

TABLE 16. Employed doctoral scientists and engineers, by field of doctorate and primary or secondary work activity: 2003

Field	Total	Research and development					Computer applications	Management, sales, administration	Professional services	Teaching	Other
		Any R&D	Applied research	Basic research	Design	Development					
Number											
All fields	593,300	371,830	194,380	141,240	38,060	86,330	56,280	241,190	95,630	183,650	35,700
Science	468,570	283,660	145,260	127,470	20,410	52,050	38,380	191,540	85,750	154,230	28,020
Biological, agricultural, and environmental life sciences	145,760	99,330	49,890	54,510	3,060	15,150	6,300	65,730	20,220	40,730	8,880
Agricultural/food sciences	16,890	11,280	8,380	3,090	330	3,010	850	7,900	1,400	4,060	1,600
Biochemistry/biophysics	22,850	16,200	7,070	9,800	670	3,040	1,270	10,850	2,930	5,000	1,030
Cell/molecular biology	15,180	11,220	4,200	7,900	300	1,240	650	7,160	1,970	3,430	560
Environmental life sciences	5,620	3,820	3,180	690	210	450	220	2,820	380	1,430	540
Microbiology	10,970	7,150	3,680	3,810	330	1,380	310	4,980	1,980	2,600	680
Zoology	12,070	7,440	3,750	4,030	120	1,030	430	5,310	1,810	4,480	1,050
Other biological sciences	62,190	42,220	19,630	25,200	1,110	5,000	2,560	26,700	9,740	19,730	3,430
Computer and information sciences	11,960	8,630	4,640	2,510	1,320	1,960	4,220	3,330	230	3,960	320
Mathematics and statistics	28,330	18,120	7,390	8,340	2,160	2,730	6,280	7,680	1,320	14,470	1,370
Physical sciences	112,670	78,150	38,920	30,130	9,900	23,580	15,130	44,760	6,390	27,840	8,510
Astronomy/astrophysics	3,820	3,100	680	2,090	470	410	930	1,030	100	1,170	160
Chemistry, except biochemistry	57,040	38,050	21,820	11,960	2,990	14,580	3,620	26,570	3,900	12,770	5,070
Earth/atmospheric/ocean sciences	17,050	12,310	6,230	6,620	860	1,480	2,350	5,890	950	5,650	1,120
Physics	34,760	24,700	10,200	9,470	5,580	7,110	8,220	11,270	1,450	8,250	2,160
Psychology	91,410	32,190	18,820	11,300	2,240	4,320	2,960	39,580	48,860	26,140	3,940
Social sciences	78,450	47,230	25,610	20,680	1,730	4,310	3,490	30,460	8,730	41,100	5,000
Economics	22,060	14,810	10,580	4,640	740	1,230	1,370	8,280	2,650	9,720	1,170
Political sciences	17,730	9,320	4,010	4,970	180	740	570	7,070	1,640	9,980	1,490
Sociology	14,250	8,980	4,220	4,690	290	720	580	5,400	1,290	8,080	660
Other social sciences	24,410	14,110	6,800	6,370	520	1,630	960	9,700	3,150	13,310	1,680
Engineering	101,500	75,080	39,480	10,660	16,990	32,450	16,980	39,320	4,810	20,050	6,370
Aerospace/aeronautical/astronautical engineering	4,150	3,310	1,710	730	690	1,340	720	1,330	120	910	280
Chemical engineering	13,460	9,940	5,170	1,100	2,580	4,930	1,710	5,430	840	1,850	990
Civil engineering	9,170	6,250	3,480	870	1,650	1,350	1,220	3,910	770	2,930	430
Electrical/computer engineering	28,480	21,570	10,230	2,770	4,790	10,720	5,990	10,320	780	5,460	1,760
Materials/metallurgical engineering	10,820	8,060	4,440	960	1,430	4,750	750	4,730	490	1,260	1,020
Mechanical engineering	13,920	10,610	5,200	1,470	2,960	4,890	2,570	5,030	530	2,720	490
Other engineering	21,480	15,330	9,250	2,770	2,890	4,470	4,020	8,560	1,280	4,910	1,390
Health	23,230	13,100	9,640	3,110	660	1,830	910	10,330	5,060	9,370	1,310
Percent											
All fields	593,300	62.7	32.8	23.8	6.4	14.6	9.5	40.7	16.1	31.0	6.0
Science	468,570	60.5	31.0	27.2	4.4	11.1	8.2	40.9	18.3	32.9	6.0

TABLE 16. Employed doctoral scientists and engineers, by field of doctorate and primary or secondary work activity: 2003

Field	Total	Research and development					Computer applications	Management, sales, administration	Professional services	Teaching	Other
		Any R&D	Applied research	Basic research	Design	Development					
Biological, agricultural, and environmental life sciences	145,760	68.1	34.2	37.4	2.1	10.4	4.3	45.1	13.9	27.9	6.1
Agricultural/food sciences	16,890	66.8	49.6	18.3	2.0	17.8	5.0	46.7	8.3	24.0	9.5
Biochemistry/biophysics	22,850	70.9	31.0	42.9	2.9	13.3	5.6	47.5	12.8	21.9	4.5
Cell/molecular biology	15,180	73.9	27.6	52.0	2.0	8.2	4.3	47.2	13.0	22.6	3.7
Environmental life sciences	5,620	68.1	56.6	12.2	3.7	8.1	3.9	50.2	6.7	25.5	9.6
Microbiology	10,970	65.2	33.6	34.7	3.0	12.6	2.9	45.4	18.1	23.7	6.2
Zoology	12,070	61.7	31.1	33.4	1.0	8.5	3.6	44.0	15.0	37.2	8.7
Other biological sciences	62,190	67.9	31.6	40.5	1.8	8.0	4.1	42.9	15.7	31.7	5.5
Computer and information sciences	11,960	72.1	38.8	21.0	11.0	16.4	35.3	27.8	1.9	33.1	2.6
Mathematics and statistics	28,330	64.0	26.1	29.4	7.6	9.6	22.2	27.1	4.7	51.1	4.8
Physical sciences	112,670	69.4	34.5	26.7	8.8	20.9	13.4	39.7	5.7	24.7	7.6
Astronomy/astrophysics	3,820	81.1	17.7	54.8	12.4	10.8	24.3	26.9	2.5	30.6	4.2
Chemistry, except biochemistry	57,040	66.7	38.3	21.0	5.3	25.6	6.4	46.6	6.8	22.4	8.9
Earth/atmospheric/ocean sciences	17,050	72.2	36.5	38.8	5.0	8.7	13.8	34.6	5.6	33.1	6.6
Physics	34,760	71.0	29.3	27.2	16.0	20.5	23.6	32.4	4.2	23.7	6.2
Psychology	91,410	35.2	20.6	12.4	2.5	4.7	3.2	43.3	53.5	28.6	4.3
Social sciences	78,450	60.2	32.6	26.4	2.2	5.5	4.4	38.8	11.1	52.4	6.4
Economics	22,060	67.1	48.0	21.1	3.3	5.6	6.2	37.5	12.0	44.1	5.3
Political sciences	17,730	52.6	22.6	28.0	1.0	4.2	3.2	39.9	9.2	56.3	8.4
Sociology	14,250	63.1	29.6	32.9	2.0	5.0	4.1	37.9	9.1	56.7	4.7
Other social sciences	24,410	57.8	27.8	26.1	2.1	6.7	4.0	39.8	12.9	54.5	6.9
Engineering	101,500	74.0	38.9	10.5	16.7	32.0	16.7	38.7	4.7	19.8	6.3
Aerospace/aeronautical/astronautical engineering	4,150	79.7	41.1	17.5	16.6	32.3	17.3	32.1	3.0	21.9	6.8
Chemical engineering	13,460	73.8	38.4	8.1	19.1	36.6	12.7	40.4	6.2	13.7	7.4
Civil engineering	9,170	68.2	37.9	9.4	18.0	14.8	13.3	42.7	8.5	32.0	4.7
Electrical/computer engineering	28,480	75.7	35.9	9.7	16.8	37.6	21.0	36.2	2.7	19.2	6.2
Materials/metallurgical engineering	10,820	74.5	41.1	8.8	13.3	43.9	7.0	43.7	4.5	11.7	9.4
Mechanical engineering	13,920	76.2	37.4	10.5	21.2	35.1	18.4	36.1	3.8	19.6	3.5
Other engineering	21,480	71.4	43.1	12.9	13.4	20.8	18.7	39.9	5.9	22.8	6.5
Health	23,230	56.4	41.5	13.4	2.8	7.9	3.9	44.5	21.8	40.3	5.6

NOTES: Numbers are rounded to nearest 10. Detail may exceed total due to multiple responses.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 2003 Survey of Doctorate Recipients.