

Appendix G

Supplementary Tables

TABLE G-1 Demographic Characteristics of Ph.D. Recipients in the Basic Biomedical Sciences

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Total	3085 100.0%	3150 100.0%	3050 100.0%	3118 100.0%	3212 100.0%	3396 100.0%	3356 100.0%	3444 100.0%	3338 100.0%	3399 100.0%
Men	2347 76.1%	2424 77.0%	2351 77.1%	2311 74.1%	2351 73.2%	2440 71.8%	2383 71.0%	2417 70.2%	2224 66.6%	2315 68.1%
Women	738 23.9%	726 23.0%	699 22.9%	807 25.9%	861 26.8%	956 28.2%	973 29.0%	1027 29.8%	1114 33.4%	1084 31.9%
Minorities ^a	74 2.4%	72 2.3%	58 1.9%	87 2.8%	67 2.1%	75 2.2%	91 2.7%	94 2.7%	86 2.6%	98 2.9%
U.S. citizens	2554 82.8%	2609 82.8%	2525 82.8%	2626 84.2%	2738 85.2%	2904 85.5%	2897 86.3%	2919 84.8%	2850 85.4%	2866 84.3%
Permanent residents	194 6.3%	165 5.2%	169 5.5%	147 4.7%	133 4.1%	147 4.3%	125 3.7%	114 3.3%	108 3.2%	109 3.2%
Temporary visas	256 8.3%	277 8.8%	261 8.6%	259 8.3%	253 7.9%	273 8.0%	248 7.4%	294 8.5%	291 8.7%	308 9.1%
Planning postdoctoral study	1891 61.3%	1937 61.5%	1966 64.5%	2086 66.9%	2127 66.2%	2316 68.2%	2305 68.7%	2363 68.6%	2298 68.8%	2377 69.9%
Median time to Ph.D. (in years) ^b	6.00	6.17	6.25	6.33	6.41	6.50	6.50	6.67	7.00	7.09
Median age at time of degree	29.25	29.25	29.34	29.38	29.41	29.25	29.33	29.59	29.83	30.25

^a African Americans, Hispanics, and Native Americans; tabulations include U.S. citizens and permanent residents only.

^b From entry into graduate studies.

SOURCE: Data are from the Survey of Earned Doctorates.

1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
3313	3369	3465	3769	3793	3992	4309	4456	4823	4881	5101	5385	5420
100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2192	2197	2214	2377	2348	2477	2655	2740	2864	2887	2955	3101	3069
66.2%	65.2%	63.9%	63.1%	61.9%	62.0%	61.6%	61.5%	59.4%	59.1%	57.9%	57.6%	56.6%
1121	1172	1251	1392	1445	1515	1639	1702	1930	1976	2125	2264	2319
33.8%	34.8%	36.1%	36.9%	38.1%	38.0%	38.0%	38.2%	40.0%	40.5%	41.7%	42.0%	42.8%
104	118	127	122	133	135	159	161	183	220	236	240	255
3.1%	3.5%	3.7%	3.2%	3.5%	3.4%	3.7%	3.6%	3.8%	4.5%	4.6%	4.5%	4.7%
2725	2751	2670	2858	2850	2899	3050	3072	3264	3203	3278	3291	3415
82.3%	81.7%	77.1%	75.8%	75.1%	72.6%	70.8%	68.9%	67.7%	65.6%	64.3%	61.1%	63.0%
113	118	153	176	173	183	210	240	296	641	831	801	553
3.4%	3.5%	4.4%	4.7%	4.6%	4.6%	4.9%	5.4%	6.1%	13.1%	16.3%	14.9%	10.2%
364	343	455	515	570	814	987	1078	1165	980	919	1172	1170
11.0%	10.2%	13.1%	13.7%	15.0%	20.4%	22.9%	24.2%	24.2%	20.1%	18.0%	21.8%	21.6%
2309	2368	2419	2651	2656	2886	3160	3293	3614	3626	3806	3931	3529
69.7%	70.3%	69.8%	70.3%	70.0%	72.3%	73.3%	73.9%	74.9%	74.3%	74.6%	73.0%	65.1%
7.17	7.25	7.33	7.42	7.42	7.58	7.50	7.59	7.67	7.75	7.83	7.67	7.83
30.42	30.59	30.50	30.83	30.92	31.17	31.08	31.17	31.17	31.17	31.25	31.25	30.92

TABLE G-2 Demographic Characteristics of Ph.D. Recipients in the Behavioral and Social Sciences

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Total	2794 100.0%	2897 100.0%	2893 100.0%	2743 100.0%	2736 100.0%	2610 100.0%	2729 100.0%	2507 100.0%	2590 100.0%	2482 100.0%
Men	1899 68.0%	1949 67.3%	1860 64.3%	1725 62.9%	1623 59.3%	1535 58.8%	1568 57.5%	1397 55.7%	1385 53.5%	1256 50.6%
Women	895 32.0%	948 32.7%	1033 35.7%	1018 37.1%	1113 40.7%	1075 41.2%	1161 42.5%	1110 44.3%	1205 46.5%	1226 49.4%
Minorities ^a	114 4.1%	130 4.5%	129 4.5%	139 5.1%	157 5.7%	149 5.7%	141 5.2%	158 6.3%	147 5.7%	144 5.8%
U.S. citizens	2464 88.2%	2598 89.7%	2554 88.3%	2448 89.2%	2440 89.2%	2301 88.2%	2389 87.5%	2157 86.0%	2220 85.7%	2100 84.6%
Permanent residents	75 2.7%	76 2.6%	81 2.8%	79 2.9%	79 2.9%	86 3.3%	68 2.5%	66 2.6%	67 2.6%	49 2.0%
Temporary visas	190 6.8%	168 5.8%	154 5.3%	133 4.8%	147 5.4%	138 5.3%	150 5.5%	131 5.2%	163 6.3%	177 7.1%
Planning postdoctoral study	349 12.5%	392 13.5%	441 15.2%	480 17.5%	444 16.2%	459 17.6%	465 17.0%	409 16.3%	469 18.1%	444 17.9%
Median time to Ph.D. (in years) ^b	6.25	6.33	6.59	6.92	7.17	7.33	7.63	8.00	8.00	8.25
Median age at time of degree	30.42	30.58	30.83	30.83	31.42	31.75	32.08	32.34	32.75	33.00

^a African Americans, Hispanics, and Native Americans; tabulations include U.S. citizens and permanent residents only.

^b From entry into graduate studies.

SOURCE: Data are from the Survey of Earned Doctorates.

1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
2352	2357	2288	2268	2215	2261	2290	2273	2439	2411	2406	2434	2591
100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
1187	1180	1133	1046	1030	1008	977	1031	1019	1042	1013	982	1012
50.5%	50.1%	49.5%	46.1%	46.5%	44.6%	42.7%	45.4%	41.8%	43.2%	42.1%	40.3%	39.1%
1165	1177	1155	1222	1185	1253	1309	1236	1412	1362	1388	1444	1558
49.5%	49.9%	50.5%	53.9%	53.5%	55.4%	57.2%	54.4%	57.9%	56.5%	57.7%	59.3%	60.1%
152	144	126	147	139	169	182	157	183	188	221	200	219
6.5%	6.1%	5.5%	6.5%	6.3%	7.5%	7.9%	6.9%	7.5%	7.8%	9.2%	8.2%	8.5%
1975	1936	1819	1807	1684	1851	1869	1812	1964	1944	1915	1943	1927
84.0%	82.1%	79.5%	79.7%	76.0%	81.9%	81.6%	79.7%	80.5%	80.6%	79.6%	79.8%	74.4%
72	77	87	74	70	72	97	94	104	128	137	137	117
3.1%	3.3%	3.8%	3.3%	3.2%	3.2%	4.2%	4.1%	4.3%	5.3%	5.7%	5.6%	4.5%
164	163	153	172	222	235	267	294	301	283	276	263	253
7.0%	6.9%	6.7%	7.6%	10.0%	10.4%	11.7%	12.9%	12.3%	11.7%	11.5%	10.8%	9.8%
434	493	459	459	406	438	495	488	532	555	567	521	486
18.5%	20.9%	20.1%	20.2%	18.3%	19.4%	21.6%	21.5%	21.8%	23.0%	23.6%	21.4%	18.8%
8.59	8.91	8.92	9.00	9.00	9.00	9.08	9.08	9.00	9.00	9.00	8.92	8.83
33.42	34.00	34.33	35.00	34.75	34.67	35.00	34.83	34.92	34.34	34.50	33.91	33.38

TABLE G-3 Demographic Characteristics of Ph.D. Recipients in the Clinical Sciences

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Total	230 100.0%	241 100.0%	276 100.0%	289 100.0%	311 100.0%	337 100.0%	367 100.0%	416 100.0%	526 100.0%	621 100.0%
Men	158 68.7%	176 73.0%	196 71.0%	208 72.0%	202 65.0%	204 60.5%	221 60.2%	232 55.8%	249 47.3%	262 42.2%
Women	72 31.3%	65 27.0%	80 29.0%	81 28.0%	109 35.0%	133 39.5%	146 39.8%	184 44.2%	277 52.7%	359 57.8%
Minorities ^a	2 0.9%	4 1.7%	10 3.6%	8 2.8%	12 3.9%	8 2.4%	13 3.5%	19 4.6%	23 4.4%	34 5.5%
U.S. citizens	171 74.3%	181 75.1%	213 77.2%	223 77.2%	240 77.2%	256 76.0%	292 79.6%	328 78.8%	401 76.2%	492 79.2%
Permanent residents	31 13.5%	27 11.2%	34 12.3%	23 8.0%	32 10.3%	27 8.0%	29 7.9%	25 6.0%	30 5.7%	36 5.8%
Temporary visas	21 9.1%	28 11.6%	25 9.1%	28 9.7%	27 8.7%	45 13.4%	34 9.3%	48 11.5%	70 13.3%	66 10.6%
Planning postdoctoral study	43 18.7%	51 21.2%	64 23.2%	57 19.7%	78 25.1%	87 25.8%	81 22.1%	84 20.2%	69 13.1%	104 16.7%
Median time to Ph.D. (in years) ^b	7.00	6.63	6.50	7.09	6.92	7.17	7.67	7.50	7.92	8.17
Median age at time of degree	31.83	31.58	30.79	31.67	31.75	32.00	32.37	32.87	34.08	34.33

^a African Americans, Hispanics, and Native Americans; tabulations include U.S. citizens and permanent residents only.

^b From entry into graduate studies.

SOURCE: Data are from the Survey of Earned Doctorates.

1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
619	677	699	788	881	840	954	1030	1112	1217	1236	1246	1349
100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
244	259	290	302	313	322	333	363	396	420	456	434	462
39.4%	38.3%	41.5%	38.3%	35.5%	38.3%	34.9%	35.2%	35.6%	34.5%	36.9%	34.8%	34.2%
375	418	409	486	568	518	617	659	704	787	769	803	870
60.6%	61.7%	58.5%	61.7%	64.5%	61.7%	64.7%	64.0%	63.3%	64.7%	62.2%	64.4%	64.5%
31	32	38	50	38	41	56	49	79	69	87	81	80
5.0%	4.7%	5.4%	6.3%	4.3%	4.9%	5.9%	4.8%	7.1%	5.7%	7.0%	6.5%	5.9%
458	489	527	573	656	630	706	739	803	897	857	865	891
74.0%	72.2%	75.4%	72.7%	74.5%	75.0%	74.0%	71.7%	72.2%	73.7%	69.3%	69.4%	66.0%
32	30	33	38	29	34	58	48	63	91	103	87	78
5.2%	4.4%	4.7%	4.8%	3.3%	4.0%	6.1%	4.7%	5.7%	7.5%	8.3%	7.0%	5.8%
85	93	84	108	118	145	161	213	202	214	235	253	247
13.7%	13.7%	12.0%	13.7%	13.4%	17.3%	16.9%	20.7%	18.2%	17.6%	19.0%	20.3%	18.3%
89	109	109	133	116	165	141	192	185	226	236	238	223
14.4%	16.1%	15.6%	16.9%	13.2%	19.6%	14.8%	18.6%	16.6%	18.6%	19.1%	19.1%	16.5%
8.83	8.91	9.00	9.00	9.08	9.59	9.17	9.92	9.63	9.50	9.91	9.79	10.00
35.50	35.96	35.92	36.42	36.75	37.17	37.83	37.75	38.42	37.79	38.08	38.46	38.42

TABLE G-4 Characteristics of the Science and Engineering Workforce in the Basic Biomedical Sciences

	1975	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997
Total	40639	44727	49827	54660	58118	63194	67341	72142	74405	79497	82983	92955
Men	34110	37141	41166	44350	46429	49956	52565	55318	55712	58424	59925	65716
Women	6529	7586	8661	10310	11689	13238	14776	16824	18693	21030	23095	27239
Minorities ^a	1076	1171	1286	1592	1561	1862	1950	2251	2805	3048	3410	3943
Citizens	38187	41756	46158	51499	55337	60153	64015	68451	70501	74398	76570	84887
Permanent residents	1118	1340	1807	2291	2192	2359	2646	2807	2709	3653	5091	4922
Temporary residents	796	1080	1669	503	331	473	581	884	997	1431	1322	1466
Tenured faculty	13376	14345	15636	17836	18884	20114	19157	19755	17106	19151	19487	20326
Tenure track, not tenured	8854	9170	9592	6446	5673	6644	6149	5872	7556	7683	8259	8974
Total academics	27219	29889	33188	36165	36797	39307	41027	43572	40581	45247	48568	53026
Tenured or tenure-track faculty	22230	23515	21588	24282	24557	26758	25306	25627	24662	26834	27746	29300
Nontenure-track faculty	668	1057	4476	3586	3953	3696	5974	6235	4010	5386	5713	6822
Academic postdoctorates	2615	3507	4358	4722	4405	4450	4784	5993	4819	6401	7693	9620
Other academics	1706	1810	3092	3575	3882	4403	4963	5717	7090	6626	7427	7296
Total industry ^b	5326	5583	6313	7951	9635	11967	13588	15582	18513	19950	19434	22204
Industry professionals	5273	5543	6286	7881	9589	11841	13366	15376	18309	19579	18903	21643
Industry postdoctorates	53	40	27	70	46	126	222	206	204	371	531	561
Total government	4030	4250	4776	4831	5287	5399	6254	6290	6589	7200	7185	8649
Government professionals	3785	3914	4449	4545	4843	5026	5725	5776	6157	6154	6074	7212
Government postdoctorates	245	336	327	286	444	373	529	514	432	1046	1111	1437
Other sectors of employment	3055	3436	4103	4303	4657	5043	4847	5034	5984	4072	3790	5602

^a African Americans, Hispanics, and Native Americans; tabulations include U.S. citizens and permanent residents only.

^b Including those who are self-employed.

SOURCE: Data are from the Survey of Doctorate Recipients.

TABLE G-5 Characteristics of the Science and Engineering Workforce in the Behavioral and Social Sciences

	1975	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997
Total	25802	29155	33010	36662	41038	43862	45295	48844	48154	51307	52324	57843
Men	20501	22569	25033	27006	29315	30171	30392	31896	30151	31485	30959	33605
Women	5301	6586	7977	9656	11723	13691	14903	16948	18003	19849	21365	24238
Minorities ^a	642	843	1049	1444	1774	1846	1980	2274	2760	3042	3278	4015
Citizens	25170	28556	31993	35664	39918	42559	44107	47449	46565	49746	50745	55822
Permanent residents	340	322	569	795	856	1066	1113	1149	1338	1353	1388	1732
Temporary residents	165	127	332	123	182	135	50	218	160	178	178	289
Tenured faculty	10038	11285	12901	14700	16960	17113	15968	17053	15291	17183	18121	19492
Tenure track, not tenured	6803	6729	4506	4538	4169	4759	4041	4359	4597	4974	4790	4879
Total academics	18668	20132	22543	25025	26896	28472	28187	29841	26475	29901	31764	34850
Tenured or tenure-track faculty	16841	18014	17407	19238	21129	21872	20009	21412	19888	22157	22911	24371
Non-tenure-track faculty	690	710	2719	2290	2306	2606	3819	3643	2204	2410	2797	3168
Academic postdoctorates	435	543	806	760	702	713	579	745	412	469	967	1177
Other academics	702	865	2119	2737	2759	3281	3780	4041	3971	4865	5089	6134
Total industry ^b	2111	2777	3487	4643	6625	7345	8032	8843	10696	10896	10484	11779
Industry professionals	2111	2773	3487	4643	6622	7328	8029	8838	10696	10878	10421	11650
Industry postdoctorates	0	4	0	0	3	17	3	5	0	18	63	129
Total government	1793	2394	2654	2831	3058	3182	3858	3732	3900	4874	4993	5192
Government professionals	1778	2353	2605	2781	3013	3163	3816	3732	3816	4748	4854	5071
Government postdoctorates	15	41	49	50	45	19	42	0	84	126	139	121
Other sectors of employment	2662	2788	3116	3181	3200	3740	3876	4787	4631	3201	3138	3820

^a African Americans, Hispanics, and Native Americans; tabulations include U.S. citizens and permanent residents only.

^b Including those who are self-employed.

SOURCE: Data are from the Survey of Doctorate Recipients.

TABLE G-6 Characteristics of the Science and Engineering Workforce in the Clinical Sciences

	1975	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997
Total	3515	3815	4615	5390	6119	7340	7835	9154	9479	11143	12431	14618
Men	3028	3161	3709	4211	4560	5117	5139	5603	5416	5752	5826	6918
Women	487	654	906	1179	1559	2223	2696	3551	4063	5352	6605	7700
Minorities ^a	134	146	186	201	260	281	348	500	626	762	946	1139
U.S. citizens	3276	3515	4207	4977	5766	6917	7334	8647	8929	10483	11669	13635
Permanent residents	125	170	264	362	336	340	446	435	471	467	693	775
Temporary residents	83	91	148	44	8	79	55	72	65	184	69	208
Tenured faculty	931	1031	1271	1424	1516	1968	1960	2191	1890	2331	2770	3081
Tenure track, not tenured	684	743	565	780	921	1002	931	1337	1426	1749	1988	1878
Total academics	1856	2064	2564	2963	3225	3938	4164	4959	4706	5753	6684	7609
Tenured or tenure-track faculty	1615	1774	1836	2204	2437	2970	2891	3528	3316	4080	4758	4959
Nontenure-track faculty	56	78	423	438	485	443	784	843	761	944	947	1366
Academic postdoctorates	107	108	105	139	100	177	90	152	116	140	342	416
Other academics	78	104	231	182	203	348	399	436	513	589	637	868
Total industry ^b	739	733	992	1259	1493	1798	1954	2310	2568	2867	2940	3617
Industry professionals	739	733	992	1259	1485	1793	1940	2307	2564	2862	2923	3568
Industry postdoctorates	0	0	0	0	8	5	14	3	4	5	17	49
Total government	500	470	457	562	619	703	753	918	1080	1207	1410	1514
Government professionals	491	462	446	527	585	689	745	916	1064	1141	1309	1467
Government postdoctorates	9	8	11	35	34	14	8	2	16	66	101	47
Other sectors of employment	380	455	436	501	645	749	760	778	847	828	962	1329

^aAfrican Americans, Hispanics, and Native Americans; tabulations include U.S. citizens and permanent residents only.

^bIncluding those who are self-employed.

SOURCE: Data are from the Survey of Doctorate Recipients.

TABLE G-7 Primary Form of Financial Support for Graduate Students in the Basic Biomedical Sciences

Mechanisms of Support	1975	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997
NIH and other DHHS traineeships and fellowships	5068	4281	4363	3678	3478	3400	3502	3486	3896	4001	4138	3941
NIH and other DHHS research assistantships	1832	2227	2804	3092	3159	3608	4562	5918	6483	7174	7461	7436
Other federal support	1897	2322	2509	2579	2407	2581	2651	2854	3087	3690	3800	3816
Institutional teaching assistantships	7530	7703	8076	8160	8200	8150	7547	7736	7685	7866	8005	7861
Other institutional support	4195	5865	5304	5811	6061	6816	8212	8991	10006	10435	10946	10819

SOURCE: Data are from the Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE G-8 Primary Source of Financial Support for Graduate Students in the Behavioral and Social Sciences

Mechanisms of Support	1975	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997
NIH and other DHHS traineeships and fellowships	3666	3139	2664	1381	665	625	523	457	575	539	540	563
NIH and other DHHS research assistantships	867	916	946	668	590	681	744	1015	1139	1242	1179	1236
Other federal support	2146	2546	1842	2744	2150	2045	2069	2129	2310	2458	2532	2560
Institutional teaching assistantships	7186	7215	7268	7705	7686	7852	8112	8579	8795	9581	9724	9801
Other institutional support	5311	5948	5724	6663	6827	7423	7926	8908	9815	10411	10249	10828

SOURCE: Data are from the Survey of Graduate Students and Postdoctorates in Science and Engineering.