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ABSTRACT

A brief summary of data, in tables with some narrative, from the Survey of Earned Doctorates during fiscal year 1980 is presented. Both research and applied research doctorates with these degree designations are included: DAS, DArch, DA, DBA, JCD, DCJ, DCrim, EdD, DEng, DESc, ScDE, DEnv, DED, DFA, DF, DGS, DHS (Health and Safety), DHS (Hebrew Studies), DHL, DIT, SDJ, JSD, DLS, DMin or DM (Ministry), DM (Music), DMA, DME, DML, DNSc, PhD, DPE, DPA, DPH, DRec, or DR, DRE, DSM, STD, DSc, DScH. DScD, LScD, DScVM, DSSc, DSW, and ThD; some other are excluded. The five basic tables and one sub-table present: (1) the number of doctorate recipients by sex and subfield; (1a) recipients by citizenship, racial/ethnic group, and subfield; (2) statistical profile by sex and doctorate field (including such characteristics as marital status, bachelor's and master's degrees and fields, time lapse, study and employment plans, and employment region and activity); (3) percentage of recipients by sources of support in graduate school, by sex, and summary field; and (5) statistical profile by racial or ethnic groups and U.S. citizenship status. The survey questionnaire and a specialties list are appended. (MSE)

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Summary Report 1980

DOCTORATE RECIPIENTS FROM UNITED STATES UNIVERSITIES

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HIGHLIGHTS

- The total number of doctorates awarded in 1980 was 30,982, a 0.8% decrease from the 31,224 doctorates awarded in 1979.

- The proportion of doctorates granted to women increased from 28.6% of the total in 1979 to 30.3% in 1980, extending a trend that began in 1965. The number of women increased in all broad fields except the humanities.

- The number of male doctorate recipients decreased 3.1% from 1979 to 1980, a continuation of the steady decline from the peak year of 1972. This overall decrease was reflected in all broad fields except the life sciences, where the number increased by 2.5%.

- Of the U.S. citizen doctorate recipients in 1980, a greater number of women reported black racial/ethnic identification than did men. This is the first time women constituted a higher proportion than men in any of the racial/ethnic groups reported here.

- While the number of foreign citizens with permanent visas earning Ph.D.'s from U.S. universities has decreased by 38.6% from its peak year in 1972, the number of temporary visa holders has increased through the 1970's, reaching an all-time high of 3,632 in 1980.

- Foreign doctorate recipients are largely concentrated in science fields - about one-half of the engineering doctorates (46.3%) and one-third of the Ph.D.'s in the agricultural sciences (36.5%) in 1980 were foreign citizens.

- From 1960 to 1980, the geographic areas of Eastern and Western Asia were the sources for the largest number of foreign citizens earning doctorates in the U.S. In 1980, the Asian geographic areas accounted for nearly 44% of the total number of foreign doctorate recipients.

- In 1980, the three sources of financial support administered through the university - University Fellowship, Teaching Assistantship, and Research Assistantship - represented the primary support for 39.2% of the Ph.D.'s, with foreign citizens reporting greater dependence on support from these sources than their U.S. counterparts.

- For foreign citizens, the planned employment location following the doctorate is highly dependent on visa status - 87.4% of permanent visa holders and 25.8% of the temporary group have firm commitments to remain in the U.S. for employment.

Summary Report 1980 DOCTORATE RECIPIENTS FROM UNITED STATES UNIVERSITIES

The Survey of Earned Doctorates is conducted by the National Research Council for the National Science Foundation, the U.S. Office of Education, the National Institutes of Health, and the National Endowment for the Humanities

Peter D. Syverson
Operations Manager
Doctorate Survey Project

Commission on Human Resources
NATIONAL RESEARCH COUNCIL

NATIONAL ACADEMY PRESS
1981

FOREWORD

This report presents a brief summary of data gathered from the Survey of Earned Doctorates during the academic year 1979-1980. The survey is conducted annually by the Commission on Human Resources (CHR) of the National Research Council. Questionnaire forms, distributed with the cooperation of the Graduate Deans, are filled out by the graduates as they complete all requirements for their doctoral degrees. The doctorates reported here were earned during the period July 1, 1979 to June 30, 1980 (FY 1980) and include both research and applied research doctorates with degrees such as the D.Sc.M., S.J.D., D.L.S., Th.D, and Ed.D. They do not include professional degrees such as the M.D., D.D.S., D.M.D., O.D., D.O., D.V.M., or J.D. A full list of titles of degrees included is shown on the inside back cover.

This is the fourteenth in a series of yearly summaries of data from the Survey of Earned Doctorates. The CHR publishes data gathered during a given fiscal year in the following fiscal year. Trend data from earlier periods can be found in the book [illegible] (National Academy of Sciences, 1978).

The distribution of the Survey of Earned Doctorates questionnaire, the maintenance of the resulting data file, and the publication of this report are supported jointly by the National Science Foundation, the Department of Education, the National Institutes of Health, and the National Endowment for the Humanities. The CHR thanks these agencies for their assistance. Dr. Charles Dickens of the National Science Foundation is the project officer for the agencies; his interest and assistance are appreciated.

The Survey of Earned Doctorates is under the administrative supervision of Peter D. Syverson. Muriel Quinones had continuing responsibility for the development of the summary statistics presented in the report. In addition to Dr. Dickens of the National Science Foundation, Donald Bigelow of the Department of Education, George Bowden of the National Institutes of Health, and Arnita Jones of the National Endowment for the Humanities, have provided constructive advice in the design and analysis of the survey, a contribution that increases its relevance to national policy issues. Nancy Milburn and Mario Molina, members of the Commission on Human Resources, provided valuable assistance in review of the report. Special appreciation also goes to Doris Rogowski who supervised the coding and editing of the data, to Joseph Finan and George Boyce who were responsible for the computer programming and processing, and to Olivia Waller for her meticulous care in typing the report.

The CHR is concerned with those activities of the National Research Council that contribute to the more effective development and utilization of the nation's human resources. Its programs seek to strengthen higher education and to develop better understanding of the educational process. It is hoped that prompt reporting of the present data to educational, governmental, and professional agencies will facilitate planning in higher education. Suggestions for improvement of the content or format of the report and questions or comments will be welcomed. Such communications may be directed to the Commission on Human Resources, National Research Council, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.

Peter D. Syverson
Operations Manager

NOTICE. This report is based on research conducted by the National Research Council with the support of the National Science Foundation, the Department of Education, the National Institutes of Health, and the National Endowment for the Humanities under NSF Contract No. SRS-7917001. Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the author and do not necessarily reflect the views of the sponsoring agencies.

INTRODUCTION

Between July 1, 1979 and June 30, 1981 a total of 30,982 research doctorates were awarded by U.S. universities (Text Table A). This number constitutes a decrease of 242 or 0.8% from the 31,224 doctorates awarded in 1979 and an overall decrease of 8.5% from the peak year, 1973.

TEXT TABLE A
Doctorates Awarded by U.S. Universities, 1979-1980

Year	Doctorates	Year	Doctorates
1966	17,949	1974	33,047
1967	20,404	1975	32,950
1968	22,936	1976	32,945
1969	25,743	1977	31,713
1970	29,498	1978	30,866
1971	31,867	1979	31,224
1972	33,043	1980	30,982
1973	33,756		

Figure 1, which displays data from Text Table A on the trend in doctorates awarded, shows a period of large annual increases from 1966 to 1973 followed by smaller decreases through 1980 with the exception of a slight increase between 1978 and 1979. The 0.8% decrease from 1979 to 1980 represents a continuation of the downward trend that began in 1973.

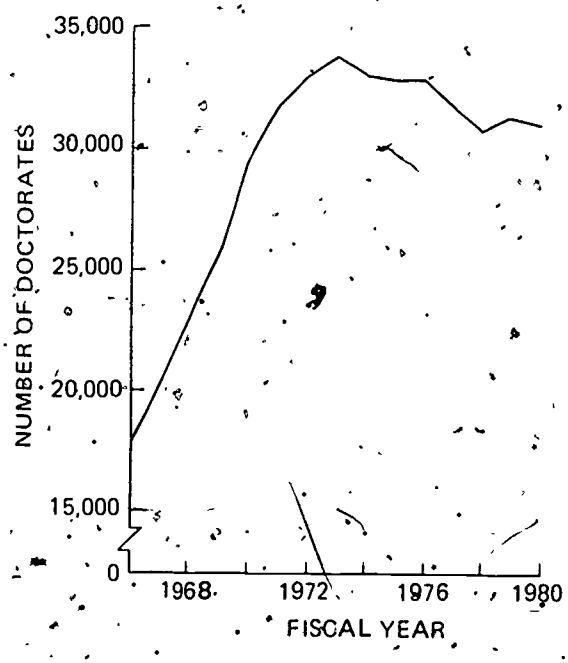


FIGURE 1
Doctorates Awarded by U.S Universities: 1965-1979

Selected statistics from the 1980 Survey of Earned Doctorates and from past surveys are highlighted in this report. In light of current interest in foreign citizens pursuing courses of study in the U.S., this report focuses on non-U.S. citizen doctorate recipients - their countries of citizenship, fields of Ph.D., sources of support for graduate study, and postdoctoral employment and study plans.

The Summary Report for 1979 highlighted trends in postgraduation employment plans by field of Ph.D. and racial/ethnic group, and trends in the number of doctorate recipients planning postdoctoral study in foreign countries. The postgraduation plans of 1971-1978 doctorate recipients from departments rated as distinguished in the Roose-Andersen study[1] were examined in the 1978 Summary Report.

TRENDS IN THE NUMBER OF DOCTORATES BY FIELD FOR MEN AND WOMEN

Text Table B and Figure 2 show the distribution of doctorate recipients by broad field and sex for the period 1970 to 1980. The proportion of doctorates granted to women increased from 28.6% of the total in 1979 to 30.3% in 1980, continuing a trend that began in 1965 when 10.5% of the doctorate recipients were women. The number of women doctorates has increased each year since 1965.[2] Indeed, even as the total number of Ph.D.'s granted has tended to decline since 1973, the number of doctorates granted to women has increased 54.2%.

From 1979 to 1980, the number of women doctorate recipients increased in all broad fields except the humanities, which has shown slight annual decreases since 1975. The largest numerical increase was in education, a field in which the fraction of women doctorates has more than doubled during the last decade. The largest rate of increase was in engineering, which showed a growth of 45.2% between 1979 and 1980. Despite this large proportional increase, the absolute number of women Ph.D.'s in engineering remains the lowest of the seven broad fields shown in Table B.

The decrease of 696 or 3.1% in men doctorate recipients from 1979 to 1980 represents a continuation of the steady decline from the peak year of

[1] Roose, Kenneth D. and Charles J. Andersen, A Rating of Graduate Programs, American Council on Education, Washington, D.C., 1970.

[2] Data for 1920 to 1970 were provided in Summary Report 1975: Doctorate Recipients from United States Universities, p.4., National Research Council, 1976.

1972. This overall decrease was reflected in all broad fields except the life sciences, which increased by 2.5%. The humanities and professional fields showed the sharpest declines from 1970 to 1980 (8.3% and 7.9% respectively). About one-third fewer doctorates were granted to men in the physical sciences, engineering, and the humanities than were granted in the peak years for those fields (1971 for physical sciences and engineering, 1973 for the humanities).

FOREIGN CITIZENS EARNING DOCTORATES FROM U.S. UNIVERSITIES

Since the beginning of the Survey of Earned Doctorates in 1958, data on the citizenship status of doctorate recipients have been collected. A portion of the extensive data available from the Doctorate Records File on a topic of current interest - non-U.S. citizens who earn the doctorate at U.S. universities - has been selected for presentation here. While the tables and graphs that follow are by no means exhaustive of the doctoral data, they illustrate some of the ways in which the data can be used.

Trends in the Number of Doctorate Recipients by Citizenship and Sex

Text Table C shows the citizenship status and sex of doctorate recipients from 1960 to 1980. During this period, the proportion of non-U.S. citizen doctorate recipients increased steadily, from 12.1% in 1960 to 15.9% in 1980. From 1960 to the peak year of 1973, the number of degrees awarded to non-U.S. citizens increased at a rate about one-fifth greater than that for total doctorates. While the number of doctorates awarded to U.S. citizens also peaked in 1973, the number awarded to non-U.S. citizens continued to increase and did not reach a peak until 1975. Since 1973, there has been an overall decrease of 8.2% in total doctorates, but this decrease has been greater for U.S. citizens (-10.1%) than that for non-U.S. citizens (-4.9%).

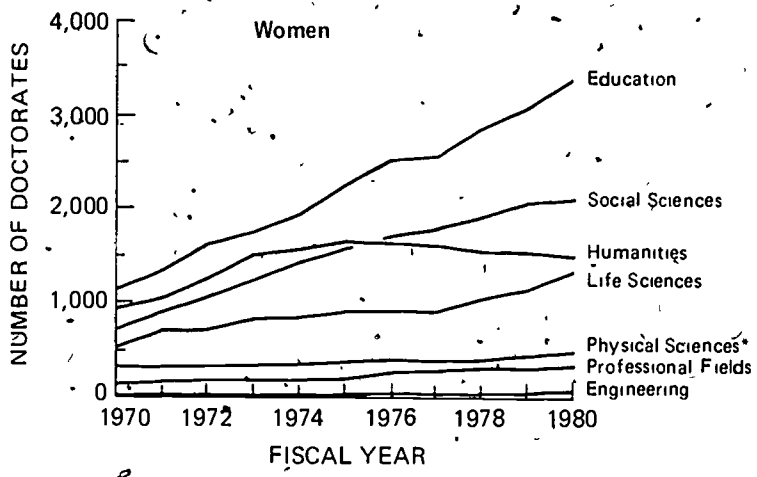
Within the non-U.S. citizen doctorate recipients, the two visa status categories[4/] - permanent and temporary - have experienced substantially different growth patterns over the past two decades. Figure 3 shows that between 1960 and 1973, the increase in the permanent group was over twice that for the temporary group. The permanent group also peaked in 1972, one year earlier than the peak for

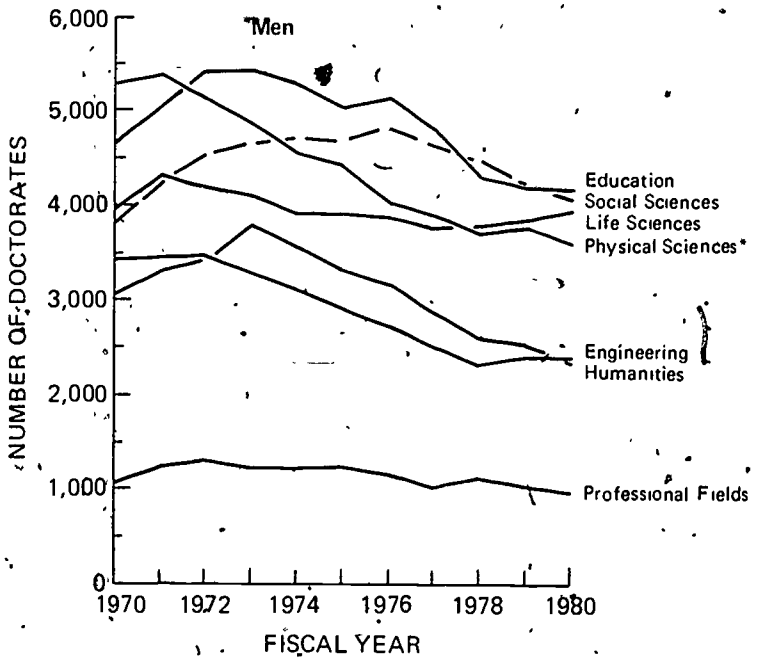
TEXT TABLE B
Number of Doctorates Awarded by United States Universities by Broad Field and Sex, 1970-1980

Year	Total	Physical Sciences 3/	Engineering	Life Sciences	Social Sciences	Humanities	Prof. Fields	Education
				MEN				
1970	25,527	5,308	3,419	3,989	3,829	3,095	1,072	4,671
1971	27,271	5,398	3,483	4,360	4,265	3,314	1,262	5,089
1972	27,756	5,171	3,481	4,221	4,558	3,440	1,348	5,439
1973	27,671	4,929	3,318	4,140	4,692	3,817	1,258	5,456
1974	26,594	4,592	3,114	3,967	4,727	3,594	1,22[illegible]	5,302
1975	25,749	4,454	2,950	3,955	4,710	3,359	1,243	5,064
1976	25,261	4,089	2,780	3,921	4,856	3,208	1,189	5,185
1977	23,855	3,949	2,569	3,816	4,691	2,903	1,041	4,870
1978	22,548	3,754	2,370	3,808	4,510	2,635	1,125	4,339
1979	22,291	3,803	2,428	3,887	4,283	2,545	1,053	4,277
1980	21,595	3,612	2,389	3,983	4,088	2,335	970	4,201
				WOMEN				
1970	3,971	320	15	588	737	972	143	1,186
1971	4,596	341	15	715	924	1,063	177	1,346
1972	5,287	367	22	731	1,053	1,274	184	1,646
1973	6,085	382	46	868	1,246	1,547	201	1,783
1974	6,453	384	33	867	1,446	1,576	194	1,939
1975	7,201	403	52	950	1,600	1,687	208	2,295
1976	7,684	420	54	959	1,734	1,673	290	2,540
1977	7,858	430	74	957	1,837	1,659	308	2,585
1978	8,318	439	53	1,083	1,955	1,596	330	2,855
1979	8,933	496	62	1,194	2,109	1,592	366	3,106
1980	9,387	502	90	1,342	2,165	1,528	375	3,375

3/ Includes mathematics and computer sciences.

4/ See item 7 on page 40 for definition of the citizenship categories used in this report. The category "U.S. Citizen" includes U.S. native and U.S. naturalized citizens.





*Includes mathematics and computer sciences.

FIGURE 2
Number of Doctorates Awarded by U.S. Universities by Broad Field and Sex, 1970-1980

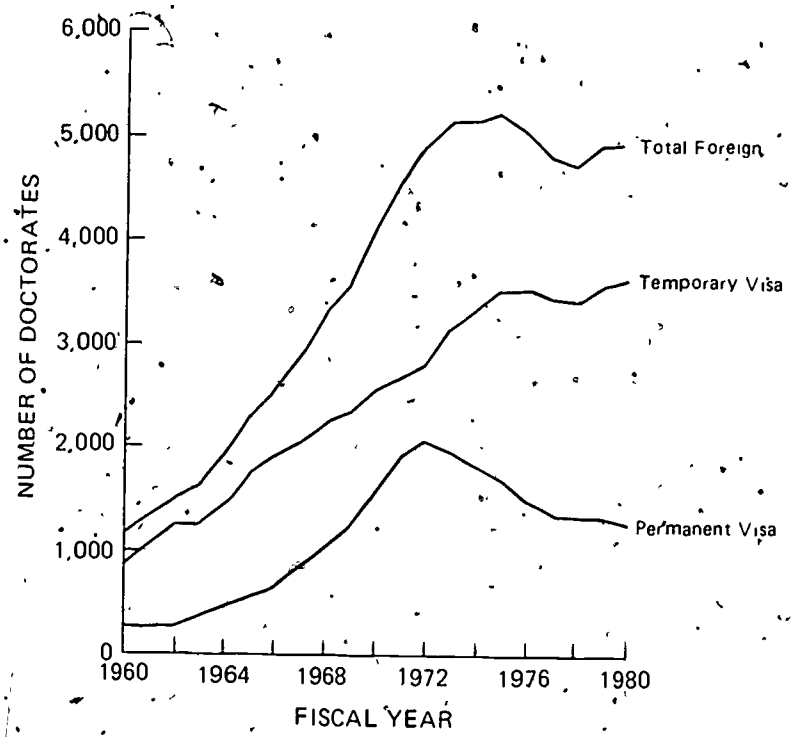


FIGURE 3
Visa Status of Non-U S. Citizen Doctorate Recipients, 1960-1980

all doctorates, whereas the number of doctorates earned by persons with temporary visas has continued to increase. Since 1973, the temporary group has grown 14.4%, while the permanent group has had an overall decrease of 35.6%, more than four times that for total doctorates.

There are striking differences between the citizenship status of men and women doctorate recipients. During the past 20 years, an increasing proportion of men have been non-U.S. citizens, whereas the proportion of non-U.S. women has decreased. Text Table C shows that while in 1960, the proportion of men and women who were foreign citizens was nearly the same (12.2% and 11.1% respectively), by 1980 the proportion of foreign citizens among male Ph.D.'s was more than double that for women (19.0% and 8.6% respectively). Although the number of U.S. men Ph.D.'s has increased from 7,556 to 16,807, these numbers represent a decrease from 77.6% to 54.2% of the total number of new Ph.D.'s. On the other hand, the proportion of U.S. women Ph.D.'s has increased from 9.2% to 26.8% of the total.

Between 1960 and 1980, the proportion of men doctorate recipients with temporary visas increased from 9.3% to 14.5%, whereas the proportion for women declined steadily from 1960 to 1970 and has remained stable at about 5.0% for the past 10 years. In contrast, the proportion of men and women with permanent visas has been about the same over the past two decades.

Field of Doctorate

Although the overall trend from 1960 to 1980 has been for an increasing proportion of U.S. doctorate recipients to be citizens of foreign countries, Figure 4 and Text Table D show the widely differing patterns that exist among the doctoral fields. For physics, chemistry, and mathematics, the general pattern has been significant increases in the proportion of non-U.S. doctorate recipients during the last two decades. With slight variation, the proportion of permanent and temporary visa holders has increased at about the same rate in those fields. While reaching a peak in the early 1970's, the proportion of foreign Ph.D.'s in the earth sciences has since returned to the levels characteristic of the early 1960's.

Since 1976, engineering has been the field with the largest proportion of foreign doctorate

TEXT TABLE C
CITIZENSHIP STATUS AND SEX OF 1960-1980 DOCTORATE RECIPIENTS FROM U.S. UNIVERSITIES

YEAR OF DOCTORATE		TOTAL					MEN					WOMEN				
		TOTAL 1/	U.S.	NON-U.S. TOTAL	NON-U.S. PERM.	NON-U.S. TEMP.	TOTAL	U.S.	NON-U.S. TOTAL	NON-U.S. PERM.	NON-U.S. TEMP.	TOTAL	U.S.	NON-U.S. TOTAL	NON-U.S. PERM.	NON-U.S. TEMP.
1960		9733	8460	1176	279	897	8691	7556	1060	248	812	1042	913	116	31	85
	H 2/		87.0	12.1	2.9	9.2		86.9	12.2	2.9	9.3		87.6	11.1	3.0	8.2
1961		10413	8961	1306	256	1050	9285	7975	1184	229	955	1128	986	122	27	95
	H		86.1	12.5	2.5	10.1		85.9	12.8	2.5	10.3		87.4	10.8	2.4	8.4
1962		11500	9841	1518	274	1244	10265	8753	1387	245	1142	1235	1088	131	29	102
	H		85.6	13.2	2.4	10.8		85.3	13.5	2.4	11.1		88.1	10.6	2.3	8.3
1963		12730	10927	1605	354	1251	11337	9691	1466	321	1145	1393	1236	139	33	106
	H		85.8	12.6	2.8	9.8		85.5	12.9	2.8	10.1		88.7	10.0	2.4	7.6
1964		14325	12121	1931	468	1463	12764	10774	1757	420	1337	1561	1347	174	48	126
	H		84.6	13.5	3.3	10.2		84.4	13.8	3.3	10.5		86.3	11.1	3.1	8.1
1965		16340	13772	2313	560	1753	14580	12245	2130	499	1631	1760	1527	183	61	122
	H		84.3	14.2	3.4	10.7		84.0	14.6	3.4	11.2		86.8	10.4	3.5	6.9
1966		17949	14974	2544	636	1908	15863	13179	2309	567	1742	2086	1795	235	69	166
	H		83.4	14.2	3.5	10.6		83.1	14.6	3.6	11.0		86.0	11.3	3.3	8.0
1967		20404	17030	2924	876	2048	17962	14931	2642	793	1849	2442	2099	282	83	199
	H		83.5	14.3	4.3	10.0		83.1	14.7	4.4	10.3		86.0	11.5	3.4	8.1
1968		22936	19227	3314	1046	2268	20004	16674	2984	904	2080	2932	2553	330	142	188
	H		83.8	14.4	4.6	9.9		83.4	14.9	4.5	10.4		87.1	11.3	4.8	6.4
1969		25743	21541	3569	1235	2334	22355	18580	3214	1094	2120	3388	2961	355	141	214
	H		83.7	13.9	4.8	9.1		83.1	14.4	4.9	9.5		87.4	10.5	4.2	6.3
1970		29498	24915	4148	1576	2572	25527	21430	3718	1368	2350	3971	3485	430	208	222
	H		84.5	14.1	5.3	8.7		84.0	14.6	5.4	9.2		87.8	10.8	5.2	5.6
1971		31867	26758	4597	1907	2690	27271	22713	4119	1661	2458	4596	4045	478	246	232
	H		84.0	14.4	6.0	8.4		83.3	15.1	6.1	9.0		88.0	10.4	5.4	5.0
1972		33043	27480	4925	2094	2831	27756	22849	4360	1788	2572	5287	4631	565	306	259
	H		83.2	14.9	6.3	8.6		82.3	15.7	6.4	9.3		87.6	10.7	5.8	4.9
1973		33756	27914	5172	1998	3174	27671	22541	4581	1706	2875	6085	5373	591	292	299
	H		82.7	15.3	5.9	9.4		81.5	16.6	6.2	10.4		88.3	9.7	4.8	4.9
1974		33047	26343	5185	1826	3359	26594	20856	4546	1538	3008	6453	5487	639	288	351
	H		79.7	15.7	5.5	10.2		78.4	17.1	5.8	11.3		85.0	9.9	4.5	5.4
1975		32950	27079	5250	1714	3536	25749	20661	4599	1417	3182	7201	6418	651	297	354
	H		82.2	15.9	5.2	10.7		80.2	17.9	5.5	12.4		89.1	9.0	4.1	4.9
1976		32945	27269	5023	1494	3529	25261	20427	4325	1204	3121	7684	6842	698	290	408
	H		82.8	15.2	4.5	10.7		80.9	17.1	4.8	12.4		89.0	9.1	3.8	5.3
1977		31713	26105	4816	1368	3448	23855	19144	4115	1106	3009	7858	6961	701	262	439
	H		82.3	15.2	4.3	10.9		80.3	17.3	4.6	12.6		88.6	8.9	3.3	5.6
1978		30866	25287	4765	1344	3421	22548	17933	4018	1052	2966	8318	7354	747	292	455
	H		81.9	15.4	4.4	11.1		79.5	17.8	4.7	13.2		88.4	9.0	3.5	5.5
1979		31224	25462	4903	1319	3584	22291	17579	4102	1013	3089	8933	7883	801	306	495
	H		81.5	15.7	4.2	11.5		78.9	18.4	4.5	13.9		88.2	9.0	3.4	5.5
1980		30982	25108	4918	1286	3632	21595	16807	4113	971	3142	9387	8301	805	315	490
	H		81.0	15.9	4.2	11.7		77.8	19.0	4.5	14.5		88.4	8.6	3.4	5.2

1/ Includes those individuals who did not report citizenship status.
2/ H provides horizontal percentages within rows based on the total column for each of the three groupings - total, men, and women.

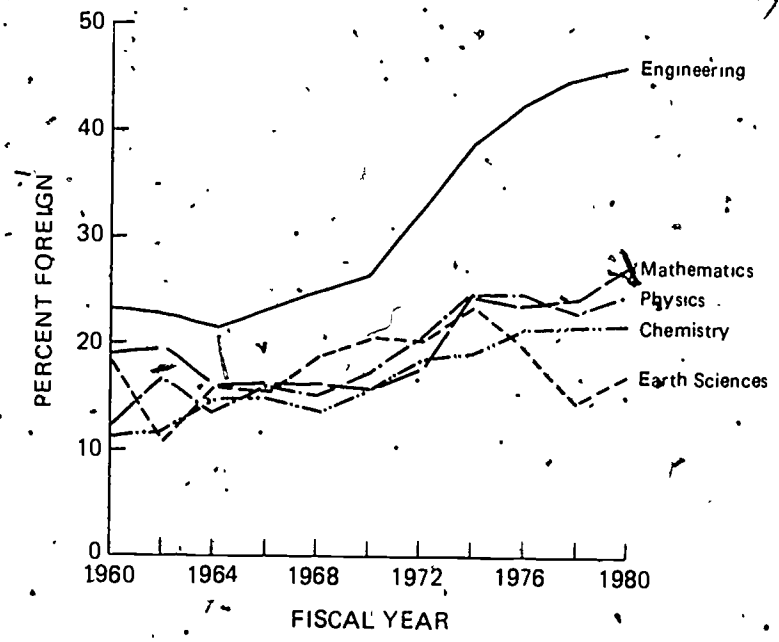


FIGURE 4
Proportion of Non-U.S. Doctorate Recipients by Field, 1960-1980
Part A–Physics, Chemistry, Earth Sciences, Mathematics, and Engineering

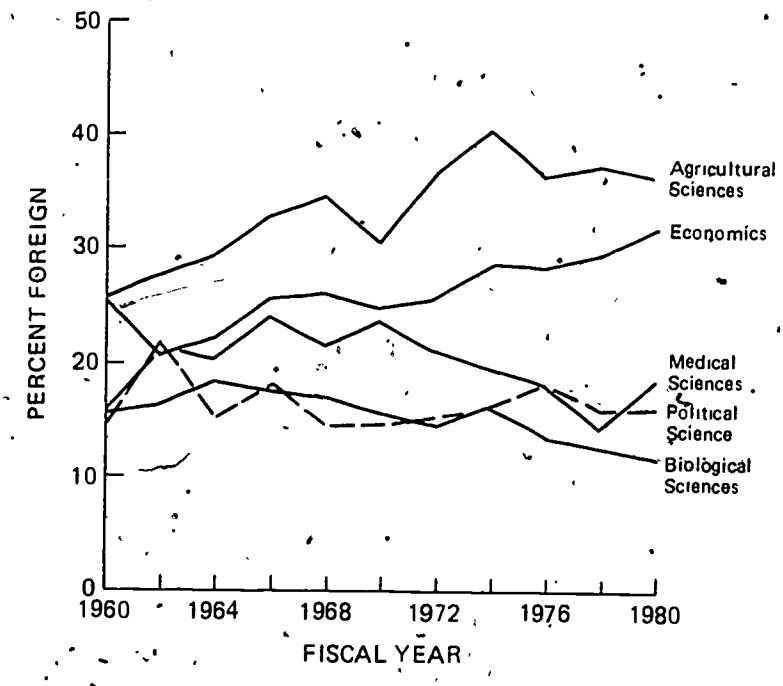


FIGURE 4
Part B–Life and Social Sciences

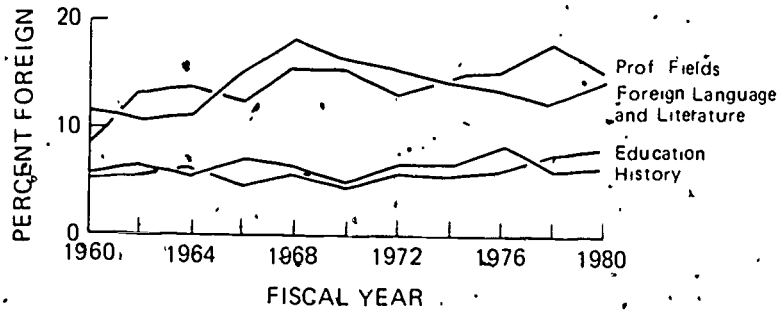


FIGURE 4
Part C—Humanities, Education, and Professional Fields

recipients. In 1980, nearly half (46.3%) of the engineering doctorates were foreign citizens. It is also the field with the largest number of non-U.S. citizens, accounting for 23.4% of the total foreign doctorate population in 1980, while being only 8.0% of all doctorates granted. This increase in the proportion of foreign engineering doctorates has been the result of a 50% decrease in the number of U.S. doctorates and an 80% increase in the number of temporary visa holders from 1970 to 1980. Even though the number of permanent visa Ph.D.'s peaked in 1972, their proportion of total engineering doctorates in 1980 was nearly the same as in 1970.

Of the ten science fields included in Text Table D, the earth, biological, and medical sciences are the only disciplines that experienced a general decrease through the 1970's in the proportion of non-U.S. doctorate recipients. The agricultural sciences, which now has the second largest proportion of foreign doctorate recipients, was replaced by engineering in 1976 as the leading field for foreign doctorates. It is also the field with the highest ratio of temporary to permanent visa holders - about 8 to 1 compared to an average ratio of 2.5 to 1 for all other fields.

The two social science fields selected for analysis - political science and economics - show substantially different patterns of foreign doctorate recipients. For political science, the percentage of non-U.S. citizen Ph.D.'s has, with some fluctuation, remained at about the same level during the 1960-1980 period. The proportion of foreign doctorates in economics, however, has increased steadily since 1962. As in engineering, the increase in foreign doctorates in economics during the 1970's has been the result of overall increases in the proportion of temporary visa holders coincident with decreases in the proportion of U.S. economics doctorates.

Part C. of Figure 4 illustrates that, in contrast to the science fields, the humanities, professional fields, and education attract a smaller and more stable number of foreign citizens. Among the humanities fields, foreign languages and literature is the area with the largest proportion of non-U.S. citizen doctorate recipients. At the same time, it has been the only discipline where between 1960 and 1980, the number of permanent visa Ph.D.'s has consistently exceeded the number with temporary visas. The pattern shown in the field of history, with a generally level curve and a small proportion of foreign doctorate recipients, is more typical of the humanities fields. While the number of non-U.S. doctorates in the professional fields increased in the early 1960's, their number has remained generally stable since 1970. In education, the proportion of foreign Ph.D.'s, although small, has increased steadily since 1970.

Country of Citizenship

Figure 5 shows the geographic areas of origin for foreign citizens who earned the doctorate in the U.S. between 1960 and 1980. In general, the trend in number of doctorates from these areas has followed that for the doctoral population as a whole - sharp increases from 1960 to 1970, followed by decreases in 1975 and 1980. Exceptions to this general trend include the areas of Mexico, Central and South America, and Africa, with steady increases from 1960 through 1980 and Canada, with a decrease of about 30% from 1970 to 1980.

From 1960 to 1980, Eastern and Western Asia

TEXT TABLE D
FIELD OF DEGREE AND CITIZENSHIP STATUS OF 1960-1980 DOCTORATE RECIPIENTS.

CITIZENSHIP		YEAR OF DOCTORATE 1960	1962	1964	1966	1968	1970	1972	1974	1976	1978	1980
- PHYSICS AND ASTRONOMY												
TOTAL		530	710	866	1061	1436	1655	1634	1335	1237	1067	985
U.S.	1/	459	580	716	851	1186	1337	1278	956	914	804	717
	V	86.6	81.7	82.7	80.2	82.6	80.8	78.2	71.4	73.6	75.4	72.8
NON-U.S. TOTAL		65	116	118	169	217	286	334	328	304	245	240
	V	12.3	16.3	13.6	15.9	15.1	17.3	20.4	24.5	24.6	23.0	24.4
NON-U.S., PERMANENT		17	19	27	40	63	99	125	98	76	64	51
	V	3.2	2.7	3.1	3.8	4.4	6.0	7.6	7.3	6.1	6.0	5.2
NON-U.S., TEMPORARY		48	97	91	129	154	187	209	230	228	181	189
	V	9.1	13.7	10.5	12.2	10.7	11.3	12.8	17.2	18.4	17.0	19.2
UNKNOWN		6	14	32	41	33	32	22	55	22	18	28
	V	1.1	2.0	3.7	3.9	2.3	1.9	1.3	4.1	1.8	1.7	2.8
- CHEMISTRY												
TOTAL		1078	1138	1351	1594	1803	2238	2019	1797	1624	1544	1538
U.S.		954	998	1146	1322	1530	1874	1611	1383	1264	1174	1165
	V	88.5	87.7	84.8	82.9	84.9	83.7	79.8	77.0	77.8	76.0	75.7
NON-U.S. TOTAL		119	133	193	234	241	340	375	342	344	335	336
	V	11.0	11.7	14.3	14.7	13.4	15.2	18.6	19.0	21.2	21.7	21.8
NON-U.S., PERMANENT		24	23	53	57	63	164	197	159	141	115	99
	V	2.2	2.0	3.9	3.6	3.5	7.3	9.8	8.8	8.7	7.7	6.4
NON-U.S., TEMPORARY		95	110	140	177	178	176	178	183	203	216	237
	V	8.8	9.7	10.4	11.1	9.9	7.9	8.8	10.2	12.5	14.0	15.4
UNKNOWN		5	7	12	38	32	24	33	72	16	35	37
	V	.5	.6	.9	2.4	1.8	1.1	1.6	4.0	1.0	2.3	2.4
- EARTH, ENVIRONMENTAL AND MARINE SCIENCES												
TOTAL		253	249	310	404	442	510	604	629	645	623	628
U.S.		206	221	252	334	350	400	473	457	508	518	510
	V	81.4	88.8	81.3	82.7	79.2	78.4	78.3	72.7	78.8	83.1	81.2
NON-U.S. TOTAL		45	26	49	62	83	104	122	148	128	90	106
	V	17.8	10.4	15.8	15.3	18.8	20.4	20.2	23.5	19.8	14.4	16.9
NON-U.S., PERMANENT		10	3	11	10	17	33	58	47	32	22	26
	V	4.0	1.2	3.5	2.5	3.8	6.5	9.6	7.5	5.0	3.5	4.1
NON-U.S., TEMPORARY		35	23	38	52	66	71	64	101	96	68	80
	V	13.8	9.2	12.3	12.9	14.9	13.9	10.6	16.1	14.9	10.9	12.7
UNKNOWN		2	2	5	8	9	6	9	24	5	15	12
	V	.8	.8	2.9	2.0	2.0	1.2	1.5	3.8	1.4	2.4	1.9
- MATHEMATICS												
TOTAL		291	388	588	769	971	1225	1281	1211	1003	838	745
U.S.		233	309	486	631	797	1018	1030	876	748	615	520
	V	80.1	79.6	82.7	82.1	82.1	83.1	80.4	72.3	74.6	73.5	69.8
NON-U.S. TOTAL		55	75	92	122	156	192	234	295	238	202	202
	V	18.9	19.3	15.6	15.9	16.1	15.7	18.3	24.4	23.7	24.1	27.1
NON-U.S., PERMANENT		11	10	12	25	44	58	65	71	55	47	63
	V	3.8	2.6	2.0	3.3	4.5	4.7	5.1	5.9	5.5	5.6	8.5
NON-U.S., TEMPORARY		44	65	80	97	112	134	169	224	183	155	139
	V	15.1	16.8	13.6	12.6	11.5	10.9	13.2	18.5	18.2	18.5	18.7
UNKNOWN		3	4	10	16	18	15	17	40	17	17	23
	V	1.0	1.0	1.7	2.1	1.9	1.2	1.3	3.3	1.7	2.0	3.1

1/ V provides vertical percentages within columns based on the total for each field.

TEXT TABLE D. CONTINUED

- ECONOMICS

CITIZENSHIP		YEAR OF DOCTORATE 1960	1962	1964	1966	1968	1970	1972	1974	1976	1978	1980
TOTAL		352	418	527	627	747	853	895	853	885	804	767
U.S.		260	322	387	442	537	630	648	578	620	531	502
	V 1/	73.9	77.0	73.4	70.5	71.9	73.9	72.4	67.8	70.1	66.3	65.4
NON-U.S. TOTAL		88	85	116	159	194	212	228	243	250	238	245
	V	25.0	20.3	22.0	25.4	26.0	24.9	25.5	28.5	28.2	29.7	31.9
NON-U.S., PERMANENT		22	13	22	33	45	65	64	55	48	53	53
	V	6.3	3.1	4.2	5.3	6.0	7.6	7.2	6.4	5.4	6.6	6.9
NON-U.S., TEMPORARY		66	72	94	126	149	147	164	188	202	185	192
	V	18.8	17.2	17.8	20.1	19.9	17.2	18.3	22.0	22.8	23.1	25.0
UNKNOWN		4	11	24	26	16	11	19	32	15	32	20
	V	1.1	2.6	4.6	4.1	2.1	1.3	2.1	3.8	1.7	4.0	2.6

- POLIT. SCI., PUBLIC ADMIN., & INT'L REL.

TOTAL		238	278	337	408	580	636	911	909	887	851	729
U.S.		195	209	269	319	472	528	743	719	707	690	573
	V	81.9	75.2	79.8	78.2	81.4	83.0	81.6	79.1	79.7	81.1	78.6
NON-U.S. TOTAL		35	61	51	74	85	93	139	147	159	136	119
	V	14.7	21.9	15.1	18.1	14.7	14.6	15.3	16.2	17.9	16.0	16.3
NON-U.S., PERMANENT		6	8	13	21	39	34	57	49	33	41	32
	V	2.5	2.9	3.9	5.1	6.7	5.3	6.3	5.4	3.7	4.8	4.4
NON-U.S., TEMPORARY		29	53	38	53	46	59	82	98	126	95	87
	V	12.2	19.1	11.3	13.0	7.9	9.3	9.0	10.8	14.2	11.2	11.9
UNKNOWN		8	8	17	15	23	15	29	43	31	25	37
	V	3.4	2.9	5.0	3.7	4.0	2.4	3.2	4.7	2.4	2.9	5.1

- FOREIGN LANGUAGES AND LITERATURE

TOTAL		213	252	345	451	629	733	919	975	914	704	589
U.S.		180	214	293	372	497	602	756	806	777	596	478
	V	84.5	84.9	84.9	82.5	79.0	82.1	82.3	82.7	85.0	84.7	81.2
NON-U.S. TOTAL		24	26	38	68	114	120	142	140	126	90	84
	V	11.3	10.3	11.0	15.1	18.1	16.4	15.5	14.4	13.8	12.8	14.3
NON-U.S., PERMANENT		13	12	26	46	68	86	102	102	82	50	52
	V	6.1	4.8	7.5	10.2	10.8	11.7	11.1	10.5	9.0	7.1	8.8
NON-U.S., TEMPORARY		11	14	12	22	46	34	40	38	44	40	32
	V	5.2	5.6	3.5	4.9	7.3	4.6	4.4	3.9	4.8	5.7	5.4
UNKNOWN		9	12	14	11	18	11	21	29	11	18	27
	V	4.2	4.8	4.1	2.4	2.9	1.5	2.3	3.0	1.2	2.6	4.6

- HISTORY

TOTAL		364	366	530	645	741	1091	1186	1186	1095	852	744
U.S.		338	333	488	578	682	1015	1098	1074	995	782	677
	V	92.9	91.0	92.1	89.6	92.0	93.0	92.6	90.6	90.9	91.9	91.0
NON-U.S. TOTAL		20	23	29	45	48	53	69	69	79	51	47
	V	5.5	6.3	5.5	7.0	6.5	4.9	5.8	5.8	7.2	6.0	6.3
NON-U.S., PERMANENT		9	6	15	18	21	26	26	29	26	14	18
	V	2.5	1.6	2.8	2.8	2.8	2.4	2.2	2.4	2.4	1.6	2.4
NON-U.S., TEMPORARY		11	17	14	27	27	27	43	40	53	37	29
	V	3.0	4.6	2.6	4.2	3.6	2.5	3.6	3.4	4.8	4.3	3.9
UNKNOWN		6	10	13	22	11	23	19	43	21	18	20
	V	1.6	2.7	2.5	3.4	1.5	2.1	1.6	3.6	1.9	2.1	2.7

TEXT TABLE 0. CONTINUED

- ENGINEERING

CITIZENSHIP		YEAR OF DOCTORATE 1960	1962	1964	1966	1968	1970	1972	1974	1976	1978	1980
TOTAL		794	1216	1664	2301	2855	3434	3503	3147	2834	2423	2479
U.S.		607	930	1288	1690	2105	2514	2330	1752	1557	1261	1254
	V 1/	76.4	76.5	77.4	73.4	73.7	73.2	66.5	55.7	54.9	52.0	50.6
NON-U.S. TOTAL		183	278	356	529	709	901	1141	1219	1203	1093	1149
	V	23.0	22.9	21.4	23.0	24.8	26.2	32.6	38.7	42.4	45.1	46.3
NON-U.S., PERMANENT		54	60	109	144	273	430	622	515	390	325	299
	V	6.8	4.9	6.6	6.3	9.6	12.5	17.8	16.4	13.8	13.4	12.1
NON-U.S., TEMPORARY		129	218	247	385	436	471	519	704	813	768	850
	V	16.2	17.9	14.8	16.7	15.3	13.7	14.8	22.4	28.7	31.7	34.3
UNKNOWN		4	8	20	82	41	19	32	176	74	69	76
	V	.5	.7	1.2	3.6	1.4	.6	.9	5.6	2.6	2.8	3.1

- BIOLOGICAL SCIENCES

TOTAL		1182	1300	1581	1991	2626	3171	3323	3201	3254	3196	3411
U.S.		990	1077	1268	1615	2148	2657	2767	2548	2728	2710	2945
	V	83.8	82.8	79.7	81.1	81.8	83.8	83.3	79.6	83.8	84.8	86.3
NON-U.S. TOTAL		183	210	285	347	449	491	485	517	438	403	391
	V	15.5	16.2	18.3	17.4	17.1	15.5	14.6	16.2	13.5	12.6	11.5
NON-U.S., PERMANENT		38	23	53	62	117	157	201	182	144	130	125
	V	3.2	1.8	3.4	3.1	4.5	5.0	6.0	5.7	4.4	4.1	3.7
NON-U.S., TEMPORARY		145	187	236	285	332	334	284	335	294	273	266
	V	12.3	14.4	14.9	14.3	12.6	10.5	8.5	10.5	9.0	8.5	7.8
UNKNOWN		9	13	32	29	29	23	71	136	88	83	75
	V	.8	1.0	2.0	1.5	1.1	.7	2.1	4.2	2.7	2.6	2.2

- MEDICAL SCIENCES

TOTAL		133	205	263	318	397	488	613	631	676	663	842
U.S.		111	160	207	239	308	364	459	450	531	565	670
	V	83.5	78.0	78.7	75.2	77.6	74.6	74.9	71.3	78.6	82.7	79.6
NON-U.S. TOTAL		21	43	53	76	85	115	129	124	122	97	154
	V	15.8	21.0	20.2	23.9	21.4	23.6	21.0	19.7	18.0	14.2	18.3
NON-U.S., PERMANENT		2	13	11	17	28	34	66	65	52	35	59
	V	1.5	6.3	4.2	5.3	7.1	7.0	10.8	10.3	7.7	5.1	7.0
NON-U.S., TEMPORARY		19	30	42	59	57	81	63	59	70	62	95
	V	14.3	14.6	16.0	18.6	14.4	16.6	10.3	9.4	10.4	9.1	11.3
UNKNOWN		1	2	3	3	4	9	25	57	23	21	18
	V	.8	1.0	1.1	.9	1.0	1.8	4.1	9.0	3.4	3.1	2.1

- AGRICULTURAL SCIENCES

TOTAL		414	470	517	576	684	918	1016	1002	950	1012	1072
U.S.		306	340	363	375	438	632	636	571	592	620	666
	V	73.9	72.3	70.2	65.1	64.0	68.8	62.6	57.0	62.3	61.3	62.1
NON-U.S. TOTAL		107	130	152	190	237	283	374	406	347	375	391
	V	25.8	27.7	29.4	33.0	34.6	30.8	36.8	40.5	36.5	37.1	36.5
NON-U.S., PERMANENT		16	18	17	15	41	51	93	73	44	46	42
	V	3.9	3.8	3.3	2.6	6.0	5.6	9.2	7.3	4.6	4.5	3.9
NON-U.S., TEMPORARY		91	112	135	175	196	232	281	333	303	329	349
	V	22.0	23.8	26.1	30.4	28.7	25.3	27.7	33.2	31.9	32.5	32.6
UNKNOWN		1		2	11	9	3	6	25	11	17	15
	V	.2		.4	1.9	1.3	.3	.6	2.5	1.2	1.7	1.4

TEXT TABLE D. CONTINUED

- PROFESSIONAL FIELDS

CITIZENSHIP		YEAR OF DOCTORATE 1960	1962	1964	1966	1968	1970	1972	1974	1976	1978	1980
TOTAL		381	468	565	734	948	1215	1532	1420	1479	1455	1345
U.S.	1/	337	396	468	606	766	984	1270	1129	1219	1169	1090
	V	88.5	84.6	82.8	82.6	80.8	81.0	82.9	79.5	82.4	80.3	81.0
NON-U.S. TOTAL		33	62	78	93	149	190	202	202	226	260	207
	V	8.7	13.2	13.8	12.7	15.7	15.6	13.2	14.2	15.3	17.9	15.4
NON-U.S., PERMANENT		7	12	18	27	57	63	75	63	62	64	62
	V	1.8	2.6	3.2	3.7	6.0	5.2	4.9	4.4	4.2	4.4	4.6
NON-U.S., TEMPORARY		26	50	60	66	92	127	127	139	164	196	145
	V	6.8	10.7	10.6	9.0	9.7	10.5	8.3	9.8	11.1	13.5	10.8
UNKNOWN		11	10	19	35	33	41	60	89	34	26	48
	V	2.9	2.1	3.4	4.8	3.5	3.4	3.9	6.3	2.3	1.8	3.6

- EDUCATION

TOTAL		1549	1893	2351	3040	4029	5857	7085	7241	7725	7194	7576
U.S.		1461	1788	2199	2875	3736	5540	6600	6558	7114	6498	6720
	V	94.3	94.5	93.5	94.6	92.7	94.6	93.2	90.6	92.1	90.3	88.7
NON-U.S. TOTAL		80	98	136	136	238	273	415	404	460	540	619
	V	5.2	5.2	5.8	4.5	5.9	4.7	5.9	5.6	6.0	7.5	8.2
NON-U.S., PERMANENT		8	16	16	31	54	72	131	102	114	128	112
	V	.5	.8	.7	1.0	1.3	1.2	1.8	1.4	1.5	1.8	1.5
NON-U.S., TEMPORARY		72	82	120	105	184	201	284	302	346	412	507
	V	4.6	4.3	5.1	3.5	4.6	3.4	4.0	4.2	4.5	5.7	6.7
UNKNOWN		8	7	16	29	55	44	70	279	151	156	237
	V	.5	.4	.7	1.0	1.4	.8	1.0	3.9	2.0	2.2	3.1

have been the geographic areas with the largest number of citizens earning doctorates in the U.S. In 1980, the Asian geographic areas accounted for nearly 44% of the total foreign doctorate recipients.

India, Taiwan, and Canada are shown in Text Table E to have been the largest source countries for doctorate recipients during the 1960-1980 period and, by 1980, Taiwan had replaced India as the largest source of foreign Ph.D.'s. Four countries - Brazil, Iran, Hong Kong, and Thailand - have also had large increases in the number of doctorates in each of the five years displayed in Table E. Of these, the country with the largest proportional growth was Brazil, where the number of doctorates in 1980 was 39 times the number in 1960.

Europe, followed by East and West Asia, were the regions with the largest proportion of citizens earning Ph.D.'s who held permanent visas. The countries having the largest proportion of citizens with permanent visas between 1960 and 1980 were Germany, Taiwan, and England. The Pacific, the African, and the Mexico, Central and South American regions had the largest proportion of temporary visa Ph.D.'s - nearly one-quarter more than the average proportion for this period.

Source of Support in Graduate School

The primary source of finanical support for graduate study reported by the 1980 doctorate recipients, both U.S. citizens and non-U.S., is shown in Figure 6 and Text Table F. The most commonly reported source of support was Own Earnings (21.9%) followed by Teaching Assistantship (17.6%) and Research Assistantship (16.1%). The three sources of financial support administered through the university - University Fellowship, Teaching Assistantship, and Research Assistantship - represented the primary support for 39.2% of the Ph.D.'s. As shown in Figure 6, among non-U.S. citizens, the permanent and temporary visa holders were the groups most dependent on support from university sources (55.2% and 45.3% respectively).

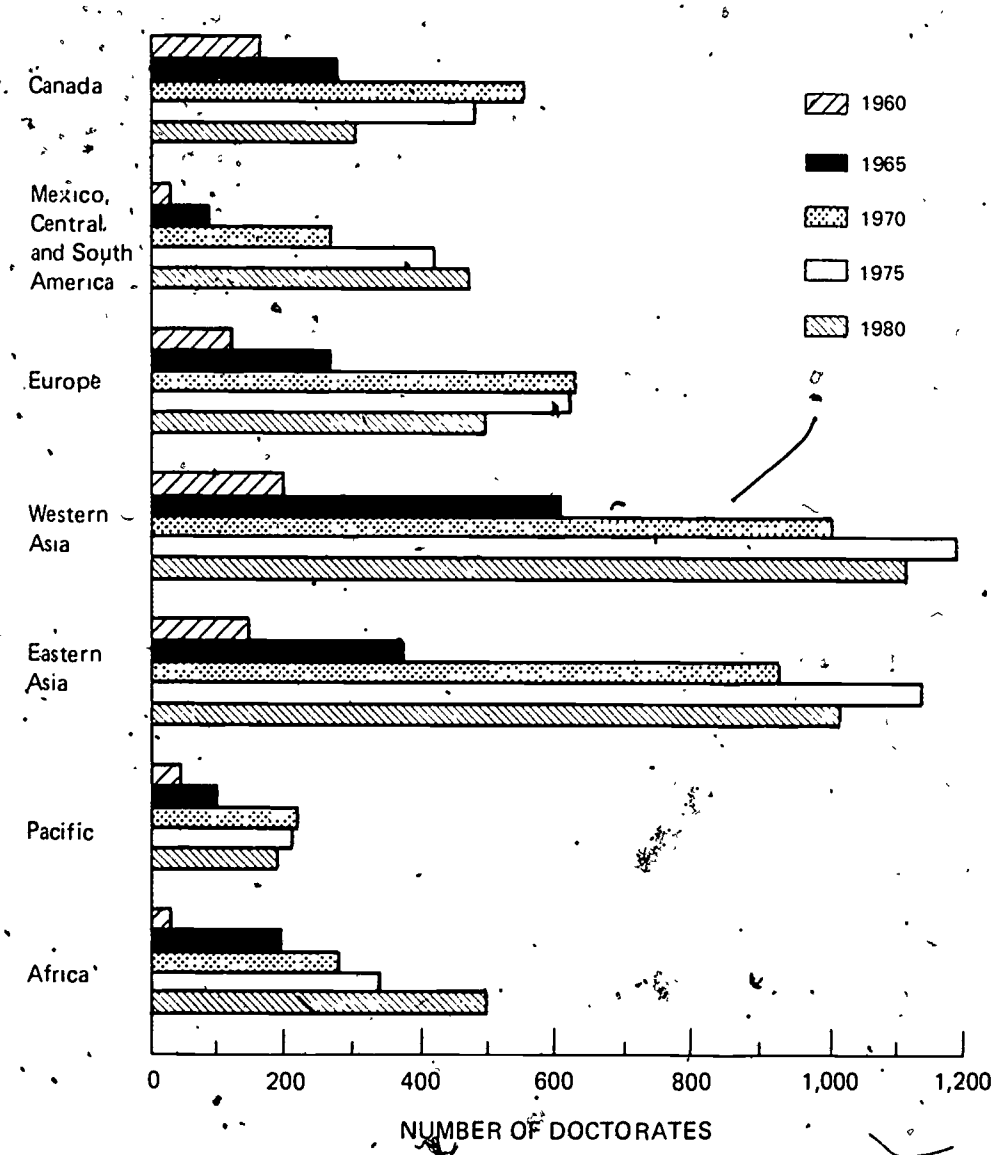


FIGURE 5
Geographic Area of Citizenship of Non-U.S. Citizen Doctorate Recipients, 1960-1980

TEXT TABLE E
COUNTRY OF CITIZENSHIP OF 1960-1980 NON-U.S. CITIZEN DOCTORATE RECIPIENTS.

COUNTRY OF CITIZENSHIP		YEAR OF DOCTORATE AND VISA STATUS														
		1960			1965			1970			1975			1980		
		TOTAL	PERM-ANENT	TEMP-ORARY	TOTAL	PERM-ANENT	TEMP-ORARY	TOTAL	PERM-ANENT	TEMP-ORARY	TOTAL	PERM-ANENT	TEMP-ORARY	TOTAL	PERM-ANENT	TEMP-ORARY
TOTAL NON-U.S. CITIZENS		1176	279	897	2313	560	1753	4148	1576	2572	5250	1714	3536	4918	1286	3632
	H 1/		23.7	76.3		24.2	75.8		38.0	62.0		32.6	67.4		26.1	73.9
CANADA		162	40	122	270	50	220	533	149	384	482	81	401	300	59	241
	H		24.7	75.3		18.5	81.5		28.0	72.0		16.8	83.2		19.7	80.3
MEXICO/CENT/SO. AMER., TOTAL		37	8	29	92	15	77	277	79	198	421	75	346	474	66	408
	H		21.6	78.4		16.3	83.7		28.5	71.5		17.8	82.2		13.9	86.1
MEXICO		10		10	18		18	31	2	29	52	7	45	67	6	61
	H			100.0			100.0		6.5	93.5		13.5	86.5		9.0	91.0
BRAZIL		4	1	3	12	2	10	36	7	29	99	3	96	156	5	151
	H		25.0	75.0		16.7	83.3		19.4	80.6		3.0	97.0		3.2	96.8
EUROPE, TOTAL		129	61	68	273	95	178	636	287	349	629	201	428	499	178	321
	H		47.3	52.7		34.8	65.2		45.1	54.9		32.0	68.0		35.7	64.3
ENGLAND		37	15	22	92	38	54	225	109	116	172	65	107	126	53	73
	H		40.5	59.5		41.3	58.7		48.4	51.6		37.8	62.2		42.1	57.9
GERMANY		22	12	10	36	8	28	76	41	35	74	32	42	50	27	23
	H		54.5	45.5		22.2	77.8		53.9	46.1		43.2	56.8		54.0	46.0
GREECE		16	2	14	26	9	17	65	33	32	60	23	37	71	14	57
	H		12.5	87.5		34.6	65.4		50.8	49.2		38.3	61.7		19.7	80.3
WESTERN ASIA, TOTAL		201	22	179	611	51	560	1092	383	709	1192	308	884	1121	173	948
	H		10.9	89.1		8.3	91.7		35.1	64.9		25.8	74.2		15.4	84.6
INDIA		123	7	116	390	24	366	574	237	337	659	195	464	419	82	337
	H		5.7	94.3		6.2	93.8		41.3	58.7		29.6	70.4		19.6	80.4
IRAN		16	6	10	28	5	23	95	31	64	124	35	89	271	34	237
	H		37.5	62.5		17.9	82.1		32.6	67.4		28.2	71.8		12.5	87.5
ISRAEL		18	2	16	45	7	38	109	35	74	119	23	96	96	24	72
	H		11.1	88.9		15.6	84.4		32.1	67.9		19.3	80.7		25.0	75.0
PAKISTAN		11	1	10	53	2	51	112	17	95	63	16	47	77	5	72
	H		9.1	90.9		3.8	96.2		15.2	84.8		25.4	74.6		6.5	93.5
TURKEY		5		5	21	4	17	54	17	37	100	13	87	77	8	69
	H			100.0		19.0	81.0		31.5	68.5		13.0	87.0		10.4	89.6
EASTERN ASIA, TOTAL		147	25	122	387	54	333	928	476	452	1143	384	759	1023	259	764
	H		17.0	83.0		14.0	86.0		51.3	48.7		33.6	66.4		25.3	74.7
TAIWAN, ROC		77	19	58	197	36	161	562	360	202	572	259	313	470	163	307
	H		24.7	75.3		18.3	81.7		64.1	35.9		45.3	54.7		34.7	65.3
HONG KONG					4	1	3	43	11	32	97	16	81	100	22	78
	H					25.0	75.0		25.6	74.4		16.5	83.5		22.0	78.0
JAPAN		30	3	27	60	6	54	100	19	81	109	9	100	90	9	81
	H		10.0	90.0		10.0	90.0		19.0	81.0		8.3	91.7		10.0	90.0
SOUTH KOREA		24	2	22	84	10	74	150	71	79	190	85	105	158	37	121
	H		8.3	91.7		11.9	88.1		47.3	52.7		44.7	55.3		23.4	76.6
THAILAND		13	1	12	19	1	18	38	2	36	103	6	97	139	11	128
	H		7.7	92.3		5.3	94.7		5.3	94.7		5.8	94.2		7.9	92.1
PACIFIC, TOTAL		55	6	49	107	6	101	220	45	175	217	28	189	187	25	162
	H		10.9	89.1		5.6	94.4		20.5	79.5		12.9	87.1		13.4	86.6
AUSTRALIA		13	3	10	38	3	35	86	24	62	83	8	75	92	14	78
	H		23.1	76.9		7.9	92.1		27.9	72.1		9.6	90.4		15.2	84.8
THE PHILIPPINES		24	1	23	35	1	34	90	12	78	68	10	58	36	2	34
	H		4.2	95.8		2.9	97.1		13.3	86.7		14.7	85.3		5.6	94.4
AFRICA, TOTAL		34	2	32	197	17	180	286	65	221	337	78	259	521	44	477
	H		5.9	94.1		8.6	91.4		22.7	77.3		23.1	76.9		8.4	91.6
NIGERIA 2/											113	24	89	157	14	143
	H											21.2	78.8		8.9	91.1
EGYPT		17	1	16	130	11	119	127	37	90	64	34	30	118	11	107
	H		5.9	94.1		8.5	91.5		29.1	70.9		53.1	46.9		9.3	90.7
COUNTRY UNKNOWN		411	115	296	376	272	104	176	92	84	829	559	270	793	482	311
	H		28.0	72.0		72.3	27.7		52.3	47.7		67.4	32.6		60.8	39.2

1/ H provides horizontal percentage within each year grouping.
2/ Nigeria was first coded as a separate country of citizenship in 1973.

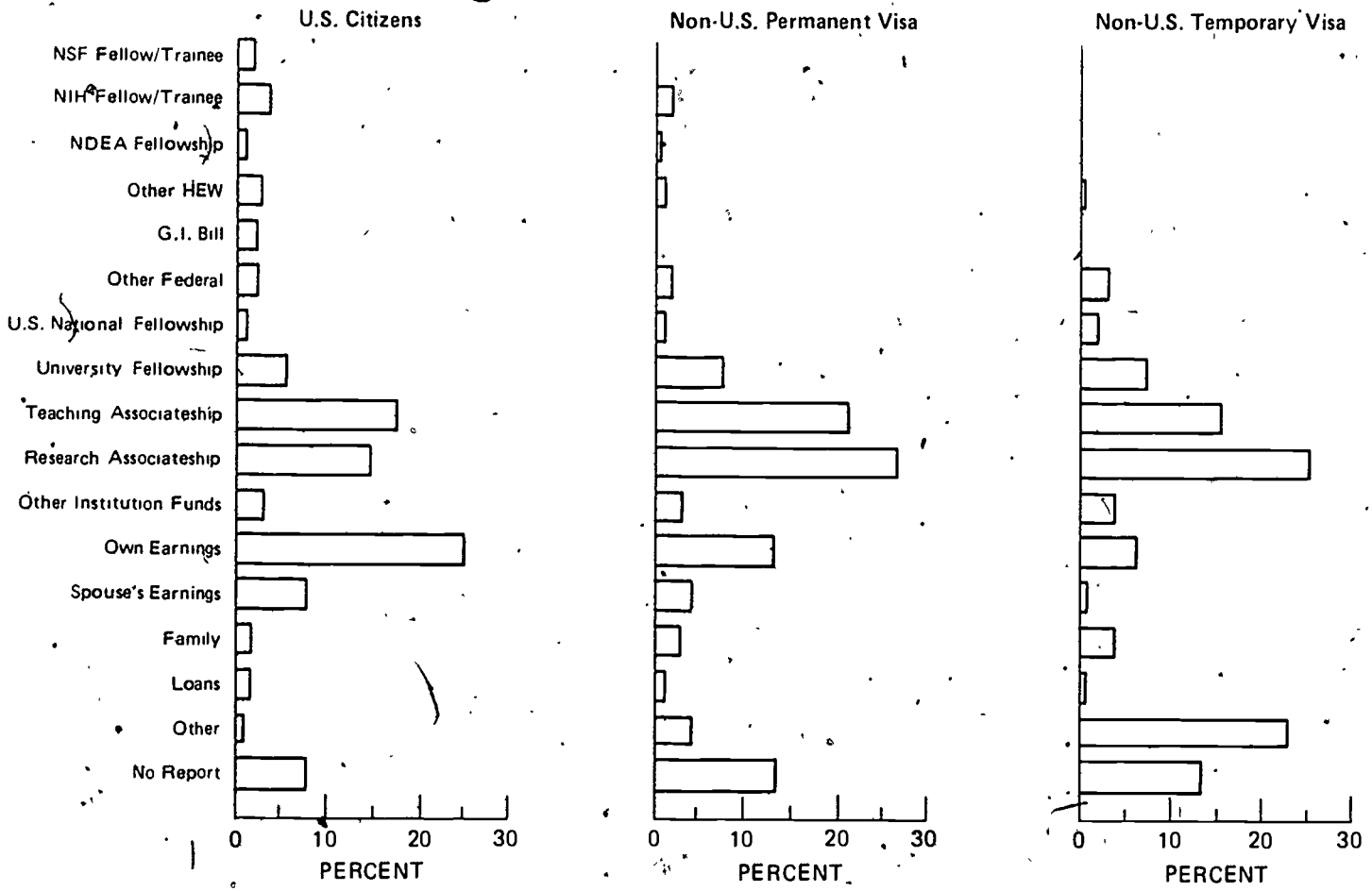


FIGURE 6
Primary Source of Support and Citizenship Status, 1980

TEXT TABLE F
PRIMARY SOURCE OF SUPPORT IN GRADUATE SCHOOL FOR 1980 DOCTORATE RECIPIENTS BY CITIZENSHIP AND FIELD OF DEGREE 1/

SOURCE OF SUPPORT 2/		FIELD OF DOCTORATE AND CITIZENSHIP STATUS: TOTAL U.S. CIT.	TOTAL NON-U.S. PERM.	TOTAL NON-U.S. TEMP.	PHYSICAL SCIENCES U.S. CIT.	PHYSICAL SCIENCES NON-U.S. PERM	PHYSICAL SCIENCES NON-U.S. TEMP.	ENGINEERING U.S. CIT.	ENGINEERING NON-U.S. PERM.	ENGINEERING NON-U.S. TEMP.	BIOLOGICAL SCIENCES U.S. CIT.	BIOLOGICAL SCIENCES NON-U.S. PERM.	BIOLOGICAL SCIENCES NON-U.S. TEMP.	OTHER LIFE SCIENCES U.S. CIT.	OTHER LIFE SCIENCES NON-U.S. PERM.	OTHER LIFE SCIENCES NON-U.S. TEMP.
NSF FELLOW/TRAINEE		447			147			54			105			11		
	V 3/	1.8			4.8			4.3			3.6			.8		
NIH FELLOW/TRAINEE		1210	22		46	7		29	1		627	6		168	3	
	V	4.8	1.7		1.5	2.8		2.3	.3		21.3	4.8		12.6	3.0	
NDEA FELLOWSHIP		227	1		7			4			3			1		
	V	.9	.1		.2			.3			.1			.1		
OTHER HEW		563	9	4	16			11	2	1	53	2		49	1	1
	V	2.2	.7	.1	.5			.9	.7	.1	1.8	1.6		3.7	1.0	.2
GI BILL		507		1	30			19		1	44			20		
	V	2.0			1.0			1.5		.1	1.5			1.5		
OTHER FEDERAL SUPPORT		525	18	92	92	1	15	92	11	17	55		2	48	2	14
	V	2.1	1.4	2.5	3.0	.4	2.2	7.3	3.7	2.0	1.9		.8	3.6	2.0	3.2
OTHER U.S. NATIONAL FELLOWSHIP		227	10	55	13	1	6	4	2	6	9		4	3		12
	V	.9	.8	1.5	.4	.4	.9	.3	.7	.7	.3		1.5	.2		2.7
UNIVERSITY FELLOWSHIP		1294	90	233	148	19	38	55	8	41	155	10	24	37	8	20
	V	5.2	7.0	6.4	4.8	7.5	5.5	4.4	2.7	4.8	5.3	8.0	9.0	2.8	7.9	4.5
TEACHING ASSISTANTSHIP		4478	270	548	839	79	210	104	34	92	592	28	37	98	13	11
	V	17.8	21.0	15.1	27.3	31.3	30.5	8.3	11.4	10.8	20.1	22.4	13.9	7.3	12.9	2.5
RESEARCH ASSISTANTSHIP		3633	350	863	1123	80	206	467	155	392	634	33	78	464	46	84
	V	14.5	27.2	23.8	36.6	31.7	29.9	37.2	51.8	46.1	21.5	26.4	29.3	34.7	45.5	18.9
OTHER INSTITUTIONAL FUNDS		680	35	130	74	5	12	83	8	19	63	9	9	40	3	34
	V	2.7	2.7	3.6	2.4	2.0	1.7	6.6	2.7	2.2	2.1	7.2	3.4	3.0	3.0	7.7
OWN EARNINGS		6197	163	221	178	5	6	187	19	22	155	10	9	161	12	20
	V	24.7	12.7	6.1	5.8	2.0	.9	14.9	6.4	2.6	5.3	8.0	3.4	12.1	11.9	4.5
SPOUSE'S EARNINGS		2164	51	33	146	9	1	42	5	4	186	4	2	104	3	5
	V	8.6	4.0	.9	4.8	3.6	.1	3.3	1.7	.5	6.3	3.2	.8	7.8	3.0	1.1
FAMILY CONTRIBUTIONS		421	35	128	9	1	5	5	7	19	22	1	4	8	2	12
	V	1.7	2.7	3.5	.3	.4	.7	.4	2.3	2.2	.7	.8	1.5	.6	2.0	2.7
LOANS		375	14	17	1		3	2	3	2	15		1	9		3
	V	1.5	1.1	.5			.4	.2	1.0	.2	.5		.4	.7		.7
OTHER		264	51	830	11	8	90	11	16	143	22	3	67	15	2	179
	V	1.1	4.0	22.9	.4	3.2	13.1	.9	5.4	16.8	.7	2.4	25.2	1.1	2.0	40.3
NO PRIMARY SUPPORT REPORTED		1896	167	477	188	37	96	85	28	91	205	19	29	100	6	49
	V	7.6	13.0	13.1	6.1	14.7	14.0	6.8	9.4	10.7	7.0	15.2	10.9	7.5	5.9	11.0
TOTAL		25108	1286	3632	3068	252	688	1254	299	850	2945	125	266	1336	101	444

1/ Not included in this table are the 956 doctorate recipients who did not report citizenship status.
2/ See item 15 on page 41 for listing of support sources. Here, the category Other HEW includes Title IX G*POP Fellowship, Other Federal Support includes AEC/ERDA Fellowship and NASA Traineeship, Other U.S. National Fellowship includes Woodrow Wilson Fellowship, Other Institutional Funds includes Educational Funds of Business or Industry, and the category Loans includes NDSL and Other Loans.
3/ V provides vertical percentages within columns based on total Ph.D.'s.

TEXT TABLE F. CONTINUED

FIELD OF DOCTORATE AND CITIZENSHIP STATUS

SOURCE OF SUPPORT 2/		SOCIAL SCIENCES U.S. CIT.	SOCIAL SCIENCES NON-U.S. PERM.	SOCIAL SCIENCES NON-U.S. TEMP.	HUMANITIES U.S. CIT.	HUMANITIES NON-U.S. PERM.	HUMANITIES NON-U.S. TEMP.	PROFESSIONAL FIELDS U.S. CIT.	PROFESSIONAL FIELDS NON-U.S. PERM.	PROFESSIONAL FIELDS NON-U.S. TEMP.	EDUCATION U.S. CIT.	EDUCATION NON-U.S. PERM.	EDUCATION NON-U.S. TEMP.
NSF FELLOW/TRAINEE		105			13			1			11		
	V 3/	2.0			.4			.1			.2		
NIH FELLOW/TRAINEE		309	5		2			13			16		
	V	5.8	2.5		.1			1.2			.2		
NDEA FELLOWSHIP		51			131			7			23	1	
	V	1.0			3.9			.6			.3	.9	
OTHER HEW		183	1	2	8	1		53	1		189	1	
	V	3.5	.5	.4	.2	.7		4.9	1.6		2.8	.9	
GI BILL		112			74			27			180		
	V	2.1			2.2			2.5			2.7		
OTHER FEDERAL SUPPORT		132	2	21	19		7	25		4	62	2	12
	V	2.5	1.0	4.0	.6		3.4	2.3		2.8	.9	1.8	2.4
OTHER U.S. NATIONAL FELLOWSHIP		67	5	14	82	1	6	7			42	1	7
	V	1.3	2.5	2.7	2.4	.7	2.9	.6			.6	.9	1.4
UNIVERSITY FELLOWSHIP		302	25	58	373	16	19	40	2	20	182	2	12
	V	5.7	12.5	11.0	11.1	11.9	9.3	3.7	3.2	13.8	2.7	1.8	2.4
TEACHING ASSISTANTSHIP		971	38	78	1043	44	52	213	16	20	617	18	48
	V	18.3	19.0	14.8	30.9	32.8	25.4	19.5	25.8	13.8	9.2	16.1	9.5
RESEARCH ASSISTANTSHIP		520	17	42	42	1	9	71	9	15	309	9	37
	V	9.8	8.5	8.0	1.2	.7	4.4	6.5	14.5	10.3	4.6	8.0	7.3
OTHER INSTITUTIONAL FUNDS		110	3	23	59	2	10	32	1	6	217	3	17
	V	2.1	1.5	4.4	1.7	1.5	4.9	2.9	1.6	4.1	3.2	2.7	3.4
OWN EARNINGS		1125	39	33	664	23	15	347	21	20	3373	34	96
	V	21.2	19.5	6.3	19.7	17.2	7.3	31.8	33.9	13.8	50.2	30.4	18.9
SPOUSE'S EARNINGS		514	9	9	394	11	2	121	2	1	654	8	9
	V	9.7	4.5	1.7	11.7	8.2	1.0	11.1	3.2	.7	9.7	7.1	1.8
FAMILY CONTRIBUTIONS		156	10	32	107	3	11	13	2	11	101	9	34
	V	2.9	5.0	6.1	3.2	2.2	5.4	1.2	3.2	7.6	1.5	8.0	6.7
LOANS		143	2	3	45	4	1	7		2	153	5	2
	V	2.7	1.0	.6	1.3	3.0	.5	.6		1.4	2.3	4.5	.4
OTHER		65	10	127	43	6	42	25	1	34	72	5	148
	V	1.2	5.0	24.1	1.3	4.5	20.5	2.3	1.6	23.4	1.1	4.5	29.2
NO PRIMARY SUPPORT REPORTED		433	34	84	275	22	31	88	7	12	519	14	85
	V	8.2	17.0	16.0	8.2	16.4	15.1	8.1	11.3	8.3	7.7	12.5	16.8
TOTAL		5298	200	526	3374	134	205	1090	62	145	6720	112	507

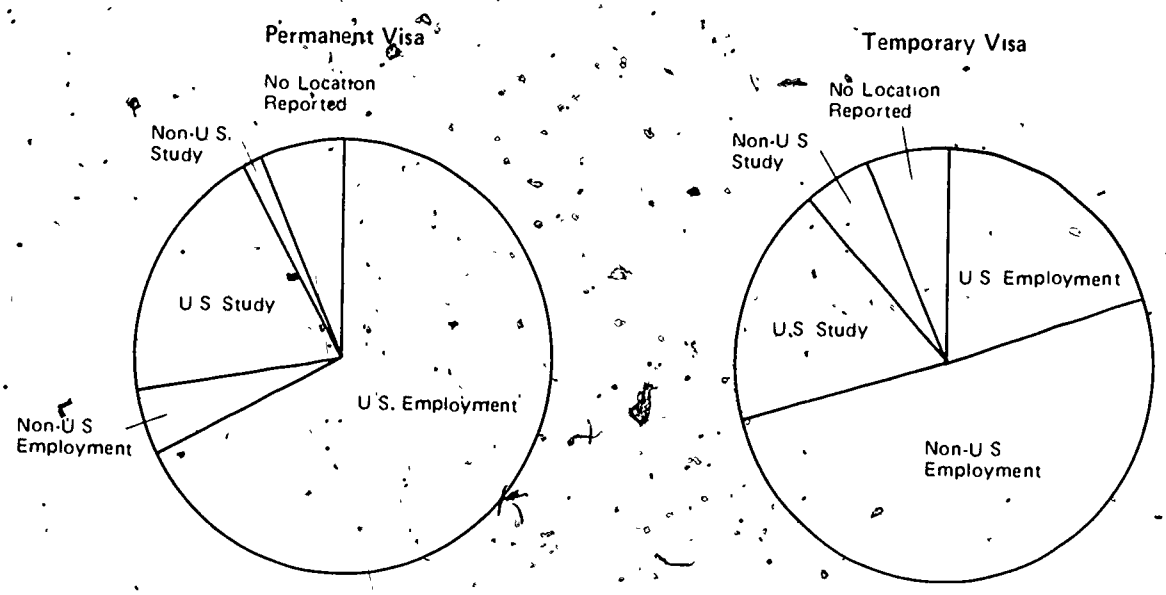


FIGURE 7
Planned Location for Non-U.S Citizen Doctorate Recipients with Definite Employment or Study Commitments, 1980

The U.S.-citizen Ph.D.'s were the group most frequently reporting use of their own earnings for graduate school support (24.7%), a proportion nearly twice as great as that of the permanent visa holders and four times as great as that of the temporary group. The Other source of support was noted by 22.9% of the temporary visa holders - a much higher proportion than for the other two citizenship groups. Review of the written-in responses to this item show that foreign Ph.D.'s typically use the Other category to denote support from their home countries.

Support from university sources was reported by a higher proportion of doctorates in the physical sciences than by Ph.D.'s in the other fields shown in Text Table F. At the same time, Own Earnings was reported as the primary source of support by a smaller proportion of physical science Ph.D.'s than by doctorates in all other fields. For engineers, the Research Assistantship was the most frequently noted source of support. A higher proportion of Ph.D. engineers checked Other Federal and Other Institutional Funds as their primary support than did doctorates in the other fields.

NIH support was most often reported by U.S. citizen Ph.D.'s in the biological sciences. In the other life science fields, two-fifths of the temporary visa holders were supported by Other sources, the largest proportion for any field and about twice the average proportion reported by the temporary visa group. Of all science fields, a larger proportion of doctorate recipients in the social sciences used their Own Earnings as the source of primary support for graduate study.

Doctorate recipients in humanities fields had both the highest proportion receiving primary support from University Fellowships and Teaching Assistantships (11.0% and 30.7% respectively); and the lowest proportion reporting support from Research Assistantships (1.4%). Own Earnings was the source most frequently checked by U.S. citizens and permanent visa doctorate recipients in the professional fields and in education. For temporary visa holders in these fields, the Other source of support was most frequently reported.

Postdoctoral Employment and Study Plans

Text Table G presents a summary of data from questions 17, 18, and 20 on the postdoctoral employment and study plans for 1980 non-U.S. citizen doctorate recipients. As might be expected, the planned postdoctoral employment location of foreign citizens is highly dependent on their visa status. A total of 87.4% of the doctorates holding permanent

TEXT TABLE G
POSTDOCTORAL EMPLOYMENT AND STUDY PLANS OF 1980 NON-U.S. CITIZEN DOCTORATE RECIPIENTS BY FIELD OF DEGREE.

POSTDOCTORAL PLANS		FIELD OF DOCTORATE: TOTAL ALL FLDS.	PHYS & ASTR.	CHEM.	EARTH ENV. & MAR. SCI.	MATH	COMP. SCI.	ENGR.	BIOL. SCI.	MED. SCI.	AGRIC. SCI.	PSYCH	ECON.	ALL OTHER SOC. SCI.	FOR. LANG. & LIT.	ALL OTHER HUM.	PROF. FLDS.	EDUC.
NON-U.S. CITIZENS																		
WITH PERMANENT VISAS		1286	51	99	26	63	13	299	125	59	42	50	53	97	52	82	62	112
TOTAL EMPLOYED		937	23	55	12	49	13	269	28	26	27	38	49	77	44	70	60	96
	V1 1/	72.9	45.1	55.6	46.2	77.8	100.0	90.0	22.4	44.1	64.3	76.0	92.5	79.4	84.6	85.4	96.8	85.7
DEFINITE EMPLOYMENT		625	19	37	9	31	11	211	16	23	19	25	31	36	17	44	46	49
	V1	48.6	37.3	37.4	34.6	49.2	84.6	70.6	12.8	39.0	45.2	50.0	58.5	37.1	32.7	53.7	74.2	43.8
LOCATION-U.S.		546	19	34	8	29	10	187	13	20	13	24	24	30	15	38	42	39
	V1	42.5	37.3	34.3	30.8	46.0	76.9	62.5	10.4	33.9	31.0	48.0	45.3	30.9	28.8	46.3	67.7	34.8
-NON-U.S.		37		1	1	2		3	2	3	4		5	4	1	4	3	4
	V1	2.9		1.0	3.8	3.2		1.0	1.6	5.1	9.5		9.4	4.1	1.9	4.9	4.8	3.6
EMPLOYER-ED. INST.		261	1	3	3	19	4	30	9	11	8	10	16	23	17	33	40	34
	V1	20.3	2.0	3.0	11.5	30.2	30.8	10.0	7.2	18.6	19.0	20.0	30.2	23.7	32.7	40.2	64.5	30.4
-IND/BUS.		286	17	32	5	9	7	166	5	8	10	4	4	7		4	3	4
	V1	22.2	33.3	32.3	19.2	14.3	53.8	55.5	4.0	13.6	23.8	8.0	7.5	7.2		4.9	4.8	3.6
-GOVT.		30	1		1	1		8	1	1		5	3	3		2		4
	V1	2.3	2.0		3.8	1.6		2.7	.8	1.7		10.0	5.7	3.1		2.4		3.6
-ALL OTHER		48		2		2		7	1	3	1	6	8	3		5	3	7
	V1	3.7		2.0		3.2		2.3	.8	5.1	2.4	12.0	15.1	3.1		6.1	4.8	6.3
SEEKING EMPLOYMENT		312	4	18	3	18	2	58	12	3	8	13	18	41	27	26	14	47
	V1	24.3	7.8	18.2	11.5	28.6	15.4	19.4	9.6	5.1	19.0	26.0	34.0	42.3	51.9	31.7	22.6	42.0
TOTAL POSTDOCT'L STUDY		310	26	44	13	12		26	92	32	13	11	3	13	3	10	1	11
	V1	24.1	51.0	44.4	50.0	19.0		8.7	73.6	54.2	31.0	22.0	5.7	13.4	5.8	12.2	1.6	9.8
DEFINITE STUDY		183	17	26	10	9		12	60	18	8	6	1	5		5	1	5
	V1	14.2	33.3	26.3	38.5	14.3		4.0	48.0	30.5	19.0	12.0	1.9	5.2		6.1	1.6	4.5
LOCATION-U.S.		161	14	26	10	5		11	54	18	6	6	1	3		2	1	4
	V1	12.5	27.5	26.3	38.5	7.9		3.7	43.2	30.5	14.3	12.0	1.9	3.1		2.4	1.6	3.6
-NON-U.S.		13	3			2		1	2		2			1		2		
	V1	1.0	5.9			3.2		.3	1.6		4.8			1.0		2.4		
SEEKING STUDY		127	9	18	3	3		14	32	14	5	5	2	8	3	5		6
	V1	9.9	17.6	18.2	11.5	4.8		4.7	25.6	23.7	11.9	10.0	3.8	8.2	5.8	6.1		5.4
WITH TEMPORARY VISAS		3632	189	237	80	139	43	850	266	95	349	71	192	263	32	173	145	507
TOTAL EMPLOYED		2544	61	94	45	96	34	603	108	56	267	47	174	222	28	139	135	435
	V2 2/	70.0	32.3	39.7	56.3	69.1	79.1	70.9	40.6	58.9	76.5	66.2	90.6	84.4	87.5	80.3	93.1	85.8
DEFINITE EMPLOYMENT		1828	40	57	34	66	27	434	86	48	213	30	132	148	13	97	106	297
	V2	50.3	21.2	24.1	42.5	47.5	62.8	51.1	32.3	50.5	61.0	42.3	68.8	56.3	40.6	56.1	73.1	58.6
LOCATION-U.S.		472	12	20	8	31	18	230	5	5	13	12	31	21	4	13	34	15
	V2	13.0	6.3	8.4	10.0	22.3	41.9	27.1	1.9	5.3	3.7	16.9	16.1	8.0	12.5	7.5	23.4	3.0
-NON-U.S.		1238	25	32	24	30		179	77	38	186	18	95	116	8	77	66	260
	V2	34.1	13.2	13.5	30.0	21.6	16.3	21.1	28.9	40.0	53.3	25.4	49.5	44.1	25.0	44.5	45.5	51.3
EMPLOYER-ED. INST.		1117	24	30	17	50	15	184	58	38	107	24	80	98	13	78	73	228
	V2	30.8	12.7	12.7	21.3	36.0	34.9	21.6	21.8	40.0	30.7	33.8	41.7	37.3	40.6	45.1	50.3	45.0
-IND/BUS.		281	10	17	11	7	12	183	1	1	9		6	6		3	12	3
	V2	7.7	5.3	7.2	13.8	5.0	27.9	21.5	.4	1.1	2.6		3.1	2.3		1.7	8.3	.6
-GOVT.		320	6	7	6	7		58	23	9	75	2	25	34		7	10	51
	V2	8.8	3.2	3.0	7.5	5.0		6.8	8.6	9.5	21.5	2.8	13.0	12.9		4.0	6.9	10.1
-ALL OTHER		110		3		2		9	4		22	4	21	10		9	11	15
	V2	3.0		1.3		1.4		1.1	1.5		6.3	5.6	10.9	3.8		5.2	7.6	3.0
SEEKING EMPLOYMENT		716	21	37	11	30	7	169	22	8	54	17	42	74	15	42	29	138
	V2	19.7	11.1	15.6	13.8	21.6	16.3	19.9	8.3	8.4	15.5	23.9	21.9	28.1	46.9	24.3	20.0	27.2
TOTAL POSTDOCT'L STUDY		887	121	136	29	32	9	204	147	31	55	13	12	27	2	23	7	38
	V2	24.4	64.0	57.4	36.3	23.0	20.9	24.0	55.3	32.6	15.8	18.3	6.3	10.3	6.3	13.3	4.8	7.5
DEFINITE STUDY		577	85	96	20	17	4	137	96	25	26	10	9	14	1	14	3	20
	V2	15.9	45.0	40.5	25.0	12.2	9.3	16.1	36.1	26.3	7.4	14.1	4.7	5.3	3.1	8.1	2.1	3.9
LOCATION-U.S.		429	63	84	14	11	4	115	74	21	10	7	6	6	1	3	1	9
	V2	11.8	33.3	35.4	17.5	7.9	9.3	13.5	27.8	22.1	2.9	9.9	3.1	2.3	3.1	1.7	.7	1.8
-NON-U.S.		121	22	7	6	6		15	16	2	13	2	3	8		10	2	9
	V2	3.3	11.6	3.0	7.5	4.3		1.8	6.0	2.1	3.7	2.8	1.6	3.0		5.8	1.4	1.8
SEEKING STUDY		310	36	40	9	15	5	67	51	6	29	3	3	13	1	9	4	18
	V2	8.5	19.0	16.9	11.3	10.8	11.6	7.9	19.2	6.3	8.3	4.2	1.6	4.9	3.1	5.2	2.8	3.6

1/ V1 provides vertical percentages within columns based on total non-U.S. citizens with permanent visas.
2/ V2 provides vertical percentages based on total non-U.S. citizens with temporary visas

visas have obtained commitments for U.S. employment. Among those with temporary visa status, the majority, 67.7 , have indicated a foreign employment location, and only 25.8% expect to be employed in the U.S. (see Figure 7).

The type of employment anticipated following the doctorate also differed between the two groups of non-U.S. citizens. Among the foreign doctorate recipients with firm commitments for employment, the leading type of employer for those with permanent visas was industry or business (45.8%), whereas the majority of those holding temporary visas planned employment in academe (61.1%). Only 41.8% of the individuals with permanent visa status indicated commitments for academic employment.

The proportion of both permanent and temporary visa holders reporting plans for continued study following the doctorate is one-third greater than for U.S. citizen doctorate recipients.[5/] In contrast to the large difference between the planned employment location for permanent and temporary visa holders, the planned postdoctoral study location for the two groups is quite similar - 88.0% of the permanent visa Ph.D.'s and 74.4% of the temporary visa holders planned study in the U.S.

Among those planning employment, the field of medical sciences has the largest proportion with definite employment plans for both the permanent (88.4%) and the temporary visa (85.7%) groups. For those planning further study, this field also has the largest proportion (80.7%) of temporary visa citizens with definite study plans. The biological sciences has the largest proportion of doctorate recipients seeking study for both the permanent (25.6%) and the temporary groups (19.2%), while the largest proportions seeking employment are in foreign languages and literature - 51.9% of permanent visa Ph.D.'s and 46.9% of the temporary group.

5/Data for U.S. citizens can be found in Table 5, pp.38-39.

EXPLANATION OF FIVE BASIC TABLES

Table 1 - Number of Doctorate Recipients by Sex and Subfield, FY 1980

Table 1A - Number of Doctorate Recipients by Citizenship, Racial/Ethnic Group, and Subfield, FY 1980

Table 2 - Statistical Profile of Doctorate Recipients by Sex and by Field of Doctorate, FY 1980 (three tables)

Table 3 - Percentage of FY 1980 Doctorate Recipients by Sources of Support in Graduate School, by Sex and Summary Field

Table 4 - Number of FY 1980 Doctorate Recipients by Sex, State of Doctoral Institution, and Summary Field

Table 5 - Statistical Profile of Doctorate Recipients by Racial or Ethnic Group and U.S. Citizenship Status, FY 1980

Table titles and headings are generally self-explanatory, but a few terms need special definition or explanation. The survey questionnaire is reproduced on pages

Tables 1 and 1A:

Tables 1 and 1A display data by fine field of doctorate, corresponding to the fields specified in the Specialties List on page 42. The "general" field categories, e.g., "chemistry, general," contain individuals who either received the doctorate in the general subject area or who did not specify a particular fine field. The "other" field categories, e.g., "chemistry, other," include those individuals whose specified doctoral discipline was not listed in the Specialties List.

Table 2:

There are three 2-page tables; one contains data about all doctorate recipients in FY 1980 and the other two present data by sex. This table provides data by field and also by broader summary field. Refer to inside back cover for the codes included in each broad field and the Specialties List on page for the codes and names of each subfield.

"Median Age at Doctorate" -- One-half received the doctorate at this age or younger.

"Percentage with Master's" -- This indicates the percentage of doctorate recipients in a field who received a master's degree in any field before taking the doctorate.

"Median Time Lapse" -- "Total Time" refers to total calendar time elapsed between year of baccalaureate and year of doctorate; "Registered Time" refers to the total time registered in a university between baccalaureate and doctorate.

Postgraduation plans of the doctorate recipients are grouped: "Postdoctoral Study Plans" (fellowship, research associateship, traineeship, other), "Planned Employment" (educational institution, industry, etc.), or "Postdoctoral Status Unknown." The sum of these columns of percentages totals 100% with allowance for rounding. For example, 3.2% of all the engineers plan to go to postdoctoral fellowships, 8.4% to research associateships, 1.3% to traineeships, 0.6 plan on some form of postdoctoral study support; 79.9% plan on employment and 6.6% did not indicate their postgraduation plans. The percentage listed by type of employer (educational institution, industry, etc.) total to the 79.9% planning on employment.

The four lines of data beginning with "Definite Postdoctoral Study," first included in the 1974 report, distinguish between individuals who have definite postgraduation plans (item S: "Have signed contract or made definite commitment" in the survey questionnaire) and those who are still seeking employment or postdoctoral study (item S: negotiating, seeking, or other). These four lines when added to the prior line "Status Unknown" total 100%. The two lines "Definite Postdoctoral Study" and "Seeking Postdoctoral Study" add to give the total percentage planning postdoctoral study listed in the table as "Postdoctoral Study Plans" and the two lines "Definite Employment" and "Seeking Employment" add to give the total percentage planning employment listed in the table as "Planned Employment After Doctorate."

Percentages showing the distribution of doctorate recipients by work activity and by region of employment are based on those who have a definite employment commitment. They exclude those still seeking employment and those planning postdoctoral study as

described in the categories above. These data differ from Summary Reports prior to 1974 which included all individuals planning on employment, i.e., those seeking as well as those having definite employment commitments.

Table 3:

Data in Table 3 describe sources of financial support during graduate school. The question was answered by 29,271 (94.5) of the FY 1980 doctorate recipients. The data in the table should be interpreted as follows: 206 male doctorate recipients in the physical sciences reported financial support from NSF fellowships during graduate school. This number is 6.0 of the male physical sciences doctorates who answered the question, and it is 37.2 of the males in all fields who reported NSF fellowship support. Since students indicate multiple sources of support, the vertical percentages sum to more than 100.

Changes in the survey questionnaire item on source of support have reduced the comparability of the 1977 to 1980 data with data presented in earlier Summary Reports. An explanation of the effects of these changes in Table 3 is detailed on page 13 of the 1977 Summary Report.

Table 4:

Table 4 shows the number of persons receiving a doctorate from universities in each of the 50 states, the District of Columbia, and Puerto Rico.

Table 5:

The 1973 Summary Report was the first to include data for racial and ethnic groups. The tables in that report stimulated many requests for more detailed data by individual racial or ethnic group. Such data are provided in Table 5, first included in the 1974 Summary Report. Table 5 contains data by racial or ethnic group and by U.S. citizenship status for selected variables from Tables 2 and 3. Comparisons between the 1973 data and data for 1974 to 1975 are somewhat tenuous because of the large number of cases (8,592) for which racial or ethnic data were unavailable in 1973.

In 1977, the item on racial or ethnic group in the survey questionnaire was revised to coincide with the question format recommended by the Federal Interagency Committee on Education and adopted by the Office of Management and Budget (OMB) for use in federally-sponsored surveys. An explanation of the effects of these changes is detailed on page 13 of the 1977 Summary Report. Changes in the OMB guidelines prompted the moving of persons having origins in the Indian Subcontinent from the white category to Asian in 1978. In 1980, the category Hispanic was subdivided into Puerto Rican, Mexican-American, and Other Hispanic to provide more detail for users of the racial/ethnic data.

An additional revision to this item in 1980 involves the number of categories that may be checked. Prior to 1980, doctorate recipients could check as many categories as applied to indicate their racial/ethnic background. When compiling the data, all persons who checked "white" in addition to one other category, with the exception of "black", were included with those who had provided the single category response. Those whose responses were "black" and who gave one additional response to any other category were designated as "black". Beginning in 1980, respondents were asked to check only one category. Evidence of this change will be most pronounced in the "American Indian" group where the majority of the respondents formerly checked "white" in addition to "American Indian".

These changes ~~can~~ affect the continuity of the time series of all the racial/ethnic groups in the report.

TABLE 1
NUMBER OF DOCTORATE RECIPIENTS BY SEX AND SUBFIELD, FY 1980

SUBFIELD OF DOCTORATE	NUMBER OF DOCTORATES		
	MEN	WOMEN	TOTAL
TOTAL ALL FIELDS	21595	9387	30982
PHYSICAL SCIENCES	3612	502	4114
MATHEMATICS	650	95	745
ALGEBRA	63	15	78
ANALYSIS AND FUNCTIONAL ANALYSIS	83	8	91
GEOMETRY	33	2	35
LOGIC	22	2	24
NUMBER THEORY	25	3	28
PROBABILITY, MATH STATISTICS	126	26	152
TOPOLOGY	50	7	57
COMPUTING THEORY AND PRACTICE	13		13
OPERATIONS RESEARCH	36	5	41
APPLIED	93	9	102
MATHEMATICS, GENERAL	71	12	83
MATHEMATICS, OTHER	35	6	41
COMPUTER SCIENCES	197	21	218
PHYSICS AND ASTRONOMY	918	67	985
ASTRONOMY	45	7	52
ASTROPHYSICS	63	6	69
ATOMIC AND MOLECULAR	69		69
ACOUSTICS	21	2	23
FLUIDS	15		15
PLASMA	57	2	59
OPTICS	41	2	43
THERMAL	5		5
ELEMENTARY PARTICLES	112	5	117
NUCLEAR STRUCTURE	67	6	73
SOLID STATE	188	14	202
PHYSICS, GENERAL	157	9	166
PHYSICS, OTHER	78	14	92
CHEMISTRY	1283	255	1538
ANALYTICAL	161	23	184
INORGANIC	157	32	189
ORGANIC	410	74	484
NUCLEAR	13	1	14
PHYSICAL	226	55	281
THEORETICAL	40	7	47
PHARMACEUTICAL	37	15	52
POLYMER	56	5	61
CHEMISTRY, GENERAL	131	29	160
CHEMISTRY, OTHER	52	14	66
EARTH, ENVIRONMENTAL AND MARINE SCI	564	64	628
MINERALOGY, PETROLOGY	43	4	47
GEOCHEMISTRY	45	6	51
STRATIGRAPHY, SEDIMENTATION	35	5	40
PALEONTOLOGY	16	5	21
STRUCTURAL GEOLOGY	19	1	20
GEOPHYSICS (SOLID EARTH)	69	2	71
GEOMORPHOL, GLACIAL GEOLOGY	13	2	15
HYDROLOGY AND WATER RESOURCES	25	3	28
OCEANOGRAPHY	75	10	85
MARINE SCIENCES, OTHER	20	5	25
ATMOSPHERIC PHYSICS AND CHEMISTRY	18	1	19
ATMOSPHERIC DYNAMICS	17	3	20
ATMOSPHERIC SCIENCES, OTHER	47	4	51
ENVIRONMENTAL SCIENCES, GENERAL	15		15
ENVIRONMENTAL SCIENCES, OTHER	19	6	25
APPL GEOL, GEOL ENG, ECON GEOL	27		27
EARTH SCIENCES, GENERAL	44	4	48
EARTH SCIENCES, OTHER	17	3	20

SUBFIELD OF DOCTORATE	NUMBER OF DOCTORATES		
	MEN	WOMEN	TOTAL
ENGINEERING	2389	90	2479
AERONAUTICAL AND ASTRONAUTICAL	80	1	81
AGRICULTURAL	67	1	68
BIOMEDICAL	65	3	68
CIVIL	233	6	239
CHEMICAL	271	14	285
CERAMIC	22	2	24
COMPUTER	57	5	62
ELECTRICAL	394	11	405
ELECTRONICS	72	1	73
INDUSTRIAL	70	7	77
NUCLEAR	111	1	112
ENGINEERING MECHANICS	88	3	91
ENGINEERING PHYSICS	18		18
MECHANICAL	289	4	293
METALLURGY AND PHYSICAL MET	100	7	107
SYSTEMS DESIGN, SYSTEMS SCIENCE	59	3	62
OPERATIONS RESEARCH	58	5	63
FUEL TECH, PETROLEUM	31		31
SANITARY AND ENVIRONMENTAL	61	5	66
MINING	4		4
MATERIALS SCIENCE	137	5	142
ENGINEERING, GENERAL	37	5	42
ENGINEERING, OTHER	65	1	66
LIFE SCIENCES	3983	1342	5325
BIOLOGICAL SCIENCES	2456	955	3411
BIOCHEMISTRY	484	188	672
BIOPHYSICS	90	18	108
BIOMETRICS, BIOSTATISTICS	29	13	42
ANATOMY	102	45	147
CYTOLOGY	31	13	44
EMBRYOLOGY	11	7	18
IMMUNOLOGY	84	40	124
BOTANY	106	38	144
ECOLOGY	133	36	169
MICROBIOLOGY AND BACTERIOLOGY	247	115	362
PHYSIOLOGY, ANIMAL	271	68	339
PHYSIOLOGY, PLANT	43	9	52
ZOOLOGY	181	46	227
GENETICS	102	55	157
ENTOMOLOGY	135	25	160
MOLECULAR BIOLOGY	122	60	182
NUTRITION AND/OR DIETETICS	28	62	90
BIOL SCIENCES, GENERAL	147	63	210
BIOL SCIENCES, OTHER	110	54	164
AGRICULTURAL SCIENCES	963	109	1072
AGRONOMY	141	10	151
AGRICULTURAL ECONOMICS	148	12	160
ANIMAL HUSBANDRY	23	2	25
FOOD SCIENCE AND TECHNOLOGY	78	24	102
FISH AND WILDLIFE	66	7	73
FORESTRY	74	6	80
HORTICULTURE	65	8	73
SOILS AND SOIL SCIENCE	73	6	79
ANIMAL SCIENCE AND ANIMAL NUTRITION	106	13	119
PHYTOPATHOLOGY	104	14	118
AGRICULTURE, GENERAL	3		3
AGRICULTURE, OTHER	82	7	89
MEDICAL SCIENCES	564	278	842
PUBLIC HEALTH AND EPIDEMIOLOGY	66	57	123
VETERINARY MEDICINE	34	7	41
NURSING	2	74	76
PARASITOLOGY	15	7	22
ENVIRONMENTAL HEALTH	26	13	39
PATHOLOGY	80	28	108
PHARMACOLOGY	197	60	257
PHARMACY	61	9	70
MEDICAL SCIENCES, GENERAL	11	4	15
MEDICAL SCIENCES, OTHER	72	19	91

TABLE 1. CONTINUED

SUBFIELD OF DOCTORATE	NUMBER OF DOCTORATES		
	MEN	WOMEN	TOTAL
SOCIAL SCIENCES (INCL PSYCH)	4088	2165	6253
ANTHROPOLOGY	195	174	369
COMMUNICATIONS	160	92	252
SOCIOLOGY	371	231	602
ECONOMICS	644	101	745
ECONOMETRICS	20	2	22
STATISTICS	24	9	33
GEOGRAPHY	113	17	130
AREA STUDIES	17	5	22
POLITICAL SCIENCE	403	102	505
PUBLIC ADMINISTRATION	113	32	145
INTERNATIONAL RELATIONS	69	10	79
CRIMINOLOGY	24	6	30
URBAN AND REGIONAL PLANNING	61	18	79
SOCIAL SCIENCES, GENERAL	20	13	33
SOCIAL SCIENCES, OTHER	66	43	109
PSYCHOLOGY	1788	1310	3098
CLINICAL	621	485	1106
COUNSELING AND GUIDANCE	159	139	298
DEVELOP AND GERONTOL	85	120	205
EDUCATIONAL	75	61	136
SCHOOL PSYCHOLOGY	93	83	176
EXPERIMENTAL	209	98	307
COMPARATIVE	6	2	8
PHYSIOLOGICAL	84	24	108
INDUSTRIAL AND PERSONNEL	50	16	66
PERSONALITY	25	18	43
PSYCHOMETRICS	11	10	21
SOCIAL	112	78	190
PSYCHOLOGY, GENERAL	120	93	213
PSYCHOLOGY, OTHER	138	83	221
HUMANITIES	2335	1528	3863
ART, HISTORY AND CRITICISM	58	86	144
HISTORY, AMERICAN	213	69	282
HISTORY, EUROPEAN	137	57	194
HISTORY, OTHER	190	57	247
HISTORY AND PHILOSOPHY OF SCIENCE	11	10	21
AMERICAN STUDIES	49	32	81
THEATRE AND THEATRE CRITICISM	59	35	94
MUSIC	289	111	400
SPEECH AS A DRAMATIC ART	41	22	63
ARCHEOLOGY	11	14	25
RELIGION	144	26	170
PHILOSOPHY	196	58	254
LINGUISTICS	107	75	182
COMPARATIVE LITERATURE	60	47	107
LANGUAGES AND LITERATURE	741	799	1540
AMERICAN	117	92	209
ENGLISH	374	368	742
GERMAN	46	53	99
RUSSIAN	10	22	32
FRENCH	45	117	162
SPANISH AND PORTUGUESE	55	90	145
ITALIAN	3	7	10
CLASSICAL	36	18	54
OTHER LANGUAGES	55	32	87
HUMANITIES, GENERAL	5	8	13
HUMANITIES, OTHER	24	22	46
PROFESSIONAL FIELDS	970	375	1345
THEOLOGY	176	13	189
BUSINESS ADMINISTRATION	542	91	633
HOME ECONOMICS	13	77	90
JOURNALISM	14	4	18
SPEECH AND HEARING SCIENCES	56	67	123
LAW, JURISPRUDENCE	20	1	21
SOCIAL WORK	97	81	178
LIBRARY AND ARCHIVAL SCIENCE	27	38	65
PROFESSIONAL FIELDS, OTHER	25	3	28

SUBFIELD OF DOCTORATE	NUMBER OF DOCTORATES		
	MEN	WOMEN	TOTAL
EDUCATION	4201	3375	7576
FOUNDATIONS: SOCIAL, PHILOS	126	88	214
EDUCATIONAL PSYCHOLOGY	233	241	474
ELEMENTARY EDUCATION, GENERAL	51	112	163
SECONDARY EDUCATION, GENERAL	103	65	168
HIGHER EDUCATION	412	272	684
ADULT EDUC AND EXTENSION EDUC	144	93	237
EDUCATIONAL MEAS AND STATISTICS	56	33	89
CURRICULUM AND INSTRUCTION	401	429	830
EDUCATIONAL ADMIN AND SUPERVISION	1020	509	1529
GUIDANCE, COUNS, STUDENT PERSONNEL	327	266	593
SPECIAL EC (GIFTED, HANDICAPPED, ETC)	141	205	346
AUDIO-VISUAL MEDIA	52	22	74
TEACHING FIELDS	800	740	1540
AGRICULTURE	37	2	39
ART	24	21	45
BUSINESS	26	26	52
EARLY CHILDHOOD	11	61	72
ENGLISH	31	43	74
FOREIGN LANGUAGE	18	18	36
HOME ECONOMICS		27	27
INDUSTRIAL ARTS	25	2	27
MATHEMATICS	44	30	74
MUSIC	76	34	110
NURSING		41	41
PHYS ED, HEALTH, AND REC	215	150	365
READING	36	125	161
SCIENCE	70	26	96
SOCIAL SCIENCE	28	22	50
SPEECH	1	9	10
VOCATIONAL	134	95	229
OTHER TEACHING FIELDS	24	8	32
EDUCATION, GENERAL	240	200	440
EDUCATION, OTHER	95	100	195
OTHER AND UNSPECIFIED	17	10	27

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

TABLE 1A
NUMBER OF DOCTORATE RECIPIENTS BY CITIZENSHIP, RACIAL/ETHNIC GROUP, AND SUBFIELD, FY 1980

SUBFIELD OF DOCTORATE	TOTAL DOCTORATES	NON-U.S. CITIZENS TEMP. VISAS	U.S. CITIZENS AND NON-U.S. WITH PERMANENT VISAS RACIAL/ETHNIC GROUP 1/								
			TOTAL	AMER. IND.	ASIAN	BLACK	WHITE	PUERTO RICAN	MEX-ICAN	OTHER HIS-PANIC 3/	OTHER & UNK
TOTAL ALL FIELDS	30482 2/	3632	26394	106	1097	1095	22326	69	109	325	1287
PHYSICAL SCIENCES	4114	688	3320	1	238	29	2779	4	1	24	232
MATHEMATICS	745	139	583		43	12	496			5	27
ALGEBRA	78	10	68		1	2	61			1	3
ANALYSIS AND FUNCTIONAL ANALYSIS	91	17	74		2	3	66				3
GEOMETRY	35	4	31		3		28				
LOGIC	24	1	23		1		19				3
NUMBER THEORY	28	6	22		1		20				1
PROBABILITY, MATH STATISTICS	152	39	112		18	2	88			1	3
TOPOLOGY	57	6	51		3		47				1
COMPUTING THEORY AND PRACTICE	13	1	12		1		11				
OPERATIONS RESEARCH	41	12	28		4		22				2
APPLIED	102	18	82		6	1	67			2	6
MATHEMATICS, GENERAL	83	18	47		3	2	37			1	4
MATHEMATICS, OTHER	41	7	33			2	30				1
COMPUTER SCIENCES	218	43	169		9		143			1	16
PHYSICS AND ASTRONOMY	985	189	768		46	4	622	3	3	6	84
ASTRONOMY	52	3	48		3		40	1	1		3
ASTROPHYSICS	69	8	61		2	1	51	1			6
ATOMIC AND MOLECULAR	69	9	60		3		45				12
ACOUSTICS	23	2	21		3		18				
FLUIDS	15	4	10				8				2
PLASMA	59	8	51		1	2	45			1	2
OPTICS	43	10	33		4		29				
THERMAL	5		5				5				
ELEMENTARY PARTICLES	117	26	91		7		75			2	7
NUCLEAR STRUCTURE	73	16	57		3		49			1	4
SOLID STATE	202	45	156		11		128	1	1	1	14
PHYSICS, GENERAL	166	45	96		5		60			1	30
PHYSICS, OTHER	92	13	79		4	1	69		1		4
CHEMISTRY	1538	237	1264	4	118	12	1036	1	2	10	81
ANALYTICAL	184	18	166	1	12		140			4	9
INORGANIC	189	22	167		13	2	146			1	5
ORGANIC	484	81	401	2	41	3	330	1	2	4	18
NUCLEAR	14	2	12				12				
PHYSICAL	281	38	243		19	2	208			1	13
THEORETICAL	47	7	40				38				2
PHARMACEUTICAL	52	14	36		10		24				2
POLYMER	61	17	44		13		26				5
CHEMISTRY, GENERAL	160	31	96	1	6	3	62				24
CHEMISTRY, OTHER	66	7	59		4	2	50				3
EARTH, ENVIRONMENTAL AND MARINE SCI	628	80	536	3	22	1	482		2	2	24
MINERALOGY, PETROLOGY	47	1	46	2	1		41				2
GEOCHEMISTRY	51	6	44	1	1		42				
STRATIGRAPHY, SEDIMENTATION	40	2	38				36				2
PALEONTOLOGY	21	1	20				20				
STRUCTURAL GEOLOGY	20		19				18				1
GEOPHYSICS (SOLID EARTH)	71	16	52		4		46		1		1
GEOMORPHOL, GLACIAL GEOLOGY	15	3	12				12				
HYDROLOGY AND WATER RESOURCES	28	5	22		1		20				1
OCEANOGRAPHY	85	6	77		4		72				1
MARINE SCIENCES, OTHER	25		25		2		21			1	1
ATMOSPHERIC PHYSICS AND CHEMISTRY	19	1	18		2		15				1
ATMOSPHERIC DYNAMICS	20	6	14		1		13				
ATMOSPHERIC SCIENCES, OTHER	51	14	36		2		32			1	1
ENVIRONMENTAL SCIENCES, GENERAL	15	2	13		1		12				
ENVIRONMENTAL SCIENCES, OTHER	25	1	24		2		20				2
APPL. GEOL, GEOL ENG, ECON GEOL	27	5	22				21				1
EARTH SCIENCES, GENERAL	48	7	38		1	1	26		1		9
EARTH SCIENCES, OTHER	20	4	16				15				1

1/ For more detailed explanation of racial/ethnic groups see item 8 on questionnaire on page 40
2/ Includes 956 individuals who did not report their citizenship at time of doctorate.
3/ Earlier versions of the racial/ethnic questionnaire item have grouped all Puerto Ricans, Mexican-Americans, and other Hispanics into one broad "Hispanic" category All individuals who checked this category on the 7,309 old forms still in circulation during the 1980 survey year have been included in "Other Hispanic."

TABLE 1A. CONTINUED

SUBFIELD OF DOCTORATE	TOTAL DOCTORATES	NON-U.S. CITIZENS TEMP. VISAS	U.S. CITIZENS AND NON-U.S. WITH PERMANENT VISAS RACIAL/ETHNIC GROUP 1/ TOTAL	AMER. IND.	ASIAN	BLACK	WHITE	PUERTO RICAN	MEXICAN	OTHER HISPANIC 3/	OTHER & UNK
SOCIAL SCIENCES (INCL PSYCH)	6253	526	5498	18	148	322	4757	18	23	65	247
ANTHROPOLOGY	369	17	346	1	9	10	300		1	2	23
COMMUNICATIONS	252	20	228		3	12	207	1	1		4
SOCIOLOGY	602	64	529	3	14	24	451	1	4	11	21
ECONOMICS	745	187	538	2	37	13	443	1	1	11	30
ECONOMETRICS	22	5	17		2		13	1			1
STATISTICS	33	9	24		6		17			1	
GEOGRAPHY	130	20	105	1	5	5	87			1	6
AREA STUDIES	22	2	19			2	16				1
POLITICAL SCIENCE	505	47	439	1	11	16	379		5	5	22
PUBLIC ADMINISTRATION	145	19	110		1	9	94				6
INTERNATIONAL RELATIONS	79	21	56	1	4	1	46				4
CRIMINOLOGY	30	3	27		1		26				
URBAN AND REGIONAL PLANNING	79	21	58		2	5	44		1	2	4
SOCIAL SCIENCES, GENERAL	33	3	26		1	1	22	1			1
SOCIAL SCIENCES, OTHER	109	17	87		2	6	74			2	3
PSYCHOLOGY	3098	71	2889	9	50	118	2538	13	10	30	121
CLINICAL	1106	12	1037	2	18	43	917	3	8	13	33
COUNSELING AND GUIDANCE	298	2	293	2	4	9	260	[illegible]		6	10
DEVELOP AND GERONTOL	205	5	200		3	12	173	1		2	9
EDUCATIONAL	136	1	129	1	4	7	109	1		1	6
SCHOOL PSYCHOLOGY	176	1	174			5	167				2
EXPERIMENTAL	307	10	296		5	2	272	1		4	12
COMPARATIVE	8		8				7				1
PHYSIOLOGICAL	108	2	106		3	5	94			1	3
INDUSTRIAL AND PERSONNEL	66	2	64			4	56	1			3
PERSONALITY	43	1	42		2		35	1			4
PSYCHOMETRICS	21	1	20		2		18				
SOCIAL	190	6	184		4	13	165				2
PSYCHOLOGY, GENERAL	213	7	164	3	3	10	116	1	2	2	27
PSYCHOLOGY, OTHER	221	21	172	1	2	8	149	2		1	9
HUMANITIES	3863	205	3508	9	68	103	3064	12	15	76	161
ART, HISTORY AND CRITICISM	144	6	131		2	1	120		1		7
HISTORY, AMERICAN	282	5	276			13	249		1	2	11
HISTORY, EUROPEAN	194	5	186	1	1	2	172		1	1	8
HISTORY, OTHER	247	19	212		13	12	159	3	1	3	21
HISTORY AND PHILOSOPHY OF SCIENCE	21		21				19				2
AMERICAN STUDIES	81	1	77		1	3	69		1		3
THEATRE AND THEATRE CRITICISM	94	5	87		1	2	81				3
MUSIC	400	18	362	3	7	8	322			2	20
SPEECH AS A DRAMATIC ART	63	2	58			4	49		1		5
ARCHEOLOGY	25		25				23				2
RELIGION	170	7	153	1	7	3	134			1	7
PHILOSOPHY	254	20	224		3	5	202	2		1	11
LINGUISTICS	182	39	138	1	6	9	109			6	7
COMPARATIVE LITERATURE	107	8	99		6	4	80	1	1	2	5
LANGUAGES AND LITERATURE	1540	68	1405	3	21	33	1231	6	7	58	46
AMERICAN	209	7	202	1		6	191			1	3
ENGLISH	742	29	673	1	9	18	614	1	1	5	24
GERMAN	99	8	85	1	2	1	77			1	3
RUSSIAN	32	1	30			1	29				
FRENCH	162	8	154			5	141	1		4	3
SPANISH AND PORTUGUESE	145	8	133			2	71	4	6	47	3
ITALIAN	10	1	9				9				
CLASSICAL	54	3	49				46				3
OTHER LANGUAGES	87	7	70		10		53				7
HUMANITIES, GENERAL	13	1	11				11				
HUMANITIES, OTHER	44	1	43			4	35		1		3
PROFESSIONAL FIELDS	1345	145	1152	5	44	53	983	9	4	6	52
THEOLOGY	189	6	179		4	3	158				14
BUSINESS ADMINISTRATION	633	95	514	2	26	15	441	1	1	2	26
HOME ECONOMICS	90	2	87			3	80				4
JOURNALISM	18	1	16				15				1
SPEECH AND HEARING-SCIENCES	123	2	119	1	2	4	110			1	1
LAW, JURISPRUDENCE	21	8	4			1	3				
SOCIAL WORK	178	9	165	1	6	21	126	2	3	2	4
LIBRARY AND ARCHIVAL SCIENCE	65	8	57	1	4	6	41	2		1	2
PROFESSIONAL FIELDS, OTHER	28	14	11		2		9				

TABLE 1A. CONTINUED

SUBFIELD OF DOCTORATE	TOTAL DOCTORATES	NON-U.S. CITIZENS TEMP. VISAS	U.S. CITIZENS AND NON-U.S. WITH PERMANENT VISAS RACIAL/ETHNIC GROUP 1/								
			TOTAL	AMER. IND.	ASIAN	BLACK	WHITE	PUERTO RICAN	MEX-ICAN	OTHER HIS-PANIC 3/	OTHER & UNK
ENGINEERING	2479	850	1553	3	278	18	1141	3	1	24	85
AERONAUTICAL AND ASTRONAUTICAL	81	34	44		7	1	33			1	2
AGRICULTURAL	68	39	28			1	23			1	3
BIOMEDICAL	68	5	61	1	4	1	47			1	7
CIVIL	239	111	121		21	1	87	1		6	5
CHEMICAL	285	113	164		35	1	116	2		2	8
CERAMIC	24	7	17		4		12				1
COMPUTER	62	25	37		7	2	28				
ELECTRICAL	405	117	271		45	6	197			4	19
ELECTRONICS	73	22	51		7		37			2	5
INDUSTRIAL	77	28	44		6		35			1	2
NUCLEAR	112	36	71		13		55				3
ENGINEERING MECHANICS	91	35	52		10		39			1	2
ENGINEERING PHYSICS	18	2	14		2		11				1
MECHANICAL	293	95	191	1	55	2	128				5
METALLURGY AND PHYSICAL MET	107	33	71	1	17		48		1		4
SYSTEMS DESIGN, SYSTEMS SCIENCE	62	22	40		4		34			1	1
OPERATIONS RESEARCH	63	13	50		7	1	38			2	2
FUEL TECH, PETROLEUM	31	16	15		2	1	10			1	1
SANITARY AND ENVIRONMENTAL	66	9	57		5		51				1
MINING	4	3	1				1				
MATERIALS SCIENCE	142	52	86		15	1	65				5
ENGINEERING, GENERAL	42	9	26		3		18				5
ENGINEERING, OTHER	66	24	41		9		28			1	3
LIFE SCIENCES	5325	710	4507	11	227	68	3908	3	7	33	250
BIOLOGICAL SCIENCES	3411	266	3070	10	151	42	2658	2	2	25	180
BIOCHEMISTRY	672	53	607	2	35	5	517			5	43
BIOPHYSICS	108	8	94		9	2	73				10
BIOMETRICS, BIOSTATISTICS	42	6	35		5		30				
ANATOMY	147	9	136		3	3	125				5
CYTOLOGY	44	2	42		4		33		1		4
EMBRYOLOGY	18		18	1	1		14			1	1
IMMUNOLOGY	124	6	117		12	2	93			1	9
BOTANY	144	11	128		5	1	115			2	5
ECOLOGY	169	9	159	1	1	2	144	1		2	8
MICROBIOLOGY AND BACTERIOLOGY	362	21	331	2	23	5	281			4	16
PHYSIOLOGY, ANIMAL	339	16	322	1	9	1	280	1		2	28
PHYSIOLOGY, PLANT	52	4	46		3	2	39				2
ZOOLOGY	227	10	212		1	3	199			1	8
GENETICS	157	22	132		9		118			1	4
ENTOMOLOGY	160	31	126	1	5	2	109		1	2	6
MOLECULAR BIOLOGY	182	18	164		8	5	138			2	11
NUTRITION AND/OR DIETETICS	90	9	79	1	6	3	66			1	2
BIOL SCIENCES, GENERAL	210	18	174	1	6	5	152			1	9
BIOL SCIENCES, OTHER	164	13	148		6	1	132				9
AGRICULTURAL SCIENCES	1072	349	708	1	30	11	627		1	6	32
AGRONOMY	151	64	86		2	2	77				5
AGRICULTURAL ECONOMICS	160	54	103		2	4	88			2	7
ANIMAL HUSBANDRY	25	5	20		1		18				1
FOOD SCIENCE AND TECHNOLOGY	102	38	64	1	10		49			1	3
FISH AND WILDLIFE	73	13	59				58				1
FORESTRY	80	18	61				60				1
HORTICULTURE	73	27	45		2	1	41				1
SOILS AND SOIL SCIENCE	79	32	47		6		37			1	3
ANIMAL SCIENCE AND ANIMAL NUTRITION	119	30	86		3		76			1	6
PHYTOPATHOLOGY	118	37	79			2	73		1		3
AGRICULTURE, GENERAL	3	1	2				2				
AGRICULTURE, OTHER	89	30	56		4	2	48			1	1
MEDICAL SCIENCES	842	95	729		46	15	623	1	4	2	38
PUBLIC HEALTH AND EPIDEMIOLOGY	123	8	114		4	4	98		2		6
VETERINARY MEDICINE	41	19	21		1		17				3
NURSING	76	8	66		1	2	61				2
PARASITOLOGY	22	5	17		1		16				
ENVIRONMENTAL HEALTH	39	6	30		1	2	24			1	2
PATHOLOGY	108	10	95		3	2	84				6
PHARMACOLOGY	257	15	237		15	4	202	1		1	14
PHARMACY	70	16	54		14		38				2
MEDICAL SCIENCES, GENERAL	15	1	13				13				
MEDICAL SCIENCES, OTHER	91	7	82		6	1	70		2		3

TABLE 1A. CONTINUED

SUBFIELD OF DOCTORATE	TOTAL DOCTORATES	NON-U.S. CITIZENS TEMP. VISAS	U.S. CITIZENS AND NON-U.S. WITH PERMANENT VISAS RACIAL/ETHNIC GROUP 1/								
			TOTAL	AMER. IND.	ASIAN	BLACK	WHITE	PUERTO RICAN	MEX-ICAN	OTHER HIS-PANIC 3/	OTHER & UNK
EDUCATION	7576	507	6832	53	92	602	5676	24	52	77	256
FOUNDATIONS: SOCIAL, PHILOS	214	19	191		9	15	154		2	3	8
EDUCATIONAL PSYCHOLOGY	474	28	436	2	5	17	385	2	5	4	16
ELEMENTARY EDUCATION, GENERAL	163	6	151	5	2	11	124	1		4	4
SECONDARY EDUCATION, GENERAL	160	12	145	1		15	125			1	3
HIGHER EDUCATION	684	39	644	7	3	70	539	2	3	5	16
ADULT EDUC AND EXTENSION EDUC	237	21	214	1	2	14	185	1	1	3	7
EDUCATIONAL MEAS AND STATISTICS	89	8	81		2	1	76				2
CURRICULUM AND INSTRUCTION	830	67	755	2	9	75	613	1	13	15	27
EDUCATIONAL ADMIN AND SUPERVISION	1529	66	1450	22	13	156	1173	8	16	12	50
GUIDANCE, COUNS, STUDENT PERSONNEL	593	16	556	1	9	48	471	2	6	6	13
SPECIAL ED (GIFTED, HANDICAPPED, ETC)	346	9	337	3	10	18	289	1	1	1	14
AUDIO-VISUAL MEDIA	74	16	58		3		53	1			1
TEACHING FIELDS	1540	149	1375	5	13	107	1178	5	3	16	48
AGRICULTURE	39	11	28			4	24				
ART	45	10	35			1	34				
BUSINESS	52	3	49			3	43			1	2
EARLY CHILDHOOD	72	1	71		1	9	58			1	2
ENGLISH	74	5	69		2	8	55			1	3
FOREIGN LANGUAGE	36	10	26		2		17	1	3	3	
HOME ECONOMICS	27		26			1	24				1
INDUSTRIAL ARTS	27	2	25		1	3	21				
MATHEMATICS	74	10	64			7	54			3	
MUSIC	110	3	102	1		8	85				8
NURSING	41	1	40		2	3	35				
PHYS ED, HEALTH, AND REC	365	55	305	3	2	11	276	1			12
READING	161	3	156		1	15	131	1		2	6
SCIENCE	96	15	80		1	8	66			3	2
SOCIAL SCIENCE	50	2	48			3	42				3
SPEECH	10	1	9			1	7				1
VOCATIONAL	229	13	214		1	22	180	2		1	8
OTHER TEACHING FIELDS	32	4	28	1			26			1	
EDUCATION, GENERAL	440	29	274	2	10	35	181		1	2	43
EDUCATION, OTHER	195	22	165	2	2	20	131		1	5	4
OTHER AND UNSPECIFIED	27	1	24		2		18				4

SOURCE NRC. Commission on Human Resources. Doctorate Records File.

TABLE 2
STATISTICAL PROFILE OF DOCTORATE RECIPIENTS BY FIELD OF DOCTORATE, FY 1980 1/

TOTAL ALL DOCTORATES

	FY 1980 TOTAL	PHYSICS AND ASTRONOMY	CHEMISTRY	EARTH, ENVIRONM AND MARINE SCIENCES	PHYSICAL SCIENCES	MATHEMATICS	COMPUTER SCIENCES	ENGINEERING	ENG FIELDS	BIOCHEMISTRY	BASIC MEDICAL SCIENCES	OTHER BIOSCIENCES	BIOSCIENCES	MEDICAL SCIENCES	AGRICULTURAL SCIENCES
NUMBER IN FIELD	30982	985	1538	628	3151	745	218	2479	6593	672	1324	1415	3411	842	1072
MALE %	69.7	93.2	83.4	89.8	87.7	87.2	90.4	96.4	91.0	72.0	72.4	71.7	72.0	67.0	89.8
FEMALE %	30.3	6.8	16.6	10.2	12.3	12.8	9.6	3.6	9.0	28.0	27.6	28.3	28.0	33.0	10.2
U.S. CITIZENSHIP %	81.0	72.8	75.7	81.2	75.9	69.8	71.6	50.6	65.6	87.5	87.8	84.4	86.3	79.6	62.1
FOREIGN CITIZENSHIP %	15.9	24.4	21.8	16.9	21.6	27.1	25.7	46.3	31.7	10.7	10.6	12.6	11.5	18.3	36.5
UNKNOWN %	3.1	2.8	2.4	1.9	2.4	3.1	2.8	3.1	2.8	1.8	1.5	3.0	2.2	2.1	1.4
MARRIED %	61.1	49.8	53.8	60.8	54.0	51.0	51.4	62.1	56.6	56.3	55.2	57.2	56.2	64.1	74.3
NOT MARRIED %	34.1	44.5	42.4	36.0	41.8	44.4	43.1	32.7	38.7	39.9	41.3	38.4	39.8	31.8	23.2
UNKNOWN %	4.7	5.7	3.8	3.2	4.3	4.6	5.5	5.2	4.7	3.9	3.5	4.4	3.9	4.0	2.5
MEDIAN AGE AT DOCTORATE	32.2	29.4	28.3	30.8	29.1	29.3	29.5	30.3	29.6	28.6	29.3	30.1	29.5	30.8	31.5
PERCENT WITH BACC IN SAME FIELD AS DOCTORATE	53.8	81.1	85.8	46.5	76.5	81.9	15.6	75.2	74.6	23.7	19.1	69.6	41.0	24.8	53.5
PERCENT WITH MASTERS	80.9	65.6	39.4	74.5	54.6	75.7	78.4	90.4	71.2	32.6	46.9	65.8	51.9	58.2	91.9
MEDIAN TIME LAPSE FROM BACC TO DOCT															
TOTAL TIME YRS	9.3	7.2	6.0	8.1	6.8	7.0	7.4	7.6	7.2	6.3	6.9	7.6	7.1	7.8	8.2
REGISTERED TIME YRS	6.3	6.3	5.2	6.2	5.7	5.9	6.0	5.6	5.7	5.6	5.8	6.3	5.9	5.7	5.6
POSTDOCTORAL STUDY PLANS %	18.4	48.4	41.5	29.8	41.4	13.6	9.6	13.5	26.7	80.4	73.7	46.9	63.9	43.5	16.2
FELLOWSHIP	9.0	15.3	17.9	11.5	15.8	6.6	3.7	3.2	9.6	50.6	44.6	25.9	38.0	22.8	4.1
RESEARCH ASSOC	6.8	31.5	22.0	17.5	24.1	5.1	5.5	8.4	15.4	21.4	18.3	16.3	18.1	11.9	10.8
TRAINEESHIP	1.0	.4	.7	.3	.5	.5	.5	1.3	.8	2.7	3.8	1.6	2.6	1.9	.8
OTHER	1.6	1.2	.9	.5	.9	1.3	.0	.6	.8	5.7	7.1	3.2	5.2	6.9	.5
PLANNED EMPLOYMENT AFTER DOCTORATE %	75.3	44.6	53.9	65.1	53.2	79.7	85.3	79.9	67.3	15.8	22.0	46.5	30.9	51.4	77.9
EDUC INSTITUTION	45.3	11.9	8.6	23.1	12.5	56.0	39.9	23.0	22.3	5.5	11.7	26.7	16.7	27.9	42.6
INDUSTRY/BUSINESS	12.9	21.7	39.6	23.1	30.7	15.7	37.2	41.8	33.4	7.1	5.0	6.6	6.1	9.5	12.9
GOVERNMENT	8.9	8.2	3.8	15.3	7.5	5.1	5.5	11.9	8.8	1.5	3.2	8.5	5.1	8.1	16.2
NONPROFIT	4.8	.8	.8	1.4	.9	.7	1.8	1.6	1.2	1.0	1.4	1.6	1.4	3.8	1.7
OTHER & UNKNOWN	3.5	1.9	1.2	2.2	1.6	2.3	.9	1.5	1.6	.6	.6	3.0	1.6	2.1	4.5
POSTDOCT STATUS UNKN %	6.3	7.0	4.6	5.1	5.4	6.7	5.0	6.6	6.0	3.9	4.3	6.6	5.2	5.1	5.9
DEFINITE POSTDOCTORAL STUDY	13.8	38.7	31.9	23.9	32.4	9.4	6.0	9.1	20.2	67.0	62.2	33.7	51.3	36.1	9.9
SEEKING POSTDOCTORAL STUDY	4.6	9.7	9.6	5.9	8.9	4.2	3.7	4.4	6.5	13.4	11.5	13.2	12.6	7.4	6.3
DEFINITE EMPLOYMENT	56.2	34.1	44.4	53.0	42.9	62.8	67.4	64.5	54.1	10.9	16.4	30.5	21.2	41.6	61.4
SEEKING EMPLOYMENT	19.1	10.5	9.5	12.1	10.3	16.9	17.9	15.4	13.2	4.9	5.6	16.0	9.8	9.9	16.5
EMPLOYMENT ACTIVITY AFTER DOCTORATE %															
PRIMARY ACTIVITY															
R & D	25.6	67.9	75.8	53.8	70.4	39.3	64.6	64.7	63.5	68.5	51.2	37.3	44.6	42.0	53.5
TEACHING	40.1	18.5	11.3	22.8	15.9	50.9	25.2	19.8	22.6	17.8	27.6	38.9	33.9	32.3	24.6
ADMINISTRATION	14.4	2.7	1.5	3.0	2.1	.9	2.7	2.0	1.9	2.7	5.5	5.1	5.0	9.7	2.9
PROF. SERVICES	11.4	3.3	1.5	8.7	3.7	4.5	2.7	5.3	4.5	6.8	6.9	9.0	8.2	10.3	4.6
OTHER	3.2	4.5	1.0	8.4	3.7	1.3	1.4	3.1	3.0	2.7	3.7	5.1	4.4	1.4	6.7
ACTIVITY UNKNOWN	5.3	3.3	5.0	3.3	4.1	3.2	3.4	5.1	4.4	1.4	5.1	4.6	4.4	4.3	7.8
SECONDARY ACTIVITY															
R & D	24.9	15.8	7.8	24.3	13.8	41.5	24.5	18.9	20.2	11.0	24.0	34.5	28.9	27.4	21.7
TEACHING	11.2	7.4	3.4	9.9	6.0	19.2	18.4	10.3	10.2	9.6	22.1	11.3	14.4	15.4	21.6
ADMINISTRATION	9.5	6.5	13.9	9.3	10.9	3.0	5.4	9.2	8.9	19.2	9.7	9.7	10.7	16.6	9.7
PROF. SERVICES	7.4	4.2	4.0	6.9	4.7	4.3	2.7	5.8	5.1	5.5	4.6	6.3	5.7	9.7	5.6
OTHER	2.1	.0	.6	2.4	.9	.9	.0	1.1	.9	1.4	.5	1.2	1.0	1.7	1.2
NO SECONDARY ACTIVITY	39.5	62.8	65.4	43.8	59.5	28.0	45.6	49.6	50.3	52.1	34.1	32.4	34.9	24.9	32.4
UNKNOWN	5.3	3.3	5.0	3.3	4.1	3.2	3.4	5.1	4.4	1.4	5.1	4.6	4.4	4.3	7.8
REGION OF EMPLOYMENT AFTER DOCTORATE %															
NEW ENGLAND	6.4	6.8	6.7	2.4	5.7	7.5	9.5	5.9	6.2	6.8	5.1	6.0	5.8	6.6	1.5
MIDDLE ATLANTIC	15.1	21.7	21.2	6.9	17.8	18.8	22.4	15.0	16.9	16.4	13.4	10.9	12.2	15.7	5.2
EAST NO CENTRAL	13.9	7.1	19.0	6.3	12.9	14.7	10.2	13.5	13.3	8.6	12.9	15.7	14.3	13.4	8.2
WEST NO CENTRAL	6.8	4.2	6.0	2.7	4.7	5.8	5.4	3.8	4.5	2.7	5.1	5.1	4.8	5.4	11.4
SOUTH ATLANTIC	15.4	15.5	13.3	10.8	13.2	14.1	7.5	10.6	11.9	21.9	22.6	17.1	19.3	16.0	13.1
EAST SO CENTRAL	4.3	2.7	3.4	3.0	3.1	5.3	.7	3.4	3.4	5.5	4.1	5.1	4.8	2.9	4.3
WEST SO CENTRAL	8.2	5.1	8.5	21.3	10.8	9.0	4.8	7.9	9.0	5.5	6.5	8.5	6.4	9.7	8.7
MOUNTAIN	4.9	8.6	2.5	15.3	7.2	3.6	6.1	5.8	6.1	5.5	4.1	3.9	4.2	3.1	5.0
PACIFIC & INSULAR	10.9	17.3	11.1	18.0	14.3	10.9	23.8	16.9	15.5	6.8	11.5	11.8	11.2	9.7	8.1
FOREIGN	8.6	7.7	5.3	9.6	7.0	6.8	5.4	11.9	9.1	9.6	11.5	13.9	12.7	12.6	30.4
REGION UNKNOWN	5.6	3.3	2.9	3.6	3.2	3.4	4.1	5.3	4.2	9.6	3.2	3.9	4.3	4.9	4.3

1/ Refer to explanatory note on page 22 and the description of doctoral fields inside back cover.

TABLE 2. CONTINUED

TOTAL ALL DOCTORATES

LIFE SCIENCES	PSYCHOLOGY	ECONOMICS	ANTHROPOLOGY & SOCIOLOGY	POLIT SCI PUBLIC ADMIN INTERN'L REL	OTHER SOCIAL SCIENCES	SOCIAL SCIENCES INCL PSYCHOL	TOTAL SCIENCES	HISTORY	ENG AND AMER LANG AND LIT	FOREIGN LANG AND LIT	OTHER HUMANITIES	HUMANITIES	PROFESSIONAL FIELDS	EDUCATION	TOTAL NON-SCIENCES	OTHER OR UNSPECIFIED
5325	3098	767	971	729	688	6253	18171	744	951	589	1579	3863	1345	7576	12784	27
74.8	57.7	86.6	58.3	80.2	70.5	65.4	77.4	74.1	51.6	42.4	66.1	60.4	72.1	55.5	58.7	63.0
25.2	42.3	13.4	41.7	19.8	29.5	34.6	22.6	25.9	48.4	57.6	33.9	39.6	27.9	44.5	41.3	37.0
80.4	91.6	65.4	85.2	78.6	81.0	84.7	76.5	91.0	90.6	81.2	85.9	87.3	81.0	88.7	87.5	
17.6	3.9	31.9	13.3	16.3	16.3	11.6	20.6	6.3	5.2	14.3	10.1	8.8	15.4	8.2	9.1	
2.0	4.5	2.6	1.5	5.1	2.8	3.7	2.9	2.7	4.2	4.6	4.0	3.9	3.6	3.1	3.4	
61.1	53.6	62.0	59.9	59.5	63.5	57.4	58.2	60.8	58.5	57.0	56.7	57.9	67.4	68.7	65.3	
35.2	40.5	33.8	36.3	32.2	32.6	37.2	37.2	34.3	36.2	36.7	37.5	36.4	27.9	26.8	29.8	
3.7	5.9	3.8	3.8	8.2	3.9	5.4	4.6	5.1	5.4	6.3	5.8	5.6	4.7	4.6	4.9	
30.0	30.6	31.0	32.9	32.9	32.8	34.6	30.3	33.3	33.3	34.0	33.2	33.4	34.5	37.0	35.5	
40.9	66.2	61.1	57.2	55.0	27.5	58.6	59.2	68.8	78.0	63.3	53.1	64.2	34.3	39.0	46.1	
61.0	79.8	77.3	88.4	87.4	91.3	83.0	72.2	87.1	88.2	88.3	87.0	87.5	93.2	96.1	93.2	
7.3	7.9	8.3	9.9	10.0	9.7	8.7	7.7	10.7	10.5	10.7	10.6	10.6	11.1	13.1	12.1	
5.8	6.1	6.0	7.3	6.7	6.2	6.4	5.9	8.1	7.8	7.8	7.3	7.7	6.5	6.9	7.1	
51.1	16.7	4.0	12.9	4.7	5.4	11.9	28.7	7.9	4.6	4.9	5.4	5.6	2.8	2.9	3.7	
28.8	9.5	1.2	8.4	2.5	2.5	6.7	14.2	4.4	1.8	1.7	3.0	2.8	1.3	.8	1.5	
16.6	2.8	2.1	3.0	2.1	2.0	2.6	11.1	1.1	.6	1.0	.6	.8	.9	.7	.8	
2.2	2.8	.3	.5	.0	.0	1.5	1.4	.1	.0	.5	.2	.2	.1	.5	.4	
4.5	1.6	.5	.9	.1	.9	1.1	2.0	2.3	2.2	1.7	1.6	1.9	.5	.8	1.1	
43.6	76.0	91.8	83.1	84.6	89.0	81.5	65.2	84.7	87.7	85.9	84.8	85.7	92.3	91.3	89.7	
23.7	30.1	55.8	57.9	52.5	61.5	43.6	30.0	57.8	71.9	68.6	65.0	65.9	65.6	67.8	67.0	
8.0	11.6	10.0	4.4	7.8	10.2	9.7	17.8	6.6	6.4	6.8	6.4	6.5	8.0	5.1	5.8	
7.8	13.8	15.9	8.5	16.0	8.0	12.9	9.9	9.4	1.9	1.9	2.6	3.6	5.4	9.8	7.5	
1.9	14.7	4.4	6.3	4.0	5.4	9.8	4.4	5.2	1.6	1.0	7.1	4.5	1.2	4.7	5.3	
2.3	5.9	5.6	6.0	4.3	3.9	5.5	3.1	5.6	5.9	7.6	3.7	5.2	2.2	3.8	4.1	
5.3	7.3	4.2	4.0	10.7	5.7	6.6	6.0	7.4	7.7	9.2	9.8	8.7	5.0	5.9	6.6	
40.6	12.3	2.7	8.7	3.7	2.0	8.4	22.1	4.3	2.2	1.7	3.2	2.9	1.9	1.6	2.1	
10.5	4.4	1.3	4.2	1.0	3.3	3.5	6.6	3.6	2.4	3.2	2.3	2.7	.8	1.2	1.6	
32.5	54.1	77.3	55.2	62.1	65.7	59.3	49.6	56.3	56.0	47.5	57.8	55.5	78.7	68.5	65.6	
11.1	21.9	14.5	27.9	22.5	23.3	22.1	15.7	28.4	31.7	38.4	27.0	30.2	13.6	22.8	24.1	
47.5	16.8	37.9	29.1	15.0	18.4	21.9	43.3	9.3	3.6	2.5	5.9	5.6	12.3	5.7	6.5	
29.8	21.7	48.2	56.2	53.9	58.8	39.4	30.9	59.9	78.4	80.0	72.4	72.4	58.6	39.0	50.0	
5.1	6.9	2.9	6.2	14.6	16.9	7.1	4.7	11.2	5.8	3.2	4.2	5.8	9.2	36.0	24.9	
7.2	48.1	3.7	2.1	4.6	6.9	24.0	13.1	4.8	3.0	3.2	6.3	4.8	11.7	11.2	9.6	
4.7	1.7	3.7	1.9	5.3	3.5	2.7	3.2	9.1	3.8	2.5	5.9	5.6	3.3	2.2	3.2	
5.7	4.8	3.5	4.7	6.6	5.5	4.9	4.9	5.7	5.4	8.6	5.4	5.9	4.9	6.0	5.8	
25.9	24.0	39.3	41.4	37.5	43.1	33.0	26.5	30.5	30.2	38.6	28.6	30.7	37.1	17.3	23.3	
17.3	14.8	14.5	10.6	7.9	9.3	12.6	12.6	4.8	4.1	1.8	7.5	5.4	12.4	14.1	9.8	
11.5	10.7	6.2	7.3	6.8	8.2	8.7	9.3	8.8	7.7	5.7	7.9	7.7	10.1	10.3	9.6	
6.5	9.2	3.9	4.5	4.0	4.6	6.5	5.9	2.6	2.1	1.1	5.4	3.5	9.2	11.3	9.0	
1.2	3.0	1.3	1.3	1.5	1.3	2.1	1.5	1.9	3.8	3.6	6.1	4.4	1.8	2.4	2.8	
31.9	33.5	31.2	30.2	35.5	27.9	32.2	39.3	45.6	46.7	40.7	39.1	42.5	24.5	41.5	39.6	
5.7	4.8	3.5	4.7	6.6	5.5	4.9	4.9	5.7	5.4	8.6	5.4	5.9	4.9	6.0	5.8	
4.3	7.5	6.6	9.0	6.0	6.9	7.3	6.3	7.6	8.8	11.1	7.3	8.3	5.6	5.9	6.5	
10.2	20.2	14.3	15.3	19.7	12.8	17.1	15.7	16.9	17.3	18.9	14.3	16.1	13.0	13.9	14.4	
11.8	15.7	12.3	11.8	10.6	13.1	13.7	13.2	13.1	12.9	12.9	14.4	13.6	14.7	15.1	14.7	
7.5	6.9	5.2	7.8	6.8	7.7	6.8	6.0	5.0	5.8	8.6	8.8	7.3	6.7	8.0	7.7	
16.2	13.7	21.9	15.5	22.5	15.3	16.5	14.7	19.8	20.1	13.6	14.5	16.8	15.3	16.2	16.2	
4.2	2.9	3.0	4.1	5.5	4.0	3.5	3.6	4.1	5.3	3.2	4.2	4.3	7.2	5.0	5.1	
7.9	7.3	4.6	6.2	5.7	5.3	6.3	7.7	7.2	9.6	5.0	7.3	7.6	12.5	8.6	8.7	
4.3	4.2	3.7	5.6	4.0	6.4	4.6	5.1	2.4	3.0	2.9	4.5	3.5	5.0	5.1	4.7	
9.7	13.1	7.3	10.4	7.7	13.1	11.1	12.6	9.1	5.6	10.4	10.7	9.1	8.4	9.3	9.1	
19.4	2.2	18.0	10.6	9.3	11.1	7.9	10.6	7.4	4.9	5.7	7.1	6.4	8.2	6.1	6.4	
4.4	6.4	3.0	3.7	6.2	4.4	5.2	4.7	7.4	6.8	7.9	6.9	7.1	3.4	7.0	6.6	

2/ Statistics are not presented for this group because too few records contained the specified data.

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

TABLE 2
STATISTICAL PROFILE OF DOCTORATE RECIPIENTS BY FIELD OF DOCTORATE, FY 1980 1/

DOCTORATES: MEN

	FY 1980 TOTAL	PHYSICS AND ASTRONOMY	CHEMISTRY	EARTH, ENVIRONM AND MARINE SCIENCES	PHYSICAL SCIENCES	MATHEMATICS	COMPUTER SCIENCES	ENGINEERING	ENG FIELDS	BIOCHEMISTRY	BASIC MEDICAL SCIENCES	OTHER BIOSCIENCES	BIOSCIENCES	MEDICAL SCIENCES	AGRICULTURAL SCIENCES
TOTAL MALE	21595	918	1283	564	2765	650	197	2389	6001	484	958	1014	2456	564	963
MALE AS A PERCENT OF TOTAL DOCTORATES	69.7	93.2	83.4	89.8	87.7	87.2	90.4	96.4	91.0	78.0	72.4	71.7	72.0	67.0	89.8
U.S. CITIZENSHIP %	77.8	73.2	76.5	80.5	76.2	68.8	69.5	49.8	64.7	88.0	88.0	84.5	86.6	78.5	60.7
FOREIGN CITIZENSHIP %	19.0	23.9	21.1	17.4	21.3	27.7	27.4	47.0	32.4	10.1	10.9	13.1	11.6	19.7	37.7
UNKNOWN %	3.1	2.9	2.4	2.1	2.5	3.5	3.0	3.1	2.9	1.9	1.1	2.4	1.8	1.8	1.6
MARRIED %	64.8	49.5	54.6	60.3	54.0	50.8	53.8	62.9	52.2	57.6	58.4	60.2	59.0	69.9	76.9
NOT MARRIED %	30.2	44.7	41.8	36.2	41.6	44.3	40.6	31.9	38.0	38.4	38.3	35.7	37.3	25.7	20.4
UNKNOWN %	5.0	5.9	3.7	3.5	4.4	4.9	5.6	5.2	4.8	3.9	3.3	4.1	3.8	4.4	2.7
MEDIAN AGE AT DOCTORATE	31	29.5	28.4	30.9	29.2	29.2	29.5	30.3	29.7	28.7	29.3	30.1	29.4	30.0	31.7
PERCENT WITH BACC IN SAME FIELD AS DOCTORATE	55.2	81.0	86.1	46.5	76.3	81.1	15.2	76.4	74.9	25.2	19.1	70.4	41.5	17.9	56.1
PERCENT WITH MASTERS	79.1	65.1	38.6	74.3	54.7	74.2	76.1	90.4	71.7	23.9	47.3	65.2	51.1	51.6	92.6
MEDIAN TIME LAPSE FROM BACC TO DOCT															
TOTAL TIME YRS	8.8	7.2	6.1	8.1	6.9	6.9	7.3	7.7	7.2	6.3	6.9	7.4	7.0	7.1	8.3
REGISTERED TIME YRS	6.2	6.2	5.2	6.2	5.8	5.8	6.0	5.6	5.7	5.6	5.7	6.3	5.9	5.6	5.6
POSTDOCTORAL STUDY PLANS %	19.7	48.3	40.8	29.3	40.9	14.5	10.2	13.8	26.2	81.0	73.1	46.1	63.5	48.4	15.5
FELLOWSHIP	9.2	14.8	17.7	11.7	15.6	7.1	4.1	3.2	9.3	50.2	41.5	24.3	36.1	24.5	4.0
RESEARCH ASSOC	8.0	31.9	21.7	17.0	24.1	5.7	5.6	8.6	15.3	22.5	19.2	17.0	18.9	13.5	10.0
TRAINEESHIP	1.0	.4	.6	.2	.5	.5	.5	1.3	.8	2.5	4.2	1.7	2.8	2.1	.9
OTHER	1.6	1.1	.9	.4	.8	1.2	.0	.7	.8	5.8	8.1	3.2	5.6	8.3	.5
PLANNED EMPLOYMENT AFTER DOCTORATE %	74.1	44.7	54.7	66.0	53.7	78.2	84.3	79.7	67.7	15.1	22.5	47.9	31.6	46.6	78.5
EDUC INSTITUTION	41.9	12.0	7.6	22.5	12.1	54.6	38.6	22.9	21.8	4.8	11.5	26.9	16.5	20.7	43.7
INDUSTRY/BUSINESS	14.8	21.5	41.0	23.8	31.0	15.4	38.1	41.8	33.8	7.2	5.8	7.0	6.6	10.1	12.6
GOVERNMENT	10.0	8.4	4.1	16.0	8.0	5.5	4.6	12.0	9.2	1.7	3.5	10.3	5.9	9.6	16.5
NONPROFIT	4.7	.9	.9	1.6	1.0	.8	2.0	1.5	1.2	1.0	1.6	1.5	1.4	4.1	1.8
OTHER & UNKNOWN	2.6	2.0	1.2	2.1	1.6	1.8	1.0	1.5	1.6	.4	.1	2.3	1.1	2.1	3.9
POSTDOCT STATUS UNKN %	6.2	7.1	4.4	4.8	5.4	7.4	5.6	6.6	6.1	3.9	4.4	6.0	5.0	5.0	6.0
DEFINITE POSTDOCTORAL STUDY	14.9	38.9	31.9	23.0	32.3	10.3	6.1	9.2	19.9	67.4	62.1	33.1	51.2	40.6	9.1
SEEKING POSTDOCTORAL STUDY	4.8	9.4	9.4	6.7	8.6	4.2	4.1	4.6	6.4	13.6	11.0	12.9	12.3	7.8	6.3
DEFINITE EMPLOYMENT	53.0	33.9	45.8	54.1	43.5	62.5	66.5	64.4	54.6	10.5	17.1	32.7	22.3	38.7	62.9
SEEKING EMPLOYMENT	17.1	10.8	8.9	11.9	10.1	15.7	17.8	15.3	13.0	4.5	5.4	15.2	9.3	8.0	15.6
EMPLOYMENT ACTIVITY AFTER DOCTORATE %															
PRIMARY ACTIVITY															
R & D	30.4	68.5	81.1	54.8	74.2	42.6	67.9	64.5	64.4	78.4	53.7	40.4	47.9	46.8	53.5
TEACHING	36.7	18.0	10.0	22.0	15.1	48.0	22.9	19.7	21.7	11.8	25.6	35.5	30.3	23.9	23.8
ADMINISTRATION	13.9	2.9	1.5	3.0	2.2	.7	1.5	2.0	1.9	2.0	3.7	5.4	4.6	8.7	3.0
PROF. SERVICES	10.2	3.2	1.5	8.9	3.8	4.2	3.1	5.5	4.6	3.9	7.9	9.3	8.4	13.3	4.8
OTHER	3.3	4.2	.7	7.9	3.4	1.0	1.5	3.1	2.9	2.0	4.9	4.2	4.2	1.4	6.9
ACTIVITY UNKNOWN	5.5	3.2	5.1	3.6	4.2	3.4	3.1	5.2	4.5	2.0	4.3	5.1	4.6	6.0	8.1
SECONDARY ACTIVITY															
R & D	23.6	15.4	7.5	23.0	13.5	39.4	22.1	18.9	18.5	7.8	23.2	31.9	27.1	24.8	21.9
TEACHING	11.6	7.7	3.2	9.8	6.1	20.7	20.6	10.3	10.5	11.8	22.6	11.1	14.6	15.6	22.3
ADMINISTRATION	9.8	6.8	15.1	10.2	11.7	3.0	6.1	9.4	9.3	21.6	12.2	9.9	11.7	17.0	9.4
PROF. SERVICES	7.1	4.2	4.1	7.2	4.9	4.7	3.1	5.1	5.2	5.9	4.9	6.6	6.0	9.6	5.6
OTHER	1.9	.0	.7	2.1	.9	1.0	.0	1.0	.9	2.0	.6	1.2	1.1	.9	1.0
NO SECONDARY ACTIVITY	40.5	62.7	64.3	43.9	58.7	27.8	45.0	49.5	50.0	49.0	32.3	34.0	34.9	26.1	31.7
UNKNOWN	5.5	3.2	5.1	3.6	4.2	3.4	3.1	5.2	4.5	2.0	4.3	5.1	4.6	6.0	8.1
REGION OF EMPLOYMENT AFTER DOCTORATE %															
NEW ENGLAND	6.2	6.8	7.1	2.3	5.8	7.1	9.9	5.9	6.2	7.8	6.1	6.0	6.2	5.0	1.3
MIDDLE ATLANTIC	14.3	20.9	21.1	7.5	17.6	17.5	21.4	15.0	16.5	13.7	14.6	9.0	11.2	14.2	4.3
EAST NO CENTRAL	13.7	7.1	19.9	5.9	13.0	15.0	9.2	13.5	13.3	9.8	12.2	15.7	14.1	14.7	8.1
WEST NO CENTRAL	6.8	4.5	5.4	2.6	4.5	6.4	5.3	3.8	4.4	3.9	3.7	4.8	4.4	6.9	10.7
SOUTH ATLANTIC	15.1	16.4	12.2	9.8	12.7	13.1	7.6	10.7	11.6	19.6	23.2	17.8	19.6	17.9	13.4
EAST SO CENTRAL	4.3	2.6	3.4	2.6	3.0	4.9	.8	3.3	3.3	5.9	3.7	5.4	4.9	2.8	4.5
WEST SO CENTRAL	8.1	5.5	8.5	21.0	10.9	9.6	5.3	7.9	9.1	5.9	6.7	5.7	6.3	9.6	8.4
MOUNTAIN	5.0	8.0	2.4	16.4	7.4	3.9	5.3	5.9	6.2	7.8	4.9	4.2	4.8	5.0	5.4
PACIFIC & INSULAR	11.2	17.0	10.9	18.0	14.4	11.6	24.4	16.9	15.6	7.8	9.8	11.7	10.8	7.3	8.1
FOREIGN	10.2	7.7	5.8	9.8	7.3	7.1	6.1	12.0	9.5	7.8	12.8	15.4	13.9	12.8	31.5
REGION UNKNOWN	5.0	3.5	3.2	3.6	3.4	3.7	4.6	5.3	4.4	9.8	2.4	4.2	4.2	3.7	4.3

1/ Refer to explanatory note on page 22 and the description of doctoral fields inside back cover.

TABLE 2. CONTINUED

DOCTORATES: MEN

LIFE SCIENCES	PSYCHOLOGY	ECONOMICS	ANTHROPOLOGY & SOCIOLOGY	POLIT SCI, PUBLIC ADMIN, INTERN'L REL	OTHER SOCIAL SCIENCES	SOCIAL SCIENCES INCL. PSYCHOL.	TOTAL SCIENCES	HISTORY	ENG AND AMER LANG AND LIT	FOREIGN LANG AND LIT.	OTHER HUMANITIES	HUMANITIES	PROFESSIONAL FIELDS	EDUCATION	TOTAL NON-SCIENCES	OTHER OR UNSPECIFIED 2/
3983	1788	664	566	585	485	4088	14072	551	491	250	1043	2335	970	4201	7506	17
74.8	57.7	86.6	58.3	80.2	70.5	65.4	77.4	74.1	51.6	42.4	66.1	60.4	72.1	55.5	58.7	63.0
79.2	90.9	64.6	83.6	78.1	79.2	82.4	73.9	90.2	89.8	80.0	83.9	86.2	77.0	86.4	85.1	
19.1	4.4	32.7	14.5	17.3	17.7	13.8	23.2	6.7	6.1	15.6	11.6	9.7	18.5	10.4	11.2	
1.7	4.8	2.7	1.9	4.6	3.1	3.8	2.8	3.1	4.1	4.4	4.5	4.1	4.5	3.2	3.7	
64.9	57.8	63.7	68.0	61.7	69.3	62.1	60.8	62.4	61.3	61.2	60.4	61.1	73.9	78.0	72.2	
31.5	35.4	32.4	26.9	30.1	26.2	31.9	34.4	31.4	32.6	32.4	33.4	32.8	20.5	17.1	22.4	
3.6	6.8	3.9	5.1	8.2	4.5	6.0	4.8	6.0	6.1	6.4	6.2	6.2	5.6	4.9	5.4	
30.0	30.4	31.1	32.8	33.0	32.8	31.5	30.3	33.1	32.4	33.4	33.1	33.0	34.3	36.7	35.1	
41.7	68.7	61.1	58.1	56.1	31.1	59.8	61.1	69.3	79.0	55.6	54.2	63.1	34.9	35.7	44.1	
61.2	79.9	76.2	87.8	87.9	92.4	83.0	72.0	87.5	86.4	86.0	85.6	86.3	92.6	96.0	92.5	
7.3	7.7	8.3	9.8	9.9	9.7	8.5	7.6	10.6	9.8	10.0	10.3	10.3	11.0	12.9	11.7	
5.8	6.0	6.0	7.3	6.7	6.2	6.3	5.9	8.0	7.3	7.4	7.0	7.4	6.7	7.0	7.1	
49.7	16.4	3.9	11.8	5.1	4.9	10.8	28.4	8.2	4.7	4.4	4.6	5.4	2.8	2.5	3.4	
26.7	9.6	.9	7.6	2.7	1.9	6.0	13.3	4.9	1.4	1.2	2.5	2.7	1.3	.7	1.4	
16.0	2.7	2.1	3.2	2.2	2.3	2.5	11.8	1.1	1.0	.4	.5	.7	.8	.7	.7	
2.3	2.6	.3	.4	.0	.0	1.2	1.3	.2	.0	1.2	.2	.3	.0	.5	.3	
4.8	1.5	.6	.7	.2	.8	1.0	2.0	2.0	2.2	1.6	1.4	1.8	.6	.6	1.0	
45.0	76.2	91.9	84.1	84.6	89.3	82.6	65.6	84.4	87.6	87.2	85.9	86.0	91.5	91.9	90.0	
23.7	28.3	56.3	59.0	51.3	63.1	44.5	29.0	57.0	72.5	70.0	64.2	64.9	63.8	67.5	66.2	
8.5	12.0	9.3	4.8	9.1	8.7	9.8	19.7	6.4	6.7	6.4	6.7	6.6	8.2	4.7	5.7	
9.0	16.4	16.6	9.7	17.3	8.7	14.7	10.7	11.6	2.2	1.6	3.2	4.8	5.3	11.5	8.6	
1.9	14.7	4.7	5.8	3.6	5.6	9.1	3.7	5.4	1.2	2.4	8.8	5.7	12.7	5.7	6.6	
1.9	4.8	5.0	4.8	3.4	3.3	4.4	2.5	4.0	4.9	6.8	3.0	4.0	1.5	2.5	2.9	
5.2	7.4	4.2	4.1	10.3	9.8	6.6	6.0	7.4	7.7	8.4	9.5	8.5	5.7	5.7	6.6	
39.5	12.4	2.6	7.8	3.9	1.9	7.7	21.9	4.4	2.2	1.2	3.1	3.0	1.8	1.4	1.9	
10.2	4.1	1.4	4.1	1.2	3.1	3.1	6.5	3.8	2.4	3.2	1.5	2.4	1.0	1.1	1.5	
34.4	55.9	78.0	57.2	62.4	69.3	62.2	51.1	57.2	57.0	47.6	59.5	57.2	80.0	71.2	68.0	
10.6	20.2	13.9	26.9	22.2	20.0	20.4	14.5	27.2	30.5	39.6	26.4	28.9	11.5	20.6	22.0	
50.2	18.7	38.0	29.6	14.5	17.6	23.3	47.1	8.9	3.6	3.4	5.6	5.8	12.9	5.6	6.8	
26.4	19.4	48.5	56.5	52.1	58.9	40.0	29.0	59.0	78.9	81.5	70.9	70.7	57.7	34.6	47.6	
4.5	6.7	2.9	6.5	16.9	7.7	7.4	4.3	11.4	4.6	2.5	4.5	6.0	9.3	41.5	27.3	
7.6	47.5	3.7	1.9	5.5	4.5	21.0	11.0	6.3	2.9	1.7	7.4	5.7	11.6	10.1	9.2	
5.0	1.8	3.1	1.9	5.5	4.5	2.9	3.3	9.2	4.3	1.7	6.4	6.2	3.9	2.0	3.[illegible]	
6.3	5.9	3.9	3.7	6.6	6.8	5.4	5.2	5.1	5.7	9.2	5.2	5.6	4.6	6.2	5.8	
24.4	22.7	39.8	39.8	36.4	41.1	32.8	25.1	29.2	29.6	43.7	25.6	28.9	33.9	14.9	21.4	
18.2	14.5	14.5	11.7	7.7	8.6	12.4	12.6	4.1	2.5	2.5	8.5	5.7	13.7	11.2	10.1	
11.5	12.9	6.6	8.3	6.6	8.0	9.5	9.8	9.8	8.6	8.4	8.5	8.8	10.8	10.1	9.9	
6.4	10.0	3.7	4.6	3.8	5.1	6.5	5.9	2.5	1.8	.0	5.[illegible]	3.4	9.7	11.1	8.9	
1.0	2.5	1.5	1.9	1.4	.9	1.8	1.3	2.5	5.0	2.5	6.1	4.7	1.9	2.3	2.9	
32.1	31.5	30.1	29.9	37.5	29.5	31.6	40.1	46.7	46.8	33.6	40.9	42.8	25.4	44.2	41.0	
6.3	5.9	3.9	3.7	6.6	6.8	5.4	5.2	5.1	5.7	9.2	5.2	5.6	4.6	6.2	5.8	
3.9	8.3	6.2	9.0	5.8	6.8	7.4	6.2	7.0	8.9	10.9	6.6	7.6	5.2	6.0	6.3	
8.6	17.6	14.7	14.2	14.2	10.4	15.1	14.5	14.6	18.2	16.0	13.7	15.1	12.2	14.1	14.1	
11.5	16.3	12.4	10.5	10.1	14.0	13.6	13.1	12.1	14.6	15.1	13.7	13.6	14.3	15.2	14.6	
7.6	7.2	5.4	8.0	6.8	8.0	7.0	5.9	6.0	3.6	8.4	9.8	7.5	7.1	8.6	8.1	
16.6	13.6	21.0	14.8	22.5	16.7	16.9	14.4	22.2	19.6	11.8	13.7	16.8	15.5	15.7	16.0	
4.4	3.1	3.5	4.3	6.3	4.5	4.0	3.7	4.1	4.6	4.2	4.8	4.6	7.3	4.6	5.0	
7.7	7.3	4.4	6.5	5.8	6.0	6.2	7.8	7.6	10.7	5.0	8.7	8.5	12.4	7.8	8.7	
5.1	4.5	3.7	4.6	4.4	4.8	4.4	5.3	2.2	2.5	4.2	4.2	3.4	4.6	5.2	4.6	
9.0	13.2	7.1	11.1	7.7	14.0	11.0	12.7	7.9	6.4	11.8	10.0	8.9	9.3	8.9	9.0	
21.5	2.7	18.7	13.3	10.1	11.3	9.5	11.8	8.3	5.7	6.7	8.5	7.7	9.3	7.9	8.1	
4.2	6.2	2.9	3.7	6.3	3.6	4.9	4.5	7.9	5.0	5.9	6.3	6.4	2.8	6.0	5.6	

2/ Statistics are not presented because too few records contained the specified data.

SOURCE: NRC, Commission on Human Resources. Doctorate Records File.

TABLE 2
STATISTICAL PROFILE OF DOCTORATE RECIPIENTS BY FIELD OF DOCTORATE, FY 1980 1/

DOCTORATES: WOMEN

	FY 1980 TOTAL	PHYSICS AND ASTRONOMY	CHEMISTRY	EARTH, ENVIRONM AND MARINE SCIENCES	PHYSICAL SCIENCES	MATHEMATICS	COMPUTER SCIENCES	ENGINEERING	EMP FIELDS	BIOCHEMISTRY	BASIC MEDICAL SCIENCES	OTHER BIOSCIENCES	BIOSCIENCES	MEDICAL SCIENCES	AGRICULTURAL SCIENCES
TOTAL FEMALE	9387	64	255	64	386	95	21	90	592	188	366	401	955	278	109
FEMALE AS A PERCENT OF TOTAL DOCTORATES	30.3	6.8	16.6	10.2	12.3	12.8	9.6	3.6	9.0	28.0	27.6	28.3	28.0	33.0	10.2
U.S. CITIZENSHIP %	88.4	67.2	72.2	87.5	73.8	76.8	90.5	71.1	74.5	86.2	87.4	84.0	85.8	81.7	74.3
FOREIGN CITIZENSHIP %	8.6	31.3	25.5	12.5	24.4	23.2	9.5	27.8	24.2	12.2	10.4	11.2	11.0	15.5	25.7
UNKNOWN %	3.0	1.5	2.4	.0	1.8	.0	.0	1.1	1.4	1.6	2.5	4.7	3.2	2.9	.0
MARRIED %	52.8	55.2	50.2	65.6	53.6	52.6	28.6	40.0	50.5	52.7	47.0	49.6	49.2	52.5	50.5
NOT MARRIED %	43.1	41.8	45.5	34.4	43.0	45.3	66.7	53.3	45.8	43.6	49.2	45.4	46.5	44.2	48.6
UNKNOWN %	4.1	3.0	4.3	.0	3.4	2.1	4.8	6.7	3.7	3.7	3.8	5.0	4.3	3.2	.9
MEDIAN AGE AT DOCTORATE	33.5	29.1	27.9	30.5	28.5	30.2	30.0	28.9	28.8	28.4	29.3	30.3	29.5	32.8	29.8
PERCENT WITH BACC IN SAME FIELD AS DOCTORATE	50.7	82.1	84.3	46.9	77.7	87.4	19.0	42.2	71.8	19.7	19.1	67.6	39.6	38.8	31.2
PERCENT WITH MASTERS	84.9	71.6	43.5	76.6	53.9	86.3	100.0	88.9	66.0	42.0	45.9	67.3	54.1	71.6	85.3
MEDIAN TIME LAPSE FROM BACC TO DOCT															
TOTAL TIME YRS	10.5	7.1	5.7	8.0	6.3	8.2	8.3	6.6	6.7	6.3	7.0	8.0	7.2	9.9	7.2
REGISTERED TIME YRS	6.6	6.4	5.2	6.4	5.5	6.5	6.5	5.8	5.8	5.7	5.9	6.3	6.0	5.9	5.8
POSTDOCTORAL STUDY PLANS %	15.4	50.7	45.1	34.4	44.3	7.4	4.8	6.7	31.3	78.7	75.4	49.1	65.0	33.5	22.9
FELLOWSHIP	8.5	22.4	19.2	9.4	18.1	3.2	.0	3.3	12.8	51.6	52.5	30.2	42.9	19.4	4.6
RESEARCH ASSOC	4.1	25.4	23.5	21.9	23.6	1.1	4.8	3.3	16.2	18.6	15.8	14.5	15.8	8.6	18.3
TRAINEESHIP	1.0	.0	1.2	1.6	1.0	1.1	.0	.0	.8	3.2	2.7	1.2	2.2	1.4	.0
OTHER	1.7	3.0	1.2	1.6	1.6	2.1	.0	.0	1.4	5.3	4.4	3.2	4.1	4.0	.0
PLANNED EMPLOYMENT AFTER DOCTORATE %	78.2	43.3	49.8	57.8	50.0	90.5	95.2	85.6	63.5	17.6	20.5	42.9	29.3	61.2	22.5
EDUC INSTITUTION	53.1	10.4	13.7	28.1	15.5	65.3	52.4	27.8	26.7	7.4	12.3	26.2	17.2	42.4	33.0
INDUSTRY/BUSINESS	8.3	25.4	32.5	17.2	28.8	17.9	28.6	42.2	29.1	6.9	2.7	5.7	4.8	8.3	15.6
GOVERNMENT	6.3	6.0	2.0	9.4	3.9	2.1	14.3	11.1	5.1	1.1	2.5	4.0	2.8	5.0	13.8
NONPROFIT	4.8	.0	.4	.0	.3	.0	.0	2.2	.5	1.1	1.1	2.0	1.5	3.2	.9
OTHER & UNKNOWN	5.6	1.5	1.2	3.1	1.6	5.3	.0	2.2	2.2	1.1	1.9	5.0	3.0	2.2	9.2
POSTDOCT STATUS UNKN %	6.4	6.0	5.1	7.8	5.7	2.1	.0	7.8	5.2	3.7	4.1	8.0	5.7	5.4	4.6
DEFINITE POSTDOCTORAL STUDY	11.3	35.8	34.1	26.6	33.2	3.2	4.8	5.6	23.1	66.0	62.6	35.2	51.7	27.0	16.5
SEEKING POSTDOCTORAL STUDY	4.1	14.9	11.0	7.8	11.1	4.2	.0	1.1	8.1	12.8	12.8	14.0	13.3	6.5	6.4
DEFINITE EMPLOYMENT	54.4	37.3	37.3	43.8	38.3	66.3	76.2	67.8	48.5	11.7	14.5	24.9	18.3	47.5	47.7
SEEKING EMPLOYMENT	23.9	6.0	12.5	14.1	11.7	25.3	19.0	17.8	15.0	5.9	6.0	18.0	11.0	13.7	24.8
EMPLOYMENT ACTIVITY AFTER DOCTORATE %															
PRIMARY ACTIVITY															
R & D	13.9	60.0	71.6	42.9	64.2	17.7	37.5	68.9	53.7	45.5	43.4	27.0	34.3	34.1	53.8
TEACHING	48.3	24.0	18.9	32.1	22.3	69.4	43.8	23.0	33.8	31.8	34.0	50.0	42.9	46.2	34.6
ADMINISTRATION	15.8	.0	1.1	3.6	1.4	1.6	12.5	1.6	2.1	4.5	11.3	4.0	6.3	11.4	1.9
PROF. SERVICES	14.2	4.0	1.1	7.1	2.7	6.5	.0	1.6	3.1	13.6	3.8	8.0	7.4	5.3	1.9
OTHER	2.9	8.0	3.2	14.3	6.1	3.2	.0	1.6	4.2	4.5	.0	8.0	5.1	1.5	3.8
ACTIVITY UNKNOWN	5.0	4.0	4.2	.0	3.4	1.6	6.3	3.3	3.1	.0	7.5	3.0	4.0	1.5	3.8
SECONDARY ACTIVITY															
R & D	28.2	20.0	9.5	39.3	16.9	54.8	43.8	19.7	27.2	18.2	26.4	43.0	34.9	31.8	19.2
TEACHING	10.4	4.0	4.2	10.7	5.4	9.7	.0	9.8	7.0	4.5	20.8	12.0	13.7	15.2	13.5
ADMINISTRATION	8.6	4.0	6.3	.0	4.7	3.2	.0	3.3	3.8	13.6	1.9	9.0	7.4	15.9	13.5
PROF. SERVICES	8.2	4.0	3.2	3.6	3.4	1.6	.0	9.8	4.2	4.5	3.8	5.0	4.6	9.8	5.8
OTHER	2.6	.0	.0	3.6	.7	.0	.0	1.6	.7	.0	.0	1.0	.6	3.0	3.8
NO SECONDARY ACTIVITY	37.1	64.0	72.6	42.9	65.5	29.0	50.0	52.5	54.0	59.1	39.6	27.0	34.9	22.7	40.4
UNKNOWN	5.0	4.0	4.2	.0	3.4	1.6	6.3	3.3	3.1	.0	7.5	3.0	4.0	1.5	3.8
REGION OF EMPLOYMENT AFTER DOCTORATE %															
NEW ENGLAND	6.8	8.0	4.2	3.6	4.7	9.7	6.3	6.6	6.3	4.5	1.9	6.0	4.6	9.1	3.8
MIDDLE ATLANTIC	16.8	32.0	22.1	.0	19.6	27.4	31.3	14.8	20.9	22.7	9.4	17.0	15.4	18.2	15.4
EAST NO CENTRAL	14.3	8.0	13.7	10.7	12.2	12.9	18.8	14.8	13.2	9.1	15.1	16.0	14.9	11.4	9.6
WEST NO CENTRAL	8.8	.0	9.5	3.6	6.8	1.6	6.3	3.3	4.9	.0	9.4	6.0	6.3	3.0	19.2
SOUTH ATLANTIC	16.2	4.0	20.0	21.4	17.6	21.0	6.3	9.8	16.0	27.3	20.8	15.0	18.3	12.9	9.6
EAST SO CENTRAL	4.5	4.0	3.2	7.1	4.1	8.1	.0	4.9	4.9	4.5	5.7	4.0	4.6	3.0	1.9
WEST SO CENTRAL	8.2	.0	8.4	25.0	10.1	4.8	.0	9.8	8.4	4.5	5.7	9.0	7.4	9.8	11.5
MOUNTAIN	4.6	16.0	3.2	3.6	5.4	1.6	12.5	4.9	4.9	.0	1.9	3.0	2.3	.0	.0
PACIFIC & INSULAR	10.3	20.0	12.6	14.3	14.2	6.5	18.8	18.0	13.6	4.5	17.0	12.0	12.6	13.6	7.7
FOREIGN	4.6	8.0	2.1	7.1	4.1	4.8	.0	8.2	4.9	13.6	7.5	9.0	9.1	12.1	17.3
REGION UNKNOWN	7.0	.0	1.1	3.6	1.4	1.6	.0	4.9	2.1	9.1	5.7	3.0	4.6	6.8	3.8

1/ Refer to explanatory note on page 22 and the description of doctoral fields inside back cover.

TABLE 2. CONTINUED

OCCTORATES: WOMEN

LIFE SCIENCES	PSYCHOLOGY	ECONOMICS	ANTHROPOLOGY & SOCIOLOGY	POLIT SCI, PUBLIC ADMIN INTERN'L REL	OTHER SOCIAL SCIENCES	SOCIAL SCIENCES INCL PSYCHOL	TOTAL SCIENCES	HISTORY	ENG AND AMER LANG AND LIT	FOREIGN LANG AND LIT	OTHER HUMANITIES	HUMANITIES	PROFESSIONAL FIELDS	EDUCATION	TOTAL NON-SCIENCES	OTHER OR UNSPECIFIED 2/
1342	1310	103	405	144	203	2165	4099	193	460	339	536	1528	375	3375	5278	10
25.2	42.3	13.4	41.7	19.8	29.5	34.6	22.6	25.9	48.4	57.6	33.9	39.6	27.9	44.5	41.3	37.0
86.0	92.7	70.9	87.4	80.6	85.2	89.1	85.3	93.3	91.5	82.0	89.9	89.1	91.5	91.5	90.8	
13.1	3.3	27.2	11.6	12.5	12.8	7.5	11.7	5.2	4.1	13.3	7.1	7.3	7.5	5.5	6.1	
2.9	4.0	1.9	1.0	6.9	2.0	3.4	2.9	1.6	4.3	4.7	3.0	3.6	1.1	3.0	3.1	
50.0	47.8	54.4	48.6	50.7	49.8	48.6	49.4	56.5	55.4	54.0	49.4	53.1	50.7	57.0	55.5	
46.2	47.6	42.7	49.4	41.0	47.8	47.3	46.7	40.9	40.0	39.[illegible]	45.5	42.0	46.9	38.8	40.3	
3.8	4.7	2.9	2.0	8.3	2.5	4.1	4.0	2.6	4.6	6.2	5.0	4.8	2.4	4.1	4.2	
30.0	[illegible]	30.4	33.1	32.8	32.5	31.7	30.6	34.3	34.6	34.5	33.4	34.0	35.4	37.5	36.1	
38.7	62.8	61.2	55.8	50.7	18.7	56.5	52.9	67.4	80.0	69.0	51.1	65.8	37.8	43.2	49.0	
60.3	79.6	84.5	89.1	95.4	88.7	82.9	73.0	86.0	90.2	90.0	89.6	89.4	94.7	96.3	94.2	
7.6	8.3	8.2	9.9	10.4	9.9	8.9	8.1	10.9	11.6	11.5	11.0	11.2	12.1	13.5	12.7	
6.0	6.3	6.2	7.3	6.9	6.1	6.5	6.2	8.3	8.4	8.0	7.8	8.1	6.2	6.7	7.1	
55.1	17.0	4.9	14.3	2.8	6.4	14.0	29.9	7.3	4.6	5.3	7.1	6.0	2.7	3.3	4.1	
34.9	9.3	2.9	9.6	1.4	3.9	8.0	17.5	3.1	2.2	2.1	4.1	2.9	1.1	1.0	1.6	
14.5	2.9	1.9	2.7	1.4	1.5	2.6	8.5	1.0	.2	1.5	.7	.8	1.1	.7	.9	
1.9	3.1	.0	.7	.0	.0	2.0	1.8	.0	.0	.0	.2	.1	.3	.6	.4	
3.7	1.7	.0	1.2	.0	1.0	1.3	2.1	3.1	2.2	1.8	2.1	2.2	.3	1.0	1.3	
39.4	75.8	91.3	81.7	84.7	88.2	79.4	64.0	85.5	87.8	85.0	82.6	85.1	94.1	90.5	89.2	
23.7	32.5	52.4	56.3	57.6	57.6	41.9	33.8	60.1	71.3	67.6	66.6	67.4	70.1	68.3	68.2	
6.4	11.0	14.6	4.0	2.8	13.8	9.6	11.3	7.3	6.1	7.1	5.8	6.3	7.2	5.7	6.0	
4.2	10.2	11.7	6.9	11.1	6.4	9.3	7.0	3.1	1.5	2.1	1.5	1.8	5.6	7.6	5.8	
1.8	14.7	2.9	6.9	5.6	4.9	11.1	6.5	4.7	2.0	.0	3.7	2.5	7.2	3.6	3.5	
3.4	7.5	9.7	7.7	7.6	5.4	7.4	5.3	10.4	7.0	8.3	5.0	7.0	4.0	5.4	5.8	
5.5	7.2	3.9	4.0	12.5	5.4	6.6	6.1	7.3	7.6	9.7	10.3	9.0	3.2	6.1	6.7	
43.7	12.2	3.9	9.9	2.8	2.5	9.8	22.9	4.1	2.2	2.1	3.4	2.8	2.4	2.0	2.3	
11.3	4.8	1.0	4.4	.0	3.9	4.2	7.1	3.1	2.4	3.2	3.7	3.1	.3	1.4	1.3	
26.8	51.7	72.8	52.3	61.1	57.1	53.9	44.3	53.9	55.0	47.5	54.3	52.9	75.2	65.0	62.3	
12.7	24.1	18.4	29.4	23.6	31.0	25.5	19.8	31.6	32.8	37.5	28.4	32.1	18.9	25.5	27.0	
37.0	14.0	37.3	28.3	17.0	20.7	19.0	28.1	10.6	3.6	1.9	6.5	5.2	10.6	5.7	6.0	
42.9	25.1	46.7	55.7	61.4	58.6	38.1	38.4	62.5	77.9	78.9	75.6	75.3	61.0	44.9	53.8	
7.5	7.1	2.7	5.7	9.1	4.3	6.4	6.0	10.6	7.1	3.7	3.4	5.6	8.9	28.5	21.2	
5.8	49.0	4.0	2.4	1.1	13.8	30.6	21.3	.0	3.2	4.3	3.8	3.2	12.1	12.7	10.3	
3.6	1.6	8.0	1.9	4.5	.9	2.2	2.8	8.7	3.2	3.1	4.8	4.4	1.8	2.5	2.9	
3.1	3.1	1.3	6.1	6.8	1.7	3.7	3.5	7.7	5.1	8.1	5.8	6.3	5.7	5.6	5.8	
31.5	26.0	36.0	43.9	42.0	49.1	33.4	32.0	34.6	30.8	34.8	35.1	33.6	46.1	20.7	26.1	
14.2	15.2	14.7	9.0	9.1	11.2	13.2	12.4	6.7	5.9	1.2	5.2	4.8	8.9	11.0	9.3	
11.4	7.5	4.0	5.7	8.0	8.6	7.1	7.4	5.8	6.7	3.7	6.5	5.9	8.2	10.6	9.3	
6.7	8.1	5.3	4.2	4.5	3.4	6.5	6.2	2.9	2.4	1.9	5.8	3.6	7.8	11.6	9.3	
1.9	3.7	.0	.5	2.3	2.6	2.7	2.2	.0	2.4	4.3	6.2	3.8	1.4	2.6	2.8	
31.2	36.3	38.7	30.7	27.3	23.3	33.5	36.3	42.3	46.6	46.0	35.4	41.9	22.0	37.8	37.5	
3.1	3.1	1.3	6.1	6.8	1.7	3.7	3.5	7.7	5.1	8.1	5.8	6.3	5.7	5.6	[illegible]	
6.1	6.2	9.3	9.0	6.8	6.9	7.0	6.7	9.6	8.7	11.2	8.9	9.4	6.7	5.8	6.8	
18.4	24.1	12.0	17.0	21.6	19.8	21.4	20.9	24.0	16.2	21.1	15.5	17.9	15.2	13.6	14.8	
12.8	14.9	12.0	13.7	12.5	10.3	13.9	13.6	16.3	11.1	11.2	15.8	13.5	15.6	15.0	14.7	
7.0	6.4	4.0	[illegible]	6.8	6.9	6.5	6.3	1.9	8.3	8.7	6.5	6.9	5.7	7.2	7.0	
15.0	13.7	28.0	16.5	22.7	11.2	15.6	15.5	12.5	20.6	14.9	16.2	16.8	14.9	16.8	16.6	
3.6	2.5	.0	3.8	2.3	2.6	2.6	3.1	3.8	5.9	2.5	2.7	3.8	6.7	5.6	5.3	
8.9	7.4	5.3	5.7	5.7	3.4	6.4	7.2	5.8	8.3	5.0	4.5	5.9	12.8	9.2	8.7	
1.1	3.7	4.0	7.1	2.3	11.2	5.0	4.2	2.9	3.6	1.9	5.2	3.7	6.0	5.1	4.8	
12.3	12.9	8.0	9.4	8.0	10.3	11.3	11.9	12.5	4.7	9.3	12.4	9.4	6.0	9.8	9.4	
11.4	1.5	13.3	6.6	5.7	10.3	4.4	5.8	4.8	4.0	5.0	4.1	4.3	5.3	3.5	3.9	
5.3	6.8	4.0	3.8	5.7	6.9	6.0	5.2	5.8	8.7	9.3	8.2	8.3	5.0	8.3	8.0	

2/ Statistics are not presented because too few records contained the specified data

SOURCE: NRC. Commission on Human Resources. Doctorate Records File.

TABLE 3
PERCENTAGE OF FY 1980 DOCTORATE RECIPIENTS BY SOURCES OF SUPPORT IN GRADUATE SCHOOL, BY SEX AND SUMMARY FIELD 1/

SOURCES OF SUPPORT IN GRADUATE SCHOOL		DOCTORATE RECIPIENTS BY FIELD: PHYSICAL SCIENCES 2/		ENGINEERING		LIFE SCIENCES		SOCIAL SCIENCES		HUMANITIES		PROF. FIELDS		EDUCATION		TOTAL	
		MEN/	WOMEN	MEN/	WOMEN	MEN/	WOMEN	MEN/	WOMEN	MEN/	WOMEN	MEN/	WOMEN	MEN/	WOMEN	MEN/	WOMEN
NSF FELLOWSHIP	N	206/	23	92/	2	95/	43	49/	60	15/	.9	1/	0	46/	16	554/	153
	V%	6.0/	4.7	4.1/	2.4	2.5/	3.4	2.6/	2.9	.7/	.6	.1/	.0	1.2/	.5	2.7/	1.7
	H%	37.2/	15.0	16.6/	1.3	17.1/	28.1	17.9/	39.2	2.7/	5.9	.2/	.0	8.3/	10.5	100.0/	100.0
NSF TRAINEESHIP	N	63/	10	52/	3	46/	17	34/	19	4/	1	0/	0	5/	3	204/	53
	V%	1.8/	2.1	2.3/	3.7	1.2/	1.3	.9/	.9	.2/	.1	.0/	.0	.1/	.1	1.0/	.6
	H%	30.9/	18.9	25.5/	5.7	22.5/	32.1	16.7/	35.8	2.0/	1.9	.0/	.0	2.5/	5.7	100.0/	100.0
NIH FELLOWSHIP 3/	N	38/	8	16/	0	163/	64	107/	114	5/	1	7/	6	5/	14	341/	207
	V%	1.1/	1.6	.7/	.0	4.3/	5.0	2.8/	5.6	.2/	.1	.8/	1.6	.1/	.4	1.7/	2.3
	H%	11.1/	3.9	4.7/	.0	47.8/	30.9	31.4/	55.1	1.5/	.5	2.1/	2.9	1.5/	6.8	100.0/	100.0
NIH TRAINEESHIP 3/	N	50/	12	31/	1	668/	294	216/	181	3/	3	7/	9	5/	10	980/	510
	V%	1.5/	2.5	1.4/	1.2	17.5/	23.0	5.6/	8.8	.1/	.2	.8/	2.5	.1/	.3	4.8/	5.7
	H%	5.1/	2.4	3.2/	.2	68.2/	57.6	22.0/	35.5	.3/	.6	.7/	1.8	.5/	2.0	100.0/	100.0
NDEA FELLOWSHIP	N	27/	4	17/	1	14/	4	88/	39	156/	131	16/	2	45/	33	363/	214
	V%	.8/	.8	.8/	1.2	.4/	.3	2.3/	1.9	7.2/	9.1	1.8/	.5	1.1/	1.0	1.8/	2.4
	H%	7.4/	1.9	4.7/	.5	3.9/	1.9	24.2/	18.2	43.0/	61.2	4.4/	.9	12.4/	15.4	100.0/	100.0
GRADUATE & PROF. OPPORTUNITIES PROGRAM	N	1/	4	1/	0	3/	3	3/	3	2/	1	1/	0	8/	10	19/	21
	V%	.0/	.8	.0/	.0	.1/	.2	.1/	.1	.1/	.1	.1/	.0	.2/	.3	.1/	.2
	H%	5.3/	19.0	5.3/	.0	15.8/	14.3	15.8/	14.3	10.5/	4.8	5.3/	.0	42.1/	47.6	100.0/	100.0
NATIONAL DIRECT STUDENT LOANS	N	148/	14	79/	3	329/	95	585/	351	344/	260	74/	36	401/	292	1960/	991
	V%	4.3/	2.9	3.5/	3.7	8.6/	7.4	15.3/	17.1	15.8/	13.9	8.2/	9.9	10.1/	9.2	9.6/	11.2
	H%	7.6/	1.4	4.0/	.3	16.8/	9.6	29.8/	35.4	17.6/	20.2	3.8/	3.6	20.5/	29.5	100.0/	100.0
OTHER HEW	N	38/	5	25/	1	118/	91	201/	209	23/	13	44/	43	140/	194	589/	556
	V%	1.1/	1.0	1.1/	1.2	3.1/	7.1	5.3/	10.2	1.1/	.9	4.9/	14.8	3.5/	6.1	2.9/	6.3
	H%	6.5/	.9	4.2/	.2	20.0/	16.4	34.1/	37.6	3.9/	2.3	7.5/	7.7	23.8/	34.9	100.0/	100.0
GI BILL	N	230/	2	131/	0	307/	9	407/	12	248/	2	137/	2	551/	21	2011/	48
	V%	6.7/	.4	5.8/	.0	8.0/	.7	10.6/	.6	11.4/	.1	15.1/	.5	13.9/	.7	9.9/	.5
	H%	11.4/	4.2	6.5/	.0	15.3/	18.8	20.2/	25.0	12.3/	4.2	6.8/	4.2	27.4/	43.8	100.0/	100.0
OTHER FEDERAL 4/ SUPPORT	N	197/	34	216/	5	185/	64	288/	150	83/	46	41/	19	118/	74	1128/	392
	V%	5.7/	7.0	9.6/	6.1	4.8/	5.0	7.5/	7.3	3.8/	3.2	4.5/	5.2	3.0/	2.3	5.5/	4.4
	H%	17.5/	8.7	19.1/	1.3	16.4/	16.3	25.5/	38.3	7.4/	11.7	3.6/	4.8	10.5/	18.9	100.0/	100.0
OTHER NATIONAL 5/ FELLOWSHIP	N	61/	16	26/	3	68/	26	135/	99	150/	110	10/	11	57/	73	507/	338
	V%	1.8/	3.3	1.2/	3.7	1.8/	2.0	3.5/	4.8	6.9/	7.6	1.1/	3.0	1.4/	2.3	2.5/	3.8
	H%	12.0/	4.7	5.1/	.9	13.4/	7.7	26.6/	29.3	29.6/	32.5	2.0/	3.3	11.2/	21.6	100.0/	100.0
UNIVERSITY FELLOWSHIP	N	733/	126	346/	18	573/	263	857/	404	742/	491	157/	62	309/	311	3717/	1675
	V%	21.3/	25.9	15.4/	22.0	15.0/	20.6	22.4/	19.7	34.1/	34.1	17.3/	17.0	7.8/	9.7	18.2/	18.8
	H%	19.7/	7.5	9.3/	1.1	15.4/	15.7	23.1/	24.1	20.0/	29.3	4.2/	3.7	8.3/	18.6	100.0/	100.0
TEACHING ASSISTANTSHIP	N	2453/	353	890/	39	1558/	564	1977/	952	1387/	943	395/	162	908/	805	9568/	3818
	V%	71.4/	72.6	39.6/	47.6	40.8/	44.2	51.7/	46.5	63.7/	65.6	43.6/	44.4	22.9/	25.2	46.9/	43.0
	H%	25.6/	9.2	9.3/	1.0	16.3/	14.8	20.7/	24.9	14.5/	24.7	4.1/	4.2	9.5/	21.1	100.0/	100.0
RESEARCH ASSISTANTSHIP	N	2272/	311	1485/	56	1976/	565	1350/	642	284/	170	228/	104	594/	455	8189/	2303
	V%	66.1/	64.0	66.1/	68.3	51.7/	44.3	35.3/	31.3	13.1/	11.8	25.2/	28.5	15.0/	14.3	40.2/	25.9
	H%	27.7/	13.5	18.1/	2.4	24.1/	24.5	16.5/	27.9	3.5/	7.4	2.8/	4.5	7.3/	19.8	100.0/	100.0
EDUC. FUNDS OF INDUSTRY	N	159/	36	195/	11	96/	33	65/	36	28/	13	48/	14	85/	61	676/	204
	V%	4.6/	7.4	8.7/	13.4	2.5/	2.6	1.7/	1.8	1.3/	.9	5.3/	3.8	2.1/	1.9	3.3/	2.3
	H%	23.5/	17.6	28.8/	5.4	14.2/	16.2	9.6/	17.6	4.1/	6.4	7.1/	6.9	12.6/	29.9	100.0/	100.0
OTHER INSTITUTION FUNDS	N	166/	31	105/	4	282/	128	303/	214	186/	146	75/	43	345/	279	1462/	845
	V%	4.8/	6.4	4.7/	4.9	7.4/	10.0	7.9/	10.4	8.5/	10.2	8.3/	11.8	8.7/	8.7	7.2/	9.5
	H%	11.4/	3.7	7.2/	.5	19.3/	15.1	20.7/	25.3	12.7/	17.3	5.1/	5.1	23.6/	33.0	100.0/	100.0
OWN EARNINGS	N	914/	108	773/	27	1233/	424	2238/	1209	1359/	883	588/	242	3116/	2395	10221/	5288
	V%	26.6/	22.2	34.4/	32.9	32.3/	33.2	58.5/	59.0	62.5/	61.4	65.0/	66.3	78.4/	75.1	50.1/	59.5
	H%	8.9/	2.0	7.6/	.5	12.1/	8.0	21.9/	22.9	13.3/	16.7	5.8/	4.6	30.5/	45.3	100.0/	100.0
SPOUSE'S EARNINGS	N	793/	110	388/	12	1140/	321	1241/	621	798/	537	301/	121	1356/	1245	6017/	2967
	V%	23.1/	22.6	17.3/	14.6	29.8/	25.2	32.4/	30.3	36.7/	37.3	33.3/	33.2	34.1/	39.0	29.5/	33.4
	H%	13.2/	3.7	6.4/	.4	18.9/	10.8	20.6/	20.9	13.3/	18.1	5.0/	4.1	22.5/	42.0	100.0/	100.0
FAMILY CONTRIBUTIONS	N	400/	64	340/	14	597/	205	766/	423	481/	335	123/	59	451/	430	3158/	1530
	V%	11.6/	13.2	15.1/	17.1	15.6/	16.8	20.0/	20.7	22.1/	23.3	13.6/	16.2	11.4/	13.5	15.5/	17.2
	H%	12.7/	4.2	10.8/	.9	18.9/	13.4	24.3/	27.6	15.2/	21.9	3.9/	3.9	14.3/	28.1	100.0/	100.0
OTHER LOANS	N	196/	18	139/	5	331/	89	572/	293	270/	165	101/	39	445/	317	2054/	926
	V%	5.7/	3.7	6.2/	6.1	8.7/	7.0	14.9/	14.3	12.4/	11.5	11.2/	10.7	11.2/	9.9	10.1/	10.4
	H%	9.5/	1.9	6.8/	.5	16.1/	9.6	27.8/	31.6	13.1/	17.8	4.9/	4.2	21.7/	34.2	100.0/	100.0
OTHER	N	174/	20	200/	7	376/	97	267/	143	151/	96	93/	21	280/	195	1541/	579
	V%	5.1/	4.1	8.9/	8.5	9.8/	7.6	7.0/	7.0	6.9/	6.7	10.3/	5.8	7.0/	6.1	7.6/	6.5
	H%	11.3/	3.5	13.0/	1.2	24.4/	16.8	17.3/	24.7	9.8/	16.6	6.0/	3.6	18.2/	33.7	100.0/	100.0
UNDUPLICATED TOTAL	N	3436/	486	2248/	82	3820/	1276	3827/	2048	2176/	1438	905/	365	3973/	3191	20385/	8886 6/

1/ Data are not comparable with data prior to 1977 because of a change in the survey question on source of support. Frequencies as reported are not reliable but relative frequencies should serve as useful approximations.
2/ Includes mathematics and computer sciences.
3/ The sources NIH Fellowship and NIH Traineeship refer to support provided under the National Research Service Awards Act of 1974.
4/ Includes AEC/ERDA Fellowship and NASA Traineeship which were formerly shown separately.
5/ Includes Woodrow Wilson Fellowship which was formerly shown separately.
6/ The 27 individuals shown in Table 1 as having subfield "Other and Unspecified" and the Ph.D.'s who did not report source of support are omitted from this table.

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

TABLE 4
NUMBER OF DOCTORATE RECIPIENTS BY SEX, STATE OF DOCTORAL INSTITUTION, AND SUMMARY FIELD, FY 1980 1/

STATE OF DOCTORAL INSTITUTION	NUMBER OF DOCTORATE RECIPIENTS BY FIELD: PHYSICAL SCIENCES 2/		ENGINEERING		LIFE SCIENCES		SOCIAL SCIENCES		HUMANITIES		PROF. FIELDS		EDUCATION		OTHER & UNSPEC.		TOTAL	
	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN
U.S. TOTAL	3612	502	2389	90	3983	1362	4088	2165	2335	1528	970	375	4201	3375	17	10	21595	9387
ALABAMA	12	1	21	0	44	16	12	9	6	11	6	1	62	49	0	0	163	87
ALASKA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARIZONA	55	5	26	2	65	19	43	27	15	16	13	1	69	61	0	0	286	131
ARKANSAS	4	1	3	2	19	4	10	4	7	4	19	1	18	13	0	0	80	29
CALIFORNIA	559	84	405	18	459	166	610	326	270	171	91	32	246	223	1	0	2643	1024
COLORADO	95	6	43	1	80	24	71	48	25	15	8	6	117	80	0	0	439	180
CONNECTICUT	76	12	15	1	50	25	76	29	81	54	8	0	35	29	0	0	341	150
DELAWARE	18	1	14	1	3	1	10	6	8	4	0	0	1	3	0	0	54	16
D. C.	39	6	24	0	28	38	90	48	51	37	27	8	37	31	0	0	296	168
FLORIDA	72	13	24	1	113	23	148	55	40	40	29	14	364	274	0	0	790	420
GEORGIA	49	5	31	0	45	12	84	45	23	23	29	6	86	80	0	3	347	171
HAWAII	16	0	2	0	23	3	21	10	17	5	0	0	1	3	0	0	80	21
IDAHO	7	1	4	1	14	0	6	1	3	0	0	0	13	5	0	0	47	8
ILLINOIS	206	25	185	2	195	75	238	108	164	90	47	22	205	194	2	0	1242	516
INDIANA	105	9	98	5	117	33	115	42	106	58	37	18	164	98	1	0	743	263
IOWA	64	9	51	2	82	25	63	15	43	23	12	7	80	53	0	0	395	134
KANSAS	29	2	21	0	72	15	54	27	18	17	7	4	70	50	0	0	271	115
KENTUCKY	17	3	13	0	38	17	31	7	9	20	22	1	9	12	1	0	140	60
LOUISIANA	25	5	11	0	46	17	27	18	26	21	53	6	37	25	0	0	225	92
MAINE	2	2	0	0	3	0	1	1	3	0	0	0	2	3	0	0	11	6
MARYLAND	69	10	30	2	79	40	79	25	49	32	9	5	46	52	0	0	361	166
MASSACHUSETTS	246	41	169	8	161	80	223	106	151	92	72	19	206	203	1	0	1229	549
MICHIGAN	109	15	91	4	210	45	188	76	86	61	30	18	223	157	0	1	937	377
MINNESOTA	37	7	36	2	105	27	70	43	34	21	12	3	40	50	0	0	334	153
MISSISSIPPI	12	1	9	0	35	1	35	9	6	4	9	3	55	47	0	0	161	65
MISSOURI	53	13	53	3	68	22	72	38	40	28	31	15	126	66	0	0	443	185
MONTANA	10	1	0	0	11	2	7	3	1	0	0	0	16	5	0	0	45	11
NEBRASKA	16	2	2	0	56	7	25	5	9	8	16	2	45	24	0	0	169	52
NEVADA	4	1	0	0	4	2	3	2	0	0	0	0	8	3	0	0	19	8
NEW HAMPSHIRE	21	5	3	0	10	2	6	2	1	1	0	0	1	0	0	0	42	10
NEW JERSEY	86	15	51	2	63	25	66	28	55	36	8	7	51	55	0	1	380	169
NEW MEXICO	19	1	12	2	22	4	11	11	18	5	1	0	30	28	0	0	113	51
NEW YORK	386	49	203	5	351	151	510	428	295	226	63	39	330	309	3	0	2141	1207
NORTH CAROLINA	74	17	33	1	135	58	81	69	69	43	7	5	71	58	0	0	470	251
NORTH DAKOTA	6	1	0	0	29	5	5	7	5	0	0	0	16	9	0	0	61	22
OHIO	125	26	119	5	131	44	184	77	85	44	40	24	207	165	3	0	894	385
OKLAHOMA	31	2	53	1	53	16	38	12	16	15	16	6	73	41	0	0	280	93
OREGON	45	7	10	0	64	9	47	22	24	11	11	3	63	38	0	0	264	90
PENNSYLVANIA	183	15	143	2	139	62	192	105	118	84	57	33	261	182	3	5	1096	488
RHODE ISLAND	60	10	21	1	19	4	17	13	25	32	1	0	0	0	0	0	143	60
SOUTH CAROLINA	33	3	5	1	26	8	20	8	14	3	8	1	24	30	0	0	130	54
SOUTH DAKOTA	1	0	1	0	5	0	6	0	0	0	0	0	18	4	0	0	31	4
TENNESSEE	35	4	36	3	58	16	65	41	37	22	10	14	105	94	0	0	346	194
TEXAS	190	22	133	5	211	88	147	83	114	56	98	30	220	217	0	2	1113	503
UTAH	44	3	34	2	51	11	58	22	20	4	12	3	109	54	1	0	329	99
VERMONT	6	1	1	0	7	1	3	6	1	2	0	0	0	0	0	0	18	10
VIRGINIA	46	6	54	1	84	15	53	17	30	22	12	5	82	73	0	0	361	139
WASHINGTON	73	13	34	3	112	31	54	29	38	23	18	7	36	39	1	0	366	145
WEST VIRGINIA	9	4	9	0	25	5	13	4	9	2	0	0	35	29	0	0	100	44
WISCONSIN	115	14	48	1	146	45	94	40	69	40	21	6	70	48	0	1	563	195
WYOMING	14	1	5	0	17	1	6	4	1	0	0	0	16	7	0	0	59	13
PUERTO RICO	4	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	4	4

1/ Refer to explanatory note on page 23
2/ Includes mathematics and computer sciences

SOURCE. NRC, Commission on Human Resources, Doctorate Records File.

TABLE 5
STATISTICAL PROFILE OF DOCTORATE RECIPIENTS BY RACIAL OR ETHNIC GROUP AND U.S. CITIZENSHIP STATUS, FY 1980 1/

		TOTAL				AMERICAN INDIAN	ASIAN				BLACK			
		U.S.	NON-U.S. PERM.	NON-U.S. TEMP.	TOTAL	TOTAL	U.S.	NON-U.S. PERM.	NON-U.S. TEMP.	TOTAL	U.S.	NON-U.S. PERM.	NON-U.S. TEMP.	TOTAL
TOTAL NUMBER		25108	1286	3632	30982 3/	106	456	641	1469	2612 4/	1021	74	327	1430 4/
MALE	V%	66.9	75.5	86.5	69.7	65.1	68.4	79.9	87.1	82.2	48.5	85.1	92.0	60.3
FEMALE	V%	33.1	24.5	13.5	30.3	34.9	31.6	20.1	12.9	17.8	51.5	14.9	8.0	39.7
DOCTORAL FIELD														
PHYSICAL SCIENCES 6/	V%	12.2	19.6	18.9	13.3	6.6	16.4	25.4	24.5	23.2	2.4	5.4	6.1	3.5
ENGINEERING	V%	5.0	23.3	23.4	8.0	2.8	16.0	32.0	30.4	28.3	1.1	9.5	11.5	4.0
LIFE SCIENCES	V%	17.1	17.6	19.5	17.2	10.4	21.9	19.8	16.7	18.3	5.7	13.5	25.4	10.6
SOCIAL SCIENCES	V%	21.1	15.6	14.5	20.2	17.0	17.8	10.5	12.2	12.9	19.3	33.8	16.2	19.4
ARTS & HUMANITIES	V%	13.4	10.4	5.6	12.5	8.5	8.8	4.4	4.0	4.9	9.4	9.5	7.0	8.8
EDUCATION	V%	26.8	8.7	14.0	24.5	50.0	14.0	4.4	5.9	9.2	57.4	21.6	27.8	48.7
PROFESSIONS & OTHER	V%	4.4	4.9	4.0	4.4	4.7	5.0	3.6	2.2	3.1	4.7	6.8	5.5	5.0
MEDIAN AGE AT DOCTORATE		32.2	32.1	32.0	32.2	35.9	34.0	31.4	31.1	31.4	36.9	35.6	34.4	36.0
MEDIAN TIME LAPSE BA-PHD														
TOTAL TIME		9.4	8.9	8.6	9.3	11.6	10.6	8.9	8.5	8.9	12.9	8.9	[illegible]	11.1
REGISTERED TIME		6.4	6.2	5.6	6.3	6.4	7.0	6.2	5.8	6.1	7.0	6.1	5.1	6.4
GRADUATE SCHOOL SUPPORT														
FEDERAL FELLOW/TRAINEE	V%	21.3	9.2	7.0	18.5	22.6	21.7	10.0	7.9	10.8	19.1	2.7	4.9	14.9
GI BILL	V%	8.2	.1	.1	6.6	8.5	3.5	.0	.1	.7	6.5	.0	.0	4.3
OTHER FELLOWSHIP	V%	20.0	21.2	19.1	19.4	17.9	18.4	20.3	18.9	18.9	26.6	13.5	20.2	24.4
TEACHING ASSISTANTSHIP	V%	45.4	48.4	37.4	43.2	35.8	43.9	50.1	44.9	45.4	24.8	40.5	24.8	25.5
RESEARCH ASSISTANTSHIP	V%	32.9	51.0	43.7	33.9	25.5	45.0	62.4	57.3	55.5	14.0	28.4	23.5	16.9
EDUC./INST. FUNDS	V%	10.7	9.6	8.7	10.1	6.6	12.3	10.0	8.4	9.3	10.8	13.5	11.9	11.1
OWN/SPOUSE EARNINGS	V%	68.9	49.9	27.8	61.2	73.6	62.5	41.2	21.2	33.0	72.6	67.6	36.7	63.8
FAMILY CONTRIBUTIONS	V%	15.1	17.9	18.1	15.1	10.4	14.3	18.3	22.4	19.6	10.6	12.2	11.6	10.8
NATL DIRECT STDNT LOAN	V%	11.3	6.2	.7	9.5	21.7	11.6	4.1	.5	3.3	18.8	12.2	.6	14.2
OTHER LOANS	V%	10.7	9.1	5.0	9.6	12.3	10.1	5.6	3.7	5.2	16.0	17.6	6.1	13.7
OTHER	V%	4.0	5.5	29.0	6.8	4.7	2.9	1.9	13.0	8.3	5.1	8.1	46.2	14.7
UNKNOWN	V%	2.3	2.3	3.9	5.4	1.9	.4	2.2	2.9	3.7	1.8	2.7	3.7	2.6
POSTDOCTORAL STUDY PLANS	V%	17.9	24.1	24.4	18.4	12.3	25.2	28.1	31.8	29.2	6.3	14.9	14.1	8.5
PLANNED EMPLOYMENT AFTER DOCTORATE	V%	79.0	72.9	70.0	75.3	84.0	73.7	69.9	64.2	66.4	90.5	85.1	81.0	87.8
EDUC. INSTITUTION	V%	48.3	32.5	40.4	45.3	56.6	34.0	21.1	32.7	29.7	64.0	45.9	46.5	58.8
INDUSTRY/BUSINESS	V%	12.6	29.2	12.0	12.9	11.3	24.3	39.9	18.4	24.4	4.5	18.9	6.1	5.6
GOVERNMENT	V%	9.1	3.7	11.5	8.9	11.3	8.1	3.4	7.6	6.6	12.2	5.4	20.8	13.8
NON-PROFIT	V%	5.4	3.8	2.1	4.8	2.8	4.6	3.0	2.0	2.6	5.5	2.7	1.8	4.5
OTHER & UNKNOWN	V%	3.6	3.7	4.0	3.5	1.9	2.6	2.5	3.5	3.1	4.3	12.2	5.8	5.0
POSTDOCT STATUS UNKNOWN	V%	3.1	3.0	5.5	6.3	3.8	1.1	2.0	4.0	4.4	3.2	.0	4.9	3.8
DEFINITE POSTDOCT STUDY	V%	14.0	14.2	15.9	13.8	10.4	19.3	16.2	20.4	18.8	3.9	5.4	7.6	4.8
SEEKING POSTDOCT STUDY	V%	3.9	9.9	8.5	4.6	1.9	5.9	11.9	11.4	10.4	2.4	9.5	6.4	3.6
DEFINITE EMPLOYMENT	V%	59.5	48.6	50.3	56.2	58.5	49.3	48.8	44.9	46.0	65.6	41.9	55.4	61.9
SEEKING EMPLOYMENT	V%	19.5	24.3	19.7	19.1	25.5	24.3	21.1	19.3	20.4	24.9	43.2	25.7	25.9
EMPLOYMENT LOCATION AFTER DOCTORATE														
U.S.	V% 7/	93.2	87.4	25.8	85.9	87.1	93.3	85.9	42.7	63.6	89.0	83.9	13.3	73.1
FOREIGN	V% 7/	1.4	5.9	67.7	8.6	1.6	.9	6.7	49.5	29.2	1.2	.0	79.6	17.3
UNKNOWN	V% 7/	5.4	6.7	6.5	5.6	11.3	5.8	7.3	7.7	7.2	9.9	16.1	7.2	9.6

1/ Data not comparable with data for earlier years because of changes in the survey question on racial/ethnic group. See discussion on page 23.
2/ Earlier versions of the racial/ethnic questionnaire item have grouped all Puerto Ricans, Mexican-Americans, and other Hispanics into one broad "Hispanic" category. All individuals who checked this category on the 7,309 old forms still in circulation during the 1980 survey year have been included in "Other Hispanic."
3/ Includes 956 individuals who did not report their citizenship at time of doctorate.
4/ Includes individuals who did not report their citizenship at time of doctorate
5/ Includes those who provided no usable response to the item on "racial or ethnic group."
6/ Includes mathematics and computer sciences.
7/ The base for this V% is the number of doctorates in the column caption group who have found definite employment

TABLE 5. CONTINUED

WHITE				PUERTO RICAN	MEXICAN-AMERICAN				OTHER HISPANIC 2/				OTHER & UNKNOWN		
U.S.	NON-U.S. PERM.	NON-U.S. TEMP.	TOTAL	TOTAL	U.S.	NON-U.S. PERM.	NON-U.S. TEMP.	TOTAL	U.S.	NON-U.S. PERM.	NON-U.S. TEMP.	TOTAL	U.S.	NON-U.S.	TOTAL
21858	468	1327	23666 4/	69	103	6	38	148 4/	239	66	290	602 4/	1256	212	2349 4/5/
67.5	69.7	84.9	68.5	68.1	68.0	83.3	92.1	75.0	58.2	65.2	84.5	72.1	73.2	84.0	72.8
32.5	30.3	15.1	31.5	31.9	32.0	16.7	7.9	25.0	41.8	34.8	15.5	27.9	26.8	16.0	27.2
12.4	15.0	17.1	12.7	5.8	5.8	16.7	23.7	11.5	6.7	12.1	14.5	11.3	18.0	17.0	15.1
4.9	16.0	21.3	6.0	4.3	1.0	.0	23.7	6.8	6.3	13.6	13.8	10.8	6.5	16.5	7.5
17.5	16.2	16.4	17.4	4.3	5.8	16.7	36.8	14.2	10.9	10.6	39.7	24.6	19.5	18.9	16.3
21.4	18.8	16.1	21.0	26.1	20.4	33.3	7.9	17.6	23.0	15.2	14.8	18.3	19.0	20.3	21.0
13.7	15.0	7.5	13.4	17.4	13.6	16.7	.0	10.1	22.2	34.8	4.8	15.1	12.4	7.1	13.5
25.7	12.4	15.5	24.9	34.8	50.5	.0	7.9	37.2	28.9	12.1	9.3	17.4	20.2	17.5	22.0
4.4	6.6	6.2	4.6	7.2	2.9	16.7	.0	2.7	2.1	1.5	3.1	2.5	4.3	2.8	4.6
32.1	32.6	32.0	32.1	32.6	34.7	35.0	31.1	34.1	33.4	34.8	34.0	33.9	31.7	32.3	31.8
9.3	8.8	8.5	9.2	9.8	10.6	12.0	7.3	10.2	9.9	8.8	9.3	9.4	8.9	8.8	9.0
6.4	6.2	5.7	6.3	6.3	6.9	6.3	5.0	6.6	6.9	6.3	4.9	5.9	6.3	5.9	6.2
21.7	9.2	6.6	20.6	26.1	26.2	.0	.0	18.2	23.8	9.1	8.3	14.5	15.9	7.1	9.2
8.5	.2	.1	7.9	11.6	9.7	.0	.0	6.8	7.1	.0	.3	3.0	5.8	.0	3.1
19.9	22.4	20.8	20.0	36.2	34.0	33.3	7.9	27.0	23.4	25.8	16.6	20.0	14.3	15.1	9.1
47.3	47.4	38.7	46.8	27.5	26.2	16.7	28.9	26.4	41.4	53.0	18.5	31.2	34.2	25.0	20.7
34.1	42.3	40.6	34.6	20.3	16.5	16.7	39.5	22.3	20.5	37.9	23.4	23.6	27.1	26.4	17.0
10.8	8.5	8.1	10.6	17.4	11.7	.0	2.6	8.8	11.7	7.6	10.7	10.6	8.0	9.0	5.2
70.2	58.8	34.1	67.9	60.9	69.9	83.3	21.1	57.4	65.7	47.0	31.4	46.3	46.3	21.7	26.9
15.8	17.9	18.2	16.0	18.8	9.7	.0	15.8	10.8	12.1	24.2	8.6	11.6	8.6	9.9	5.6
11.1	7.5	.9	10.4	27.5	20.4	16.7	2.6	18.5	14.2	9.1	.3	6.8	6.8	2.4	3.9
10.7	10.9	5.7	10.4	14.5	13.6	16.7	13.2	13.5	9.2	15.2	6.9	8.6	5.9	5.7	3.7
4.0	8.8	34.7	5.8	5.8	2.9	.0	55.3	16.2	3.8	15.2	52.4	28.4	2.5	36.8	4.7
1.0	2.1	3.0	1.2	.0	2.9	.0	7.9	4.7	2.1	4.5	3.4	4.2	26.6	16.5	52.8
18.5	21.2	22.9	18.8	8.7	6.8	16.7	7.9	7.4	13.0	13.6	14.1	13.5	17.5	17.0	11.0
79.7	74.4	71.7	79.1	91.3	90.3	83.3	86.8	88.5	83.3	84.8	80.3	81.2	55.8	64.2	36.4
48.8	42.5	45.1	48.4	66.7	60.2	50.0	42.1	54.7	54.0	59.1	49.0	51.7	29.1	39.6	19.7
12.9	20.7	9.0	12.8	5.8	7.8	.0	5.3	6.8	8.4	4.5	5.9	6.6	12.4	6.6	7.3
9.1	3.0	11.5	9.1	10.1	11.7	16.7	28.9	16.2	7.5	9.1	17.2	12.3	6.5	11.3	4.6
5.5	4.7	2.2	5.3	2.9	4.9	16.7	.0	4.1	5.9	6.1	3.9	4.8	4.2	1.4	2.4
3.5	3.4	3.8	3.5	5.8	5.8	.0	10.5	6.8	7.5	6.1	4.5	5.8	3.6	5.2	2.4
1.8	4.5	5.4	2.1	.0	2.9	.0	5.3	4.1	3.8	1.5	5.5	5.3	26.7	18.9	52.6
14.6	12.8	15.4	14.6	7.2	2.9	.0	5.3	3.4	10.0	12.1	10.0	10.1	13.0	11.3	8.0
3.9	8.3	7.5	4.2	1.4	3.9	16.7	2.6	4.1	2.9	1.5	4.1	3.3	4.5	5.7	3.0
60.5	49.8	52.1	59.8	63.8	62.1	66.7	71.1	64.2	56.1	50.0	61.4	57.5	41.0	47.6	26.6
19.2	24.6	19.5	19.3	27.5	28.2	16.7	15.8	24.3	27.2	34.8	19.0	23.8	14.8	16.5	9.8
93.6	88.4	20.2	89.9	90.9	87.5	100.0	3.7	64.2	93.3	93.9	9.6	50.0	90.5	17.8	78.2
1.4	5.6	74.7	5.1	.0	.0	.0	85.2	24.2	.7	6.1	86.0	45.1	1.7	74.3	14.1
5.0	6.0	5.1	5.0	9.1	12.5	.0	11.1	11.6	6.0	.0	4.5	4.9	7.8	7.9	7.7

SOURCE: NRC. Commission on Human Resources, Doctorate Records File.

NSF Form 558 1979
OMB No. 99-R0290
Approval Expires June 30, 1981

SURVEY OF EARNED DOCTORATES

This form is to be returned to the GRADUATE DEAN, for forwarding to Commission on Human Resources
National Research Council
2101 Constitution Avenue, Washington, D. C. 20418

Please print or type.

1. Name in full: (Last Name) (First Name) (Middle Name) (9-30)

Cross Reference: Maiden name or former name legally changed

2. Permanent address through which you could always be reached: (Care of, if applicable)

(Number) (Street) (City)

(State) (Zip Code) (Or Country if not U.S.)

3. U.S. Social Security Number: — — — - — — - — — — — (31-39)

4. Date of birth: (10-14) (Month) (Day) (Year) Place of birth: (15-16) (State) (Or Country if not U.S.)

5. Sex: 1 ☐ Male 2 ☐ Female (17)

6. Marital status: 1 ☐ Married 2 ☐ Not married (including widowed, divorced) (18)

7. Citizenship: 0 ☐ U.S. native 2 ☐ Non U.S., Immigrant (Permanent Resident)
1 ☐ U.S. naturalized 3 ☐ Non-U.S., Non-Immigrant (Temporary Resident) (19)
If Non-U.S., indicate country of present citizenship (20-21)

8. Racial or ethnic group: (Check only one.) *A person having origins in —*
0 ☐ American Indian or Alaskan Native ... any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.
1 ☐ Asian or Pacific Islander ..... any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa.
2 ☐ Black, not of Hispanic Origin ..... any of the black racial groups of Africa.
3 ☐ White, not of Hispanic Origin ..... any of the original peoples of Europe, North Africa, or the Middle East.
4 ☐ Puerto Rican ..... Puerto Rico, regardless of race.
5 ☐ Mexican-American ..... Mexico, regardless of race.
6 ☐ Other Hispanic ..... Central or South America, Cuba, or other Spanish culture, regardless of race. (22-24)

9. Number of dependents. Do not include yourself. (Dependent = someone receiving at least one half of his or her support from you) ..... (25)

EDUCATION

10. High school last attended: (School Name) (City) (State) (26-27)

Year of graduation from high school: (28-29)

11. List in the table below all collegiate and graduate institutions you have attended including 2-year colleges. List chronologically, and include your doctoral institution as the last entry.

Institution Name	Location	Years Attended		Major Field		Minor Field	Degree (if any)		
				Use Specialties List			Title of Degree	Granted	
		From	To	Name	Number	Number		Mo	Yr

12. Enter below the title of your doctoral dissertation and the most appropriate classification number and field. If a project report or a musical or literary composition (not a dissertation) is a degree requirement, please check box. ☐ (12)

Title

Classify using Specialties List

Number Name of field

13. Name the department (or interdisciplinary committee, center, institute, etc.) and school or college of the university which supervised your doctoral program: (Department/Institute/Committee/Program) (School)

14. Name of your adviser for dissertation, project report or music/literary composition: (Last Name) (First Name) (Middle Initial)

continued on next page

SURVEY OF EARNED DOCTORATES, Cont.

15. Please enter a "1" beside your primary source of support during graduate study. Enter a "2" beside your secondary source of support during graduate study. Check (✓) all other sources from which support was received.

a — NSF Fellowship
b — NSF Traineeship
c — NIH Fellowship
d — NIH Traineeship
e — NDEA Fellowship
f — Title IX Graduate & Professional Opportunities Pgm. Fellowship
g — Other HEW
h — AEC/ERDA/DOE Fellowship
i — NASA Traineeship
j — GI Bill
k — Other Federal support (specify)
l — Woodrow Wilson Fellowship
m — Other U.S. national fellowship (specify)
n — University Fellowship
o — Teaching Assistantship
p — Research Assistantship
q — Educational fund of industrial or business firm
r — Other institutional funds (specify)
s — Own earnings
t — Spouse's earnings
u — Family contributions
v — Loans (NDSL direct)
w — Other loans
x — Other (specify)

(28-49)

16. Please check the space which most fully describes your status during the year immediately preceding the doctorate.

0 ☐ Held fellowship
1 ☐ Held assistantship
2 ☐ Held own research grant
3 ☐ Not employed
4 ☐ Part-time employed

Full-time Employed in (Other than 0, 1, 2)
5 ☐ College or university, teaching
6 ☐ College or university, non-teaching
7 ☐ Elem or sec school, teaching
8 ☐ Elem or sec school, non-teaching
9 ☐ Industry or business
(11) ☐ Other (specify)

(12) ☐ Any other (specify) (50)

POSTGRADUATION PLANS

17. How well defined are your postgraduation plans?

0 ☐ Am returning to, or continuing in, predoctoral employment
1 ☐ Have signed contract or made definite commitment
2 ☐ Am negotiating with one or more specific organizations
3 ☐ Am seeking appointment but have no specific prospects
4 ☐ Other (specify) ..... (51)

18. What are your immediate postgraduation plans?

0 ☐ Postdoctoral fellowship
1 ☐ Postdoctoral research associateship
2 ☐ Traineeship
3 ☐ Other study (specify)
4 ☐ Employment (other than 0, 1, 2, 3)
5 ☐ Military service
6 ☐ Other (specify) (52)

Go to Item "19"
Go to Item "20"

19. If you plan to be on a postdoctoral fellowship, associateship, traineeship or other study

a. What was the most important reason for taking a postdoctoral appointment? (Check only one.)

0 ☐ To obtain additional research experience in my doctoral field
1 ☐ To work with a particular scientist or research group
2 ☐ To switch into a different field of research
3 ☐ Could not obtain the desired type of employment position
4 ☐ Other reason (specify) ..... (53)

b. What will be the field of your postdoctoral study?
Please enter number from Specialties List ..... (54-56)

What will be the primary source of research support?

0 ☐ U.S. Government
1 ☐ College or university
2 ☐ Private foundation
3 ☐ Nonprofit, other than private foundation
4 ☐ Other (specify)
6 ☐ Unknown (57)

Go to Item "21"

20. If you plan to be employed, enter military service or other —

a. What will be the type of employer?

0 ☐ 4-year college or university other than medical school
1 ☐ Medical school
2 ☐ Jr. or community college
3 ☐ Elem or sec school
4 ☐ Foreign government
5 ☐ U.S. Federal government
6 ☐ U.S. state government
7 ☐ U.S. local government
8 ☐ Nonprofit organization
9 ☐ Industry or business
(11) ☐ Self-employed
(12) ☐ Other (specify) (58)

b. Indicate what your *primary* work activity will be with "1" in appropriate box; *secondary* work activity (if any) with "2" in appropriate box.

0 ☐ Research and development
1 ☐ Teaching
2 ☐ Administration
3 ☐ Professional services to individuals
5 ☐ Other (specify) (59-60)

c. In what field will you be working?
Please enter number from Specialties List (61-63)

d. Did you consider taking a postdoctoral appointment?
Yes — No — (64)

If yes, why did you decide against the postdoctoral?

0 ☐ No postdoctoral appointment available
1 ☐ Felt that I would derive little or no benefit from a postdoctoral appointment
2 ☐ Had more attractive employment opportunity
3 ☐ Other (specify) ..... (65)

Go to Item "21"

21. What is the name and address of the organization with which you will be associated?

(Name of Organization) .....

(Street) ..... (City, State) (Or Country if not U.S.) (66-71)

BACKGROUND INFORMATION

22. Please indicate, by circling the highest grade attained, the education of

your father	none	1 2 3 4 5 6 7 8	9 10 11 12	1 2 3 4	MA, MD PhD	Postdoctoral	(72)
		Elementary school	High school	College	Graduate		
your mother	none	1 2 3 4 5 6 7 8	9 10 11 12	1 2 3 4	MA, MD PhD	Postdoctoral	(73)
	0	1 2 3	4 5	6 7	8 9	(11)	

Signature ..... Date ..... (74-76)

SPECIALTIES LIST

MATHEMATICS

000 Algebra
010 Analysis & Functional Analysis
020 Geometry
030 Logic
040 Number Theory
050 Probability & Math. Statistics (see also 544, 670, 725, 727, 920)
060 Topology
080 Computing Theory & Practice
082 Operations Research (see also 478)
085 Applied Mathematics
098 Mathematics, General
099 Mathematics, Other*

COMPUTER SCIENCES

079 Computer Sciences* (see also 437)

ASTRONOMY

101 Astonomy
102 Astrophysics

PHYSICS

110 Atomic & Molecular
132 Acoustics
134 Fluids
135 Plasma
136 Optics
138 Thermal
140 Elementary Particles
150 Nuclear Structure
160 Solid State
198 Physics, General
199 Physics, Other*

CHEMISTRY

200 Analytical
210 Inorganic
220 Organic
230 Nuclear
240 Physical
250 Theoretical
270 Pharmaceutical
275 Polymer
298 Chemistry, General
299 Chemistry, Other*

EARTH, ENVIRONMENTAL AND MARINE SCIENCES

301 Mineralogy, Petrology
305 Geochemistry
310 Stratigraphy, Sedimentation
320 Paleontology
330 Structural Geology
341 Geophysics (Solid Earth)
350 Geomorph. & Glacial Geology
391 Applied Geol., Geol. Engr. & Econ. Geol.
360 Hydrology & Water Resources
370 Oceanography
397 Marine Sciences, Other*
381 Atmospheric Physics and Chemistry
382 Atmospheric Dynamics
383 Atmospheric Sciences, Other*
388 Environmental Sciences, General (see also 480, 528)
389 Environmental Sciences, Other*
398 Earth Sciences, General
399 Earth Sciences, Other*

ENGINEERING

400 Aeronautical & Astronautical
410 Agricultural
415 Biomedical
420 Civil
430 Chemical
435 Ceramic
437 Computer
440 Electrical
445 Electronics
450 Industrial
455 Nuclear
460 Engineering Mechanics
465 Engineering Physics
470 Mechanical
475 Metallurgy & Phys. Met Engr
476 Systems Design & Systems Science
478 Operations Research (see also 082)
479 Fuel Tech. & Petrol. Engr.
480 Sanitary & Environmental
486 Mining
497 Materials Science
498 Engineering, General
499 Engineering, Other*

AGRICULTURAL SCIENCES

500 Agronomy
501 Agricultural Economics
502 Animal Husbandry
503 Food Science & Technology
504 Fish & Wildlife
505 Forestry
506 Horticulture
507 Soils & Soil Science
510 Animal Science & Animal Nutrition
511 Phytopathology
518 Agriculture, General
519 Agriculture, Other*

MEDICAL SCIENCES

522 Public Health & Epidemiology
523 Veterinary Medicine
526 Nursing
527 Parasitology
528 Environmental Health
534 Pathology
536 Pharmacology
537 Pharmacy
538 Medical Sciences, General
539 Medical Sciences, Other*

BIOLOGICAL SCIENCES

540 Biochemistry
542 Biophysics
544 Biometrics & Biostatistics (see also 050, 670, 725, 727, 920)
545 Anatomy
546 Cytology
547 Embryology
548 Immunology
550 Botany
560 Ecology
564 Microbiology & Bacteriology
566 Physiology, Animal
567 Physiology, Plant
569 Zoology
570 Genetics
571 Entomology
572 Molecular Biology
576 Nutrition and/or Dietetics
578 Biological Sciences, General
579 Biological Sciences, Other*

PSYCHOLOGY

600 Clinical
610 Counseling & Guidance
620 Developmental & Gerontological
630 Educational
635 School Psychology
641 Experimental
642 Comparative
643 Physiological
650 Industrial & Personnel
660 Personality
670 Psychometrics (see also 050, 544, 725, 727, 920)
680 Social
698 Psychology, General
699 Psychology, Other*

SOCIAL SCIENCES

700 Anthropology
708 Communications*
710 Sociology
720 Economics (see also 501)
725 Econometrics (see also 050, 544, 670, 727, 920)
727 Statistics (see also 050, 544, 670, 725, 920)
740 Geography
745 Area Studies*
751 Political Science
752 Public Administration
755 International Relations
760 Criminology & Criminal Justice
770 Urban & Reg. Planning
798 Social Sciences, General
799 Social Sciences, Other*

HUMANITIES

802 History & Criticism of Art
804 History, American
805 History, European
806 History, Other*
807 History & Philosophy of Science
808 American Studies
809 Theatre and Theatre Criticism
830 Music
831 Speech as a Dramatic Art (see also 885)
832 Archeology
833 Religion (see also 881)
834 Philosophy
835 Linguistics
836 Comparative Literature
878 Humanities, General
879 Humanities, Other*

LANGUAGES & LITERATURE

811 American
812 English
821 German
822 Russian
823 French
824 Spanish & Portuguese
826 Italian
827 Classical*
829 Other Languages*

EDUCATION

900 Foundations Social & Philosoph
910 Educational Psychology
908 Elementary Educ., General
909 Secondary Educ., General
918 Higher Education
919 Adult Educ. & Extension Educ.
920 Educ. Meas & Stat.
929 Curriculum & Instruction
930 Educ. Admin. & Superv.
940 Guid., Couns., & Student Pers.
950 Special Education (Gifted, Handicapped, etc.)
960 Audio-Visual Media

TEACHING FIELDS

970 Agriculture Educ.
972 Art Educ.
974 Business Educ.
975 Early Childhood Educ
976 English Educ.
978 Foreign Languages Educ.
980 Home Economics Educ.
982 Industrial Arts Educ.
984 Mathematics Educ
986 Music Educ.
987 Nursing Educ.
988 Phys. Ed., Health, & Recreation
989 Reading Education
990 Science Educ.
992 Social Science Educ.
993 Speech Education
994 Vocational Educ.
996 Other Teaching Fields*
998 Education, General
999 Education, Other*

OTHER PROFESSIONAL FIELDS

881 Theology (see also 833)
882 Business Administration
883 Home Economics
884 Journalism
885 Speech & Hearing Sciences (see also 831)
886 Law & Jurisprudence
887 Social Work
891 Library & Archival Science
897 Professional Field, Other*

899 OTHER FIELDS*

* Identify the specific field in the space provided on the questionnaire.

CODE NUMBERS FOR FIELDS DISPLAYED IN TABLE 2

Physics & Astronomy (101-199)
Chemistry (200-299)
Earth Sciences (301-399)

Physical Sciences Subtotal (101-399)
Mathematics (000-060, 080-099)
Computer Sciences (079)
Engineering (400-499)

EMP Total (000-499)

Biochemistry (540)
Basic-Medical Sciences (542, 545-548, 564-566, 572)
Other Biosciences (544, 550-562, 567-571, 576-579)

Biosciences Subtotal (540-579)
Medical Sciences (520-539)
Agricultural Sciences (500-519)

Life Sciences (500-579)

Psychology (600-699)
Economics and Econometrics (720, 725)
Anthropology & Sociology (700, 710)
Political Science, Public Administration, International Relations (751-755)
Other Social Sciences (708, 727-745, 770-799)

Social Sciences Total (600-799)

Total Sciences (000-799)

History (804-807)
English & American Language & Literature (811-812)
Foreign Languages & Literature (821-829)
Other Humanities (802, 808-809, 830-879)

Humanities Total (802-879)

Professional Fields (881-897)

Education (900-999)

Total Non-Sciences (802-897, 900-999)

Other or Unspecified (899)

TITLES OF DEGREES INCLUDED IN THE SURVEY OF EARNED DOCTORATES

DAS	Doctor of Applied Science
DArch	Doctor of Architecture
DA	Doctor of Arts
DBA	Doctor of Business Administration
JCD	Doctor of Canon Law
DCJ	Doctor of Criminal Justice
DCrim	Doctor of Criminology
EdD	Doctor of Education
DEng	Doctor of Engineering
DESc	Doctor of Engineering Science
ScDE	Doctor of Engineering Science
DEnv	Doctor of Environment
DED	Doctor of Environmental Design
DFA	Doctor of Fine Arts
DF	Doctor of Forestry
DGS	Doctor of Geological Science
DHS	Doctor of Health and Safety
DHL	Doctor of Hebrew Literature
DHS	Doctor of Hebrew Studies
DIT	Doctor of Industrial Technology
SDJ	Doctor of Juridical Science
JSD	Doctor of Juristic Science
DLS	Doctor of Library Science
DMin or DM	Doctor of Ministry (except professional)
DM	Doctor of Music
DMA	Doctor of Musical Arts
DME	Doctor of Music Education
DML	Doctor of Modern Languages
DNSc	Doctor of Nursing Science
PhD	Doctor of Philosophy
DPE	Doctor of Physical Education
DPA	Doctor of Public Administration
DPH	Doctor of Public Health
DRec or DR	Doctor of Recreation
DRE	Doctor of Religious Education
DSM	Doctor of Sacred Music
STD	Doctor of Sacred Theology
DSc	Doctor of Science
DScH	Doctor of Science and Hygiene
DScD	Doctor of Science in Dentistry
LScD	Doctor of Science and Law
DScVM	Doctor of Science in Veterinary Medicine
DSSc	Doctor of Social Science
DSW	Doctor of Social Work
ThD	Doctor of Theology