	1.52	0.00	0.00	0.00	3.55	0.00
Research.....	4.78	0.73	0.27	1.10	2.90	4.43	0.27
Doctorate.....	2.85	0.64	0.25	0.79	0.59	3.11	0.16
Comprehensive.....	1.68	1.82	2.44	1.65	4.98	3.90	0.06
Liberal arts.....	1.09	0.72	0.21	1.16	0.28	4.83	0.00
Public, 2-year.....	0.17	0.00	0.48	0.07	1.10	2.27	0.08
Other.....	0.82	0.14	0.39	0.31	0.69	1.58	0.31
American Indian.....	1.52	0.55	0.35	0.28	2.65	4.46	0.00
Younger than 35 years old.....	1.07	0.00	0.00	0.00	1.60	2.13	0.00
35 to 44 years old.....	3.66	1.25	0.44	0.56	6.22	9.86	0.00
45 to 54 years old.....	0.20	0.39	0.00	0.11	1.57	1.38	0.00
55 to 64 years old.....	0.11	0.11	0.40	0.13	0.10	1.32	0.00
65 to 70 years old.....	1.00	2.00	5.00	2.00	10.00	6.00	0.00
71 years old or older.....	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Research.....	3.82	4.55	0.27	1.82	0.91	4.91	0.00
Doctorate.....	3.58	0.01	0.21	0.99	8.84	5.97	0.00
Comprehensive.....	1.99	1.04	0.43	0.02	2.16	8.22	0.00
Liberal arts.....	0.00	0.39	0.00	0.00	0.00	1.96	0.00
Public, 2-year.....	0.04	0.04	0.41	0.00	0.40	0.91	0.00

NOTES: Because of rounding, details may not add to totals. Data are preliminary.

SOURCE: U.S. Department of Education/NCES. 1993 National Study of Postsecondary Faculty.

Appendix table 5-38. Full-time science and engineering faculty, by race/ethnicity, type of school, and actual and preferred time in activities: 1993

Race/ethnicity and type of school	Total	Actual time allocation (percent distribution)				Preferred time allocation (percent distribution)			
		Teaching	Research	Administra- tion	Other activity	Teaching	Research	Administra- tion	Other activity
Total.....	211,000	49.9	25.3	12.8	11.8	44.9	32.1	7.8	14.9
Research.....	70,200	33.3	42.2	13.2	11.1	30.9	48.1	7.4	13.3
Doctorate.....	32,400	41.3	34.8	11.9	11.8	37.1	41.6	6.8	14.2
Comprehensive.....	48,500	59.5	15.6	12.7	11.9	50.9	25.0	8.2	15.5
Liberal arts.....	14,700	62.0	13.5	13.9	10.1	55.1	22.3	8.0	14.3
Public, 2-year.....	36,500	70.0	4.2	12.1	13.7	65.1	8.8	8.4	17.7
Other.....	8,700	58.0	15.0	15.1	11.9	52.0	21.3	10.2	16.5
White, non-Hispanic.....	181,600	49.6	25.0	13.3	11.8	45.0	31.7	8.1	15.0
Research.....	61,600	32.7	41.9	13.8	11.2	30.4	47.8	7.8	13.6
Doctorate.....	28,000	41.4	33.8	12.4	12.2	37.7	40.6	7.1	14.4
Comprehensive.....	40,100	59.6	15.1	13.2	11.8	51.4	24.4	8.4	15.5
Liberal arts.....	13,000	62.1	13.5	13.7	10.1	56.1	22.1	7.5	14.0
Public, 2-year.....	31,300	69.8	4.0	12.7	13.5	65.5	8.3	8.8	17.4
Other.....	7,600	58.6	13.5	15.5	12.4	52.8	19.6	10.5	17.2
Asian.....	15,600	49.3	33.5	7.6	9.6	41.4	41.6	4.8	12.0
Research.....	6,200	38.0	45.9	7.3	8.8	34.3	52.9	3.4	9.5
Doctorate.....	2,700	39.9	45.6	6.1	8.4	31.9	53.0	3.6	11.5
Comprehensive.....	3,700	61.6	19.9	7.0	11.5	49.1	30.3	5.6	14.2
Liberal arts.....	600	59.7	13.8	18.8	7.7	46.0	22.8	14.1	17.1
Public, 2-year.....	1,700	74.0	8.0	6.7	11.4	63.0	15.3	5.1	16.6
Other.....	700	52.1	27.5	12.2	8.1	42.5	37.6	9.3	10.6
Black, non-Hispanic.....	8,100	54.9	17.6	13.0	14.3	47.6	25.4	9.3	17.5
Research.....	1,300	31.9	37.9	13.2	16.9	34.0	41.9	6.8	17.3
Doctorate.....	800	45.8	26.9	14.3	13.0	40.6	34.7	9.4	15.3
Comprehensive.....	3,100	58.7	14.7	12.8	13.4	47.9	24.9	9.4	17.6
Liberal arts.....	1,000	63.1	10.7	14.2	11.9	48.1	24.2	11.3	16.4
Public, 2-year.....	1,700	66.0	5.6	12.1	16.3	59.8	10.1	10.0	19.7
Other.....	-	50.7	26.7	11.8	10.8	58.5	19.9	7.2	14.4
Hispanic.....	4,800	54.0	22.6	9.2	14.2	47.1	29.8	5.8	17.2
Research.....	1,000	40.3	41.2	8.8	9.7	35.7	45.9	6.2	12.2
Doctorate.....	800	37.7	41.6	9.8	10.9	30.7	49.4	5.7	14.2
Comprehensive.....	1,400	54.4	18.5	12.6	14.5	47.6	27.0	9.0	16.4
Liberal arts.....	-	48.8	31.3	10.9	9.0	49.8	30.0	4.6	15.6
Public, 2-year.....	1,400	71.2	3.5	5.7	19.6	62.5	10.9	3.0	23.6
Other.....	-	65.7	16.1	10.3	7.9	52.9	32.9	2.2	12.0
American Indian.....	800	59.5	18.0	11.2	11.3	59.1	21.3	4.8	14.7
Research.....	-	60.4	20.9	9.1	9.6	31.8	49.6	0.0	18.7
Doctorate.....	-	41.9	37.6	14.9	5.6	44.4	36.7	7.9	10.9
Comprehensive.....	-	43.8	27.5	14.3	14.4	50.1	27.9	7.4	14.5
Liberal arts.....	-	73.3	6.3	3.8	16.6	65.2	9.8	3.4	21.6
Public, 2-year.....	-	79.5	1.4	8.0	11.2	76.1	6.6	1.9	15.5

KEY: - = fewer than 500 estimated

NOTES: Because of rounding, details may not add to totals. Data are preliminary.

SOURCE: U.S. Department of Education/NCES. 1993 National Study of Postsecondary Faculty.

Appendix 5-39. Primary work activity of employed bachelor's and master's scientists and engineers, by race/ethnicity and disability status: 1993

Degree and primary work activity	Total	Race/ethnicity					Disability status	
		White	Asian	Black	Hispanic	American Indian	Persons without disabilities	Persons with disabilities
Bachelor's:								
Total, all activities.....	1,558,000	1,357,000	94,000	60,000	44,000	3,000	1,474,545	84,487
Accounting, finance.....	36,000	32,000	2,000	1,000	1,000	-	33,695	2,103
Applied research.....	125,000	110,000	7,000	5,000	4,000	-	119,562	6,206
Basic research.....	23,000	18,000	2,000	2,000	1,000	-	21,624	1,428
Computer applications.....	451,000	387,000	33,000	19,000	12,000	1,000	429,092	22,452
Development.....	121,000	106,000	7,000	4,000	3,000	-	115,644	5,875
Design of equipment.....	238,000	211,000	15,000	4,000	8,000	1,000	225,161	12,839
Employee relations.....	16,000	13,000	1,000	1,000	1,000	-	15,701	579
Management and administration.....	175,000	157,000	7,000	6,000	5,000	-	166,899	8,381
Production, operations, maintenance..	65,000	55,000	5,000	4,000	1,000	-	60,518	4,796
Professional services.....	57,000	52,000	2,000	2,000	1,000	-	52,705	4,851
Sales, purchasing, marketing.....	70,000	62,000	3,000	3,000	1,000	-	65,202	4,479
Quality/productivity management.....	59,000	49,000	4,000	4,000	2,000	-	56,505	2,912
Teaching.....	11,000	9,000	1,000	1,000	-	-	10,207	899
Other.....	109,000	96,000	5,000	3,000	4,000	-	102,030	6,687
Master's:								
Total, all activities.....	673,000	557,000	81,000	17,000	17,000	1,000	643,411	30,040
Accounting, finance.....	12,000	10,000	1,000	-	-	-	10,281	1,318
Applied research.....	90,000	78,000	8,000	2,000	2,000	-	86,312	4,228
Basic research.....	9,000	7,000	1,000	-	1,000	-	8,680	388
Computer applications.....	160,000	121,000	30,000	5,000	4,000	-	152,540	7,399
Development.....	55,000	45,000	8,000	1,000	1,000	-	53,816	1,338
Design of equipment.....	86,000	69,000	13,000	2,000	3,000	-	83,273	3,119
Employee relations.....	9,000	7,000	1,000	-	-	-	7,919	599
Management and administration.....	79,000	69,000	6,000	3,000	2,000	-	74,946	4,287
Production, operations, maintenance..	11,000	9,000	2,000	-	-	-	11,009	299
Professional services.....	66,000	60,000	3,000	2,000	1,000	-	62,623	3,575
Sales, purchasing, marketing.....	23,000	20,000	2,000	-	-	-	22,121	407
Quality/productivity management.....	22,000	19,000	2,000	1,000	-	-	21,222	686
Teaching.....	6,000	5,000	-	-	-	-	5,279	234
Other.....	45,000	39,000	4,000	1,000	1,000	-	43,390	2,163

KEY: - = fewer than 500 estimated

NOTE: Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 National Survey of College Graduates.

Appendix table 5-40. Doctoral scientists and engineers employed in business or industry, by primary work activity and race/ethnicity: 1993

Primary work activity	All	White	Black	Hispanic	Asian	American Indian
Total.....	141,190	112,680	1,950	2,300	23,860	400
Research and development.....	71,850	54,980	910	1,170	14,640	150
Teaching.....	810	690	--	--	90	--
Management, sales, and administration.....	34,910	29,410	430	550	4,380	140
Computer applications.....	12,560	8,930	120	250	3,220	--
Other activities.....	21,070	18,670	480	320	1,530	70
	Percent distribution					
Research and development.....	50.9	48.8	46.7	50.9	61.4	37.5
Teaching.....	0.6	0.6	--	--	0.4	--
Management, sales, and administration.....	24.7	26.1	22.1	23.9	18.4	35.0
Computer applications.....	8.9	7.9	6.2	10.9	13.5	--
Other activities.....	14.9	16.6	24.6	13.9	6.4	17.5

KEY: -- = fewer than 50 estimated/percent distribution not available

NOTES: The business or industry classification excludes individuals who reported self-employment. Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-41: Variable means and percent of the doctoral science and engineering salary gaps explained for blacks, Hispanics, Asians, and American Indians compared with whites: 1993

Characteristics	Variable means					Percent of salary gap explained			
	White	Black	Hispanic	Asian	American Indian	Black	Hispanic	Asian	American Indian
Salary.....	\$61,700	\$54,600	\$56,000	\$57,600	\$55,200				
Dependent variable:									
Log of salary.....	11.0305	10.9084	10.9326	10.9610	10.9189				
Independent variables.....						108.0%	103.3%	76.6%	57.3%
Years since receipt of Ph.D.1.....						32.5%	44.0%	65.2%	1.9%
Years since receipt of Ph.D.....	15.4	11.6	11.5	11.4	15.2	54.1%	69.0%	101.0%	2.6%
Years since receipt of Ph.D. squared.....	322.1	198.5	206.8	205.2	318.1	-21.6%	-25.1%	-35.9%	-0.8%
Field of degree.....						2.9%	-10.9%	-62.3%	13.3%
Main effects.....						13.6%	-4.3%	-64.9%	15.0%
Computer science.....	1.0%	0.8%	1.8%	2.8%	0.5%	0.6%	-2.3%	-7.7%	1.5%
Mathematical sciences.....	5.3%	3.9%	6.7%	5.4%	4.0%	1.0%	-1.3%	-0.2%	1.0%
Agricultural sciences.....	3.4%	2.8%	3.3%	2.9%	1.6%	-0.1%	0.0%	-0.1%	-0.3%
{Biological sciences}**.....	24.8%	22.8%	20.9%	17.6%	17.6%	--	--	--	--
Environmental sciences.....	1.0%	0.3%	0.5%	0.2%	3.1%	0.1%	0.1%	0.3%	-0.4%
Chemistry.....	11.7%	8.7%	12.4%	13.6%	11.6%	2.0%	-0.5%	-2.1%	0.1%
Geosciences.....	3.1%	0.4%	2.1%	1.4%	1.2%	1.5%	0.7%	1.6%	1.1%
Physics/astronomy.....	7.7%	2.8%	6.3%	8.8%	4.2%	5.3%	1.9%	-2.1%	4.2%
Other physical sciences.....	0.3%	0.0%	0.0%	0.2%	0.4%	0.1%	0.1%	0.1%	0.0%
Economics.....	4.4%	6.0%	4.9%	3.3%	4.0%	-2.2%	-0.8%	2.8%	0.7%
Political science.....	3.3%	7.8%	2.0%	1.2%	3.9%	-0.9%	0.3%	0.7%	-0.1%
Psychology.....	12.4%	20.1%	13.7%	1.9%	19.8%	-1.3%	-0.3%	3.0%	-1.3%
Sociology/anthropology.....	4.5%	9.1%	5.7%	1.1%	11.1%	2.1%	0.7%	-2.7%	3.2%
Other social sciences.....	2.6%	4.3%	4.5%	2.0%	7.4%	-0.7%	-1.0%	0.5%	-2.3%
Aeroengineering.....	0.6%	0.7%	0.7%	0.9%	0.3%	-0.1%	-0.1%	-0.7%	0.5%
Chemical engineering.....	2.2%	1.0%	2.5%	5.4%	0.0%	2.1%	-0.6%	-9.9%	4.3%
Electrical engineering.....	4.7%	4.2%	5.2%	12.5%	3.9%	0.8%	-1.0%	-21.9%	1.4%
Industrial engineering.....	0.4%	0.2%	0.4%	0.8%	0.7%	0.3%	0.0%	-1.4%	-0.5%
Mechanical engineering.....	1.7%	0.8%	1.6%	5.4%	1.2%	1.3%	0.1%	-9.0%	0.7%
Other engineering.....	4.8%	3.4%	5.0%	12.4%	3.7%	1.6%	-0.3%	-16.1%	1.4%
Interaction with years since degree.....						-10.7%	-6.6%	2.7%	-1.7%
Computer science.....	6.6%	3.9%	8.0%	14.3%	0.6%	-0.2%	0.1%	0.9%	-0.4%
Mathematical sciences.....	93.6%	61.7%	109.6%	63.0%	83.5%	-0.5%	0.3%	-0.8%	-0.2%
Agricultural sciences.....	48.8%	30.0%	32.8%	38.2%	19.2%	-0.5%	-0.5%	-0.5%	-0.9%
{Biological sciences}**.....	354.8%	272.2%	231.4%	196.7%	221.8%	--	--	--	--
Environmental sciences.....	14.5%	1.8%	3.8%	2.6%	33.6%	-0.3%	-0.3%	-0.4%	0.4%
Chemistry.....	204.9%	115.6%	150.1%	171.0%	243.2%	-2.4%	-1.8%	-1.6%	1.1%
Geosciences.....	47.5%	6.4%	21.9%	14.8%	11.2%	-0.3%	-0.3%	-0.5%	-0.3%
Physics/astronomy.....	138.0%	41.1%	86.9%	107.2%	93.2%	-2.2%	-1.4%	-1.2%	-1.1%
Other physical sciences.....	2.5%	0.5%	0.3%	1.2%	6.6%	-0.1%	-0.1%	-0.1%	0.2%
Economics.....	70.3%	70.6%	65.0%	34.3%	90.1%	0.0%	0.0%	-0.1%	0.0%
Political science.....	53.2%	102.5%	21.6%	15.8%	60.5%	-0.3%	0.3%	0.4%	-0.1%
Psychology.....	173.6%	191.6%	136.2%	20.1%	272.3%	0.4%	-1.0%	-5.7%	2.3%
Sociology/anthropology.....	67.3%	115.0%	65.0%	13.0%	168.0%	-0.3%	0.0%	0.7%	-0.8%
Other social sciences.....	37.0%	43.2%	40.5%	23.0%	87.4%	0.2%	0.1%	-0.8%	1.8%
Aeroengineering.....	10.9%	7.8%	7.6%	9.7%	4.6%	-0.1%	-0.1%	-0.1%	-0.2%
Chemical engineering.....	36.4%	7.4%	25.2%	69.5%	0.0%	-1.1%	-0.5%	2.2%	-1.5%
Electrical engineering.....	75.0%	45.9%	63.0%	144.6%	51.9%	-1.3%	-0.7%	5.5%	-1.1%
Industrial engineering.....	5.1%	1.2%	3.7%	9.1%	1.5%	-0.1%	0.0%	0.2%	-0.1%
Mechanical engineering.....	26.1%	7.2%	16.1%	53.7%	15.8%	-0.6%	-0.4%	1.4%	-0.3%
Other engineering.....	71.5%	36.4%	64.5%	136.2%	55.7%	-1.0%	-0.2%	3.2%	-0.5%

See explanatory information and SOURCE at end of table.

Appendix table 5-41: Variable means and percent of the doctoral science and engineering salary gaps explained for blacks, Hispanics, Asians, and American Indians compared with whites: 1993

Characteristics	Variable means					Percent of salary gap explained			
	White	Black	Hispanic	Asian	American Indian	Black	Hispanic	Asian	American Indian
Other work-related characteristics.....						29.4%	39.2%	84.5%	-0.1%
Age when doctorate received.....						18.6%	10.9%	13.3%	14.4%
Age at Ph.D.....	31.10	34.16	32.32	32.01	33.36	81.6%	40.7%	42.5%	66.0%
Age at Ph.D. squared.....	988.98	1201.45	1069.51	1045.03	1147.98	-63.0%	-29.8%	-29.2%	-51.6%
Whether attended professional society meeting or conference within the past year*.....	81.7%	83.6%	82.8%	82.7%	76.3%	-0.7%	-0.5%	-0.6%	2.0%
Number of professional societies or associations belonged to.....	2.7	3.0	2.8	2.1	3.2	-2.5%	-0.8%	11.4%	-5.5%
Highest degree since doctorate*.....						0.4%	1.2%	0.8%	1.4%
MBA.....	0.7%	0.7%	0.7%	1.9%	0.1%	0.0%	0.0%	-0.8%	0.3%
Master's.....	1.0%	1.1%	1.0%	1.5%	0.4%	0.0%	0.0%	0.4%	-0.4%
Other doctorate.....	0.2%	0.6%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
JD,LLB,LLM.....	0.4%	1.1%	0.3%	0.1%	0.3%	-0.8%	0.1%	0.6%	0.1%
MD.....	1.3%	0.4%	0.7%	0.9%	0.2%	1.2%	1.0%	0.8%	1.6%
Other professional degree.....	0.2%	0.2%	0.1%	0.1%	0.0%	0.0%	-0.1%	-0.2%	-0.2%
Other degree.....	0.1%	0.1%	0.4%	0.1%	0.0%	0.0%	0.2%	0.0%	-0.1%
Bachelor's degree.....	0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	-0.1%
{No degree}**.....	95.9%	95.9%	96.5%	95.0%	99.0%	--	--	--	--
Taken courses since last degree?*.....	23.6%	21.9%	22.7%	19.4%	22.9%	-0.3%	-0.2%	-1.2%	-0.1%
Previously retired?*.....	2.5%	3.8%	3.8%	1.7%	2.6%	0.9%	1.1%	-0.9%	0.1%
Full-time experience.....						9.2%	20.7%	45.5%	-9.6%
Years full-time experience.....	17.6	15.7	14.6	12.8	19.2	16.6%	34.1%	76.2%	-15.7%
Years full-time experience squared.....	407.2	338.1	305.9	243.1	459.5	-7.4%	-13.5%	-30.7%	6.1%
Have employment-related license?*.....	17.7%	21.2%	18.3%	10.4%	27.3%	-0.7%	-0.2%	2.7%	-2.2%
Same occupation?*.....	73.5%	64.3%	60.7%	60.2%	73.6%	3.0%	5.2%	7.6%	0.0%
Employed in 1988?*.....	95.5%	92.1%	92.0%	87.3%	96.8%	1.4%	1.8%	6.0%	-0.6%
Employer characteristics.....						34.7%	16.4%	-63.1%	43.5%
Type of employer***.....						30.3%	3.2%	-53.0%	30.1%
2-year college.....	1.4%	2.3%	2.3%	0.7%	2.0%	1.9%	2.4%	-2.4%	1.4%
Research institution I.....	21.5%	18.7%	23.4%	20.2%	20.8%	-4.0%	3.3%	-3.3%	-1.0%
Research institution II.....	4.5%	2.9%	5.2%	3.8%	6.3%	-2.7%	1.6%	-2.2%	3.6%
Doctorate granting I.....	2.6%	4.2%	2.1%	2.2%	1.3%	3.0%	-1.2%	-1.4%	-2.7%
Doctorate granting II.....	3.2%	3.5%	4.0%	2.1%	4.9%	0.5%	2.0%	-3.8%	3.8%
Comprehensive I.....	8.5%	16.2%	9.8%	5.6%	16.6%	16.2%	3.4%	-10.8%	18.6%
Comprehensive II.....	0.7%	1.4%	1.0%	0.3%	1.6%	1.8%	0.9%	-1.5%	2.8%
Liberal arts I.....	2.2%	2.1%	2.0%	0.3%	1.8%	-0.3%	-0.6%	-6.9%	-1.0%
Liberal arts II.....	1.7%	4.5%	1.1%	1.2%	1.0%	8.4%	-2.3%	-2.6%	-2.4%
Medical school (Carnegie classification).....	2.7%	2.1%	3.3%	2.1%	2.3%	-0.7%	1.0%	-1.5%	-0.6%
Medical school (self-classification).....	8.2%	7.7%	9.4%	7.0%	8.0%	0.1%	-0.3%	0.3%	0.0%
Health related schools that are not medical schools.....	0.4%	0.8%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Univ.-affiliated research institute.....	4.4%	4.4%	6.2%	5.3%	10.6%	0.0%	0.2%	0.1%	0.5%
Other educational institution.....	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Elementary/mid/secondary school.....	1.1%	2.3%	1.6%	0.3%	2.7%	2.1%	1.0%	-2.4%	3.1%
Private, for-profit company.....	29.2%	18.2%	25.2%	46.6%	19.4%	--	--	--	--
Private, not-for-profit organization.....	5.5%	4.9%	4.8%	4.3%	2.6%	-0.8%	-1.2%	-3.0%	-4.3%
Local government.....	0.9%	2.8%	0.8%	0.7%	2.0%	4.8%	-0.3%	-0.7%	3.2%
State government.....	2.1%	2.8%	1.2%	1.1%	4.1%	1.8%	-3.0%	-4.7%	5.8%
U.S. military service.....	0.6%	0.7%	0.7%	0.2%	0.3%	0.2%	0.1%	-0.7%	-0.3%
U.S. Government (civilian employee).....	8.1%	6.7%	7.0%	5.0%	7.4%	-1.1%	-1.1%	-4.5%	-0.7%
Other employer type.....	0.3%	0.6%	1.3%	0.5%	0.1%	-0.8%	-2.8%	-1.0%	0.4%

See explanatory information and SOURCE at end of table.

Appendix table 5-41: Variable means and percent of the doctoral science and engineering salary gaps explained for blacks, Hispanics, Asians, and American Indians compared with whites: 1993

Characteristics	Variable means					Percent of salary gap explained			
	White	Black	Hispanic	Asian	American Indian	Black	Hispanic	Asian	American Indian
Region of employment.....						4.4%	13.2%	-10.0%	13.4%
New England.....	7.9%	6.0%	8.2%	6.9%	7.0%	-0.4%	0.1%	-0.4%	-0.2%
(Middle Atlantic)**.....	17.1%	16.0%	15.0%	20.6%	9.3%	--	--	--	--
East North Central.....	14.3%	11.8%	10.3%	14.7%	15.3%	-1.2%	-2.4%	0.3%	0.5%
West North Central.....	6.5%	4.5%	4.7%	4.4%	6.3%	-1.4%	-1.6%	-2.5%	-0.1%
South Atlantic.....	19.3%	33.2%	17.2%	16.5%	9.0%	6.4%	-1.2%	-2.2%	-5.2%
East South Central.....	4.3%	6.9%	3.0%	3.2%	10.1%	2.9%	-1.9%	-2.2%	7.1%
West South Central.....	8.1%	8.6%	10.6%	8.5%	16.2%	0.3%	2.1%	0.5%	5.8%
Mountain.....	6.7%	2.4%	7.5%	3.2%	13.5%	-3.0%	0.7%	-4.4%	5.3%
Pacific.....	15.6%	10.0%	16.0%	21.7%	13.1%	0.0%	0.0%	0.0%	0.0%
Other U.S.....	0.1%	0.3%	7.4%	0.1%	0.2%	0.3%	17.4%	-0.2%	0.2%
Non-U.S.....	0.1%	0.2%	0.1%	0.3%	0.1%	0.4%	0.1%	1.1%	0.0%
Type of work.....						-1.2%	12.6%	55.6%	1.4%
Occupation.....						-7.5%	0.0%	11.7%	-6.8%
Computer scientist.....	2.4%	1.3%	2.4%	4.4%	2.2%	-0.2%	0.0%	0.6%	0.0%
Mathematical scientist.....	1.1%	0.8%	0.8%	1.6%	0.1%	0.0%	0.1%	-0.1%	0.1%
Postsecondary teacher— math/computers.....	4.0%	3.7%	6.4%	5.1%	3.7%	0.0%	-0.3%	-0.2%	0.0%
Agricultural scientist.....	1.8%	0.6%	1.7%	1.3%	1.8%	-1.2%	-0.1%	-0.9%	0.0%
Biological scientist.....	10.0%	6.5%	10.5%	11.8%	8.4%	-3.3%	0.6%	3.0%	-1.7%
Environmental scientist.....	0.2%	0.1%	0.0%	0.1%	0.0%	-0.1%	-0.3%	-0.3%	-0.2%
Postsecondary teacher—life sciences.....	7.6%	6.0%	5.1%	3.6%	3.9%	-0.5%	-1.0%	-2.2%	-1.3%
Chemist.....	4.8%	3.5%	4.4%	7.3%	2.0%	-1.0%	-0.4%	3.6%	-2.4%
Geoscientist.....	1.9%	0.1%	2.1%	1.1%	1.1%	-1.3%	0.2%	-1.0%	-0.6%
Physicist/astronomer.....	2.9%	1.2%	2.5%	3.7%	0.3%	-1.0%	-0.3%	0.9%	-1.7%
Other physical scientist.....	0.3%	0.0%	0.1%	0.8%	0.3%	-0.2%	-0.1%	0.4%	0.0%
Postsecondary teacher—physical sciences.....	5.0%	4.3%	6.1%	3.3%	7.6%	-0.3%	0.5%	-1.2%	1.1%
Economist.....	1.1%	1.4%	1.7%	1.1%	0.5%	0.1%	0.3%	0.0%	-0.3%
Political scientist.....	0.2%	0.1%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%
Psychologist.....	4.5%	6.2%	6.6%	0.7%	5.3%	1.0%	1.5%	-3.6%	0.5%
Sociologist/anthropologist.....	0.5%	0.8%	1.2%	0.2%	1.5%	0.0%	0.1%	-0.1%	0.1%
Other social scientist.....	0.4%	0.3%	0.1%	0.2%	0.2%	-0.1%	-0.4%	-0.4%	-0.2%
Postsecondary teacher—social sciences.....	9.9%	18.2%	11.0%	3.8%	24.5%	0.6%	0.1%	-0.7%	1.1%
Aeronautical, aerospace engineer.....	0.6%	0.2%	0.5%	1.9%	0.0%	-0.2%	0.0%	1.2%	-0.3%
Chemical engineer.....	1.0%	0.9%	1.5%	3.1%	0.0%	-0.1%	0.5%	3.0%	-0.9%
Civil engineer.....	0.3%	0.4%	0.4%	1.7%	0.3%	0.1%	0.1%	2.8%	0.0%
Electrical/electronic engineer.....	1.6%	0.9%	1.3%	6.5%	4.0%	-0.1%	-0.1%	1.5%	0.5%
Industrial engineer.....	0.1%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%	0.0%
Mechanical engineer.....	0.8%	0.2%	1.0%	3.8%	1.0%	-0.4%	0.2%	3.6%	0.2%
Other engineer.....	2.6%	1.3%	2.0%	6.4%	0.1%	-0.9%	-0.5%	4.8%	-2.0%
Engineering teacher.....	3.5%	3.6%	4.1%	5.7%	3.5%	0.0%	-0.4%	-1.9%	0.0%
Non-S&E ("low status").....	7.3%	9.4%	7.2%	6.5%	8.8%	1.7%	-0.1%	-1.2%	1.4%
{Non-S&E ("high status")}**.....	23.7%	27.9%	19.1%	14.1%	18.4%	--	--	--	--
How closely job is related to degree.....						-1.4%	-1.4%	-0.1%	-2.1%
{Closely related}**.....	68.0%	74.2%	71.4%	66.7%	75.3%	--	--	--	--
Somewhat related.....	25.4%	20.4%	23.7%	27.4%	20.2%	-0.8%	-0.3%	0.5%	-0.9%
Not related.....	6.6%	5.4%	4.9%	5.9%	4.5%	-0.6%	-1.1%	-0.6%	-1.2%

See explanatory information and SOURCE at end of table.

Appendix table 5-41: Variable means and percent of the doctoral science and engineering salary gaps explained for blacks, Hispanics, Asians, and American Indians compared with whites: 1993

Characteristics	Variable means					Percent of salary gap explained			
	White	Black	Hispanic	Asian	American Indian	Black	Hispanic	Asian	American Indian
Primary work activity.....						7.1%	0.6%	-8.2%	12.2%
Accounting, finance, contracts.....	0.8%	0.6%	0.8%	0.8%	0.0%	0.0%	0.0%	0.0%	0.2%
{Applied research}**.....	21.0%	17.1%	20.4%	26.4%	20.2%	--	--	--	--
Basic research.....	15.2%	8.2%	17.3%	18.4%	5.7%	-0.9%	0.4%	0.7%	-1.3%
Computer applications, programming, systems development.....	3.6%	2.7%	3.3%	7.9%	2.3%	-0.5%	-0.2%	3.7%	-0.7%
Development.....	4.6%	3.8%	4.6%	10.1%	1.8%	-0.1%	0.0%	0.8%	-0.3%
Design of equipment, processes, structures, models.....	2.0%	1.5%	1.9%	4.4%	0.4%	-0.2%	0.0%	1.3%	-0.6%
Employee relations.....	0.8%	1.3%	1.0%	0.4%	2.5%	0.1%	0.0%	-0.1%	0.2%
Management and administration.....	15.6%	18.4%	12.1%	8.6%	12.0%	0.5%	-0.8%	-2.2%	-0.7%
Production, operations, maintenance.....	0.2%	0.2%	0.1%	0.6%	0.0%	-0.1%	-0.5%	1.5%	-0.6%
Professional services.....	7.9%	8.7%	9.5%	3.9%	7.9%	0.0%	0.1%	-0.3%	0.0%
Sales, purchasing, marketing.....	1.1%	0.9%	0.7%	0.9%	0.6%	0.0%	0.0%	0.0%	0.0%
Quality or productivity management.....	0.9%	0.4%	1.0%	1.1%	1.3%	-0.1%	0.0%	0.0%	0.1%
Teaching.....	24.2%	34.0%	25.9%	15.0%	40.9%	8.2%	1.8%	-13.5%	15.3%
Other work activity.....	2.1%	2.3%	1.3%	1.6%	4.3%	0.1%	-0.2%	-0.2%	0.5%
Secondary work activity.....						0.9%	0.9%	-1.5%	0.2%
Accounting, finance, contracts.....	2.3%	1.7%	1.8%	1.5%	1.1%	0.1%	0.1%	0.3%	0.3%
Applied research.....	17.2%	16.5%	20.4%	20.9%	15.7%	0.1%	-0.3%	-0.5%	0.1%
{Basic research}.....	14.6%	16.5%	15.1%	14.4%	17.8%	--	--	--	--
Computer applications, programming, systems development.....	7.3%	4.7%	6.5%	10.6%	6.4%	-0.4%	-0.1%	0.8%	-0.1%
Development.....	6.3%	4.8%	6.2%	10.7%	3.7%	0.2%	0.0%	-1.1%	0.4%
Design of equipment, processes, structures, models.....	3.9%	2.3%	2.9%	6.6%	2.5%	-0.1%	-0.1%	0.4%	-0.1%
Employee relations.....	4.9%	7.2%	3.5%	2.6%	5.9%	0.3%	-0.2%	-0.5%	0.2%
Management and administration.....	14.7%	12.9%	12.9%	7.7%	19.9%	-0.1%	-0.2%	-0.9%	0.4%
Production, operations, maintenance.....	0.3%	0.1%	0.5%	0.6%	0.0%	-0.4%	0.3%	0.7%	-0.5%
Professional services.....	3.0%	5.3%	2.7%	1.7%	2.4%	-0.1%	0.0%	0.2%	0.0%
Sales, purchasing, marketing.....	1.7%	0.7%	0.6%	1.9%	1.9%	0.3%	0.4%	-0.1%	-0.1%
Quality or productivity management.....	1.6%	1.4%	1.6%	2.2%	0.8%	-0.1%	0.0%	0.3%	-0.3%
Teaching.....	12.7%	11.7%	14.3%	9.1%	10.5%	-0.2%	0.4%	-1.3%	-0.5%
Other work activity.....	1.9%	3.1%	1.7%	1.3%	3.0%	0.1%	0.0%	0.0%	0.0%
No secondary activity.....	7.6%	11.1%	9.2%	8.3%	8.2%	1.2%	0.7%	0.4%	0.2%
Managerial position*.....	11.9%	15.0%	9.4%	7.6%	10.1%	-1.9%	1.8%	4.5%	1.2%
Log number of direct supervisees.....	0.6421	0.5804	0.5838	0.3639	0.6552	1.3%	1.5%	10.2%	-0.3%
Log number of indirect supervisees.....	0.1642	0.1912	0.0290	-0.1820	0.1706	-0.6%	3.9%	14.0%	-0.2%
Postdoctoral appointment*.....	3.7%	4.0%	5.2%	8.9%	2.8%	0.9%	5.2%	25.0%	-2.6%
"Life choices".....						9.8%	2.1%	-3.3%	-2.8%
Marital status.....						8.2%	1.9%	-6.9%	-0.9%
{Married}**.....	79.3%	65.8%	77.1%	86.3%	79.5%	0.0%	0.0%	0.0%	0.0%
Widowed.....	0.6%	1.1%	0.3%	0.4%	0.1%	0.3%	-0.3%	-0.2%	-0.4%
Separated.....	1.2%	2.7%	1.4%	1.0%	1.8%	0.7%	0.1%	-0.1%	0.3%
Divorced.....	7.5%	11.9%	7.0%	2.5%	10.8%	2.3%	-0.3%	-4.6%	1.9%
Never married.....	11.3%	18.5%	14.1%	9.8%	7.7%	4.9%	2.4%	-1.9%	-2.7%
Spouse's work status.....						0.5%	-0.3%	0.1%	-0.3%
Spouse work full-time?*.....	40.4%	45.7%	40.4%	42.6%	39.4%	2.0%	0.0%	1.5%	-0.4%
Spouse work part-time?*.....	15.5%	6.4%	14.0%	10.6%	16.1%	-1.5%	-0.3%	-1.4%	0.1%
{Spouse not working or no spouse}**.....	44.1%	47.9%	45.6%	46.8%	44.5%	0.0%	0.0%	0.0%	0.0%
Spouse in natural science/engineering?*.....	17.8%	12.8%	18.3%	29.3%	19.5%	-0.6%	0.1%	2.6%	0.2%

See explanatory information and SOURCE at end of table.

Appendix table 5-41: Variable means and percent of the doctoral science and engineering salary gaps explained for blacks, Hispanics, Asians, and American Indians compared with whites: 1993

Characteristics	Variable means					Percent of salary gap explained			
	White	Black	Hispanic	Asian	American Indian	Black	Hispanic	Asian	American Indian
Reason not working in Ph.D. field:									
Family-related reasons.....	1.3%	1.3%	0.9%	1.0%	0.4%	0.0%	-0.3%	-0.3%	-0.5%
Reasons for changing employer/occupation:									
Working conditions.....	12.6%	14.9%	17.1%	13.1%	15.6%	-0.6%	-1.4%	-0.2%	-0.8%
School-related reasons.....	9.9%	12.0%	15.5%	15.7%	8.9%	0.4%	1.3%	1.9%	-0.2%
Reasons which would increase interest in research abroad:									
Better financial support.....	57.9%	65.1%	61.3%	55.1%	62.3%	1.3%	0.8%	-0.9%	0.9%
Reasons for taking workshops or seminars:									
Required by employer.....	21.1%	24.4%	20.6%	19.9%	18.1%	0.4%	-0.1%	-0.3%	-0.4%
Reasons for taking college or university courses:									
Further education before starting career.....	2.5%	2.5%	3.2%	3.2%	0.9%	0.0%	0.3%	0.4%	-0.6%
Change in occupation/field.....	5.5%	6.1%	4.8%	6.0%	5.5%	0.2%	-0.2%	0.2%	0.0%

KEY: *Dummy variables. All dummy variables are named so that 1 indicates possession of the trait and 0 its absence, e.g., 1 on MBA indicates the person's highest degree after completion of the doctorate was an MBA.

** This dummy variable was omitted from the regression equation to avoid overspecification of the model. The regression coefficients for the remaining dummy variables listed for this variable can accordingly be interpreted as deviations from this omitted category.

*** Type of employer sums to more than 100 percent, because it merges two closely related SDR variables. See the Technical Notes for more information.

-- = No parameter for cell because variable excluded from model.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-42. Doctoral scientists and engineers in the U.S. labor force, by field of doctorate and disability status: 1993

Field of doctorate	Total		Persons with disabilities		Persons without disabilities	
	Number	Percent	Number	Percent	Number	Percent
Total science and engineering.....	470,500	100.0	23,740	100.0	446,760	100.0
Sciences.....	394,070	83.8	20,400	85.9	373,660	83.6
Computer and mathematical sciences.....	28,260	6.0	1,440	6.1	26,820	6.0
Computer and information sciences.....	5,190	1.1	150	0.6	5,040	1.1
Mathematical science.....	23,070	4.9	1,290	5.4	21,790	4.9
Life and related sciences.....	126,460	26.9	5,830	24.6	120,630	27.0
Agricultural and food sciences.....	15,390	3.3	730	3.1	14,650	3.3
Biological and health sciences.....	107,180	22.8	4,860	20.5	102,330	22.9
Environmental science.....	3,880	0.8	240	1.0	3,650	0.8
Physical and related sciences.....	100,660	21.4	4,900	20.6	95,760	21.4
Chemistry, except biochemistry.....	52,710	11.2	2,560	10.8	50,150	11.2
Geology and oceanography.....	12,890	2.7	620	2.6	12,270	2.7
Physics and astronomy.....	33,930	7.2	1,620	6.8	32,310	7.2
Other physical sciences (incl earth).....	1,140	0.2	100	0.4	1,040	0.2
Social and related science.....	138,690	29.5	8,240	34.7	130,450	29.2
Economics.....	19,690	4.2	1,290	5.4	18,410	4.1
Political science.....	14,580	3.1	1,230	5.2	13,350	3.0
Psychology.....	71,950	15.3	3,840	16.2	68,120	15.2
Sociology and anthropology.....	20,110	4.3	1,140	4.8	18,970	4.2
Other social sciences.....	12,350	2.6	740	3.1	11,610	2.6
Engineering.....	76,440	16.2	3,340	14.1	73,100	16.4
Aerospace, aeronautical.....	3,120	0.7	90	0.4	3,040	0.7
Chemical.....	11,340	2.4	410	1.7	10,930	2.4
Civil.....	7,100	1.5	330	1.4	6,770	1.5
Electrical, computer.....	19,780	4.2	920	3.9	18,850	4.2
Industrial.....	1,950	0.4	60	0.3	1,890	0.4
Mechanical.....	9,560	2.0	380	1.6	9,180	2.1
Other engineering.....	23,580	5.0	1,150	4.8	22,430	5.0

NOTE: Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-43. Doctoral Scientists and engineers who reported a disability, by age at onset of disability: 1993

Page 1 of 1

Age at onset of disability	Number	Percent
Total with disability.....	31,220	100.0
Since birth	2,250	7.2
Younger than 10 years old	2,650	8.5
10 to 19 years old.....	2,980	9.5
20 to 34 years old.....	5,440	17.4
35 to 44 years old.....	5,700	18.3
45 to 54 years old.....	6,020	19.3
55 to 64 years old	4,100	13.1
65 to 75 years old	2,080	6.7

NOTES: Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recip

Women, Minorities, and Persons With Disabilities in Science and Engineering:

Appendix table 5-44. Doctoral scientists and engineers employed in universities and 4-year colleges, by year of doctorate, disability status, academic rank, and tenure status: 1993

Year of doctorate and disability status	Total	Academic rank					Tenure status			
		Professor	Associate professor	Assistant professor	Other faculty	Does not apply	Tenured	Tenure-track, not tenured	Not in track, not tenured	Tenure not applicable
Total:										
All years.....	190,640	72,020	45,160	38,380	9,330	25,750	105,750	34,470	17,210	33,210
1985–1992 graduates.....	60,460	1,120	8,740	29,380	4,290	16,930	7,700	25,400	9,130	18,230
Pre-1985 graduates.....	130,180	70,890	36,420	9,000	5,050	8,820	98,060	9,060	8,080	14,980
Disabled:										
All years.....	9,460	4,740	2,300	1,250	370	800	6,490	1,190	500	1,280
1985–1992 graduates.....	1,520	80	200	890	110	240	210	890	130	290
Pre-1985 graduates.....	7,940	4,660	2,110	360	260	560	6,280	300	370	990
Not disabled:										
All years.....	181,180	67,280	42,860	37,130	8,960	24,950	99,270	33,280	16,710	31,930
1985–1992 graduates.....	58,940	1,040	8,540	28,490	4,180	16,690	7,480	24,510	9,000	17,940
Pre-1985 graduates.....	122,240	66,240	34,310	8,640	4,780	8,260	91,780	8,770	7,710	13,990
Percent distribution										
Total:										
All years.....	100.0	37.8	23.7	20.1	4.9	13.5	55.5	18.1	9.0	17.4
1985–1992 graduates.....	100.0	1.9	14.5	48.6	7.1	28.0	12.7	42.0	15.1	30.2
Pre-1985 graduates.....	100.0	54.5	28.0	6.9	3.9	6.8	75.3	7.0	6.2	11.5
Disabled:										
All years.....	100.0	50.1	24.3	13.2	3.9	8.5	68.6	12.6	5.3	13.5
1985–1992 graduates.....	100.0	5.3	13.2	58.6	7.2	15.8	13.8	58.6	8.6	19.1
Pre-1985 graduates.....	100.0	58.7	26.6	4.5	3.3	7.1	79.1	3.8	4.7	12.5
Not disabled:										
All years.....	100.0	37.1	23.7	20.5	4.9	13.8	54.8	18.4	9.2	17.6
1985–1992 graduates.....	100.0	1.8	14.5	48.3	7.1	28.3	12.7	41.6	15.3	30.4
Pre-1985 graduates.....	100.0	54.2	28.1	7.1	3.9	6.8	75.1	7.2	6.3	11.4

NOTE: Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-45. Doctoral scientists and engineers employed in business or industry, by age, disability status, and management work activity: 1993

Age and disability status	Total	Management		Nonmanagement	
		Number	Percent	Number	Percent
Total:					
Persons with disabilities.....	6,320	1,960	31.0	4,360	69.0
Persons without disabilities.....	134,870	32,940	24.4	101,930	75.6
Younger than 35 years old:					
Persons with disabilities.....	300	100	33.3	200	66.7
Persons without disabilities.....	18,780	1,430	7.6	17,350	92.4
35 to 45 years old:					
Persons with disabilities.....	1,180	300	25.4	880	74.6
Persons without disabilities.....	50,400	10,650	21.1	39,750	78.9
45 years old and older:					
Persons with disabilities.....	4,850	1,570	32.4	3,280	67.6
Persons without disabilities.....	65,710	20,870	31.8	44,840	68.2

NOTES: The business or industry classification excludes individuals who reported self-employment.
Because of rounding, details may not add to totals.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.

Appendix table 5-46: Regression parameters and standard errors for model used in the salary decomposition in Chapter 5 and alternative models evaluated

Characteristics	Basic model (based on total population)		Regression model for men		Regression model for women		Model including academic rank and		Model including demographic variables	
	Parameters	Standard error	Parameters	Standard error	Parameters	Standard error	Parameters	Standard error	Parameters	Standard error
R ² for the model.....			53%		49%		56%		54%	
Intercept.....	11.46888	0.05249	11.54457	0.06584	11.09604	0.09393	11.43239	0.05162	11.49271	0.05277
Years since receipt of Ph.D.1:										
Years since receipt of Ph.D.....	0.01757	0.00102	0.02062	0.00124	0.00965	0.00197	0.01495	0.00102	0.01741	0.00103
Years since receipt of Ph.D. squared.....	-0.00021	0.00002	-0.00027	0.00003	-0.00007	0.00006	-0.00020	0.00002	-0.00021	0.00003
Field of degree										
Main effects:										
Computer science.....	0.30255	0.02812	0.32376	0.03203	0.21638	0.06163	0.28708	0.02768	0.29960	0.02814
Mathematical sciences.....	0.08972	0.01823	0.10244	0.02080	0.02478	0.04213	0.10153	0.01795	0.08479	0.01827
Agricultural sciences.....	-0.01914	0.01817	-0.01086	0.02106	-0.02032	0.03989	-0.01908	0.01787	-0.02184	0.01816
(Biological sciences)**.....										
Environmental sciences.....	0.02331	0.03790	0.03571	0.04256	-0.04860	0.10377	0.03188	0.03728	0.01834	0.03786
Chemistry.....	0.07924	0.01273	0.08421	0.01506	0.07196	0.02560	0.06263	0.01254	0.07664	0.01275
Geosciences.....	0.06740	0.02203	0.07082	0.02521	0.06222	0.05188	0.05667	0.02167	0.06160	0.02202
Physics/astronomy.....	0.13209	0.01538	0.13647	0.01718	0.13176	0.04676	0.12742	0.01513	0.12521	0.01545
Other physical sciences.....	0.05012	0.05286	0.04500	0.06358	0.08400	0.10337	0.03030	0.05200	0.05086	0.05279
Economics.....	0.17395	0.01873	0.18400	0.02170	0.14723	0.03904	0.17526	0.01844	0.17026	0.01877
Political science.....	0.02348	0.02062	0.02095	0.02477	0.04220	0.03715	0.03306	0.02029	0.01770	0.02061
Psychology.....	0.01998	0.01297	0.04703	0.01721	-0.02546	0.01897	0.01600	0.01276	0.02025	0.01298
Sociology/anthropology.....	-0.05447	0.01820	-0.04256	0.02449	-0.07656	0.02663	-0.04425	0.01791	-0.05259	0.01819
Other social sciences.....	0.05371	0.02051	0.09425	0.02699	-0.01972	0.03033	0.06034	0.02019	0.05461	0.02051
Aeroengineering.....	0.15678	0.04318	0.16535	0.04517	0.16663	0.42357	0.13850	0.04248	0.14803	0.04317
Chemical engineering.....	0.21539	0.02286	0.23198	0.02535	0.10083	0.08144	0.19351	0.02251	0.20934	0.02291
Electrical engineering.....	0.19535	0.01603	0.20805	0.01780	0.10899	0.06260	0.18154	0.01578	0.18742	0.01617
Industrial engineering.....	0.22082	0.04368	0.23342	0.05227	0.11727	0.10307	0.22687	0.04297	0.22143	0.04364
Mechanical engineering.....	0.16788	0.02292	0.17525	0.02476	0.15965	0.10912	0.15419	0.02255	0.16188	0.02301
Other engineering.....	0.14559	0.01537	0.15596	0.01732	0.06963	0.04648	0.13170	0.01513	0.14069	0.01547
Interaction with years since degree:										
Computer science.....	-0.00815	0.00362	-0.00970	0.00400	-0.00374	0.00933	-0.00663	0.00356	-0.00822	0.00362
Mathematical sciences.....	-0.00188	0.00086	-0.00263	0.00096	0.00177	0.00242	-0.00284	0.00084	-0.00176	0.00086
Agricultural sciences.....	-0.00324	0.00103	-0.00368	0.00115	-0.00535	0.00338	-0.00342	0.00102	-0.00320	0.00103
(Biological sciences)**.....										
Environmental sciences.....	-0.00262	0.00233	-0.00338	0.00255	0.00579	0.01192	-0.00275	0.00229	-0.00257	0.00233
Chemistry.....	-0.00328	0.00061	-0.00372	0.00069	-0.00273	0.00163	-0.00190	0.00060	-0.00325	0.00061
Geosciences.....	-0.00103	0.00114	-0.00121	0.00127	-0.00296	0.00452	-0.00002	0.00113	-0.00094	0.00114
Physics/astronomy.....	-0.00274	0.00072	-0.00319	0.00080	-0.00224	0.00300	-0.00223	0.00071	-0.00257	0.00073
Other physical sciences.....	-0.00432	0.00508	-0.00348	0.00570	-0.01174	0.01678	-0.00130	0.00500	-0.00458	0.00507
Economics.....	-0.00020	0.00097	-0.00097	0.00109	0.00123	0.00243	-0.00082	0.00096	-0.00017	0.00097
Political science.....	0.00080	0.00110	0.00080	0.00126	-0.00071	0.00245	-0.00025	0.00108	0.00099	0.00110
Psychology.....	-0.00260	0.00068	-0.00387	0.00085	0.00134	0.00122	-0.00224	0.00067	-0.00259	0.00068
Sociology/anthropology.....	0.00085	0.00103	-0.00004	0.00128	0.00370	0.00183	-0.00022	0.00101	0.00078	0.00103
Other social sciences.....	-0.00398	0.00125	-0.00599	0.00153	0.00157	0.00239	-0.00466	0.00123	-0.00401	0.00125
Aeroengineering.....	-0.00421	0.00226	-0.00494	0.00235	0.00760	0.02785	-0.00320	0.00222	-0.00402	0.00226
Chemical engineering.....	-0.00465	0.00111	-0.00554	0.00120	-0.00109	0.01256	-0.00301	0.00109	-0.00441	0.00111
Electrical engineering.....	-0.00548	0.00082	-0.00628	0.00089	0.00254	0.00648	-0.00445	0.00081	-0.00524	0.00082
Industrial engineering.....	-0.00294	0.00271	-0.00383	0.00304	0.00562	0.01478	-0.00347	0.00267	-0.00316	0.00271
Mechanical engineering.....	-0.00363	0.00126	-0.00422	0.00133	-0.00045	0.01043	-0.00253	0.00124	-0.00347	0.00126
Other engineering.....	-0.00344	0.00085	-0.00422	0.00093	0.00508	0.00459	-0.00267	0.00084	-0.00331	0.00085
Other work-related characteristics										
Age when doctorate received:										
Age at Ph.D.....	-0.03252	0.00286	-0.03683	0.00370	-0.01551	0.00483	-0.02950	0.00282	-0.03339	0.00288
Age at Ph.D. squared.....	0.00036	0.00004	0.00042	0.00005	0.00016	0.00006	0.00033	0.00004	0.00038	0.00004

See explanatory information and SOURCE at end of table.

Appendix table 5-46: Regression parameters and standard errors for model used in the salary decomposition in Chapter 5 and alternative models evaluated

Characteristics	Basic model (based on total population)		Regression model for men		Regression model for women		Model including academic rank and		Model including demographic variables	
	Parameters	Standard error	Parameters	Standard error	Parameters	Standard error	Parameters	Standard error	Parameters	Standard error
Whether attended professional society meeting or conference within the past year*	0.04223	0.00449	0.03793	0.00508	0.06291	0.00979	0.03720	0.00442	0.04243	0.00449
Number of professional societies or associations belonged to.....	0.01342	0.00083	0.01306	0.00094	0.01283	0.00176	0.01042	0.00082	0.01345	0.00083
Highest degree since doctorate*:										
MBA.....	0.04819	0.01743	0.02988	0.01920	0.19449	0.04457	0.05892	0.01715	0.05014	0.01743
Master's.....	-0.06440	0.01573	-0.06165	0.01837	-0.07607	0.02961	-0.05091	0.01548	-0.06183	0.01572
Other doctorate.....	0.00112	0.03260	0.02554	0.03654	-0.15940	0.07315	0.00667	0.03207	-0.00351	0.03256
JD,LLB,LLM.....	0.14170	0.02621	0.08592	0.03111	0.31775	0.04669	0.15338	0.02579	0.14054	0.02618
MD.....	0.17536	0.01653	0.15892	0.01889	0.19226	0.03414	0.19629	0.01629	0.16931	0.01653
Other professional degree.....	-0.07475	0.03488	-0.07374	0.04386	-0.04486	0.05350	-0.07506	0.03431	-0.07517	0.03483
Other degree.....	-0.06534	0.04834	-0.02738	0.05768	-0.15191	0.08686	-0.03173	0.04758	-0.06366	0.04828
Bachelor's degree.....	-0.08885	0.06138	-0.01668	0.07183	-0.28838	0.11337	-0.08500	0.06038	-0.08592	0.06131
{No degree}**										
Taken courses since last degree?*	-0.02026	0.00439	-0.02132	0.00504	-0.00745	0.00892	-0.02290	0.00403	-0.01918	0.00439
Previously retired?*	-0.08533	0.01082	-0.08691	0.01183	-0.06706	0.02976	-0.06230	0.01067	-0.08683	0.01081
Full-time experience:										
Years full-time experience.....	0.01108	0.00084	0.00870	0.00101	0.01666	0.00159	0.00997	0.00083	0.01087	0.00085
Years full-time experience squared.....	-0.00013	0.00002	-0.00008	0.00002	-0.00030	0.00004	-0.00012	0.00002	-0.00013	0.00002
Have employment-related license?*	0.02580	0.00535	0.01993	0.00625	0.04775	0.01027	0.02226	0.00526	0.02679	0.00534
Same occupation?*	0.03963	0.00455	0.03701	0.00529	0.04577	0.00870	0.03573	0.00450	0.03924	0.00455
Employed in 1988?*	0.05121	0.00877	0.04942	0.01057	0.04637	0.01525	0.05739	0.00864	0.04864	0.00877
Employer characteristics										
Type of employer***:										
2-year college.....	-0.25247	0.01521	-0.25736	0.01809	-0.22648	0.02696	-0.29560	0.01547	-0.25392	0.01519
Research institution I.....	-0.17250	0.00628	-0.16257	0.00720	-0.20260	0.01291	-0.22583	0.00717	-0.17206	0.00627
Research institution II.....	-0.21649	0.00935	-0.20952	0.01060	-0.24498	0.02007	-0.27919	0.00999	-0.21660	0.00934
Doctorate granting I.....	-0.23101	0.01151	-0.22450	0.01325	-0.23887	0.02286	-0.28506	0.01194	-0.22993	0.01150
Doctorate granting II.....	-0.24522	0.01066	-0.24531	0.01221	-0.23429	0.02168	-0.31138	0.01124	-0.24505	0.01065
Comprehensive I.....	-0.25483	0.00815	-0.26019	0.00945	-0.23148	0.01587	-0.32631	0.00902	-0.25499	0.00815
Comprehensive II.....	-0.32207	0.02077	-0.33481	0.02460	-0.28076	0.03722	-0.40536	0.02086	-0.32119	0.02075
Liberal arts I.....	-0.24660	0.01307	-0.25130	0.01562	-0.22158	0.02295	-0.30973	0.01344	-0.24498	0.01306
Liberal arts II.....	-0.36801	0.01377	-0.36481	0.01605	-0.35287	0.02608	-0.43673	0.01411	-0.36725	0.01376
Medical school (Carnegie classification).....	-0.16009	0.01286	-0.16110	0.01560	-0.15407	0.02219	-0.21829	0.01326	-0.15893	0.01284
Medical school (self-classification).....	0.02013	0.00799	0.03929	0.00963	-0.02337	0.01381	0.03843	0.00800	0.02090	0.00798
Health related schools that are not medical schools.....	0.00463	0.02521	0.03366	0.03280	-0.03216	0.03618	-0.01497	0.02486	0.00564	0.02519
Univ.-affiliated research institute.....	-0.00972	0.00799	-0.00880	0.00899	-0.01108	0.01771	-0.00763	0.00788	-0.00991	0.00799
Other educational institution.....	-0.13612	0.11004	-0.16074	0.13722	-0.07885	0.17060	-0.18493	0.10830	-0.14423	0.10988
Elementary/mid/secondary school.....	-0.21781	0.01698	-0.22878	0.02254	-0.19099	0.02423	-0.20993	0.01671	-0.21654	0.01697
Private, for-profit company.....										
Private, not-for-profit organization.....	-0.16322	0.00787	-0.16502	0.00925	-0.15536	0.01476	-0.15498	0.00775	-0.16333	0.00787
Local government.....	-0.31552	0.01749	-0.31791	0.02155	-0.30749	0.02836	-0.31421	0.01721	-0.31626	0.01747
State government.....	-0.32763	0.01210	-0.34956	0.01417	-0.25116	0.02262	-0.32498	0.01191	-0.32795	0.01209
U.S. military service.....	-0.12365	0.02249	-0.12895	0.02504	-0.08720	0.05294	-0.12256	0.02211	-0.12739	0.02246
U.S. government (civilian employee).....	-0.09852	0.00718	-0.10859	0.00811	-0.04393	0.01564	-0.08770	0.00707	-0.09885	0.00718
Other employer type.....	0.26875	0.02933	0.25778	0.03275	0.27062	0.06791	0.28647	0.02885	0.26517	0.02934
Region of employment:										
New England.....	-0.02789	0.00696	-0.01908	0.00807	-0.05910	0.01338	-0.02499	0.00686	-0.02783	0.00695
(Middle Atlantic)**										
East North Central.....	-0.05857	0.00578	-0.06132	0.00661	-0.05344	0.01178	-0.06140	0.00568	-0.05903	0.00577
West North Central.....	-0.08641	0.00759	-0.09284	0.00867	-0.06719	0.01562	-0.09210	0.00747	-0.08768	0.00759
South Atlantic.....	-0.05627	0.00555	-0.05091	0.00639	-0.08396	0.01099	-0.05772	0.00546	-0.05690	0.00554

See explanatory information and SOURCE at end of table.

Appendix table 5-46: Regression parameters and standard errors for model used in the salary decomposition in Chapter 5 and alternative models evaluated

Characteristics	Basic model (based on total population)		Regression model for men		Regression model for women		Model including academic rank and		Model including demographic variables	
	Parameters	Standard error	Parameters	Standard error	Parameters	Standard error	Parameters	Standard error	Parameters	Standard error
East South Central.....	-0.13805	0.00878	-0.14429	0.00989	-0.10815	0.01941	-0.14714	0.00864	-0.13914	0.00877
West South Central.....	-0.08024	0.00688	-0.07536	0.00780	-0.11881	0.01486	-0.08172	0.00677	-0.08048	0.00688
Mountain.....	-0.08648	0.00763	-0.08789	0.00862	-0.07634	0.01670	-0.09001	0.00751	-0.08710	0.00764
Pacific.....	0.00020	0.00562	0.00116	0.00647	-0.00471	0.01120	-0.00381	0.00553	-0.00042	0.00562
Other U.S.....	-0.23462	0.03220	-0.23631	0.03868	-0.25832	0.05500	-0.24606	0.03168	-0.23752	0.03294
Non-U.S.....	-0.39514	0.04493	-0.38159	0.04851	-0.61157	0.13783	-0.42526	0.04427	-0.39612	0.04487
Type of work										
Occupation:										
Computer scientist.....	-0.01910	0.01323	-0.02202	0.01463	0.02192	0.03404	-0.00695	0.01306	-0.01902	0.01322
Mathematical scientist.....	0.01306	0.01705	0.00719	0.01911	0.05672	0.03894	0.02275	0.01679	0.01237	0.01703
Postsecondary teacher—math/computers.....	0.01355	0.01268	0.01005	0.01436	0.04275	0.02953	-0.00421	0.01254	0.01127	0.01268
Agricultural scientist.....	-0.12528	0.01505	-0.11983	0.01679	-0.14944	0.03610	-0.12472	0.01480	-0.12720	0.01503
Biological scientist.....	-0.11452	0.00865	-0.10656	0.01018	-0.12599	0.01643	-0.10011	0.00855	-0.11590	0.00864
Environmental scientist.....	-0.13672	0.03953	-0.12821	0.04330	-0.17497	0.10553	-0.13820	0.03888	-0.13929	0.03948
Postsecondary teacher—life sciences.....	-0.03948	0.00913	-0.04102	0.01080	-0.02853	0.01713	-0.05975	0.00903	-0.04278	0.00913
Chemist.....	-0.09777	0.01117	-0.09292	0.01252	-0.10519	0.02607	-0.08545	0.01102	-0.09875	0.01116
Geoscientist.....	-0.08957	0.01617	-0.09043	0.01773	-0.03880	0.04456	-0.06909	0.01594	-0.09021	0.01615
Physicist/astronomer.....	-0.07439	0.01303	-0.07222	0.01414	-0.07075	0.04313	-0.05505	0.01285	-0.07558	0.01301
Other physical scientist.....	-0.06232	0.02830	-0.06087	0.03036	-0.03887	0.09397	-0.05685	0.02784	-0.06175	0.02826
Postsecondary teacher—physical sciences.....	-0.04833	0.01082	-0.04852	0.01226	-0.04760	0.02651	-0.07790	0.01072	-0.05065	0.01081
Economist.....	-0.05653	0.01864	-0.03503	0.02141	-0.12808	0.03773	-0.05443	0.01837	-0.05428	0.01863
Political scientist.....	-0.00483	0.04178	0.01282	0.05043	-0.04745	0.07075	-0.01428	0.04110	-0.00146	0.04173
Psychologist.....	-0.06775	0.01257	-0.08579	0.01586	-0.03634	0.01981	-0.05817	0.01239	-0.06903	0.01256
Sociologist/anthropologist.....	-0.01113	0.02474	0.01615	0.03270	-0.06069	0.03531	-0.00609	0.02434	-0.00911	0.02471
Other social scientist.....	-0.12603	0.02779	-0.06402	0.03614	-0.23936	0.04041	-0.11557	0.02736	-0.12599	0.02777
Postsecondary teacher—social sciences.....	-0.00849	0.00925	-0.00048	0.01125	-0.02314	0.01556	-0.02657	0.00916	-0.00958	0.00925
Aeronautical, aerospace engineer.....	-0.06625	0.02180	-0.06009	0.02301	-0.07268	0.11982	-0.04956	0.02145	-0.06386	0.02177
Chemical engineer.....	-0.10113	0.01905	-0.10254	0.02066	-0.01855	0.05891	-0.09393	0.01875	-0.10140	0.01903
Civil engineer.....	-0.14618	0.02466	-0.14188	0.02599	-0.09965	0.13377	-0.13060	0.02427	-0.14506	0.02465
Electrical/electronic engineer.....	-0.02100	0.01409	-0.01639	0.01514	0.00188	0.05545	-0.01085	0.01389	-0.01840	0.01409
Industrial engineer.....	-0.08475	0.05708	-0.07952	0.06233	-0.11623	0.15893	-0.08586	0.05615	-0.08517	0.05701
Mechanical engineer.....	-0.08227	0.01880	-0.07279	0.01994	-0.23515	0.09898	-0.07005	0.01851	-0.07982	0.01879
Other engineer.....	-0.08710	0.01207	-0.08332	0.01332	-0.08026	0.03212	-0.07895	0.01190	-0.08698	0.01206
Teach engineering.....	0.05999	0.01186	0.05873	0.01314	0.12255	0.04137	0.03187	0.01176	0.05751	0.01185
Non-S&E ("low status").....	-0.10238	0.00809	-0.09728	0.00953	-0.11661	0.01490	-0.09013	0.00801	-0.10179	0.00808
{Non-S&E ("high status")}**										
How closely job is related to degree:										
{Closely related}**.....										
Somewhat related.....	-0.01933	0.00412	-0.01759	0.00469	-0.02337	0.00865	-0.01386	0.00405	-0.01900	0.00412
Not related.....	-0.06230	0.00807	-0.06422	0.00900	-0.05614	0.01909	-0.05741	0.00792	-0.06286	0.00806
Primary work activity:										
Accounting, finance, contracts.....	0.02694	0.01873	0.02401	0.02114	0.04930	0.04091	0.03276	0.01843	0.02780	0.01870
{Applied research}**										
Basic research.....	-0.01585	0.00647	-0.01068	0.00740	-0.04152	0.01319	-0.02381	0.00637	-0.01652	0.00646
Computer applications, programming, systems development.....	-0.06010	0.01001	-0.05792	0.01099	-0.07695	0.02689	-0.06383	0.00985	-0.06038	0.01000
Development.....	-0.01054	0.00849	-0.01124	0.00939	0.00417	0.02105	-0.00764	0.00836	-0.00974	0.00848
Design of equipment, processes, structures, models.....	-0.03894	0.01175	-0.04068	0.01266	0.01877	0.03774	-0.03494	0.01156	-0.04020	0.01173
Employee relations.....	-0.01347	0.01892	-0.02978	0.02273	0.03234	0.03263	-0.01742	0.01861	-0.01267	0.01890
Management and administration.....	-0.02224	0.00729	-0.01912	0.00830	-0.02981	0.01540	-0.02414	0.00717	-0.02153	0.00729
Production, operations, maintenance.....	-0.29273	0.03208	-0.28595	0.03566	-0.34533	0.07603	-0.29891	0.03155	-0.29567	0.03204
Professional services.....	-0.00505	0.00886	0.02451	0.01058	-0.09006	0.01585	0.00272	0.00873	-0.00487	0.00885
Sales, purchasing, marketing.....	0.00957	0.01634	0.00550	0.01796	0.03015	0.04239	0.01709	0.01608	0.00845	0.01633
Quality or productivity management.....	-0.02052	0.01750	-0.00657	0.01967	-0.09156	0.03855	-0.01814	0.01720	-0.01946	0.01747
Teaching.....	-0.10211	0.00817	-0.09494	0.00960	-0.12640	0.01535	-0.12332	0.00814	-0.09983	0.00816
Other work activity.....	-0.02583	0.01227	-0.02588	0.01437	-0.03094	0.02290	-0.02511	0.01206	-0.02507	0.01225

See explanatory information and SOURCE at end of table.

Appendix table 5-46: Regression parameters and standard errors for model used in the salary decomposition in Chapter 5 and alternative models evaluated

Characteristics	Basic model (based on total population)		Regression model for men		Regression model for women		Model including academic rank and		Model including demographic variables	
	Parameters	Standard error	Parameters	Standard error	Parameters	Standard error	Parameters	Standard error	Parameters	Standard error
Secondary work activity:										
Accounting, finance, contracts.....	0.02558	0.01231	0.02980	0.01369	0.01949	0.02997	0.03195	0.01211	0.02553	0.01230
Applied research..... (Basic research)	0.01020	0.00625	0.00700	0.00713	0.02646	0.01283	0.01399	0.00615	0.01026	0.00624
Computer applications, programming, systems development.....	-0.01685	0.00773	-0.01658	0.00865	-0.01255	0.01787	-0.00879	0.00761	-0.01707	0.00772
Development.....	0.01750	0.00807	0.01630	0.00904	0.02915	0.01840	0.02712	0.00794	0.01859	0.00806
Design of equipment, processes, structures, models.....	-0.00890	0.00965	-0.00801	0.01063	-0.01212	0.02554	-0.00098	0.00949	-0.00901	0.00964
Employee relations.....	-0.01654	0.00933	-0.01308	0.01088	-0.01180	0.01770	-0.01234	0.00918	-0.01545	0.00933
Management and administration.....	-0.00909	0.00666	-0.00623	0.00766	-0.01142	0.01323	-0.00245	0.00656	-0.00882	0.00666
Production, operations, maintenance.....	-0.16161	0.02746	-0.17148	0.03044	-0.09853	0.06640	-0.15811	0.02701	-0.16347	0.02742
Professional services.....	0.00810	0.01091	0.02342	0.01312	-0.03621	0.01884	0.01600	0.01073	0.00820	0.01089
Sales, purchasing, marketing.....	0.03687	0.01371	0.03264	0.01513	0.06003	0.03536	0.05426	0.01350	0.03712	0.01370
Quality or productivity management.....	-0.04053	0.01356	-0.04367	0.01538	-0.00828	0.02873	-0.03035	0.01334	-0.03875	0.01354
Teaching.....	-0.02473	0.00812	-0.03319	0.00949	0.01387	0.01543	-0.04177	0.00803	-0.02372	0.00812
Other work activity.....	-0.00519	0.01259	0.00619	0.01498	-0.02017	0.02222	0.00196	0.01238	-0.00422	0.01257
No secondary activity.....	-0.04175	0.00771	-0.04003	0.00905	-0.04011	0.01435	-0.03359	0.00760	-0.04047	0.00770
Managerial position.....	0.07219	0.00729	0.07834	0.00823	0.05729	0.01583	0.09186	0.00721	0.07260	0.00728
Log number of direct supervisees.....	0.02550	0.00173	0.02722	0.00197	0.01584	0.00359	0.02270	0.00170	0.02531	0.00173
Log number of indirect supervisees.....	0.02808	0.00139	0.02799	0.00156	0.02448	0.00319	0.02776	0.00137	0.02755	0.00139
Postdoctoral appointment*.....	-0.33130	0.00957	-0.33098	0.01158	-0.32961	0.01636	-0.31171	0.00994	-0.32982	0.00957
"Life choices"										
Marital status:										
{Married}**.....										
Widowed.....	-0.08935	0.02099	-0.07673	0.02752	-0.02937	0.03277	-0.08212	0.02065	-0.07748	0.02657
Separated.....	-0.05446	0.01487	-0.06111	0.01704	0.01217	0.03215	-0.04779	0.01464	-0.06081	0.01645
Divorced.....	-0.06347	0.00701	-0.06726	0.00846	0.00313	0.01743	-0.05813	0.00690	-0.06863	0.00814
Never married.....	-0.08371	0.00601	-0.08622	0.00724	-0.01254	0.01649	-0.07688	0.00592	-0.08880	0.00694
Spouse's work status:										
Spouse work full-time?*.....	-0.04598	0.00461	-0.04207	0.00502	-0.00442	0.01637	-0.05037	0.00415	-0.04243	0.00466
Spouse work part-time?*..... {Spouse not working or no spouse}**	-0.01973	0.00544	-0.02161	0.00577	0.00846	0.02258	-0.02179	0.00526	-0.02293	0.00544
Spouse in natural science/engineering?*.....	-0.01574	0.00474	-0.01047	0.00563	-0.00548	0.00917			-0.00742	0.00482
Reason not working in Ph.D. field:										
Family-related reasons.....	-0.07403	0.01613	-0.09041	0.01899	-0.01392	0.03054	-0.07280	0.01587	-0.07221	0.01612
Reasons for changing employer/occupation:										
Working conditions.....	0.03052	0.00509	0.03484	0.00602	0.01291	0.00918	0.03104	0.00503	0.03132	0.00509
School-related reasons.....	-0.02340	0.00674	-0.02884	0.00814	-0.01347	0.01159	-0.02943	0.00665	-0.02241	0.00673
Reasons that would increase interest in research abroad:										
Better financial support.....	-0.02198	0.00346	-0.02307	0.00392	-0.01255	0.00735	-0.01913	0.00340	-0.02229	0.00346
Reasons for taking workshops or seminars:										
Required by employer.....	-0.01645	0.00411	-0.01894	0.00470	-0.00552	0.00842			-0.01658	0.00411
Reasons for taking college or university courses:										
Further education before starting career.....	-0.04204	0.01109	-0.03804	0.01281	-0.06141	0.02164	-0.04733	0.01044	-0.04337	0.01108
Change in occupation/field.....	-0.02912	0.00824	-0.03040	0.00955	-0.02253	0.01596			-0.02861	0.00823
Rank and tenure										
Academic rank:										
Full professor.....	--	--	--	--	--	--	0.16476	0.01096	--	--
Associate professor.....	--	--	--	--	--	--	0.04179	0.01064	--	--
Assistant professor.....	--	--	--	--	--	--	0.01637	0.01093	--	--
Instructor.....	--	--	--	--	--	--	-0.03719	0.02037	--	--
{Other rank}**.....	--	--	--	--	--	--	--	--	--	--

See explanatory information and SOURCE at end of table.

Appendix table 5-46: Regression parameters and standard errors for model used in the salary decomposition in Chapter 5 and alternative models evaluated

Characteristics	Basic model (based on total population)		Regression model for men		Regression model for women		Model including academic rank and		Model including demographic variables	
	Parameters	Standard error	Parameters	Standard error	Parameters	Standard error	Parameters	Standard error	Parameters	Standard error
Tenure status:										
Tenured.....	--	--	--	--	--	--	0.05168	0.01019	--	--
In tenure track, not tenured.....	--	--	--	--	--	--	0.07554	0.01083	--	--
Not in tenure track.....	--	--	--	--	--	--	-0.06629	0.00972	--	--
{Tenure track not relevant}**.....	--	--	--	--	--	--	--	--	--	--
Demographic variables***:										
Gender (Female = 1)*.....	--	--	--	--	--	--	--	--	-0.04602	0.00571
Disability at degree?.....	--	--	--	--	--	--	--	--	-0.02041	0.01076
Disability after degree?.....	--	--	--	--	--	--	--	--	-0.01759	0.01059
Foreign born?*.....	--	--	--	--	--	--	--	--	0.01874	0.00629
Race/ethnicity*:										
{White}**.....	--	--	--	--	--	--	--	--	--	--
Black*.....	--	--	--	--	--	--	--	--	0.03048	0.01324
Hispanic*.....	--	--	--	--	--	--	--	--	-0.00476	0.01574
Asian*.....	--	--	--	--	--	--	--	--	0.01911	0.01656
American Indian*.....	--	--	--	--	--	--	--	--	-0.04586	0.02499
Interactions between race/ethnicity and whether U.S. born*:										
Non-U.S. White*.....	--	--	--	--	--	--	--	--	--	--
Non-U.S. Black*.....	--	--	--	--	--	--	--	--	-0.07823	0.02422
Non-U.S. Hispanic*.....	--	--	--	--	--	--	--	--	0.00288	0.02399
Non-U.S. Asian*.....	--	--	--	--	--	--	--	--	-0.05868	0.01825
Interactions between gender and marital status:										
{Married female}*.....	--	--	--	--	--	--	--	--	--	--
Never married female*.....	--	--	--	--	--	--	--	--	0.03913	0.01147
Widowed female*.....	--	--	--	--	--	--	--	--	0.00153	0.04269
Separated female*.....	--	--	--	--	--	--	--	--	0.05164	0.03695
Divorced female*.....	--	--	--	--	--	--	--	--	0.04265	0.01398

¹ See the Technical Notes for a discussion of the alternative models.

KEY: *Dummy variables. All dummy variables are named so that 1 indicates possession of the trait and 0 its absence, e.g., 1 on MBA indicates the person's highest degree after completion of the doctorate was an MBA.

** This dummy variable was omitted from the regression equation to avoid overspecification of the model. The regression coefficients for the remaining dummy variables listed for this variable can accordingly be interpreted as deviations from this omitted category.

*** The demographic variables listed had a statistically significant association with log salary at the 0.05 level.

-- = No parameter for cell because variable excluded from model.

SOURCE: National Science Foundation/SRS. 1993 Survey of Doctorate Recipients.