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ABSTRACT

This report presents a summary of the 1991-92 results of the national Survey of Earned Doctorates conducted each year since 1958. The report presents an analysis of the numbers of doctorate recipients including data with regard to number of degrees by selected characteristics (gender, citizenship, minority groups), fields, time-to-degree, financial support, and post-graduation plans. The report has been redesigned to facilitate the use of the data by institutional and governmental leaders to develop policies. The first section analyzes trends and provides figures to illustrate them. Data tables are located in the following section including tables which present related data in detail. Four appendixes present basic tables, trend tables for 1982-1992, technical notes, and the survey instrument. (JB)

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Summary Report 1992

Doctorate Recipients from United States Universities

The Survey of Earned Doctorates is conducted
for the following agencies of the U.S. government:

National Science Foundation
U.S. Department of Education
National Institutes of Health
National Endowment for the Humanities
U.S. Department of Agriculture

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Project Manager

Delores H. Thurgood
Senior Research Associate

OFFICE OF SCIENTIFIC AND ENGINEERING PERSONNEL
NATIONAL RESEARCH COUNCIL

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NOTICE: The project that is the subject of this report was approved by the Governing Board of the National Research Council, whose members are drawn from the councils of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. The survey project is part of the program of the Office of Scientific and Engineering Personnel (OSEP).

This report has been reviewed by a group of persons other than the author according to procedures approved by a Report Review Committee consisting of members of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine.

The National Academy of Sciences is a private, nonprofit, self-perpetuating society of distinguished scholars engaged in scientific and engineering research, dedicated to the furtherance of science and technology and to their use for the general welfare. Upon the authority of the charter granted to it by the Congress in 1863, the Academy has a mandate that requires it to advise the federal government on scientific and technical matters. Dr. Bruce M. Alberts is president of the National Academy of Sciences.

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The Institute of Medicine was established in 1970 by the National Academy of Sciences to secure the services of eminent members of appropriate professions in the examination of policy matters pertaining to the health of the public. The Institute acts under the responsibility given to the National Academy of Sciences by its congressional charter to be an adviser to the federal government and, upon its own initiative, to identify issues of medical care, areas of research, and topics for education. Dr. Kenneth I. Shine is president of the Institute of Medicine.

The National Research Council was organized by the National Academy of Sciences in 1916 to associate the broad community of science and technology with the Academy's purposes of furthering knowledge and of advising the federal government. Functioning in accordance with general policies determined by the Academy, the Council has become the principal operating agency of both the National Academy of Sciences and the National Academy of Engineering in providing services to the government, the public, and the scientific and engineering communities. The Council is administered jointly by both Academies and the Institute of Medicine. Dr. Bruce M. Alberts and Dr. Robert M. White are the chairman and vice-chairman, respectively, of the National Research Council.

This report is based on research conducted by OSEP with the support of the National Science Foundation (NSF), the National Institutes of Health (NIH), the National Endowment for the Humanities (NEH), the U.S. Department of Education (U.S. Dept. of Ed.), and the U.S. Department of Agriculture (USDA) under NSF Contract No. SRS-9309720. Opinions, findings, conclusions, or recommendations expressed in this publication are those of OSEP and do not necessarily reflect the views of the sponsoring agencies.

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PREFACE AND ACKNOWLEDGMENTS

This report presents a summary of the results of the 1991-92 Survey of Earned Doctorates (SED), which has been conducted each year since 1958 by the National Research Council's Office of Scientific and Engineering Personnel (OSEP) and its predecessor organizations. Questionnaires, distributed with the cooperation of the graduate deans of U.S. universities, are filled in by graduates as they complete requirements for their doctoral degrees. The doctorates are reported by academic year (from July 1 of one year through June 30 of the following year) and include *research* and *applied-research doctorates* in all fields.¹ Professional degrees such as the M.D., D.D.S., O.D., D.V.M., and J.D. are not covered by this survey. A full list of included degrees can be found inside the back cover. For convenience throughout this report, "Ph.D." is used to represent any of the doctoral degrees covered by the survey.

This *Summary Report* is the 26th in an annual series of reports that began in 1967. Trend data from earlier periods can be found in the book *A Century of Doctorates: Data Analyses of Growth and Change* (National Academy of Sciences, 1978). All survey responses become part of the Doctorate Records File (DRF), a virtually complete data bank on doctorate recipients from 1920 to 1992. More than 85 percent of the 1,063,349 records now in the DRF have come from results of the 1958-1992 surveys. For doctorates granted during the 1920-1957 period, information was compiled from commencement bulletins, registrars' records, and other published material.

The conduct of the SED, the maintenance of the resulting data file, and the publication of this report are funded jointly by the National Science Foundation (NSF), the National Institutes of Health (NIH), the National Endowment for the Humanities (NEH), the U.S. Department of Education (U.S. Dept. of Ed.), and the U.S. Department of Agriculture (USDA). Susan Hill (NSF) serves as the project officer for the agencies. In addition, constructive reviews of the design and analysis of the survey by Mary Golladay (NSF), Susan Hill (NSF), David Chananie (NIH), Jeffrey Thomas (NEH), Nancy Schantz (U.S. Dept. of Ed.), and K. Jane Coulter and Gwen Lewis (USDA) increased the survey's relevance to national policy issues. We would also like to acknowledge the graduate deans and their assistants in the doctorate-granting institutions

¹ The Survey of Earned Doctorates collects information on *research* doctorates only. This differs from the institutional collection of numbers of degrees that is done by the U.S. Department of Education on *all* doctorates. For an evaluation of the differences, see: National Science Foundation. 1993. *Science and Engineering Doctorates 1960-1991*, NSF 93-301, Detailed Statistical Tables, (Washington, D.C.). pp. 2-6.

for their unflagging interest in and assistance to this project. It is through their cooperation that the DRF continues to serve as a useful resource for monitoring developments in graduate education in the country. Finally, we would like to thank all of the doctorate recipients who have completed the SED over the years.

The 1991-92 Survey of Earned Doctorates was conducted under the administrative supervision of Paula Ries, who collaborated with Delores H. Thurgood on the development of this report. Dr. Ries analyzed the survey results and drafted all text in the body of the report. Ms. Thurgood drafted the technical notes, supervised the production of tables and figures, and reviewed the manuscript for accuracy. George Orvis generated much of the data used in the report from the Doctorate Records File and also verified the accuracy of the explanatory and technical notes in the appendixes. Julie Clarke produced the camera-ready copies of all tables and figures presented in the body of the report and assisted in the verification of numbers and percentages contained therein. Martha Bohman prepared all appendix tables and finalized the manuscript for publication. Special appreciation is also expressed to the following people: Eileen Milner, who supervised the coding and editing of the data, and her staff who provided proficient support in the collection and processing of the survey: Frann Bell, Daniel Fulwiler, Abraha Gedamu, Joyce Hendrickson, John Hines, Mary Wanyoike, and Kevin Williams. Thanks are also expressed to George Boyce, manager of OSEP's Data Processing Section, and to Joseph Finan and Maren Herman, who were responsible for the computer programming and processing.

The work of this project was overseen by the Advisory Committee for Studies and Analyses of the Office of Scientific and Engineering Personnel, which is concerned with those activities of the NRC that contribute to the effective development and utilization of the nation's scholars and research personnel. In recent months, an advisory panel has been established to guide project staff in the further improvement of this important survey. During the development of this report, Alan E. Fechter, Executive Director of OSEP, provided helpful guidance, as did Pamela Ebert Flattau, who served as OSEP's Director of Studies and Surveys. Suggestions for improvement of the content or format of the report, other comments, and questions are welcome and may be directed to the Project Manager, Paula Ries.

Linda Wilson, Chair
Office of Scientific and Engineering Personnel
Advisory Committee on Studies and Analyses

NATIONAL RESEARCH COUNCIL
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DOCTORATE RECORDS PROJECT
SURVEY OF EARNED DOCTORATES
DOCTORATE RECORDS FILE

PHONE (202) 334-3161
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MEMORANDUM

28 April 94

TO: *Summary Report 1992* Data Users

FROM: Paula Ries, manager *PR*
Doctorate Records Project

SUBJECT: Adjusted 1992 numbers

Attached is a table of "adjusted" numbers for selected variables from the Survey of Earned Doctorates (SED): total Ph.D.s, sex, race/ethnicity, and citizenship. The Doctorate Records File (the historical data file compiled primarily from the SED) is updated only once a year. Any late returns and follow-up information received after closure for a given survey cycle do not get added to the data file until the following year. For example, FY 1992 data obtained after survey closure in January 1993 were not updated until the following year (January 1994). So the data reported in *Summary Report 1992* are considered "preliminary," and the data in the attached table are referred to as "adjusted."

Follow-up data increased the total Ph.D. count for FY 1992 by 0.1 percent. The effect on the demographic variables presented in the attached table ranged from -20.1 percent (unknown citizenship) to +4.2 percent (unknown race/ethnicity for U.S. citizens).

Because it is not possible to provide adjusted numbers for all the tables in *Summary Report 1992*, we have selected those variables which are of greatest interest to the higher education community and federal policy makers. Additional adjusted 1992 data will be presented in *Summary Report 1993*.

Adjusted Numbers of 1992 Doctorate Recipients*

	Total Ph.D.s	Men	Women
TOTAL PHDS	38,853	24,433	14,420
Physical Sciences	6,502	5,218	1,284
Engineering	5,439	4,933	506
Life Sciences	7,114	4,312	2,802
Social Sciences	6,217	3,252	2,965
Humanities	4,443	2,380	2,063
Education	6,640	2,682	3,958
Professional/Other	2,498	1,656	842
U.S. Citizens	25,961	14,493	11,468
Native American	149	82	67
Asian	837	528	309
Black	961	392	569
Hispanic	764	403	361
White	22,876	12,822	10,054
Unknown	374	266	108
Permanent Residents	1,978	1,291	687
Temporary Residents	9,950	7,960	1,990
Unknown Citizenship	964	689	275

*Adjustments are a result of questionnaires and follow-up data coming in after FY 1992 survey closure. These adjustments increased the total Ph.D. population by 0.1 percent.

Source: Survey of Earned Doctorates, sponsored by five Federal Agencies: National Science Foundation; National Institutes of Health; U.S. Department of Education; National Endowment for the Humanities; U.S. Department of Agriculture; and conducted by the National Research Council.

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INTRODUCTION

Summary Report 1992 is the 26th in a series of reports on doctorates awarded by U.S. colleges and universities. Like its predecessors, it presents trends in doctorate production in the United States, describing the broad fields in which Ph.D.s are earned and the general demographic characteristics of doctorate recipients.

However, *Summary Report 1992* differs noticeably in format from its most recent predecessors. The report has been redesigned to facilitate the use of the data by university, state, and federal leaders who develop policies affecting graduate education throughout the United States. The front section presents selected trend data in figures accompanied by a brief narrative describing key findings. Data tables, which furnish the numbers corresponding to the percentages found in the figures, are located in the section directly following the figures. This section also includes tables which have no corresponding figure, but which present related data in finer detail than is possible in figures (relevant tables are referenced at the bottom of the figures). Another change to *Summary Report 1992* is the separation of the special analysis section from the report. A special analysis, in the form of a data brief, will appear in the fall.

As usual, supplementary tables on the most recent year's doctorates—1992 in this case—are displayed in Appendix A of this report, and 1982-1992 data are presented in Appendix B. Technical notes are in Appendix C, and the survey questionnaire is included in Appendix D.

Seven broad fields are profiled in the text of *Summary Reports*. Readers should note that these fields may differ from those reported by federal sponsors of the survey. "Major" fields are the subfields that make up the broad fields (e.g., biological sciences as a part of life sciences or psychology as a part of social sciences). For a list of these subfields, see the inside back cover of this report and the specialties list in Appendix D.

*** IMPORTANT NOTICE ***

The estimates reported for the Survey of Earned Doctorates (SED) are simple tabulations of all available information, with no adjustment for nonresponse. Thus, differences in response rates from year to year can produce numerical fluctuations which are unrelated to true trends. The numbers presented in this report may be underestimated, depending on the variables displayed.

The SED has always enjoyed an unusually high response, but in 1981 it began to drop, falling from a high of 96.2 in 1980 to a low of 92.3 in 1989. The decline in self-report response rates evident throughout the 1980s was reversed in 1990, however, and has increased each year since to its current level of 95.0 percent. (Note: These rates represent the proportion of questionnaires completed by the doctorate recipients and thus are *self-report rates*. Forms completed by either the doctoral institution or NRC staff are not included in these self-report rates *but are* included in all tabulations in this report. The self-report rate for 1992 may increase somewhat in the next year if additional questionnaires are received from doctorate recipients. See page 76 in Appendix C for a table showing survey response rates from 1980 to 1992.)

Item response rates have shown a parallel improvement—both a natural consequence of the increase in the overall self-report rate and a result of format revisions to the questionnaire and follow-ups for missing information. In 1990, new follow-up procedures were implemented, increasing coverage of several variables (birth year, gender, race/ethnicity, citizenship status, country of citizenship, BA institution, year of BA, and postgraduation plans). These new procedures have substantially improved response rates, particularly for race/ethnicity and citizenship, resulting in increased counts of minority Ph.D.s. The most significant adjustment was to the data on black Ph.D.s, whose numbers for the aggregate of citizenship groups increased by 7.5 percent in the year after survey closure. This was true for both the 1990 and 1991 surveys. Most follow-up responses, though, were not included in the initial reporting of survey results in *Summary Report 1990* and *1991* because they were not received until *after* closure of the surveys. Updated 1990 numbers reflecting additional data were displayed in *Summary Report 1991*, and updated 1991 numbers are shown in Appendix Table B2 (page 72) in this year's report. The data for 1992 will likewise be subject to further revision, and adjustments will be presented in next year's report. However, the 1992 survey cycle was extended one month to allow receipt of more follow-up information before closure, and it is anticipated that adjustments will be minimal compared to those in 1990 and 1991.

In using SED data, the reader should be mindful that numerical trends are affected by fluctuations in response rates *and especially* that increases in 1990-1992 data on citizenship and race/ethnicity may be overstated.

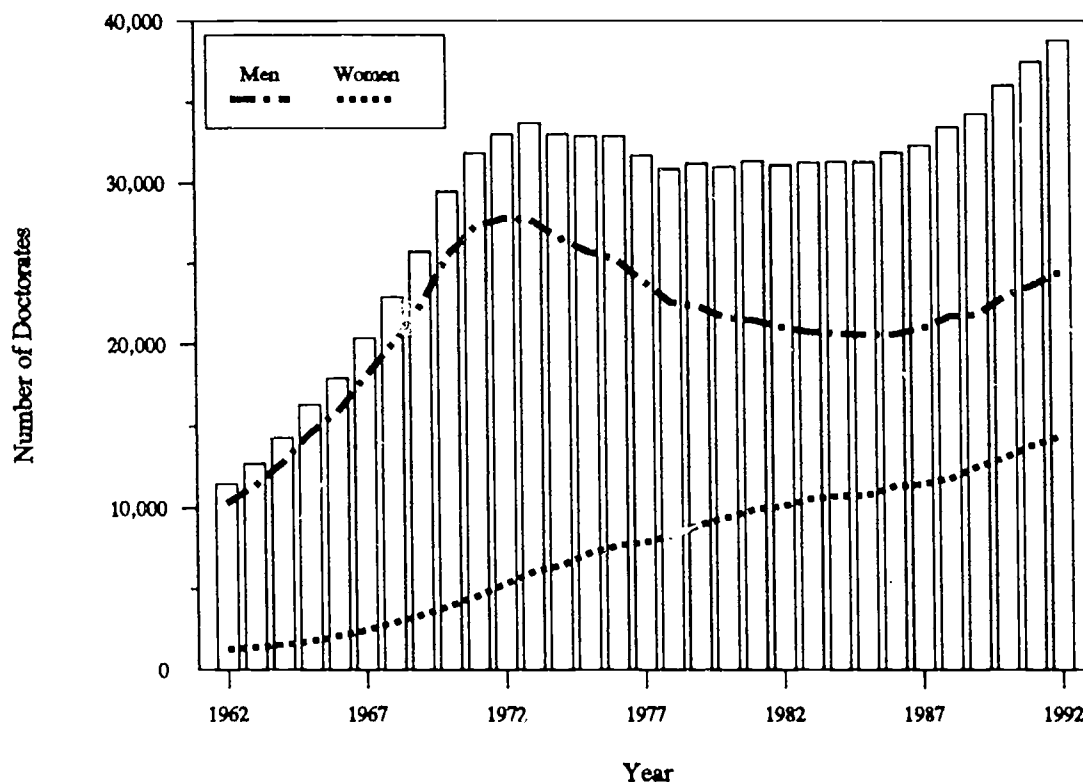
TRENDS IN DOCTORATE RECIPIENT PRODUCTION

Number of Doctorates by Selected Characteristics

In 1992, 364 U.S. colleges and universities awarded the largest number of Ph.D.s ever—38,814. This continues an upward surge in doctoral degree attainment, a trend begun in 1986 after a period of stagnant growth during the late 1970s and early 1980s.

- Women continued to earn increasing numbers of Ph.D.s (14,366 in 1992) while men have not yet regained the record number of doctorates they earned in the early 1970s (27,754 in 1972 compared to 24,448 in 1992).

FIGURE 1 Doctorate recipients, total and by gender, 1962-1992.



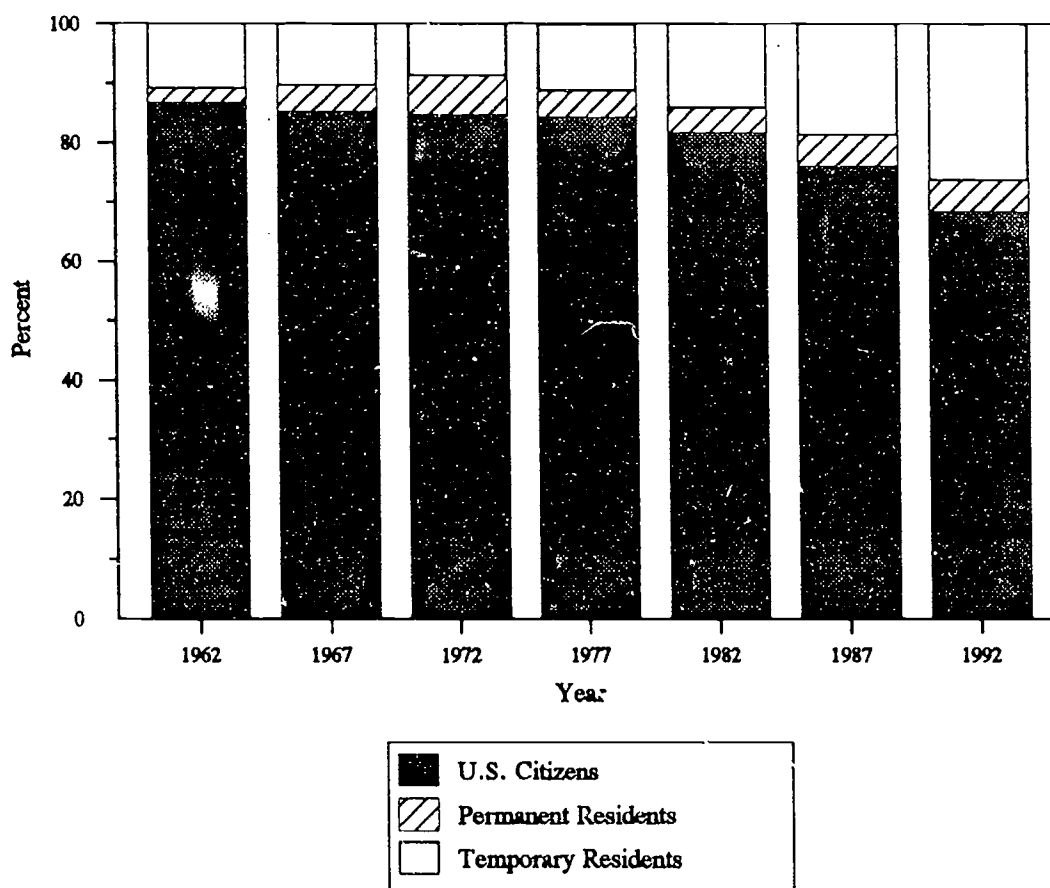
See Tables 1 and 2.

SOURCE: National Research Council, Survey of Earned Doctorates.

U.S. citizens earned over two-thirds (25,759) of the doctorates awarded in 1992. However, non-U.S. citizens' share has increased steadily, rising from 13 percent (1,518 Ph.D.s) in 1962 to 32 percent (11,846 Ph.D.s) 30 years later.

- Among non-U.S. citizens, temporary residents outnumbered permanent residents five to one—9,888 compared to 1,958.

FIGURE 2 Doctorate recipients, by citizenship for selected years, 1962-1992.



See Tables 3 and 4.

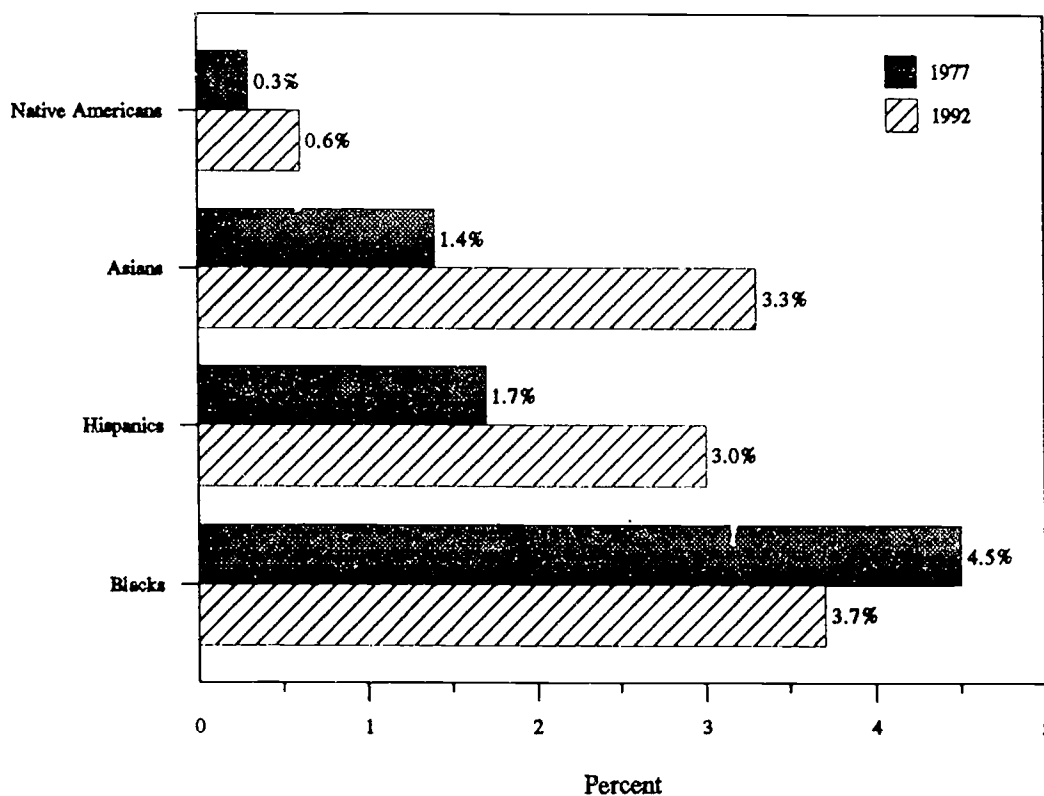
See technical notes in Appendix C for rates of nonresponse to the question on citizenship status.

SOURCE: National Research Council, Survey of Earned Doctorates.

Just over 10 percent of all Ph.D.s awarded to U.S. citizens in 1992 were earned by racial/ethnic minorities—Asians, blacks, Hispanics, and Native Americans.

- Of the minority groups, only blacks earned a smaller share of Ph.D.s in 1992 than did their predecessors 15 years ago.
- Since 1977, U.S. Asians have more than doubled and Hispanics have nearly doubled their representation among doctorate recipients.

FIGURE 3 Percentage of doctorates earned by U.S. minorities, 1977 and 1992.



NOTE: Percentages are based on the number of U.S. citizen Ph.D.s with known race/ethnicity. "Native American" includes American Indian and Alaskan Native.

See Appendix Table B-2.

See technical notes in Appendix C for rates of nonresponse to citizenship and race/ethnicity.

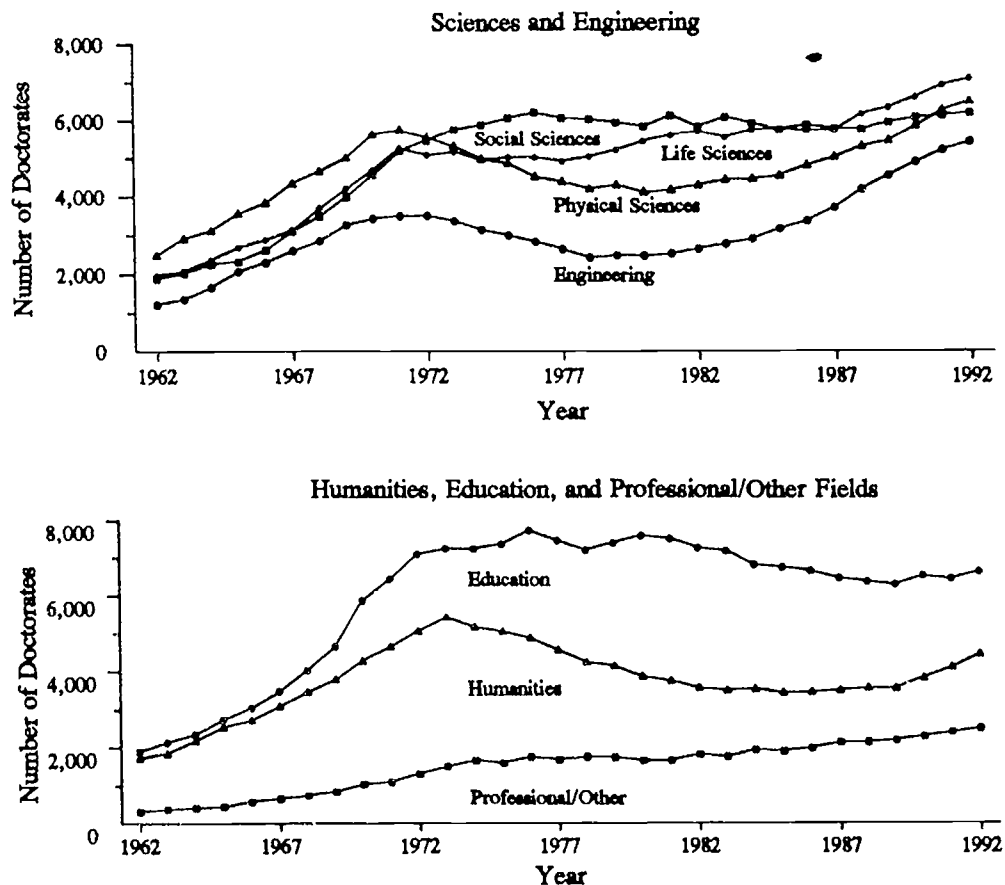
SOURCE: National Research Council, Survey of Earned Doctorates.

Field of Doctorate

Life sciences produced the largest number of Ph.D.s of the seven broad fields profiled in this report—7,108 in 1992.

- Among the science and engineering fields, life sciences surpassed physical sciences (6,498 Ph.D.s), social sciences (6,205 Ph.D.s), and engineering (5,437 Ph.D.s). During the 1970s and early 1980s, engineering lost ground against the other science fields, but began to close the gap in the mid-1980s.
- Of the nonscience fields, education continued to outstrip humanities and professional/other fields, producing 6,622 Ph.D.s in 1992 compared to 4,444 humanities Ph.D.s and 2,500 professional/other Ph.D.s. However, the number of professional/other fields doctorates has steadily climbed since the early 1970s, and the number of humanities Ph.D.s is at its highest level since 1977.

FIGURE 4 Doctorate recipients, by broad field, 1962-1992.

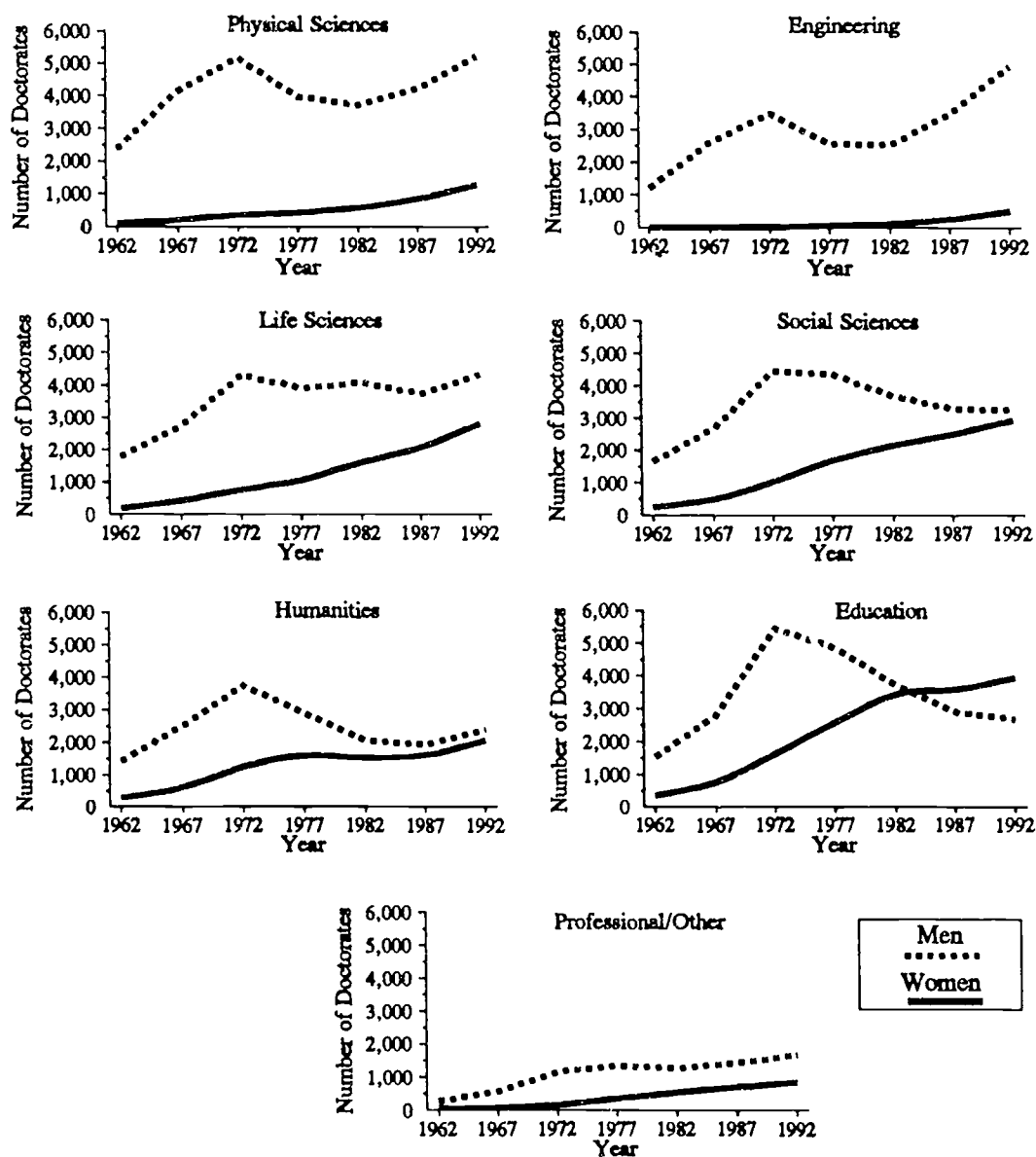


See Table 5.

SOURCE: National Research Council, Survey of Earned Doctorates.

In 1992, men outnumbered women in doctoral awards in all but one broad field—education. Women predominated in education and were rapidly closing the gap in social sciences and humanities, due in part to declining numbers of men in these fields.

FIGURE 5 Doctorate recipients, by gender and broad field for selected years, 1962-1992.

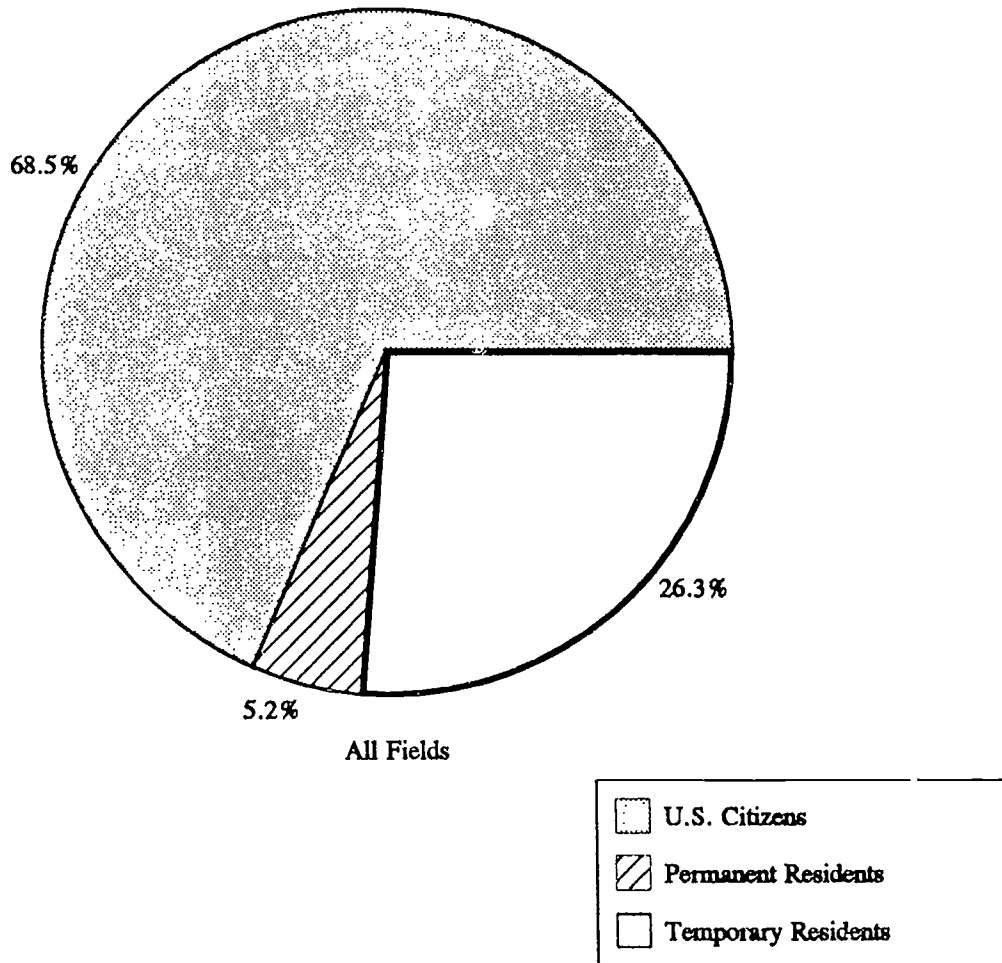


See Table 2.

SOURCE: National Research Council, Survey of Earned Doctorates.

Non-U.S. citizens earned 32 percent of all doctorates awarded in 1992. Their representation varied by field—accounting for 60 percent of engineering Ph.D.s, 44 percent of physical sciences Ph.D.s, and just 11 percent of education Ph.D.s.

FIGURE 6a Citizenship status of doctorate recipients, 1992.

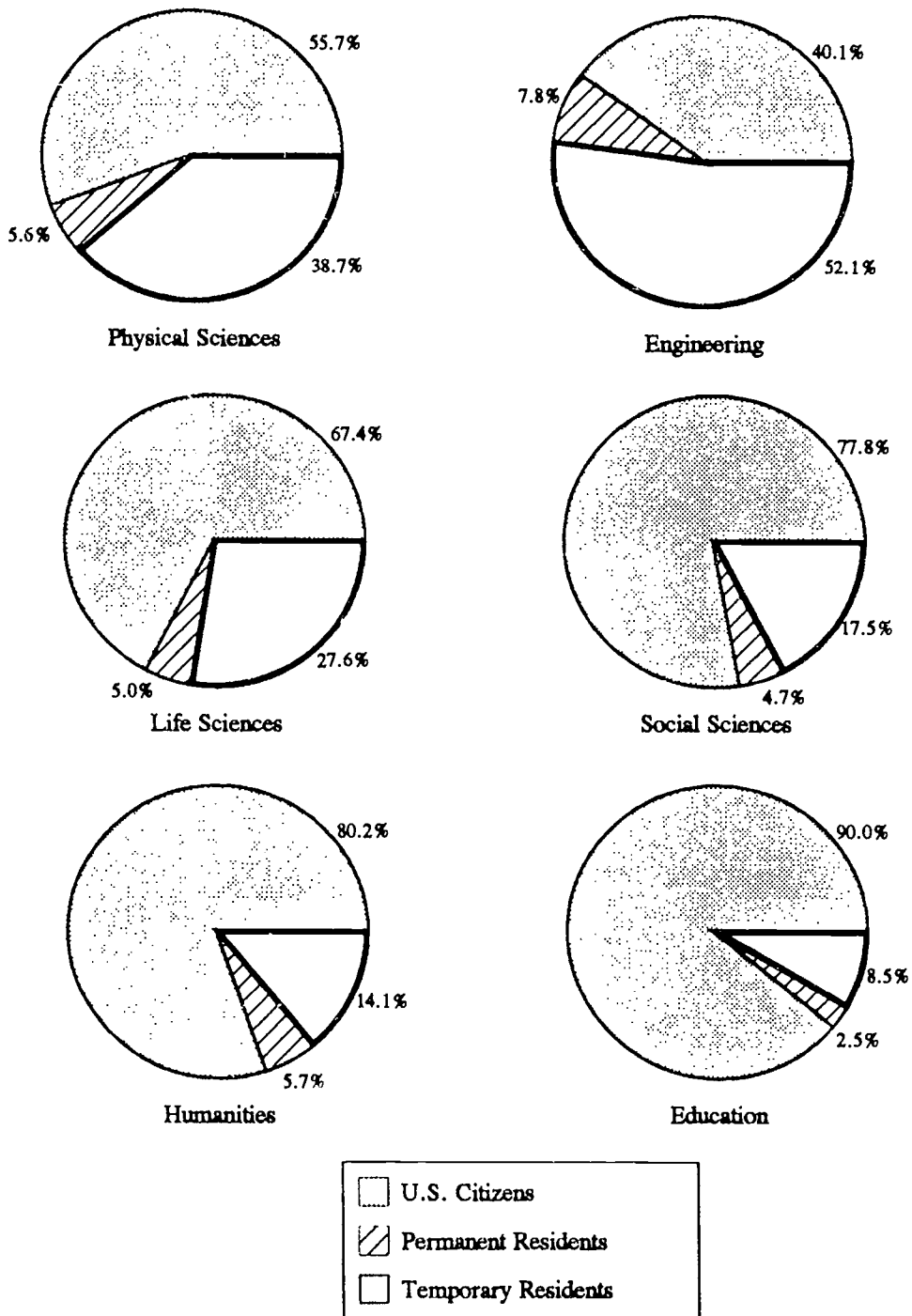


See Table 3.

See technical notes in Appendix C for rates of nonresponse to the question on citizenship status.

SOURCE: National Research Council, Survey of Earned Doctorates.

FIGURE 6b Citizenship status of doctorate recipients, by broad field, 1992.



See Table 3.

See technical notes in Appendix C for rates of nonresponse to the question on citizenship status.

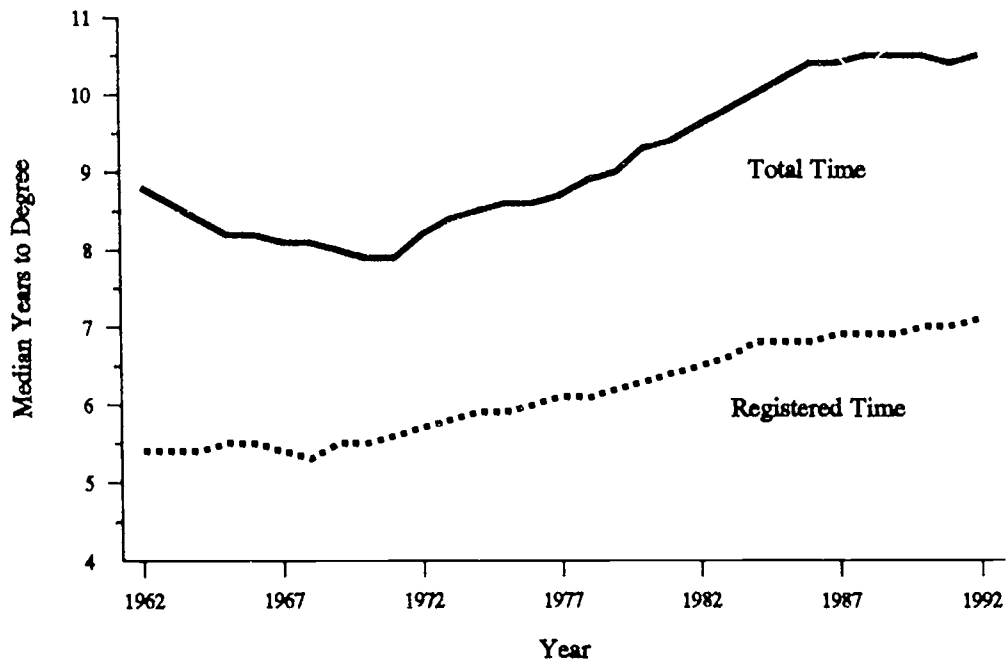
SOURCE: National Research Council, Survey of Earned Doctorates.

Time-to-Degree

Total time-to-degree (TTD) measures the number of years elapsed between receipt of the baccalaureate and the Ph.D. Registered time-to-degree (RTD) gauges the amount of time actually enrolled in graduate school, including master's degrees and enrollment in nondegree programs.

- TTD has begun to level off, increasing by less than two months since 1987. At 7.1 median years in 1992, RTD was lower than TTD by almost 3.5 years.
- TTD and RTD both varied considerably by field. In 1992, physical sciences had the shortest TTD (8.1 median years) and education the longest TTD (18.9 median years). Engineers had the shortest RTD (6.2 median years), while humanists had the longest (8.3 median years).

FIGURE 7a Median years to degree for doctorate recipients, 1962-1992.



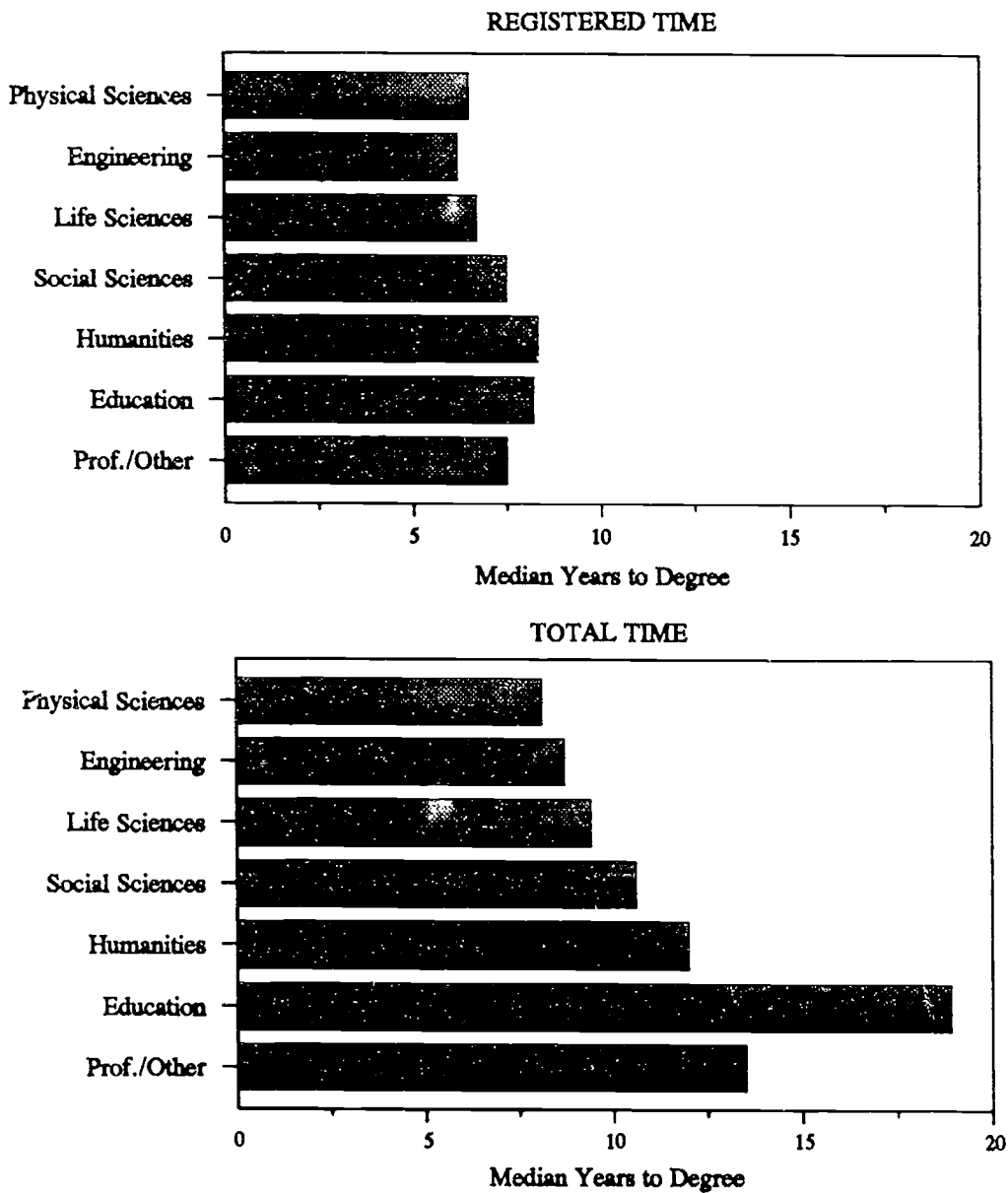
NOTE: A different method of computing TTD using baccalaureate-year cohorts rather than doctorate-year cohorts is discussed in Bowen, W., G. Lord, and J. A. Sosa, *Measuring Time to the Doctorate: A Reinterpretation of the Evidence*, published in *The Proceedings of the National Academy of Sciences* (Vol. 88, pp. 713-717, February 1991, Washington, D.C.).

See Tables 6 and 7.

See technical notes in Appendix C for rates of nonresponse to the applicable questions.

SOURCE: National Research Council, Survey of Earned Doctorates.

FIGURE 7b Median years to degree for doctorate recipients, by broad field, 1992.



NOTE: A different method of computing TTD using baccalaureate-year cohorts rather than doctorate-year cohorts is discussed in Bowen, W., G. Lord, and J. A. Sosa, *Measuring Time to the Doctorate: A Reinterpretation of the Evidence*, published in *The Proceedings of the National Academy of Sciences* (Vol. 88, pp. 713-717, February 1991, Washington, D.C.).

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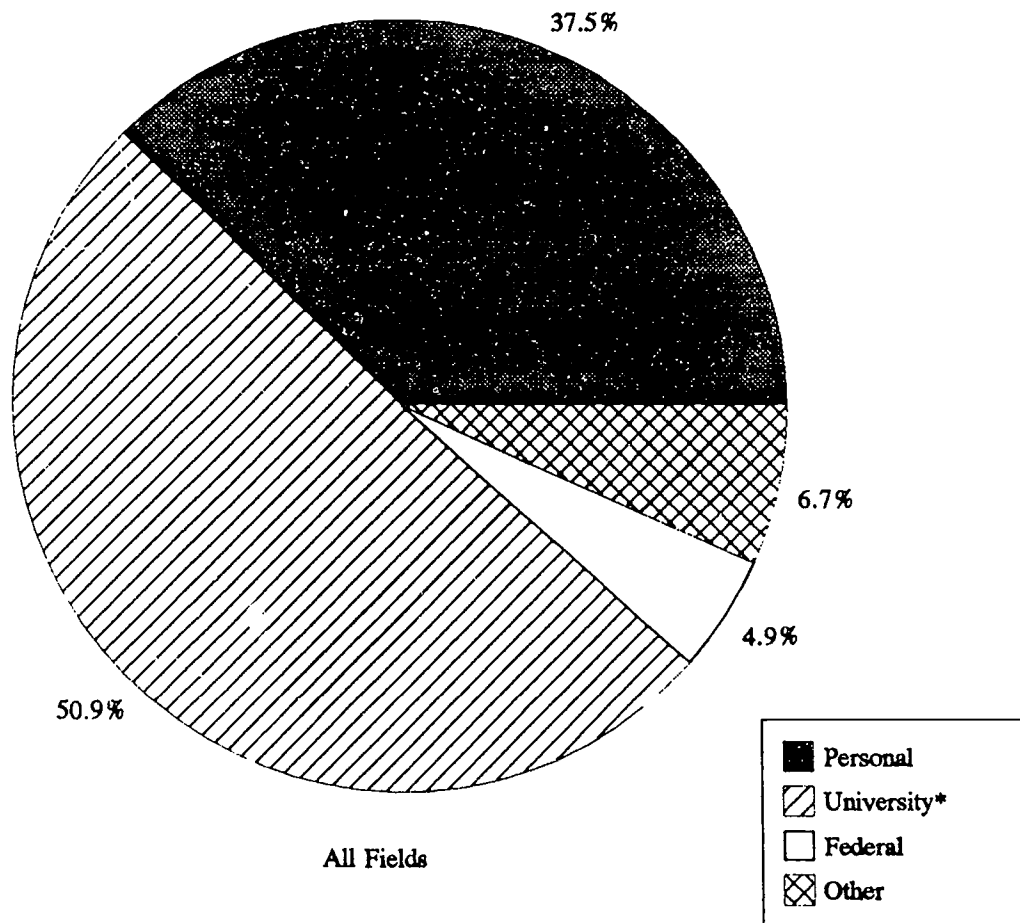
SOURCE: National Research Council, *Survey of Earned Doctorates*.

Financial Support

University funds were the most common primary source of support listed by 1992 doctorate recipients (51 percent), followed by personal resources (38 percent).

- The type of primary support varied greatly by field. University sources were most common in physical and life sciences and engineering, and personal resources were most typical in education.

FIGURE 8a Primary sources of support for doctorate recipients, 1992.



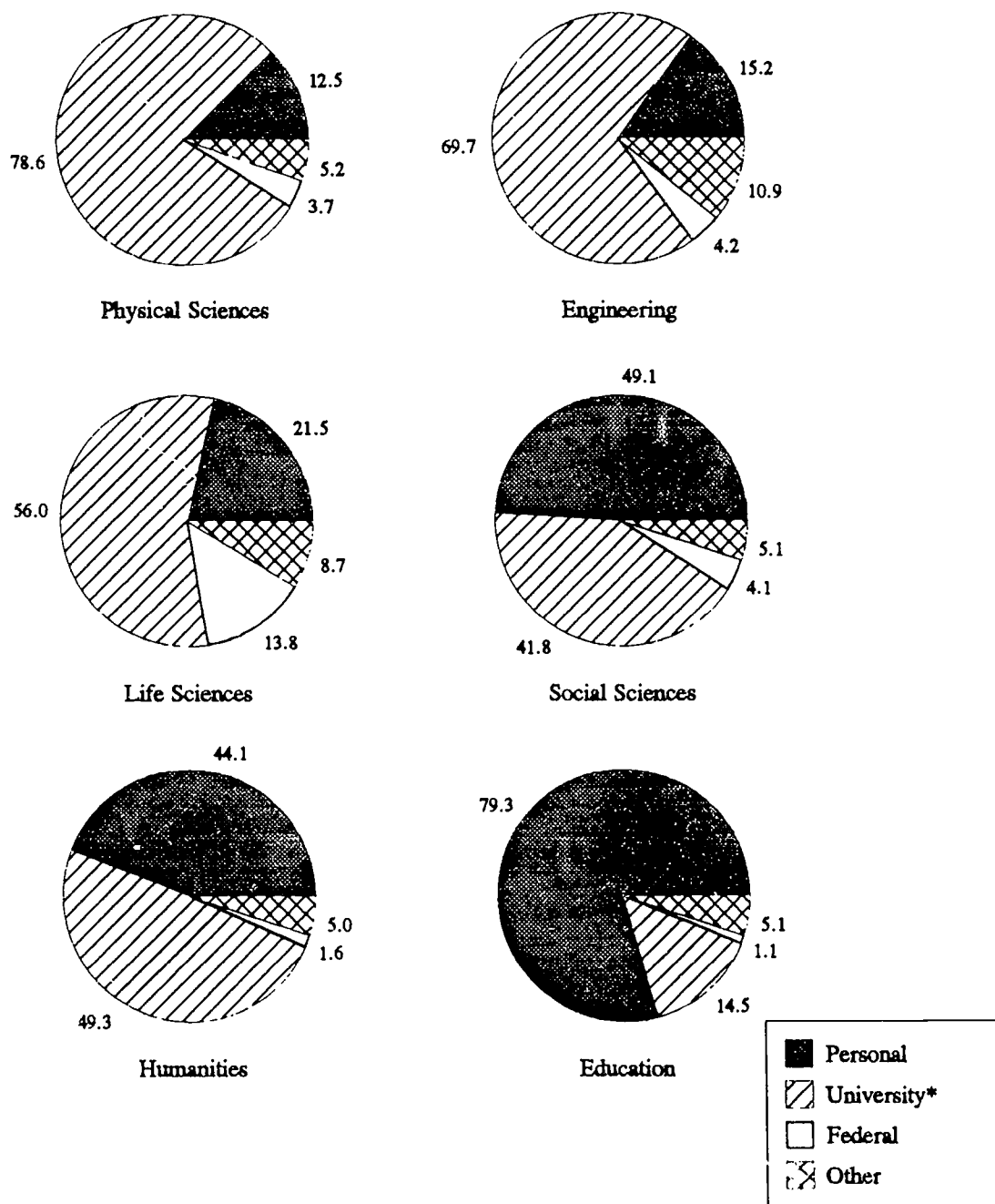
See Table 8.

See technical notes in Appendix C for rates of nonresponse to this question.

*University support also includes any federally funded research assistantships.

SOURCE: National Research Council, Survey of Earned Doctorates.

FIGURE 8b Primary sources of support for doctorate recipients, by broad field, 1992.



See Table 8.

See technical notes in Appendix C for rates of nonresponse to this question.

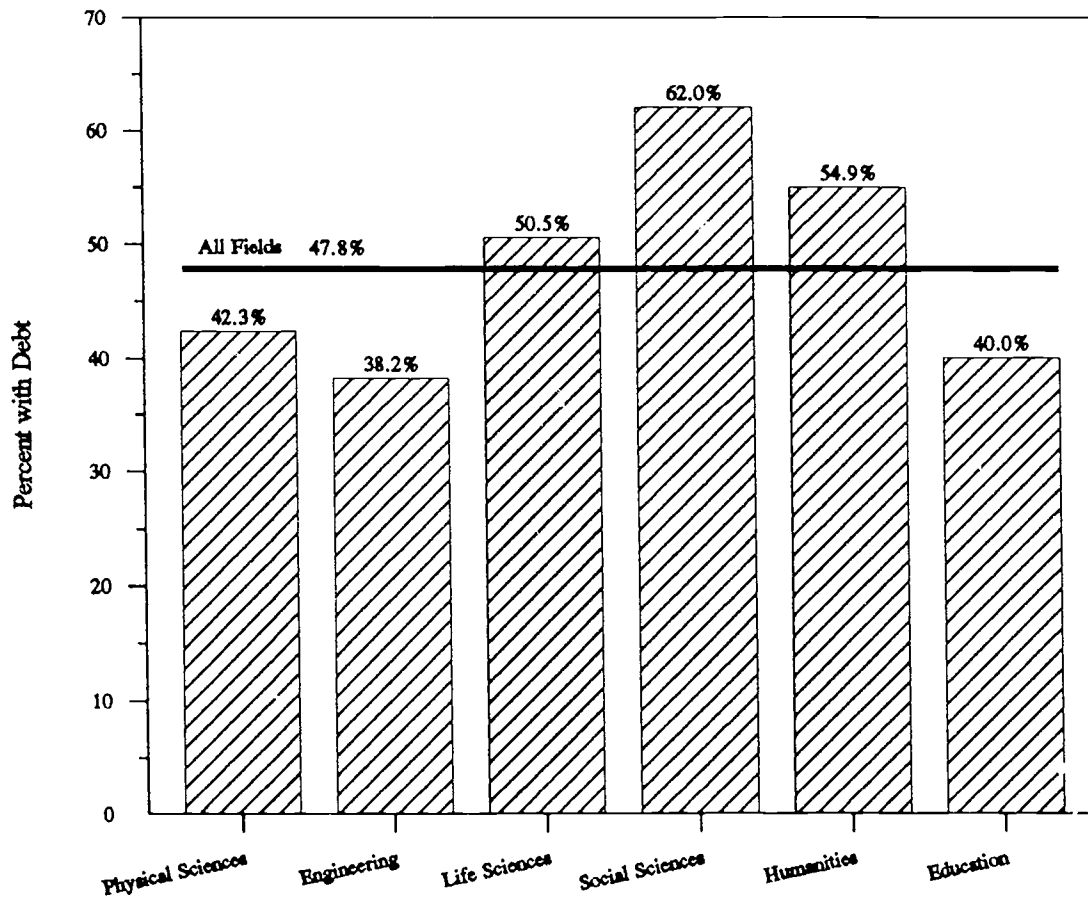
*University support also includes any federally funded research assistantships.

SOURCE: National Research Council, Survey of Earned Doctorates.

Nearly half (48 percent) of all doctorate recipients reported debt related to both undergraduate and graduate education upon completion of their degree in 1992.

- Social scientists were the most likely (at 62 percent) and engineers the least likely (at 38 percent) to have incurred debt during their postsecondary schooling.

FIGURE 9 Cumulative debt related to the education of doctorate recipients, total and by broad field, 1992.



See Tables 9 and 10.

See technical notes in Appendix C for rates of nonresponse to the question on cumulative debt.

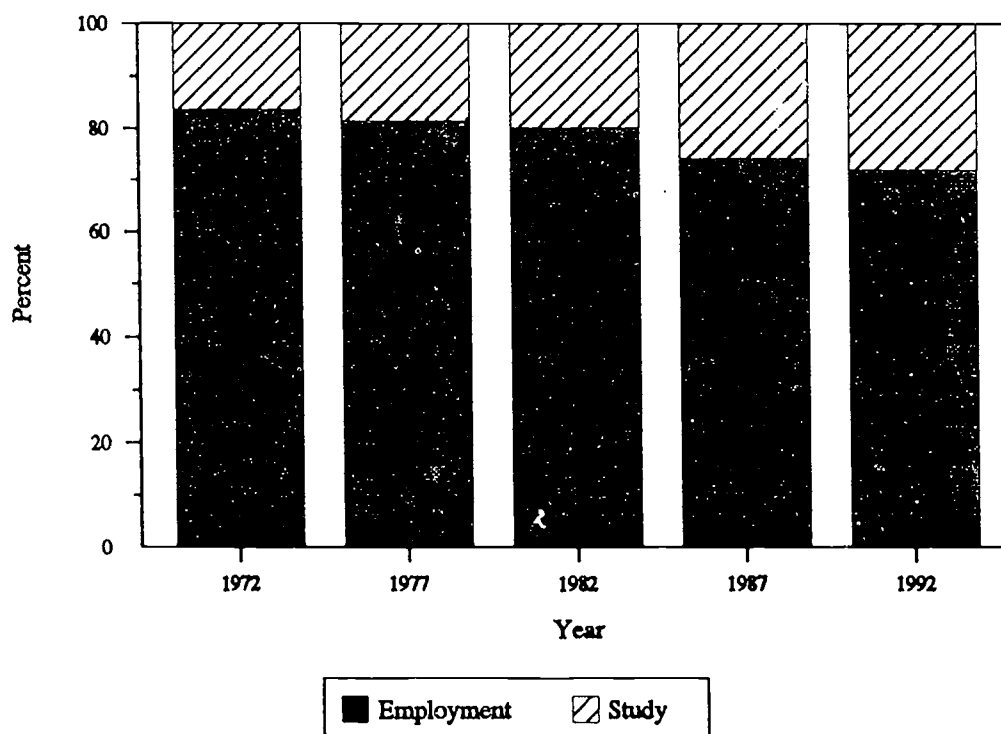
SOURCE: National Research Council, Survey of Earned Doctorates.

Postgraduation Plans

At the time of graduation, the majority of Ph.D.s with definite postgraduation commitments planned to work rather than study in 1992, although employment plans were not as common as they were 20 years ago (72 percent compared to 84 percent in 1972).

- Professional/other and education Ph.D.s were the most likely to have work plans (97 percent). These two groups of Ph.D.s were also the most likely to have reported working full-time the year immediately preceding the award of the doctorate, which may explain their high rates of postgraduation work plans. Life scientists, on the other hand, were the most apt to have postdoctoral study plans (63 percent).

FIGURE 10 Postgraduation commitments of doctorate recipients, for selected years, 1972-1992.



NOTE: Only Ph.D.s with definite commitments are included. Percentages are based on the number of Ph.D.s whose specific plans are known.

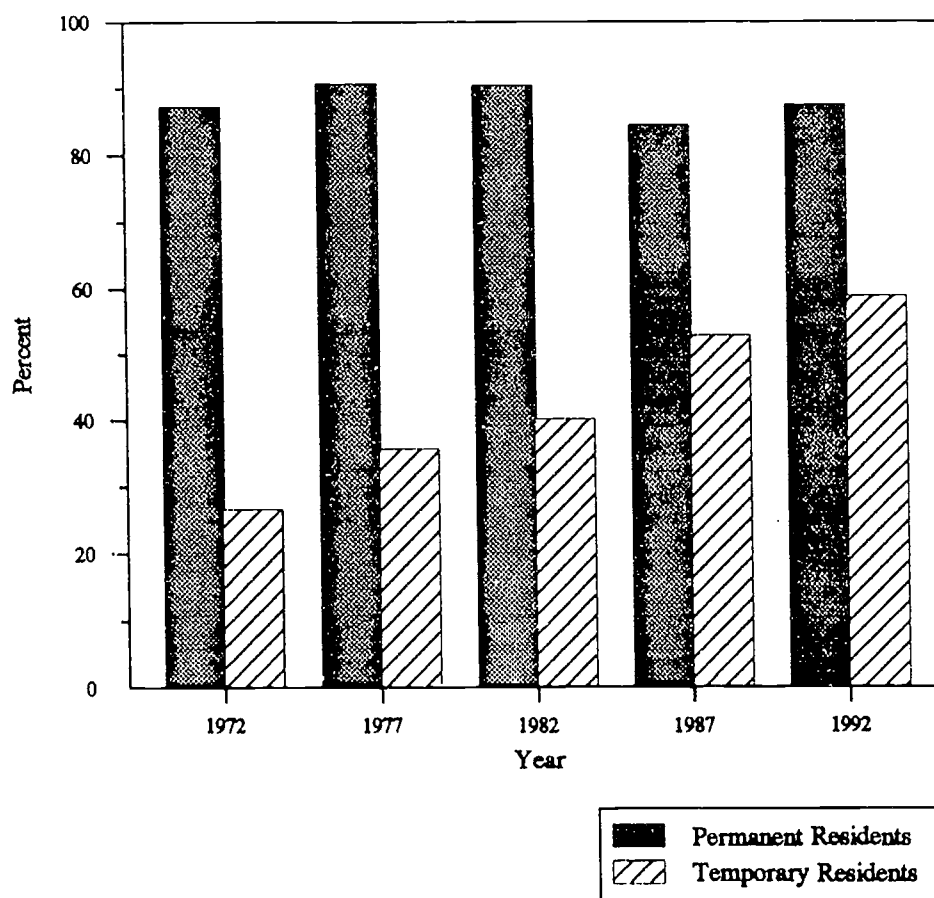
See Tables 11 and 12.

See technical notes in Appendix C for rates of nonresponse to the applicable questions and for further explanation of postgraduation plans.

SOURCE: National Research Council, Survey of Earned Doctorates.

As would be expected, a higher proportion of permanent residents than temporary residents reported plans to remain in the United States after obtaining the doctorate (largely due to their visa status). However, in 1992, temporary resident Ph.D. recipients were more than twice as likely as their counterparts 20 years ago to report plans to stay in the United States.

FIGURE 11 Percentage of non-U.S. citizen doctorate recipients with definite commitments who plan to remain in the United States after graduation, by visa status for selected years, 1972-1992.



NOTE: Only Ph.D.s with definite commitments are included.

See Tables 13 and 14.

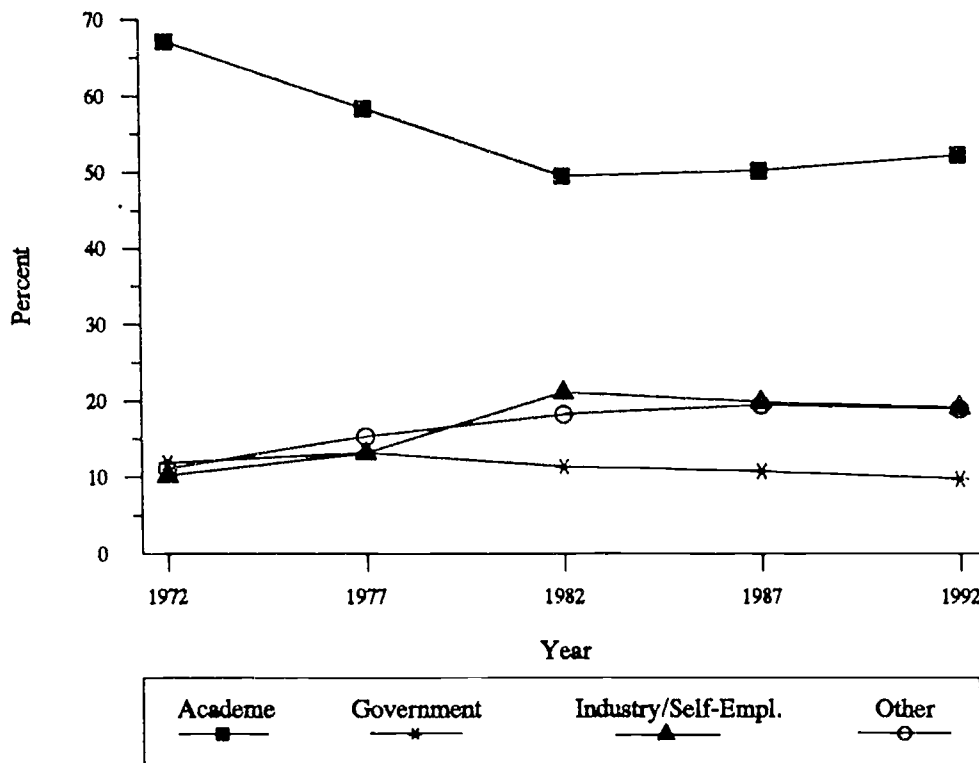
See technical notes in Appendix C for rates of nonresponse to the applicable questions.

SOURCE: National Research Council, Survey of Earned Doctorates.

Academe continued to be the primary employer of doctorate recipients in 1992, although fewer Ph.D.s planned to work in academe in 1992 than 20 years ago (52 percent compared to 67 percent).

- Employment plans for industry or self-employment were more likely in 1992 than in 1972 and were equally common as work plans in "other" sectors (primarily K-12 schools and nonprofit organizations).
- The increase in reported employment plans in industry/self-employment and "other" sectors has been offset by decreasing proportions of Ph.D. recipients reporting work plans in academe and government.

FIGURE 12 Employment sector of doctorate recipients with postgraduation commitments in the United States, for selected years, 1972-1992 (U.S. citizens and permanent residents).



NOTE: Only Ph.D.s with definite commitments for employment are included. Foreign locations are excluded. Percentages are based on the number of Ph.D.s who reported employment sector. Government includes U.S. federal, state, and local agencies.

See Tables 15 and 16.

See technical notes in Appendix C for rates of nonresponse to this question.

SOURCE: National Research Council, Survey of Earned Doctorates.

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TABLE 1 Doctorates Awarded by U.S. Colleges and Universities, 1962-1992

Year	Number	Year	Number	Year	Number	Year	Number
1962	11,500	1970	29,498	1978	30,875	1986	31,897
1963	12,728	1971	31,867	1979	31,239	1987	32,363
1964	14,325	1972	33,041	1980	31,020	1988	33,490
1965	16,340	1973	33,755	1981	31,356	1989	34,317
1966	17,949	1974	33,047	1982	31,111	1990	36,052
1967	20,403	1975	32,952	1983	31,282	1991	37,503
1968	22,936	1976	32,946	1984	31,337	1992	38,814
1969	25,743	1977	31,716	1985	31,297		

SOURCE: National Research Council, Survey of Earned Doctorates.

TABLE 2 Gender of Doctorate Recipients, by Broad Field for Selected Years, 1962-1992

Field/Gender	1962	1967	1972	1977	1982	1987	1992
All Fields	11,500	20,403	33,041	31,716	31,111	32,363	38,814
Men	10,265	17,961	27,754	23,858	21,018	20,938	24,448
Women	1,235	2,442	5,287	7,858	10,093	11,425	14,366
Physical Sciences*	2,485	4,333	5,538	4,379	4,291	5,030	6,498
Men	2,384	4,124	5,171	3,949	3,715	4,200	5,216
Women	101	209	367	430	576	830	1,282
Engineering	1,216	2,604	3,503	2,643	2,646	3,712	5,437
Men	1,212	2,595	3,481	2,569	2,522	3,470	4,934
Women	4	9	22	74	124	242	503
Life Sciences	1,971	3,143	5,084	4,923	5,709	5,754	7,108
Men	1,783	2,725	4,311	3,894	4,073	3,724	4,314
Women	192	418	773	1,029	1,636	2,030	2,794
Social Sciences	1,890	3,102	5,467	6,070	5,837	5,786	6,205
Men	1,650	2,654	4,441	4,346	3,679	3,295	3,261
Women	240	448	1,026	1,724	2,158	2,491	2,944
Humanities	1,725	3,087	5,055	4,562	3,561	3,500	4,444
Men	1,435	2,509	3,755	2,903	2,051	1,929	2,385
Women	290	578	1,300	1,659	1,510	1,571	2,059
Education	1,893	3,481	7,085	7,455	7,251	6,450	6,622
Men	1,534	2,791	5,439	4,870	3,712	2,897	2,679
Women	359	690	1,646	2,585	3,539	3,553	3,943
Professional/Other	316	653	1,309	1,684	1,816	2,131	2,500
Men	267	563	1,156	1,327	1,266	1,423	1,659
Women	49	90	153	357	550	708	841

*Includes mathematics and computer sciences.

SOURCE: National Research Council, Survey of Earned Doctorates.

TABLE 3 Citizenship Status of Doctorate Recipients, by Broad Field for Selected Years, 1962-1992

Field/Citizenship	1962	1967	1972	1977	1982	1987	1992
All Fields	11,500	20,403	33,041	31,716	31,111	32,363	38,814
U.S. Citizens	9,841	17,029	27,479	26,119	24,391	22,983	25,759
Permanent Residents	274	876	2,093	1,368	1,228	1,578	1,958
Temporary Residents	1,244	2,048	2,831	3,448	4,204	5,610	9,888
Unknown Citizenship	141	450	638	781	1,288	2,192	1,209
Physical Sciences*	2,485	4,333	5,538	4,379	4,291	5,030	6,498
U.S. Citizens	2,108	3,539	4,392	3,344	3,120	3,093	3,519
Permanent Residents	55	194	445	268	201	255	355
Temporary Residents	295	508	620	676	838	1,368	2,447
Unknown Citizenship	27	92	81	91	132	314	177
Engineering	1,216	2,604	3,503	2,643	2,646	3,712	5,437
U.S. Citizens	930	1,926	2,330	1,472	1,169	1,558	2,102
Permanent Residents	60	229	622	326	296	355	408
Temporary Residents	218	409	519	773	1,030	1,532	2,735
Unknown Citizenship	8	40	32	72	151	267	192
Life Sciences	1,975	3,143	5,084	4,923	5,709	5,754	7,108
U.S. Citizens	1,577	2,454	3,988	3,892	4,610	4,242	4,672
Permanent Residents	54	133	364	242	184	258	348
Temporary Residents	329	511	629	672	749	923	1,911
Unknown Citizenship	15	45	103	117	166	331	177
Social Sciences	1,890	3,102	5,467	6,070	5,837	5,786	6,205
U.S. Citizens	1,614	2,605	4,640	5,181	4,801	4,402	4,613
Permanent Residents	40	138	252	189	196	248	280
Temporary Residents	199	279	459	541	535	654	1,037
Unknown Citizenship	37	80	116	159	305	482	275
Humanities	1,725	3,087	5,055	4,562	3,561	3,500	4,444
U.S. Citizens	1,564	2,734	4,527	4,053	3,023	2,733	3,453
Permanent Residents	42	113	215	160	139	176	244
Temporary Residents	79	142	205	216	226	327	607
Unknown Citizenship	40	98	108	133	173	264	140
Education	1,893	3,481	7,085	7,455	7,251	6,450	6,622
U.S. Citizens	1,788	3,266	6,600	6,795	6,279	5,491	5,749
Permanent Residents	16	37	131	108	145	172	162
Temporary Residents	82	124	284	380	572	419	549
Unknown Citizenship	7	54	70	172	255	368	162
Professional/Other	316	653	1,309	1,684	1,816	2,131	2,500
U.S. Citizens	260	505	1,002	1,382	1,389	1,464	1,651
Permanent Residents	7	32	64	75	67	114	161
Temporary Residents	42	75	115	190	254	387	602
Unknown Citizenship	7	41	128	37	106	166	86

NOTE: See technical notes in Appendix C for rates of nonresponse to the question on citizenship status.

*Includes mathematics and computer sciences.

SOURCE: National Research Council, Survey of Earned Doctorates.

TABLE 4 Top 30 Countries of Origin of Non-U.S. Citizens Earning Ph.D.s at U.S. Colleges and Universities, 1992 (ranked on number of Ph.D.s)

Country	Number	Country	Number
1. People's Republic of China*	2,079	16. Hong Kong	140
2. Republic of Korea†	1,458	17. Egypt	126
3. Taiwan, Republic of China*	1,422	18. Nigeria	125
4. India	1,065	19. Israel	117
5. Canada	506	20. France	115
6. Iran	233	21. The Philippines	106
7. England	210	22. Jordan	104
8. Germany	188	23. Saudi Arabia	103
9. Japan	171	24. Indonesia	102
10. Greece	166	25. Argentina	100
11. Brazil	160	26. Italy	98
12. Thailand	151	27. Sri Lanka	93
13. Mexico	147	28. Spain	91
14. Pakistan	142	29. Malaysia	84
15. Turkey	141	30. Australia	80

NOTE: See technical notes in Appendix C for rates of nonresponse to the country of citizenship question.

*An additional 178 Ph.D.s indicated "China" as their country of citizenship, but the specific origin could not be determined. Thus, data for these recipients were excluded from the table.

†Includes "Korea, unspecified." The Democratic People's Republic of Korea (North Korea) does not permit its citizens to study in the United States.

SOURCE: National Research Council, Survey of Earned Doctorates.

TABLE 5 Major Doctorate Field for Selected Years, 1962-1992

Field	1962	1967	1972	1977	1982	1987	1992
All Fields	11,500	20,403	33,041	31,716	31,111	32,363	38,814
Physical Sciences	2,485	4,333	5,538	4,379	4,291	5,030	6,498
Physics/Astronomy	710	1,312	1,634	1,150	1,014	1,237	1,537
Chemistry	1,138	1,773	2,019	1,571	1,680	1,975	2,212
Earth, Atmos., & Marine Sci.	249	418	604	694	657	628	824
Mathematics	388	830	1,281	933	720	740	1,058
Computer Sciences*	N/A	N/A	N/A	31	220	450	867
Engineering	1,216	2,604	3,503	2,643	2,646	3,712	5,437
Life Sciences	1,975	3,143	5,084	4,923	5,709	5,754	7,108
Biological Sciences	1,397	2,360	3,600	3,484	3,893	3,839	4,794
Health Sciences	108	177	467	511	686	800	1,110
Agricultural Sciences	470	606	1,017	928	1,130	1,115	1,204
Social Sciences	1,890	3,102	5,467	6,070	5,837	5,786	6,205
Psychology	856	1,295	2,279	2,990	3,159	3,169	3,252
Anthropology	81	147	260	385	333	352	320
Economics	418	691	893	837	761	821	910
Poli. Sci. & Int'l. Relations	278	501	911	710	536	486	590
Sociology	184	331	639	725	568	423	495
Other Social Sciences	73	137	485	423	480	535	638
Humanities	1,725	3,087	5,055	4,562	3,561	3,500	4,444
History	366	733	1,186	961	692	586	725
Amer. & Eng. Lang. & Lit.	463	797	1,370	1,076	770	668	903
Foreign Lang. & Lit.	196	470	812	728	490	444	562
Other Humanities	700	1,087	1,687	1,797	1,609	1,802	2,254
Education	1,893	3,481	7,085	7,455	7,251	6,450	6,622
Teacher Education	279	418	663	502	588	447	407
Teaching Fields	395	817	1,705	1,439	1,333	1,064	1,003
Other Education	1,219	2,246	4,717	5,514	5,330	4,939	5,212
Professional/Other	316	653	1,309	1,684	1,816	2,131	2,500
Business & Management	199	425	765	671	685	982	1,248
Communications	9	34	166	302	266	309	330
Other Professional Fields	101	169	270	687	841	778	882
Other Fields	7	25	108	24	24	62	40

*Not available prior to 1978.

SOURCE: National Research Council, Survey of Earned Doctorates.

TABLE 6 Median Years to Degree for Doctorate Recipients, by Broad Field for Selected Years, 1962-1992

Field	1962	1967	1972	1977	1982	1987	1992
All Fields							
Registered	5.4	5.4	5.7	6.1	6.5	6.9	7.1
Total	8.8	8.1	8.2	8.7	9.6	10.4	10.5
Physical Sciences*							
Registered	5.1	5.1	5.6	5.7	5.8	6.0	6.5
Total	6.5	6.0	6.5	6.9	6.9	7.4	8.1
Engineering							
Registered	5.0	5.2	5.5	5.6	5.7	5.8	6.2
Total	7.1	7.2	7.5	7.5	8.0	8.1	8.7
Life Sciences							
Registered	5.3	5.4	5.5	5.7	6.0	6.5	6.7
Total	7.8	7.2	7.0	7.3	7.6	8.8	9.4
Social Sciences							
Registered	5.4	5.2	5.6	5.9	6.7	7.2	7.5
Total	9.0	7.7	7.5	8.0	9.2	10.4	10.6
Humanities							
Registered	5.9	5.5	6.2	7.1	8.0	8.4	8.3
Total	10.3	9.4	9.0	9.9	11.2	12.1	12.0
Education							
Registered	6.6	6.2	6.1	6.4	7.2	7.9	8.2
Total	12.8	14.0	12.5	12.5	13.6	16.1	18.9
Professional/Other							
Registered	5.2	5.3	5.6	6.1	6.7	7.2	7.5
Total	10.8	11.1	9.7	10.6	11.6	12.6	13.5

NOTE: Medians are based on the number of individuals who have provided complete information about their postbaccalaureate education. "Registered" time-to-degree gauges the amount of time actually enrolled in graduate school, including master's degrees and enrollment in nondegree programs. "Total" time-to-degree measures the number of years elapsed between receipt of the baccalaureate and the Ph.D. See technical notes in Appendix C for rates of nonresponse to the applicable questions.

*Includes mathematics and computer sciences.

SOURCE: National Research Council, Survey of Earned Doctorates.

TABLE 7 Median Years to Degree for Doctorate Recipients, by Demographic Group and Broad Field, 1992

	All Fields	Physical Sci.*	Eng.	Life Sci.	Social Sci.	Human- ities	Educa- tion	Prof./ Other
Registered Time								
All Ph.D.s	7.1	6.5	6.2	6.7	7.5	8.3	8.2	7.5
Men	6.9	6.5	6.2	6.7	7.3	8.1	8.1	7.4
Women	7.5	6.4	6.1	6.8	7.7	8.5	8.2	7.7
U.S. Citizens	7.3	6.3	6.1	6.8	7.6	8.4	8.4	7.8
Permanent Residents	7.2	7.0	6.5	6.8	7.9	8.1	7.3	7.7
Temporary Residents	6.6	6.6	6.2	6.6	7.1	7.6	6.3	6.9
U.S. Citizens								
Asians	6.9	6.4	6.3	7.0	7.4	9.4	7.9	8.9
Blacks	8.0	7.7	5.9	7.8	7.8	8.9	8.1	8.1
Hispanics	7.5	6.7	6.7	7.0	7.9	8.0	8.4	6.9
Native Americans	7.0	6.3	6.5	7.3	8.2	7.1	6.9	7.3
Whites	7.3	6.3	6.0	6.8	7.6	8.4	8.4	7.8
Total Time								
All Ph.D.s	10.5	8.1	8.7	9.4	10.6	12.0	18.9	13.5
Men	9.8	8.1	8.8	9.2	10.4	11.6	18.4	13.0
Women	12.4	7.9	7.9	9.8	10.9	12.5	19.2	14.7
U.S. Citizens	11.5	7.3	7.9	9.1	10.8	12.4	19.5	15.0
Permanent Residents	10.1	8.9	9.2	9.6	11.2	11.1	14.2	12.7
Temporary Residents	9.4	8.8	9.1	9.7	9.9	10.7	13.5	10.5
U.S. Citizens								
Asians	9.1	7.4	8.4	8.4	9.2	12.0	18.2	13.0
Blacks	16.4	11.3	8.6	11.8	13.0	16.2	19.7	16.5
Hispanics	11.4	7.6	8.3	8.7	10.2	12.8	17.6	12.8
Native Americans	14.4	8.0	6.8	9.0	13.5	16.0	18.4	15.0
Whites	11.4	7.3	7.8	9.1	10.8	12.3	19.5	15.0

NOTE: Medians are based on the number of individuals who have provided complete information about their postbaccalaureate education. Medians were computed wherever there were five or more Ph.D.s with known time-to-degree. "Registered time" gauges the amount of time actually enrolled in graduate school, including master's degrees and enrollment in nondegree programs. "Total time" measures the number of years elapsed between receipt of the baccalaureate and the Ph.D. See technical notes in Appendix C for rates of nonresponse to the applicable questions.

*Includes mathematics and computer sciences.

SOURCE: National Research Council, Survey of Earned Doctorates.

TABLE 8 Primary Sources of Support for Doctorate Recipients, by Broad Field and Demographic Group, 1992

Primary Source of Support		All Ph.D.s	Men	Women	U.S. Cits.	Perm. Res.	Temp. Res.	U.S. Citizens				
								Asians	Blacks	Hispanics	Native Amers.	Whites
All Fields	N	27,010	17,008	10,002	18,937	1,259	6,781	593	588	501	88	16,982
Personal	%	37.5	30.8	49.0	47.2	28.9	12.1	31.4	60.9	48.3	53.4	47.4
University	%	50.9	56.4	41.4	42.1	63.3	73.0	50.9	25.3	36.5	37.5	42.4
Federal	%	4.9	4.9	4.9	6.4	2.1	1.3	11.3	5.3	9.2	3.4	6.2
Other	%	6.7	7.9	4.7	4.3	5.6	13.6	6.4	8.5	6.0	5.7	4.0
Physical Sciences*	N	4,635	3,712	923	2,713	237	1,680	122	23	56	12	2,458
Personal	%	12.5	11.9	15.0	17.7	13.5	3.9	13.9	13.0	16.1	33.3	17.9
University	%	78.6	78.9	77.1	72.0	83.5	88.6	74.6	60.9	64.3	58.3	72.1
Federal	%	3.7	3.6	4.3	5.9	0.8	0.6	6.6	8.7	12.5	0.0	5.8
Other	%	5.2	5.6	3.6	4.4	2.1	6.9	4.9	17.4	7.1	8.3	4.2
Engineering	N	3,955	3,569	386	1,677	286	1,984	164	22	48	9	1,407
Personal	%	15.2	15.4	13.2	19.3	17.8	11.4	22.6	9.1	12.5	11.1	19.5
University	%	69.7	69.4	72.5	61.2	73.1	76.5	62.2	40.9	62.5	66.7	61.5
Federal	%	4.2	4.0	6.0	8.9	2.1	0.5	4.9	9.1	12.5	0.0	9.4
Other	%	10.9	11.2	8.3	10.6	7.0	11.7	10.4	40.9	12.5	22.2	9.7
Life Sciences	N	5,051	3,029	2,022	3,480	227	1,335	127	58	77	11	3,172
Personal	%	21.5	18.1	26.6	27.9	14.5	6.1	25.2	27.6	20.8	0.0	28.5
University	%	56.0	58.7	52.0	49.4	69.6	70.9	40.9	36.2	48.1	81.8	49.8
Federal	%	13.8	13.4	14.4	18.6	7.9	2.5	29.1	22.4	27.3	18.2	17.8
Other	%	8.7	9.8	7.0	4.1	7.9	20.5	4.7	13.8	3.9	0.0	3.9
Social Sciences	N	4,182	2,174	2,008	3,329	168	682	67	102	104	19	3,005
Personal	%	49.1	44.2	54.4	54.8	45.2	22.0	34.3	54.9	65.4	63.2	55.0
University	%	41.8	45.1	38.1	38.2	47.6	57.8	47.8	30.4	22.1	26.3	38.7
Federal	%	4.1	3.7	4.6	4.7	0.0	2.2	11.9	6.9	4.8	5.3	4.5
Other	%	5.1	7.0	2.9	2.3	7.1	18.0	6.0	7.8	7.7	5.3	1.9
Humanities	N	2,936	1,579	1,357	2,423	135	376	32	60	67	7	2,236
Personal	%	44.1	44.9	43.3	48.3	40.7	18.1	50.0	48.3	41.8	71.4	48.4
University	%	49.3	48.0	50.7	46.3	54.8	66.2	40.6	38.3	50.7	14.3	46.6
Federal	%	1.6	2.0	1.2	1.7	0.7	1.9	6.3	5.0	3.0	0.0	1.4
Other	%	5.0	5.1	4.9	3.7	3.7	13.8	3.1	8.3	4.5	14.3	3.5
Education	N	4,570	1,847	2,723	4,125	96	344	51	290	125	30	3,615
Personal	%	79.3	79.0	79.5	82.8	67.7	41.3	76.5	80.7	80.8	83.3	83.1
University	%	14.5	12.8	15.6	12.4	27.1	36.0	13.7	13.8	11.2	16.7	12.2
Federal	%	1.1	1.2	1.0	0.9	0.0	3.2	5.9	1.4	3.2	0.0	0.8
Other	%	5.1	6.9	3.9	3.9	5.2	19.5	3.9	4.1	4.8	0.0	3.9
Professional/Other	N	1,681	1,098	583	1,190	110	380	30	33	24	0	1,089
Personal	%	53.1	51.5	56.1	63.3	47.3	23.2	73.3	54.5	58.3	0.0	63.4
University	%	39.2	39.8	38.1	31.3	47.3	61.6	16.7	33.3	37.5	0.0	31.6
Federal	%	1.1	1.5	0.5	1.3	0.0	0.8	3.3	0.0	4.2	0.0	1.2
Other	%	6.5	7.2	5.3	4.1	5.5	14.5	6.7	12.1	0.0	0.0	3.9

NOTE: Numbers represent those Ph.D.s with known primary support; percentages are based on these numbers. Because nonresponse to "primary" source of support is much greater than for other variables, and in that it varies from year to year, the reader is advised *not* to compare percentages in this table with those published in earlier reports. The overall nonresponse rate to "primary" source of support was 30.4 percent in 1992, an increase of nearly 8 percentage points since 1991. See technical notes in Appendix C for rates of nonresponse to this question by field and demographic group.

"Personal" includes loans as well as own earnings and contributions from the spouse/family. Federally funded research assistantships (RAs) are grouped under "University" because not all recipients of such support are aware of the actual source of funding. For further definition of "Federal" support, see item 17 on the survey questionnaire in Appendix D. "Other" support includes U.S. nationally competitive fellowships, business/employer funds, foreign government, state government, and other nonspecified sources.

*Includes mathematics and computer sciences.

SOURCE: National Research Council, Survey of Earned Doctorates.

TABLE 9 Cumulative Debt Related to the Education of Doctorate Recipients, by Broad Field, 1992

	All Fields	Physical Sci.*	Eng.	Life Sci.	Social Sci.	Human- ities	Educa- tion	Prof./ Other
All Ph.D.s	N 38,814	6,498	5,437	7,108	6,205	4,444	6,622	2,500
Responses to Debt Status	N 36,171	6,071	5,041	6,692	5,671	4,163	6,218	2,315
Without Debt	% 52.2	57.7	61.8	49.5	38.0	45.1	60.0	51.4
With Debt	% 47.8	42.3	38.2	50.5	62.0	54.9	40.0	48.6
\$5,000 or less	13.6	14.0	11.5	14.6	13.0	15.4	13.5	12.1
\$5,001 to \$10,000	11.0	11.7	8.6	12.5	11.5	13.6	8.9	9.4
\$10,001 to \$15,000	7.8	7.0	5.5	8.9	10.3	9.6	5.7	8.3
\$15,001 or more	15.5	9.7	12.7	14.6	27.3	16.4	12.0	18.8

NOTE: "All Ph.D.s" includes recipients whose debt status is unknown; percentages are based on the number with "responses to debt status." Percentages for "with" and "without" debt add to 100.0. Percentages for levels of debt add to the total percentage of Ph.D.s "with debt." See technical notes in Appendix C for rates of nonresponse to this question.

*Includes mathematics and computer sciences.

SOURCE: National Research Council, Survey of Earned Doctorates.

TABLE 10 Cumulative Debt Related to the Education of Doctorate Recipients, by Demographic Group, 1992

	All Ph.D.s	U.S. Citizens									
		Men	Women	U.S. Cits.	Perm. Res.	Temp. Res.	Asians	Blacks	His-panics	Native Amers.	Whites
All Ph.D.s	N 38,814	24,448	14,366	25,759	1,958	9,888	828	951	755	148	22,718
Responses to Debt Status	N 36,171	22,689	13,482	24,983	1,871	9,276	801	893	735	146	22,134
Without Debt	% 52.2	52.3	51.9	44.6	65.0	69.9	46.3	35.9	35.8	42.5	45.2
With Debt	% 47.8	47.7	48.1	55.4	35.0	30.1	53.7	64.1	64.2	57.5	54.8
\$5,000 or less	13.6	13.6	13.5	14.9	10.7	10.5	13.6	16.6	12.9	8.2	15.0
\$5,001 to \$10,000	11.0	11.0	10.9	13.3	8.2	5.1	15.6	12.4	15.8	17.1	13.2
\$10,001 to \$15,000	7.8	7.6	8.0	9.6	4.5	3.5	9.9	8.6	8.8	8.2	9.7
\$15,001 or more	15.5	15.5	15.6	17.5	11.5	11.1	14.6	26.4	26.7	24.0	16.9

NOTE: "All Ph.D.s" includes recipients whose debt status is unknown; percentages are based on the number with "responses to debt status." Percentages for "with" and "without" debt add to 100.0. Percentages for levels of debt add to the total percentage of Ph.D.s "with debt." See technical notes in Appendix C for rates of nonresponse to this question.

SOURCE: National Research Council, Survey of Earned Doctorates.

TABLE 11 Postgraduation Commitments of Doctorate Recipients, by Type of Plans and Broad Field for Selected Years, 1972-1992

		All Fields	Physical Sci.*	Eng.	Life Sci.	Social Sci.	Human- ities	Educa- tion	Prof./ Other
All Definite Commitments									
1972	N	23,902	3,914	2,387	3,622	4,196	3,587	5,204	992
1977	N	21,345	2,986	1,828	3,476	4,071	2,511	5,146	1,327
1982	N	21,429	3,173	1,768	4,080	3,819	2,146	5,072	1,371
1987	N	21,360	3,488	2,216	4,024	3,593	2,091	4,419	1,529
1992	N	24,704	4,082	2,950	4,954	3,811	2,548	4,615	1,744
Definite Commitments with Responses to Type of Plans									
1972	N	23,665	3,896	2,373	3,591	4,155	3,522	5,142	986
1977	N	21,107	2,963	1,813	3,434	4,026	2,468	5,090	1,313
1982	N	21,351	3,163	1,763	4,066	3,811	2,138	5,047	1,363
1987	N	21,162	3,471	2,196	4,003	3,562	2,061	4,349	1,520
1992	N	24,514	4,065	2,939	4,934	3,790	2,521	4,526	1,739
Employment									
1972	%	83.7	60.9	87.4	57.0	92.3	97.3	98.5	98.7
1977	%	81.6	61.1	86.6	48.1	89.1	95.4	97.6	97.9
1982	%	80.2	65.8	88.6	45.1	87.8	95.2	97.5	98.5
1987	%	74.3	51.5	80.4	40.6	83.6	93.4	96.1	96.6
1992	%	72.1	49.1	77.9	37.1	82.1	94.1	96.9	97.0
Study									
1972	%	16.3	39.1	12.6	43.0	7.7	2.7	1.5	1.3
1977	%	18.4	38.9	13.4	51.9	10.9	4.6	2.4	2.1
1982	%	19.8	34.2	11.4	54.9	12.2	4.8	2.5	1.5
1987	%	25.7	48.5	19.6	59.4	16.4	6.6	3.9	3.4
1992	%	27.9	50.9	22.1	62.9	17.9	5.9	3.1	3.0

NOTE: Only Ph.D.s with definite commitments are included. "All definite commitments" includes recipients who reported definite commitments but not type of plans (employment or study). Percentages are based on the number of Ph.D.s with "responses to type of plans." See technical notes in Appendix C for rates of nonresponse to the applicable questions and for further explanation of postgraduation plans.

*Includes mathematics and computer sciences.

SOURCE: National Research Council, Survey of Earned Doctorates.

TABLE 12 Postgraduation Commitments of Doctorate Recipients, by Type of Plans and Demographic Group for Selected Years, 1972-1992

		All Ph.D.s	Men	Women	U.S. Cits.	Perm. Res.	Temp. Res.	U.S. Citizens & Permanent Residents*				
								Asians	Blacks	His-panics	Native Amers.	Whites
All Definite Commitments												
1972	N	23,902	20,546	3,356	20,779	1,198	1,903	N/A	N/A	N/A	N/A	N/A
1977	N	21,345	16,494	4,851	18,331	793	2,174	539	785	331	50	16,873
1982	N	21,429	14,847	6,582	17,842	755	2,745	652	803	429	48	16,385
1987	N	21,360	13,929	7,431	16,816	871	3,633	719	567	483	83	15,508
1992	N	24,704	15,349	9,355	18,179	1,013	5,482	974	701	576	99	16,624
Definite Commitments with Responses to Type of Plans												
1972	N	23,665	20,352	3,313	20,580	1,187	1,878	N/A	N/A	N/A	N/A	N/A
1977	N	21,107	16,314	4,793	18,161	780	2,121	531	770	325	50	16,727
1982	N	21,351	14,792	6,559	17,796	750	2,721	646	798	428	48	16,348
1987	N	21,162	13,815	7,347	16,681	864	3,579	717	555	476	82	15,392
1992	N	24,514	15,257	9,257	18,051	991	5,442	965	680	563	99	16,519
Employment												
1972	%	83.7	83.3	85.8	85.1	70.3	76.5	N/A	N/A	N/A	N/A	N/A
1977	%	81.6	80.9	84.1	82.6	73.2	76.6	69.3	93.4	88.6	82.0	82.1
1982	%	80.2	79.1	82.7	80.5	79.9	78.2	73.5	94.2	86.2	72.9	80.0
1987	%	74.3	72.0	78.8	76.5	70.3	65.4	66.2	86.5	77.9	79.3	76.3
1992	%	72.1	69.3	76.7	75.7	69.3	60.7	64.1	83.5	76.9	80.8	75.6
Study												
1972	%	16.3	16.7	14.2	14.9	29.7	23.5	N/A	N/A	N/A	N/A	N/A
1977	%	18.4	19.1	15.9	17.4	26.8	23.4	30.7	6.6	11.4	18.0	17.9
1982	%	19.8	20.9	17.3	19.5	20.1	21.8	26.5	5.8	13.8	27.1	20.0
1987	%	25.7	28.0	21.2	23.5	29.7	34.6	33.8	13.5	22.1	20.7	23.7
1992	%	27.9	30.7	23.3	24.3	30.7	39.3	35.9	16.5	23.1	19.2	24.4

NOTE: Only Ph.D.s with definite commitments are included. "All definite commitments" includes recipients who reported definite commitments but not type of plans (employment or study). Percentages are based on the number of Ph.D.s with "responses to type of plans." See technical notes in Appendix C for rates of nonresponse to the applicable questions and for further explanation of postgraduation plans.

*Race/ethnicity was not available in 1972.

SOURCE: National Research Council, Survey of Earned Doctorates.

TABLE 13 Postdoctoral Location of Non-U.S. Citizens with Definite Commitments, by Visa Status for Selected Years, 1972-1992

		All Non-U.S. Citizens	Permanent Residents	Temporary Residents
All Definite Commitments				
1972	N	3,101	1,198	1,903
1977	N	2,967	793	2,174
1982	N	3,500	755	2,745
1987	N	4,504	871	3,633
1992	N	6,495	1,013	5,482
Definite Commitments with Responses to Location				
1972	N	3,018	1,161	1,857
1977	N	2,844	763	2,081
1982	N	3,251	711	2,540
1987	N	4,054	789	3,265
1992	N	6,393	999	5,394
U.S. Location				
1972	%	49.9	87.3	26.5
1977	%	50.4	90.7	35.6
1982	%	51.0	90.4	40.0
1987	%	59.0	84.5	52.8
1992	%	63.3	87.4	58.8
Foreign Location				
1972	%	50.1	12.7	73.5
1977	%	49.6	9.3	64.4
1982	%	49.0	9.6	60.0
1987	%	41.0	15.5	47.2
1992	%	36.7	12.6	41.2

NOTE: Only non-U.S. citizen Ph.D.s with definite commitments are included. "All definite commitments" includes recipients who reported definite commitments but not location (U.S. or foreign). Percentages are based on the number with "responses to location." See technical notes in Appendix C for rates of nonresponse to the applicable questions and for further explanation of postgraduation plans.

SOURCE: National Research Council, Survey of Earned Doctorates.

TABLE 14 Postdoctoral Location of Non-U.S. Citizen Doctorate Recipients with Postgraduation Commitments, by Major Field and Visa Status, 1992

Field of Doctorate	Postdoctoral Location									
	Permanent Visas					Temporary Visas				
	Resp. to Location/ Type of Plans (N)	U.S. Location		Foreign Location		Resp. to Location/ Type of Plans (N)	U.S. Location		Foreign Location	
		Empl. (%)	Study (%)	Empl. (%)	Study (%)		Empl. (%)	Study (%)	Empl. (%)	Study (%)
All Fields	978	60.0	27.7	9.4	2.9	5,357	28.9	30.0	32.1	8.9
Physical Sciences	180	43.9	44.4	6.1	5.6	1,354	27.2	44.8	15.4	12.6
Physics/Astronomy	41	19.5	68.3	7.3	4.9	348	12.9	63.2	8.3	15.5
Chemistry	60	31.7	61.7	1.7	5.0	399	17.3	62.4	8.8	11.5
Earth, Atmos., Marine	18	44.4	38.9	16.7	0.0	136	18.4	35.3	30.1	16.2
Mathematics	28	60.7	17.9	10.7	10.7	259	45.2	23.6	18.5	12.7
Computer Sciences	33	81.8	9.1	3.0	6.1	212	52.8	13.2	26.4	7.5
Engineering	192	76.0	16.1	6.8	1.0	1,303	38.1	21.3	34.1	6.5
Life Sciences	195	20.5	66.2	8.7	4.6	1,197	7.8	53.0	28.0	11.2
Biological Sciences	144	11.1	79.2	5.6	4.2	750	6.4	68.9	14.0	10.7
Health Sciences	22	50.0	45.5	0.0	4.5	136	17.6	33.8	38.2	10.3
Agricultural Sciences	29	44.8	17.2	31.0	6.9	311	6.8	23.2	57.2	12.9
Social Sciences*	120	68.3	16.7	13.3	1.7	558	34.6	9.1	49.1	7.2
Psychology	45	66.7	26.7	2.2	4.4	92	29.3	25.0	38.0	7.6
Economics	25	80.0	4.0	16.0	0.0	245	41.2	4.1	50.6	4.1
Poli. Sci./Int'l. Relat.	17	64.7	11.8	23.5	0.0	57	36.8	3.5	49.1	10.5
Humanities	129	86.8	4.7	7.8	0.8	323	45.2	7.1	41.8	5.9
Education	69	72.5	2.9	21.7	2.9	261	21.1	3.8	67.4	7.7
Professional/Other*	93	83.9	3.2	10.8	2.2	361	54.6	1.7	41.0	2.8
Business & Mgmt.	66	90.9	3.0	6.1	0.0	252	62.7	1.6	34.9	0.8

NOTE: Only Ph.D.s with definite commitments are included; see Table 13 for numbers of non-U.S. citizens with commitments. Percentages are based on the number of Ph.D.s with "responses to location/type of plans" in each field. See technical notes in Appendix C for rates of nonresponse to these questions and for further explanation of postgraduation plans.

*Totals include other fields not shown.

SOURCE: National Research Council, Survey of Earned Doctorates

TABLE 15 Employment Sector of Doctorate Recipients with Postgraduation Commitments in the United States, by Broad Field for Selected Years, 1972-1992 (U.S. citizens and permanent residents)

		All Fields	Physical Sci.*	Eng.	Life Sci.	Social Sci.	Human- ities	Educa- tion	Prof./ Other
All Employment Commitments									
1972	N	17,765	2,071	1,809	1,682	3,363	3,196	4,793	851
1977	N	15,202	1,585	1,205	1,308	3,178	2,149	4,665	1,112
1982	N	14,647	1,745	1,024	1,446	2,943	1,845	4,510	1,134
1987	N	13,079	1,366	1,111	1,238	2,606	1,700	3,883	1,175
1992	N	13,972	1,367	1,294	1,348	2,568	2,014	4,089	1,292
Employment Commitments with Responses to Sector									
1972	N	17,688	2,067	1,801	1,674	3,351	3,186	4,764	845
1977	N	15,147	1,583	1,202	1,308	3,167	2,139	4,639	1,109
1982	N	14,563	1,744	1,022	1,442	2,923	1,837	4,465	1,130
1987	N	12,943	1,360	1,110	1,232	2,570	1,681	3,820	1,170
1992	N	13,794	1,360	1,279	1,340	2,513	1,991	4,029	1,282
Academe†									
1972	%	67.1	55.6	26.3	65.5	73.1	92.8	63.4	85.1
1977	%	58.4	41.5	25.4	60.2	61.2	85.0	54.0	75.3
1982	%	49.5	29.1	24.1	53.2	49.1	78.6	45.2	70.1
1987	%	50.2	35.5	29.8	51.7	44.3	81.3	44.2	72.6
1992	%	52.3	36.1	24.1	50.8	48.0	84.6	47.2	73.3
Industry/Self-Employed									
1972	%	10.1	22.0	47.8	10.5	4.4	1.2	1.4	6.0
1977	%	13.1	38.9	50.3	17.4	7.5	3.5	3.1	7.4
1982	%	21.1	58.8	59.9	26.2	15.9	7.9	7.6	9.2
1987	%	19.8	50.3	53.6	24.6	19.6	5.7	6.5	11.3
1992	%	19.1	49.9	57.7	23.3	18.7	3.8	5.7	9.6
Government									
1972	%	11.8	18.9	23.3	17.5	14.8	1.5	8.1	6.5
1977	%	13.2	17.2	21.5	16.7	17.5	2.9	11.8	7.5
1982	%	11.3	10.5	14.1	14.0	15.9	3.1	11.2	7.9
1987	%	10.7	11.4	15.1	16.7	14.3	3.0	9.6	5.7
1992	%	9.7	12.1	15.6	17.4	14.2	2.2	6.9	4.8
Other‡									
1972	%	11.0	3.5	2.6	6.5	7.8	4.6	27.1	2.4
1977	%	15.3	2.3	2.7	5.7	13.9	8.6	31.1	9.8
1982	%	18.2	1.6	2.0	6.6	19.0	10.4	36.1	12.8
1987	%	19.4	2.8	1.4	7.0	21.8	10.0	39.7	10.3
1992	%	18.9	1.8	2.6	8.5	19.1	9.3	40.2	12.3

NOTE: Only Ph.D.s with definite commitments for employment are included. Foreign locations are excluded. "All employment commitments" includes recipients whose employment sector is unknown; percentages are based on the number with "responses to sector." See technical notes in Appendix C for rates of nonresponse to this question.

*Includes mathematics and computer sciences.

†Academe includes two- and four-year colleges and universities and medical schools. Elementary and secondary schools are included in "Other."

‡"Other" is mainly composed of elementary and secondary schools and nonprofit organizations.

SOURCE: National Research Council, Survey of Earned Doctorates.

TABLE 16 Employment Sector of Doctorate Recipients with Postgraduation Commitments in the United States, by Demographic Group for Selected Years, 1972-1992

	U.S. Citizens & Permanent Residents*									U.S. Cits.	Perm. Res.	Temp. Res.
	All Ph.D.s	Men	Women	Asians	Blacks	Hispanics	Native Amers.	Whites				
All Employment Commitments												
1972	N 17,765	15,126	2,639	N/A	N/A	N/A	N/A	N/A	N/A	17,040	725	225
1977	N 15,202	11,433	3,769	354	704	280	41	13,425	14,694	508	384	
1982	N 14,647	9,606	5,041	451	738	357	34	12,858	14,107	540	608	
1987	N 13,079	7,725	5,354	417	470	358	65	11,557	12,574	505	808	
1992	N 13,972	7,629	6,343	554	556	414	79	12,229	13,378	594	1,544	
Employment Commitments with Responses to Sector												
1972	N 17,688	15,064	2,624	N/A	N/A	N/A	N/A	N/A	16,972	716	225	
1977	N 15,147	11,393	3,754	353	697	279	41	13,380	14,643	504	384	
1982	N 14,563	9,563	5,000	448	719	353	33	12,802	14,026	537	608	
1987	N 12,943	7,677	5,266	408	456	352	64	11,456	12,443	500	807	
1992	N 13,794	7,546	6,248	540	541	409	78	12,090	13,212	582	1,528	
Academe†												
1972	% 67.1	65.1	78.5	N/A	N/A	N/A	N/A	N/A	67.2	64.0	70.2	
1977	% 58.4	55.0	68.6	38.0	67.3	71.3	51.2	58.3	58.7	49.4	52.1	
1982	% 49.5	45.8	56.5	33.5	53.0	54.4	45.5	49.7	49.7	43.9	49.8	
1987	% 50.2	47.0	54.8	35.8	51.5	54.3	46.9	50.5	50.0	54.0	63.1	
1992	% 52.3	47.6	58.0	38.9	54.5	59.4	56.4	52.5	52.2	55.2	54.4	
Industry/Self-Employed												
1972	% 10.1	11.5	2.6	N/A	N/A	N/A	N/A	N/A	9.4	27.4	13.8	
1977	% 13.1	15.6	5.6	48.4	4.9	5.0	9.8	12.6	12.2	40.1	34.6	
1982	% 21.1	25.6	12.4	53.1	7.9	14.2	21.2	20.8	20.1	47.3	42.4	
1987	% 19.8	24.1	13.5	48.5	9.0	13.4	18.8	19.3	19.2	35.2	29.9	
1992	% 19.1	24.6	12.4	45.0	9.8	15.9	12.8	18.4	18.4	34.9	39.5	
Government												
1972	% 11.8	12.8	5.9	N/A	N/A	N/A	N/A	N/A	12.1	3.8	1.3	
1977	% 13.2	14.6	8.7	9.3	9.2	14.0	19.5	13.5	13.5	4.4	3.4	
1982	% 11.3	11.9	10.0	8.0	15.3	13.9	24.2	11.0	11.5	4.5	1.3	
1987	% 10.7	12.4	8.1	10.0	13.6	12.8	12.5	10.5	10.9	4.0	2.2	
1992	% 9.7	11.2	7.9	9.6	10.0	8.3	11.5	9.7	10.0	4.0	1.8	
Other‡												
1972	% 11.0	10.6	13.0	N/A	N/A	N/A	N/A	N/A	11.2	4.9	14.7	
1977	% 15.3	14.7	17.1	4.2	18.7	9.7	19.5	15.7	15.6	6.2	9.9	
1982	% 18.2	16.6	21.2	5.4	23.8	17.6	9.1	18.5	18.7	4.3	6.4	
1987	% 19.4	16.5	23.6	5.6	25.9	19.6	21.9	19.6	19.9	6.8	4.8	
1992	% 18.9	16.7	21.7	6.5	25.7	16.4	19.2	19.4	19.5	6.0	4.3	

NOTE: Only doctorates with definite commitments for employment are included. Foreign locations are excluded. "All employment commitments" includes recipients whose employment sector is unknown; percentages are based on the number with "responses to sector." See technical notes in Appendix C for rates of nonresponse to this question.

*Race/ethnicity was not available in 1972.

†Academe includes two- and four-year colleges and universities and medical schools. Elementary and secondary schools are included in "Other."

‡"Other" is mainly composed of elementary and secondary schools and nonprofit organizations.

SOURCE: National Research Council, Survey of Earned Doctorates.

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APPENDIX A: The Seven Basic Tables, 1992

Appendix A includes the following seven tables:

- A-1 Number of Doctorate Recipients, by Gender and Subfield, 1992
- A-2 Number of Doctorate Recipients, by Citizenship, Race/Ethnicity, and Subfield, 1992
- A-3 Statistical Profile of Doctorate Recipients, by Major Field, 1992
- A-4 Statistical Profile of Doctorate Recipients, by Race/Ethnicity and Citizenship, 1992
- A-5 Sources of Graduate School Support for Doctorate Recipients, by Broad Field and Gender, 1992
- A-6 State of Doctoral Institution of Doctorate Recipients, by Broad Field and Gender, 1992
- A-7 Institutions Granting Doctorates, by Major Field, 1992

*** IMPORTANT NOTICE ***

The estimates reported for the Survey of Earned Doctorates (SED) are simple tabulations of all available information, with no adjustment for nonresponse. Thus, differences in response rates from year to year can produce numerical fluctuations which are unrelated to true trends. The numbers presented in this report may be underestimated, depending on the variables displayed.

The SED has always enjoyed an unusually high response, but in 1981 it began to drop, falling from a high of 96.2 in 1980 to a low of 92.3 in 1989. The decline in self-report response rates evident throughout the 1980s was reversed in 1990, however, and has increased each year since to its current level of 95.0 percent. (Note: These rates represent the proportion of questionnaires completed by the doctorate recipients and thus are *self-report rates*. Forms completed by either the doctoral institution or NRC staff are not included in these self-report rates *but are* included in all tabulations in this report. The self-report rate for 1992 may increase somewhat in the next year if additional questionnaires are received from doctorate recipients. See page 76 in Appendix C for a table showing survey response rates from 1980 to 1992.)

Item response rates have shown a parallel improvement—both a natural consequence of the increase in the overall self-report rate and a result of format revisions to the questionnaire and follow-ups for missing information. In 1990, new follow-up procedures were implemented, increasing coverage of several variables (birth year, gender, race/ethnicity, citizenship status, country of citizenship, BA institution, year of BA, and postgraduation plans). These new procedures have substantially improved response rates, particularly for race/ethnicity and citizenship, resulting in increased counts of minority Ph.D.s. The most significant adjustment was to the data on black Ph.D.s, whose numbers for the aggregate of citizenship groups increased by 7.5 percent in the year after survey closure. This was true for both the 1990 and 1991 surveys. Most follow-up responses, though, were not included in the initial reporting of survey results in *Summary Report 1990* and *1991* because they were not received until *after* closure of the surveys. Updated 1990 numbers reflecting additional data were displayed in *Summary Report 1991*, and updated 1991 numbers are shown in Appendix Table B2 (page 72) in this year's report. The data for 1992 will likewise be subject to further revision, and adjustments will be presented in next year's report. However, the 1992 survey cycle was extended one month to allow receipt of more follow-up information before closure, and it is anticipated that adjustments will be minimal compared to those in 1990 and 1991.

TABLE A-1 and TABLE A-2: These tables display data for the most recent year by subfield of doctorate. The subfields correspond to the fields on the questionnaire's Specialties List located at the back of this report. Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates (SED). See inside the back cover for a description of field groupings as reported in these tables. The "general" field categories—e.g., "chemistry, general"—include individuals who either received the doctorate in the general subject area or did not indicate a particular specialty field. The "other" field categories—e.g., "chemistry, other"—include individuals whose specified doctoral discipline was not among the specialty fields.

Table A-1 presents data by doctoral specialty and gender. Table A-2 displays doctoral specialty by citizenship and race/ethnicity. For a detailed description of the racial/ethnic variable, see the explanatory note for Table A-4. *Refer to the notice on page 35 for important information on recent increases in response rates and their impact on time-series data.*

TABLE A-3: Table A-3 is composed of three two-page tables. The first table includes data on *all* doctorate recipients from the most recent year; the other two tables present the same data by gender. Field groupings may differ from those in reports published by federal sponsors of the SED. See inside the back cover for a description of field groupings as reported in these tables; see the questionnaire's Specialties List at the back of the report for the names and codes of the subfields included. Terms requiring definition are as follows:

- *Median Age at Doctorate:* One-half received the doctorate at or before this age. A recipient's age is derived by subtracting the year of birth from the calendar year of doctorate. Months are not included in the computation.
- *Percentage with Master's:* The percentage of doctorate recipients in a field who received a master's degree in any field before earning the doctorate.
- *Median Time Lapse:* "Total Time" refers to total calendar time elapsed between the year of baccalaureate and the year of doctorate; "Registered Time" refers to the total time registered in a university between baccalaureate and doctorate. Enrollment includes years of attendance not related to a recipient's doctoral program. Months are excluded from the computations because they are rarely reported.

Postgraduation Plans: Each year's doctorate recipients provide information on postgraduation employment or study plans in response to items 20-24 on the survey form. Since the questionnaire is filled out around the time the doctorate is awarded, a recipient's plans are subject to change. However, comparisons with the longitudinal Survey of Doctorate Recipients (SDR) have shown SED data to be a reasonable indicator of actual employment status in the year following the doctorate. (The SDR, also conducted by the National Research Council, is a follow-up employment survey of a

sample of doctorate recipients in science, engineering, and humanities fields.) For a comparison of the immediate postgraduation plans of Ph.D.s in the 1990 SED with their employment status in the 1991 SDR, see the table below; refer to the footnote on page 84 in Appendix C for additional information on those Ph.D.s who reported *definite* commitments at the time they completed the SED questionnaire.

COMPARISON OF PH.D.S' IMMEDIATE POSTGRADUATION PLANS IN THE 1990 SED
WITH THEIR EMPLOYMENT STATUS 1-2 YEARS LATER IN THE 1991 SDR

Employment Status in 1991 SDR

<i>Plans in 1990 SED</i>	Total	Postdoc	Total Empl	Acad	Govt	Indus/ Self	Other Empl	Unkn Sector	Not Empl
	Postdoc Study *	546	50.4	44.5	26.2	3.5	9.5	5.1	0.2
Employment	1258	2.1	94.8	51.8	5.9	27.7	9.1	0.3	3.1
Academe	654	2.1	96.0	86.9	1.8	4.7	2.3	0.3	1.8
Government	96	2.1	94.8	16.7	47.9	13.5	16.7	0.0	3.1
Industry/Self-employed	351	1.4	95.2	8.5	2.0	80.6	3.7	0.3	3.1
Other Sector	96	3.1	93.8	15.6	3.1	10.4	64.6	0.0	3.1
Unknown Sector	61	3.3	80.3	37.7	9.8	18.0	13.1	1.6	16.4

NOTE: SED = Survey of Earned Doctorates; SDR = Survey of Doctorate Recipients, whose sample is drawn from the SED. This table includes only 1990 Ph.D.s who were located in the United States in the 1991 SDR (total $n = 1901$). The shaded percentages represent the proportions of Ph.D.s whose employment status in the 1991 SDR was consistent with their postgraduation plans in the 1990 SED.

* This comparison may underestimate postdoctoral study because it is likely that some Ph.D.s who reported plans for postdoctoral study in the SED had completed their postdoctoral appointments by the time the 1991 SDR was distributed. There is a gap of 1-2 years between the Ph.D. graduation dates in the SED and the reference date for employment in the 1991 SDR.

In Table A-3, the postgraduation plans of doctorate recipients are grouped as follows: "Postdoctoral Study Plans" (fellowship, research associateship, traineeship, other), "Planned Employment" (educational institution, industry, etc.), or "Postdoctoral Plans Unknown." These categories include recipients who were still negotiating or seeking positions at the time of survey completion, as well as those whose plans were definite. The sum of these lines equals 100 percent for each column, with allowance for rounding: for example, 55.7 percent of all chemists had postdoctoral study plans, 37.7 percent planned to be employed, and 6.6 percent did not report their postgraduation plans, totaling 100 percent. The study and employment rows are further subdivided. The data on study plans show that 25.6 percent of all chemists planned to pursue postdoctoral fellowships; 28.4 percent, research associateships; 0.7 percent, traineeships; and 1.0 percent, some other form of postdoctoral study. These percentages sum to 55.7 percent, the proportion of chemists who reported plans for postdoctoral study. The employment row is similarly subdivided by type of employer. The percentages for these

rows add to 37.7 percent—the proportion of chemistry Ph.D.s who planned employment. The category for educational institutions includes elementary and secondary schools as well as colleges and universities, and the category for government includes military service.

The four lines of data beginning with "Definite Postdoctoral Study" distinguish between individuals who had definite postgraduation plans at the time of survey completion (item 20: "Am returning to, or continuing in, predoctoral employment" or "Have signed contract or made definite commitment") and those who were still seeking employment or postdoctoral study (item 20: "Am negotiating with one or more specific organizations," "Am seeking position but have no specific prospects," or "Other"). These four lines, when added to the prior line, "Postdoctoral Plans Unknown," total 100 percent with allowance for rounding. The two lines "Definite Postdoctoral Study" and "Seeking Postdoctoral Study" add to give the percentage for "Postdoctoral Study Plans"; the two lines "Definite Employment" and "Seeking Employment" add to give the percentage for "Planned Employment After Doctorate."

Percentages showing the distribution of doctorate recipients by postdoctoral work activity and region of employment are based only on the number of recipients who had *definite employment* commitments at the time they completed the questionnaire. These percentages exclude recipients who planned postdoctoral study (as described above) and recipients who were still *seeking* employment at the time they completed the questionnaire. (Note that the rows on specific postdoctoral study and employment plans discussed earlier include individuals whose plans were *not definite*). Revisions to the questionnaire format appear to have resulted in higher rates of nonresponse to the item on work activity in recent years. Nonresponse was 14.0 percent in 1990, 13.9 percent in 1991, and 14.6 percent in 1992, compared to only 6.2 percent in 1989.

The U.S. regions of employment shown in Table A-3 include the following states and territories:

<i>New England:</i>	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
<i>Middle Atlantic:</i>	New Jersey, New York, Pennsylvania
<i>East North Central:</i>	Illinois, Indiana, Michigan, Ohio, Wisconsin
<i>West North Central:</i>	Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota
<i>South Atlantic:</i>	Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia
<i>East South Central:</i>	Alabama, Kentucky, Mississippi, Tennessee
<i>West South Central:</i>	Arkansas, Louisiana, Oklahoma, Texas
<i>Mountain:</i>	Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming
<i>Pacific & Insular:</i>	Alaska, California, Hawaii, Oregon, Washington, American Samoa, Guam, Puerto Rico, Trust Territory, Virgin Islands

TABLE A-4: Table A-4 contains data by race/ethnicity and citizenship for selected variables included in Tables A-3 and A-5. Field groupings may differ from those in reports published by federal sponsors of the SED. See inside the back cover for a description of field groupings as reported in these tables; refer to the questionnaire's Specialties List at the back of the report for the names and codes of the subfields included. *See the notice on page 35 for important information on recent increases in response rates and their impact on time-series data.*

The racial/ethnic question has undergone several revisions over the years. In 1977, it was modified to correspond to a standard 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 effect of these changes is detailed on page 13 of *Summary Report 1977*. (Note: Changes in the OMB guidelines prompted the moving of persons having origins in the Indian subcontinent from the white category to the Asian category.) In 1980, the item was further revised in two ways: (1) the Hispanic category was subdivided into Puerto Rican, Mexican American, and "other" Hispanic to provide more detail for users of the racial/ethnic data, and (2) respondents were asked to check only one racial category. (Before 1980, doctorate recipients could check more than one category to indicate their race. When the data were compiled, however, all persons who checked American Indian, Asian, or Hispanic and also checked white were included in the minority group category. Those who checked black and any other category were designated as black.) The item was modified again in 1982 to separate the questions on race and ethnicity. Since then, respondents have been asked to first check one of the four racial group categories (American Indian, Asian, black, or white) and then to indicate whether or not they are Hispanic. In Table A-4, Ph.D.s who reported Hispanic heritage, regardless of racial designation, are included in one of three Hispanic groups: Puerto Rican, Mexican American, or Other Hispanic. The remaining survey respondents are then counted in the respective racial groups. (Note: Doctorate recipients who checked the category "American Indian or Alaskan Native" are identified as Native American in this report.)

In the section on "Graduate School Support," a recipient counts in more than one category if support was received from multiple sources. Because a student counts once for each of his/her sources of support, the vertical percentages sum to more than 100 percent. See the explanatory note on Appendix Table A-5 for further detail. (Data on the *primary* source of support for doctorate recipients are presented in the body of the report.)

The other sections of Table A-4 correspond to many of those in Appendix Table A-3. The reader is referred to the explanatory note on Table A-3 for additional information.

TABLE A-5: Table A-5 displays data reported in item 17 on sources of financial support received during graduate school, by broad field and gender of recipient. Field groupings may differ from those in reports published by federal sponsors of the SED. See inside the back cover for a description of field groupings as reported in this table; see the questionnaire's Specialties List at the back of the report for the names and codes of the subfields included.

A recipient counts in more than one category in Table A-5 if support was received from multiple sources. Because a student counts once for each of his/her sources of support, the vertical percentages sum to more than 100 percent. (Data on the *primary* source of support for doctorate recipients are presented in the body of the report.)

For the last three years, federal research assistantships (RAs) have been aggregated with university RAs and shown under "University" in this table. The RA data were combined because focus groups of doctoral candidates have indicated uncertainty as to the source of their RA funding, and it is probable that some RAs have been reported incorrectly as university rather than federal. The reader should note that because percentages for university support appear higher and federal support lower in tables where RAs are aggregated, it is inadvisable to compare results from the 1990-1992 surveys with those from earlier years.

The data in Table A-5 should be interpreted as follows: 136 male doctorate recipients in the physical sciences in 1992 reported financial support from federal fellowships or traineeships during graduate school. This number is 2.8 percent of the male physical sciences doctorates who answered the question and 12.2 percent of the males in all fields who reported federal fellowship or traineeship support.

TABLE A-6: This table shows, by broad field and gender, the number of persons receiving a doctorate in the most recent year from institutions in each of the 50 states, the District of Columbia, and Puerto Rico. Field groupings may differ from those in reports published by federal sponsors of the SED. See inside the back cover for a description of field groupings as reported in this table; see the questionnaire's Specialties List at the back of the report for the names and codes of the subfields included.

TABLE A-7: This table displays data by doctorate-granting institution and major field. It includes all institutions in the United States (the 50 states, the District of Columbia, and Puerto Rico) which awarded doctoral degrees in the most recent year. Field groupings may differ from those in reports published by federal sponsors of the SED and from departmental designations at institutions. See inside the back cover for a description of field groupings as reported in this table; see the questionnaire's Specialties List at the back of the report for the names and codes of the subfields included.

APPENDIX TABLE A-1 Number of Doctorate Recipients, by Gender and Subfield, 1992

Subfield of Doctorate	Number of Doctorates			Subfield of Doctorate	Number of Doctorates		
	Total	Men	Women		Total	Men	Women
TOTAL ALL FIELDS	38,814	24,448	14,366				
PHYSICAL SCIENCES	6,498	5,216	1,282				
MATHEMATICS	1,058	853	205	Electrical, Electronics	1,279	1,178	101
Applied Mathematics	213	169	44	Engineering Mechanics	132	121	11
Algebra	69	56	13	Engineering Physics	25	23	2
Analysis and Functional Analysis	105	87	18	Engineering Science	51	45	6
Geometry	45	39	6	Environmental Health Engineering	54	40	14
Logic	28	26	2	Industrial	197	172	25
Number Theory	25	21	4	Materials Science	365	315	50
Math Probability and Statistics	217	171	46	Mechanical	856	823	33
Topology	58	42	16	Metallurgical	78	76	2
Computing Theory and Practice	12	12	0	Mining and Mineral	26	23	3
Operations Research	22	16	6	Nuclear	120	111	9
Mathematics, General	209	172	37	Ocean	21	21	0
Mathematics, Other	55	42	13	Operations Research	56	45	11
				Petroleum	54	51	3
COMPUTER SCIENCE	867	747	120	Polymer	64	55	9
Computer Sciences	789	698	91	Systems Engineering	37	34	3
Information Sciences and Systems	78	49	29	Engineering, General	63	60	3
				Engineering, Other	103	90	13
PHYSICS AND ASTRONOMY	1,537	1,351	186	LIFE SCIENCES	7,108	4,314	2,794
Astronomy	55	44	11	BIOLOGICAL SCIENCES	4,794	2,969	1,825
Astrophysics	79	71	8	Biochemistry	714	432	282
Acoustics	18	18	0	Biophysics	125	92	33
Atomic and Molecular	85	79	6	Bacteriology	13	8	5
Elementary Particles	153	141	12	Plant Genetics	33	25	8
Fluids	17	16	1	Plant Pathology	32	22	10
Nuclear Structure	86	74	12	Plant Physiology	68	52	16
Optics	94	85	9	Botany, Other	107	63	44
Plasma	65	61	4	Anatomy	75	44	31
Polymer	17	16	1	Biometrics and Biostatistics	63	39	24
Solid State	408	355	53	Cell Biology	188	108	80
Physics, General	297	255	42	Ecology	180	115	65
Physics, Other	163	136	27	Developmental Biology/Embryology	48	26	22
				Endocrinology	27	15	12
CHEMISTRY	2,212	1,633	579	Entomology	139	104	35
Analytical	302	207	95	Immunology	180	98	82
Inorganic	268	199	69	Molecular Biology	526	332	194
Nuclear	7	6	1	Microbiology	377	221	156
Organic	512	393	119	Neurosciences	237	145	92
Pharmaceutical	68	41	27	Nutritional Sciences	133	37	96
Physical	399	289	110	Parasitology	17	9	8
Polymer	83	71	12	Toxicology	104	72	32
Theoretical	59	43	16	Human and Animal Genetics	142	82	60
Chemistry, General	448	343	105	Human and Animal Pathology	113	72	41
Chemistry, Other	66	41	25	Human and Animal Pharmacology	279	186	93
				Human and Animal Physiology	266	184	82
EARTH, ATMOS. & MARINE SCI	824	632	192	Zoology, Other	134	89	45
Atmospheric Physics and Chemistry	36	31	5	Biological Sciences, General	316	201	115
Atmospheric Dynamics	22	18	4	Biological Sciences, Other	158	96	62
Meteorology	28	18	10	HEALTH SCIENCES	1,110	402	708
Atmos and Meteorological Sci, Gen	28	21	7	Audiology and Speech Pathology	82	21	61
Atmos and Meteorological Sci, Other	6	5	1	Environmental Health	44	28	16
Geology	166	131	35	Public Health	157	61	96
Geochemistry	62	46	16	Epidemiology	108	45	63
Geophysics and Seismology	106	84	22	Nursing	337	12	325
Paleontology	25	23	2	Pharmacy	159	102	57
Mineralogy, Petrology	29	23	6	Rehabilitation/Therapeutic Services	25	12	13
Stratigraphy, Sedimentation	23	13	10	Veterinary Medicine	63	49	14
Geomorphology and Glacial Geology	12	7	5	Health Sciences, General	30	12	18
Geological Sciences, General	20	16	4	Health Sciences, Other	105	60	45
Geological Sciences, Other	31	24	7	AGRICULTURAL SCIENCES	1,204	943	261
Environmental Sciences	57	40	17	Agricultural Economics	141	113	28
Hydrology and Water Resources	29	22	7	Animal Breeding and Genetics	23	17	6
Oceanography	82	64	18	Animal Nutrition	41	33	8
Marine Sciences	32	21	11	Dairy Science	14	12	2
Physical Sciences, Other	30	25	5	Poultry Science	22	16	6
				Fisheries Science	26	25	1
ENGINEERING	5,437	4,934	503	Animal Sciences, Other	97	76	21
Aerospace, Aeronautic & Astronautic	234	226	8	Agronomy	123	100	23
Agricultural	84	78	6	Plant Breeding and Genetics	82	70	12
Bioengineering and Biomedical	147	114	33	Plant Pathology	63	43	20
Ceramic	42	33	9	Plant Sciences, Other	29	23	6
Chemical	606	506	100	Food Engineering	14	12	2
Civil	539	503	36	Food Sciences, Other	151	91	60
Communications	30	29	1	Soil Chemistry/Microbiology	24	21	3
Computer	174	162	12	Soil Sciences, Other	63	51	12
				Horticulture Science	65	49	16
				Forest Biology	29	21	8
				Forest Engineering	2	2	0

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. See inside the back cover for a description of fields as reported in this table. Refer also to the explanatory note about this table in front of Appendix A.

APPENDIX TABLE A-1 (Continued)

Subfield of Doctorate	Number of Doctorates			Subfield of Doctorate	Number of Doctorates						
	Total	Men	Women		Total	Men	Women				
Forest Management	16	15	1	<u>EDUCATION</u>	<u>6,522</u>	<u>2,679</u>	<u>3,943</u>				
Wood Science	21	19	2								
Renewable Natural Resources	9	8	1								
Forestry & Related Sci, Other	61	53	8								
Wildlife/Range Management	55	48	7								
Agriculture, General	9	7	2								
Agriculture, Other	24	18	6								
<u>SOCIAL SCIENCES (INCL PSYCH)</u>	<u>6,205</u>	<u>3,261</u>	<u>2,944</u>					Curriculum and Instruction	899	295	604
Anthropology	320	165	155					Educational Admin and Supervision	1,285	635	650
Area Studies	33	22	11					Educational Leadership	680	315	365
Criminology	37	22	15					Educational Media	62	36	26
Demography	17	12	5					Educational Statistics and Research	61	25	36
Economics	885	696	189					Educational Testing, Eval and Meas	45	22	23
Econometrics	25	23	2					Educational Psychology	346	108	238
Geography	111	82	29					School Psychology	88	25	63
International Relations	76	52	24	Social Foundations	101	52	49				
Political Science and Government	514	372	142	Special Education	259	68	191				
Public Policy Studies	107	68	39	Student Counseling & Personnel Serv	254	102	152				
Sociology	495	253	242	Higher Education Research	379	152	227				
Statistics	29	18	11	Pre-elementary Education	98	12	86				
Urban Studies	86	55	31	Elementary Education	73	15	58				
Social Sciences, General	33	14	19	Secondary Education	28	12	16				
Social Sciences, Other	185	69	116	Adult and Continuing Education	208	84	124				
<u>PSYCHOLOGY</u>	<u>3,252</u>	<u>1,338</u>	<u>1,914</u>	<u>TEACHING FIELDS</u>	<u>1,003</u>	<u>414</u>	<u>589</u>				
Clinical	1,298	498	800	Agricultural Education	43	31	12				
Cognitive	102	55	47	Art Education	46	11	35				
Comparative	2	0	2	Business Education	16	8	8				
Counseling	508	218	290	English Education	61	12	49				
Developmental	170	39	131	Foreign Languages Education	50	20	30				
Experimental	154	81	73	Health Education	98	26	72				
Educational	91	22	69	Home Economics Education	12	0	12				
Industrial and Organizational	138	74	64	Industrial Arts Education	11	9	2				
Personality	17	9	8	Mathematics Education	62	25	37				
Physiological	55	30	25	Music Education	96	51	45				
Psychometrics	5	3	2	Nursing Education	29	0	29				
Quantitative	10	5	5	Physical Education	167	95	72				
School	88	29	59	Reading Education	121	18	103				
Social	139	61	78	Science Education	73	44	29				
Psychology, General	294	130	164	Social Science Education	19	11	8				
Psychology, Other	181	84	97	Technical Education	35	25	10				
<u>HUMANITIES</u>	<u>4,444</u>	<u>2,385</u>	<u>2,059</u>	Trade and Industrial Education	11	8	3				
History, American	277	181	96	Other Teaching Fields	53	20	33				
History, European	176	111	65	Education, General	427	154	273				
History of Science	28	20	8	Education, Other	326	153	173				
History, General	104	78	26	<u>PROFESSIONAL/OTHER FIELDS</u>	<u>2,500</u>	<u>1,659</u>	<u>841</u>				
History, Other	140	87	53	<u>BUSINESS AND MANAGEMENT</u>	<u>1,248</u>	<u>948</u>	<u>300</u>				
Classics	58	36	22	Accounting	180	124	56				
Comparative Literature	163	56	97	Banking and Finance	172	148	24				
Linguistics	266	133	133	Business Admin and Management	242	188	54				
Speech, Debate, and Rhetoric	98	55	43	Business Economics	21	16	5				
Letters, General	18	9	9	Management Information Systems	103	82	21				
Letters, Other	38	12	26	Marketing Management and Research	139	102	37				
American Studies	81	34	47	Operations Research	67	58	9				
Archeology	33	16	17	Organizational Behavior	80	38	42				
Art History and Criticism	153	43	110	Business and Management, General	112	97	15				
Music	641	403	238	Business and Management, Other	132	95	37				
Philosophy	280	207	73	<u>COMMUNICATIONS</u>	<u>330</u>	<u>174</u>	<u>156</u>				
Religion	231	178	53	Communications Research	45	24	21				
Theatre	95	51	44	Mass Communications	85	54	31				
<u>LANGUAGE AND LITERATURE</u>	<u>1,465</u>	<u>614</u>	<u>851</u>	Communication Theory	47	22	25				
American	291	128	163	Communications, General	76	37	39				
English	612	258	354	Communications, Other	77	37	40				
French	124	35	89	<u>OTHER PROFESSIONAL FIELDS</u>	<u>882</u>	<u>517</u>	<u>365</u>				
German	96	33	63	Architecture & Environmental Design	61	40	21				
Italian	20	9	11	Home Economics	58	9	49				
Spanish	179	74	105	Law	20	16	4				
Russian	28	14	14	Library and Archival Science	51	18	33				
Slavic	15	2	13	Public Administration	109	79	30				
Chinese	20	15	5	Social Work	248	92	156				
Japanese	12	6	6	Theology	292	241	51				
Hebrew	20	15	5	Professional Fields, General	1	0	1				
Arabic	12	5	7	Professional Fields, Other	42	22	20				
Other Languages	36	20	16	<u>OTHER FIELDS</u>	<u>40</u>	<u>20</u>	<u>20</u>				
Humanities, General	21	9	12								
Humanities, Other	78	42	36								

SOURCE: National Research Council, Survey of Earned Doctorates.

APPENDIX TABLE A-2 Number of Doctorate Recipients, by Citizenship, Race/Ethnicity, and Subfield, 1992

Subfield of Doctorate	Total Doctorates*	Non-U.S. Citizens Temp. Visas	U.S. Citizens and Non-U.S. with Permanent Visas								
			Total	Native Amer.	Asian	Black	White	Puerto Rican	Mex-ican Amer.	Other His-panic	Other & Unk
TOTAL ALL FIELDS	38,814	9,888	27,717	148	1,731	1,092	23,425	211	217	454	439
PHYSICAL SCIENCES	6,498	2,447	3,874	17	388	40	3,243	26	23	59	78
MATHEMATICS	1,058	511	505	2	51	4	423	2	4	6	13
Applied Mathematics	213	100	112	1	15	0	92	0	1	3	0
Algebra	69	31	37	0	5	0	31	0	0	1	0
Analysis and Functional Analysis	105	58	47	0	2	2	42	0	0	1	0
Geometry	45	26	19	0	2	0	15	0	0	0	2
Logic	28	8	20	0	2	0	18	0	0	0	0
Number Theory	25	11	14	0	1	0	13	0	0	0	0
Math Probability and Statistics	217	121	93	1	12	1	74	1	1	0	3
Topology	58	19	39	0	0	0	38	0	1	0	0
Computing Theory and Practice	12	5	7	0	0	0	6	0	0	0	1
Operations Research	22	12	10	0	0	0	9	0	0	0	1
Mathematics, General	209	95	77	0	12	1	57	1	0	1	5
Mathematics, Other	55	25	30	0	0	0	28	0	1	0	1
COMPUTER SCIENCE	867	364	486	2	86	5	376	1	3	4	9
Computer Sciences	789	337	436	2	79	5	334	1	3	3	9
Information Sciences and Systems	78	27	50	0	7	0	42	0	0	0	0
PHYSICS AND ASTRONOMY	1,537	607	893	6	92	7	733	6	3	21	25
Astronomy	55	7	48	0	1	0	45	0	0	1	1
Astrophysics	79	21	58	0	3	1	50	1	0	2	1
Acoustics	18	4	14	0	0	1	12	0	0	0	1
Atomic and Molecular	85	30	54	0	6	0	47	0	0	1	0
Elementary Particles	153	58	94	0	9	1	74	0	0	4	6
Fluids	17	3	14	0	1	0	13	0	0	0	0
Nuclear Structure	86	34	52	0	6	1	42	1	0	1	1
Optics	94	27	67	0	7	0	57	0	0	3	0
Plasma	65	17	48	1	3	2	41	0	0	0	1
Polymer	17	9	8	0	0	0	8	0	0	0	0
Solid State	408	198	209	3	29	1	164	2	3	4	3
Physics, General	297	136	134	2	16	0	101	2	0	4	9
Physics, Other	163	63	93	0	11	0	79	0	0	1	2
CHEMISTRY	2,212	722	1,432	6	132	17	1,211	14	6	22	24
Analytical	302	85	217	1	13	0	192	4	1	2	4
Inorganic	268	67	201	1	15	3	173	1	1	3	4
Nuclear	7	2	5	0	0	0	5	0	0	0	0
Organic	512	164	347	2	33	3	299	1	1	6	2
Pharmaceutical	68	24	44	0	7	2	34	0	0	0	1
Physical	399	179	269	0	20	1	239	1	2	3	3
Polymer	83	36	47	0	7	1	34	0	1	1	3
Theoretical	59	24	35	0	4	0	29	1	0	1	0
Chemistry, General	448	168	225	1	29	2	176	5	0	5	7
Chemistry, Other	66	23	42	1	4	5	30	1	0	1	0
EARTH, ATMOS., & MARINE SCI	824	243	558	1	27	7	500	3	7	6	7
Atmospheric Physics and Chemistry	36	14	21	0	4	0	17	0	0	0	0
Atmospheric Dynamics	22	8	14	0	0	0	13	0	1	0	0
Meteorology	28	16	12	0	1	0	10	0	0	1	0
Atmos and Meteorological Sci, Gen	28	8	15	0	1	2	12	0	0	0	0
Atmos and Meteorological Sci, Other	6	1	5	0	0	1	4	0	0	0	0
Geology	166	35	130	0	3	2	118	0	2	1	4
Geochemistry	62	12	49	1	0	1	47	0	0	0	0
Geophysics and Seismology	106	45	59	0	6	0	50	1	1	0	1
Paleontology	25	3	22	0	1	0	20	0	1	0	0
Mineralogy, Petrology	29	6	23	0	0	0	23	0	0	0	0
Stratigraphy, Sedimentation	23	2	21	0	0	0	20	0	0	1	0
Geomorphology and Glacial Geology	12	2	10	0	0	0	9	1	0	0	0
Geological Sciences, General	20	4	11	0	1	0	9	0	0	1	0
Geological Sciences, Other	31	13	18	0	2	0	15	0	0	0	1
Environmental Sciences	57	14	43	0	3	0	37	0	2	1	0
Hydrology and Water Resources	29	12	17	0	0	0	17	0	0	0	0
Oceanography	82	29	47	0	5	0	40	1	0	1	0
Marine Sciences	32	11	21	0	0	0	21	0	0	0	0
Physical Sciences, Other	30	8	20	0	0	1	18	0	0	0	1
ENGINEERING	5,437	2,735	2,510	11	447	48	1,874	14	10	48	58
Aerospace, Aeronautic & Astronautic	234	111	103	0	9	3	83	1	1	3	3
Agricultural	84	48	33	0	1	0	32	0	0	0	0
Bioengineering and Biomedical	147	54	91	2	12	0	74	0	0	1	2
Ceramic	42	16	25	0	4	1	19	0	1	0	0
Chemical	606	271	327	1	43	9	253	3	1	10	7
Civil	539	335	183	1	28	3	142	1	1	4	3
Communications	30	17	13	0	3	1	8	0	0	0	1
Computer	174	96	74	1	18	1	46	2	0	3	3

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. See inside the back cover for a description of fields as reported in this table. Refer also to the explanatory note about this table in front of Appendix A.

*Includes individuals who did not report their citizenship at time of doctorate

APPENDIX TABLE A-2 (Continued)

Subfield of Doctorate	Total Doctorates*	Non-U.S. Citizens Temp. Visas	U.S. Citizens and Non-U.S. with Permanent Visas								
			Total	Native Amer.	Asian	Black	White	Puerto Rican	Mex-ican Amer.	Other His-panic	Other & Unk
Electrical, Electronics	1,279	611	628	3	153	15	431	1	3	8	14
Engineering Mechanics	112	79	46	0	3	1	39	0	0	2	1
Engineering Physics	25	5	20	0	3	0	16	0	0	1	0
Engineering Science	51	22	28	0	1	2	24	0	0	1	0
Environmental Health Engineering	54	21	31	0	5	0	24	0	1	0	1
Industrial	197	118	75	1	15	3	50	3	0	2	1
Materials Science	365	173	182	0	35	1	140	0	0	2	4
Mechanical	856	457	379	1	75	4	285	1	2	6	5
Metallurgical	78	43	27	0	3	0	24	0	0	0	0
Mining and Mineral	26	15	10	0	2	0	8	0	0	0	0
Nuclear	120	35	62	1	8	0	46	1	0	2	4
Ocean	21	14	4	0	1	0	3	0	0	0	0
Operations Research	56	24	32	0	3	0	28	0	0	1	0
Petroleum	54	34	18	0	3	2	9	0	0	2	2
Polymer	64	33	31	0	8	1	21	0	0	0	1
Systems Engineering	37	17	18	0	2	0	13	1	0	0	2
Engineering, General	63	27	29	0	4	1	22	0	0	0	2
Engineering, Other	103	59	41	0	5	0	34	0	0	0	2
LIFE SCIENCES	7,108	1,911	5,020	19	351	113	4,320	35	34	68	80
BIOLOGICAL SCIENCES	4,794	1,148	3,535	13	262	61	3,043	27	24	50	55
Biochemistry	714	183	518	1	39	11	446	5	3	6	7
Biophysics	125	44	78	0	15	1	58	0	0	1	3
Bacteriology	13	3	9	0	0	0	9	0	0	0	0
Plant Genetics	33	9	24	0	0	1	23	0	0	0	0
Plant Pathology	32	11	20	0	1	0	19	0	0	0	0
Plant Physiology	68	25	41	0	1	0	40	0	0	0	0
Botany, Other	107	36	68	0	4	1	61	1	0	0	1
Anatomy	75	15	58	0	4	1	50	0	0	2	1
Biometrics and Biostatistics	63	23	39	0	3	2	31	0	0	1	2
Cell Biology	188	38	150	0	11	0	130	2	1	1	5
Ecology	180	24	155	0	0	1	142	0	2	5	5
Developmental Biology/Embryology	48	8	40	0	2	0	36	1	0	0	1
Endocrinology	27	7	20	2	0	0	16	1	0	1	0
Entomology	139	53	79	0	1	4	67	1	2	1	3
Immunology	180	26	154	1	10	2	137	0	1	2	3
Molecular Biology	526	146	379	2	37	8	315	4	2	5	6
Microbiology	377	80	289	1	28	5	243	3	2	5	2
Neurosciences	237	46	188	0	12	1	170	1	2	1	1
Nutritional Sciences	133	32	98	0	7	3	82	1	0	2	3
Parasitology	17	3	14	0	1	0	13	0	0	0	0
Toxicology	104	14	87	0	7	2	78	0	0	0	0
Human and Animal Genetics	142	27	107	1	7	0	96	1	0	1	1
Human and Animal Pathology	113	28	81	0	14	3	59	1	0	2	2
Human and Animal Pharmacology	279	60	212	0	15	4	184	0	1	7	1
Human and Animal Physiology	266	66	199	0	16	4	172	1	1	2	3
Zoology, Other	134	35	96	3	1	1	86	2	1	1	1
Biological Sciences, General	316	74	221	0	17	4	189	0	5	2	4
Biological Sciences, Other	158	32	111	2	9	2	91	2	1	2	2
HEALTH SCIENCES	1,110	222	851	5	52	38	730	4	5	4	13
Audiology and Speech Pathology	82	9	72	0	4	8	57	0	1	0	2
Environmental Health	44	11	32	0	0	3	28	1	0	0	0
Public Health	157	36	117	0	6	9	94	1	0	2	5
Epidemiology	108	20	88	0	5	5	75	0	0	2	1
Nursing	337	9	318	3	10	9	290	1	4	0	1
Pharmacy	159	78	69	1	19	1	47	1	0	0	0
Rehabilitation/Therapeutic Services	25	4	21	0	1	1	18	0	0	0	1
Veterinary Medicine	63	26	35	0	0	1	33	0	0	0	1
Health Sciences, General	30	5	24	1	2	0	21	0	0	0	0
Health Sciences, Other	105	24	75	0	5	1	67	0	0	0	2
AGRICULTURE	1,204	541	634	1	37	14	547	4	5	14	12
Agricultural Economics	141	75	64	1	1	2	56	0	0	4	0
Animal Breeding and Genetics	23	9	13	0	0	0	11	0	1	1	0
Animal Nutrition	41	12	29	0	0	0	29	0	0	0	0
Dairy Science	14	4	9	0	1	0	7	0	1	0	0
Poultry Science	22	11	10	0	1	0	8	0	0	1	0
Fisheries Science	26	10	15	0	1	1	12	0	0	0	1
Animal Sciences, Other	97	31	60	0	2	1	53	2	0	1	1
Agronomy	123	57	63	0	2	3	55	0	1	1	1
Plant Breeding and Genetics	82	38	42	0	0	1	39	0	0	0	2
Plant Pathology	63	36	27	0	0	0	27	0	0	0	0
Plant Sciences, Other	29	13	14	0	0	0	11	0	0	2	1
Food Engineering	14	8	6	0	3	0	2	0	0	1	0
Food Sciences, Other	151	85	64	0	11	2	48	0	0	1	2
Soil Chemistry/Microbiology	24	7	17	0	1	0	16	0	0	0	0
Soil Sciences, Other	63	34	27	0	1	0	22	1	0	1	2
Horticulture Science	65	33	29	0	4	1	23	1	0	0	0

APPENDIX TABLE A-2 (Continued)

Subfield of Doctorate	Total Doctorates*	Non-U.S. Citizens Temp. Visas	U.S. Citizens and Non-U.S. with Permanent Visas								
			Total	Native Amer.	Asian	Black	White	Puerto Rican	Mexican Amer.	Other Hispanic	Other & Unk
Forest Biology	29	8	21	0	2	0	19	0	0	0	0
Forest Engineering	2	1	1	0	0	0	1	0	0	0	0
Forest Management	16	5	11	0	0	1	10	0	0	0	0
Wood Science	21	15	6	0	1	0	5	0	0	0	0
Renewable Natural Resources	9	3	6	0	0	0	6	0	0	0	0
Forestry & Related Sci., Other	61	17	43	0	3	0	38	0	1	0	1
Wildlife/Range Management	55	14	41	0	2	1	37	0	0	0	1
Agriculture, General	9	3	5	0	0	0	3	0	0	1	0
Agriculture, Other	24	12	11	0	1	1	9	0	1	0	0
SOCIAL SCIENCES (INCL PSYCH)	6,205	1,037	4,893	26	171	215	4,225	32	55	92	77
Anthropology	320	43	267	0	6	5	233	1	5	8	9
Area Studies	33	8	24	0	0	6	16	1	0	0	1
Criminology	37	4	33	0	2	3	27	0	0	0	0
Demography	17	10	6	0	1	1	3	0	1	0	1
Economics	885	410	441	0	43	22	359	0	0	8	9
Econometrics	25	13	12	0	0	1	9	0	0	2	0
Geography	111	32	78	1	0	0	73	1	0	1	2
International Relations	76	17	58	0	4	5	45	0	0	3	1
Political Science and Government	514	120	366	3	23	22	303	1	5	4	5
Public Policy Studies	107	22	85	0	5	7	67	0	3	1	2
Sociology	495	113	369	6	22	25	301	4	3	5	3
Statistics	29	23	4	0	4	0	0	0	0	0	0
Urban Studies	86	32	46	1	1	3	36	1	1	0	3
Social Sciences, General	33	6	20	0	1	0	19	0	0	0	0
Social Sciences, Other	185	30	145	0	4	14	123	2	0	0	2
PSYCHOLOGY	3,252	154	2,939	15	55	101	2,611	21	37	60	39
Clinical	1,298	26	1,193	7	22	44	1,047	6	20	31	16
Cognitive	102	10	90	1	1	0	84	0	1	0	3
Comparative	2	0	2	0	0	0	2	0	0	0	0
Counseling	508	13	492	2	4	19	445	4	7	7	3
Developmental	170	10	157	0	3	4	138	2	3	6	1
Experimental	154	17	136	0	5	0	129	1	1	0	0
Educational	91	9	82	0	6	2	70	0	1	2	1
Industrial and Organizational	138	6	129	0	1	1	121	0	1	2	3
Personality	17	4	13	0	0	0	13	0	0	0	0
Physiological	55	2	53	0	2	3	47	0	0	1	0
Psychometrics	5	0	5	0	0	0	5	0	0	0	0
Quantitative	10	0	10	0	1	0	8	1	0	0	0
School	88	2	82	0	0	6	71	1	1	2	1
Social	139	12	127	0	6	6	110	2	0	3	0
Psychology, General	294	23	214	2	3	11	185	2	1	2	8
Psychology, Other	181	20	154	2	1	5	136	2	1	4	3
HUMANITIES	4,444	607	3,697	19	110	101	3,275	25	26	88	53
History, American	277	21	255	4	2	10	232	0	0	1	6
History, European	176	12	164	0	1	4	153	1	0	2	3
History of Science	28	5	23	0	1	0	22	0	0	0	0
History, General	104	18	77	1	3	5	64	0	1	0	3
History, Other	140	21	119	0	8	6	98	1	2	1	3
Classics	58	5	53	0	1	0	50	0	0	0	2
Comparative Literature	163	34	125	0	4	0	111	1	0	5	4
Linguistics	266	101	151	1	11	5	120	3	1	5	5
Speech, Debate, and Rhetoric	98	6	91	0	0	3	85	0	1	0	2
Letters, General	18	1	15	0	1	1	11	0	0	2	0
Letters, Other	38	2	34	0	0	0	34	0	0	0	0
American Studies	81	8	72	0	0	7	62	0	0	1	2
Archeology	33	5	28	0	0	0	26	0	1	0	1
Art History and Criticism	153	12	139	1	2	2	131	0	1	1	1
Music	641	60	548	5	25	10	492	2	6	6	2
Philosophy	280	45	226	2	7	2	204	2	1	5	3
Religion	231	21	207	1	12	9	177	3	1	3	1
Theatre	95	13	79	0	1	3	70	0	3	1	1
LANGUAGE AND LITERATURE	1,465	208	1,210	3	30	25	1,066	12	8	53	13
American	291	20	270	1	4	8	247	1	3	2	4
English	612	66	523	1	12	10	488	0	1	4	7
French	124	21	100	0	0	5	93	1	0	1	0
German	96	13	81	1	1	0	79	0	0	0	0
Italian	20	5	14	0	0	0	13	0	0	1	0
Spanish	179	56	114	0	1	0	55	10	4	42	2
Russian	28	5	23	0	0	0	23	0	0	0	0
Slavic	15	1	12	0	0	0	12	0	0	0	0
Chinese	20	7	13	0	6	0	7	0	0	0	0
Japanese	12	0	12	0	4	0	7	0	0	1	0
Hebrew	20	2	14	0	0	0	14	0	0	0	0
Arabic	12	5	7	0	0	0	7	0	0	0	0
Other Languages	36	7	27	0	2	2	21	0	0	2	0
Humanities, General	21	1	17	0	0	2	14	0	0	1	0
Humanities, Other	78	8	64	1	1	7	53	0	0	1	1

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. See inside the back cover for a description of fields as reported in this table. Refer also to the explanatory note about this table in front of Appendix A.

*Includes individuals who did not report their citizenship at time of doctorate.

APPENDIX TABLE A-2 (Continued)

Subfield of Doctorate	Total Doctorates*	Non-U.S. Citizens Temp. Visas	U.S. Citizens and Non-U.S. with Permanent Visas								
			Total	Native Amer.	Asian	Black	White	Puerto Rican	Mex-ican Amer.	Other His-panic	Other & Unk
EDUCATION	6,622	549	5,911	49	139	491	4,968	73	57	77	57
Curriculum and Instruction	899	88	798	6	20	48	675	20	9	13	7
Educational Admin and Supervision	1,285	58	1,213	13	10	128	1,021	8	16	7	10
Educational Leadership	680	24	653	6	6	68	547	5	7	9	5
Educational Media	62	17	45	0	4	3	37	1	0	0	0
Educational Statistics and Research	61	12	47	0	3	5	39	0	0	0	0
Educational Testing, Eval and Meas	45	13	32	0	2	2	26	0	0	2	0
Educational Psychology	346	35	306	1	10	14	265	1	7	4	4
School Psychology	88	1	86	1	0	3	80	2	0	0	0
Social Foundations	101	15	86	2	3	3	74	0	2	0	2
Special Education	259	21	233	0	3	14	206	1	4	4	1
Student Counseling & Personnel Serv	254	7	242	3	5	18	206	2	1	3	4
Higher Education Research	379	25	351	3	7	41	283	4	2	7	4
Pre-elementary Education	98	12	86	1	6	16	58	1	1	2	1
Elementary Education	73	2	70	0	2	6	57	2	3	0	0
Secondary Education	28	2	26	0	0	1	24	0	0	0	1
Adult and Continuing Education	208	6	198	2	3	14	171	3	1	2	2
TEACHING FIELDS	1,003	124	859	7	29	41	753	10	3	13	3
Agricultural Education	43	11	31	0	2	0	27	0	1	1	0
Art Education	46	8	38	0	0	2	36	0	0	0	0
Business Education	16	2	13	0	0	1	11	1	0	0	0
English Education	61	5	55	1	2	2	49	1	0	0	0
Foreign Languages Education	50	17	31	0	2	2	24	1	0	2	0
Health Education	98	4	93	1	0	6	85	0	0	1	0
Home Economics Education	12	0	12	0	1	2	9	0	0	0	0
Industrial Arts Education	11	2	9	0	0	0	9	0	0	0	0
Mathematics Education	62	7	55	0	1	2	51	0	0	1	0
Music Education	96	3	92	0	1	2	84	1	0	4	0
Nursing Education	29	4	25	0	1	1	22	0	0	1	0
Physical Education	167	25	137	0	6	7	119	2	1	0	2
Reading Education	121	8	108	1	4	5	96	2	0	0	0
Science Education	73	13	60	1	3	0	54	0	0	1	1
Social Science Education	19	5	14	0	1	3	8	0	0	2	0
Technical Education	35	2	32	1	2	4	25	0	0	0	0
Trade and Industrial Education	11	2	9	1	0	0	7	1	0	0	0
Other Teaching Fields	53	6	45	1	3	2	37	1	1	0	0
Education, General	427	45	311	2	13	33	240	9	0	4	10
Education, Other	326	42	269	2	13	33	206	4	1	7	3
PROFESSIONAL/OTHER FIELDS	2,500	602	1,812	7	125	84	1,520	6	12	22	36
BUSINESS AND MANAGEMENT	1,248	398	804	2	77	26	671	0	3	13	12
Accounting	180	38	140	0	10	0	128	0	1	1	0
Banking and Finance	172	81	89	0	13	2	71	0	0	1	2
Business Admin and Management	242	67	156	0	12	6	132	0	0	2	4
Business Economics	21	8	12	0	1	0	10	0	0	0	1
Management Information Systems	103	39	64	1	10	3	48	0	0	2	0
Marketing Management and Research	139	45	94	0	7	3	83	0	0	0	1
Operations Research	67	26	41	0	6	1	33	0	0	1	0
Organizational Behavior	80	13	67	0	5	3	55	0	0	4	0
Business and Management, General	112	36	57	1	3	4	43	0	0	2	4
Business and Management, Other	132	45	84	0	10	4	68	0	2	0	0
COMMUNICATIONS	330	55	265	1	9	16	223	3	1	3	9
Communications Research	45	6	39	0	0	3	33	1	0	0	2
Mass Communications	85	15	67	0	2	4	56	2	0	0	3
Communication Theory	47	5	42	0	3	3	32	0	1	2	1
Communications, General	76	12	59	0	3	3	51	0	0	1	1
Communications, Other	77	17	58	1	1	3	51	0	0	0	2
OTHER PROFESSIONAL FIELDS	882	140	715	4	35	42	605	3	8	5	13
Architecture, Environmental Design	61	22	33	0	5	0	25	1	0	1	1
Home Economics	58	11	46	0	3	2	40	0	0	1	0
Law	20	8	8	0	0	0	6	0	2	0	0
Library and Archival Science	51	6	42	0	1	4	35	1	1	0	0
Public Administration	109	19	86	0	4	7	72	0	1	1	1
Social Work	248	25	217	1	5	21	178	0	4	2	6
Theology	292	38	252	3	16	4	225	0	0	0	4
Professional Fields, General	1	0	1	0	0	0	1	0	0	0	0
Professional Fields, Other	42	11	30	0	1	4	23	1	0	0	1
OTHER FIELDS	40	9	28	0	4	0	21	0	0	1	2

SOURCE: National Research Council, Survey of Earned Doctorates.

APPENDIX TABLE A-3 Statistical Profile of Doctorate Recipients, by Major Field, 1992

Total All Doctorates

		1992 Total	Physics and Astronomy	Chemistry	Earth, Atmos. and Marine Sci.	Mathematics	Computer Sciences	PHYSICAL SCIENCES	ENGINEERING	Biochemistry	Other Biosciences	Biosciences Subtotal	Health Sciences	Agricultural Sciences	LIFE SCIENCES
Number in Field		38,814	1,537	2,212	824	1,058	867	6,498	5,437	714	4,080	4,794	1,110	1,204	7,108
Men	%	63.0	87.9	73.8	76.7	80.6	86.2	80.3	90.7	60.5	62.2	61.9	36.2	78.3	60.7
Women		37.0	12.1	26.2	23.3	19.4	13.8	19.7	9.3	39.5	37.8	38.1	63.8	21.7	39.3
U.S. Citizenship	%	66.4	52.4	59.7	63.5	42.7	48.2	54.2	38.7	67.5	69.0	68.8	72.5	47.3	65.7
Non-U.S., Permanent Visa		5.0	5.7	5.1	4.2	5.0	7.8	5.5	7.5	5.0	4.9	4.9	4.1	5.4	4.9
Non-U.S., Temporary Visa		25.5	39.5	32.6	29.5	48.3	42.0	37.7	50.3	25.6	23.7	23.9	20.0	44.9	26.9
Unknown		3.1	2.4	2.6	2.8	4.0	2.0	2.7	3.5	1.8	2.4	2.3	3.3	2.4	2.5
Married	%	58.0	51.3	52.1	61.9	55.1	60.1	54.7	61.2	55.0	55.9	55.8	59.5	70.5	58.8
Not Married		33.8	42.2	41.4	29.6	35.4	34.7	38.2	31.0	39.9	37.2	37.6	31.1	23.3	34.2
Unknown		8.2	6.5	6.6	8.5	9.5	5.2	7.1	7.7	5.0	6.9	6.6	9.5	6.2	7.0
Median Age at Doct.	Yrs	34.1	30.0	29.7	32.7	31.4	32.0	30.7	31.5	29.8	31.8	31.5	37.6	34.1	32.7
Percent with Bacc. in Same Field as Doctorate	%	56.4	75.1	80.0	58.0	71.9	32.2	68.4	81.8	24.9	55.6	51.0	52.3	64.2	53.5
Percent with Masters	%	79.0	66.2	41.0	77.9	76.4	86.5	63.5	87.0	30.8	50.8	47.9	84.1	91.9	61.0
Median Time Lapse From Bacc. to Doct.															
Total Time	Yrs	10.5	7.6	7.1	9.5	8.7	9.2	8.1	8.7	7.3	8.8	8.6	14.1	10.4	9.4
Registered Time		7.1	6.6	5.9	7.3	6.7	6.8	6.5	6.2	6.2	6.8	6.7	7.3	6.4	6.7
Postdoctoral Study Plans	%	25.8	65.5	55.7	42.6	27.1	16.5	46.5	22.1	83.8	70.2	72.2	19.1	32.6	57.2
Fellowship		12.9	23.9	25.6	18.9	13.6	6.8	19.9	7.6	53.1	41.8	43.5	10.9	10.9	32.9
Research Assoc.		10.3	39.6	28.4	22.6	10.8	7.6	24.7	13.0	25.2	20.5	21.2	4.9	20.4	18.5
Traineeship		1.0	1.0	0.7	0.6	1.2	1.6	1.0	0.9	0.8	1.8	1.7	1.3	0.7	1.5
Other Study		1.6	0.9	1.0	0.5	1.5	0.5	0.9	0.7	4.6	6.1	5.9	2.1	0.5	4.4
Planned Employment After Doctorate	%	66.6	27.3	37.7	50.4	62.8	77.9	46.3	69.9	12.5	24.4	22.6	73.2	60.3	36.9
Educ. Institution*		39.7	9.0	6.6	16.6	48.7	36.8	19.3	21.3	3.1	11.5	10.3	42.2	25.0	17.8
Industry/Business		13.4	10.9	26.4	19.1	8.9	32.5	19.7	35.7	6.4	5.8	5.9	9.5	15.0	8.0
Government		5.6	4.0	2.7	10.1	2.6	3.9	4.1	7.1	1.5	3.9	3.6	9.6	14.2	6.3
Nonprofit		3.8	0.7	0.4	1.3	0.4	0.8	0.6	1.2	0.3	1.5	1.3	7.8	1.7	2.4
Other & Unknown		4.0	2.8	1.6	3.3	2.3	3.8	2.5	4.6	1.1	1.6	1.5	4.1	4.4	2.4
Postdoc. Plans Unknown	%	7.6	7.2	6.6	7.0	10.1	5.7	7.2	8.0	3.8	5.4	5.2	7.7	7.1	5.9
Definite Postdoc. Study	%	17.6	44.8	40.1	27.2	16.3	11.2	31.8	11.9	66.7	54.8	56.6	14.1	19.6	43.7
Seeking Postdoc. Study		8.2	20.7	15.6	15.4	10.9	5.3	14.6	10.2	17.1	15.4	15.6	5.0	13.0	13.5
Definite Employment		45.5	16.3	26.4	35.2	40.8	50.6	30.7	42.1	9.1	16.2	15.1	54.1	41.8	25.7
Seeking Employment		21.0	11.1	11.3	15.2	21.9	27.2	15.6	27.8	3.4	8.2	7.4	19.2	18.5	11.2
Employment Commitments After Doctorate		17,671	250	585	290	432	439	1,996	2,290	65	661	726	600	503	1,829
Primary Activity†															
R & D	%	28.1	58.8	70.1	54.1	34.3	62.0	56.8	66.2	70.8	46.9	49.0	33.2	54.5	45.3
Teaching		32.6	19.6	11.6	12.4	46.1	23.9	22.9	14.1	9.2	23.8	22.5	33.2	15.3	24.0
Administration		11.1	1.6	2.9	1.0	0.5	1.8	1.7	1.5	3.1	3.8	3.7	9.5	4.6	5.9
Prof. Services		11.0	4.0	4.1	11.4	3.5	2.1	4.6	5.7	4.6	10.4	9.9	10.5	6.0	9.0
Other		2.7	4.8	1.4	5.2	1.4	1.4	2.4	2.8	3.1	2.7	2.8	1.3	5.0	2.9
Secondary Activity															
R & D	%	24.5	16.8	9.1	17.2	42.8	22.3	21.4	14.8	4.6	22.2	20.7	27.8	15.9	21.7
Teaching		13.3	6.8	3.8	14.1	19.2	18.7	12.3	12.9	6.2	12.7	12.1	14.8	15.5	13.9
Administration		8.8	8.4	21.7	7.9	2.3	5.7	10.3	11.2	18.5	14.2	14.6	11.8	11.1	12.7
Prof. Services		6.9	4.4	8.5	7.2	3.0	4.8	5.8	7.4	4.6	7.1	6.9	9.8	7.8	8.1
Other		2.6	1.6	3.1	2.4	0.9	1.6	2.0	1.9	6.2	1.5	1.9	1.5	1.6	1.7
No Secondary Activity	%	29.3	50.8	43.9	35.2	17.4	38.0	36.5	42.0	50.8	29.8	31.7	21.8	33.4	28.9
Activity(ies) Unknown		14.6	11.2	9.9	15.9	14.4	8.9	11.7	9.7	9.2	12.4	12.1	12.3	14.7	12.9
Region of Employment After Doctorate‡															
New England	%	5.7	7.6	5.1	3.8	6.9	6.6	6.0	4.5	6.2	5.6	5.6	5.0	1.6	4.3
Middle Atlantic		13.4	18.8	21.5	6.2	11.6	20.7	16.6	12.3	18.5	12.3	12.8	12.5	5.0	10.6
East No. Central		13.8	9.6	19.0	5.5	16.7	9.6	13.3	10.7	10.8	11.2	11.2	15.7	9.1	12.1
West No. Central		6.8	3.6	6.2	2.1	5.8	5.0	4.9	4.8	1.5	5.7	5.4	5.8	9.5	6.7
South Atlantic		14.7	9.2	14.0	13.1	13.9	13.4	13.1	10.8	20.0	16.5	16.8	16.7	8.3	14.4
East So. Central		4.5	3.6	3.4	2.4	4.2	3.4	3.5	3.6	4.6	4.2	4.3	4.3	4.4	4.3
West So. Central		8.1	3.6	7.2	21.0	9.0	5.2	8.7	8.4	4.6	5.6	5.5	9.8	6.6	7.2
Mountain		5.0	8.0	3.4	11.0	3.7	3.6	5.2	5.1	9.2	5.3	5.6	4.3	7.4	5.7
Pacific & Insular		11.3	18.0	9.1	15.2	9.7	13.0	12.1	14.4	12.3	13.3	13.2	11.8	6.0	10.8
U.S., Region Unknown		4.4	2.4	3.6	3.4	4.6	3.0	3.5	3.4	1.5	3.0	2.9	3.8	1.2	2.7
Foreign		11.9	15.6	7.0	16.2	13.4	15.7	12.7	21.1	10.8	17.2	16.7	9.8	40.6	21.0
Region Unknown		0.4	0.0	0.5	0.0	0.5	0.7	0.4	0.9	0.0	0.0	0.0	0.3	0.4	0.2

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. See inside the back cover for a description of fields as reported in this table. Physical Sciences includes Mathematics and Computer Sciences, as well as Physics/Astronomy, Chemistry, and Earth/Atmospheric/Marine Sciences. Refer also to the explanatory note about this table in front of Appendix A.

*Includes 2-year, 4-year, and foreign colleges and universities, medical schools, and elementary/secondary schools.

†Includes only recipients with definite employment plans. Revisions to the survey form in 1990 appear to have resulted in a higher rate of nonresponse to the item on work activity than in previous years. The nonresponse rate in 1992 was 14.6% compared to 6.2% in 1989.

‡Includes only recipients with definite employment plans. See Table A-3 explanatory note for regional definitions.

APPENDIX TABLE A-3 (Continued)

Psychology	Economics	Anthropology and Sociology	Political Sci./Internat'l Rel.	Other Social Sciences	SOCIAL SCI. INCL. PSYCH.	TOTAL SCIENCES & ENGINEERING	History	Eng. and Amer. Lang. and Lit.	Foreign Lang. and Lit.	Other Humanities	HUMANITIES	EDUCATION	Business and Management	Other Professional Fields	Other Fields [§]	PROFESSIONAL/OTHER FIELDS	TOTAL NONSCIENCES
3,252	910	815	590	638	6,205	25,248	725	903	562	2,254	4,444	6,622	1,248	1,212	40	2,500	13,566
41.1	79.0	51.3	71.9	56.7	52.6	70.2	65.8	42.7	40.6	57.4	53.7	40.5	76.0	57.0	50.0	66.4	49.6
58.9	21.0	48.7	28.1	43.3	47.4	29.8	34.2	57.3	59.4	42.6	46.3	59.5	24.0	43.0	50.0	33.6	50.4
87.9	42.6	72.5	63.4	63.2	74.3	59.0	85.7	84.2	60.5	76.8	77.7	86.8	56.7	75.8		66.0	80.0
2.5	7.1	5.5	8.5	6.0	4.5	5.5	2.3	3.7	13.7	5.2	5.5	2.4	7.7	5.0		6.4	4.2
4.7	46.5	19.1	23.2	26.2	16.7	32.2	10.6	9.5	21.7	14.3	13.7	8.3	31.9	16.1		24.1	13.0
4.9	3.7	2.8	4.9	4.7	4.4	3.3	1.4	2.7	4.1	3.7	3.2	2.4	3.7	3.1		3.4	2.9
49.8	54.7	55.2	54.1	61.0	52.8	56.8	54.8	53.6	50.0	53.6	53.3	63.5	67.5	60.8		64.2	60.3
39.5	35.8	35.1	34.6	29.8	36.9	35.2	38.1	38.6	40.4	37.0	37.9	28.2	23.7	30.6		27.0	31.2
10.7	9.5	9.7	11.4	9.2	10.3	8.0	7.2	7.8	9.6	9.4	8.8	8.3	8.8	8.6		8.8	8.5
34.1	32.3	36.4	34.0	36.6	34.3	32.2	35.6	35.6	35.0	35.6	35.6	42.7	35.3	38.8		37.0	39.3
60.1	58.8	48.5	50.2	17.7	53.1	63.3	55.3	71.1	48.8	53.0	56.5	38.7	40.2	26.3		33.0	43.5
79.0	72.3	88.3	83.6	89.5	80.8	72.1	87.6	89.9	84.9	87.1	87.5	95.0	88.2	93.9		91.0	91.8
10.2	9.1	12.2	10.5	13.1	10.6	9.1	12.1	11.6	11.0	12.3	12.0	18.9	12.0	15.1		13.5	15.5
7.3	6.9	8.7	8.0	7.7	7.5	6.7	8.5	8.1	8.1	8.3	8.3	8.2	7.1	8.1		7.5	8.1
22.1	6.5	16.9	8.6	11.1	16.7	36.9	9.0	4.7	8.0	7.5	7.2	4.2	2.4	4.5		3.6	5.1
14.9	3.2	11.0	5.4	5.6	10.8	18.7	6.3	2.4	4.3	4.0	4.1	1.5	0.4	1.8		1.2	2.3
3.5	2.3	3.4	2.0	3.6	3.2	15.2	1.1	0.9	1.4	1.3	1.2	1.3	1.5	1.3		1.6	1.3
2.7	0.2	0.5	0.3	0.5	1.6	1.2	0.1	0.1	1.2	0.6	0.5	0.5	0.1	0.3		0.2	0.4
1.0	0.8	2.0	0.8	1.4	1.1	1.9	1.4	1.2	1.1	1.6	1.4	0.8	0.4	1.0		0.7	1.0
68.4	84.2	74.7	80.8	77.9	73.7	55.5	84.7	89.6	82.7	84.1	85.1	88.1	89.9	88.0		88.8	87.2
25.1	54.5	54.2	63.1	48.4	39.2	24.2	68.6	80.2	74.7	67.0	70.9	68.1	76.6	53.7		65.0	68.5
16.0	8.7	4.3	3.7	6.6	11.2	17.8	3.2	3.0	2.7	4.3	3.6	5.3	8.8	8.6		8.8	5.4
8.7	13.2	5.3	7.5	10.0	8.9	6.6	3.3	0.7	0.5	1.6	1.6	5.4	1.5	6.3		3.8	3.9
12.6	2.2	5.6	2.4	7.2	8.7	3.2	3.7	1.2	0.7	6.3	4.1	4.6	0.9	14.7		7.6	5.0
6.0	5.6	5.3	4.2	5.6	5.6	3.7	5.9	4.5	4.1	4.8	4.9	4.7	2.1	4.8		3.5	4.5
9.5	9.3	8.3	10.5	11.0	9.6	7.6	6.3	5.8	9.3	8.4	7.7	7.8	7.7	7.5		7.6	7.7
15.6	4.0	9.7	3.7	5.5	10.9	25.7	4.6	2.5	3.4	3.3	3.4	2.1	1.4	2.7		2.1	2.5
6.6	2.5	7.2	4.9	5.6	5.8	11.2	4.4	2.1	4.6	4.2	3.9	2.1	1.0	1.7		1.5	2.5
47.9	59.3	47.0	49.3	53.1	50.2	36.5	52.8	54.8	55.7	52.4	53.4	66.2	70.8	64.7		67.4	62.2
20.4	24.8	27.7	31.5	24.8	23.5	18.9	31.9	34.8	27.0	31.7	31.8	21.8	19.1	23.3		21.3	25.0
1,559	540	383	291	339	3,112	9,227	383	495	313	1,181	2,372	4,386	884	784		1,686	8,444
13.5	44.4	26.9	20.6	24.2	22.3	45.2	7.8	7.9	7.7	8.1	8.0	5.9	29.3	9.7		20.0	9.3
15.8	32.4	39.2	50.5	32.7	26.7	22.2	56.7	68.7	70.6	60.6	63.0	33.1	49.2	40.4		45.1	43.9
4.4	3.1	6.3	3.8	11.2	5.1	3.6	6.0	3.2	2.6	4.8	4.4	31.8	3.1	12.2		7.4	19.2
53.9	5.6	5.0	2.1	8.8	29.8	14.2	3.1	2.4	1.6	5.1	3.8	8.9	3.3	14.7		8.7	7.4
2.6	2.2	2.6	4.1	3.5	2.8	2.7	4.4	2.6	1.3	3.6	3.2	2.1	1.8	5.9		3.7	2.7
21.4	31.7	31.9	42.3	26.5	27.0	21.7	39.7	45.3	55.3	35.6	40.9	16.8	42.8	29.8		36.7	27.5
14.5	27.0	15.7	14.4	13.3	16.7	14.3	7.3	9.1	6.4	8.1	8.0	11.7	25.7	13.4		19.9	12.3
9.4	4.4	8.1	4.1	10.0	8.0	10.2	3.9	4.6	3.5	5.4	5.4	8.7	4.0	8.7		6.2	7.2
8.1	4.3	4.4	3.1	8.6	6.6	6.9	1.6	1.6	1.6	5.0	3.3	9.7	2.1	6.8		4.3	6.8
4.3	1.5	2.1	1.0	1.5	2.9	2.2	2.6	2.2	0.3	7.0	4.4	2.7	0.8	2.9		1.9	3.0
32.6	18.9	17.8	16.2	20.6	25.6	32.7	23.0	22.0	16.6	19.9	20.4	32.2	11.3	21.3		16.0	25.7
9.7	12.2	20.1	18.9	19.5	13.3	12.0	21.9	15.2	16.3	17.8	17.7	18.2	13.3	17.1		15.0	17.4
6.2	6.9	7.8	7.9	5.0	6.5	5.5	7.6	7.7	10.9	5.6	7.0	5.8	5.3	4.6		5.0	6.0
19.1	14.1	13.1	13.7	9.4	15.9	14.1	18.0	14.3	13.1	12.7	14.0	11.7	13.3	11.9		12.6	12.5
14.9	10.4	11.2	13.7	13.6	13.4	12.5	14.6	18.2	13.1	17.3	16.5	15.3	13.7	12.5		13.1	15.2
7.4	3.5	6.3	7.9	6.5	6.6	5.8	6.0	9.1	8.0	6.6	7.2	8.3	8.8	7.3		8.2	8.0
13.3	18.3	10.7	19.2	21.5	15.3	13.6	16.7	11.9	16.9	14.3	14.5	17.1	14.4	15.3		14.8	15.9
3.4	2.8	4.4	4.5	2.9	3.5	3.7	4.4	6.1	6.7	3.7	4.7	5.5	6.8	5.9		6.3	5.4
8.2	5.2	7.8	4.8	7.7	7.3	7.9	5.7	8.3	4.5	7.3	6.9	8.7	8.9	11.1		9.9	8.4
4.9	3.3	5.5	2.7	2.1	4.2	4.9	4.4	3.8	4.8	5.0	4.6	5.4	4.8	5.1		4.9	5.1
13.5	7.2	13.1	9.6	10.9	11.7	12.3	9.9	10.1	8.9	12.7	11.2	10.5	8.5	8.7		8.7	10.3
5.5	1.5	5.0	1.7	2.9	4.1	3.5	5.7	4.4	3.8	4.1	4.4	6.2	2.7	6.9		4.6	5.4
3.0	26.5	14.6	13.4	17.1	11.0	15.9	6.5	5.9	9.3	10.7	8.8	5.5	12.2	10.5		11.4	7.6
0.4	0.4	0.5	0.7	0.3	0.4	0.5	0.3	0.2	0.0	0.1	0.1	0.2	0.6	0.4		0.5	0.2

§Statistics are not presented for this group because too few records contained the specific data.

APPENDIX TABLE A-3 (Continued)

Doctorates: Men

		1992 Total	Physics and Astronomy	Chemistry	Earth, Atmos. and Marine Sci.	Mathematics	Computer Sciences	PHYSICAL SCIENCES	ENGINEERING	Biochemistry	Other Biosciences	Biosciences Subtotal	Health Sciences	Agricultural Sciences	LIFE SCIENCES
Total Men		24,448	1,351	1,633	632	853	747	5,216	4,934	432	2,537	2,969	402	943	4,314
Men as a Percent of Total Doctorates	%	63.0	87.9	73.8	76.7	80.6	86.2	80.3	90.7	60.5	62.2	61.9	36.2	78.3	60.7
U.S. Citizenship	%	58.9	53.3	59.0	60.6	41.6	46.7	53.1	36.9	66.9	66.6	66.6	50.2	44.5	60.3
Non-U.S., Permanent Visa		5.2	4.7	4.2	4.1	3.9	7.2	4.7	7.4	4.4	4.4	4.4	5.7	5.2	4.7
Non-U.S., Temporary Visa		32.4	39.4	33.7	32.4	50.1	43.9	39.1	52.0	26.4	26.3	26.3	39.1	47.7	32.2
Unknown		3.5	2.6	3.1	2.8	4.5	2.1	3.0	3.7	2.3	2.8	2.7	5.0	2.5	2.9
Married	%	61.1	50.2	52.1	63.4	54.2	60.0	54.4	61.7	55.3	58.5	58.0	62.4	74.9	62.1
Not Married		30.8	43.4	41.1	29.3	35.6	35.3	38.5	30.5	39.8	34.2	35.0	26.1	18.6	30.6
Unknown		8.0	6.4	6.9	7.3	10.2	4.7	7.0	7.8	4.9	7.3	7.0	11.4	6.6	7.3
Median Age at Doct.	Yrs	33.3	30.0	29.9	32.9	31.4	31.8	30.8	31.6	30.1	32.0	31.7	35.2	34.4	32.6
Percent with Bacc. in Same Field as Doctorate	%	59.3	73.9	80.1	59.2	70.5	33.2	67.7	82.8	30.6	52.7	49.5	33.1	67.4	51.9
Percent with Masters	%	77.7	66.5	42.1	79.3	75.1	86.1	64.6	87.6	29.9	52.0	48.8	73.9	92.0	60.6
Median Time Lapse From Bacc. to Doct.															
Total Time	Yrs	9.8	7.6	7.2	9.6	8.7	9.0	8.1	8.8	7.4	8.9	8.7	11.3	10.4	9.2
Registered Time		6.9	6.6	5.9	7.2	6.7	6.7	6.5	6.2	6.2	6.9	6.8	7.4	6.3	6.7
Postdoctoral Study Plans	%	28.2	65.0	57.6	42.7	27.1	16.2	46.8	22.0	84.0	69.6	71.7	23.6	32.9	58.8
Fellowship		13.2	23.6	26.6	17.9	14.0	6.4	19.8	7.4	52.8	38.4	40.5	11.4	10.8	31.3
Research Assoc.		12.5	39.7	29.4	23.6	10.3	7.8	25.1	13.2	23.6	22.0	22.2	8.2	20.9	20.6
Traineeship		1.0	0.8	0.6	0.6	1.4	1.6	0.9	0.9	1.2	2.2	2.1	1.5	0.5	1.7
Other Study		1.6	0.9	1.0	0.6	1.4	0.4	0.9	0.6	6.5	7.0	6.9	2.5	0.6	5.1
Planned Employment After Doctorate	%	64.0	28.0	35.5	50.5	62.4	78.2	45.9	69.9	12.5	24.6	22.8	65.7	60.2	35.0
Educ. Institution*		35.1	8.9	5.9	15.8	48.5	35.5	19.1	20.9	2.8	10.9	9.7	31.1	26.1	15.3
Industry/Business		16.0	11.4	25.1	20.1	9.1	34.7	19.7	35.9	7.4	6.2	6.4	14.4	13.9	8.8
Government		6.2	4.4	2.8	10.3	2.7	4.1	4.3	7.4	1.6	4.5	4.1	12.4	14.3	7.1
Nonprofit		3.2	0.7	0.4	1.4	0.1	0.7	0.6	1.2	0.5	1.4	1.3	4.7	1.4	1.6
Other & Unknown		3.4	2.6	1.3	2.8	1.9	3.2	2.2	4.5	0.2	1.5	1.3	3.0	4.6	2.2
Postdoc. Plans Unknown	%	7.8	7.0	7.0	6.8	10.6	5.6	7.4	8.0	3.5	5.8	5.4	10.7	6.9	6.2
Definite Postdoc. Study	%	19.2	44.9	41.7	26.6	15.8	11.0	32.1	11.8	67.1	55.2	56.9	19.2	19.3	45.2
Seeking Postdoc. Study		9.1	20.1	15.9	16.1	11.3	5.2	14.7	10.3	16.9	14.5	14.8	4.5	13.6	13.6
Definite Employment		43.2	16.9	25.8	35.0	40.2	51.1	30.6	41.8	9.7	16.4	15.4	47.8	42.4	24.3
Seeking Employment		20.8	11.1	9.7	15.5	22.2	27.0	15.3	28.2	2.8	8.2	7.4	17.9	17.8	10.7
Employment Commitments After Doctorate		10,567	228	421	221	343	382	1,595	2,060	42	416	458	192	400	1,050
Primary Activity†															
R & D	%	35.1	57.9	71.5	54.3	36.4	63.9	57.8	66.8	76.2	50.5	52.8	46.9	53.0	51.8
Teaching		28.1	20.6	8.8	13.1	44.6	22.0	21.9	13.5	2.4	18.5	17.0	18.8	15.0	16.6
Administration		9.1	1.3	3.6	0.3	1.8	1.8	1.6	4.8	3.6	3.7	7.3	4.8	4.8	
Prof. Services		9.5	4.4	3.6	1.3	3.2	2.1	4.3	5.7	2.4	10.3	9.6	10.4	6.5	8.6
Other		3.0	5.3	1.2	4.1	1.2	1.6	2.3	2.8	2.4	2.9	2.8	2.1	5.3	3.6
Secondary Activity															
R & D	%	22.0	17.1	7.1	17.6	40.5	21.2	20.6	14.3	2.4	16.6	15.3	19.8	16.0	16.4
Teaching		13.8	6.1	4.0	12.7	21.0	18.8	12.7	12.6	7.1	13.2	12.7	15.1	16.8	14.7
Administration		9.5	9.2	23.5	9.5	2.3	5.8	10.7	11.6	26.2	16.1	17.0	14.1	11.0	14.2
Prof. Services		6.2	3.9	8.6	6.8	3.5	5.0	5.7	7.3	7.1	6.3	6.3	8.3	7.0	7.0
Other		2.3	1.8	2.9	1.8	0.9	1.6	1.8	1.9	2.4	1.4	1.5	0.5	1.5	1.3
No Secondary Activity		31.1	51.3	42.5	35.3	17.5	39.0	36.6	42.8	42.9	32.2	33.2	27.6	32.3	31.8
Activity(ies) Unknown	%	15.2	10.5	11.4	16.3	14.3	8.6	11.9	9.5	11.9	14.2	14.0	14.6	15.5	14.7
Region of Employment After Doctorate‡															
New England	%	5.3	6.6	5.2	4.1	6.7	6.8	6.0	4.3	4.8	4.8	4.8	4.7	1.2	3.4
Middle Atlantic		12.9	18.4	19.7	7.2	10.8	20.2	16.0	12.2	16.7	12.7	13.1	13.0	3.7	9.5
East No. Central		13.3	9.6	19.7	6.8	15.7	10.2	13.4	10.4	14.3	9.6	10.0	12.5	9.7	10.4
West No. Central		6.4	3.1	6.9	2.7	5.8	4.5	5.0	4.4	2.4	5.5	5.2	4.2	8.2	6.2
South Atlantic		13.5	9.6	12.4	10.4	14.0	13.4	12.3	10.5	16.7	15.4	15.5	13.0	8.0	12.2
East So. Central		4.5	3.9	3.8	3.2	4.4	3.4	3.8	3.5	2.4	4.1	3.9	2.1	4.7	3.9
West So. Central		8.1	3.9	6.7	20.8	7.9	5.2	8.2	8.5	7.1	5.3	5.5	8.9	7.0	6.7
Mountain		5.0	8.3	3.6	10.0	4.1	3.7	5.3	5.0	7.1	6.3	6.3	4.2	7.5	6.4
Pacific & Insular		11.0	18.4	9.7	13.6	10.2	12.8	12.4	14.2	14.3	13.5	13.5	12.5	5.5	10.3
U.S., Region Unknown		3.7	2.6	3.1	3.6	4.7	2.6	3.3	3.5	2.4	2.6	2.6	3.1	1.2	2.2
Foreign		15.8	15.4	8.6	17.6	15.2	16.5	14.1	22.6	11.9	20.2	19.4	20.8	42.7	28.6
Region Unknown		0.5	0.0	0.7	0.0	0.6	0.8	0.5	0.7	0.0	0.0	0.0	1.0	0.2	0.3

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. See inside the back cover for a description of fields as reported in this table. Physical Sciences includes Mathematics and Computer Sciences, as well as Physics/Astronomy, Chemistry, and Earth/Atmospheric/Marine Sciences. Refer also to the explanatory note about this table in front of Appendix A.

*Includes 2-year, 4-year, and foreign colleges and universities, medical schools, and elementary/secondary schools.

†Includes only recipients with definite employment plans. Revisions to the survey form in 1990 appear to have resulted in a higher rate of nonresponse to the item on work activity than in previous years. Among men, the nonresponse rate in 1992 was 15.2% compared to 6.8% in 1979.

‡Includes only recipients with definite employment plans. See Table A-3 explanatory notes for regional definitions.

APPENDIX TABLE A-3 (Continued)

Psychology	Economics	Anthropology and Sociology	Political Sci./Internat'l Rel.	Other Social Sciences	SOCIAL SCI. INCL. PSYCH.	TOTAL SCIENCES & ENGINEERING	History	Eng. and Amer. Lang. and Lit.	Foreign Lang. and Lit.	Other Humanities	HUMANITIES	EDUCATION	Business and Management	Other Professional Fields	Other Fields [§]	PROFESSIONAL/OTHER FIELDS	TOTAL NONSCIENCES
1,338	719	418	424	362	<u>3,261</u>	<u>17,725</u>	477	386	228	1,294	<u>2,385</u>	<u>2,679</u>	948	691	20	<u>1,659</u>	<u>6,723</u>
41.1	79.0	51.3	71.9	56.7	52.6	70.2	65.8	42.7	40.6	57.4	53.7	40.5	76.0	57.0	50.0	66.4	49.6
86.7	38.7	66.5	58.0	55.2	66.3	52.8	86.4	82.9	57.9	75.3	77.1	82.9	50.2	70.9		58.8	74.9
2.2	6.5	5.7	9.7	6.1	5.0	5.5	2.3	3.6	10.1	4.7	4.6	3.1	7.8	5.8		7.1	4.6
6.0	51.3	23.7	27.8	33.4	24.1	38.3	9.9	10.6	26.8	14.9	14.3	11.0	37.9	19.0		29.9	16.9
5.2	3.5	4.1	4.5	5.2	4.6	3.5	1.5	2.8	5.3	5.0	4.0	2.9	4.1	4.3		4.2	3.6
52.4	57.7	61.0	57.8	67.7	57.1	58.8	58.1	58.5	54.4	58.3	57.9	73.9	69.7	69.8		69.7	67.2
36.2	33.7	28.2	31.8	23.2	32.6	33.3	35.2	33.9	35.5	31.7	35.1	18.6	21.9	20.5		21.3	24.4
11.4	8.6	10.8	10.4	9.1	10.3	7.9	6.7	7.5	10.1	10.0	9.0	7.5	8.3	9.7		9.0	8.4
33.9	32.3	35.7	34.1	36.4	34.1	32.0	35.6	34.6	34.9	35.5	35.3	42.0	35.1	38.2		36.4	38.1
63.6	59.9	49.3	49.3	19.9	54.2	65.6	59.5	73.8	44.7	55.8	58.4	34.3	39.8	25.8		33.6	42.7
78.8	72.6	87.8	82.3	89.2	80.2	72.9	86.6	88.9	82.0	86.1	86.2	94.4	88.0	93.2		90.2	90.5
10.2	9.0	12.0	10.4	12.9	10.4	8.9	11.9	10.9	10.7	11.9	11.6	18.4	11.8	14.5		13.0	14.3
7.2	6.8	8.3	7.8	7.5	7.3	6.6	8.2	7.7	7.9	8.2	8.1	8.1	7.0	8.1		7.4	7.9
22.1	7.1	17.0	9.4	11.9	15.4	37.0	10.7	3.1	8.3	7.0	7.3	4.1	2.5	4.3		3.6	5.1
14.9	3.1	10.8	5.9	5.5	9.5	17.3	8.4	2.6	4.4	3.6	4.4	1.3	0.4	2.2		1.3	2.4
3.7	2.9	3.8	2.1	4.7	3.4	16.7	1.0	0.3	1.8	1.2	1.0	1.5	1.7	1.0		1.6	1.4
2.7	0.1	0.2	0.5	0.6	1.3	1.2	0.0	0.0	1.3	0.9	0.6	0.5	0.1	0.4		0.2	0.5
0.9	1.0	2.2	0.9	1.1	1.1	1.9	1.3	0.3	0.9	1.5	1.2	0.7	0.3	0.7		0.5	0.8
68.7	83.7	73.4	80.7	78.2	75.2	55.3	83.6	91.7	80.3	83.5	84.5	88.4	88.9	86.8		87.8	86.9
23.9	54.2	55.3	63.2	49.2	42.5	23.0	64.8	81.3	71.5	65.5	68.5	68.4	74.7	47.9		63.2	67.1
17.8	9.0	4.5	3.3	6.1	11.0	20.0	3.6	4.9	3.1	4.3	4.1	5.4	9.5	7.2		8.6	5.7
10.7	13.1	6.2	8.5	11.6	10.5	7.0	4.2	1.0	0.4	1.8	2.0	6.2	1.8	6.4		3.7	4.1
12.2	2.2	4.1	1.9	6.6	7.0	2.2	4.8	1.6	0.9	7.3	5.3	4.5	0.7	21.3		9.3	6.0
4.1	5.1	3.3	3.8	4.7	4.3	3.2	6.3	2.8	4.4	4.6	4.6	3.9	2.2	4.1		3.0	3.9
9.2	9.2	9.6	9.9	9.9	9.4	7.7	5.7	5.2	11.4	9.5	8.2	7.5	8.5	8.8		8.6	8.0
15.8	4.3	8.6	4.0	4.4	9.6	25.5	5.9	1.8	4.4	3.3	3.7	2.0	1.5	2.6		2.0	2.6
6.3	2.8	8.4	5.4	7.5	5.8	11.6	4.8	1.3	3.9	3.7	3.6	2.1	1.1	1.7		1.5	2.5
51.5	58.1	47.6	49.1	53.3	52.3	36.2	52.2	54.9	53.5	50.4	51.8	67.8	68.2	64.5		66.5	61.8
17.2	25.6	25.8	31.6	24.9	22.9	19.1	31.4	36.8	26.8	33.1	32.7	20.6	20.7	22.3		21.3	25.1
689	418	199	208	193	<u>1,707</u>	<u>6,412</u>	249	212	122	652	<u>1,235</u>	<u>1,817</u>	647	446		<u>1,103</u>	<u>4,155</u>
14.5	44.0	24.6	23.6	26.9	25.4	51.1	8.0	7.1	10.7	8.4	8.3	5.4	29.2	9.9		21.3	10.5
14.4	31.3	39.2	47.6	29.0	27.1	19.7	53.0	64.2	59.0	57.8	58.1	27.7	49.0	35.7		43.7	41.0
4.4	3.3	4.0	2.4	9.8	4.5	2.9	5.6	3.3	2.5	4.9	4.5	35.3	3.2	12.6		7.0	18.7
54.6	5.5	5.5	2.4	7.3	25.1	11.0	4.0	3.8	2.5	6.6	5.2	7.9	3.1	15.5		8.2	7.1
2.3	1.7	3.0	4.8	5.2	2.9	2.8	5.2	4.2	2.5	3.7	4.0	2.1	2.3	7.8		4.5	3.3
21.2	29.2	32.7	38.5	24.9	27.0	19.6	33.7	37.3	44.3	32.2	34.6	13.9	42.5	24.2		35.2	25.7
14.7	28.0	13.6	15.4	13.5	17.8	14.3	8.4	8.5	8.2	8.7	8.6	11.1	25.2	13.9		20.5	12.8
10.6	4.5	7.0	3.8	8.8	7.7	10.7	4.0	6.6	6.6	8.0	6.8	8.6	4.3	9.9		6.6	7.6
7.4	3.1	3.0	3.4	7.8	5.4	6.3	1.6	2.4	0.0	5.4	3.6	8.6	2.5	7.0		4.3	6.0
4.8	1.9	3.0	0.5	2.6	3.1	2.1	2.0	1.9	0.8	5.8	3.9	2.4	0.6	3.6		1.8	2.7
31.5	19.1	17.1	19.2	20.7	24.1	34.5	26.1	25.9	17.2	21.3	22.7	33.8	11.7	22.9		16.3	25.9
9.9	14.1	23.6	19.2	21.8	15.0	12.4	24.1	17.5	23.0	18.6	19.9	21.6	13.1	18.6		15.3	19.4
6.8	6.7	6.5	7.2	4.7	6.6	5.2	4.8	7.1	5.7	5.7	5.7	6.1	5.1	3.6		4.5	5.6
18.4	12.4	13.6	10.6	8.8	14.4	13.3	20.9	14.6	9.8	11.3	13.7	11.8	13.4	9.9		12.0	12.4
16.5	10.8	11.1	14.9	10.9	13.6	12.0	12.9	18.4	18.0	17.0	16.5	16.6	12.7	10.3		11.6	15.2
7.1	3.8	6.5	7.7	5.2	6.1	5.3	4.0	9.9	7.4	5.8	6.3	8.9	9.1	7.6		8.6	8.0
12.9	17.5	8.0	17.8	21.8	15.1	12.4	18.5	11.8	14.8	14.7	15.0	15.7	14.2	15.5		14.8	15.2
2.8	3.1	5.0	4.3	2.1	3.2	3.6	4.4	6.1	8.2	4.3	5.0	5.9	6.8	7.0		6.8	5.9
8.6	4.8	9.0	5.3	8.8	7.3	7.8	6.0	6.6	5.7	8.1	7.2	8.1	8.5	14.1		10.7	8.5
5.2	3.1	5.0	2.9	2.1	4.0	5.1	4.8	5.2	5.7	5.5	5.3	4.8	5.3	4.3		4.8	5.0
12.8	6.5	12.1	10.1	8.3	10.3	12.1	10.4	9.9	8.2	12.4	11.2	9.4	7.6	7.4		7.5	9.4
4.8	1.2	3.0	1.0	2.6	3.0	3.1	6.8	3.3	2.5	3.2	3.9	5.2	2.8	5.8		4.0	4.5
3.8	29.7	19.1	17.3	24.4	15.9	19.7	6.0	7.1	13.9	11.7	10.0	7.4	13.9	14.1		14.1	9.9
0.3	0.5	1.0	1.0	0.5	0.5	0.5	0.4	0.0	0.0	0.2	0.2	0.3	0.6	0.4		0.6	0.3

§Statistics are not presented for this group because too few records contained the specific data.

APPENDIX TABLE A-3 (Continued)

Doctorates: Women

	1992 Total	Physics and Astronomy	Chemistry	Earth, Atmos- and Marine Sci.	Mathematics	Computer Sciences	PHYSICAL SCIENCES	ENGINEERING	Biochemistry	Other Biosciences	Biosciences Subtotal	Health Sciences	Agricultural Sciences	LIFE SCIENCES	
Total Women	14,366	186	579	192	205	120	1,282	503	282	1,543	1,825	708	261	2,794	
Women as a Percent of Total Doctorates	%	37.0	12.1	26.2	23.3	19.4	13.8	19.7	9.3	39.5	37.8	38.1	63.8	21.7	39.3
U.S. Citizenship	%	79.1	46.2	61.5	72.9	47.3	57.5	58.3	55.9	68.4	73.0	72.3	85.2	57.1	74.2
Non-U.S., Permanent Visa		4.7	12.4	7.6	4.7	9.8	11.7	8.6	8.7	6.0	5.8	5.9	3.2	6.1	5.2
Non-U.S., Temporary Visa		13.7	40.3	29.7	19.8	41.0	30.0	31.6	33.4	24.5	19.4	20.2	9.2	34.9	18.8
Unknown		2.4	1.1	1.2	2.6	2.0	0.8	1.5	2.0	1.1	1.7	1.6	2.4	1.9	1.9
Married	%	52.7	59.7	52.2	56.8	59.0	60.8	55.9	56.3	54.6	51.7	52.1	57.8	54.8	53.8
Not Married		38.8	33.3	42.1	30.7	34.6	30.8	36.9	36.2	40.1	42.2	41.9	33.9	40.2	39.7
Unknown		8.4	7.0	5.7	12.5	6.3	8.3	7.3	7.6	5.3	6.2	6.0	8.3	5.0	6.5
Median Age at Doct.	Yrs	36.1	30.0	29.2	32.2	31.4	33.8	30.4	30.3	29.5	31.5	31.1	38.7	32.9	32.8
Percent with Bacc. in Same Field as Doctorate	%	51.5	84.4	79.8	54.2	78.0	25.8	71.3	72.8	16.3	60.3	53.5	63.3	52.5	55.9
Percent with Masters	%	81.1	64.0	38.0	73.4	81.5	89.2	58.8	81.7	32.3	48.9	46.3	90.0	91.2	61.6
Median Time Lapse From Bacc. to Doct.															
Total Time	Yrs	12.4	8.0	6.8	9.3	8.7	10.4	7.9	7.9	7.3	8.8	8.5	15.3	10.2	9.8
Registered Time		7.5	6.5	5.7	7.6	6.7	7.4	6.4	6.1	6.3	6.7	6.6	7.3	6.7	6.8
Postdoctoral Study Plans	%	21.7	68.8	50.6	42.2	27.3	18.3	45.2	22.9	83.3	71.2	73.0	16.5	31.4	54.8
Fellowship		12.5	26.3	22.8	22.4	12.2	9.2	20.3	9.1	53.5	47.2	48.2	10.6	11.1	35.2
Research Assoc.		6.6	39.2	25.7	19.3	12.7	6.7	22.9	11.5	27.7	18.0	19.5	3.0	18.8	15.2
Traineeship		1.0	2.2	1.2	0.5	0.5	1.7	1.2	1.0	0.4	1.2	1.1	1.1	1.5	1.1
Other Study		1.5	1.1	0.9	0.0	2.0	0.8	0.9	1.2	1.8	4.7	4.2	1.8	0.0	3.2
Planned Employment After Doctorate	%	70.9	22.6	44.0	50.0	64.4	75.8	48.0	69.4	12.4	24.0	22.2	77.5	60.5	39.8
Educ. Institution*		47.4	10.2	8.8	19.3	49.3	45.0	20.4	24.9	3.5	12.6	11.2	48.4	21.1	21.6
Industry/Business		9.0	7.0	29.9	15.6	7.8	19.2	19.9	33.4	5.8	5.2	5.2	6.6	18.8	6.8
Government		4.6	0.5	2.6	9.4	2.0	2.5	3.2	4.2	1.4	2.9	2.7	8.1	13.8	5.1
Nonprofit		4.9	0.5	0.2	1.0	1.5	1.7	0.7	1.2	0.0	1.6	1.3	9.6	3.1	3.6
Other & Unknown		5.0	4.3	2.6	4.7	3.9	7.5	3.8	5.8	2.5	1.7	1.8	4.8	3.8	2.8
Postdoc. Plans Unknown	%	7.4	8.6	5.4	7.8	8.3	5.8	6.7	7.8	4.3	4.9	4.8	5.9	8.0	5.4
Definite Postdoc. Study	%	15.0	43.5	35.8	29.2	18.0	12.5	30.9	13.5	66.0	54.2	56.1	11.2	20.7	41.4
Seeking Postdoc. Study		6.7	25.3	14.9	13.0	9.3	5.8	14.4	9.3	17.4	16.9	17.0	5.4	10.7	13.5
Definite Employment		49.5	11.8	28.3	35.9	43.4	47.5	31.3	45.7	8.2	15.9	14.7	57.6	39.5	27.9
Seeking Employment		21.5	10.8	15.7	14.1	21.0	28.3	16.8	23.7	4.3	8.1	7.5	19.9	21.1	11.9
Employment Commitments After Doctorate		7,104	22	164	69	89	57	401	230	23	245	268	408	103	779
Primary Activity†															
R & D	%	17.6	68.2	66.5	53.6	25.8	49.1	52.9	60.4	60.9	40.8	42.5	26.7	60.2	36.6
Teaching		39.2	9.1	18.9	10.1	51.7	36.8	26.7	19.6	21.7	32.7	31.7	40.0	16.5	34.0
Administration		14.0	4.5	1.2	1.4	1.1	1.8	1.5	0.9	0.0	4.1	3.7	10.5	3.9	7.3
Prof. Services		13.2	0.0	5.5	11.6	4.5	1.8	5.5	5.7	8.7	10.6	10.4	10.5	3.9	9.6
Other		2.3	0.0	1.8	8.7	2.2	0.0	2.7	2.2	4.3	2.4	2.6	1.0	3.9	1.9
Secondary Activity	%	28.2	13.6	14.0	15.9	51.7	29.8	24.9	19.6	8.7	31.8	29.9	31.6	15.5	28.9
R & D		12.6	13.6	3.0	18.8	12.4	17.5	10.5	15.7	4.3	11.8	11.2	14.7	10.7	13.0
Teaching		7.8	0.0	17.1	2.9	2.2	5.3	8.7	7.8	4.3	11.0	10.4	10.8	11.7	10.8
Administration		7.9	9.1	8.5	8.7	1.1	3.5	6.2	8.7	0.0	8.6	7.8	10.5	10.7	9.6
Prof. Services		3.0	0.0	3.7	4.3	1.1	1.8	2.7	2.2	13.0	1.6	2.6	2.0	1.9	2.2
Other		26.7	45.5	47.6	34.8	16.9	31.6	36.2	34.8	65.2	25.7	29.1	19.1	37.9	25.0
No Secondary Activity		13.7	18.2	6.1	14.5	14.6	10.5	10.7	11.3	4.3	9.4	9.0	11.3	11.7	10.5
Activity(ies) Unknown	%														
Region of Employment After Doctorate‡	%														
New England		6.3	18.2	4.9	2.9	7.9	5.3	6.0	6.5	8.7	6.9	7.1	5.1	2.9	5.5
Middle Atlantic		14.0	22.7	26.2	2.9	14.6	24.6	19.2	13.0	21.7	11.4	12.3	12.3	9.7	11.9
East No. Central		14.5	9.1	17.1	1.4	20.2	5.3	13.0	13.5	4.3	13.9	13.1	17.2	6.8	14.4
West No. Central		7.5	9.1	4.3	0.0	5.6	8.8	4.7	8.3	0.0	6.1	5.6	6.6	14.6	7.3
South Atlantic		16.4	4.5	18.3	21.7	13.5	14.0	16.5	13.5	26.1	18.4	19.0	18.4	9.7	17.5
East So. Central		4.5	0.0	2.4	0.0	3.4	3.5	2.2	3.9	8.7	4.5	4.9	5.4	2.9	4.9
West So. Central		8.2	0.0	8.5	21.7	13.5	5.3	11.0	7.4	0.0	6.1	5.6	10.3	4.9	8.0
Mountain		5.0	4.5	3.0	14.5	2.2	3.5	5.0	5.7	13.0	3.7	4.5	4.4	6.8	4.7
Pacific & Insular		11.8	13.6	7.3	20.3	7.9	14.0	11.0	16.1	8.7	13.1	12.7	11.5	7.8	11.4
U.S., Region Unknown		5.5	0.0	4.9	2.9	4.5	5.3	4.2	1.7	0.0	3.7	3.4	4.2	1.0	3.5
Foreign		6.1	18.2	3.0	11.6	6.7	10.5	7.2	8.3	8.7	12.2	11.9	4.7	32.0	10.8
Region Unknown		0.2	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	1.0	0.1	

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. See inside the back cover for a description of fields as reported in this table. Physical Sciences includes Mathematics and Computer Sciences, as well as Physics/Astronomy, Chemistry, and Earth/Atmospheric/Marine Sciences. Refer also to the explanatory note about this table in front of Appendix A.

*Includes 2-year, 4-year, and foreign colleges and universities, medical schools, and elementary/secondary schools.

†Includes only recipients with definite employment plans. Revisions to the survey form in 1990 appear to have resulted in a higher rate of nonresponse to the item on work activity than in previous years. Among women, the nonresponse rate in 1992 was 13.7% compared to 5.3% in 1989.

‡Includes only recipients with definite employment plans. See Table A-3 explanatory note for regional definitions.

APPENDIX TABLE A-3 (Continued)

Psychology	Economics	Anthropology and Sociology	Political Sci./Internat'l Rel.	Other Social Sciences	SOCIAL SCI. INCL. PSYCH.	TOTAL SCIENCES & ENGINEERING	History	Eng. and Amer. Lang. and Lit.	Foreign Lang. and Lit.	Other Humanities	HUMANITIES	EDUCATION	Business and Management	Other Professional Fields	Other Fields ^s	PROFESSIONAL/OTHER FIELDS	TOTAL NONSCIENCES
1,914	191	397	166	276	2,944	7,523	248	517	334	960	2,059	3,943	300	521	20	841	6,843
58.9	21.0	48.7	28.1	43.3	47.4	29.8	34.2	57.3	59.4	42.6	46.3	59.5	24.0	43.0	50.0	33.6	50.4
88.7	57.6	78.8	77.1	73.6	83.3	73.8	84.3	85.1	62.3	78.9	78.4	89.4	77.3	82.3		80.3	85.0
2.8	9.4	5.3	5.4	5.8	4.0	5.5	2.4	3.7	16.2	5.8	6.6	2.0	7.3	4.0		5.2	3.8
3.9	28.3	14.4	11.4	16.7	8.5	17.9	12.1	8.7	18.3	13.4	12.9	6.4	13.0	12.3		12.6	9.1
4.7	4.7	1.5	6.0	4.0	4.3	2.8	1.2	2.5	3.3	1.9	2.2	2.1	2.3	1.3		1.9	2.1
47.9	43.5	49.1	44.6	52.2	48.0	52.0	48.4	49.9	47.0	47.3	48.0	56.4	60.3	48.9		53.4	53.5
41.8	44.0	42.3	41.6	38.4	41.7	39.8	43.5	42.2	43.7	44.1	43.5	34.7	29.3	44.0		38.3	37.8
10.3	12.6	8.6	13.9	9.4	10.3	8.2	8.1	7.9	9.3	8.6	8.5	8.9	10.3	7.1		8.3	8.7
34.4	32.2	37.2	33.4	37.5	34.7	32.7	35.9	36.4	35.0	36.0	35.9	43.1	36.1	40.0		38.1	40.6
57.6	54.5	47.6	52.4	14.9	51.8	58.0	47.2	69.1	51.5	49.2	54.3	41.6	41.7	27.1		32.0	44.2
79.2	71.2	88.9	86.7	89.9	81.4	70.2	89.5	90.7	86.8	88.5	88.9	95.5	89.0	94.8		92.6	93.1
10.3	9.6	12.5	10.7	13.5	10.9	9.6	12.4	12.6	11.3	12.9	12.5	19.2	12.7	16.1		14.7	16.8
7.4	7.2	9.1	8.5	7.9	7.7	7.0	9.1	8.4	8.2	8.5	8.5	8.2	7.3	8.0		7.7	8.2
22.2	4.2	16.9	6.6	10.1	18.3	36.8	5.6	5.8	7.8	8.1	7.2	4.2	2.0	4.6		3.7	5.1
14.9	3.7	11.3	4.2	5.8	12.3	21.9	2.4	2.3	4.2	4.7	3.7	1.7	0.3	1.3		1.0	2.2
3.4	0.0	3.0	1.8	2.2	3.0	11.5	1.2	1.4	1.2	1.6	1.4	1.2	1.0	1.7		1.5	1.3
2.7	0.5	0.8	0.0	0.4	1.9	1.4	0.4	0.2	1.2	0.2	0.4	0.5	0.0	0.2		0.1	0.4
1.0	0.0	1.8	0.6	1.8	1.1	1.9	1.6	1.9	1.2	1.7	1.7	0.9	0.7	1.3		1.1	1.1
68.1	85.9	76.1	81.3	77.5	72.0	55.8	86.7	88.0	84.4	84.9	85.8	87.8	93.0	89.6		90.6	87.6
25.9	55.5	53.1	62.7	47.5	35.6	27.1	75.8	79.3	76.9	69.1	73.7	67.9	82.7	61.4		68.7	69.7
14.7	7.3	4.0	4.8	7.2	11.5	12.7	2.4	1.5	2.4	4.3	3.1	5.1	6.7	10.4		9.0	5.0
7.3	13.6	4.3	4.8	8.0	7.2	5.5	1.6	0.4	0.6	1.5	1.1	4.9	0.7	6.1		4.2	3.6
13.0	2.1	7.3	3.6	8.0	10.5	5.6	1.6	1.0	0.6	4.9	2.8	4.7	1.3	6.0		4.3	4.1
7.3	7.3	7.3	5.4	6.9	7.2	4.9	5.2	5.8	3.9	5.2	5.1	5.2	1.7	5.8		4.4	5.1
9.7	9.9	7.1	12.0	12.3	9.7	7.5	7.7	6.2	7.8	7.0	7.0	7.9	5.0	5.8		5.7	7.4
15.4	2.6	10.8	3.0	6.9	12.4	26.4	2.0	3.1	2.7	3.2	3.0	2.2	1.0	2.9		2.3	2.4
6.8	1.6	6.0	3.6	3.3	5.8	10.4	3.6	2.7	5.1	4.9	4.2	2.0	1.0	1.7		1.4	2.6
45.5	63.9	46.3	50.0	52.9	47.7	37.4	54.0	54.7	57.2	55.1	55.2	65.2	79.0	64.9		69.3	62.7
22.7	22.0	29.7	31.3	24.6	24.3	18.4	32.7	33.3	27.2	29.8	30.6	22.7	14.0	24.8		21.3	24.9
870	122	184	83	146	1,405	2,815	134	283	191	529	1,137	2,569	237	338		583	4,289
12.6	45.9	29.3	13.3	20.5	18.6	31.9	7.5	8.5	5.8	7.8	7.6	6.3	29.5	9.5		17.7	8.2
17.0	36.1	39.1	57.8	37.7	26.1	27.9	63.4	72.1	78.0	64.1	68.3	36.9	49.8	46.7		47.9	46.7
4.5	2.5	8.7	7.2	13.0	5.9	5.3	6.7	3.2	2.6	4.7	4.2	29.2	2.5	11.8		8.2	19.7
53.4	5.7	4.3	1.2	11.0	35.4	21.6	1.5	1.4	1.0	3.2	2.2	9.7	3.8	13.6		9.8	7.7
2.9	4.1	2.2	2.4	1.4	2.7	2.5	3.0	1.4	0.5	3.4	2.4	2.1	0.4	3.3		2.1	2.2
21.5	40.2	31.0	51.8	28.8	26.9	26.6	50.7	51.2	62.3	39.7	47.7	18.8	43.5	37.3		39.6	29.3
14.4	23.8	17.9	12.0	13.0	15.4	14.0	5.2	9.5	5.2	7.4	7.3	12.1	27.0	12.7		18.7	11.7
8.5	4.1	9.2	4.8	11.6	8.3	9.0	3.7	3.2	1.6	4.9	3.8	8.7	3.0	7.1		5.3	6.9
8.6	8.2	6.0	2.4	9.6	8.0	8.2	1.5	1.1	2.6	4.5	3.0	10.4	1.3	6.5		4.5	7.6
3.9	0.0	1.1	2.4	0.0	2.7	2.5	3.7	2.5	0.0	8.5	5.0	3.0	1.3	2.1		2.1	3.4
33.6	18.0	18.5	8.4	20.5	27.4	28.6	17.2	19.1	16.2	18.1	17.9	31.1	10.1	19.2		15.4	25.5
9.5	5.7	16.3	18.1	16.4	11.3	11.0	17.9	13.4	12.0	16.8	15.3	15.9	13.9	15.1		14.4	15.5
5.6	7.4	9.2	9.6	5.5	6.5	6.1	12.7	8.1	14.1	5.5	8.4	5.6	5.9	5.9		5.8	6.4
19.7	19.7	12.5	21.7	10.3	17.9	16.0	12.7	14.1	15.2	14.4	14.2	11.6	13.1	14.5		13.9	12.6
13.6	9.0	11.4	10.8	17.1	13.1	13.5	17.9	18.0	9.9	17.6	16.4	14.3	16.5	15.4		16.0	15.1
7.7	2.5	6.0	8.4	8.2	7.1	6.9	9.7	8.5	8.4	7.6	8.2	7.9	8.0	6.8		7.4	7.9
13.7	21.3	13.6	22.9	21.2	15.7	16.1	13.4	12.0	18.3	13.8	14.1	18.1	14.8	15.1		14.9	16.6
3.9	1.6	3.8	4.8	4.1	3.8	3.9	4.5	6.0	5.8	3.0	4.4	5.2	6.8	4.4		5.3	5.0
7.9	6.6	6.5	3.6	6.2	7.2	8.0	5.2	9.5	3.7	6.2	6.5	9.1	10.1	7.1		8.4	8.3
4.7	4.1	6.0	2.4	2.1	4.4	4.7	3.7	2.8	4.2	4.3	3.9	5.8	3.4	6.2		5.0	5.2
14.1	9.8	14.1	8.4	14.4	13.5	12.8	9.0	10.2	9.4	13.0	11.3	11.2	11.0	10.4		10.8	11.2
6.1	2.5	7.1	3.6	3.4	5.5	4.4	3.7	5.3	4.7	5.1	4.9	6.9	2.5	8.3		5.8	6.2
2.4	15.6	9.8	3.6	7.5	5.1	7.2	7.5	4.9	6.3	9.5	7.6	4.1	7.6	5.6		6.3	5.3
0.6	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.4	0.0	0.0	0.1	0.1	0.4	0.3		0.3	0.1

^sStatistics are not presented for this group because too few records contained the specific data.

SOURCE: National Research Council, Survey of Earned Doctorates.

APPENDIX TABLE A-4 Statistical Profile of Doctorate Recipients, by Race/Ethnicity and Citizenship, 1992

		Total				Native American Total	Asian				Black			
		Total*	U.S.	Non-U.S. Perm. Temp.	Non-U.S. Temp.		Total*	U.S.	Non-U.S. Perm. Temp.	Non-U.S. Temp.	Total*	U.S.	Non-U.S. Perm. Temp.	Non-U.S. Temp.
Total Number		38,814	25,759	1,958	9,888	150	8,217	828	903	6,464	1,402	951	141	304
Male	%	63.0	55.9	65.5	80.1	54.0	77.7	63.2	66.1	81.2	53.8	40.6	85.1	79.6
Female		37.0	44.1	34.5	19.9	46.0	22.3	36.8	33.9	18.8	46.2	59.4	14.9	20.4
Doctoral Field														
Physical Sciences	%	16.7	13.7	18.1	24.7	11.3	25.6	21.4	23.4	26.5	5.8	3.6	4.3	13.5
Engineering		14.0	8.2	20.8	27.7	7.3	29.7	25.7	25.9	30.7	5.1	3.3	12.1	7.9
Life Sciences		18.3	18.1	17.8	19.3	13.3	19.5	21.1	19.5	19.2	14.2	9.0	19.1	27.6
Social Sciences		16.0	17.9	14.3	10.5	17.3	9.1	11.5	8.4	8.8	18.6	18.8	25.5	15.1
Humanities		11.4	13.4	12.5	6.1	12.7	4.1	6.3	6.4	3.5	9.8	10.0	4.3	11.8
Education		17.1	22.3	8.3	5.6	33.3	5.6	9.3	6.9	4.9	38.5	48.3	22.7	15.5
Professional/Other		6.4	6.4	8.2	6.1	4.7	6.5	4.7	9.5	6.3	7.9	7.0	12.1	8.6
Median Age at Doct.	Yrs	34.1	35.0	33.8	32.8	39.6	32.8	32.3	33.0	32.8	38.9	40.2	36.8	37.3
Median Time Lapse From Bacc. to Doct.														
Total Time	Yrs	10.5	11.5	10.1	9.4	14.3	9.5	9.1	10.0	9.5	14.5	16.4	10.7	11.6
Registered Time		7.1	7.3	7.2	6.6	7.0	6.7	6.9	7.1	6.7	7.5	8.0	7.0	6.7
Graduate School Support†														
GI Bill	%	1.1	1.6	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.9	1.4	0.0	0.0
Other Federal‡		8.9	12.1	5.2	2.5	16.7	3.2	16.4	3.5	1.5	10.4	11.1	4.3	10.9
State Government		1.0	1.3	0.6	0.5	2.7	0.5	1.2	0.3	0.4	2.1	2.5	0.7	1.3
Foreign Government		4.4	0.5	5.6	14.7	0.0	8.0	0.4	2.9	9.7	4.9	0.0	7.1	18.8
National Fellow (nonfed.)		4.8	5.4	4.3	3.8	8.7	2.8	5.9	3.2	2.4	9.4	9.5	5.0	11.5
Univ. Teaching Asst.	%	48.6	48.5	54.6	53.3	41.3	52.7	46.7	54.0	53.4	32.0	27.2	43.3	41.8
Univ. Research Asst.‡		48.5	43.8	56.0	64.8	40.0	69.3	60.9	65.4	71.1	29.6	25.4	46.1	35.2
Other University		24.3	27.8	23.6	18.0	23.3	17.4	23.2	19.6	16.4	29.2	32.3	21.3	23.4
Business/Employer		6.4	8.5	3.7	2.1	6.7	2.4	8.1	3.1	1.6	5.0	6.3	2.8	2.0
Self/Family Sources		69.6	81.4	66.4	47.6	81.3	50.6	70.7	60.8	46.7	72.8	81.4	77.3	45.1
GSL (Stafford) Loan‡	%	21.0	30.6	13.2	0.2	36.0	3.2	22.5	8.2	0.1	28.2	36.4	34.8	0.0
Other Loans‡		7.8	10.6	5.3	1.7	18.0	1.7	7.4	3.3	0.7	11.6	13.8	14.2	3.6
Other Sources		4.0	4.3	3.3	3.8	3.3	2.4	3.9	2.5	2.2	5.4	4.4	5.0	8.9
Unknown Sources		5.6	2.6	2.6	3.2	2.7	2.6	2.3	2.3	2.5	5.5	5.3	2.8	6.9
Postdoctoral Plans														
Postdoctoral Study	%	25.8	22.7	28.4	36.4	21.3	37.3	31.5	32.3	38.7	18.3	14.5	24.8	26.6
Planned Employment	%	66.6	73.2	65.1	57.3	75.3	56.9	63.9	61.7	55.4	72.8	77.1	67.4	62.8
Educ. Institution§		39.7	44.9	35.4	31.6	49.3	29.1	26.6	29.1	29.5	49.5	54.8	41.8	37.5
Industry/Business		13.4	13.2	19.5	14.6	8.7	17.9	22.8	24.7	16.4	6.4	6.2	10.6	5.3
Government		5.6	6.1	3.1	5.5	6.0	4.6	6.9	2.4	4.7	7.6	7.5	2.8	9.9
Nonprofit		3.8	5.0	2.4	1.5	5.3	1.5	3.0	1.4	1.3	3.9	3.9	4.3	3.6
Other & Unknown		4.0	4.0	4.7	4.2	6.0	3.7	4.6	4.0	3.6	5.5	4.7	7.8	6.6
Postdoc. Plans Unknown	%	7.6	4.1	6.4	6.3	3.3	5.9	4.6	6.0	5.8	8.9	8.4	7.8	10.5
Definite Postdoc. Study	%	17.6	17.0	15.5	21.6	13.3	22.3	23.2	17.1	23.0	10.5	10.4	9.2	11.2
Seeking Postdoc. Study		8.2	5.6	12.9	14.8	8.0	14.9	8.3	15.3	15.7	7.8	4.1	15.6	15.5
Definite Employment		45.5	53.0	35.1	33.4	53.3	31.1	40.1	31.8	30.0	49.4	55.0	31.9	40.8
Seeking Employment		21.0	20.2	30.0	23.9	22.0	25.8	23.8	29.9	25.5	23.4	22.1	35.5	22.0
Employment Location after Doctorate 		17,671	13,662	687	3,302	80	2,558	332	287	1,936	693	523	45	124
U.S.	%	87.7	97.8	85.4	46.9	98.8	61.5	92.2	84.3	53.0	87.4	98.7	88.9	40.3
Foreign		11.9	2.0	13.4	52.1	1.3	37.4	7.2	14.3	45.9	12.4	1.1	11.1	59.7
Unknown		0.4	0.2	1.2	1.0	0.0	1.1	0.6	1.4	1.1	0.1	0.2	0.0	0.0

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. See inside the back cover for a description of fields as reported in this table. Refer also to the explanatory note about this table in front of Appendix A for a discussion of past changes in the survey question on race/ethnicity.

*Includes individuals who did not report their citizenship at time of doctorate.

†In this table, a recipient counts once in each source category from which he or she received support. Since students indicate multiple sources of support, the vertical percentages sum to more than 100 percent. (Data on the "primary" source of support for doctorate recipients are presented in the body of the report.)

‡Because federal support obtained through the university cannot always be determined, no distinction is made between federal and university research assistants in this table. Both types of support are grouped under "University Research Assistant." Federal loans are counted in the categories for loans.

§Includes 2-year, 4-year, and foreign colleges and universities, medical schools, and elementary/secondary schools.

|| Includes only recipients with definite employment plans.

APPENDIX TABLE A-4 (Continued)

White				Puerto Rican	Mexican American				Other Hispanic				Other & Unknown		
Total*	U.S.	Non-U.S. Perm.	Temp.		Total	Total*	U.S.	Non-U.S. Perm.	Temp.	Total*	U.S.	Non-U.S. Perm.	Temp.	Total*	U.S.
25,689	22,718	707	2,224	213	240	205	12	22	915	339	115	454	1,988	359	497
58.1	56.1	61.4	77.2	49.8	57.9	56.1	66.7	68.2	65.6	53.7	54.8	77.1	73.7	71.9	81.9
41.9	43.9	38.6	22.8	50.2	42.1	43.9	33.3	31.8	34.4	46.3	45.2	22.9	26.3	28.1	18.1
14.6	13.8	15.0	23.0	12.2	10.8	9.8	25.0	13.6	15.8	12.4	14.8	18.7	17.0	18.4	21.5
9.5	7.7	18.4	25.0	6.6	5.8	4.9	0.0	18.2	12.0	10.0	12.2	13.7	17.3	12.5	23.5
18.2	18.5	15.6	16.3	16.9	18.3	14.6	33.3	40.9	21.6	14.5	16.5	28.2	16.5	18.9	19.3
17.6	18.0	19.1	12.6	15.5	23.8	25.4	25.0	9.1	18.6	22.1	14.8	16.7	20.0	17.8	14.7
13.8	13.8	19.9	11.6	11.7	10.8	11.7	16.7	0.0	15.8	17.1	26.1	12.3	10.9	12.8	7.2
19.9	21.7	6.1	5.6	34.3	25.4	27.8	0.0	18.2	11.6	18.9	11.3	6.4	11.6	12.5	8.0
6.4	6.5	5.9	5.9	2.8	5.0	5.9	0.0	0.0	4.5	5.0	4.3	4.0	6.8	7.0	5.6
34.4	34.9	33.9	31.9	35.3	36.3	36.6	36.0	33.5	34.6	34.9	34.6	34.4	33.8	33.6	33.7
11.0	11.4	9.7	8.6	12.4	12.0	12.2	13.0	10.5	10.6	10.8	10.5	10.4	10.1	10.1	10.0
7.2	7.3	7.3	6.4	7.5	7.6	7.7	7.8	6.1	6.7	7.4	7.4	6.1	6.8	6.9	6.8
1.4	1.6	0.0	0.0	1.9	2.1	2.4	0.0	0.0	0.5	1.5	0.0	0.0	0.4	1.9	0.0
10.9	11.8	6.6	2.8	14.1	16.3	17.1	16.7	9.1	12.5	18.6	8.7	9.0	2.3	8.9	2.8
1.1	1.2	0.4	0.5	2.8	2.1	2.0	8.3	0.0	1.4	2.1	2.6	0.7	0.4	1.7	0.4
2.8	0.5	7.5	24.6	0.5	5.4	0.0	16.7	45.5	13.9	1.5	8.7	24.7	5.6	0.6	21.7
5.1	5.0	5.7	5.4	12.7	11.3	12.7	8.3	0.0	8.7	9.7	3.5	9.5	1.9	4.7	4.2
50.6	49.6	59.8	58.4	41.8	43.3	43.9	25.0	45.5	50.9	54.0	49.6	48.9	17.7	41.5	40.2
45.3	44.1	48.9	56.6	34.7	39.6	38.0	66.7	40.9	47.1	41.3	46.1	52.0	20.1	45.7	46.7
27.2	27.7	28.4	21.8	37.6	35.4	37.6	33.3	18.2	25.4	31.6	20.9	22.2	8.1	19.8	18.3
8.2	8.7	4.8	3.6	8.9	2.5	2.4	0.0	4.5	5.0	7.4	3.5	3.7	1.3	5.0	1.4
79.5	82.2	72.7	54.3	75.6	74.2	78.0	75.0	40.9	63.2	80.8	67.0	49.3	18.7	58.5	31.8
27.4	30.5	15.4	0.5	44.6	36.7	42.0	16.7	0.0	16.1	37.5	14.8	0.4	4.1	20.3	1.6
9.8	10.5	5.7	4.2	14.6	13.3	15.1	8.3	0.0	7.5	13.0	8.7	3.1	1.5	6.7	1.0
4.5	4.3	4.2	6.6	5.6	4.6	3.9	0.0	13.6	5.8	2.9	2.6	8.6	1.9	4.7	4.2
2.3	2.1	2.4	2.2	2.8	2.9	2.9	0.0	4.5	2.0	0.9	1.7	2.4	64.5	23.1	15.3
23.8	22.7	26.0	33.8	23.9	19.6	19.5	8.3	27.3	26.3	22.7	25.2	29.5	11.1	21.7	28.4
72.4	73.7	68.0	61.8	72.3	74.6	75.1	75.0	68.2	68.7	73.5	68.7	65.6	23.1	54.0	52.1
44.3	45.3	40.7	35.5	48.8	52.9	54.1	33.3	54.5	41.7	44.8	41.7	39.4	12.2	25.3	30.2
13.2	13.2	16.5	12.9	9.9	8.3	8.3	25.0	0.0	11.1	14.5	13.9	8.1	5.2	14.8	9.5
6.0	6.1	3.1	6.5	6.1	5.8	4.9	8.3	9.1	6.6	5.3	4.3	8.1	2.5	5.3	6.0
4.8	5.2	3.0	1.7	3.3	4.6	5.4	0.0	0.0	3.6	4.1	5.2	2.9	1.2	3.9	1.8
4.1	3.9	4.7	5.2	4.2	2.9	2.4	8.3	4.5	5.7	4.7	3.5	7.0	2.0	4.7	4.6
3.8	3.6	5.9	4.4	3.8	5.8	5.4	16.7	4.5	4.9	3.8	6.1	4.8	65.8	24.2	19.5
17.5	17.2	15.7	20.9	15.5	13.8	14.1	0.0	18.2	16.5	14.7	15.7	18.1	6.5	14.8	15.3
6.3	5.5	10.3	12.9	8.5	5.8	5.4	8.3	9.1	9.8	8.0	9.6	11.5	4.5	7.0	13.1
52.1	53.8	39.0	40.1	48.8	51.3	52.7	25.0	50.0	47.0	50.7	40.9	45.8	14.5	35.1	32.0
20.3	19.9	29.0	21.7	23.5	23.3	22.4	50.0	18.2	21.7	22.7	27.8	19.8	8.6	18.9	20.1
13,394	12,218	276	892	104	123	108	3	11	430	172	47	208	289	126	159
93.9	97.9	90.6	40.8	98.1	89.4	98.1	66.7	18.2	61.9	96.5	76.6	30.3	64.0	97.6	37.7
5.9	2.0	8.0	58.2	1.0	10.6	1.9	33.3	81.8	37.7	2.3	23.4	69.7	34.9	1.6	61.0
0.2	0.1	1.4	1.0	1.0	0.0	0.0	0.0	0.0	0.5	1.2	0.0	0.0	1.0	0.8	1.3

SOURCE: National Research Council, Survey of Earned Doctorates.

APPENDIX TABLE A-5 Sources of Graduate School Support for Doctorate Recipients, by Broad Field and Gender, 1992

Sources of Support in Graduate School		Total		Physical Sciences		Engineering		Life Sciences		Social Sciences		Humanities		Education		Prof/Other Fields	
		Men/Women	Men/Women	Men/Women	Men/Women	Men/Women	Men/Women	Men/Women	Men/Women	Men/Women	Men/Women	Men/Women	Men/Women	Men/Women	Men/Women	Men/Women	
Federal Fellow/Trainee	N	1,117	1,023	136	58	97	27	658	613	138	205	59	63	23	49	6	8
	V*	4.9	7.5	2.8	4.7	2.1	5.6	16.0	22.8	4.6	7.5	2.6	3.2	0.9	1.3	0.4	1.0
	H*	100.0	100.0	12.2	5.7	8.7	2.6	58.9	59.9	12.4	20.0	5.3	6.2	2.1	4.8	0.5	0.8
GI Bill	N	317	93	20	4	31	3	27	20	65	45	43	2	91	15	40	4
	V	1.4	0.7	0.4	0.3	0.7	0.6	0.7	0.7	2.2	1.7	1.9	0.1	3.6	0.4	2.6	0.5
	H	100.0	100.0	6.3	4.3	9.8	3.2	8.5	21.5	20.5	48.4	13.6	2.2	28.7	16.1	12.6	4.3
Other Federal Support†	N	882	578	201	56	170	22	169	147	142	146	99	81	61	108	40	18
	V	3.8	4.2	4.1	4.6	3.7	4.6	4.1	5.5	4.7	5.4	4.4	4.1	2.4	2.9	2.6	2.3
	H	100.0	100.0	22.8	9.7	19.3	3.8	19.2	25.4	16.1	25.3	11.2	14.0	6.9	18.7	4.5	3.1
State Government	N	245	147	38	15	30	5	57	23	47	42	22	11	43	40	8	11
	V	1.1	1.1	0.8	1.2	0.6	1.0	1.4	0.9	1.6	1.5	1.0	0.6	1.7	1.1	0.5	1.4
	H	100.0	100.0	15.5	10.2	12.2	3.4	23.3	15.6	19.2	28.6	9.0	7.5	17.6	27.2	3.3	7.5
Foreign Government	N	1,366	340	216	30	410	18	336	101	174	46	99	75	68	51	63	19
	V	5.9	2.5	4.4	2.5	8.8	3.7	8.2	3.8	5.8	1.7	4.4	3.8	2.7	1.4	4.1	2.4
	H	100.0	100.0	15.8	8.8	30.0	5.3	24.6	29.7	12.7	13.5	7.2	22.1	5.0	15.0	4.6	5.6
National Fellow (nonfed)	N	1,025	826	192	56	141	29	171	164	225	184	212	263	31	79	53	51
	V	4.5	6.1	3.9	4.6	3.0	6.0	4.2	6.1	7.5	6.8	9.5	13.3	1.2	2.1	3.4	6.4
	H	100.0	100.0	18.7	6.8	13.8	3.5	16.7	19.9	22.0	22.3	20.7	31.8	3.0	9.6	5.2	6.2
University Teaching Assistant	N	12,189	6,657	3,611	928	2,087	222	1,557	1,075	1,850	1,500	1,634	1,537	602	965	848	430
	V	53.0	48.8	73.0	75.9	44.9	46.2	38.0	39.9	61.5	55.2	73.3	77.8	23.9	25.8	55.2	53.8
	H	100.0	100.0	29.6	13.9	17.1	3.3	12.8	16.1	15.2	22.5	13.4	23.1	4.9	14.5	7.0	6.5
University Research Assistant†	N	13,077	5,733	3,843	925	3,666	393	2,761	1,633	1,304	1,267	481	422	432	792	590	301
	V	56.9	42.1	77.7	75.6	78.8	81.7	67.3	60.7	43.4	46.6	21.6	21.4	17.1	21.2	38.4	37.6
	H	100.0	100.0	29.4	16.1	28.0	6.9	21.1	28.5	10.0	22.1	3.7	7.4	3.3	13.8	4.5	5.3
University Fellow	N	3,683	2,262	769	201	550	91	568	454	678	500	718	634	139	259	261	123
	V	16.0	16.6	15.6	16.4	11.8	18.9	13.8	16.9	22.5	18.4	32.2	32.1	5.5	6.9	17.0	15.4
	H	100.0	100.0	20.9	8.9	14.9	4.0	15.4	20.1	18.4	22.1	19.5	28.0	3.8	11.5	7.1	5.4
Other University	N	2,017	2,121	240	73	219	33	308	302	427	536	394	476	286	576	143	125
	V	8.8	15.6	4.9	6.0	4.7	6.9	7.5	11.2	14.2	19.7	17.7	24.1	11.3	15.4	9.3	15.6
	H	100.0	100.0	11.9	3.4	10.9	1.6	15.3	14.2	21.2	25.3	19.5	22.4	14.2	27.2	7.1	5.9
Business/Employer	N	1,529	943	248	53	364	37	150	154	172	144	118	93	326	397	151	65
	V	6.6	6.9	5.0	4.3	7.8	7.7	3.7	5.7	5.7	5.3	5.3	4.7	12.9	10.6	9.8	8.1
	H	100.0	100.0	16.2	5.6	23.8	3.9	9.8	16.3	11.2	15.3	7.7	9.9	21.3	42.1	9.9	6.9
Own Earnings	N	11,818	9,113	1,602	390	1,656	160	1,643	1,321	1,968	1,980	1,672	1,447	2,230	3,240	1,047	575
	V	51.4	66.9	32.4	31.9	35.6	33.3	40.1	49.1	65.4	72.8	75.0	73.3	88.4	86.6	68.1	71.9
	H	100.0	100.0	13.6	4.3	14.0	1.8	13.9	14.5	16.7	21.7	14.1	15.9	18.9	35.6	8.9	6.3
Spouse's Earnings	N	5,583	4,807	878	287	666	104	1,015	837	883	1,036	789	727	872	1,514	480	302
	V	24.3	35.3	17.8	23.5	14.3	21.6	24.7	31.1	29.4	38.1	35.4	36.8	34.6	40.4	31.2	37.8
	H	100.0	100.0	15.7	6.0	11.9	2.2	18.2	17.4	15.8	21.6	14.1	15.1	15.6	31.5	8.6	6.3
Family Support	N	6,128	3,306	1,131	228	1,399	93	983	603	1,021	891	738	632	394	667	462	192
	V	26.6	24.3	22.9	18.6	30.1	19.3	24.0	22.4	34.0	32.8	33.1	32.0	15.6	17.8	30.1	24.0
	H	100.0	100.0	18.5	6.9	22.8	2.8	16.0	18.2	16.7	27.0	12.0	19.1	6.4	20.2	7.5	5.8
Guaranteed Student Loan (Stafford)	N	4,572	3,598	654	150	365	54	791	552	1,143	1,191	730	659	553	765	336	227
	V	19.9	26.4	13.2	12.3	7.8	11.2	19.3	20.5	38.0	43.8	32.8	33.4	21.9	20.4	21.9	28.4
	H	100.0	100.0	14.3	4.2	8.0	1.5	17.3	15.3	25.0	33.1	16.0	18.3	12.1	21.3	7.3	6.3
Perkins Loan (NDSL)	N	1,070	913	100	23	77	14	131	93	330	353	213	191	131	179	88	60
	V	4.7	6.7	2.0	1.9	1.7	2.9	3.2	3.5	11.0	13.0	9.6	9.7	5.2	4.8	5.7	7.5
	H	100.0	100.0	9.3	2.5	7.2	1.5	12.2	10.2	30.8	38.7	19.9	20.9	12.2	19.6	8.2	6.6
Other Loans	N	711	638	97	29	94	8	109	70	165	211	97	95	81	178	68	47
	V	3.1	4.7	2.0	2.4	2.0	1.7	2.7	2.6	5.5	7.8	4.4	4.8	3.2	4.8	4.4	5.9
	H	100.0	100.0	13.6	4.5	13.2	1.3	15.3	11.0	23.2	33.1	13.6	14.9	11.4	27.9	9.6	7.4
Other Sources	N	843	696	144	39	112	7	174	163	121	121	102	105	89	205	101	56
	V	3.7	5.1	2.9	3.2	2.4	1.5	4.2	6.1	4.0	4.5	4.6	5.3	3.5	5.5	6.6	7.0
	H	100.0	100.0	17.1	5.6	13.3	1.0	20.6	23.4	14.4	17.4	12.1	15.1	10.6	29.5	12.0	8.0
Unduplicated Total‡		22,995	13,631	4,945	1,223	4,652	481	4,102	2,691	3,007	2,718	2,229	1,975	2,523	3,743	1,537	800

NOTE: In this table, a recipient counts once in each source category from which he or she received support. Since students indicate multiple sources of support, the vertical percentages sum to more than 100 percent. (Data on the "primary" source of support for doctorate recipients are presented in the body of the report.) Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. See inside the back cover for a description of fields as reported in this table. Refer also to the explanatory note about this table in front of Appendix A.

*V denotes vertical percentage; H denotes horizontal percentage.

†Because federal support obtained through the university cannot always be determined, no distinction is made between federal and university research assistants in this table. Both types of support are grouped under "University Research Assistant." Federal loans are displayed separately in the categories for loans.

‡The 2,188 Ph.D.s who did not report sources of support are omitted from this total. Percentages are based only on known responses.

SOURCE: National Research Council, Survey of Earned Doctorates.

APPENDIX TABLE A-6 State of Doctoral Institution of Doctorate Recipients, by Broad Field and Gender, 1992

	Total		Physical Sciences		Engineering		Life Sciences		Social Sciences		Humanities		Education		Prof./Other Fields	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
U.S. Total*	24,448	14,366	5,216	1,282	4,934	503	4,314	2,794	3,261	2,944	2,385	2,059	2,679	3,943	1,659	841
Alabama	238	134	37	5	60	2	68	48	14	21	8	9	25	43	26	6
Alaska	10	3	8	2	0	0	2	1	0	0	0	0	0	0	0	0
Arizona	417	211	100	22	96	6	63	27	46	31	33	30	44	82	35	13
Arkansas	76	36	6	1	14	0	20	4	7	4	2	2	14	23	13	2
California	2,882	1,650	707	185	649	62	467	282	451	485	301	248	179	326	128	62
Colorado	412	241	110	34	87	7	77	51	66	48	18	27	36	59	18	15
Connecticut	380	205	91	18	44	5	62	47	64	33	86	69	18	31	15	2
Delaware	110	56	33	10	37	4	11	2	9	9	10	19	9	11	1	1
Dist. of Columbia	258	201	31	4	27	3	31	30	64	65	51	39	18	45	36	15
Florida	715	542	115	42	113	10	104	49	89	94	42	46	184	269	68	32
Georgia	515	321	82	25	114	12	90	53	65	71	36	39	67	103	61	18
Hawaii	101	39	25	7	8	0	29	9	20	13	16	3	3	6	0	1
Idaho	56	20	12	2	10	1	25	4	1	1	3	0	5	12	0	0
Illinois	1,483	759	341	79	303	33	199	155	217	123	166	110	157	197	100	62
Indiana	709	380	143	45	163	10	97	68	78	65	87	78	85	83	56	31
Iowa	456	233	90	23	88	4	99	53	37	33	35	32	88	76	19	12
Kansas	279	169	51	11	37	4	89	37	34	31	20	14	31	62	17	10
Kentucky	175	110	26	13	24	1	49	35	19	21	24	17	14	17	19	8
Louisiana	283	152	61	22	40	4	65	31	25	20	36	29	16	35	40	11
Maine	34	18	9	1	1	1	13	8	1	2	4	0	6	6	0	0
Maryland	554	375	162	31	86	10	133	105	70	75	57	48	31	85	15	21
Massachusetts	1,378	810	326	83	302	51	188	162	217	160	116	106	141	208	88	40
Michigan	999	486	141	37	293	15	170	113	143	97	85	65	113	137	54	22
Minnesota	495	277	82	17	95	8	120	65	62	50	35	42	50	73	51	22
Mississippi	199	94	15	2	18	2	49	6	31	26	4	4	56	51	26	3
Missouri	431	254	66	24	89	7	82	49	64	61	39	24	48	75	43	14
Montana	37	28	15	3	3	0	7	7	3	5	0	0	9	13	0	0
Nebraska	150	84	17	7	10	1	46	12	18	14	12	13	29	33	18	4
Nevada	29	17	12	1	4	0	6	4	2	3	2	0	3	9	0	0
New Hampshire	47	25	17	7	10	1	8	10	9	1	3	1	0	5	0	0
New Jersey	556	274	176	39	101	14	71	51	65	54	79	59	30	38	34	19
New Mexico	153	78	42	5	31	7	29	12	18	10	5	13	28	31	0	0
New York	2,192	1,483	506	107	365	45	354	255	374	406	272	284	194	297	127	89
North Carolina	582	358	111	35	121	15	146	109	53	65	70	48	65	78	16	8
North Dakota	46	33	9	3	6	0	17	7	4	9	3	0	7	14	0	0
Ohio	1,016	635	204	41	244	17	152	108	120	131	96	85	134	191	66	62
Oklahoma	253	138	44	10	58	3	44	13	28	23	12	9	49	66	18	14
Oregon	306	179	58	12	33	3	91	43	33	21	22	16	51	74	18	10
Pennsylvania	1,277	799	249	71	302	38	154	157	174	154	123	117	132	209	143	53
Rhode Island	155	87	56	15	31	4	24	12	17	27	27	28	0	1	0	0
South Carolina	214	146	42	15	41	3	49	36	20	10	15	12	34	60	13	10
South Dakota	37	21	2	0	3	0	3	1	9	3	0	0	20	17	0	0
Tennessee	368	277	57	8	66	10	69	52	51	39	34	31	74	124	17	13
Texas	1,540	846	309	67	334	25	273	200	146	113	146	102	164	270	168	69
Utah	271	102	76	12	64	4	48	20	31	22	14	8	31	29	7	7
Vermont	25	22	5	1	2	1	8	5	3	5	0	0	7	10	0	0
Virginia	524	339	98	21	139	26	81	63	57	68	43	29	68	113	38	19
Washington	366	230	78	17	68	12	83	49	42	50	33	39	45	48	17	15
West Virginia	63	53	4	4	19	1	13	6	8	15	1	3	18	23	0	1
Wisconsin	538	289	140	32	79	11	125	69	67	42	59	58	39	53	29	24
Wyoming	39	11	15	3	2	0	10	1	4	4	0	0	7	3	1	0
Puerto Rico	19	36	4	1	0	0	1	0	11	11	0	4	3	19	0	1

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. See inside the back cover for a description of fields as reported in this table. Refer also to the explanatory note about this table in front of Appendix A.

*Includes the 50 states, the District of Columbia, and Puerto Rico.

SOURCE: National Research Council, Survey of Earned Doctorates.

APPENDIX TABLE A-7 Institutions Granting Doctorates, by Major Field, 1992

	1992 Total	Physics and Astronomy	Chemistry	Earth, Atmos., and Marine Sci.	Math and Computer Sci.	Engineering	Biosciences	Health Sciences	Agricultural Sciences	Psychology	Other Social Sciences	History	Eng. and Amer. Lang. and Lit.	Other Humanities	Education	Professional/ Other Fields
TOTAL ALL INSTITUTIONS*	38,814	1,537	2,212	824	1,925	5,437	4,794	1,110	1,204	3,252	2,953	725	903	2,816	6,622	2,500
ALABAMA	372	15	13	2	12	62	62	31	23	31	4	4	7	6	68	32
Alabama A & M University	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Auburn University	132	7	4	0	4	35	9	6	23	13	2	2	1	0	24	2
Univ of Alabama-Birmingham	87	3	4	0	1	2	42	23	0	3	0	0	0	0	8	1
Univ of Alabama-Huntsville	21	4	0	0	5	12	0	0	0	0	0	0	0	0	0	0
Univ of Alabama-University	123	1	5	2	2	13	3	1	0	15	2	2	6	6	36	29
Univ of South Alabama	8	0	0	0	0	0	7	1	0	0	0	0	0	0	0	0
ALASKA	13	4	0	6	0	0	2	0	1	0	0	0	0	0	0	0
Univ of Alaska	13	4	0	6	0	0	2	0	1	0	0	0	0	0	0	0
ARIZONA	628	37	23	25	37	102	60	13	17	38	39	5	14	44	126	48
Arizona State Univ	219	5	8	4	19	46	10	2	0	17	16	2	6	10	45	29
Northern Arizona Univ	55	0	0	0	0	0	11	0	0	0	3	0	0	0	41	0
Univ of Arizona	354	32	15	21	18	56	39	11	17	21	20	3	8	34	40	19
ARKANSAS	112	2	4	0	1	14	13	0	11	10	1	2	2	0	37	15
U of Arkansas-Fayetteville	109	2	4	0	1	14	10	0	11	10	1	2	2	0	37	15
U of Arkansas-Med Sci Campus	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
CALIFORNIA	4,532	225	293	127	247	711	577	103	69	594	342	111	95	343	505	190
Biola Univ	6	0	0	0	0	0	0	0	0	5	0	0	0	0	1	0
Cal Inst of Integral Studies	21	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0
Cal Inst of Technology	134	22	21	17	17	40	17	0	0	0	0	0	0	0	0	0
Cal Sch Prof Psych-Alameda	59	0	0	0	0	0	0	0	0	59	0	0	0	0	0	0
Cal Sch Prof Psych-Fresno	54	0	0	0	0	0	0	0	0	54	0	0	0	0	0	0
Cal Sch Prof Psych-Alhambra	62	0	0	0	0	0	0	0	0	62	0	0	0	0	0	0
Cal Sch Prof Psych-San Diego	43	0	0	0	0	0	0	0	0	43	0	0	0	0	0	0
Claremont Graduate School	90	0	0	0	7	0	0	0	0	11	9	5	1	13	35	7
Fielding Institute	35	0	0	0	0	0	0	0	0	28	5	0	0	0	1	1
Fuller Theological Seminary	42	0	0	0	0	0	0	0	0	26	5	0	0	1	0	10
Golden Gate Baptist Theol Sem	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Graduate Theological Union	17	0	0	0	0	0	0	0	0	1	0	1	0	3	0	12
Hebrew Union College	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
La Sierra Univ	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0
Loma Linda Univ	15	0	0	1	0	0	6	8	0	0	0	0	0	0	0	0
Naval Postgraduate School	8	0	0	2	3	3	0	0	0	0	0	0	0	0	0	0
Pacific Grad Sch of Psych	13	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0
Pepperdine Univ	24	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0
Rand Grad Sch Policy Studies	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0
San Diego State Univ	14	0	2	0	0	4	0	0	0	5	0	0	0	0	3	0
Saybrook Institute	24	0	0	0	0	1	0	0	0	22	1	0	0	0	0	0
Stanford Univ	562	37	46	15	34	185	51	0	4	13	45	11	9	57	39	16
U.S. International Univ	137	0	0	0	0	0	0	0	0	90	0	0	0	0	20	27
Univ of California-Berkeley	796	38	82	19	57	161	94	25	31	16	84	32	21	70	37	29
Univ of California-Davis	285	19	24	4	13	37	126	2	26	9	10	3	5	6	0	1
Univ of California-Irvine	162	14	13	1	16	25	33	2	0	13	23	3	11	7	0	1
Univ of Calif-Los Angeles	612	46	21	19	38	79	70	28	0	25	73	29	13	85	60	26
Univ of Calif-Riverside	95	6	11	1	5	0	30	0	8	2	11	2	7	3	9	0
Univ of Calif-San Diego	216	14	21	18	23	35	47	0	0	8	20	2	4	24	0	0
Univ of Calif-San Francisco	81	0	9	0	2	3	36	23	0	3	5	0	0	0	0	0
Univ of Calif-Santa Barbara	210	15	19	12	14	42	17	3	0	9	17	8	6	28	20	0
Univ of Calif-Santa Cruz	60	8	3	4	4	1	14	0	0	3	4	10	5	4	0	0
Univ of La Verne	45	0	0	0	0	0	0	0	0	0	0	0	0	0	37	8
Univ of the Pacific	14	0	1	0	0	0	0	0	0	0	0	0	0	0	13	0
Univ of San Diego	17	0	0	0	0	0	0	5	0	0	0	0	0	0	12	0
Univ of San Francisco	72	0	0	0	0	0	0	0	0	1	0	0	0	0	71	0
Univ of Santa Clara	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
Univ of Southern California	452	6	20	14	14	96	29	7	0	28	26	5	13	38	105	51
Wright Institute, The	25	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0
COLORADO	653	41	31	41	31	94	79	20	29	56	58	5	8	32	95	33
Colorado School of Mines	48	4	3	14	1	21	0	0	0	0	3	0	0	0	0	2
Colorado State Univ	194	7	13	12	8	37	40	4	29	8	10	0	0	0	24	2
Univ of Colorado	290	28	13	14	21	36	38	14	0	25	31	4	4	25	22	15
Univ of Denver	81	2	2	1	0	0	1	1	0	19	12	1	4	4	20	14
Univ of Northern Colorado	40	0	0	0	1	0	0	1	0	4	2	0	0	3	29	0
CONNECTICUT	585	31	35	11	32	49	94	11	4	28	69	27	16	112	49	17
Univ of Connecticut	206	8	18	1	8	26	31	5	2	15	16	4	6	11	47	8
Univ of Hartford	5	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0
Univ of New Haven	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Wesleyan Univ	25	2	5	0	3	0	12	0	0	0	0	0	0	3	0	0
Yale Univ	347	21	12	10	21	23	51	6	2	13	53	23	10	95	0	7
DELAWARE	166	8	14	10	11	41	12	0	1	2	16	4	10	15	20	2
Univ of Delaware	166	8	14	10	11	41	12	0	1	2	16	4	10	15	20	2
DISTRICT OF COLUMBIA	459	7	16	0	12	30	51	10	0	46	83	18	9	63	63	51
American Univ	56	2	6	0	0	0	0	0	0	7	24	1	0	2	14	0
Catholic Univ of America	100	3	0	0	1	6	4	6	0	8	6	6	3	31	7	19
Gallaudet Univ	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
George Washington Univ	156	0	2	0	11	18	22	1	0	18	17	5	5	4	35	18
Georgetown Univ	68	1	5	0	0	0	19	0	0	1	16	3	0	23	0	0
Howard Univ	76	1	3	0	0	6	6	3	0	12	20	3	1	3	4	14

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. See inside the back cover for a description of fields as reported in this table. Refer also to the explanatory note about this table in front of Appendix A.

*Includes the 50 states, the District of Columbia, and Puerto Rico.

APPENDIX TABLE A-7 (Continued)

	1992 Total	Physics and Astronomy	Chemistry	Earth, Atmos- and Marine Sci.	Math and Computer Sci.	Engineering	Biosciences	Health Sciences	Agricultural Sciences	Psychology	Other Social Sciences	History	Eng. and Amer. Lang. and Lit.	Other Humanities	Education	Professional/ Other Fields
FLORIDA	1,257	22	52	22	61	123	93	18	42	118	65	6	25	57	453	100
Barry Univ	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Florida Atlantic Univ	30	0	0	0	0	15	0	0	0	1	0	0	0	0	10	4
Florida Inst of Technology	18	3	0	1	2	7	1	0	0	0	0	0	0	0	4	0
Florida International Univ	25	0	0	0	1	0	0	0	0	1	0	0	0	0	19	4
Florida State Univ	288	7	9	7	19	0	16	1	0	27	28	2	11	42	85	34
Nova Univ	290	0	0	0	10	0	0	0	0	21	2	0	0	0	226	31
Univ of Central Florida	29	0	0	0	2	5	0	0	0	1	0	0	0	0	16	5
Univ of Florida	364	6	33	2	19	68	57	13	42	29	21	3	6	7	41	17
Univ of Miami	113	6	8	8	0	11	15	4	0	21	8	1	1	6	23	1
Univ of South Florida	96	0	2	4	8	17	4	0	0	17	6	0	7	2	29	0
GEORGIA	836	20	48	11	28	126	91	21	31	89	47	7	15	53	170	79
Clark Atlanta Univ	31	0	0	0	0	0	3	0	0	5	7	1	1	0	12	2
Emory Univ	114	1	19	0	4	0	20	0	0	5	7	4	9	36	4	5
Georgia Inst of Technology	186	15	13	7	15	124	4	0	0	4	0	0	0	0	0	4
Georgia State Univ	139	1	2	0	3	0	9	3	0	34	6	1	1	0	46	33
Inst of Paper Sci & Tech	3	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0
Medical College of Georgia	15	0	0	0	0	0	7	8	0	0	0	0	0	0	0	0
Mercer U/Southern Sch Pharmacy	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Univ of Georgia	347	3	13	3	6	1	48	9	31	41	27	1	4	17	108	35
HAWAII	140	4	10	17	1	8	26	3	9	7	26	4	1	14	9	1
Univ of Hawaii at Manoa	140	4	10	17	1	8	26	3	9	7	26	4	1	14	9	1
IDAHO	76	1	5	7	1	11	12	2	15	1	1	1	2	0	17	0
Idaho State Univ	11	0	0	1	1	0	4	2	0	0	1	0	2	0	0	0
Univ of Idaho	65	1	5	6	0	11	8	0	15	1	0	1	0	0	17	0
ILLINOIS	2,242	94	165	13	148	336	226	67	61	133	207	47	48	181	354	162
DePaul Univ	13	0	0	0	0	0	0	0	0	10	0	0	0	3	0	0
Illinois Inst of Technology	75	5	0	0	22	29	6	0	0	8	0	1	0	0	0	4
Illinois State Univ-Normal	46	0	0	0	3	0	1	0	0	0	1	4	3	2	32	0
Loyola Univ of Chicago	94	0	7	0	0	0	15	0	0	15	8	4	3	5	37	0
Lutheran Sch of Theol-Chicago	10	0	0	0	0	0	0	0	0	0	0	0	0	1	0	9
Northern Illinois Univ	117	0	5	3	3	0	5	0	0	5	8	5	6	1	76	0
Northwestern Univ	348	11	30	2	31	86	36	7	0	27	33	5	6	39	11	24
Rush Univ	20	0	1	0	0	0	5	14	0	0	0	0	0	0	0	0
Southern Ill Univ-Carbondale	197	9	3	0	8	11	16	8	4	12	11	0	4	10	78	23
Southern Ill Univ-Edwardsville	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
Univ of Chicago	323	26	28	1	12	0	30	0	0	11	78	17	12	51	17	40
Univ of Health Sci-Chicago Med	13	0	0	0	0	0	5	0	0	8	0	0	0	0	0	0
Univ of Ill-Chicago	206	8	30	1	17	30	29	33	0	11	20	2	4	5	10	6
Univ of Ill-Urbana/Champaign	774	35	61	6	52	180	78	5	57	26	48	9	10	64	87	56
INDIANA	1,089	41	84	9	54	173	114	21	30	61	82	24	35	106	168	87
Ball State Univ	56	0	0	0	0	0	2	1	0	12	0	0	6	10	24	1
Grace Theological Seminary	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Indiana State Univ	42	0	0	0	0	0	4	0	0	10	2	0	0	0	26	0
Indiana Univ-Bloomington	411	12	21	4	16	0	40	1	0	18	50	18	18	71	87	55
Indiana Univ Sch of Medicine	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0
Purdue Univ	479	19	57	5	30	155	58	11	30	18	23	1	5	15	31	21
Univ of Notre Dame	91	10	6	0	8	18	10	0	0	3	7	5	6	10	0	8
IOWA	689	25	44	7	37	92	83	29	40	34	36	10	14	43	164	31
Drake Univ	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
Iowa State Univ	277	19	26	0	15	44	37	1	40	17	19	5	0	0	51	3
Maharishi International Univ	4	1	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Univ of Northern Iowa	15	0	0	0	0	1	0	0	0	0	0	0	0	0	13	1
Univ of Iowa	379	5	18	7	22	47	45	28	0	16	17	5	14	43	86	26
KANSAS	448	11	30	3	18	41	74	13	39	39	26	4	3	27	93	27
Kansas State Univ	168	8	7	0	11	14	28	0	39	7	8	1	0	0	43	2
Univ of Kansas	263	3	20	3	5	18	46	11	0	32	18	3	2	27	50	25
Wichita State Univ	17	0	3	0	2	9	0	2	0	0	0	0	1	0	0	0
KENTUCKY	285	4	18	4	13	25	41	19	22	28	12	5	6	30	31	27
Southern Bapt Theol Seminary	32	0	0	0	0	0	0	0	0	2	1	2	0	14	3	10
Univ of Kentucky	207	4	10	4	13	22	32	19	22	13	11	3	6	12	19	17
Univ of Louisville	46	0	8	0	0	3	9	0	0	13	0	0	0	4	9	0
LOUISIANA	435	7	25	13	38	44	62	20	14	22	23	6	19	40	51	51
Louisiana St U & A&M College	213	5	14	10	9	24	31	6	14	8	11	4	11	16	35	15
Louisiana St U Med-New Orleans	13	0	0	0	0	0	11	2	0	0	0	0	0	0	0	0
Louisiana St U Med-Shreveport	8	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0
Louisiana Tech Univ	15	0	0	0	0	7	0	0	0	0	0	0	0	0	0	8
New Orleans Bapt Theol Seminary	41	0	0	0	0	0	0	0	0	2	0	0	0	15	2	22
Northeast Louisiana Univ	5	0	2	1	0	0	1	1	0	0	0	0	0	0	0	0
Tulane Univ of Louisiana	86	2	5	2	7	11	9	11	0	8	11	2	5	8	0	5
Univ of New Orleans	24	0	4	0	0	0	0	0	0	4	1	0	0	0	14	1
Univ of Southwestern Louisiana	30	0	0	0	22	2	2	0	0	0	0	0	3	1	0	0

APPENDIX TABLE A-7 (Continued)

	T.	Physics and Astronomy	Chemistry	Earth, Atmos., and Marine Sci.	Math and Computer Sci.	Engineering	Biosciences	Health Sciences	Agricultural Sciences	Psychology	Other Social Sciences	History	Eng. and Amer. Lang. and Lit.	Other Humanities	Education	Professional/Other Fields
MAINE	52	1	7	1	1	2	10	0	11	3	0	3	0	1	12	0
Univ of Maine	52	1	7	1	1	2	10	0	11	3	0	3	0	1	12	0
MARYLAND	299	61	41	21	70	96	152	75	11	52	93	28	16	61	116	36
Johns Hopkins Univ	297	15	14	11	13	34	63	52	0	0	41	23	6	11	6	1
Loyola College in Maryland	9	0	0	0	0	0	0	0	0	8	0	0	0	0	0	1
Morgan State Univ	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0
Peabody Inst of Johns Hopkins	12	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0
Uniformed Serv U of Hlth Sci	11	0	0	0	0	0	9	1	0	1	0	0	0	0	0	0
U of Maryland-Baltimore County	27	0	8	0	11	0	6	0	0	2	0	0	0	0	0	0
U of Maryland-College Park	506	46	15	10	46	62	45	6	11	34	52	5	10	38	102	24
U of Maryland-Eastern Shore	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
U of Maryland Sch of Med	59	0	4	0	0	0	28	16	0	0	0	0	0	0	1	10
MASSACHUSETTS	2,188	121	134	39	115	353	284	58	8	115	262	36	48	138	349	128
American Internatl College	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
Boston College	113	5	2	0	0	0	7	6	0	18	9	5	6	3	42	10
Boston Univ	280	6	11	2	8	7	43	14	0	33	38	5	5	29	69	10
Brandeis Univ	105	11	10	0	10	0	25	1	0	3	24	4	6	10	0	1
Clark Univ	19	2	2	0	0	0	3	1	0	3	6	1	0	0	1	0
Harvard Univ	501	33	21	7	28	14	82	27	0	8	93	17	13	69	64	25
Mass Coll Pharm & Health Sci	3	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0
Mass Inst of Technology	513	40	42	23	42	227	39	1	1	4	44	0	0	13	1	36
Northeastern Univ	65	6	6	0	3	14	4	1	0	6	14	0	0	0	10	1
Simmons College	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Smith College	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Springfield College	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Tufts Univ	79	3	6	0	2	13	32	0	0	6	11	2	1	3	0	0
Univ of Mass-Amherst	408	8	21	5	17	53	32	5	7	34	23	2	17	11	146	27
Univ of Mass-Boston	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Univ of Mass-Lowell	53	7	9	0	5	16	4	1	0	0	0	0	0	0	11	0
Univ of Mass-Worcester	12	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0
Worcester Polytechnic Inst	12	0	2	0	0	9	1	0	0	0	0	0	0	0	0	0
MICHIGAN	1,485	45	69	19	45	308	189	47	47	129	111	19	34	97	250	76
Andrews Univ	17	0	0	0	0	0	0	0	0	1	0	0	0	2	11	3
Michigan State Univ	468	12	25	1	9	59	67	4	42	39	49	2	13	26	90	30
Michigan Technological Univ	33	1	1	2	0	20	5	0	4	0	0	0	0	0	0	0
Oakland Univ	11	0	2	0	0	5	1	0	0	0	0	0	0	0	3	0
Univ of Detroit Mercy	22	0	1	0	0	2	0	0	0	19	0	0	0	0	0	0
Univ of Michigan	674	28	26	16	27	206	75	34	1	33	53	16	19	67	33	40
Wayne State Univ	198	4	14	0	5	16	41	9	0	19	7	1	2	2	75	3
Western Michigan Univ	62	0	0	0	4	0	0	0	0	18	2	0	0	0	38	0
MINNESOTA	772	16	35	8	40	103	82	44	59	58	54	14	13	50	123	73
Luther Northwestern Theol Sem	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Mayo Graduate School	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
Univ of Minnesota-Minneapolis	650	16	35	8	40	103	79	33	59	36	44	14	13	49	86	35
Univ of St. Thomas	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
Walden Univ	101	0	0	0	0	0	11	0	22	10	0	0	0	1	25	32
MISSISSIPPI	293	1	15	0	1	20	18	4	33	47	10	2	2	4	107	29
Delta State Univ	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Jackson State Univ	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0
Mississippi State Univ	102	0	4	0	1	14	5	1	33	8	6	1	0	0	17	12
Univ of Mississippi	77	1	1	0	0	4	2	3	0	13	4	0	0	2	34	13
U of Mississippi-Med Center	7	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0
Univ of Southern Mississippi	98	0	10	0	0	2	4	0	0	26	0	1	2	2	47	4
MISSOURI	685	18	37	13	22	96	88	9	34	81	44	3	12	48	123	57
Concordia Seminary	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Midwest Bapt Theol Seminary	17	0	0	0	0	0	0	0	0	0	0	0	0	3	0	14
St. Louis Univ	102	0	0	4	1	0	10	1	0	15	5	0	4	11	37	14
Univ of Missouri-Columbia	256	7	9	5	5	16	36	3	33	31	19	2	7	7	60	16
Univ of Missouri-Kansas City	53	1	4	0	0	0	1	5	0	15	0	0	0	9	18	0
Univ of Missouri-Rolla	59	2	5	0	4	47	0	0	0	0	0	0	0	0	0	1
Univ of Missouri-S. Louis	25	0	7	0	0	0	0	0	0	11	0	0	0	0	7	0
Washington Univ st. l.	169	8	12	4	12	33	41	0	1	9	20	1	1	18	1	8
MONTANA	65	6	8	1	3	3	6	0	8	7	1	0	0	0	22	0
Montana State Univ	41	6	6	0	2	3	5	0	5	0	0	0	0	0	14	0
Univ of Montana	24	0	2	1	1	0	1	0	3	7	1	0	0	0	8	0
NEBRASKA	234	0	16	3	5	11	29	6	23	18	14	1	10	14	62	22
Creighton Univ	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
Univ of Nebraska-Lincoln	231	0	16	3	5	11	26	6	23	18	14	1	10	14	62	22
NEVADA	46	1	4	8	0	4	10	0	0	4	1	0	2	0	12	0
Univ of Nevada-Las Vegas	6	0	0	0	0	0	2	0	0	0	1	0	1	0	2	0
Univ of Nevada-Reno	40	1	4	8	0	4	8	0	0	4	0	0	1	0	10	0
NEW HAMPSHIRE	72	11	4	2	7	11	18	0	0	6	4	2	2	0	5	0
Dartmouth College	35	6	3	2	7	5	9	0	0	3	0	0	0	0	0	0
Univ of New Hampshire	37	5	1	0	0	6	9	0	0	3	4	2	2	0	5	0

NOTE. Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. See inside the back cover for a description of fields as reported in this table. Refer also to the explanatory note about this table in front of Appendix A.

APPENDIX TABLE A-7 (Continued)

	1992 Total	Physics and Astronomy	Chemistry	Earth, Atmos- and Marine Sci	Math and Computer Sci.	Engineering	Biosciences	Health Sciences	Agricultural Sciences	Psychology	Other Social Sciences	History	Eng. and Amer. Lang. and Lit.	Other Humanities	Education	Professional/ Other Fields
NEW JERSEY	830	52	73	29	61	115	101	5	16	48	71	29	25	84	68	53
Drew Univ	37	0	0	0	0	0	0	0	0	0	2	3	4	11	0	17
Fairleigh Dickinson Univ	10	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0
New Jersey Inst of Technology	15	0	0	1	0	14	0	0	0	0	0	0	0	0	0	0
Princeton Theol Seminary	18	0	0	0	0	0	0	0	0	0	0	0	0	2	0	16
Princeton Univ	257	33	26	14	20	33	16	0	0	5	41	16	7	46	0	0
Rutgers St U-New Brunswick	373	16	25	12	35	53	68	5	16	14	25	10	14	25	47	8
Rutgers St U-Newark	28	0	9	0	0	0	2	0	0	3	3	0	0	0	0	11
Seton Hall Univ	46	0	9	0	0	0	0	0	0	16	0	0	0	0	21	0
Stevens Inst of Technology	31	3	4	2	6	15	0	0	0	0	0	0	0	0	0	1
Univ of Med & Dent of NJ	15	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0
NEW MEXICO	231	12	15	6	14	38	29	3	9	17	11	5	3	10	59	0
New Mexico Inst of Mining & Tech	10	0	0	4	0	6	0	0	0	0	0	0	0	0	0	0
New Mexico State Univ	67	3	7	0	5	13	0	9	7	0	0	0	0	0	8	0
Univ of New Mexico	154	9	8	2	9	17	16	3	0	10	11	5	3	10	51	0
NEW YORK	3,675	181	173	55	204	410	463	77	69	404	376	87	98	371	491	216
Adelphi Univ	47	0	0	0	0	0	0	9	0	28	0	0	0	1	0	9
Alfred Univ	6	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0
City U of NY-Grad Sch/U Ctr	257	20	11	4	10	11	46	2	0	51	28	9	8	38	2	17
Clarkson Univ	33	2	7	0	1	18	5	0	0	0	0	0	0	0	0	0
Columbia Univ	418	24	21	16	20	45	39	18	0	29	58	23	20	62	10	33
Columbia U-Teachers College	223	0	0	0	0	0	0	0	0	0	0	0	0	0	223	0
Cornell Univ	513	50	20	7	40	101	71	11	65	8	53	9	13	40	15	10
Cornell Univ Medical College	30	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0
Fordham Univ	90	0	0	0	0	0	0	0	0	20	19	2	1	2	32	14
Hofstra Univ	71	0	0	0	0	0	0	0	0	55	0	0	0	0	16	0
Jewish Theol Sem of America	8	0	0	0	0	0	0	0	0	0	0	2	0	5	1	0
The Juilliard School	13	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0
Long Island U-Brooklyn Campus	14	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0
Manhattan School of Music	16	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0
New School for Social Research	53	0	0	0	0	0	0	0	0	21	31	0	0	1	0	0
New York Medical College	5	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
New York Univ	403	10	5	2	34	2	38	13	0	50	33	14	11	70	65	56
Pace Univ	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Polytechnic Univ	51	0	7	0	13	30	0	0	0	0	0	0	0	0	0	1
Rensselaer Polytechnic Inst	127	7	13	2	16	74	3	0	0	0	5	0	1	0	0	6
Rockefeller Univ	20	1	0	0	0	0	19	0	0	0	0	0	0	0	0	0
St. John's Univ	30	0	1	0	0	0	6	2	0	15	0	0	1	0	5	0
State Univ of NY-Albany	134	8	3	4	6	0	10	2	0	15	26	0	8	15	27	10
State Univ of NY-Binghamton	82	0	13	3	3	8	5	0	0	7	26	5	4	7	0	1
State Univ of NY-Buffalo	290	3	22	1	8	39	52	9	0	32	30	4	14	17	48	11
SUNY Coll-Envirn Sci & Forestry	8	0	1	1	0	0	2	0	4	0	0	0	0	0	0	0
SUNY College of Optometry	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
SUNY-Hlth Sci Ctr-Brooklyn	9	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0
SUNY-Hlth Sci Ctr-Syracuse	10	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0
State Univ of NY-Stony Brook	226	26	18	12	26	20	34	1	0	15	21	6	5	41	1	0
Syracuse Univ	170	5	11	2	13	30	8	1	0	10	28	5	4	8	29	16
Union Theological Seminary	10	0	0	0	0	0	0	0	0	0	0	0	0	3	0	7
Union Univ	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Union U-Albany Med College	11	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0
Univ of Rochester	229	25	19	1	14	26	32	6	0	12	18	8	8	32	15	13
Yeshiva Univ	32	0	0	0	0	0	0	0	0	22	0	0	0	0	2	8
Yeshiva U-Einstein Coll of Med	29	0	1	0	0	0	28	0	0	0	0	0	0	0	0	0
NORTH CAROLINA	940	27	57	19	43	136	189	33	33	56	62	29	31	58	143	24
Campbell Univ	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0
Duke Univ	213	8	11	5	14	27	60	0	0	6	21	15	13	24	0	9
East Carolina U-Sch of Med	5	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
North Carolina St U-Raleigh	274	13	10	5	13	106	37	4	33	9	9	0	0	0	34	1
U of N Carolina-Chapel Hill	338	6	35	8	16	3	66	29	0	30	26	14	15	32	46	12
U of N Carolina-Greensboro	70	0	1	0	0	3	0	0	11	6	0	3	2	42	2	
Wake Forest Univ	19	0	1	0	0	0	18	0	0	0	0	0	0	0	0	
NORTH DAKOTA	79	1	5	0	6	6	11	1	12	13	0	0	3	0	21	0
North Dakota State Univ	31	0	0	0	6	6	4	0	12	0	0	0	0	0	0	0
Univ of North Dakota	48	1	5	0	0	0	7	1	0	13	0	0	3	0	21	0
OHIO	1,651	49	123	17	56	261	177	49	34	160	91	29	44	108	325	128
Air Force Inst of Technology	10	2	0	0	0	8	0	0	0	0	0	0	0	0	0	0
Bowling Green State Univ	53	0	0	0	5	0	4	0	0	10	4	0	9	9	8	4
Case Western Reserve Univ	176	6	20	1	5	55	31	10	0	10	6	2	1	8	1	20
Cleveland State Univ	16	0	1	0	0	7	1	0	0	0	1	0	0	0	6	0
Hebrew Union College	6	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0
Kent State Univ	149	7	5	2	6	0	16	2	0	24	12	3	2	7	44	19
Medical College of Ohio	16	1	0	0	0	0	15	0	0	0	0	0	0	0	0	0
Miami Univ	62	0	5	0	0	0	7	0	0	14	4	6	3	2	21	0
Ohio State Univ	660	17	38	8	35	85	60	28	34	49	47	8	20	51	127	53
Ohio Univ	115	7	4	0	2	6	6	0	0	19	0	2	6	5	38	20
Univ of Akron	106	4	23	0	0	27	3	0	0	18	4	5	0	0	22	0
Univ of Cincinnati	215	4	21	6	3	56	28	7	0	7	13	3	0	20	35	12
Univ of Dayton	8	0	0	0	0	7	1	0	0	0	0	0	0	0	0	0
Univ of Toledo	54	1	6	0	0	10	0	2	0	9	0	0	3	0	23	0
Wright State Univ	5	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0

APPENDIX TABLE A-7 (Continued)

	1992 Total	Physics and Astronomy	Chemistry	Earth, Atmos., and Marine Sci.	Math and Computer Sci.	Engineering	Biosciences	Health Sciences	Agricultural Sciences	Psychology	Other Social Sciences	History	Eng. and Appls. Lang. and Lit.	Other Humanities	Education	Professional/ Other Fields
OKLAHOMA	391	9	20	11	14	61	33	6	18	36	15	1	3	17	115	32
Oklahoma State Univ	181	1	10	3	4	24	12	0	17	18	5	0	3	1	66	17
Univ of Oklahoma	179	8	10	6	10	30	20	6	1	12	10	1	0	16	34	15
Univ of Tulsa	31	0	0	2	0	7	1	0	0	6	0	0	0	0	15	0
OREGON	485	20	10	17	23	36	60	14	60	23	31	5	9	24	125	28
Oregon Graduate Inst of Sci & Tech	20	5	0	2	3	10	0	0	0	0	0	0	0	0	0	0
Oregon Health Sciences Univ	19	0	0	0	0	0	13	5	0	1	0	0	0	0	0	0
Oregon State Univ	196	5	5	9	11	25	32	4	60	3	2	0	0	0	37	3
Portland State Univ	32	2	0	5	1	1	1	0	0	0	0	0	0	0	13	2
Univ of Oregon	218	8	5	1	8	0	14	5	0	19	22	5	9	24	75	23
PENNSYLVANIA	2,076	63	107	44	106	340	229	62	20	153	175	27	50	163	341	196
Annenberg Research Inst	5	0	0	0	0	0	0	0	0	0	1	1	0	3	0	0
Bryn Mawr College	24	1	1	0	1	0	2	0	0	4	0	1	1	8	1	4
Carnegie-Mellon Univ	148	2	7	2	37	71	6	0	0	0	7	2	0	4	0	10
Drexel Univ	53	3	3	9	5	20	6	0	0	1	0	0	0	0	0	6
Duquesne Univ	22	0	0	0	1	0	0	0	0	6	0	0	1	10	0	4
Hahnemann Univ	23	0	0	0	0	0	13	0	0	10	0	0	0	0	0	0
Indiana Univ of Pennsylvania	24	0	0	0	0	0	0	0	0	0	1	0	10	7	6	0
Lehigh Univ	93	7	6	2	5	42	1	0	0	3	2	0	5	0	17	3
Med College of Pennsylvania	7	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0
Pennsylvania State Univ	560	23	33	28	24	125	66	6	20	41	40	1	7	22	86	38
Phila Coll of Pharm & Sci	4	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
Temple Univ	282	5	7	0	7	0	17	6	0	45	20	6	9	22	114	24
Thomas Jefferson Univ	13	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0
Univ of Pennsylvania	447	11	23	1	17	41	63	14	0	20	78	14	14	54	36	61
Univ of Pittsburgh	343	11	24	2	9	41	33	26	0	23	26	2	3	31	77	35
Villanova Univ	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
Westminster Theol Seminary	13	0	0	0	0	0	0	0	0	0	0	0	0	2	0	11
Widener Univ	12	0	0	0	0	0	0	8	0	0	0	0	0	0	4	0
PUERTO RICO	55	0	5	0	0	0	1	0	0	19	3	0	0	4	22	1
Caribbean Ctr for Adv Studies	17	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0
Inter Amer U PR-Metro Campus	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
Univ of Puerto Rico	27	0	5	0	0	0	1	0	0	2	3	0	0	4	11	1
RHODE ISLAND	242	14	16	17	24	35	18	5	13	28	16	6	20	29	1	0
Brown Univ	134	11	8	3	21	17	7	2	0	6	16	5	9	29	0	0
Providence College	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Univ of Rhode Island	107	3	8	14	3	18	11	3	13	22	0	0	11	0	1	0
SOUTH CAROLINA	360	4	25	12	16	44	56	18	11	15	15	5	8	14	94	23
Clemson Univ	94	0	8	0	6	34	23	0	11	0	2	0	0	0	6	4
Medical Univ of South Carolina	19	0	1	0	1	2	14	1	0	0	0	0	0	0	0	0
South Carolina State College	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0
Univ of South Carolina	239	4	16	12	9	8	19	17	0	15	13	5	8	14	80	19
SOUTH DAKOTA	58	0	0	2	0	3	2	0	2	10	2	0	0	0	37	0
S Dakota Sch of Mines & Tech	5	0	0	2	0	3	0	0	0	0	0	0	0	0	0	0
South Dakota State Univ	5	0	0	0	0	1	0	2	0	2	0	0	0	0	0	0
Univ of South Dakota	48	0	0	0	0	1	0	0	0	10	0	0	0	0	37	0
TENNESSEE	645	16	27	4	18	76	96	12	13	50	40	13	19	33	158	30
East Tennessee State Univ	16	0	0	0	0	0	2	0	0	0	0	0	0	0	14	0
Geo Peabody Coll for Teachers	68	0	0	0	0	0	0	0	0	0	0	0	0	0	68	0
Mcharry Medical College	8	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0
Memphis State Univ	104	0	4	0	3	5	2	3	0	19	1	4	0	3	53	7
Mid-America Bapt Theol Sem	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Middle Tennessee State Univ	16	0	1	0	0	0	0	0	0	0	3	5	2	0	5	0
Tennessee Technological Univ	7	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0
U of Tenn-Ctr for Health Sci	15	0	0	0	0	12	3	0	0	0	0	0	0	0	0	0
Univ of Tennessee-Knoxville	260	11	11	4	5	47	40	5	13	20	23	1	11	6	44	19
Vanderbilt Univ	148	5	11	0	10	17	32	1	0	11	13	3	6	24	14	1
TEXAS	2,386	104	112	62	98	359	299	99	75	147	112	34	49	165	434	237
Baylor College of Medicine	32	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0
Baylor Univ	30	1	3	0	0	0	0	0	0	0	0	0	2	10	11	3
Dallas Theological Seminary	7	0	0	0	0	0	0	0	0	0	0	0	0	2	0	5
East Texas State Univ	42	0	0	0	0	0	0	0	0	2	0	0	0	0	40	0
Lamar Univ	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
Rice Univ	92	17	11	6	7	23	7	0	0	5	4	3	6	3	0	0
Sam Houston State Univ	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0
Southern Methodist Univ	45	0	0	4	10	14	1	0	0	0	8	0	0	8	0	0
Southwestern Bapt Theol Sem	80	0	0	0	0	0	0	0	0	0	0	4	0	16	13	47
Stephen F Austin St Univ	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Texas A&I Univ	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Texas A&M Univ	471	14	38	21	12	103	60	5	59	23	22	3	8	1	78	24
Texas Christian Univ	28	5	4	0	0	0	0	0	0	7	0	3	6	3	0	0
Texas Southern Univ	19	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0
Texas Tech Univ	139	5	5	5	4	15	15	0	14	10	7	4	4	14	16	21
Texas Woman's Univ	106	0	0	0	0	0	10	28	0	11	4	0	2	3	24	24
Univ of Dallas	4	0	0	0	0	0	0	0	0	0	2	0	1	1	0	0
Univ of Houston	170	10	9	1	3	25	12	4	0	26	7	4	2	1	56	10

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. See inside the back cover for a description of fields as reported in this table. Refer also to the explanatory note about this table in front on Appendix A.

APPENDIX TABLE A-7 (Continued)

	1992 Total	Physics and Astronomy	Chemistry	Earth, Atmos., and Marine Sci.	Math and Computer Sci.	Engineering	Biosciences	Health Sciences	Agricultural Sciences	Psychology	Other Social Sciences	History	Eng. and Amer. Lang. and Lit.	Other Humanities	Education	Professional/ Other Fields
TEXAS (continued)																
Univ of North Texas	184	10	7	0	12	0	24	0	0	15	7	2	5	22	61	19
Univ of Texas-Arlington	61	2	1	0	4	30	0	0	0	3	0	0	0	3	0	18
Univ of Texas-Austin	671	31	33	14	35	141	37	38	1	37	37	9	13	72	114	59
Univ of Texas-Dallas	63	9	1	7	11	2	9	1	0	2	8	1	0	5	0	7
Univ of Texas-El Paso	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
U Tex-Hlth Sci Ctr-Houston	52	0	0	2	0	0	28	19	0	1	2	0	0	0	0	0
U Tex-Hlth Sci Ctr-San Antonio	19	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0
U Tex-Med Branch-Galveston	17	0	0	0	0	0	11	4	0	0	0	1	0	1	0	0
U Tex-Southwestern Med Ctr	41	0	0	0	0	2	34	0	0	5	0	0	0	0	0	0
UTAH																
Brigham Young Univ	373	17	37	13	21	68	30	23	15	37	16	3	4	15	60	14
Univ of Utah	96	4	9	0	1	13	6	1	1	22	5	3	0	5	26	0
Utah State Univ	210	8	26	11	18	40	16	22	0	8	7	0	4	10	26	14
	67	5	2	2	2	15	8	0	14	7	4	0	0	0	8	0
VERMONT																
Univ of Vermont	47	1	5	0	0	3	13	0	0	8	0	0	0	0	17	0
	47	1	5	0	0	3	13	0	0	8	0	0	0	0	17	0
VIRGINIA																
College of William & Mary	863	24	34	16	45	165	90	23	31	72	53	18	25	29	181	57
George Mason Univ	56	7	0	4	3	0	2	0	0	0	0	9	0	0	31	0
Old Dominion Univ	38	0	0	0	11	1	0	3	0	8	5	0	0	0	8	2
Union Theological Seminary	56	1	0	4	9	14	4	1	0	6	8	0	0	0	9	0
Univ of Virginia	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Virginia Commonwealth Univ	289	9	7	6	11	42	30	7	0	27	21	9	25	29	61	5
Virginia Polytech Inst & St U	96	0	8	0	2	0	37	10	0	18	4	0	0	0	7	10
	323	7	19	2	9	16	17	2	31	13	15	0	0	0	65	35
WASHINGTON																
Gonzaga Univ	596	16	27	24	28	80	78	19	35	40	52	11	15	46	93	32
Seattle Univ	22	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0
Univ of Washington	24	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0
Washington State Univ	399	12	23	22	21	61	48	13	17	25	37	7	14	44	27	28
	151	4	4	2	7	19	30	6	18	15	15	4	1	2	20	4
WEST VIRGINIA																
West Virginia Univ	116	2	3	2	1	20	16	0	3	17	6	1	1	2	41	1
	116	2	3	2	1	20	16	0	3	17	6	1	1	2	41	1
WISCONSIN																
Marquette Univ	827	42	56	23	51	90	137	17	40	35	74	24	28	65	92	53
Medical College of Wisconsin	53	0	5	0	1	12	2	0	0	3	1	2	3	7	14	3
Univ of Wisconsin-Madison	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Univ of Wisconsin-Milwaukee	679	37	43	21	46	70	120	10	40	25	61	22	20	55	65	44
	87	5	8	2	4	8	7	7	0	7	12	0	5	3	13	6
WYOMING																
Univ of Wyoming	50	3	2	8	5	2	8	0	3	7	1	0	0	0	10	1
	50	3	2	8	5	2	8	0	3	7	1	0	0	0	10	1

Leading Doctorate-Granting Institutions, 1992

1. Univ of California-Berkeley	796	26. Rutgers State Univ-New Brunswick	373
2. Univ of Illinois-Urbana/Champaign	774	27. Univ of Florida	364
3. Univ of Wisconsin-Madison	679	28. Univ of Arizona	354
4. Univ of Michigan	674	29. Northwestern Univ	348
5. Univ of Texas-Austin	671	30. Yale Univ	347
6. Ohio State Univ	660	31. Univ of Georgia	347
7. Univ of Minnesota-Minneapolis	650	32. Univ of Pittsburgh	343
8. Univ of California-Los Angeles	612	33. Univ of North Carolina-Chapel Hill	338
9. Stanford Univ	562	34. Univ of Chicago	323
10. Pennsylvania State Univ	560	35. Virginia Polytech Inst & State Univ	323
11. Massachusetts Inst of Technology	513	36. Johns Hopkins Univ	297
12. Cornell Univ	513	37. State Univ of New York-Buffalo	290
13. Univ of Maryland-College Park	506	38. Nova Univ	290
14. Harvard Univ	501	39. Univ of Colorado	290
15. Purdue Univ	479	40. Univ of Virginia	289
16. Texas A&M Univ	471	41. Florida State Univ	288
17. Michigan State Univ	468	42. Univ of California-Davis	285
18. Univ of Southern California	452	43. Temple Univ	282
19. Univ of Pennsylvania	447	44. Boston Univ	280
20. Columbia Univ	418	45. Iowa State Univ	277
21. Indiana Univ-Bloomington	411	46. North Carolina State Univ-Raleigh	271
22. Univ of Massachusetts-Amherst	408	47. Univ of Kansas	263
23. New York Univ	403	48. Univ of Tennessee-Knoxville	260
24. Univ of Washington	399	49. City U of NY-Grad Sch/U Ctr	257
25. Univ of Iowa	379	50. Princeton Univ	257

SOURCE: National Research Council, Survey of Earned Doctorates.

APPENDIX B: Trend Tables, 1982-1992

Appendix B includes the following two tables:

- B-1 Number of Doctorate Recipients, by Subfield, 1982-1992
- B-2 Number of Doctorate Recipients, by Gender, Race/Ethnicity, and Citizenship, 1977 and 1982-1992

*** IMPORTANT NOTICE ***

The estimates reported for the Survey of Earned Doctorates (SED) are simple tabulations of all available information, with no adjustment for nonresponse. Thus, differences in response rates from year to year can produce numerical fluctuations which are unrelated to true trends. The numbers presented in this report may be underestimated, depending on the variables displayed.

The SED has always enjoyed an unusually high response, but in 1981 it began to drop, falling from a high of 96.2 in 1980 to a low of 92.3 in 1989. The decline in self-report response rates evident throughout the 1980s was reversed in 1990, however, and has increased each year since to its current level of 95.0 percent. (Note: These rates represent the proportion of questionnaires completed by the doctorate recipients and thus are *self-report rates*. Forms completed by either the doctoral institution or NRC staff are not included in these self-report rates *but are* included in all tabulations in this report. The self-report rate for 1992 may increase somewhat in the next year if additional questionnaires are received from doctorate recipients. See page 76 in Appendix C for a table showing survey response rates from 1980 to 1992.)

Item response rates have shown a parallel improvement—both a natural consequence of the increase in the overall self-report rate and a result of format revisions to the questionnaire and follow-ups for missing information. In 1990, new follow-up procedures were implemented, increasing coverage of several variables (birth year, gender, race/ethnicity, citizenship status, country of citizenship, BA institution, year of BA, and postgraduation plans). These new procedures have substantially improved response rates, particularly for race/ethnicity and citizenship, resulting in increased counts of minority Ph.D.s. The most significant adjustment was to the data on black Ph.D.s, whose numbers for the aggregate of citizenship groups increased by 7.5 percent in the year after survey closure. This was true for both the 1990 and 1991 surveys. Most follow-up responses, though, were not included in the initial reporting of survey results in *Summary Report 1990* and *1991* because they were not received until *after* closure of the surveys. Updated 1990 numbers reflecting additional data were displayed in *Summary Report 1991*, and updated 1991 numbers are shown in Appendix Table B2 (page 72) in this year's report. The data for 1992 will likewise be subject to further revision, and adjustments will be presented in next year's report. However, the 1992 survey cycle was extended one month to allow receipt of more follow-up information before closure, and it is anticipated that adjustments will be minimal compared to those in 1990 and 1991.

In using SED data, the reader should be mindful that numerical trends are affected by fluctuations in response rates and *especially* that increases in 1990-1992 data on citizenship and race/ethnicity may be overstated.

TABLE B-1: Table B-1 presents data for the most recent decade by subfield of doctorate. In general, the subfields correspond to the fields on the questionnaire's Specialties List located at the back of this report; some, however, do not appear on the current Specialties List because they are no longer included in the survey taxonomy. A dash (-) in a column indicates that the field was not on the Specialties List for that year.

Field groupings in this table may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates (SED); see inside the back cover for a description of field groupings as reported in these tables. The "general" field categories—e.g., "chemistry, general"—include individuals who either received the doctorate in the general subject area or did not indicate a particular specialty field. The "other" field categories—e.g., "chemistry, other"—include individuals whose specified doctoral discipline was not among the specialty fields.

The seven tables in Appendix A present additional information on the most recent cohort of Ph.D.s by field of doctorate.

TABLE B-2: Table B-2 displays data on the race/ethnicity of doctorate recipients for 1977 and the last decade by gender and citizenship. (The year 1977 is included because it serves as the earliest point of comparison for racial/ethnic data presented in the body of the report.) Table B-2 contains three panels, each displayed on a separate page. The first panel includes all doctorates; the others disaggregate the data by gender.

Because of late questionnaire returns and responses to follow-ups for missing information, data are subject to revision in the year after survey closure. The reader should note that numbers in Table B-2 have been revised since publication of Summary Report 1991. New follow-up procedures implemented in 1990 resulted in significant adjustment after survey closure to the racial/ethnic data for both 1990 and 1991. Updated 1990 numbers reflecting follow-up responses were included in Summary Report 1991, and updated 1991 numbers are shown in Appendix Table B-2 in this year's report. The greatest adjustment was to the data on black Ph.D.s, whose numbers for the aggregate of citizenship groups increased by 7.5 percent in the year after survey closure. This was true for both the 1990 and 1991 surveys. See the notice on page 65 for additional information on recent increases in response rates and their impact on time-series data.

The racial/ethnic question has undergone several revisions over the years. In 1977, it was modified to correspond to a standard 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 effect of these changes is detailed on page 13 of *Summary Report 1977*. (Note: Changes in the OMB guidelines prompted the moving of persons having origins in the Indian subcontinent from the white category to the Asian category.) In 1980, the item was further revised in two ways: (1) the Hispanic category was subdivided into Puerto Rican, Mexican American, and "other" Hispanic to provide more detail for users of the racial/ethnic data, and (2) respondents were asked to check only one racial category. (Before 1980, doctorate recipients could check more than one category to indicate their race. When the data were compiled, however, all persons who checked American

Indian, Asian, or Hispanic and also checked white were included in the minority group category. Those who checked black and any other category were designated as black.) The item was modified again in 1982 to separate the questions on race and ethnicity. Since then, respondents have been asked to first check one of the four racial group categories (American Indian, Asian, black, or white) and then indicate whether or not they are Hispanic. In this table, Ph.D.s who reported Hispanic heritage, regardless of racial designation, are counted as Hispanic. The remaining survey respondents are then counted in the respective racial groups. (Note: Doctorate recipients who checked the category "American Indian or Alaskan Native" are identified as Native American in this report.)

Tables A-2 and A-4 in Appendix A present additional information on the most recent cohort of Ph.D.s by race/ethnicity.

APPENDIX TABLE B-1 Number of Doctorate Recipients, by Subfield, 1982-1992

	Year of Doctorate											
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	
TOTAL ALL FIELDS	31,111	31,282	31,337	31,297	31,897	32,363	33,490	34,317	36,052	37,503	38,814	
PHYSICAL SCIENCES	4,291	4,426	4,452	4,531	4,807	5,030	5,309	5,455	5,858	6,279	6,498	
MATHEMATICS	720	701	698	688	729	740	749	859	892	1,039	1,058	
Applied Mathematics	108	125	108	116	135	131	142	158	185	193	213	
Algebra	60	55	65	55	46	57	54	50	39	72	69	
Analysis & Functional Analysis	98	76	71	83	81	86	76	103	90	132	105	
Geometry	32	44	27	35	38	30	44	47	42	66	45	
Logic	17	21	25	30	23	18	20	12	19	23	28	
Number Theory	28	19	27	15	20	15	26	23	26	30	25	
Math Probability and Statistics	165	151	181	150	141	143	152	167	157	206	217	
Topology	45	44	42	35	34	41	27	37	50	57	58	
Computing Theory and Practice	11	12	13	15	10	14	12	12	12	19	12	
Operations Research	36	20	27	22	29	22	29	22	29	16	22	
Mathematics, General	84	86	78	85	125	137	134	177	191	180	209	
Mathematics, Other	36	48	34	44	47	46	33	51	52	45	55	
COMPUTER SCIENCE	220	286	295	310	399	450	515	612	705	800	867	
Computer Sciences	220	264	256	249	355	384	442	519	612	720	789	
Information Sciences and Systems	-	22	39	61	44	66	73	93	93	80	78	
PHYSICS AND ASTRONOMY	1,014	1,043	1,080	1,080	1,187	1,237	1,302	1,274	1,392	1,411	1,537	
Astronomy	52	50	42	43	52	46	66	49	52	50	55	
Astrophysics	50	65	56	57	57	54	64	64	76	75	79	
Acoustics	11	14	21	10	15	17	16	15	21	13	18	
Atomic and Molecular	96	71	77	58	70	79	77	74	87	76	85	
Electron	-	1	2	4	2	6	2	4	2	1	-	
Elementary Particles	119	136	138	154	147	159	174	135	163	182	153	
Fluids	13	15	11	16	6	21	17	14	17	14	17	
Nuclear Structure	53	90	72	86	89	74	88	81	73	66	86	
Optics	42	50	53	51	58	50	65	78	76	85	94	
Plasma	69	72	73	55	61	72	65	61	42	58	65	
Polymer	-	10	8	11	11	15	20	7	11	17	17	
Solid State	235	222	258	248	280	287	252	296	306	372	408	
Physics, General	167	150	170	176	222	238	271	269	323	247	297	
Physics, Other	107	97	99	111	117	119	125	127	143	155	163	
CHEMISTRY	1,680	1,759	1,765	1,836	1,903	1,975	2,015	1,970	2,100	2,193	2,212	
Analytical	190	264	228	285	257	314	301	289	293	304	302	
Inorganic	226	215	233	251	260	240	250	256	242	260	268	
Nuclear	20	13	18	7	18	13	7	6	13	14	7	
Organic	519	503	525	494	511	511	531	511	452	538	512	
Pharmaceutical	55	78	56	60	58	65	73	64	48	82	68	
Physical	324	311	329	304	293	302	318	310	325	364	399	
Polymer	50	62	63	84	72	96	81	78	81	111	83	
Theoretical	32	48	37	48	41	46	50	46	55	45	59	
Chemistry, General	175	177	183	213	289	297	310	312	524	400	448	
Chemistry, Other	89	88	93	90	104	91	94	98	67	75	66	
EARTH, ATMOS. & MARINE SCI	657	637	614	617	589	628	728	740	769	836	824	
Atmospheric Physics and Chemistry	17	21	11	16	21	24	19	15	18	20	36	
Atmospheric Dynamics	22	16	25	21	16	17	25	16	20	21	22	
Meteorology	-	17	28	23	27	17	35	27	20	31	28	
Atmos and Meteorological Sci, Gen	-	16	5	10	7	16	14	14	23	26	28	
Atmos and Meteorological Sci, Other	26	27	12	10	7	13	10	15	2	10	6	
Geology	25	105	124	111	118	114	144	165	166	192	166	
Geochemistry	51	48	43	48	37	31	46	39	56	64	62	
Geophysics and Seismology	81	75	68	92	89	75	83	87	91	114	106	
Paleontology	24	17	35	25	16	21	24	17	21	24	25	
Mineralogy, Petrology	41	24	28	28	17	24	19	36	26	36	29	
Stratigraphy, Sedimentation	47	25	16	23	14	22	30	24	25	29	23	
Geomorphology and Glacial Geology	21	10	9	13	11	18	9	10	14	18	12	
Applied Geology	25	8	7	8	4	5	7	6	6	1	-	
Geological Sciences, General	38	15	10	11	12	18	8	19	31	33	20	
Geological Sciences, Other	29	21	25	11	12	29	31	28	28	33	31	
Environmental Sciences	53	50	45	42	35	29	58	68	50	35	57	
Hydrology and Water Resources	24	20	18	17	16	18	24	24	13	16	29	
Oceanography	92	87	78	68	78	73	81	87	89	85	82	
Marine Sciences	41	22	21	24	22	38	28	26	39	27	32	
Physical Sciences, Other	-	13	6	18	30	26	33	17	31	21	30	
ENGINEERING	2,646	2,781	2,913	3,166	3,376	3,712	4,188	4,543	4,894	5,215	5,437	
Aerospace, Aeronautic & Astronautic	86	106	119	124	118	142	150	178	192	207	234	
Agricultural	48	58	74	60	52	74	70	102	101	84	84	
Bioengineering and Biomedical	59	74	70	69	67	75	114	115	129	149	147	
Ceramic	20	24	25	19	25	42	30	35	43	58	42	
Chemical	306	349	361	440	476	527	624	625	561	621	606	
Civil	308	354	351	358	387	441	489	492	505	504	539	
Communications	-	25	11	30	23	26	24	25	35	21	30	
Computer	72	83	56	55	77	62	100	117	131	178	174	

NOTE: Dash (-) indicates that the field was not on the questionnaire's Specialties List that year. Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. See inside the back cover for a description of fields as reported in this table. Refer also to the explanatory note about this table in front of Appendix B.

	Year of Doctorate										
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Electrical, Electronics	544	517	593	631	706	691	886	995	1,110	1,206	1,279
Engineering Mechanics	103	68	91	89	94	113	105	110	111	113	132
Engineering Physics	12	10	8	12	13	9	9	16	16	23	25
Engineering Science	-	30	28	31	30	26	32	27	37	42	51
Environmental Health Engineering	60	43	57	33	42	36	43	40	48	66	54
Industrial	79	86	84	92	101	120	127	162	151	165	197
Materials Science	147	157	168	188	187	238	252	257	307	361	365
Mechanical	334	311	336	424	442	544	610	650	773	762	856
Metallurgical	88	87	78	96	93	112	92	88	90	70	78
Mining and Mineral	7	22	16	16	22	27	17	33	39	38	26
Naval Architecture, Marine Eng	-	4	5	8	9	7	9	9	8	5	-
Nuclear	121	103	120	96	98	84	104	86	114	107	120
Ocean	-	12	11	25	14	24	21	20	17	21	21
Operations Research	58	44	50	54	54	51	44	68	46	76	56
Petroleum	27	22	17	24	18	23	33	29	49	28	54
Polymer	-	21	31	40	37	34	28	58	48	42	64
Systems Engineering	49	57	52	57	33	47	44	30	51	48	37
Engineering, General	29	30	29	26	55	54	49	61	75	78	63
Engineering, Other	89	84	72	69	103	79	82	109	107	137	103
LIFE SCIENCES	5,709	5,554	5,758	5,781	5,734	5,754	6,165	6,341	6,604	6,932	7,108
BIOLOGICAL SCIENCES	3,893	3,741	3,880	3,793	3,807	3,839	4,112	4,115	4,327	4,647	4,794
Biochemistry	649	647	606	581	576	573	613	669	678	765	714
Biophysics	91	88	90	69	72	86	97	87	103	100	125
Bacteriology	-	10	12	17	12	13	7	11	15	11	13
Plant Genetics	-	19	20	31	20	26	26	18	31	23	33
Plant Pathology	-	29	30	38	28	33	30	22	37	50	32
Plant Physiology	56	67	70	58	52	62	74	47	51	65	68
Botany, Other	146	116	126	120	121	106	112	117	104	105	197
Anatomy	163	107	103	135	86	92	88	80	70	77	75
Biometrics and Biostatistics	59	45	49	40	30	37	47	46	47	59	63
Cell Biology	41	118	123	100	130	127	118	133	145	149	188
Ecology	173	183	202	200	183	158	155	161	166	189	180
Developmental Biology/Embryology	10	13	15	15	9	6	7	10	22	37	48
Endocrinology	-	28	30	17	17	19	21	21	24	33	27
Entomology	170	141	156	173	170	123	133	139	147	138	139
Immunology	151	154	133	124	146	136	179	152	153	177	180
Molecular Biology	223	225	275	277	298	303	364	413	413	481	526
Microbiology and Bacteriology	324	-	-	-	-	-	-	-	-	-	-
Microbiology	-	309	346	289	326	301	333	340	335	373	377
Neurosciences	117	134	145	156	120	153	163	181	192	238	237
Nutritional Sciences	120	111	109	113	122	141	127	128	118	106	133
Parasitology	14	4	30	21	25	16	20	20	13	20	17
Toxicology	-	60	97	99	104	115	108	111	91	86	104
Human and Animal Genetics	-	95	82	105	91	113	118	112	153	160	142
Genetics	176	-	-	-	-	-	-	-	-	-	-
Human and Animal Pathology	97	97	88	110	91	127	112	105	101	122	113
Human and Animal Pharmacology	280	218	237	235	245	234	252	241	243	262	279
Human and Animal Physiology	309	246	237	245	240	248	225	272	278	272	266
Zoology, Other	199	192	158	147	155	139	167	132	122	125	134
Biological Sciences, General	196	174	190	190	213	229	256	231	333	278	316
Biological Sciences, Other	129	106	121	88	125	123	160	116	142	146	158
HEALTH SCIENCES	686	640	722	729	770	800	882	974	956	1,043	1,110
Audiology and Speech Pathology	129	113	104	99	82	107	93	91	93	90	82
Environmental Health	39	38	40	31	39	29	52	35	38	38	44
Public Health	3	54	53	103	103	96	121	129	123	132	157
Public Health and Epidemiology	159	-	-	-	-	-	-	-	-	-	-
Epidemiology	-	76	103	76	80	86	97	107	102	115	108
Nursing	112	126	161	183	216	218	247	308	261	326	337
Pharmacy	81	81	102	106	104	133	95	111	116	115	159
Rehabilitation/Therapeutic Services	-	-	-	-	-	-	-	-	-	17	25
Veterinary Medicine	41	45	46	51	41	31	48	48	70	56	63
Health Sciences, General	16	20	14	13	27	12	29	19	36	28	30
Health Sciences, Other	106	87	99	67	78	88	100	126	117	126	105
AGRICULTURAL SCIENCES	1,130	1,173	1,156	1,259	1,157	1,115	1,171	1,252	1,321	1,242	1,204
Agricultural Business & Mgmt	-	-	-	-	-	-	0	2	2	1	0
Agricultural Economics	179	158	159	148	150	139	156	164	145	168	141
Animal Breeding and Genetics	-	25	28	28	25	23	27	23	22	18	23
Animal Husbandry	22	-	-	-	-	-	-	-	-	-	-
Animal Nutrition	133	56	71	78	65	82	54	67	54	57	41
Dairy Science	-	-	-	-	-	-	12	16	20	19	14
Poultry Science	-	-	-	-	-	-	10	11	17	13	22
Animal Sciences, Other	-	92	90	95	91	76	86	95	90	92	97
Agronomy	159	149	137	158	159	143	141	140	143	117	123
Plant Breeding and Genetics	-	71	78	88	78	70	83	64	87	69	82
Plant Pathology	114	92	57	89	85	76	46	63	64	90	63
Plant Protection-Pest Mgmt	-	-	-	-	-	-	1	6	4	2	-
Plant Sciences, Other	-	16	20	21	20	20	23	15	23	17	29
Food Sciences	110	141	113	136	121	131	16	1	-	-	-
Food Engineering	-	-	-	-	-	-	6	11	10	12	14
Food Sciences, Other	-	-	-	-	-	-	119	147	141	137	151
Soil Chemistry/Microbiology	-	-	-	-	-	-	33	28	27	24	24
Soil Sciences	83	85	99	97	103	74	18	-	-	-	-
Soil Sciences, Other	-	-	-	-	-	-	62	75	91	78	63
Horticulture Science	88	72	66	76	60	71	61	75	101	78	65

APPENDIX TABLE B-1 (Continued)

	Year of Doctorate										
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Forestry Science	78	90	94	105	88	100	15	-	-	-	-
Forest Biology	-	-	-	-	-	-	21	22	27	17	29
Forest Engineering	-	-	-	-	-	-	3	1	2	2	2
Forest Management	-	-	-	-	-	-	18	21	14	22	16
Wood Science	-	-	-	-	-	-	7	16	16	16	21
Renewable Natural Resources	-	-	-	-	-	-	7	12	16	19	9
Forestry & Related Sci., Other	-	-	-	-	-	-	35	57	62	45	61
Fish and Wildlife	65	-	-	-	-	-	-	-	-	-	-
Fisheries Science	-	36	45	36	31	32	42	34	42	39	26
Wildlife Management	-	31	31	38	20	23	3	-	-	-	-
Wildlife/Range Management	-	-	-	-	-	-	36	52	58	59	55
Agriculture, General	5	7	1	5	4	5	9	7	5	3	9
Agriculture, Other	94	52	67	61	45	50	21	27	38	28	24
SOCIAL SCIENCES (INCL PSYCH)	5,837	6,095	5,929	5,764	5,891	5,786	5,771	5,955	6,079	6,143	6,205
Anthropology	333	373	335	353	381	352	325	325	324	341	320
Area Studies	19	20	23	19	28	17	16	17	22	24	33
Criminology	36	49	41	38	24	29	43	32	42	35	37
Demography	-	26	19	25	15	26	19	22	20	27	17
Economics	737	792	766	784	834	796	825	872	836	859	885
Econometrics	24	21	27	27	25	25	27	26	26	24	25
Geography	106	121	114	120	120	111	129	105	131	108	111
International Relations	77	76	95	78	76	82	77	94	97	88	76
Political Science and Government	459	397	419	406	414	404	392	430	462	434	514
Public Policy Studies	-	69	54	70	81	83	73	79	87	111	107
Sociology	568	525	515	461	491	423	449	436	428	465	495
Statistics	43	47	39	60	65	49	47	69	69	31	29
Urban Studies	93	74	81	75	50	72	86	62	67	90	86
Social Sciences, General	34	17	17	17	36	30	28	26	23	36	33
Social Sciences, Other	149	141	127	114	127	118	171	158	178	226	185
PSYCHOLOGY	3,159	3,347	3,257	3,117	3,124	3,169	3,064	3,202	3,267	3,244	3,252
Clinical	1,168	1,241	1,195	1,181	1,172	1,214	1,094	1,259	1,331	1,303	1,298
Cognitive	-	65	77	76	70	80	83	79	76	94	102
Comparative	12	11	13	11	14	9	7	8	8	7	2
Counseling	348	432	464	431	449	486	482	501	466	497	508
Developmental	192	219	207	175	184	200	176	148	159	155	170
Experimental	240	209	169	165	147	146	135	146	143	142	154
Educational	140	154	210	127	106	89	103	105	98	110	91
Industrial and Organizational	83	90	106	102	110	107	118	104	125	142	138
Personality	36	32	25	21	16	25	18	28	20	13	17
Physiological	90	94	73	79	73	69	85	62	46	45	55
Psychometrics	8	10	6	10	11	9	11	6	8	9	5
Quantitative	-	14	17	16	23	13	12	11	15	7	10
School	166	121	89	92	116	93	115	107	82	82	88
Social	179	191	157	167	141	133	140	128	145	147	139
Psychology, General	242	292	267	265	308	339	359	358	365	320	294
Psychology, Other	255	172	182	199	184	157	126	152	180	171	181
HUMANITIES	3,561	3,500	3,536	3,429	3,461	3,500	3,556	3,552	3,822	4,098	4,444
History, American	271	224	240	176	197	198	209	206	211	251	277
History, European	158	168	150	143	121	121	127	107	151	127	176
History of Science	29	13	24	23	24	25	22	20	26	27	28
History, General	-	58	76	85	83	94	103	85	111	121	104
History, Other	234	153	127	116	138	148	142	120	113	137	140
Classics	60	44	57	44	51	55	56	51	58	55	58
Comparative Literature	118	124	133	133	101	121	139	103	97	150	163
Linguistics	191	164	160	176	189	199	166	188	167	227	266
Speech, Debate and Rhetoric	38	48	41	38	30	37	37	35	38	86	98
Letters, General	-	3	14	13	19	25	16	13	19	17	18
Letters, Other	1	19	31	26	37	39	43	60	52	44	38
American Studies	64	99	76	87	68	75	70	76	72	92	81
Archeology	21	30	31	24	28	31	23	26	22	33	33
Art History and Criticism	138	150	141	127	126	143	134	145	135	125	153
Music	402	391	445	447	476	499	505	522	572	589	641
Philosophy	251	241	215	238	248	233	222	269	243	285	280
Religion	151	177	183	181	182	182	217	215	219	187	231
Theatre	94	108	101	92	88	82	92	79	106	91	95
LANGUAGE AND LITERATURE	1,260	1,219	1,225	1,164	1,164	1,112	1,147	1,152	1,308	1,350	1,465
American	154	173	190	204	215	190	186	192	229	253	291
English	616	542	543	525	504	478	531	528	567	599	612
French	119	121	108	86	102	103	101	106	123	100	124
German	74	77	80	62	79	77	76	73	78	71	96
Italian	17	22	17	14	15	21	14	20	25	32	20
Spanish	177	161	144	145	122	133	137	134	173	173	179
Russian	24	24	33	28	28	19	13	13	19	25	28
Slavic	-	9	12	10	8	5	5	7	7	14	15
Chinese	-	16	13	14	13	13	12	9	16	19	20
Japanese	-	5	12	13	9	9	6	13	9	7	12
Hebrew	-	11	13	9	11	13	12	10	14	11	20
Arabic	-	8	8	5	9	8	14	6	7	4	12
Other Languages	79	50	52	49	49	43	40	41	41	42	36
Humanities, General	28	17	22	27	23	23	25	19	28	29	21
Humanities, Other	52	50	44	59	68	58	61	61	74	75	78

NOTE: Dash (-) indicates that the field was not on the questionnaire's Specialties List that year. Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. See inside the back cover for a description of fields as reported in this table. Refer also to the explanatory note about this table in front of Appendix B.

	Year of Doctorate										
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EDUCATION	7,251	7,174	6,808	6,733	6,646	6,450	6,359	6,278	6,510	6,434	6,622
Curriculum and Instruction	811	861	869	825	794	762	815	841	839	806	899
Educational Admin and Supervision	1,474	1,632	1,569	1,625	1,637	1,686	1,749	1,632	1,663	1,428	1,285
Educational Leadership	-	-	-	-	1	-	-	-	-	481	680
Educational Media	76	88	83	101	79	68	67	76	55	73	62
Educational Measurement & Statistics	94	-	-	-	-	-	-	-	-	-	-
Educational Statistics and Research	-	86	105	74	58	73	51	59	59	80	61
Educational Testing, Eval and Meas	-	51	56	44	47	37	55	42	40	32	45
Educational Psychology	454	274	233	388	330	320	323	301	323	323	346
School Psychology	-	88	110	102	92	95	98	85	87	90	88
Social Foundations	214	142	151	135	124	114	122	110	86	109	101
Special Education	347	349	312	270	273	248	257	259	225	226	259
Student Counseling & Personnel Serv	540	506	391	397	315	315	324	264	301	269	254
Higher Education Research	653	635	657	589	612	570	399	373	424	344	379
Pre-elementary Education	78	63	54	65	86	73	83	63	42	85	98
Elementary Education	149	111	97	122	94	105	93	99	110	73	73
Junior High Education	-	1	0	1	0	1	1	-	-	-	-
Secondary Education	104	87	62	68	86	65	67	53	56	40	28
Adult and Continuing Education	257	221	218	207	223	203	229	236	211	209	208
TEACHING FIELDS	1,353	1,327	1,170	1,118	1,142	1,064	988	968	923	970	1,003
Agricultural Education	35	47	47	40	39	39	32	35	38	49	43
Art Education	55	58	41	43	43	52	42	39	44	28	46
Business Education	44	62	52	52	50	36	44	40	34	32	16
English Education	67	76	72	68	79	72	57	51	52	58	61
Foreign Languages Education	31	25	25	30	37	37	53	33	31	46	50
Health Education	-	99	93	89	81	91	86	100	95	78	98
Home Economics Education	33	25	26	21	17	17	17	19	10	21	12
Industrial Arts Education	39	19	27	13	20	24	11	17	18	13	11
Mathematics Education	50	62	64	65	72	74	56	69	65	73	62
Music Education	103	112	32	81	94	109	76	97	78	96	96
Nursing Education	25	17	21	21	40	36	34	29	24	18	29
Physical Education	-	235	219	220	210	192	184	176	191	185	167
Physical Education, Health & Rec	351	-	-	-	-	-	-	-	-	-	-
Reading Education	153	169	142	113	134	94	74	95	82	102	121
Science Education	86	78	77	88	65	63	67	48	72	72	73
Social Science Education	29	39	22	24	22	17	23	13	11	19	19
Speech Education	12	2	10	7	5	5	5	1	5	1	-
Technical Education	-	-	-	-	-	-	13	28	15	25	35
Trade and Industrial Education	191	138	117	82	86	68	67	47	18	17	11
Other Teaching Fields	29	64	23	61	48	38	47	31	40	37	53
Education, General	419	349	311	294	354	366	358	414	535	420	427
Education, Other	248	303	360	308	299	285	280	403	531	376	326
PROFESSIONAL/OTHER FIELDS	1,816	1,752	1,941	1,893	1,982	2,131	2,142	2,193	2,285	2,402	2,500
BUSINESS AND MANAGEMENT	685	750	869	790	902	982	1,033	1,067	1,037	1,163	1,248
Accounting	-	163	164	150	157	161	175	186	172	172	180
Banking and Finance	-	94	123	104	126	156	148	151	134	172	172
Business Admin and Management	-	179	175	174	222	225	265	245	277	204	242
Business Economics	-	25	30	20	28	26	27	27	21	19	21
Management Information Systems	-	-	-	-	-	-	-	-	-	72	103
Marketing Management and Research	-	73	126	94	110	113	126	130	120	134	139
Business Statistics	-	8	7	9	3	8	6	15	10	5	-
Operations Research	-	38	46	45	46	64	50	52	46	58	67
Organizational Behavior	-	53	70	68	57	66	74	95	64	72	80
Business and Management, General	-	35	49	49	56	75	75	57	70	123	112
Business and Management, Other	685	82	79	77	97	88	87	109	123	132	132
COMMUNICATIONS	266	250	255	266	258	309	247	306	323	332	330
Communications Research	-	51	66	55	79	90	72	85	87	72	45
Journalism	18	20	17	22	18	7	21	15	21	7	-
Mass Communications	-	-	-	-	-	-	-	-	-	68	85
Radio and Television	-	27	20	19	13	16	12	29	17	6	-
Communication Theory	-	-	-	-	-	-	-	-	-	25	47
Communications, General	-	60	68	89	75	102	70	79	86	70	76
Communications, Other	248	92	84	81	73	94	72	98	112	84	77
OTHER PROFESSIONAL FIELDS	841	730	802	812	796	778	812	766	858	836	882
Architecture & Environmental Design	-	34	25	36	27	33	31	43	41	67	61
Home Economics	98	79	107	90	88	67	58	55	74	29	58
Law	21	19	24	25	31	29	33	26	34	23	20
Library and Archival Science	83	51	68	71	57	48	57	60	42	52	51
Public Administration	173	113	127	112	88	78	92	97	88	107	109
Social Work	218	190	231	220	235	214	241	206	246	240	248
Theology	214	227	212	240	240	254	251	232	271	273	292
Professional Fields, General	-	-	2	0	0	1	2	0	3	3	1
Professional Fields, Other	34	17	6	18	30	54	47	47	59	42	42
OTHER FIELDS	24	22	15	25	26	62	50	54	67	71	40

SOURCE: National Research Council, Survey of Earned Doctorates.

APPENDIX TABLE B-2 Number of Doctorate Recipients, by Gender, Race/Ethnicity, and Citizenship, 1977 and 1982-1992

Total All Doctorates

	Year of Doctorate											
	1977	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
TOTAL MEN AND WOMEN	31,716	31,111	31,282	31,337	31,297	31,897	32,363	33,490	34,317	36,052	37,503	38,814
U.S. Citizens	26,119	24,391	24,359	24,027	23,370	23,082	22,983	23,289	23,400	24,894	25,543	25,759
Permanent Visas	1,368	1,228	1,275	1,224	1,324	1,433	1,578	1,623	1,626	1,698	1,855	1,958
Temporary Visas	3,448	4,204	4,499	4,832	5,228	5,276	5,610	6,194	6,646	8,092	9,306	9,888
Unknown Citizenship	781	1,288	1,149	1,254	1,375	2,106	2,192	2,384	2,645	1,368	799	1,209
Total Known Race/Ethnicity	29,462	29,087	29,389	29,282	29,058	28,923	29,217	30,348	30,943	33,860	35,727	36,826
U.S. Citizens	25,008	23,791	23,734	23,425	22,848	22,652	22,505	22,902	23,016	24,514	25,040	25,400
Permanent Visas	1,290	1,190	1,249	1,194	1,291	1,357	1,509	1,546	1,564	1,637	1,794	1,878
Temporary Visas	3,051	3,954	4,250	4,509	4,848	4,837	5,141	5,838	6,294	7,555	8,780	9,471
Unknown Citizenship	113	152	156	154	71	77	62	62	69	154	113	77
Native Americans	70	77	82	74	96	100	116	94	94	97	132	150
U.S. Citizens	65	77	81	74	96	99	115	94	94	96	130	148
Permanent Visas*	1	0	1	0	0	0	0	0	0	0	2	0
Temporary Visas*	4	0	0	0	0	1	1	0	0	1	0	1
Unknown Citizenship	0	0	0	0	0	0	0	0	0	0	0	1
Asians	2,056	2,904	3,124	3,394	3,642	3,727	4,126	4,778	5,181	6,291	7,520	8,217
U.S. Citizens	339	452	492	512	516	530	542	614	626	641	787	828
Permanent Visas	571	552	551	507	553	528	625	621	635	664	740	903
Temporary Visas	1,118	1,829	2,006	2,295	2,526	2,645	2,933	3,516	3,903	4,930	5,945	6,464
Unknown Citizenship	28	71	75	80	47	24	26	27	17	56	48	22
Blacks	1,455	1,526	1,382	1,494	1,440	1,270	1,218	1,263	1,246	1,349	1,456	1,402
U.S. Citizens	1,116	1,047	922	953	912	823	768	814	821	898	1,001	951
Permanent Visas	78	96	83	102	131	126	139	152	141	149	155	141
Temporary Visas	249	373	363	419	395	313	305	291	273	290	292	304
Unknown Citizenship	12	10	14	20	2	8	6	6	11	12	8	6
Hispanics	717	920	969	918	1,000	1,055	1,055	1,051	1,065	1,227	1,319	1,368
U.S. Citizens	423	535	539	536	561	571	618	597	583	717	730	755
Permanent Visas	51	79	69	71	73	107	91	99	112	117	137	127
Temporary Visas	232	294	342	300	360	372	338	349	364	386	446	478
Unknown Citizenship	11	12	19	11	6	5	8	6	6	7	6	8
Whites	25,164	23,660	23,832	23,402	22,880	22,771	22,702	23,162	23,357	24,896	25,300	25,689
U.S. Citizens	23,065	21,680	21,700	21,350	20,763	20,629	20,462	20,783	20,892	22,162	22,392	22,718
Permanent Visas	589	463	545	514	534	596	654	674	676	707	760	707
Temporary Visas	1,448	1,458	1,539	1,495	1,567	1,506	1,564	1,682	1,754	1,948	2,097	2,224
Unknown Citizenship	62	59	48	43	16	40	22	23	35	79	51	40
Unknown Race/Ethnicity	2,254	2,024	1,893	2,055	2,239	2,974	3,146	3,142	3,374	2,192	1,776	1,988
U.S. Citizens	1,111	600	625	602	522	430	478	387	384	380	503	359
Permanent Visas	78	38	26	30	33	76	69	77	62	61	61	80
Temporary Visas	397	250	249	323	380	439	469	356	352	537	526	417
Unknown Citizenship	668	1,136	993	1,100	1,304	2,029	2,130	2,322	2,576	1,214	686	1,132

NOTE: The reader is referred to the explanatory note about this table in front of Appendix B.

*In most cases, non-U.S. Native Americans are citizens of Canada or of Latin America.

Doctorates: MEN

	Year of Doctorate											
	1977	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
TOTAL MEN	23,858	21,018	20,749	20,638	20,553	20,593	20,938	21,677	21,809	22,953	23,638	24,448
U.S. Citizens	19,155	15,562	15,120	14,730	14,223	13,637	13,575	13,725	13,396	14,159	14,366	14,391
Permanent Visas	1,106	915	953	892	999	1,068	1,117	1,165	1,139	1,190	1,223	1,282
Temporary Visas	3,009	3,621	3,872	4,134	4,395	4,414	4,722	5,133	5,442	6,631	7,513	7,917
Unknown Citizenship	588	920	804	882	936	1,474	1,524	1,654	1,832	973	536	858
Total Known Race/Ethnicity	22,082	19,538	19,270	19,132	18,944	18,432	18,673	19,408	19,398	21,330	22,328	22,983
U.S. Citizens	18,299	15,142	14,673	14,304	13,858	13,338	13,248	13,447	13,114	13,892	14,002	14,133
Permanent Visas	1,040	886	931	867	971	1,004	1,064	1,098	1,094	1,151	1,176	1,222
Temporary Visas	2,657	3,396	3,645	3,844	4,057	4,037	4,313	4,820	5,140	6,172	7,074	7,570
Unknown Citizenship	86	114	121	117	58	53	48	43	50	115	76	58
Native Americans	47	44	51	54	40	59	63	52	49	52	74	81
U.S. Citizens	43	44	50	54	40	58	62	52	49	52	74	81
Permanent Visas*	0	0	1	0	0	0	0	0	0	0	0	0
Temporary Visas*	4	0	0	0	0	1	1	0	0	0	0	0
Unknown Citizenship	0	0	0	0	0	0	0	0	0	0	0	0
Asians	1,716	2,355	2,542	2,780	2,945	3,040	3,349	3,843	4,154	5,030	5,875	6,383
U.S. Citizens	251	281	312	338	329	347	369	414	441	427	482	523
Permanent Visas	488	444	431	389	437	417	455	456	459	482	487	597
Temporary Visas	955	1,567	1,731	1,982	2,137	2,258	2,505	2,955	3,241	4,076	4,870	5,246
Unknown Citizenship	22	63	68	71	42	18	20	18	13	45	36	17
Blacks	996	911	833	903	851	707	701	697	684	731	782	754
U.S. Citizens	684	483	413	427	379	323	317	315	327	351	415	386
Permanent Visas	70	81	73	81	117	106	118	126	125	128	131	120
Temporary Visas	236	340	329	382	354	275	261	251	222	242	231	242
Unknown Citizenship	6	7	8	13	1	3	5	5	10	10	5	6
Hispanics	566	650	635	621	646	665	677	681	665	759	807	845
U.S. Citizens	310	344	288	314	300	302	332	323	309	378	370	402
Permanent Visas	36	52	45	47	50	71	50	65	69	70	89	71
Temporary Visas	210	247	288	252	294	289	288	288	284	309	344	366
Unknown Citizenship	10	7	14	8	2	3	7	5	3	2	4	6
Whites	18,757	15,578	15,309	14,774	14,462	13,961	13,883	14,135	13,846	14,758	14,790	14,920
U.S. Citizens	17,011	13,990	13,610	13,171	12,810	12,308	12,168	12,343	11,988	12,684	12,661	12,741
Permanent Visas	446	309	381	350	367	410	441	451	441	471	469	434
Temporary Visas	1,252	1,242	1,287	1,228	1,272	1,214	1,258	1,326	1,393	1,545	1,629	1,716
Unknown Citizenship	48	37	31	25	13	29	16	15	24	58	31	29
Unknown Race/Ethnicity	1,776	1,480	1,379	1,506	1,609	2,161	2,265	2,269	2,411	1,623	1,310	1,465
U.S. Citizens	856	420	447	426	365	299	327	278	282	267	364	258
Permanent Visas	66	29	22	25	28	64	53	67	45	39	47	60
Temporary Visas	352	225	227	290	338	377	409	313	302	459	439	347
Unknown Citizenship	502	806	683	765	878	1,421	1,476	1,611	1,782	858	460	800

APPENDIX TABLE B-2 (Continued)

Doctorates: WOMEN

	Year of Doctorate											
	1977	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
TOTAL WOMEN	7,858	10,093	10,533	10,699	10,744	11,304	11,425	11,813	12,508	13,099	13,865	14,366
U.S. Citizens	6,964	8,829	9,239	9,297	9,147	9,445	9,408	9,564	10,004	10,735	11,177	11,368
Permanent Visas	262	313	322	332	325	365	461	458	487	508	632	676
Temporary Visas	439	583	627	698	833	862	888	1,061	1,204	1,461	1,793	1,971
Unknown Citizenship	193	368	345	372	439	632	668	730	813	395	263	351
Total Known Race/Ethnicity	7,380	9,549	10,019	10,150	10,114	10,491	10,544	10,940	11,545	12,530	13,399	13,843
U.S. Citizens	6,709	8,649	9,061	9,121	8,990	9,314	9,257	9,455	9,902	10,622	11,038	11,267
Permanent Visas	250	304	318	327	320	353	445	448	470	486	618	656
Temporary Visas	394	558	605	665	791	800	828	1,018	1,154	1,383	1,706	1,901
Unknown Citizenship	27	38	35	37	13	24	14	19	19	39	37	19
Native Americans	23	33	31	20	56	41	53	42	45	45	58	69
U.S. Citizens	22	33	31	20	56	41	53	42	45	44	56	67
Permanent Visas*	1	0	0	0	0	0	0	0	0	0	2	0
Temporary Visas*	0	0	0	0	0	0	0	0	0	1	0	1
Unknown Citizenship	0	0	0	0	0	0	0	0	0	0	0	1
Asians	340	549	582	614	697	687	777	935	1,027	1,261	1,645	1,834
U.S. Citizens	88	171	180	174	187	183	173	200	185	214	305	305
Permanent Visas	83	108	120	118	116	111	170	165	176	182	253	306
Temporary Visas	163	262	275	313	389	387	428	561	662	854	1,075	1,218
Unknown Citizenship	6	8	7	9	5	6	6	9	4	11	12	5
Blacks	459	615	549	591	589	563	517	566	562	618	674	648
U.S. Citizens	432	564	509	526	533	500	451	499	494	547	586	565
Permanent Visas	8	15	10	21	14	20	21	26	16	21	24	21
Temporary Visas	13	33	24	37	41	38	44	40	51	48	61	62
Unknown Citizenship	6	3	6	7	1	5	1	1	1	2	3	0
Hispanics	151	270	334	297	354	390	378	370	400	468	512	523
U.S. Citizens	113	191	251	222	261	269	286	274	274	339	360	353
Permanent Visas	15	27	24	24	23	36	41	34	43	47	48	56
Temporary Visas	22	47	54	48	66	83	50	61	80	77	102	112
Unknown Citizenship	1	5	5	3	4	2	1	1	3	5	2	2
Whites	6,407	8,082	8,523	8,628	8,418	8,810	8,819	9,027	9,511	10,138	10,510	10,769
U.S. Citizens	6,054	7,690	8,090	8,179	7,953	8,321	8,294	8,440	8,904	9,478	9,731	9,977
Permanent Visas	143	154	164	164	167	186	213	223	235	236	291	273
Temporary Visas	196	216	252	267	295	292	306	356	361	403	468	508
Unknown Citizenship	14	22	17	18	3	11	6	8	11	21	20	11
Unknown Race/Ethnicity	478	544	514	549	630	813	881	873	963	569	466	523
U.S. Citizens	255	180	178	176	157	131	151	109	102	113	139	101
Permanent Visas	12	9	4	5	5	12	16	10	17	22	14	20
Temporary Visas	45	25	22	33	42	62	60	43	50	78	87	70
Unknown Citizenship	166	330	310	335	426	608	654	711	794	356	226	332

NOTE: The reader is referred to the explanatory note about this table in front of Appendix B.

*In most cases, non-U.S. Native Americans are citizens of Canada or of Latin American countries

SOURCE: National Research Council, Survey of Earned Doctorates.

APPENDIX C: Technical Notes

*** IMPORTANT NOTICE ***

The estimates reported for the Survey of Earned Doctorates (SED) are simple tabulations of all available information, with no adjustment for nonresponse. Thus, differences in response rates from year to year can produce numerical fluctuations which are unrelated to true trends. The numbers presented in this report may be underestimated, depending on the variables displayed.

The SED has always enjoyed an unusually high response, but in 1981 it began to drop, falling from a high of 96.2 in 1980 to a low of 92.3 in 1989. The decline in self-report response rates evident throughout the 1980s was reversed in 1990, however, and has increased each year since to its current level of 95.0 percent. (Note: These rates represent the proportion of questionnaires completed by the doctorate recipients and thus are *self-report rates*. Forms completed by either the doctoral institution or NRC staff are not included in these self-report rates *but are* included in all tabulations in this report. The self-report rate for 1992 may increase somewhat in the next year if additional questionnaires are received from doctorate recipients. See the next page for a table showing survey response rates from 1980 to 1992.)

Item response rates have shown a parallel improvement—both a natural consequence of the increase in the overall self-report rate and a result of format revisions to the questionnaire and follow-ups for missing information. In 1990, new follow-up procedures were implemented, increasing coverage of several variables (birth year, gender, race/ethnicity, citizenship status, country of citizenship, BA institution, year of BA, and postgraduation plans). These new procedures have substantially improved response rates, particularly for race/ethnicity and citizenship, resulting in increased counts of minority Ph.D.s. The most significant adjustment was to the data on black Ph.D.s, whose numbers for the aggregate of citizenship groups increased by 7.5 percent in the year after survey closure. This was true for both the 1990 and 1991 surveys. Most follow-up responses, though, were not included in the initial reporting of survey results in *Summary Report 1990* and *1991* because they were not received until *after* closure of the surveys. Updated 1990 numbers reflecting additional data were displayed in *Summary Report 1991*, and updated 1991 numbers are shown in Appendix Table B2 (page 72) in this year's report. The data for 1992 will likewise be subject to further revision, and adjustments will be presented in next year's report. However, the 1992 survey cycle was extended one month to allow receipt of more follow-up information before closure, and it is anticipated that adjustments will be minimal compared to those in 1990 and 1991.

In using SED data, the reader should be mindful that numerical trends are affected by fluctuations in response rates *and especially* that increases in 1990-1992 data on citizenship and race/ethnicity may be overstated.

SED RESPONSE RATES *

Year	Self-report Rate	Nonresponse Rate	
		Basic Information Provided by: Institution**	NRC/OSEP**
1980	96.2	1.6	2.1
1981	95.7	1.4	2.8
1982	95.3	1.5	3.2
1983	95.5	1.6	3.0
1984	95.1	1.8	3.1
1985	94.8	2.5	2.7
1986	93.5	0.9	5.6
1987	93.1	0.9	6.0
1988	93.0	0.3	6.7
1989	92.3	0.4	7.4
1990	93.6	0.3	6.1
1991	94.6	0.6	4.9
1992	95.0	0.6	4.5

* These rates may not sum to 100.0 because of rounding. The rates for 1980-1991 reflect late responses. The self-report rate for 1992 may increase somewhat in the next year if additional questionnaires are received from doctorate recipients.

** The National Research Council's Office of Scientific and Engineering Personnel (NRC/OSEP) enters information from commencement programs, such as name, Ph.D. field and year, and earlier educational history if available. Gender is assumed from the name of the recipient wherever possible. Institutions provide similar information and, occasionally, other demographic variables such as citizenship and race/ethnicity.

As shown on the previous page, 95.0 percent of all doctorate recipients in 1992 completed a survey questionnaire; this percentage is referred to as the "self-report" rate. For the remaining 5.0 percent of recipients, "skeletal" survey forms were created using information from doctorate-granting institutions or commencement programs. Whether or not individuals completed the survey questionnaire, the following four data items are available for all recipients: gender, Ph.D. institution, Ph.D. field, and Ph.D. year.

This report presents data obtained from *all* survey forms, both "self-reported" and "skeletal." Nonresponse in a tabulation varies according to the *combination* of selected variables. Higher nonresponse rates occur when any of the four above-mentioned variables are crossed with another variable (e.g., debt level) because the universe of this cross-tabulation comprises the entire doctoral cohort. This means that the 5.0 percent of Ph.D.s who did not respond to the survey are included, even though their records contain minimal information. Nonresponse is generally lower when citizenship or race/ethnicity is cross-tabulated with a variable such as debt level because the population is restricted to a group (e.g., U.S. citizens) which is largely drawn from self-reported forms and, therefore, more likely to include responses to debt level. To be more precise, the nonresponse rate for debt level in 1992 was 3.0 percent for U.S. citizens, 4.4 percent for permanent residents, and 6.2 percent for temporary residents; nonresponse was low because information on both citizenship and debt is obtained mostly from self-reported forms. Nonresponse was higher when debt level was crossed with gender (7.2 percent for men and 6.2 percent for women) because gender is one of the data items available for all recipients; thus, the population in this cross-tabulation included the 5.0 percent of Ph.D.s who were not self-reporting and for whom there is minimal information.

However, there is less variation in nonresponse rates for 1992 data than for earlier years because the survey cycle was extended to permit receipt of more follow-up information before closure. To illustrate, we will continue with the example on "debt level" used above. Because gender information is available for all Ph.D.s while citizenship and debt level are usually obtained from self-reporting forms, one would expect the rate of nonresponse to the question on debt level to be higher for women than for temporary residents. Yet in 1992, nonresponse to debt level was the same for both women and temporary residents (6.2 percent). This occurred because citizenship is one of the variables which is followed up if missing from the survey form, while information on debt level is not further solicited. In this case, follow-up responses were received before survey closure, identifying some recipients as temporary residents. The citizenship status of these individuals was then updated to reflect the follow-up responses, but debt level remained unknown if not originally reported.

For the most part, the tables and figures in this report display percentages that are based only on the number of doctorate recipients who *responded* to the applicable survey questions; recipients who did not respond are excluded.¹ The technical notes in this

¹Appendix Tables A-3 and A-4 are exceptions. Because these tables include categories for "unknown" responses, percentages are based on the total doctoral cohort.

appendix provide rates of *nonresponse* for questions covered in the body of the report. Nonresponse rates for selected populations and years are presented, as well as additional descriptive explanation of the data as needed. There are six technical notes in all, pertaining to the following tables and figures and focusing on the topics indicated in parentheses:

- Technical Note 1: Figures 2 and 6, Tables 3 and 4 (citizenship)
- Technical Note 2: Figure 3 (race/ethnicity)
- Technical Note 3: Figure 7, Tables 6 and 7 (time-to-doctorate)
- Technical Note 4: Figure 8, Table 8 (primary source of graduate school support)
- Technical Note 5: Figure 9, Tables 9 and 10 (cumulative debt level)
- Technical Note 6: Figures 10-12, Tables 11-16 (postgraduation plans)

The 1992 *nonresponse* rates for items discussed in this report are shown below.

ITEM NONRESPONSE RATES: 1992

Data Item	Nonresponse Rate (%)
Baccalaureate field	7.8
Baccalaureate institution	4.1*
Baccalaureate year (for time-to-Ph.D.)	4.7*
Birth year (for age)	3.1*
Citizenship	3.1*
Country of citizenship	1.5 (of non-U.S. citizens)
Cumulative debt	6.8
Doctorate field	0.0
Doctorate institution	0.0
Doctorate year	0.0
Gender	0.0
Marital status	8.2
Master's institution	21.1 (includes non-M.A.s)
Postdoctoral employer type	5.7 (of employed Ph.D.s)
Postdoctoral location	5.9
Postdoctoral plans (employment vs. study)	7.6
Postdoctoral status (definite vs. seeking)	8.0
Race/ethnicity	4.1*
Sources of graduate school support	5.6
<i>Primary</i> source of graduate school support	30.4
Years not enrolled from (for time-to-Ph.D.):	
Baccalaureate to graduate entrance	10.7
Graduate entrance to doctorate	15.7

NOTE: In 1992, 95.0 percent of new doctorate recipients completed the survey form. The item nonresponse rates in this table include the 5.0 percent of recipients who were not self-reporting. Basic information for the missing group was obtained from the doctorate-granting institutions or commencement programs. Field, institution, and year of doctorate are available for all recipients, as is gender.

* The nonresponse rate for this item is less than the overall nonresponse rate of 5.0 percent because institutions are asked to provide this information for doctorate recipients who either did not complete a survey form or did not respond to the survey question. Commencement programs are an additional source of baccalaureate institution data.

1. **Figure 2 (page 4), Figure 6 (pages 8-9), Table 3 (page 20), and Table 4 (page 21):** Percentages in **Figure 6** are based on the number of doctorate recipients who reported their citizenship status. Nonresponses are excluded from the computations (see below).

Citizenship Status: Nonresponse Rates (%)

	1962	1967	1972	1977	1982	1987	1992
All Ph.D.s	1.2	2.2	1.9	2.5	4.1	6.8	3.1
Physical Sciences	1.1	2.1	1.5	2.1	3.1	6.2	2.7
Engineering	0.7	1.5	0.9	2.7	5.7	7.2	3.5
Life Sciences	0.8	1.4	2.0	2.4	2.9	5.8	2.5
Social Sciences	2.0	2.6	2.1	2.6	5.2	8.3	4.4
Humanities	2.3	3.2	2.1	2.9	4.9	7.5	3.2
Education	0.4	1.6	1.0	2.3	3.5	5.7	2.4
Professional/Other	2.2	6.3	9.8	2.2	5.8	7.8	3.4

NOTE: See Table 3 for total numbers of Ph.D.s in each field. Refer to page 77 for an explanation of how nonresponse in a tabulation is affected by the *combination* of selected variables.

Table 4 lists the leading countries of origin of non-U.S. Ph.D.s. Of the 11,846 non-U.S. Ph.D.s in 1992, 172 (or 1.5 percent) did not report their country of citizenship. **Table 3** displays the numbers of Ph.D.s in each citizenship group. See the table above for rates of nonresponse to the question on citizenship status.

2. **Figure 3 (page 5):** **Figure 3** compares the representation of minorities among U.S. citizen Ph.D.s in 1992 with their representation in 1977. Nonresponses are excluded from the percentage computations. The nonresponse rate among U.S. citizens to the question on race/ethnicity was 4.3 percent in 1977 and 1.4 percent in 1992. (See Appendix Table B-2 for total numbers of U.S. Ph.D.s; see technical note 1 for rates of nonresponse to citizenship status.) A historical discussion of the racial/ethnic question and *important information on recent adjustments to racial/ethnic data* are presented below and on the next page.

Although the item on race/ethnicity was first introduced to the Survey of Earned Doctorates in 1973, over 25 percent of recipients in 1973 and about 13 percent in 1974 either completed earlier questionnaires or provided unusable responses. Since 1975, the racial/ethnic data have been more reliable, with response rates ranging between 91 and 96 percent. The information on race/ethnicity presented in this report is limited to the period 1977 to 1992.

The racial/ethnic question has undergone several revisions over the years. In 1977, it was modified to correspond to a standard 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 effect of these changes is detailed on page 13 of *Summary Report 1977*. (Note: Changes in the OMB guidelines prompted the reclassification of persons having origins in the Indian

2. Figure 3 (continued)

subcontinent from the white category to the Asian category.) In 1980, the question was further revised in two ways: (1) the Hispanic category was subdivided into Puerto Rican, Mexican American, and "other" Hispanic to provide more detail for users of the racial/ethnic data, and (2) respondents were asked to check only one racial category. (Before 1980, doctorate recipients could check more than one category to indicate their race. When the data were compiled, however, all persons who checked American Indian, Asian, or Hispanic and also checked white were included in the minority group category. Those who checked black and any other category were designated as black.) The item was modified again in 1982 to separate the questions on race and ethnicity. Since then, respondents have been asked to first check one of the four racial group categories (American Indian, Asian, black, or white) and then indicate whether or not they are Hispanic. In this report, Ph.D.s who reported Hispanic heritage are classified as "Hispanic" regardless of their racial designations; the remaining Ph.D.s are then counted in the racial group they reported. Recipients who checked the category "American Indian or Alaskan Native" are identified as "Native American," and Ph.D.s from 1977 to 1979 who indicated that they were both white and a minority are included with the minority group.

*** ADJUSTMENTS TO RACIAL/ETHNIC DATA ***

Readers should note that because of recent increases in survey response, the racial/ethnic data for 1990-1992 may overstate any increases for these variables during this time period.

In 1990, new follow-up procedures were implemented, increasing coverage of several variables and resulting in greater adjustment of data after survey closure than was the case in earlier years. These new procedures had an especially strong impact on citizenship and racial/ethnic data. The most significant adjustment was among black Ph.D.s, whose numbers for the aggregate of citizenship groups increased by 7.5 percent in the year after survey closure. This was true for both the 1990 and 1991 surveys. Updated numbers for both years are included in Appendix Table B-2 in this report. Adjustments to the 1992 data will appear in next year's report. See the notice on page 75 for additional information.

3. **Figure 7 (pages 10-11), Table 6 (page 23), and Table 7 (page 24):** Total elapsed time from baccalaureate to doctorate (TTD) can be computed only for individuals whose baccalaureate year is known. (Note: Baccalaureate year is often obtained from commencement programs or doctorate institutions when not reported by the recipient.) Registered time (RTD) is the time actually enrolled in a college or university between receipt of the baccalaureate and the doctorate; RTD cannot be computed for individuals who have not provided all years of college attendance after earning the baccalaureate. Enrollment includes years of attendance not related to a recipient's doctoral program. Months are excluded from all computations because they are rarely reported by the respondent. Nonresponse rates for time-to-doctorate are presented below.

Time-to-Doctorate: Nonresponse Rates by Field and Demographic Group (%)

(Figure 7, Table 6)	1962 TTD	1962 RTD	1972 TTD	1972 RTD	1982 TTD	1982 RTD	1992 TTD	1992 RTD
All Fields	1.0	5.4	1.8	7.8	3.6	12.1	4.7	15.7
Physical Sciences	0.5	3.9	1.1	6.1	2.8	10.1	5.0	15.9
Engineering	0.0	5.1	1.7	6.1	6.2	14.5	4.6	14.0
Life Sciences	2.9	6.5	3.4	9.6	3.2	10.1	5.8	18.6
Social Sciences	1.0	6.0	1.2	7.6	4.2	12.4	5.3	16.1
Humanities	1.4	6.6	1.6	9.4	3.1	13.5	4.5	14.8
Education	0.0	4.7	0.5	6.2	2.9	12.2	3.0	14.1
Professional/Other	1.6	5.4	7.9	15.6	4.9	14.9	4.3	15.2

(Table 7, 1992 only)

All Ph.D.s	4.7	15.7
Men	5.1	16.2
Women	3.9	14.8
U.S. Citizens	0.9	10.9
Permanent Residents	6.2	17.9
Temporary Residents	5.6	17.9

(U.S. Citizens)

Asians	1.0	15.5
Blacks	1.7	14.9
Hispanics	2.1	12.8
Native Americans	0.7	10.8
Whites	0.8	10.1

NOTE: For total numbers of Ph.D.s, see Table 2 (field and gender), Table 3 (citizenship), and Appendix Table B-2 (race/ethnicity). Refer to page 77 for an explanation of how non-response in a tabulation is affected by the combination of selected variables.

4. **Figure 8 (pages 12-13) and Table 8 (page 25):** The percentages given in Table 8 are based on the numbers of doctorate recipients in 1992 who reported their *primary* source of support in graduate school, and the numbers shown in Table 8 represent only those Ph.D.s whose primary support is known—not the total cohort of Ph.D.s in 1992. Because many recipients who answered the support question did not designate a *primary* source, nonresponse was quite high (see table below). The reader should note that while nonresponse to primary support has consistently been greater than nonresponse to other variables, it was especially high in 1992 (probably a result of revisions to the questionnaire format). The nonresponse rate for the total cohort of Ph.D.s in 1992 was 30.4 percent, compared to 22.5 percent in 1991 (as reported in *Summary Report 1991*).

Primary Source of Support: Nonresponse Rates in 1992 (%)

	All Fields	Phys. Sci.	Engr.	Life Sci.	Soc. Sci.	Hum.	Educ.	Prof.
All Ph.D.s	30.4	28.7	27.3	28.9	32.6	33.9	31.0	32.8
Men	30.4	28.8	27.7	29.8	33.3	33.8	31.1	33.8
Women	30.4	28.0	23.3	27.6	31.8	34.1	30.9	30.7
U.S. Citizens	26.5	22.9	20.2	25.5	27.8	29.8	28.2	27.9
Permanent Res.	35.7	33.2	29.9	34.8	40.0	44.7	40.7	31.7
Temporary Res.	31.4	31.3	27.5	30.1	34.2	38.1	37.3	36.9
(U.S. Citizens)								
Asians	28.4	31.1	23.0	27.4	29.5	38.5	33.8	23.1
Blacks	38.2	32.4	29.0	32.6	43.0	36.8	36.8	50.7
Hispanics	33.6	36.4	17.2	32.5	34.6	37.4	35.6	31.4
Native Amers.	40.5	29.4	18.2	42.1	26.9	63.2	38.8	100.0
Whites	25.2	21.6	19.3	24.7	26.5	28.7	26.6	26.3

NOTE: For total numbers of Ph.D.s in each field, see Table 2 (gender), Table 3 (citizenship), and Appendix Table B-2 (race/ethnicity). Refer to page 77 for an explanation of how nonresponse in a tabulation is affected by the *combination* of selected variables.

5. **Figure 9 (page 14), Table 9 (page 26), and Table 10 (page 26):** Percentages are based on the numbers of doctorate recipients who reported the cumulative level of debt related to their *undergraduate and graduate education*. Nonresponses are excluded from the percentage computations (see table on next page).

5. Figure 9, Table 9, and Table 10 (continued)

Cumulative Educational Debt: Nonresponse Rates in 1992 (%)

	Rate		Rate
All Fields	6.8	Men	7.2
Physical Sciences	6.6	Women	6.2
Engineering	7.3	U.S. Citizens	3.0
Life Sciences	5.9	Permanent Res.	4.4
Social Sciences	8.6	Temporary Res.	6.2
Humanities	6.3	U.S. Asians	3.3
Education	6.1	Blacks	6.1
Professional	7.4	Hispanics	2.6
		Native Amers.	1.4
		Whites	2.6

NOTE: For total numbers of Ph.D.s, see Table 2 (field and gender), Table 3 (citizenship), and Appendix Table B-2 (race/ethnicity). Refer to page 77 for an explanation of how nonresponse in a tabulation is affected by the *combination* of selected variables.

6. Figures 10-12 (pages 15-17) and Tables 11-16 (pages 27-32): The question on *postgraduation status* asks recipients to indicate whether they have made a "definite" commitment, are in the process of "negotiating" with one or more organizations, or are seeking a position but with no prospects. Because Ph.D.s sometimes complete the survey form months ahead of graduation, it is not possible to determine the final plans of many recipients. It is quite likely, however, that some individuals who check "negotiating" or "seeking" have obtained positions by the time of graduation. Because many outcomes are unknown, data on postgraduation plans in this report are restricted to the group of Ph.D.s who reported "definite" plans.² See pages 85-86 for rates of nonresponse to the question on postgraduation status and for the proportions of Ph.D.s with "definite" plans.

² Comparisons with the most recent longitudinal Survey of Doctorate Recipients (SDR) have shown the data on "definite" postgraduation plans to be a reasonable indicator of the actual employment status of new Ph.D.s in the year following receipt of the doctorate. (The SDR, also conducted by the National Research Council, is a follow-up employment survey of a sample of doctorate recipients in science, engineering, and humanities fields.) According to the 1991 SDR, 97 percent of the 1990 Ph.D.s who had indicated "definite" employment plans at the time of graduation were in the U.S. labor force as of September 1991 (1-2 years after graduation), and most were working in the sector reported on their survey forms. Disaggregation by citizenship revealed that all permanent residents and 95.3 percent of temporary residents in the sample were employed in the United States in September 1991.

6. Figures 10-12 and Tables 11-16 (continued)

Postgraduation Status: Nonresponse Rates (%)

	1972	1977	1982	1987	1992
All Fields	5.4	6.7	8.1	10.1	8.8
Physical Sciences	4.2	6.1	6.9	9.8	8.8
Engineering	4.1	6.5	10.1	12.5	9.9
Life Sciences	5.5	5.9	7.0	8.6	7.3
Social Sciences	6.1	7.1	9.2	11.4	10.9
Humanities	6.7	8.4	9.0	10.8	7.7
Education	4.2	6.2	7.4	8.3	7.9
Professional/Other	12.8	6.7	9.5	11.3	7.4
Men	5.0	6.3	8.1	10.6	9.0
Women	7.5	7.8	8.2	9.2	8.3
U.S. Citizens	3.5	4.2	3.8	2.7	4.6
Permanent Residents	3.4	3.9	6.1	7.3	8.9
Temporary Residents	5.6	7.0	8.3	7.2	8.8
(U.S. & Perm. Res.)	3.5	4.2	3.9	3.0	4.9
Asians	N/A	4.5	6.4	6.9	8.0
Blacks	N/A	4.8	4.0	3.4	8.3
Hispanics	N/A	2.3	3.3	2.8	4.9
Native Americans	N/A	4.5	6.5	2.6	5.4
Whites	N/A	2.7	2.8	2.3	4.2

NOTE: N/A=not available. For total numbers of Ph.D.s, see Table 2 (field and gender), Table 3 (citizenship), and Appendix Table B-2 (race/ethnicity by citizenship). Refer to page 77 for an explanation of how nonresponse in a tabulation is affected by the *combination* of selected variables.

The proportions of Ph.D.s with "definite" commitments are given in the next two tables. These percentages are based on the number of Ph.D.s who responded to the question on postgraduation status (see table above for rates of nonresponse to this question).

Year	% Definite	Year	% Definite
1972	76.5	1987	73.4
1977	72.1	1992	69.8
1982	75.0		

NOTE: See Table 1 for total numbers of Ph.D.s. See Table 11 for number of Ph.D.s with definite commitments.

6. Figures 10-12 and Tables 11-16 (continued)

The table below displays the *proportions of Ph.D.s with "definite" commitments in 1992 by field and demographic group, and the range of proportions for the five years included in Figures 10-12 and Tables 11-16 (i.e., 1972, 1977, 1982, 1987, 1992).*

	<u>% Definite</u> Range (1992)		<u>% Definite</u> Range (1992)
All Fields	70-77 (69.8)	Men	69-78 (69.0)
Physical Sciences	69-79 (68.8)	Women	67-72 (71.0)
Engineering	60-74 (69.2)	U.S. Citizens	73-78 (74.0)
Life Sciences	75-77 (75.2)	Permanent Res.	57-66 (56.8)
Social Sciences	69-82 (68.9)	Temporary Res.	61-71 (60.8)
Humanities	60-76 (62.1)	U.S. & Perm. Res.	73-77 (72.8)
Education	74-77 (75.7)	Asians	61-69 (61.1)
Professional	77-87 (77.0)	Blacks	65-73 (70.0)
		Hispanics	69-72 (68.7)
		Native Amers.	57-79 (70.7)
		Whites	73-76 (74.1)

NOTE: For total numbers of Ph.D.s, see Table 2 (field and gender), Table 3 (citizenship), and Appendix Table B-2 (race/ethnicity by citizenship). See Tables 11 and 12 for numbers of Ph.D.s with definite commitments in each year.

Figure 10 (page 15), Table 11 (page 27), and Table 12 (page 28): These tables and figure present data on the *type of plans (employment or study) for only those Ph.D.s who reported definite postgraduation commitments; therefore, they do not reflect the entire Ph.D. population.* (See page 85 and the table above for nonresponses to the question on postgraduation status and the proportions of Ph.D.s with definite commitments.)

Nonresponses to the question on *type of postdoctoral plans (employment or study)* are excluded from the percentage calculations in Figure 10 and Tables 11 and 12. As is evident from the table on the next page, rates of nonresponse were very low in every year and for all fields and demographic groups.

6. Figures 10-12 and Tables 11-16 (continued)

Figure 10, Table 11, and Table 12 (continued)

*Employment/Study Plans of Ph.D.s with Definite Commitments:
Nonresponse Rates (%)*

	1972	1977	1982	1987	1992
All Fields	1.0	1.1	0.4	0.9	0.8
Physical Sciences	0.5	0.8	0.3	0.5	0.4
Engineering	0.6	0.8	0.3	0.9	0.4
Life Sciences	0.9	1.2	0.3	0.5	0.4
Social Sciences	1.0	1.1	0.2	0.9	0.6
Humanities	1.8	1.7	0.4	1.4	1.1
Education	1.2	1.1	0.5	1.6	1.9
Professional/Other	0.6	1.1	0.6	0.6	0.3
Men	0.9	1.1	0.4	0.8	0.6
Women	1.3	1.2	0.3	1.1	1.0
U.S. Citizens	1.0	0.9	0.3	0.8	0.7
Permanent Residents	0.9	1.6	0.7	0.8	2.2
Temporary Residents	1.3	2.4	0.9	1.5	0.7
(U S. & Perm. Res.)	1.0	1.0	0.3	0.8	0.8
Asians	N/A	1.5	0.9	0.3	0.9
Blacks	N/A	1.9	0.6	2.1	3.0
Hispanics	N/A	1.8	0.2	1.4	2.3
Native Americans	N/A	0.0	0.0	1.2	0.0
Whites	N/A	0.9	0.2	0.7	0.6

NOTE: N/A=not available. See Tables 11 and 12 for total numbers of Ph.D.s with definite commitments. Refer to page 77 for an explanation of how non-response in a tabulation is affected by the combination of selected variables.

Figure 11 (page 16) and Table 13 (page 29): Figure 11 shows the proportions of non-U.S. citizens who reported plans to stay in the United States after graduation. Table 13 provides the proportions of non-U.S. Ph.D.s who planned to leave the country as well as those who planned to stay. Only Ph.D.s who reported definite commitments are included (see page 85 for rates of nonresponse to the question on postgraduation status). Nonresponses to the question on postdoctoral location are excluded from the percentage calculations in Figure 11 (see table on next page).

6. Figures 10-12 and Tables 11-16 (continued)

Figure 11 (continued)

*Postdoctoral Location of Non-U.S. Citizen Ph.D.s with
Definite Commitments: Nonresponse Rates (%)*

	1972	1977	1982	1987	1992
Permanent Residents	3.1	3.8	5.8	9.4	1.4
Temporary Residents	2.4	4.3	7.5	10.1	1.6

NOTE: The much lower nonresponse in 1992 was largely a result of a questionnaire revision which allowed the recipient to check a box for "U.S." or "non-U.S." instead of naming a specific state or foreign country. See Table 13 for total numbers of non-U.S. Ph.D.s with definite commitments. Refer to page 77 for an explanation of how nonresponse in a tabulation is affected by the *combination* of selected variables.

Table 14 (page 30): This table presents data on the *postdoctoral location and type of plans (employment or study) for only those non-U.S. citizens who reported definite commitments* (see page 85 for nonresponses to the question on postgraduation status). Percentages in Table 14 are based on the number of non-U.S. Ph.D.s who reported *both* postdoctoral location and type of plans. Nonresponse rates for these questions are given below.

*Postdoctoral Location/Type of Plans of Non-U.S. Citizens with
Definite Commitments: Nonresponse Rates in 1992 (%)*

	Permanent Residents	Temporary Residents
All Fields	3.5	2.3
Physical Sciences	2.7	2.8
Engineering	2.0	2.3
Life Sciences	3.0	2.0
Social Sciences	4.8	1.8
Humanities	2.3	2.4
Education	11.5	2.6
Professional/Other	2.1	1.9

NOTE: Numbers of Ph.D.s not reporting both postdoctoral location and type of plans were small: a total of 35 permanent residents (ranging from 2 in professional/other fields to 9 in education) and 125 temporary residents (ranging from 7 each in education and professional/other field to 39 in physical sciences). See Table 13 for total numbers of non-U.S. Ph.D.s with definite commitments. Refer to page 77 for an explanation of how nonresponse in a tabulation is affected by the *combination* of selected variables.

6. Figures 10-12 and Tables 11-16 (continued)

Figure 12 (page 17), Table 15 (page 31), and Table 16 (page 32): As with the other tables on postgraduation plans, Figure 12 and Tables 15 and 16 do not include data on the entire Ph.D. cohort. Instead, they display the *type of employer (i.e., sector) for only those Ph.D.s who reported definite commitments in the United States.* (See pages 85-87 for rates of nonresponse to the questions on postgraduation status and type of plans.)

The table below shows the *proportions of all Ph.D.s with definite commitments (and known type of plans) who reported employment in the United States.*

	U.S. Citizens and Permanent Residents	Temporary Residents
1972	81.6	12.2
1977	80.3	18.9
1982	79.0	24.1
1987	74.5	25.0
1992	73.4	28.8

NOTE: See Table 12 for total numbers of Ph.D.s with definite commitments. See Table 16 for numbers of Ph.D.s with employment commitments in the United States.

Nonresponses to the question on *employment sector* are excluded from the percentages in Figure 12 and Tables 15 and 16. As can be seen in the tables below and on the next page, nonresponse was very low in all years.

Figure 12 and Table 15

Employment Sector of Ph.D.s with Definite Plans to Work in the United States by Field: Nonresponse Rates (%) (U.S. citizens and permanent residents)

	1972	1977	1982	1987	1992
All Fields	0.4	0.4	0.6	1.0	1.3
Physical Sciences	0.2	0.1	0.1	0.4	0.5
Engineering	0.4	0.2	0.2	0.1	1.2
Life Sciences	0.5	0.0	0.3	0.5	0.6
Social Sciences	0.4	0.3	0.7	1.4	2.1
Humanities	0.3	0.5	0.4	1.1	1.1
Education	0.6	0.6	1.0	1.6	1.5
Professional/Other	0.7	0.3	0.4	0.4	0.8

NOTE: See Table 15 for numbers of U.S. citizen and permanent resident Ph.D.s who reported employment commitments in the United States. Refer to page 77 for an explanation of how nonresponse in a tabulation is affected by the *combination* of selected variables.

6. Figures 10-12 and Tables 11-16 (continued)

Table 16

Employment Sector of Ph.D.s with Definite Plans to Work in the United States by Demographic Group: Nonresponse Rates (%)

	1972	1977	1982	1987	1992
U.S. Citizens	0.4	0.3	0.6	1.0	1.2
Permanent Residents	1.2	0.8	0.6	1.0	2.0
Temporary Residents	0.0	0.0	0.0	0.1	1.0
(U.S. & Perm. Res.)	0.4	0.4	0.6	1.0	1.3
Men	0.4	0.3	0.4	0.6	1.1
Women	0.6	0.4	0.8	1.6	1.5
Asians	N/A	0.3	0.7	2.2	2.5
Blacks	N/A	1.0	2.6	3.0	2.7
Hispanics	N/A	0.4	1.1	1.7	1.2
Native Americans	N/A	0.0	2.9	1.5	1.3
Whites	N/A	0.3	0.4	0.9	1.1

NOTE: N/A=not available. See Table 16 for numbers of Ph.D.s with employment commitments in the United States. Refer to page 77 for an explanation of how non-response in a tabulation is affected by the *combination* of selected variables.

SURVEY OF EARNED DOCTORATES 1991-92

Please return this form to the GRADUATE DEAN for forwarding to
The Office of Scientific and Engineering Personnel, National Research Council - 2101 Constitution Avenue, N.W., Washington, D.C. 20418

Please print or type.

1. Name in full: _____
Last Name First Name Middle Name
 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: _____

4. Place of birth: _____ Date of birth: _____
State or Country if not U.S. Month Day Year

5. Sex: 1 Male
 2 Female

8. Are you a person with a disability? Yes No
 If yes, is it: 1 Visual 2 Orthopedic (mobility)
 3 Auditory (hearing) 4 Vocal
 5 Other (specify) _____

6. Marital status: 0 Single, never married
 1 Married
 2 Separated, divorced, widowed

9. What is your racial background? 0 American Indian or Alaskan Native
 (Check only one.) 1 Asian or Pacific Islander
 2 Black
 3 White

7. Citizenship:
 0 United States, native
 1 United States, naturalized
 Non-United States:
 2 Permanent Resident of United States (Immigrant visa)
 ↳ _____
(Country of present citizenship)
 3 Temporary Resident of United States (Non-immigrant visa)
 ↳ _____
(Country of present citizenship)

10. Are you Hispanic? No Yes → 0 Mexican American
 1 Puerto Rican
 2 Other Hispanic

11. How many dependents do you have? _____ Do not include yourself.
 (Dependent = someone receiving at least one half of his or her support from you.)

EDUCATION

12. Location of high school/secondary school last attended: _____ Date of graduation from high school: _____
State or Country if not U.S. Month/Year

13. List below, chronologically, all colleges (including 2-year) and graduate institutions you have attended and each degree earned (if any). Be sure to give the years attended for ALL institutions attended. Include your doctoral institution(s) (and degree) at the end.

Institution/Branch	State/Country	Years Attended		Field of Study		Degree (if any)			
		From	To	Use Specialties List		Title	Granted		
				Name	Number		Mo	Yr	
EXAMPLE Genesee Community College SUNY/Buffalo	NY NY	79 81	81 83	Math Computer Science	498 400	B.S.	6	83	

If a baccalaureate degree (or equivalent) was never received, please check box.

14. How many years were you a full-time student between receiving your first baccalaureate degree (or equivalent) and receiving your doctorate (include the period spent on your thesis and/or dissertation). _____ (whole numbers)

15. Identify the field of your dissertation research and enter below the title of your dissertation. If a project report or a musical or literary composition is a degree requirement in lieu of a dissertation, please check box Name of field _____ Number of field _____
(Use Specialties List)
 Title _____

16. 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 _____

17. Please indicate all your sources of support during graduate school. Indicate your primary and secondary sources of support by entering "1" or "2" in the appropriate box. Check (✓) all other sources from which support was received, if any. (Enter only one source as "1" and one source as "2")

- Own/Family Resources
- 01 Own Earnings
- 02 Spouse's Earnings
- 03 Family Contributions

- Federal Research Assistant
- 22 NIH
- 32 NSF
- 52 USDA
- 62 Other Federal

- Other Federal Support (continued)
- 49 Other Dept. Education
- 60 Veterans Administration
- 53 USDA Fellowship
- 69 Other Federal

- Student Loans
- 80 Guaranteed Student Loan (Stafford Loan)
- 81 Perkins Loan — formerly National Direct Student Loan
- 89 Other Loan

- University-Related
- 10 Teaching Assistant
- 11 Research Assistant
- 12 University Fellow
- 14 College Work-Study
- 19 Other

Specify _____

- Specify _____
- Other Federal Support
 - 21 NIH Traineeship/Fellowship
 - 29 Other HHS
 - 33 NSF Fellowship
 - 40 Patricia Roberts-Harns Fellowship — formerly G*POP (Department of Education)
 - 44 Title VI Foreign Language

- Specify _____
- U.S. Nationally Competitive Fellowships (Non-Federal)
 - 70 Ford Foundation
 - 71 Rockefeller Foundation
 - 73 Mellon Foundation
 - 78 Other Fellowship

Specify _____

- Specify _____
- Other Sources
 - 90 Business/Employer
 - 91 Foreign (Non-U.S.) Government
 - 92 State Government
 - 99 Other

Specify _____

18. When you receive your doctorate degree, how much money will you owe that is directly related to your undergraduate and/or graduate education (tuition and fees, living expenses and supplies, transportation to and from school)?

- 0 None
- 1 \$5,000 or less
- 2 \$5,001-\$10,000
- 3 \$10,001-\$15,000
- 4 \$15,001-\$20,000
- 5 \$20,001-\$25,000
- 6 \$25,001-\$30,000
- 7 \$30,001 or more

19A. Please check the category that most fully describes your status for employment or study during the year immediately preceding the award of the doctorate.

- 0 Full-time employed → Go to item 10A →
- 1 Held fellowship
- 2 Held assistantship
- 3 Part-time employed
- 4 Not employed
- 5 Other (specify) _____

B. If full-time employed, what type of position did you hold?

- 6 College or university, faculty
- 7 College or university, non-faculty
- 8 Elementary or secondary school, teaching
- 9 Elementary or secondary school, non-teaching
- (11) Industry or business
- (12) Other (specify) _____

POSTGRADUATION PLANS

20. How definite are your immediate postgraduate 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 position but have no specific prospects
- 4 Other (specify) _____

21. What best describes your immediate postgraduate plans?

- Study**
- 0 Postdoctoral fellowship
 - 1 Postdoctoral research associateship
 - 2 Traineeship
 - 3 Other study (specify) _____
- For study plans go to Item 22**
- 4 Employment (other than 0, 1, 2, 3)
 - 5 Military service
 - 6 Other (specify) _____
- For employment plans go to Item 23**

22. If you plan to have a postdoctoral fellowship, associateship, traineeship, or otherwise undertake further study,

- A. What will be the field of your postdoctoral study? Please enter number from **Specialties List**. _____
- B. What will be the main source of financial support for your study research?
- 0 U.S. Government
 - 1 College or university
 - 2 Private foundation
 - 3 Nonprofit, other than private foundation
 - 4 Other (specify) _____
 - 6 Unknown
- Go to Item 24

23. If you plan to be employed, enter military service or other:

- A. For what type of employer will you be working?
- Education**
- a U.S. 4-yr college or university other than medical school
 - b U.S. medical school
 - c U.S. jr. or community college
 - d Elementary or secondary school
 - e Foreign institution
- Government**
- f Foreign government
 - g U.S. federal government
 - h U.S. state government
 - i U.S. local government
- Private Sector**
- j Nonprofit organization
 - k Industry or business
 - l Self-employed
- Other**
- m Other (specify) _____
- B. Indicate what your primary and secondary work activities will be by entering "1" or "2" in the appropriate box.
- 0 Research and development
 - 1 Teaching
 - 2 Administration
 - 3 Professional services to individuals
 - 5 Other (specify) _____
- C. In what field will you be working? Please enter number from **Specialties List**. _____
- Go to Item 24

24. Where do you intend to live/work/study after graduation? 0 in U.S. _____ State _____ 1 not in U.S. _____ Country _____

Name of Organization, if known _____ City of Organization, if known _____

25. What is the highest educational attainment of your mother and father? Please circle

Father	Less than high school	High school graduate	Some college	Bachelor's	Masters	Professional	Doctorate
Mother	Less than high school	High school graduate	Some college	Bachelor's	Masters	Professional	Doctorate
Codes for office use	1	2	3	4	5	6	7

Signature _____ Date _____

If you would like a summary of the results of this survey, please check box. (Available as funding permits)



SPECIALTIES LIST

Instructions: The following field listing is to be used in responding to items 13, 15, 22A, and 23C. If a field marked with an asterisk (*) is chosen in item 13, please write in your field of specialization in the space provided.

AGRICULTURE

- 000 Agricultural Economics
- 002 Agricultural Business & Mgmt
- 005 Animal Breeding & Genetics
- 010 Animal Nutrition
- 012 Dairy Science
- 014 Poultry Science
- 055 Fisheries Sciences
- 019 Animal Sciences, Other*
- 020 Agronomy
- 025 Plant Breeding & Genetics
- 030 Plant Path. (See also 120)
- 039 Plant Sciences, Other*
- 042 Food Distribution
- 043 Food Engineering
- 044 Food Sciences, Other*
- 046 Soil Chemistry/Microbiology
- 049 Soil Sciences, Other*
- 050 Horticulture Science
- 066 Forest Biology
- 068 Forest Engineering
- 070 Forest Management
- 072 Wood Science
- 074 Renewable Natural Resources
- 079 Forestry & Related Sci., Other*
- 080 Wildlife/Range Management
- 098 Agriculture, General
- 099 Agricultural Sciences, Other*

BIOLOGICAL SCIENCES

- 100 Biochemistry
- 105 Biophysics
- 110 Bacteriology
- 115 Plant Genetics
- 120 Plant Path. (See also 030)
- 125 Plant Physiology
- 129 Botany, Other*
- 130 Anatomy
- 133 Biometrics & Biostatistics
- 136 Cell Biology (See also 154)
- 139 Ecology
- 142 Developmental Bio./Embry
- 145 Endocrinology
- 148 Entomology
- 151 Immunology
- 154 Molecular Biology
- 157 Microbiology
- 160 Neurosciences
- 163 Nutritional Sciences
- 166 Parasitology
- 169 Toxicology
- 170 Genetics, Human & Animal
- 175 Pathology, Human & Animal (See also 120)
- 180 Pharmacology, Hum. & Anim
- 185 Physiology, Human & Animal
- 189 Zoology, Other*
- 198 Biological Sciences, General
- 199 Biological Sciences, Other*

HEALTH SCIENCES

- 200 Audiology & Speech Path.
- 210 Environmental Health
- 215 Public Health (See also 133)
- 220 Epidemiology
- 230 Nursing
- 240 Pharmacy
- 245 Rehabilitation/Therapeutic Services
- 250 Veterinary Medicine
- 298 Health Sciences, General
- 299 Health Sciences, Other*

ENGINEERING

- 300 Aerospace, Aeronautical & Astronautical
- 303 Agricultural
- 306 Bioengineering & Biomedical
- 309 Ceramic
- 312 Chemical
- 315 Civil
- 318 Communications
- 321 Computer
- 324 Electrical, Electronics
- 7 Engineering Mechanics
- 0 Engineering Physics

- 333 Engineering Science
- 336 Environmental Health Engin
- 339 Industrial
- 342 Materials Science
- 345 Mechanical
- 348 Metallurgical
- 351 Mining & Mineral
- 357 Nuclear
- 360 Ocean
- 363 Operations Research (See also 465, 930)
- 366 Petroleum
- 369 Polymer
- 372 Systems
- 398 Engineering, General
- 399 Engineering, Other*

COMPUTER AND INFORMATION SCIENCES

- 400 Computer Sciences
- 410 Information Sci. & Systems*

MATHEMATICS

- 420 Applied Mathematics
- 425 Algebra
- 430 Analysis & Functional Analysis
- 435 Geometry
- 440 Logic (See also 765)
- 445 Number Theory
- 450 Math Probability & Statistics
- 455 Topology
- 460 Computing Theory & Practice
- 465 Operations Research (See also 363, 930)
- 498 Mathematics, General
- 499 Mathematics, Other*

PHYSICAL SCIENCES

Astronomy

- 500 Astronomy
- 505 Astrophysics

Atmospheric and Meteorological Sciences

- 510 Atmospheric Physics & Chem
- 512 Atmospheric Dynamics
- 514 Meteorology
- 518 Atmos. & Meteor. Sci., Gen
- 519 Atmos. & Meteor. Sci., Other*

Chemistry

- 520 Analytical
- 522 Inorganic
- 524 Nuclear
- 526 Organic
- 528 Pharmaceutical
- 530 Physical
- 532 Polymer
- 534 Theoretical
- 538 Chemistry, General
- 539 Chemistry, Other* (See 100 Biochemistry)

Geological Sciences

- 540 Geology
- 542 Geochemistry
- 544 Geophysics & Seismology
- 546 Paleontology
- 548 Mineralogy, Petrology
- 550 Stratigraphy, Sedimentation
- 552 Geomorphology & Glacial Geol
- 558 Geological Sciences, General
- 559 Geological Sciences, Other*

Physics

- 560 Acoustics
- 561 Atomic & Molecular
- 564 Elementary Particle
- 566 Fluids
- 568 Nuclear
- 569 Optics
- 570 Plasma
- 572 Polymer
- 574 Solid State
- 578 Physics, General
- 579 Physics, Other*

Other Physical Sciences

- 580 Environmental Sciences
- 585 Hydrology & Water Resources
- 590 Oceanography
- 595 Marine Sciences
- 599 Physical Sciences, Other*

PSYCHOLOGY

- 600 Clinical
- 603 Cognitive
- 606 Comparative
- 609 Counseling
- 612 Developmental
- 615 Experimental
- 618 Educational (See also 822)
- 621 Industrial & Organizational (See also 935)
- 624 Personality
- 627 Physiological
- 630 Psychometrics
- 633 Quantitative
- 636 School (See also 825)
- 639 Social
- 648 Psychology, General
- 649 Psychology, Other*

SOCIAL SCIENCES

- 650 Anthropology
- 652 Area Studies
- 658 Criminology
- 662 Demography
- 666 Economics
- 668 Econometrics
- 670 Geography
- 674 International Relations
- 678 Political Sci. & Government
- 682 Public Policy Studies
- 686 Sociology
- 690 Statistics (See also 450)
- 694 Urban Studies
- 698 Social Sciences, General
- 699 Social Sciences, Other*

HUMANITIES

History

- 700 History, American
- 705 History, European
- 710 History of Science
- 718 History, General
- 719 History, Other*

Letters

- 720 Classics
- 723 Comparative Literature
- 729 Linguistics
- 732 Literature, American
- 733 Literature, English
- 734 English Language
- 736 Speech, Debate & Rhetoric
- 738 Letters, General
- 739 Letters, Other*

Foreign Languages and Literature

- 740 French
- 743 German
- 746 Italian
- 749 Spanish
- 752 Russian
- 755 Slavic (other than Russian)
- 758 Chinese
- 762 Japanese
- 765 Hebrew
- 768 Arabic
- 769 Other Languages*

Other Humanities

- 770 American Studies
- 773 Archeology
- 776 Art History & Criticism
- 780 Music
- 785 Philosophy (See also 440)
- 790 Religion (See also 984)
- 795 Theatre
- 798 Humanities, General
- 799 Humanities, Other*

EDUCATION

- 800 Curriculum & Instruction
- 805 Educational Adm. & Supervision
- 807 Educational Leadership
- 810 Educational Media
- 815 Educational Stat. & Research
- 820 Educational Testing, Eval. & Meas.
- 822 Educational Psychology (See also 618)
- 825 School Psychology (See also 636)
- 830 Social Foundations
- 835 Special Education
- 840 Student Counseling & Personnel Services
- 845 Higher Education Research

Teacher Education

- 850 Pre-elementary
- 852 Elementary
- 856 Secondary
- 858 Adult & Continuing

Teaching Fields

- 860 Agricultural Education
- 861 Art Education
- 862 Business Education
- 864 English Education
- 866 Foreign Languages Education
- 868 Health Education
- 870 Home Economics Education
- 872 Industrial Arts Education
- 874 Mathematics Education
- 876 Music Education
- 878 Nursing Education
- 880 Physical Education
- 882 Reading Education
- 884 Science Education
- 885 Social Science Education
- 887 Technical Education
- 888 Trade & Industrial Education
- 889 Teacher & Educ. Specific Subject Areas, Other*
- 898 Education, General
- 899 Education, Other*

PROFESSIONAL FIELDS

Business and Management

- 900 Accounting
- 905 Banking & Finance
- 910 Business Adm. & Mgmt.
- 915 Business Economics
- 917 Mgmt. Info. Systems
- 920 Marketing Mgmt. & Research
- 930 Operations Research (See also 363, 465)
- 935 Organiz. Beh. (See also 621)
- 938 Business & Mgmt., General
- 939 Business & Mgmt., Other*

Communications

- 940 Communications Research
- 947 Mass Communications
- 957 Communication Theory
- 958 Communications, General
- 959 Communications, Other* (See also 736)

Other Professional Fields

- 960 Architec. & Environ. Design
- 964 Home Economics
- 968 Law
- 972 Library & Archival Science
- 976 Public Administration
- 980 Social Work
- 984 Theology (See also 790)
- 988 Professional Fields, General
- 989 Professional Fields, Other*

999 OTHER FIELDS*

The Appendix tables present data according to the following field classifications. Appendix Tables A-1 and A-2 and Appendix Table B-1 display all subfields that are on the survey Specialties List. Appendix Tables A-4, A-5, and A-6 show data by seven broad fields only. Appendix Tables A-3 and A-7 include the additional field groupings indicated below.

SCIENCES

Physical Sciences (400-599)
 Physics and Astronomy (500-505, 560-579)
 Chemistry (520-539)
 Earth, Atmospheric and Marine Sciences
 (510-519, 540-559, 580-599)
 Mathematics (420-499)
 Computer Sciences (400-410) } Combined in Table A-7

Engineering (300-399)

Life Sciences (000-299)
 Biological Sciences (100-199)
 Biochemistry (100)
 Other Biological Sciences (105-199)
 Health Sciences (200-299)
 Agricultural Sciences (000-099)

Social Sciences (600-699)
 Psychology (600-649)
 Economics and Econometrics (666, 665)
 Anthropology and Sociology (650, 686)
 Political Science and International Relations
 (674, 678)
 Other Social Sciences
 (652-662, 670-682, 690-699) } Combined in Table A-7

NONSCIENCES

Humanities (700-799)
 History (700-719)
 English and American Language
 and Literature (732-734)
 Foreign Languages and Literature
 (740-769)
 Other Humanities
 (720-729, 736-739, 770-799) } Combined in Table A-7

Education (800-899)

Professional and Other Fields (900-999)
 Business and Management (900-939)
 Other Professional Fields (940-989)
 Other Fields (999)

NOTE: Doctorate recipients indicate their fields of speciality. Their choices may differ from departmental names.

TITLES OF RESEARCH DEGREES INCLUDED IN THE SURVEY OF EARNED DOCTORATES

DA/DAT	Doctor of Arts/Arts in Teaching	DMSc	Doctor of Medical Science
DArch	Doctor of Architecture	DNSc	Doctor of Nursing Science
DAS	Doctor of Applied Science	DPA	Doctor of Public Administration
DBA	Doctor of Business Administration	DPE	Doctor of Physical Education
DChem	Doctor of Chemistry	DPH	Doctor of Public Health
DCJ	Doctor of Criminal Justice	DPS	Doctor of Professional Studies
DCL	Doctor of Comparative Law/Civil Law	DrDES	Doctor of Design
DCrim	Doctor of Criminology	DRE	Doctor of Religious Education
DED	Doctor of Environmental Design	DRee/DR	Doctor of Recreation
DEng	Doctor of Engineering	DSe/ScD	Doctor of Science
DEnv	Doctor of Environment	DSeD	Doctor of Science in Dentistry
DESc/ScDE	Doctor of Engineering Science	DScH	Doctor of Science and Hygiene
DF	Doctor of Forestry	DScVM	Doctor of Science in Veterinary Medicine
DFA	Doctor of Fine Arts	DSM	Doctor of Sacred Music
DGS	Doctor of Geological Science	DSSc	Doctor of Social Science
DHL	Doctor of Hebrew Literature/Letters	DSW	Doctor of Social Work
DHS	Doctor of Health and Safety	EdD	Doctor of Education
DHS	Doctor of Hebrew Studies	JCD	Doctor of Canon Law
DIT	Doctor of Industrial Technology	JSD	Doctor of Juristic Science
DLS	Doctor of Library Science	LScD	Doctor of Science of Law
DM	Doctor of Music	PhD	Doctor of Philosophy
DMA	Doctor of Musical Arts	RhD	Doctor of Rehabilitation
DME	Doctor of Musical Education	SJD	Doctor of Juridical Science
DMIn/DM	Doctor of Ministry	STD	Doctor of Sacred Theology
DML	Doctor of Modern Languages	ThD	Doctor of Theology
DMM	Doctor of Music Ministry		

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