

## NATIONAL ENDOWMENT FOR THE

## IIUMANITIES



## USDA



## Doctorate Recipients from United States Universities:

## Summary Report 2001

## Survey of Earned Doctorates

SPONSORED BY THE NATIONAL SCIENCE FOUNDATION, THE NATIONAL INSTITUTES OF HEALTH, THE U.S. DEPARTMENT OF EDUCATION, THE NATIONAL ENDOWMENT FOR THE HUMANITIES, THE U.S. DEPARTMENT OF AGRICULTURE, AND THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

## HIGHLIGHTS

This report presents data on recipients of research doctorates awarded by U.S. universities from July 1, 2000, through June 30, 2001. This information is taken from the 2001 Survey of Earned Doctorates (SED), an annual census of new doctorate recipients.

- The 416 universities in the United States that conferred research doctorates awarded 40,744 doctorates during the 2000-2001 academic year (the eligibility period for the 2001 SED), a decline of 1.4 percent from the 41,340 doctorates awarded in 2000, and a 4.4 percent decline from the all-time high of 42,654 in 1998. The 2001 total is the lowest since 1993.
- The number of doctorates awarded by broad field in 2001 was greatest in life sciences, which conferred 8,296 Ph.D.s. The numbers in the other broad areas were 6,825 in social sciences; 6,324 in education; 5,970 in the physical sciences and mathematics (combined); 5,589 in the humanities; 5,502 in engineering; and 2,238 in business and other professional fields.
- Women received 17,901 doctorates, or 44.0 percent of all doctorates granted in 2001. This is the highest percentage ever for women, continuing a 30 -year upward trend. Women earned 47.3 percent of the doctorates granted in life sciences, 54.4 percent in social sciences, 50.6 percent in humanities, 64.6 percent in education, and 42.7 percent in business/other professional fields. In the physical sciences and engineering, they constituted 25.2 percent and 16.9 percent, respectively. In 2001, 49.5 percent of all doctorates awarded to U.S. citizens went to women, similar to the 49.4 percent in 2000 and continuing a long-term trend of U.S. women approaching parity with their male counterparts.
- Over 16 percent of all doctorates awarded to U.S. citizens in 2001 were earned by U.S. racial/ethnic minority groups. This is the largest percentage ever, and continues a steady upward trend. Among the 26,435 doctorates earned in 2001 by U.S. citizens who identified their race/ethnicity ( 98.3 percent of all U.S. citizen doctorates), 1,604 doctorates were earned by blacks, 1,382 were earned by Asians, 1,119 were earned by Hispanics, and 149 were earned by American Indians. The broad fields with the largest percentages of minorities were education, in which blacks were the predominant minority group, and engineering, in which Asians were predominant.
- U.S. citizens received 69.9 percent of all doctorates earned in 2001 by individuals who identified their citizenship status ( 94.5 percent of all doctorate recipients identified their citizenship). The People's Republic of China was the country of origin for the largest number of non-U.S. doctorates in 2001, with 2,670 , followed by South Korea with 1,186, India with 950, Taiwan with 770, and Canada with 490. The percentage of doctorates earned by U.S. citizens ranged from lows of 41.1 percent in engineering and 54.7 percent in the physical sciences, to highs of 89.6 percent in education and 82.1 percent in the humanities.
- Median time to degree since receipt of the baccalaureate was 10.0 years in 2001, down from 10.3 years in 2000 and 10.4 years in 1999 and 1998. Median time to degree since first enrollment in any graduate program was 7.3 years in 2001, virtually unchanged since 1997.
- Most of the 2001 doctorate recipients ( 64.4 percent) received their primary financial support for graduate education from such program- or institution-based sources as university fellowships or teaching and research assistantships. Half ( 49.5 percent) of the 2001 doctorate recipients reported no educational indebtedness at completion of the doctorate; 17.9 percent reported cumulative education debt levels of $\$ 30,000$ or more.
- Approximately 73 percent of the new doctorate recipients had definite postgraduation commitments for employment or continued study when they completed the SED survey. Of those, 70.9 percent will work and 29.1 percent will continue their studies as postdoctorates. For U.S. citizens, 53.0 percent of those with firm employment commitments noted higher education as their intended work sector. About onefifth (21.4 percent) indicated industry or self-employment, and 7.8 percent had definite plans for government work.


# Doctorate Recipients from United States Universities: Summary Report 2001 

The Survey of Earned Doctorates is funded by and conducted under the direction of the following agencies of the U.S. government:<br>National Science Foundation<br>National Institutes of Health<br>U.S. Department of Education<br>National Endowment for the Humanities<br>U.S. Department of Agriculture<br>National Aeronautics and Space Administration



Thomas B. Hoffer
Bernard L. Dugoni
Allen R. Sanderson
Scott Sederstrom
Vince Welch
Isabel Guzman-Barron
Shana Brown

NORC at the University of Chicago

NORC at the University of Chicago
Chicago, Illinois
2002

## NOTICE

This report is based on data collected in the Survey of Earned Doctorates (SED) conducted for the National Science Foundation (NSF), the National Institutes of Health (NIH), the U.S. Department of Education (USED), the National Endowment for the Humanities (NEH), the U.S. Department of Agriculture (USDA), and the National Aeronautics and Space Administration (NASA), by the National Opinion Research Center (NORC) under NSF Contract No. SRS-9712655. Findings in this publication represent analyses developed by NORC, which have been reviewed, but not necessarily verified, by the participating Federal agencies and do not necessarily reflect the views of the sponsoring agencies.

NSF publications from the Survey of Earned Doctorates and the Doctorate Records File are available free on request (see inside back cover). Standardized tables on baccalaureate origins of Ph.D.s by major field of doctorate and trend tables on citizenship, race/ethnicity, and sex of Ph.D.s by fine field of doctorate are available for a fee. Customized tables can also be prepared at cost. For more information, please contact:

Doctorate Data Project<br>National Opinion Research Center<br>1155 East 60th Street<br>Chicago, IL 60637

Phone: (773) 753-7500
Fax: (773) 753-7886
E-mail: 4800-sed@norcmail.uchicago.edu

Material in this publication is in the public domain and, with appropriate credit, may be reproduced without permission. Recommended citation:

Hoffer, T.B., B. Dugoni, A. Sanderson, S. Sederstrom, V. Welch, I. Guzman-Barron, and S. Brown. 2002. Doctorate Recipients from United States Universities: Summary Report 2001. Chicago: National Opinion Research Center. (The report gives the results of data collected in the Survey of Earned Doctorates, conducted for six Federal agencies, NSF, NIH, USED, NEH, USDA, and NASA by NORC.)

This report is available on the NORC Web site: http://www.norc.uchicago.edu/studies/sed/sed2001 htm. Reports on science and engineering doctorates can be found on the National Science Foundation's Web site:
http://www.nsf.gov/sbe/srs/sengdr/start.htm.

## ACKNOWLEDGMENTS

Academic officers at the nation's doctorate-granting universities distribute, collect, and forward SED questionnaires to NORC. The project gratefully acknowledges the support and assistance of graduate deans and their staff, registrars, dissertation secretaries, and other administrators who participate in the SED effort and contribute to its success. The sponsoring Federal agencies and NORC also extend their heartfelt thanks to the 37,523 new research doctorate recipients who took the time to complete and return their copy of the 2001 survey.

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 U.S. Department of Education (USED), the National Endowment for the Humanities (NEH), the U.S. Department of Agriculture (USDA), and the National Aeronautics and Space Administration (NASA). Susan Hill (NSF) serves as the project officer for the six participating agencies. The survey's relevance to national policy issues has increased, thanks to the involvement and constructive reviews of the design and analysis of the survey by representatives from the six agencies: Walter Schaffer (NIH), Nancy Borkow (USED), Frank Shaw (NEH), S. Sureshwaran (USDA), Malcom Phelps (NASA), and Mary Golladay (NSF). Susan Hill (NSF), Director of the Doctorate Data project, provided guidance and direction during the preparation of this report. Comments from additional reviewers -- Mary Frase and Ronald Fecso - NSF/SRS are also appreciated. Reviewers from the Council of Graduate Schools (Peter Syverson) and a Graduate School (Ellen Benkin) were invaluable and greatly appreciated.

The authors gratefully acknowledge the contributions of their NORC colleagues who provided valuable counsel, direction, and assistance with various survey responsibilities: Mary Hess, Project Manager; Lance Selfa, Director of Data File Construction; Jamie Friedman, Director of Institutional Contacting; Syed Ahsan, Project IT Manager; Sharnia Bullock, Coordinator for the Data Preparation Center; Jie Yin, Project Programmer; Cindy Simko, Research Specialist; Crystal Williams, Data Preparation Supervisor, and the Production Center Staff; and William B. Witherspoon, Research Assistant.

## CONTENTS

Page
HIGHLIGHTS inside front cover
LIST OF FIGURES ..... iv
LIST OF TABLES ..... iv
INTRODUCTION ..... 1
Organization ..... 1
Questionnaire changes ..... 2
Related Publications ..... 3
TRENDS IN DOCTORATE RECIPIENTS ..... 4
Overall Trends and Rates of Change ..... 4
Doctorate-granting Institutions, Doctorates Recipients per Institution, and Geographical Distribution ..... 6
Doctorates by Field of Study ..... 8
Doctorates by Sex ..... 11
Doctorates by Race/Ethnicity ..... 13
Doctorates by Citizenship ..... 18
Doctorates by Parental Education Background ..... 20
Time to Degree ..... 21
FINANCIAL RESOURCES IN SUPPORT OF DOCTORATE RECIPIENTS, INCLUDING INDEBTEDNESS ..... 24
Sources of Financial Support ..... 24
Levels of Education-Related Indebtedness ..... 26
POSTGRADUATE PLANS, EMPLOYMENT, AND LOCATION ..... 29
Definite versus Indefinite Plans ..... 29
Career Employment versus Postdoctorates ..... 30
Employment Sectors in the United States ..... 31
Sources of Financial Support for Postdoctoral Appointments ..... 31
Postdoctoral Location of Non-U.S. Citizens ..... 32
MAIN DATA TABLES ..... 35
APPENDICES ..... 65
A The Eight Basic Tables, 2001 ..... 66
B Trend Tables, 1991-2001 ..... 99
C Technical Notes ..... 109
D Survey of Earned Doctorates Questionnaire, Academic Year 2001 ..... 123
E Field Classification and Research Degree Titles ..... 133
NSF PUBLICATIONS FROM THE DOCTORATE DATA PROJECT ..... inside back cover

## LIST OF FIGURES

Page
Figure 1 Doctorates awarded by U.S. colleges and universities, 1957-2001 ..... 5
Figure 2 Annual growth or decline in doctorates awarded by U.S. colleges and universities, 1957-2001 ..... 6
Figure 3 Top 20 doctorate granting states, 2001 ..... 7
Figure 4 Science and engineering doctorates awarded by broad field, 1971-2001 ..... 9
Figure 5 Humanities, education, and professional/other fields doctorates awarded by broad field, 1971-2001 ..... 10
Figure 6 Distribution of doctorate recipients by broad field, 1971 and 2001 compared ..... 11
Figure 7 Doctorate recipients by sex, 1991-2001 ..... 12
Figure 8 Percent of female doctorate recipients by broad field, 1971, 1981, 1991, 2001 ..... 13
Figure 9 Doctorates awarded to minority U.S. citizens, by race/ethnicity, 1981-2001 ..... 15
Figure 10 Percentage of doctorates earned by minority U.S. citizens, 1981 and 2001 ..... 15
Figure 11 Percentage of doctorates earned by minority U.S. citizens, by broad field, 2001 ..... 16
Figure 12 Percentage of doctorates earned by minority U.S. citizens, by sex, 2001 ..... 17
Figure 13 Median number of years to doctorate from baccalaureate award and age at doctorate, 1976-2001 ..... 22
Figure 14 Age distribution at doctorate by broad field of study, 2001 ..... 23
Figure 15 Primary sources of financial support for doctorate recipients, 2001 ..... 25
LIST OF TABLES
Page
Table 1 Number of doctorates awarded and annual percentage change in doctorates awarded by U.S. colleges and universities, 1957-2001 ..... 36
Table 2 Number of doctorates awarded by U.S. colleges and universities and average doctorate recipients per institution, 1962-2001 ..... 37
Table 3 Top 20 doctorate-granting institutions by broad field of doctorate, 2001 ..... 38
Table 4 Number of doctorate recipients by state, including the District of Columbia and Puerto Rico, 2001 ..... 40
Table 5 Major field of doctorate recipients for selected years, 1971-2001 ..... 41
Table 6 Number of Doctorate recipients and percent female by selected subfield, 1991 and 2001 ..... 42
Table $7 \quad$ Number and percent of doctorate recipients, by sex within broad field for selected years, 1971-2001 ..... 43

## LIST OF TABLES (Continued)

Table 8 Number of U.S. citizen doctorate recipients by race/ethnicity within broad field for selected years, 1981-2001 ..... 44
Table 9 Major field of U.S. citizen doctorate recipients, by race/ethnicity, 2001 ..... 45
Table 10 Leading doctorate-granting institutions of U.S.-minority doctorate recipients, 1997-2001 ..... 46
Table 11 Citizenship status of doctorate recipients, by broad field for selected years, 1971-2001 ..... 47
Table 12 Top 30 countries of origin of non-U.S. citizens earning doctorates at U.S. colleges and universities, 2001 (ranked by number of doctorate recipients) ..... 48
Table 13 Leading doctorate-granting institutions of non-U.S. citizen doctorate recipients, 2001 (ranked by number of doctorate recipients) ..... 49
Table 14 Leading doctorate-granting institutions of non-U.S. citizen doctorate recipients, 2001 (ranked by percentage of institution's doctorate recipients) ..... 49
Table 15 Parental educational attainment of 2001 doctorate recipients, by selected characteristics ..... 50
Table 16 Median number of years from baccalaureate to doctorate award by broad field for selected years, 1976-2001 ..... 51
Table 17 Median number of years from baccalaureate to doctorate award by demographic group and broad field, 2001 ..... 52
Table 18 Distribution of 2001 doctorate recipients by age at doctorate ..... 53
Table 19 Primary sources of financial support for doctorate recipients by broad field and demographic group, 2001 ..... 54
Table 20 Cumulative debt related to the education of the doctorate recipients, by broad field, 2001 ..... 55
Table 21 Cumulative debt related to the education of the doctorate recipients, by demographic group, 2001 ..... 55
Table 22 Postgraduation status of doctorate recipients by broad field for selected years, 1981-2001 ..... 56
Table 23 Postgraduation status of doctorate recipients by demographic group for selected years, 1981-2001 ..... 57
Table 24 Postgraduation commitments of doctorate recipients by type of plans and broad field for selected years, 1981-2001 ..... 58
Table 25 Postgraduation commitments of doctorate recipients by type of plans and demographic group for selected years, 1981-2001 ..... 59
Table 26 Employment sector of doctorate recipients with postgraduation commitments in the United States, by demographic group for selected years, 1981-2001 ..... 60
Table 27 Sources of support for doctorate recipients with postgraduation commitments for postdoctoral study, by demographic group for selected years, 1981-2001 ..... 61
Table 28 Postdoctoral location of non-U.S. citizen doctorate recipients with postgraduation commitments by major field and visa status, 2001 ..... 62
Table 29 Postdoctoral location of non-U.S. citizen doctorate recipients with postgraduation commitments by visa status for selected years, 1979-2001 ..... 63
APPENDIX TABLES
Table A-1 Number of doctorate recipients, by sex and subfield, 2001 ..... 71
Table A-2 Number of doctorate recipients, by citizenship, race/ethnicity, and subfield, 2001 ..... 74
Table A-3 Statistical profile of doctorate recipients, by major field, 2001 ..... 80
Table A-4 Statistical profile of doctorate recipients, by race/ethnicity and citizenship, 2001 ..... 86
Table A-5 Doctorate recipients' financial resources in support of doctoral programs, by broad field and sex, 2001 ..... 88
Table A-6 State of doctoral institution of doctorate recipients, by broad field and sex, 2001 ..... 89
Table A-7 Institutions granting research doctorates, by major field, 2001 ..... 90
Table A-8 Top 50 doctorate-granting institutions ..... 97
Table B-1 Number of doctorate recipients, by subfield, 1991-2001 ..... 100
Table B-2 Number of doctorate recipients, by sex, race/ethnicity, and citizenship, 1991-2001 ..... 105
Table C-1 Survey response rates ..... 111
Table C-2 Profiles of respondents versus nonrespondents for critical item data, by source or response, 2001 ..... 112
Table C-3 Item response rates, 1991-2001 ..... 114

# DOCTORATE RECIPIENTS FROM UNITED STATES UNIVERSITIES: SUMMARY REPORT 2001 

## Introduction

Doctorate Recipients from United States Universities: Summary Report 2001 is the thirty-fifth in a series of reports on research doctorates awarded by universities in the United States. ${ }^{1}$ The data presented in this report are from the annual Survey of Earned Doctorates (SED), a census of the 40,744 research doctorate recipients who earned their degrees between July 1, 2000, and June 30, 2001. Conducted since 1958, this survey is sponsored by the following six Federal agencies: the National Science Foundation, the National Institutes of Health, the U.S. Department of Education, the National Endowment for the Humanities, the U.S. Department of Agriculture, and the National Aeronautics and Space Administration. All survey responses become part of the Doctorate Records File (DRF), a cumulative database on research doctorate recipients from 1920 to 2001. For the 2001 survey, 92.1 percent of the 40,744 new doctorate recipients completed the SED questionnaire; basic information on nonrespondents was obtained from their degree-granting institutions and public records. ${ }^{2}$ The cumulative DRF now contains a total of $1,436,919$ records on individuals completing doctorates over the last 82 years at U.S. institutions.

## Organization

Summary Report 2001 begins by reviewing overall trends in research doctorates awarded by U.S. universities. Trends in the numbers and percentages of research doctorates are reported by the broad fields in which research doctorate recipients earn their degrees, sex, race/ethnicity, and citizenship. Trends in the average amount of time taken to complete the doctorate degree are also reported. Cross-sectional data for the 2001 cohort are presented on the sources of financial support during graduate school, and the postgraduation status and plans of doctorate recipients.

[^0]Figures highlighting selected trend and cross-sectional data complement the brief narratives of key survey findings. A set of tables following the main text contains the numbers and percentages from which the figures and the numbers cited in the text are drawn. References to these tables are embedded in the text, and a reference at the bottom of each figure indicates the corresponding table number. Basic tables of statistics for the 2001 research doctorate recipients are shown in appendix A, and trend tabulations for the previous ten-year period (1991 to 2001) are presented in appendix B. These basic tables have maintained essentially the same structure for the past several annual volumes of the Summary Report, and thus provide a basis for additional trend analyses that researchers can pursue. Appendix C supplies technical notes, including response rates, and other information related to tables and figures in the report. Appendix D contains the SED questionnaire for the 2001 academic year. Field of study classifications and research degree titles included in the SED are listed in Appendix E.

## Questionnaire Changes

Several changes were made to the SED questionnaire between this survey year (July 1, 2000, to June 30, 2001) and the previous one (July 1, 1999, to June 30, 2000). The changes include the addition of a few entirely new questions, the deletion of some items, slight modifications in question wording and the order of response options, and some alterations in the order in which certain questions were asked. A summary of the changes, including a comparison with the previous survey instrument, is presented in the annual SED methodology report available on the NSF Website listed at the end of this Introduction.

There were substantive changes to some questions in the SED 2001, and some of these changes affect the comparability of responses to the new and old SED forms. At the appropriate sections in this Summary Report, we will note the implications both for the trend data and for the cross-sectional 2001 cohort descriptions. ${ }^{3}$

Another important development in the SED methodology is the introduction of a Webbased questionnaire. Used on a very limited basis in the 2000 cycle, access to the Web instrument was expanded in 2001 and over 500 doctorate recipients completed the questionnaire

[^1]in this form. This number is expected to grow in years to come, and the project is monitoring closely the performance of the electronic instrument and the quality of the data obtained from it.

## Related Publications

The methodology of the SED 2001 survey is described in detail in the annual Survey of Earned Doctorates Methodology Report. This report is posted on the National Science Foundation, Division of Science Resources Statistics (SRS) Website (http://www.nsf.gov/sbe/srs/ssed/sedmeth.htm). The NSF also publishes an annual volume of tabulations using the SED data, Science and Engineering Doctorate Awards, that is available from NSF-SRS in printed form or on the NSF-SRS Website. Copies of the annual Summary Report from previous years are available on the NORC Website (http://www.norc.uchicago.edu/issues/docdata.htm).

## Trends in Doctorate Recipients

The individual research doctorate recipients ${ }^{4}$ from all U.S. universities are the primary respondents to the Survey of Earned Doctorates. Each year, personnel in graduate schools or other administrative offices of the degree-granting universities distribute the SED questionnaires to these individuals and transmit the rosters and completed questionnaires to the SED data collection contractor (NORC at the University of Chicago has been the contractor since 1997). The lists of new doctorate recipients are carefully checked and edited by the data collection contractor working closely with the universities over the course of the SED eligibility year. Every effort is made to locate all new graduates who did not return a questionnaire to their graduate school and to ask them to complete the form. The graduate schools provide basic information on individual nonrespondents at the end of the data collection cycle. A comprehensive and accurate picture of the universe of new doctorates each year results from this process, and the SED data provide a solid basis for charting trends in the numbers and characteristics of this population.

## Overall Trends and Rates of Change

During the twelve-month period ending June 30, 2001, U.S. universities awarded 40,744 research doctorate degrees, compared with 41,340 in 2000 and 41,097 in 1999 (see table 1). This was a percentage decrease from 2000 to 2001 of 1.4 percent, and of 4.5 percent from the all-time high of 42,654 in 1998. The 2001 total is the lowest since 1993.

Despite the lack of growth in 2001, the long-term trend in the number of new research doctorates has been one of considerable expansion. Over the last 40 years, the increase in the number of doctorates granted by U.S. universities averaged approximately 3.3 percent per year. The expansion has been characterized by two periods of rapid growth followed by stability and

[^2]even slight declines as seen this year. Between 1961 - the year when the number of annual doctorates awarded surpassed 10,000 for the first time - and 1967, the annual growth rate was nearly 12 percent, and the number of doctorates awarded almost doubled $(20,403)$. Following this, the annual total topped $30,000(31,867)$ for the first time, in only four more years $(1971)$. The number of doctorate degrees annually awarded during the decades of the 1970s and 1980s remained moderately stable at about 30,000 each year. In 1986, a second period of growth began that persisted until the late 1990s. The total figure did not exceed 40,000 until $1994(41,037), 23$ years after it had reached the 30,000 mark. The numbers have been fairly stable since then, with only slight annual increases or decreases. In 1999 - for the first time in fourteen years - the total number of doctorates declined from the previous year. A moderate increase occurred in 2000, when the level was similar to the level in 1994; but as mentioned previously, the figure fell slightly a year later in 2001. (See figures 1 and 2.)

Figure 1. Doctorates awarded by U.S. universities, 1957-2001


[^3]Figure 2. Annual growth or decline in doctorates awarded by U.S. universities, 1957-2001


See Table 1.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

## Doctorate-granting Institutions, Doctorate Recipients per Institution, and Geographical Distribution

The SED survey staff monitor closely the universe of research doctorate-granting institutions, including an annual review of all accredited institutions recognized by the U.S. Department of Education in its Integrated Postsecondary Education Data System (IPEDS). The data collection contractor for the SED contacts newly-identified institutions granting one or more of the research doctorates listed in appendix E and includes the institutions in the SED universe as soon as they award a recognized degree. Appendix table A-7 contains the full list of institutions granting research doctorates in the 2001 academic year.

During the 2001 academic year, there were 416 universities in the United States and Puerto Rico that awarded at least one research doctorate. This is the highest number of institutions ever recorded in the SED, and reflects a trend of steady increases in the number of doctorate-granting institutions from the early 1960s (175 in 1962). (See table 2.)

In 2001, the mean number of doctorates awarded per institution was 98 , while the median was 37. (See table 2 for the mean and median numbers of doctorates awarded per institution from 1962 to 2001.) As the substantial difference between the mean and the median suggests, a
relatively small number of institutions award a disproportionately large number of doctorates. Just 48 institutions granted 50 percent of all doctorates in 2001. Eighteen institutions accounted for 25 percent of all doctorates granted; the second quartile contained 30 institutions, the third quartile included 56 universities; and the remaining 312 institutions accounted for the final 25 percent of doctorates. ${ }^{5}$

The University of California-Berkeley granted the largest number of doctorates, 751, or 1.8 percent of all doctorates awarded in 2001, followed by the University of Texas at Austin (732), the University of Illinois at Urbana-Champaign (673), and the University of WisconsinMadison (656). In 2000 and 2001, the top 10 institutions granted approximately 15.5 percent of all doctorates. (See table 3.)

The state-by-state totals in figure 3 and table 4 show that California universities led the nation by awarding 4,824 doctorates, or 11.8 percent of all doctorates in 2001. New York institutions granted the next highest number of doctorates $(3,420)$, followed by institutions in Texas $(2,683)$, Pennsylvania $(2,121)$, Illinois $(2,119)$, Massachusetts $(2,106)$, Florida $(1,761)$, and Ohio $(1,697)$. These eight states accounted for a just over half -50.9 percent - of all doctorates awarded in 2001. (See figure 3 and table 4.)

Figure 3. Top 20 doctorate-granting states, 2001


See Table 4.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

[^4]
## Doctorates by Field of Study

There were 287 fields of specialization into which the SED classified research doctorate degrees in 2001 (these are listed on page 7 of the questionnaire included in appendix D). Since fields of specialization are dynamic entities that reflect the evolving programs of researchers and their constituencies, each year the SED list is assessed in order to identify emerging fields and periodically modified to accommodate changes in the world of doctoral education. The SED is able to collect information on the specialization fields of virtually all the new doctorates each year; coverage in 2001 was attained for all of the 40,744 doctorate recipients.

Consistent with past practice in presenting the SED data, the fields of specialization are grouped into seven broad fields: physical sciences, ${ }^{6}$ engineering, life sciences, ${ }^{7}$ social sciences (including psychology), humanities, education, and a heterogeneous group of professional and other fields (including business, communications, social work, and theological programs). Appendix tables A-1, A-2, and B-1 contain the numbers of graduates in all fields.

Table 3 lists, for the institutions granting the largest numbers of doctorates, the number of doctorates granted in 2001 in each of the seven broad fields. The University of CaliforniaBerkeley awarded the most doctorates in the physical sciences (168). The Massachusetts Institute of Technology (MIT) granted the most engineering doctorates (226), while the Johns Hopkins University led all universities in the life sciences (189). The University of TexasAustin topped the list both for social science doctorates (113) and for doctorates in the humanities (150). Nova Southeastern University had the highest total in education (314) as well as in the diverse "professional/other" category (84).

The numbers of doctorates awarded in the seven broad fields were also concentrated in a relatively small number of institutions. While the top 10 degree-granting universities awarded 15.5 percent of all doctorates in 2001, the concentration was higher in six of the seven broad fields: 19.1 percent in the physical sciences, 28.5 percent in engineering, 17.6 percent in the life sciences, 22.0 percent in the humanities, 19.1 percent in education, and 20.4 percent in the professional/other category. Only in the social sciences was the concentration lower than the overall average ( 14.0 percent). (Derived from table 3.)

The overall decrease of 1.4 percent in doctorates awarded between the 2000 and 2001 academic years was a result of decreases in six of seven broad fields, offsetting a 3.4 percent

[^5]increase in engineering. The life sciences, physical sciences, and education showed decreases of 2.7, 1.7, and 1.5 percent, respectively. Social sciences registered the largest percentage drop, 4.0 percent. Humanities and professional/other saw smaller decreases. (See appendix table B-1)

Maintaining its position since 1988, the life sciences were the largest single broad field with 8,296 doctorates. Compared with five years ago, when the total number of doctorates awarded was almost 1,700 more than the total in 2001, engineering, the physical sciences, and professional/other showed large decreases: 12.8 percent, 10.5 percent, and 9.6 percent lower in 2001 than in 1996, respectively. (See table 5.) Education (-6.8 percent) was also lower while the total numbers completing doctorates in the life sciences and social sciences were about the same. Humanities registered the only percentage increase from 1996 to 2001, with 9.3 percent more degrees awarded in 2001 than five years earlier. (See table 5 and figures 4 and 5.)

Figure 4. Science and engineering doctorates awarded by broad field, 1971-2001


See Table 5.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

[^6]Figure 5. Humanities, education, and professional/other fields doctorates awarded, 1971-2001


See Table 5.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Physical sciences, life sciences, social sciences, and engineering - the four broad fields that together constitute "science and engineering" (S\&E) - represented 65.3 percent of all doctorates awarded in 2001. They accounted for approximately the same percentage of all doctorates ( 65.5 percent) ten years ago in 1991, but the $S \& E$ fields represent a larger percentage of the total in 2001 than 25 years ago (1976), when they comprised 56.4 percent of all new doctorate recipients. (See table 5.)

A more detailed classification of the SED fields of specialization is presented in table 5. Of the 25 subfields included in table 5, there were 19 which experienced declines in the number of doctorates awarded between 2000 and 2001 (see appendix table B-1 for the 2000 totals). Comparing 1996 with 2001, nine of the 25 subfields had larger absolute numbers of doctorates in 2001, and 15 had smaller numbers; within S\&E fields in these same two years, five subfields had larger totals in 2001 than in 1996, and 10 had smaller ones. In the professional/other field, the subfield of communications was the same for both years. For the five-year comparisons within S\&E, the health sciences and some of the social sciences showed the only gains while all of the physical sciences, engineering, biological sciences, and agricultural sciences showed losses. (See table 5.)

A comparison of the percentage distribution of doctorates recipients in 1971 and 2001 across the seven broad fields is shown in figure 6 . The relative shares of graduates in engineering, life sciences, social sciences, and the professional/other fields were greater in 2001 than in 1971, while the relative shares in physical sciences and mathematics, humanities, and education were smaller in 2001. (See figure 6.)

Figure 6. Distribution of doctorate recipients by broad field, 1971 and 2001


See Table 5.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

## Doctorates by Sex

The overall decrease in doctorates between 2000 and 2001 - 1.4 percent - reflects a 1.7 percent decline for males and a 1.2 percent decline for females. The number of doctorates awarded to men in 2001 fell by 386 and to women by 213 in 2001 compared to 2000. The net proportional effect is that for 2001, females received 44.0 percent of all doctorates, which is the highest percentage of women ever recorded by the SED, topping slightly the 43.9 percent in
$2000 .{ }^{8}$ This number signifies the sixth consecutive year in which the representation of female doctorate recipients has surpassed 40 percent. Five years ago (1996), females comprised 40.1 percent of all doctorate recipients; 10 years ago (1991), that percentage was 37.1 and 25 years ago (1976), it was 23.3 percent. (See figure 7 and table 7.)

Figure 7. Doctorate recipients by sex, 1991-2001


See Appendix Tables B-2b and B-2c.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

With respect to the broad fields of study, women constituted 64.6 percent of all education doctorates for 2001, the majority in the social sciences ( 54.4 percent), and half in the humanities ( 50.6 percent). In contrast, the representation of females among doctorate recipients in the physical sciences and engineering for 2001 was only 25.2 percent and 16.9 percent, respectively (figure 8). However, even these still-low percentages have shown significant change over time: when females were only 23.3 percent of all doctorate recipients 25 years ago, they constituted just 9.3 percent and 1.9 percent in the physical sciences and engineering, respectively. Similar long-term trends are discernible in other broad fields as well: in the life sciences, from 20.2

[^7]percent in 1976 to 47.2 percent in 2001 ; from 26.3 percent to 54.4 percent in the social sciences over that same period; and from 34.3 percent in the humanities in 1976 to the current 50.6 percent. (See figure 8 and table 7.)

Figure 8. Percent of female doctorate recipients, by broad field, 1971, 1981, 1991, 2001


See Table 7.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

In 2001, females constituted 37.8 percent of S\&E doctorate recipients and 55.6 percent of degrees in non-S\&E fields. With regard to finer field distinctions, of the 25 selected subfields listed in table 6 , women were the majority of doctorate recipients in ten fields and constituted at least 40 percent of the doctorate population in five additional areas. In four of the 25 fields, the percentage increase in female doctorate recipients between 1991 and 2001 was over 40 percent. (See table 6.)
other percentage calculations. Coincidently, sex was not known for 74 also in 2000.

## Doctorates by Race/Ethnicity

Following the new Federal standards established for the 2000 decennial census of the U.S. population, the SED changed the way in which race and ethnicity were requested in the 2001 questionnaire. The new format asked respondents to mark all racial categories that apply to them, rather than a single category as had been the wording since 1973 when race and ethnicity questions were first added to the SED questionnaire. Additional changes included separating Pacific Islanders from Asians and combining them with Native Hawaiians in a new racial category, and adding a Cuban response option to the Hispanic ethnicity question. A copy of the new questionnaire is included in appendix $D$.

As noted in the Introduction, about 14 percent of the 2001 doctorate recipients completed the 2000 SED questionnaire instead of the one for the 2001 academic year. Looking just at the data from the new form, a few points can be noted. The main change in the 2001 data from the past is that 293 new doctorate recipients chose multiple races. A total of 46 respondents identified themselves as Native Hawaiians or other Pacific Islanders, and 86 individuals indicated Cuban origins under Hispanic ethnicity. Individuals indicating multiple races and Native Hawaiian or other Pacific Islander are grouped as a separate category and not included in the trend comparisons presented here. Individuals indicating Cuban origins, in contrast, are included in the Hispanic category used throughout this report.

A total of 4,254 members of U.S. racial/minority groups were awarded doctorates, representing 16.1 percent of the U.S. citizens earning research doctorates in 2001 (see table 8). While the number is slightly lower than in 2000 when 4,340 minority group members earned doctorates, the 2001 minority percentage represents an increase from 15.8 percent in 2000, and is the highest percentage yet recorded in the SED (see appendix table B-2a.). Blacks earned the most doctorates $(1,604)$ of the four main U.S. minority populations in 2001, followed by Asians $(1,382)$, Hispanics $(1,116)$, and American Indians (149) (see table 8).

The 2001 number of minority doctorate recipients is 27.6 percent higher than the total five years earlier (1996) and 72.2 percent higher than 10 years ago (1991). As the figures in the first panel of table 8 indicate, doctorates awarded to U.S. minority groups generally increased much more in the 1990s than in the 1980s. The twenty-year gains were greater for Asians (198
percent) and Hispanics (140 percent), than for American Indians ( 75 percent) and blacks ( 58 percent). (See figures 9 and 10 and table 8.)

Figure 9: Doctorates awarded to minority U.S. citizens, by race/ethnicity, 1981-2001


Figure 10. Percentage of doctorates earned by minority U.S. citizens, 1981 and 2001


See Table 8.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates
U.S. minorities (combining Asians, blacks, Hispanics, and American Indians) had their largest presence in the broad fields of engineering ( 20.0 percent of U.S. citizens earning doctorates), education (20.1 percent), and the professional/other fields (18.3 percent) in 2001.

The lowest percentage representations were in physical sciences (12.5 percent) and humanities (12.4 percent). (See figure 11).

The proportional representation of the different minority groups varied by broad field. Asians were the largest contingent in physical sciences, engineering, and life sciences, representing over half of all minority group members earning doctorates in those fields during the 2001 academic year. Blacks were the largest minority population in social sciences, education, and professional/other fields. Hispanics were the largest minority population in humanities. All of these patterns of relative representation held in each year shown in table 8, back to 1981. (See table 9 for the numbers of minority doctorate recipients in each of the 25 subfields in 2001.)

Figure 11. Percentage of doctorates earned by minority U.S. citizens, by broad field, 2001


See Table 8.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

The pattern of growth for the aggregate minority populations generally holds for the separate minority groups within the seven broad fields. One exception is that the number of Asian doctorate recipients in engineering grew rapidly in the late 1980's and early 1990's, but experienced a slight decrease from 1996 to 2001 . The general pattern for minority recipients,
however, was one of relatively small increases from 1981 to 1991 followed by moderate increases from 1991 to 2001. (See table 8.)

The balance of male and female doctorate recipients varies between racial/ethnic groups. Among U.S. citizens, of doctorates earned by whites, 48.5 percent were awarded to women; for blacks, various Hispanic groups, and American Indians, women constituted a majority, earning between 55.0 percent and 63.4 percent of doctorates received by persons of those races or ethnicities. Among Asian Americans, women were 46.4 percent of the total. (See figure 12 and appendix table A-4.)

Figure 12. Percentage of doctorates earned by minority U.S. citizens, by sex, 2001


See Appendix Tables B-2b and B-2c.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 10 lists the universities that awarded the largest number of doctorates to members of the four main U.S. minority groups between 1997 and 2001, and the number granted. Over that five-year interval, three California institutions - Berkeley, UCLA, and Stanford - and two in Massachusetts - Harvard and MIT - awarded a total of 1,156 doctorates to Asian Americans, or 17.8 percent of all doctorates awarded by U.S. universities to Asian Americans. Nova Southeastern University and Howard University awarded, by far, the most doctorates to blacks (336 and 241, respectively), 7.5 percent of all the doctorates granted to blacks in this period. In
general, the leading institutions awarding doctorates to Hispanics lie in the Southwest, including California, and in Puerto Rico. Oklahoma State University and the University of Oklahoma awarded the largest number of doctorates to American Indians.

The concentration of U.S. minority doctorate recipients among institutions is noticeably greater than for the doctoral population as a whole. For example, in 2001 the ten universities granting the largest numbers of doctorates conferred 15.5 percent of all doctorates. However, over the 1997-2001 period, the ten universities awarding the most degrees to minority students in each of the four groupings accounted for nearly 20 percent of those totals. The ten institutions that awarded the most doctorates to Asians (table 10) granted 27.0 percent of all Asian doctorates between 1997 and 2001; for blacks the corresponding figure was 19.3 percent; for Hispanics it was 23.9 percent, and for American Indians it was 19.6 percent. (See table 10.)

## Doctorates by Citizenship

Each year, the SED gathers information concerning the U.S. citizenship status and country of citizenship of the new doctorate recipients. ${ }^{9}$ Of the 2001 doctorate recipients with known citizenship status ( 94.5 percent of the total), 69.9 percent were U.S. citizens, 4.7 percent were non-U.S. citizens with permanent resident visas for the United States (i.e., "green cards"), and 25.4 percent were non-U.S. citizens in the U.S. on temporary visas. (See table 11.)

The trend for non-U.S. citizens earning doctorates from U.S. institutions is generally one of increasing numbers. This is particularly true for individuals in the U.S. on temporary visas. The five-year snapshots shown in table 11 indicate that the percentage of new doctorates awarded to individuals on temporary visas rose from 8.6 percent of all doctorate recipients who reported citizenship in 1971 to 13.1 percent in 1981 and 25.5 percent in 1991. The growing numbers of doctorates awarded to foreign students on temporary visas has accounted for most of the overall growth in the numbers of doctorate recipients since 1970.

The time trend for doctorate recipients with permanent visa shows more fluctuation. There was a historic peak in 1996 because of an exceptionally large number of Chinese students

[^8]that obtained permanent visas that year. Except for that year, the number of doctorate recipients with permanent visas has ranged between 1,200 and 1,900 since 1971. (See table 11.)
U.S. citizens earned over 80 percent of the doctorates awarded in the humanities and education ( 82.1 percent and 89.6 percent, respectively) in 2001. (See table 11.) In absolute numbers, U.S. citizens earned more doctorates in the life sciences than in any of the other broad fields; permanent residents also had their highest total in the life sciences, and engineering was the most popular field for those in the United States on temporary visas.

The trend towards the equal male and female representation in the doctoral cohorts is particularly striking for U.S. citizens. In 2001, 49.5 percent of all doctorates awarded to U.S. citizens went to women, similar to the 49.4 percent in 2000 and continuing a long-term trend of U.S. women approaching parity with their male counterparts. Among U.S. citizens, women earned 43.7 percent of all doctorates in 1991. While the number of doctorates going to U.S. males was relatively level across the 1990s, the number earned by U.S. women increased every year with the exception of 1999. The number also decreased in 2001 compared to the year before. (See appendix tables A-4 and B-2.)

Among permanent residents earning doctorates in 2001, 45.4 percent were female, and among those doctorate recipients holding temporary visas, just 28.6 percent were female (appendix table A-4). Women holding temporary visas are more concentrated in the S\&E fields of study than women who are U.S. citizens. While women with temporary visas represented 15.6 percent of all female doctorates in 2001, they earned 19.8 percent of the doctorates granted to females in the life sciences, 32.6 percent of the doctorates earned by females in the physical sciences, 44.0 percent of the female-earned doctorates in engineering. (Appendix table A-3c).

In 2001, 2,670 doctorate recipients were citizens of the People's Republic of China $(\mathrm{PRC})^{10}$, comprising 6.6 percent of the total 40,744 degrees awarded. (See table 12 for a listing of the top 30 countries of origin of non-U.S. citizen doctorate recipients.) The top 15 countries in terms of the number of doctorates awarded to its citizens in 2000 remained the same for 2001, aside from France taking Italy's former place in the ranking. Thailand traded places with Japan, moving from tenth to seventh place; while Russia and Mexico also traded places with each other, moving to ninth and tenth, respectively. The leading five countries accounted for 14.9 percent of all doctorates awarded by U.S. universities in 2001. Only 5.8 percent of the total 2001 doctoral

[^9]cohort were citizens of the next 10 nations listed in table 12, and just 3.2 percent were citizens of the next 15 nations. Doctoral students who are citizens of one of the 30 nations shown in the table thus accounted for 23.9 percent of the doctorates awarded in 2001 with country of citizenship reported.

Table 13 lists the institutions awarding the largest numbers of doctorates to non-U.S. citizens in 2001; table 14 provides a corresponding relative ranking - those institutions awarding the most doctorates as a percentage of the total number of Ph.D.s they granted.

## Doctorates by Parental Education Background

The SED has asked new doctorate recipients to report their fathers' and mothers' levels of educational attainment since 1963. For purposes here, the responses are grouped into three categories: high school diploma or less; some college, including earning the baccalaureate; and advanced degree, including the master's, doctorate, or a professional degree.

The 2001 data shown in table 15 indicate that 29.8 percent of recipients' fathers had only earned a high school diploma or less; the corresponding figure for their mothers was 38.7 percent. Slightly over one-third ( 35.3 percent) of doctorate recipients had a father who had attended college (but may not have earned a baccalaureate degree); 39.8 percent of the mothers of doctorate recipients in 2001 had some college background. Finally, the father held an advanced degree for 34.9 percent of the doctorate recipients, compared with the 21.5 percent whose mothers had an advanced degree.

Although similar on the whole, parental education backgrounds of male and female 2001 doctorate recipients differed with respect to mothers' education. Female doctorate recipients were more likely than their male counterparts to have a mother who attended college or who earned an advanced degree.

There is considerable variation in parental education attainment by race/ethnicity, citizenship status, and broad field of study. Among U.S. citizens, Asian doctorate recipients were more likely than members of the other racial/ethnic categories to come from families in which the one or both parents had advanced degrees; black, Hispanic, and American Indian recipients' parents were the least likely to have gone beyond high school. U.S. citizen doctorate recipients were more likely than those with either permanent residency status or holding
temporary visas to have parents with advanced degrees (and less likely than these two groups to have parents whose formal education did not extend beyond the high school level).

The distributions of parental education by the broad fields in table 15 reflect, in part, the different racial/ethnic and citizenship compositions of the fields. Doctorate recipients in the humanities displayed the highest percentages of both fathers ( 43.8 percent) and mothers (28.5 percent) with advanced degrees. The lowest percentages of advanced degrees by fathers or mothers were within the education doctorate recipients, 22.2 percent and 13.2 percent, respectively. These two broad fields are also the least and most represented, correspondingly, with regard to the fraction of parents whose formal education ended at high school or before.

## Time to Degree

The amount of time needed to complete a doctorate is a key concern for those pursuing the degree, as well as for the faculties and administrations of the degree-granting institutions and national public agencies and private organizations that support doctoral study. Time to degree completion is likely to be affected by individual preferences and economic constraints, in addition to labor markets and cultures of the academic disciplines and institution-specific program characteristics.

The SED measures time to degree in three different ways: (1) the total time elapsed from completion of the baccalaureate to completion of the doctorate, (2) the total time elapsed while actually registered in graduate school to completion of the doctorate, and (3) the age of the doctorate recipients at the time the doctorate is awarded. In this section, the 2001 data and the historical trends for each of these measures are reviewed for the whole population of doctorate recipients and, separately, by broad field and the background variables of sex, race/ethnicity, and citizenship.

For the 2001 doctorate recipients, the median total time span from baccalaureate to doctorate was 10.0 years (table 16), nearly the same as in 2000 . The total time span was shortest in the physical sciences ( 7.8 years) and longest in education (19.0 years). The broad field of education includes large numbers of individuals who have worked full-time before starting their graduate degree programs, and who even continue to work full-time while earning their doctorates.

The historical data in table 16 show that the 2001 median total time to degree was about 9 months shorter than in 1996. The long-term trend had been one of increases in length from 1976 to 1996 (see figure 13 and table 16). From 1996 to 2001, the broad fields of engineering, physical sciences, life sciences, social sciences, humanities, and education follow an overall pattern toward shorter times; but median time to degree for the professional/other fields increased from 1996 to 2001.

Figure 13. Median number of years to doctorate from baccalaureate award and age at doctorate, 1976-2001


See Table 16.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

The median duration of being registered in graduate school was 7.5 years for the 2001 doctorates (table 16), also nearly identical to the number for 2000. Registered time to degree was shortest in the physical sciences and engineering ( 6.7 years), and longest in the humanities ( 9.0 years) (table 16). The trend for time registered is one of small but continual increases over the 25 -year span from 1976 to 2001 (see figure 13 and table 16) in most of the seven broad fields, with some flattening in the past five years.

The median time to degree indices vary somewhat by sex, citizenship, and race/ethnicity, however these differences are generally reflections of the broad field differences reviewed above
(table 17). Across the whole population of new doctorate recipients, females had longer total and registered times to degree than did males, but the sex differences are much smaller, or even reversed, when males and females are compared within specific broad fields (table 17). Similar patterns hold for comparisons of U.S. and non-U.S. citizens, and of the U.S. racial/ethnic groups. (See table 17.)

A third measure of time to degree gathered in the SED is age at doctorate. The median ages of the 2001 doctorate recipients are tabulated in appendix tables A-3 by major field of degree and A-4 by citizenship and race/ethnicity. On the whole, the median age at receipt of the doctorate in 2001 was 33.3 years. Again, age at degree varies with field of study. Doctorate recipients in the S\&E fields typically earn their degrees while in their early 30s; the median for all 2001 doctorate recipients in the $S \& E$ fields was 31.7 years old. In comparison, age at doctorate was 35.0 years in the humanities, 43.8 years in education, and 37.8 years in the professional/other fields category. (See appendix table A-3a and table 18). The modal age spans evident in figure 14 and table 18 reflect this ordering.

Figure 14. Age distribution at doctorate by broad field of study, 2001


## See Table 18.

Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

## Financial Resources in Support of Doctorate Recipients, Including Indebtedness

## Sources of Financial Support

The SED asks two questions that, taken together, provide information on the financial sources of support utilized by the new doctorate recipients (for the exact formats and wordings, see the copy of the questionnaire in Appendix D). The first question asks respondents to complete a checklist of 13 different potential sources of support, such as fellowships and scholarships, dissertation grants, teaching and research assistantships, and various personal arrangements. The second question asks respondents which of the checked sources was the primary source of support and which was the second most important. Respondents are grouped in terms of their primary sources of support for purposes here. The 13 sources are combined into the seven categories that form the rows in table 19.

Almost two-thirds of the 2001 doctorate recipients received the majority of their support for doctoral study from program- or institution-based sources, such as teaching assistantships, research assistantships/traineeships, and fellowships/dissertation grants ( 64.4 percent). ${ }^{11}$ Less than one-third ( 29.3 percent) of all 2001 doctorate recipients reported that their own resources (which include funds from loans, one's spouse, savings, and non-academic employment) were the primary sources they utilized to finance their doctoral studies. Foreign government, employer contributions, and "other" sources accounted for the remaining 6.3 percent of the cases. (See figure 15 and table 19.)

[^10]Figure 15. Primary sources of financial support for doctorate recipients, 2001


See Table 19.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Overall, women were more dependent upon personal resources than were men (37.4 percent versus 22.9 percent). The same was true for U.S. citizens ( 36.9 percent) compared to foreign citizens on permanent or temporary visas ( 22.8 percent and 9.3 percent, respectively). Differences in the various modes of financial support are also found among the main racial/ethnic groups. Black doctorate recipients indicated the greatest reliance on their own resources to finance their doctoral program ( 44.1 percent), followed in decreasing order by American Indians (42.8 percent), whites (36.9 percent), Hispanics (35.3 percent), and Asians (20.3 percent). (See table 19).

Sources of support differ substantially by field of study. For example, within the physical sciences, a notably higher than average percentage of new doctorate recipients reported programor institution-based programs as primary sources of support ( 87.6 percent). Within engineering, 80.9 percent of the research doctorate recipients in 2001 listed teaching/research assistantships or fellowships as their principal form of support, as did 78.9 percent of respondents in the life sciences. On the other hand, only 49.6 percent of doctorate recipients in the professional/other
fields and 23.3 percent of those in the broad field of education reported these categories as the primary sources of financial support for their doctoral program.

The gender variations and contrasts between U.S. and non-U.S. citizens are correlated with these differences among the broad fields. Notwithstanding, within the broad fields of life sciences, social sciences, education, and professional/other fields, women doctorates were still more likely to depend on their own resources than men doctorates (table 19). Similarly, nonU.S. citizens tend to be more concentrated in fields where the majority of doctoral students receive institution- and/or program-based support. Mirroring this concentration, non-U.S. citizen respondents reported lower percentages of reliance on their own resources than did U.S. citizen respondents. The differences were smaller within the broad fields of study than overall; however, U.S. citizens were still more likely to rely on their own resources than non-U.S. citizens (table 19).

Racial/ethnic differences in reliance on own resources also diminish within most of the broad fields of study. However, some substantial racial/ethnic differences within fields are found in terms of use of the different types of program- and institution-based support. In the physical sciences and engineering, Asians and whites were both more likely than blacks and Hispanics to rely on teaching and research assistantships and less likely to have fellowships or dissertation grants as their primary source of support. (See table 19).

## Levels of Education-Related Indebtedness

The SED also asked new doctorate recipients to indicate the amount of money they owe that is directly tied to their undergraduate or graduate education. This is defined as debt related to tuition and fees, living expenses and supplies, and transportation to and from school. The response categories begin with "none" and proceed upward in \$5,000 increments, with " $\$ 35,001$ or more" at the top. ${ }^{12}$ The format of this question was changed in the 2001 SED questionnaire, in two respects. First, the new format asks for separate undergraduate and graduate levels of debt; the previous several years asked respondents only for the total amount of debt related to their postsecondary education. Second, the highest level of debt in the new form represents an

[^11]increase of $\$ 5,000$ over the old form, which was previously capped at " $\$ 30,001$ or more." Over 90 percent of the 2001 graduates responded to the question (approximately 15 percent completed the old form and 75 percent the new form).

In order to make the data from the different forms as comparable as possible, the responses to the new form were recoded to match the old categories. This entailed summing the midpoints of the various ranges for the undergraduate and graduate levels of debt into a single measure, re-categorizing the sum into the discrete ranges, and capping the composite at the old maximum of " $\$ 30,001$ or more." In the 2002 and subsequent reports, this backward mapping will not be necessary because almost all respondents will complete the new version of the item.

Virtually half ( 49.5 percent) of the respondents in 2001 reported having no graduate or undergraduate education-related debt, while another 20.4 percent reported cumulative debt of $\$ 15,000$ or less (table 20). However, 17.9 percent of all new doctorate recipients reported debt over $\$ 30,000$, creating a distinct bulge at the high end of the debt distribution.

Examining the debt distributions within each of the seven broad fields, the most likely graduates to complete their doctorate with no education-related debt are graduates in engineering, the physical sciences, education, the life sciences, and professional/other fields in that order (table 20). Graduates of the broad fields of social science and humanities are more likely to have debt. Debt levels of $\$ 30,000$ or more are most common among graduates in social science fields (30.2 percent), the humanities ( 21.5 percent), and professional/other fields (21.4 percent).

The pattern of debt levels for the study's main demographic groups is shown in table 21. Particularly noteworthy in these tabulations is the much higher incidence of blacks, Hispanics, and American Indians sustaining high levels of education-related debt. Over one-third (35.4 percent) of black doctorate recipients, 30.1 percent of American Indians, and 27.6 percent of Hispanics owed over $\$ 30,000$; these figures compare to 13.8 percent of Asians and 19.5 percent of whites with that level of debt. On the other side of the scale, the racial/ethnic groups with a greater likelihood of having no education-related debt at completion of the doctorate are Asians and whites.

In the debt level pattern between the sexes, new male doctorates were about one and a half percent more likely to have no debt than their female counterparts ( 50.2 percent versus 48.7 percent). U.S. citizen doctorate recipients were less likely to have no higher-education-related
debt than graduates with permanent or temporary visas ( 42.2 percent, versus 61.9 percent, and 67.8 percent, respectively), and more likely to have debts totaling more than \$30,000 (21.0 percent, versus 11.9 percent, and 10.1 percent, respectively). (See table 21.)

## Postgraduate Plans, Employment, and Location

The SED questionnaire includes a number of questions about the graduates' immediate plans for work or further study. ${ }^{13}$ The responses provide a useful overview of the number of doctorate recipients planning to enter academic positions, government and industry, and postdoctoral programs of research and further study. Also, information is collected on the main types of work activities - research, teaching, administration, and professional services to individuals - that the graduates anticipate in their new positions.

There are five aspects of postgraduation plans examined in this report. First examined is whether the new doctorate recipient has a definite commitment for employment or a postdoctoral position. These data are analyzed by broad field of study, sex, citizenship, and race/ethnicity (tables 22 and 23). The second aspect is the distribution of graduates with definite commitments for career employment versus postdoctorate research and study programs. This distribution is also examined separately by broad field of study, sex, citizenship, and race/ethnicity as well as by visa status (tables 24 and 25). The third aspect looked at is the distribution of graduates across employment sectors, broken down by sex, race/ethnicity, and citizenship status (table 26). The final aspects discussed are financial support for postdoctoral study, and anticipated location of postgraduate commitment (international versus U.S.) for non-U.S. citizens (tables 28 and 29).

## Definite versus Indefinite Plans

Over seven in ten ( 72.9 percent) of all doctorate recipients in 2001 reported having definite commitments for employment or postdoctoral study or research. This is the highest percentage since 1989, and compares with 71.1 percent in 2000 (the annual numbers back to 1976 were assembled from table 22 and the analogous table from each of the previous four volumes of the Summary Report). The percentages with definite commitments in 2001 vary little by broad field with the noteworthy exception of the humanities; in the humanities, only 65.5

[^12]percent have a definite commitment compared to the other broad fields, which have percentages above 70. (See table 22.)

The percentages of graduates from various demographic groups with definite commitments are shown in table 23. Approximately three percent fewer women than men (71.1 percent compared to 74.2 percent) reported having definite plans. U.S. citizens were more likely to have definite commitments ( 73.8 percent) than individuals with permanent ( 66.4 percent) or temporary visas ( 71.4 percent). Among U.S. citizens and permanent residents, whites and Hispanics were more likely to have definite plans than blacks, Asians, and American Indians.

## Career Employment versus Postdoctorates

Among the doctoral recipients reporting definite plans, the majority ( 70.9 percent) indicated that they plan to enter career employment as opposed to pursuing further study within a postdoctoral research or teaching program (table 24). Plans for postdoctoral study were more common among graduates in the life sciences ( 61.2 percent) and the physical sciences (44.6 percent) than in the other broad fields. Although percentages of new doctorate recipients entering postdoctorate study programs has increased in all of the broad fields since 1981, decreases are evident between 1996 and 2001 in the life sciences, the physical sciences, and engineering (table 24).

Differences among demographic subgroups are shown in table 25 . Men were slightly more likely than women to have definite plans for postdoctorate study ( 30.0 versus 27.8 percent). This is the highest percentage of women with postdoctoral study appointments recorded by the SED to date, and accompanies the highest proportion of female doctorates recorded.

Students with temporary visas were more likely than permanent residents and U.S. citizens to pursue postdoctorate studies (the student visa allows the student to remain in the U.S. for two years of additional training after completing the doctorate). Among U.S. citizens and permanent residents, Asian doctorate recipients were more likely than other racial/ethnic subgroups to plan postdoctorates, followed by Hispanic and white recipients. Black and American Indian doctorate recipients were least likely to report postdoctorates. These differences among citizenship and racial/ethnic subgroups reflect the greater number of postdoctorates in the physical and life sciences, and the greater concentrations of non-U.S. citizens and Asian American students in those fields. (See table 25.)

## Employment Sectors in the United States

The most common destination of the 2001 doctorate recipients with definite commitments within the United States was higher education, identified by almost half (48.6 percent) of the 2001 respondent subpopulation (see table 26). The next largest group had commitments to industry or some form of self-employment (29.9 percent) while the third largest group planned to work for Federal, state, or local government ( 6.6 percent). The historical trends show reductions in government employment, coupled with a small increase in the industry/selfemployment sector.

Among 2001 female doctorates, 18.7 percent had commitments to industry or some form of self-employment, compared to 39.1 percent of their male counterparts. Women were more likely than men to have commitments to academe ( 57.2 percent versus 42.8 percent). With regard to U.S. racial/ethnic groups, Asians were less likely than others to go into academe and were more likely than all others to go into industry or self-employment. The main destination of non-U.S. citizens with definite plans to remain in the United States after graduation was industry or self-employment.

## Sources of Financial Support for Postdoctoral Appointments

The SED asked respondents with definite plans for further training or study (i.e., "postdocs") in the year after graduation to indicate the main source of support for their postdoctoral appointment. The percentages identifying each of the main sources from the 19812001 five-year cohorts are shown in table 27, separately by demographic group. In 2001, 38.5 percent of all postdocs named a college or university as their main source of funding, followed by 33.6 percent indicating the U.S. government. Private foundations supported another 7.5 percent, and other types of nonprofit organizations supported 3.0 percent. Over 11 percent indicated some other kind of support than those listed in the questionnaire; inspection of the descriptions written by these respondents reveals that many were planning on support from a foreign government.

Gender differences in sources of postdoctoral support are shown in the second and third columns of table 27. Men were more likely in 2001 to have support from the U.S. government ( 34.4 versus 32.5 percent), but women were equally likely to be supported by a college or university (both 38.5 percent). (See table 27.)

A number of differences in sources of support are apparent among U.S. citizens, permanent-visa holders, and temporary-visa holders. As might be expected, U.S. citizens were the most likely to have the U.S. government as their main source of postdoctoral support. But substantial numbers of non-U.S. citizens also received U.S. government support, though the percentages were lower in 2001 than in the other years shown in table 27. Non-U.S. citizens with postdoc appointments are more likely than U.S. citizens to have university or college funding as their main source of support.

The racial/ethnic breakdowns in table 27 show that blacks were less likely than other groups to have U.S. government funding in 2001, and were more likely than other groups to have university or college support. Hispanic postdoctorates were the least likely to have private foundation ( 3.7 percent) and other nonprofit organization ( 1.6 percent) support. (See table 27).

## Postdoctoral Location of Non-U.S. Citizens

Among non-U.S. citizens with definite plans for work or study, 92.8 percent of all new doctorate recipients holding permanent visas and 72.0 percent of temporary visa holders indicated that they will remain in the United States following graduation (table 28). In 2001, chemistry, biology, and computer science were the fields with the highest concentrations of new doctorate recipients with temporary visas staying in the United States ( 90.4 percent, 84.3 percent, and 81.9 percent, respectively). The lowest concentrations were located in the fields of education ( 28.7 percent), humanities ( 54.2 percent) and social sciences ( 55.3 percent). (See table 28.) Doctorate recipients with permanent visa status are much more likely overall than those with temporary visas to stay in the United States. The fields with the highest concentrations of doctorate recipients with permanent visas staying in the United States were earth, atmosphere, and marine science ( 100 percent), chemistry ( 98.6 percent), mathematics ( 97.4 percent), and computer science ( 97.3 percent). (See table 28.)

The number of international students earning research doctorates in the United States has steadily increased over the past twenty years, as has the tendency for those students to remain in the United States following graduation. Table 29 shows the trend of increasing numbers and percentages of new doctorate recipients with temporary visas planning to stay in the United States after receiving their doctorate. In 1981, under 50 percent ( 41.1 percent) of those with
temporary visas had firm commitments to positions in the United States. A decade later, 59.1 percent of them had firm commitments to stay in the United States; in 2001, the number had increased to 72.0 percent.

## MAIN DATA TABLES

Table 1. Number of doctorates awarded and annual percentage change in doctorates awarded by U.S. colleges and universities, 1957-2001

| Year | Number of doctorate recipients | Annual percentage change |  | Year | Number of doctorate recipients | Annual percentage change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1957 | 8,611 | 1.1 |  | 1980 | 31,020 | -0.7 |
| 1958 | 8,773 | 1.9 |  | 1981 | 31,356 | 1.1 |
| 1959 | 9,213 | 5.0 |  | 1982 | 31,111 | -0.8 |
| 1960 | 9,733 | 5.6 |  | 1983 | 31,281 | 0.5 |
| 1961 | 10,413 | 7.0 |  | 1984 | 31,337 | 0.2 |
| 1962 | 11,500 | 10.4 |  | 1985 | 31,297 | -0.1 |
| 1963 | 12,728 | 10.7 |  | 1986 | 31,902 | 1.9 |
| 1964 | 14,325 | 12.5 |  | 1987 | 32,370 | 1.5 |
| 1965 | 16,340 | 14.1 |  | 1988 | 33,500 | 3.5 |
| 1966 | 17,949 | 9.8 |  | 1989 | 34,327 | 2.5 |
| 1967 | 20,403 | 13.7 |  | 1990 | 36,067 | 5.1 |
| 1968 | 22,937 | 12.4 |  | 1991 | 37,533 | 4.1 |
| 1969 | 25,743 | 12.2 |  | 1992 | 38,890 | 3.6 |
| 1970 | 29,498 | 14.6 |  | 1993 | 39,800 | 2.3 |
| 1971 | 31,867 | 8.0 |  | 1994 | 41,037 | 3.1 |
| 1972 | 33,041 | 3.7 |  | 1995 | 41,747 | 1.7 |
| 1973 | 33,755 | 2.2 |  | 1996 | 42,438 | 1.7 |
| 1974 | 33,047 | -2.1 |  | 1997 | 42,559 | 0.3 |
| 1975 | 32,952 | -0.3 |  | 1998 | 42,654 | 0.2 |
| 1976 | 32,946 | 0.0 |  | 1999 | 41,097 | -3.7 |
| 1977 | 31,716 | -3.7 |  | 2000 | 41,340 | 0.6 |
| 1978 | 30,875 | -2.7 |  | 2001 | 40,744 | -1.4 |
| 1979 | 31,239 | 1.2 |  |  |  |  |

Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 2. Number of doctorates awarded by U.S. colleges and universities and average doctorate recipients per institution, 1962-2001

| Year | Number of doctorate recipients | Number of institutions | Mean number of doctorate recipients per institution | Median number of doctorate recipients per institution |
| :---: | :---: | :---: | :---: | :---: |
| 1962 | 11,500 | 175 | 66 | 26.0 |
| 1963 | 12,728 | 186 | 68 | 27.0 |
| 1964 | 14,325 | 196 | 73 | 27.0 |
| 1965 | 16,340 | 206 | 79 | 33.0 |
| 1966 | 17,949 | 216 | 83 | 32.0 |
| 1967 | 20,403 | 220 | 93 | 39.0 |
| 1968 | 22,937 | 230 | 100 | 43.5 |
| 1969 | 25,743 | 232 | 111 | 51.0 |
| 1970 | 29,498 | 242 | 122 | 55.0 |
| 1971 | 31,867 | 264 | 121 | 45.0 |
| 1972 | 33,041 | 271 | 122 | 49.0 |
| 1973 | 33,755 | 290 | 116 | 42.0 |
| 1974 | 33,047 | 297 | 111 | 38.0 |
| 1975 | 32,952 | 297 | 111 | 43.0 |
| 1976 | 32,946 | 299 | 110 | 43.0 |
| 1977 | 31,716 | 309 | 103 | 39.0 |
| 1978 | 30,875 | 316 | 98 | 35.0 |
| 1979 | 31,239 | 316 | 99 | 38.5 |
| 1980 | 31,020 | 325 | 95 | 37.0 |
| 1981 | 31,356 | 328 | 96 | 40.0 |
| 1982 | 31,111 | 333 | 93 | 34.0 |
| 1983 | 31,281 | 337 | 93 | 35.0 |
| 1984 | 31,337 | 336 | 93 | 38.0 |
| 1985 | 31,297 | 342 | 92 | 35.5 |
| 1986 | 31,902 | 345 | 92 | 35.0 |
| 1987 | 32,370 | 353 | 92 | 37.0 |
| 1988 | 33,500 | 355 | 94 | 35.0 |
| 1989 | 34,327 | 360 | 95 | 36.0 |
| 1990 | 36,067 | 358 | 101 | 42.0 |
| 1991 | 37,533 | 364 | 103 | 38.0 |
| 1992 | 38,890 | 367 | 106 | 42.0 |
| 1993 | 39,800 | 372 | 107 | 42.0 |
| 1994 | 41,037 | 374 | 110 | 43.0 |
| 1995 | 41,747 | 381 | 110 | 43.0 |
| 1996 | 42,438 | 389 | 109 | 44.0 |
| 1997 | 42,559 | 383 | 111 | 45.0 |
| 1998 | 42,654 | 388 | 110 | 43.0 |
| 1999 | 41,097 | 396 | 104 | 41.0 |
| 2000 | 41,340 | 407 | 102 | 40.0 |
| 2001 | 40,744 | 416 | 98 | 37.0 |

Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 3. Top 20 doctorate-granting institutions by broad field of doctorate, 2001

| Institution | Number of doctorate recipients | Institution | Number of doctorate recipients |
| :---: | :---: | :---: | :---: |
| All Fields | 40,744 | Physical Sciences ${ }^{\text {a }}$ | 5,970 |
| University of California-Berkeley | 751 | University of California-Berkeley | 168 |
| The University of Texas at Austin | 732 | University of Illinois at Urbana-Champaign | 136 |
| University of Illinois at Urbana-Champaign | 673 | Massachusetts Institute of Technology | 119 |
| University of Wisconsin-Madison | 656 | Stanford University | 118 |
| University of Minnesota-Twin Cities | 633 | University of Wisconsin-Madison | 105 |
| University of California-Los Angeles | 609 | University of California-Los Angeles | 104 |
| Ohio State University | 591 | Ohio State University | 101 |
| University of Michigan-Ann Arbor | 565 | The University of Texas at Austin | 101 |
| Stanford University | 547 | University of Washington-Seattle Campus | 96 |
| Pennsylvania State University-Main Campus | 541 | Texas A \& M University | 94 |
| University of Southern California | 529 | University of Maryland-College Park | 89 |
| Harvard University | 508 | Cornell University-Endowed Colleges | 87 |
| Texas A \& M University | 506 | Purdue University-Main Campus | 87 |
| Massachusetts Institute of Technology | 492 | University of Michigan-Ann Arbor | 85 |
| University of Washington-Seattle Campus | 484 | University of Arizona | 84 |
| Nova Southeastern University | 469 | Pennsylvania State University-Main Campus | 80 |
| Purdue University-Main Campus | 469 | California Institute of Technology | 77 |
| Indiana University-Bloomington | 430 | University of Minnesota-Twin Cities | 75 |
| University of Maryland-College Park | 421 | Harvard University | 71 |
| University of Florida | 417 | Princeton University | 70 |
| Cornell University-Endowed Colleges | 417 |  |  |
| Engineering | 5,502 | Life Sciences | 8,296 |
| Massachusetts Institute of Technology | 226 | Johns Hopkins University | 189 |
| Georgia Institute of Technology-Main Campus | 178 | University of Minnesota-Twin Cities | 157 |
| Stanford University | 168 | University of Wisconsin-Madison | 146 |
| University of Michigan-Ann Arbor | 166 | Harvard University | 146 |
| University of Illinois at Urbana-Champaign | 160 | Ohio State University | 143 |
| University of California-Berkeley | 150 | University of California-Davis | 143 |
| The University of Texas at Austin | 143 | University of Southern California | 139 |
| Purdue University-Main Campus | 140 | University of Washington-Seattle Campus | 139 |
| Pennsylvania State University-Main Campus | 126 | University of California-Berkeley | 131 |
| Texas A \& M University | 111 | Cornell University-Endowed Colleges | 125 |
| University of Minnesota-Twin Cities | 108 | University of Illinois at Urbana-Champaign | 121 |
| Virginia Polytechnic Institute and State Univ | 103 | University of California-Los Angeles | 120 |
| Northwestern University | 98 | University of Florida | 115 |
| University of Maryland-College Park | 93 | Texas A \& M University | 114 |
| University of Florida | 91 | University of North Carolina-Chapel Hill | 114 |
| Ohio State University | 90 | University of Michigan-Ann Arbor | 100 |
| North Carolina State Univ-Raleigh | 88 | Purdue University-Main Campus | 99 |
| University of California-Los Angeles | 83 | Pennsylvania State University-Main Campus | 91 |
| University of Wisconsin-Madison | 83 | University of Georgia | 90 |
| Carnegie Mellon University | 78 | University of Pennsylvania | 89 |

Table 3. Top 20 doctorate-granting institutions by broad field of doctorate, 2001, continued

| Institution | Number of doctorate recipients | Institution | Number of doctorate recipients |
| :---: | :---: | :---: | :---: |
| Social Sciences | 6,825 | Humanities | 5,589 |
| The University of Texas at Austin | 113 | The University of Texas at Austin | 150 |
| University of California-Berkeley | 110 | Indiana University-Bloomington | 143 |
| University of California-Los Angeles | 110 | University of California-Los Angeles | 126 |
| University of Wisconsin-Madison | 104 | Columbia University | 122 |
| University of Chicago | 99 | University of California-Berkeley | 120 |
| Harvard University | 86 | Yale University | 115 |
| University of Maryland-College Park | 85 | University of Wisconsin-Madison | 114 |
| University of Minnesota-Twin Cities | 84 | University of Chicago | 114 |
| University of Michigan-Ann Arbor | 84 | New York University | 113 |
| CUNY Grad School \& Univ Center | 81 | Harvard University | 111 |
| Ohio State University | 79 | University of Minnesota-Twin Cities | 99 |
| University of North Carolina-Chapel Hill | 76 | University of Illinois at Urbana-Champaign | 86 |
| University of Washington-Seattle Campus | 74 | University of Southern California | 86 |
| University of Illinois at Urbana-Champaign | 74 | University of Michigan-Ann Arbor | 84 |
| Michigan State University | 74 | Ohio State University | 81 |
| Stanford University | 74 | University of North Carolina-Chapel Hill | 81 |
| Columbia University | 71 | CUNY Grad School \& Univ Center | 72 |
| Pennsylvania State University-Main Campus | 69 | Princeton University | 72 |
| University of Southern California | 67 | Rutgers University-New Brunswick | 71 |
| Indiana University-Bloomington | 65 | Duke University | 70 |
| New York University | 65 |  |  |
| Education | 6,324 | Professional/Other Fields | 2,238 |
| Nova Southeastern University | 314 | Nova Southeastern University | 84 |
| Teachers College at Columbia Univ | 161 | The University of Texas at Austin | 51 |
| University of Georgia | 99 | University of Southern California | 48 |
| Oklahoma State University | 99 | University of Pennsylvania | 47 |
| The University of Texas at Austin | 95 | New York University | 46 |
| Argosy University-Sarasota | 94 | Michigan State University | 39 |
| Pennsylvania State University-Main Campus | 93 | University of Wisconsin-Madison | 39 |
| University of Minnesota-Twin Cities | 87 | Pennsylvania State University-Main Campus | 35 |
| Indiana University-Bloomington | 82 | Harvard University | 34 |
| Texas A \& M University | 82 | University of California-Berkeley | 33 |
| Ohio State University | 78 | Walden University | 30 |
| University of Southern California | 77 | Indiana University-Bloomington | 30 |
| University of Virginia-Main Campus | 71 | University of Illinois at Urbana-Champaign | 28 |
| University of Pittsburgh | 69 | Columbia University | 28 |
| University of Illinois at Urbana-Champaign | 68 | University of North Carolina-Chapel Hill | 28 |
| University of Missouri-Columbia | 67 | Florida State University | 27 |
| University of San Francisco | 67 | University of lowa | 27 |
| Virginia Polytechnic Institute and State Univ | 66 | University of Kentucky | 25 |
| University of Wisconsin-Madison | 65 | Massachusetts Institute of Technology | 25 |
| University of Houston-University Park | 65 | University of Alabama | 24 |
|  |  | Arizona State University-Main Campus | 24 |
|  |  | University of Georgia | 24 |
|  |  | Rutgers University-Newark | 24 |
|  |  | Stanford University | 24 |

a Includes mathematics and computer sciences
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 4. Number of doctorate recipients by state, including the District of Columbia and Puerto Rico, 2001

| Rank | State | Number of doctorate recipients |
| :---: | :---: | :---: |
| 1 | California | 4,824 |
| 2 | New York | 3,420 |
| 3 | Texas | 2,683 |
| 4 | Pennsylvania | 2,121 |
| 5 | Illinois | 2,119 |
| 6 | Massachusetts | 2,106 |
| 7 | Florida | 1,761 |
| 8 | Ohio | 1,697 |
| 9 | Michigan | 1,343 |
| 10 | Indiana | 1,121 |
| 11 | North Carolina | 1,106 |
| [ ${ }^{12}$ | Georgia | 970 |
| [12 | Virginia | 970 |
| 14 | New Jersey | 941 |
| 15 | Maryland | 939 |
| 16 | Wisconsin | 836 |
| 17 | Minnesota | 784 |
| 18 | Missouri | 739 |
| 19 | Colorado | 707 |
| 20 | Arizona | 675 |
| 21 | Washington | 660 |
| 22 | Tennessee | 659 |
| 23 | Iowa | 588 |
| 24 | Louisiana | 578 |
| 25 | Connecticut | 569 |
| 26 | District of Columbia | 494 |
| 27 | Alabama | 482 |
| 28 | Oklahoma | 427 |
| 29 | Kansas | 425 |
| 30 | South Carolina | 389 |
| 31 | Oregon | 383 |
| 32 | Utah | 348 |
| 33 | Mississippi | 338 |
| 34 | Kentucky | 336 |
| 35 | Nebraska | 274 |
| 36 | New Mexico | 263 |
| 37 | Rhode Island | 225 |
| 38 | Delaware | 191 |
| 39 | Puerto Rico | 151 |
| 40 | Hawaii | 144 |
| 41 | Arkansas | 138 |
| 42 | West Virginia | 128 |
| 43 | South Dakota | 97 |
| 44 | New Hampshire | 93 |
| 45 | Nevada | 92 |
| 46 | Idaho | 86 |
| 47 | Wyoming | 70 |
| 48 | North Dakota | 66 |
| 49 | Vermont | 62 |
| 50 | Montana | 58 |
| 51 | Maine | 41 |
| 52 | Alaska | 27 |

Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned
Doctorates

Table 5. Major field of doctorate recipients for selected years, 1971-2001

|  | 1971 | 1976 | 1981 | 1986 | 1991 | 1996 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Fields | 31,867 | 32,946 | 31,356 | 31,903 | 37,533 | 42,438 | 40,744 |
| Physical Sciences ${ }^{\text {a }}$ | 5,739 | 4,509 | 4,170 | 4,807 | 6,279 | 6,674 | 5,970 |
| Engineering | 3,498 | 2,834 | 2,528 | 3,376 | 5,214 | 6,309 | 5,502 |
| Life Sciences | 5,268 | 5,026 | 5,611 | 5,734 | 6,933 | 8,255 | 8,296 |
| Social Sciences | 5,189 | 6,214 | 6,141 | 5,893 | 6,152 | 6,825 | 6,825 |
| Humanities | 4,648 | 4,881 | 3,751 | 3,462 | 4,099 | 5,115 | 5,589 |
| Education | 6,435 | 7,725 | 7,497 | 6,649 | 6,454 | 6,784 | 6,324 |
| Professional/Other Fields | 1,090 | 1,757 | 1,658 | 1,982 | 2,402 | 2,476 | 2,238 |
| Physical Sciences |  |  |  |  |  |  |  |
| Physics \& Astronomy | 1,738 | 1,237 | 1,015 | 1,187 | 1,411 | 1,677 | 1,379 |
| Chemistry | 2,211 | 1,624 | 1,612 | 1,903 | 2,194 | 2,148 | 1,979 |
| Earth, Atmospheric, \& Marine Sciences | 552 | 645 | 583 | 589 | 836 | 807 | 780 |
| Mathematics | 1,238 | 1,003 | 728 | 729 | 1,038 | 1,122 | 1,006 |
| Computer Science ${ }^{\text {b }}$ | ----- | ----- | 232 | 399 | 800 | 920 | 826 |
| Engineering | 3,498 | 2,834 | 2,528 | 3,376 | 5,214 | 6,309 | 5,502 |
| Life Sciences |  |  |  |  |  |  |  |
| Biological Sciences | 3,654 | 3,573 | 3,803 | 3,807 | 4,650 | 5,724 | 5,678 |
| Health Sciences | 541 | 503 | 657 | 770 | 1,041 | 1,324 | 1,613 |
| Agricultural Sciences | 1,073 | 950 | 1,151 | 1,157 | 1,242 | 1,207 | 1,005 |
| Social Sciences |  |  |  |  |  |  |  |
| Psychology | 2,145 | 2,883 | 3,358 | 3,126 | 3,250 | 3,497 | 3,433 |
| Anthropology | 239 | 428 | 369 | 381 | 341 | 397 | 408 |
| Economics | 820 | 885 | 824 | 859 | 885 | 1,008 | 930 |
| Political Science/International Relations | 821 | 791 | 532 | 490 | 522 | 721 | 748 |
| Sociology | 587 | 734 | 605 | 491 | 465 | 517 | 565 |
| Other Social Sciences | 577 | 493 | 453 | 546 | 689 | 685 | 741 |
| Humanities |  |  |  |  |  |  |  |
| History | 1,064 | 1,095 | 692 | 564 | 663 | 857 | 1,024 |
| English Language \& Literature | 1,244 | 1,214 | 820 | 719 | 852 | 1,013 | 977 |
| Foreign Language \& Literature | 728 | 835 | 576 | 445 | 498 | 605 | 619 |
| Other Humanities | 1,612 | 1,737 | 1,663 | 1,734 | 2,086 | 2,640 | 2,969 |
| Education |  |  |  |  |  |  |  |
| Teacher Education | 591 | 588 | 639 | 490 | 408 | 371 | 293 |
| Teaching Fields | 1,564 | 1,418 | 1,437 | 1,142 | 973 | 864 | 720 |
| Other Education | 4,280 | 5,719 | 5,421 | 5,017 | 5,073 | 5,549 | 5,311 |
| Professional/Other |  |  |  |  |  |  |  |
| Business \& Management | 673 | 739 | 624 | 902 | 1,163 | 1,277 | 1,049 |
| Communications | 37 | 295 | 240 | 258 | 332 | 389 | 389 |
| Other Professional Fields | 265 | 676 | 759 | 796 | 836 | 771 | 800 |
| Other Fields | 115 | 47 | 35 | 26 | 71 | 39 | 0 |

a Includes mathematics and computer sciences.
${ }^{\mathrm{b}}$ Computer Sciences first appeared on the survey form in 1978
Dashes (-----) indicate that the field was not on the questionnaire's Specialties List that year.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 6. Number of doctorate recipients and percent female by selected subfield, 1991 and 2001

| Subfield | 1991 |  | 2001 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number of doctorate recipients a | Percent doctorate recipients to females | Number of doctorate recipients ${ }^{\text {b }}$ | Percent doctorate recipients to females |
| All Fields | 37,397 | 37.1 | 40,670 | 44.0 |
| Physical Sciences | 6,253 | 18.8 | 5,961 | 25.2 |
| Physics \& Astronomy | 1,403 | 11.1 | 1,377 | 14.2 |
| Chemistry | 2,189 | 23.6 | 1,976 | 31.8 |
| Earth, Atmospheric \& Marine Sciences | 831 | 22.3 | 779 | 31.6 |
| Mathematics | 1,034 | 19.3 | 1,006 | 27.4 |
| Computer Science | 796 | 14.7 | 823 | 18.8 |
| Engineering | 5,170 | 9.0 | 5,489 | 16.9 |
| Life Sciences | 6,911 | 38.9 | 8,271 | 47.3 |
| Biological Sciences | 4,637 | 38.2 | 5,670 | 44.9 |
| Health Sciences | 1,037 | 64.4 | 1,601 | 64.2 |
| Agricultural Sciences | 1,237 | 20.0 | 1,000 | 33.6 |
| Social Sciences | 6,140 | 49.5 | 6,816 | 54.4 |
| Psychology | 3,245 | 61.5 | 3,430 | 66.9 |
| Anthropology | 340 | 61.8 | 408 | 59.6 |
| Economics | 883 | 20.3 | 928 | 28.0 |
| Political Sciences \& International Relations | 521 | 27.1 | 748 | 32.6 |
| Sociology | 465 | 49.5 | 565 | 58.2 |
| Other Social Sciences | 686 | 41.4 | 737 | 45.5 |
| Humanities | 4,089 | 46.9 | 5,582 | 50.6 |
| History | 661 | 38.0 | 1,024 | 40.3 |
| American \& English Language \& Literature | 851 | 56.9 | 976 | 60.5 |
| Foreign Language \& Literature | 498 | 60.4 | 618 | 64.9 |
| Other Humanities | 2,079 | 42.5 | 2,964 | 47.9 |
| Education | 6,444 | 58.2 | 6,319 | 64.6 |
| Teacher Education | 407 | 68.9 | 293 | 71.7 |
| Teaching Fields | 972 | 56.9 | 720 | 62.9 |
| Other Education | 5,065 | 57.6 | 5,306 | 64.5 |
| Professional/Other Fields | 2,390 | 35.0 | 2,232 | 42.7 |
| Business \& Management | 1,156 | 25.7 | 1,047 | 34.0 |
| Communications | 332 | 47.0 | 388 | 51.8 |
| Other Professional Fields | 832 | 41.7 | 797 | 49.6 |
| Other Fields | 70 | 52.9 | 0 | 0.0 |

a 1991 field totals exclude 136 individuals whose gender was not known.
${ }^{\mathrm{b}} 2001$ field totals exclude 74 individuals for whom gender was not known.
Dashes (-----) indicate that the field was not on the questionnaire's Specialties List that year.

## See Appendix Table A-1.

Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 7. Number and percent of doctorate recipients, by sex within broad field for selected years, 1971-2001

| Fields | Totals | 1971 |  | 1976 |  | 1981 |  | 1986 |  | 1991a |  | $1996{ }^{\text {b }}$ |  | $2001{ }^{\text {c }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% |
| All Fields | Group total | 31,867 | 100.0 | 32,946 | 100.0 | 31,356 | 100.0 | 31,903 | 100.0 | 37,397 | 100.0 | 42,243 | 100.0 | 40,670 | 100.0 |
|  | Male | 27,271 | 85.6 | 25,262 | 76.7 | 21,464 | 68.5 | 20,596 | 64.6 | 23,524 | 62.9 | 25,286 | 59.9 | 22,769 | 56.0 |
|  | Female | 4,596 | 14.4 | 7,684 | 23.3 | 9,892 | 31.5 | 11,307 | 35.4 | 13,873 | 37.1 | 16,957 | 40.1 | 17,901 | 44.0 |
| Physical Sciences ${ }^{\text {d }}$ | Group total | 5,739 | 100.0 | 4,509 | 100.0 | 4,170 | 100.0 | 4,807 | 100.0 | 6,253 | 100.0 | 6,623 | 100.0 | 5,961 | 100.0 |
|  | Male | 5,398 | 94.1 | 4,089 | 90.7 | 3,667 | 87.9 | 4,033 | 83.9 | 5,079 | 81.2 | 5,239 | 79.1 | 4,460 | 74.8 |
|  | Female | 341 | 5.9 | 420 | 9.3 | 503 | 12.1 | 774 | 16.1 | 1,174 | 18.8 | 1,384 | 20.9 | 1,501 | 25.2 |
| Engineering | Group total | 3,498 | 100.0 | 2,834 | 100.0 | 2,528 | 100.0 | 3,376 | 100.0 | 5,170 | 100.0 | 6,265 | 100.0 | 5,489 | 100.0 |
|  | Male | 3,483 | 99.6 | 2,780 | 98.1 | 2,429 | 96.1 | 3,151 | 93.3 | 4,703 | 91.0 | 5,488 | 87.6 | 4,564 | 83.1 |
|  | Female | 15 | 0.4 | 54 | 1.9 | 99 | 3.9 | 225 | 6.7 | 467 | 9.0 | 777 | 12.4 | 925 | 16.9 |
| Life Sciences | Group total | 5,268 | 100.0 | 5,026 | 100.0 | 5,611 | 100.0 | 5,734 | 100.0 | 6,911 | 100.0 | 8,223 | 100.0 | 8,271 | 100.0 |
|  | Male | 4,503 | 85.5 | 4,013 | 79.8 | 4,076 | 72.6 | 3,786 | 66.0 | 4,223 | 61.1 | 4,629 | 56.3 | 4,363 | 52.8 |
|  | Female | 765 | 14.5 | 1,013 | 20.2 | 1,535 | 27.4 | 1,948 | 34.0 | 2,688 | 38.9 | 3,594 | 43.7 | 3,908 | 47.2 |
| Social Sciences | Group total | 5,189 | 100.0 | 6,214 | 100.0 | 6,141 | 100.0 | 5,893 | 100.0 | 6,140 | 100.0 | 6,807 | 100.0 | 6,816 | 100.0 |
|  | Male | 4,265 | 82.2 | 4,580 | 73.7 | 3,944 | 64.2 | 3,381 | 57.4 | 3,100 | 50.5 | 3,289 | 48.3 | 3,109 | 45.6 |
|  | Female | 924 | 17.8 | 1,634 | 26.3 | 2,197 | 35.8 | 2,512 | 42.6 | 3,040 | 49.5 | 3,518 | 51.7 | 3,707 | 54.4 |
| Humanities | Group total | 4,648 | 100.0 | 4,881 | 100.0 | 3,751 | 100.0 | 3,462 | 100.0 | 4,089 | 100.0 | 5,097 | 100.0 | 5,582 | 100.0 |
|  | Male | 3,571 | 76.8 | 3,208 | 65.7 | 2,203 | 58.7 | 1,898 | 54.8 | 2,170 | 53.1 | 2,553 | 50.1 | 2,759 | 49.4 |
|  | Female | 1,077 | 23.2 | 1,673 | 34.3 | 1,548 | 41.3 | 1,564 | 45.2 | 1,919 | 46.9 | 2,544 | 49.9 | 2,823 | 50.6 |
| Education | Group total | 6,435 | 100.0 | 7,725 | 100.0 | 7,497 | 100.0 | 6,649 | 100.0 | 6,444 | 100.0 | 6,765 | 100.0 | 6,319 | 100.0 |
|  | Male | 5,089 | 79.1 | 5,185 | 67.1 | 3,957 | 52.8 | 3,036 | 45.7 | 2,696 | 41.8 | 2,579 | 38.1 | 2,234 | 35.4 |
|  | Female | 1,346 | 20.9 | 2,540 | 32.9 | 3,540 | 47.2 | 3,613 | 54.3 | 3,748 | 58.2 | 4,186 | 61.9 | 4,085 | 64.6 |
| Profesional/Other Fields | Group total | 1,090 | 100.0 | 1,757 | 100.0 | 1,658 | 100.0 | 1,982 | 100.0 | 2,390 | 100.0 | 2,463 | 100.0 | 2,232 | 100.0 |
|  | Male | 962 | 88.3 | 1,407 | 80.1 | 1,188 | 71.7 | 1,311 | 66.1 | 1,553 | 65.0 | 1,509 | 61.3 | 1,280 | 57.3 |
|  | Female | 128 | 11.7 | 350 | 19.9 | 470 | 28.3 | 671 | 33.9 | 837 | 35.0 | 954 | 38.7 | 952 | 42.7 |

[^13]Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 8. Number of U.S. citizen doctorate recipients, by race/ethnicity within broad field for selected years, 1981-2001

| Fields | Race/Ethnicity | 1981 | 1986 | 1991 | 1996 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Fields | Group Total | 25,068 | 23,089 | 25,572 | 27,777 | 26,907 |
|  | Known Race/Ethnicity | 24,009 | 22,659 | 25,078 | 27,362 | 26,435 |
|  | Asian ${ }^{\text {b }}$ | 463 | 530 | 787 | 1,066 | 1,382 |
|  | Black | 1,012 | 823 | 1,009 | 1,306 | 1,604 |
|  | Hispanic | 466 | 572 | 732 | 957 | 1,119 |
|  | American Indian ${ }^{\text {c }}$ | 85 | 99 | 130 | 186 | 149 |
|  | White | 21,983 | 20,635 | 22,420 | 23,847 | 21,842 |
|  | Other d | ---- | ---- | ---- | ---- | 339 |
| Physical Sciences ${ }^{\text {a }}$ | Group Total | 3,078 | 3,005 | 3,562 | 3,451 | 3,121 |
|  | Known Race/Ethnicity | 2,893 | 2,912 | 3,460 | 3,373 | 3,057 |
|  | Asian ${ }^{\text {b }}$ | 74 | 107 | 147 | 173 | 198 |
|  | Black | 31 | 25 | 41 | 69 | 80 |
|  | Hispanic | 36 | 53 | 83 | 85 | 92 |
|  | American Indian ${ }^{\text {c }}$ | 2 | 8 | 14 | 13 | 13 |
|  | White | 2,750 | 2,719 | 3,175 | 3,033 | 2,632 |
|  | Other ${ }^{\text {d }}$ | ----- | ----- | ----- | ---- | 42 |
| Engineering | Group Total | 1,170 | 1,383 | 2,086 | 2,596 | 2,139 |
|  | Known Race/Ethnicity | 1,118 | 1,354 | 1,992 | 2,557 | 2,092 |
|  | Asian ${ }^{\text {b }}$ | 77 | 80 | 187 | 271 | 256 |
|  | Black | 16 | 14 | 43 | 59 | 82 |
|  | Hispanic | 12 | 25 | 49 | 87 | 73 |
|  | American Indian ${ }^{\text {c }}$ | 4 | 6 | 6 | 14 | 7 |
|  | White | 1,009 | 1,229 | 1,707 | 2,126 | 1,645 |
|  | Other ${ }^{\text {d }}$ | ----- | ---- | ----- | ----- | 29 |
| Life Sciences | Group Total |  | 4,350 |  | 5,014 | 5,395 |
|  | Known Race/Ethnicity | 4,331 | 4,276 | 4,651 | 4,938 | 5,312 |
|  | Asian b | 109 | 153 | 193 | 282 | 430 |
|  | Black | 73 | 64 | 92 | 140 | 190 |
|  | Hispanic | 48 | 72 | 99 | 150 | 186 |
|  | American Indian ${ }^{\text {c }}$ | 13 | 23 | 19 | 31 | 21 |
|  | White | 4,088 | 3,964 | 4,248 | 4,335 | 4,416 |
|  | Other ${ }^{\text {d }}$ | ----- | ----- | ----- | ----- | 69 |
| Social Sciences | Group Total |  | 4,580 | 4,712 |  | 5,058 |
|  | Known Race/Ethnicity | 4,982 | 4,494 | 4,619 | 5,137 | 4,976 |
|  | Asian b | 75 | 69 | 88 | 122 | 197 |
|  | Black | 177 | 164 | 210 | 245 | 299 |
|  | Hispanic | 103 | 132 | 182 | 235 | 243 |
|  | American Indian c | 12 | 20 | 21 | 38 | 34 |
|  | White | 4,615 | 4,109 | 4,118 | 4,497 | 4,127 |
|  | Other ${ }^{\text {d }}$ | ----- | ----- | ----- | ----- | 76 |
| Humanities | Group Total | 3,225 | 2,733 | 3,220 | 3,961 | 4,380 |
|  | Known Race/Ethnicity | 3,090 | 2,684 | 3,163 | 3,896 | 4,270 |
|  | Asian b | 32 | 30 | 47 | 86 | 130 |
|  | Black | 84 | 71 | 93 | 116 | 177 |
|  | Hispanic | 92 | 76 | 115 | 143 | 200 |
|  | American Indian ${ }^{\text {c }}$ | 12 | 7 | 10 | 20 | 23 |
|  | White | 2,870 | 2,500 | 2,898 | 3,531 | 3,686 |
|  | Other ${ }^{\text {d }}$ | ----- | ----- | ----- | ---- | 54 |
| Education | Group Total | 6,584 | 5,629 | 5,614 | 5,878 | 5,315 |
|  | Known Race/Ethnicity | 6,362 | 5,547 | 5,571 | 5,810 | 5,254 |
|  | Asian b | 79 | 60 | 85 | 87 | 102 |
|  | Black | 564 | 422 | 437 | 580 | 646 |
|  | Hispanic | 155 | 190 | 175 | 205 | 264 |
|  | American Indian ${ }^{\text {c }}$ | 39 | 26 | 55 | 60 | 42 |
|  | White | 5,525 | 4,849 | 4,819 | 4,878 | 4,148 |
|  | Other ${ }^{\text {d }}$ | ----- | ----- | ----- | ----- | 52 |
| Professional/Other Fields |  |  |  |  |  | 1,499 |
|  | Known Race/Ethnicity | 1,233 | 1,392 | 1,622 | 1,651 | 1,474 |
|  | Asian ${ }^{\text {b }}$ | 17 | 31 | 40 | 45 | 69 |
|  | Black | 67 | 63 | 93 | 97 | 130 |
|  | Hispanic | 20 | 24 | 29 | 52 | 61 |
|  | American Indian c | 3 | ${ }^{9}$ | 5 | 10 | 9 |
|  | White | 1,126 | 1,265 | 1,455 | 1,447 | 1,188 |
|  | Other ${ }^{\text {d }}$ | ----- | ---- | ---- | ---- | 17 |

a Includes mathematics and computer sciences.
b Includes Native Hawaiians/Other Pacific Islanders through 2000, but excludes them in 2001 per revised OMB guidelines issued for 2001.
c Includes Alaskan Natives.
d Includes only those with unknown race/ethnicity through 2000. In 2001 this category was expanded to include Native Hawaiians and other Pacific Islanders and respondents choosing multiple races (excluding those selecting an Hispanic ethnicity).

Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 9. Major field of U.S. citizen doctorate recipients by race/ethnicity, 2001

| Field | Total U.S. citizen doctorate recipients | Number with known race/ ethnicity | U.S. citizens |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Asian ${ }^{\text {a }}$ | Black | Hispanic | American Indian b | White | Other ${ }^{\text {c }}$ |
| All fields | 26,907 | 26,435 | 1,382 | 1,604 | 1,119 | 149 | 21,842 | 339 |
| Physical Sciences | 3,121 | 3,057 | 198 | 80 | 92 | 13 | 2,632 | 42 |
| Physics \& Astronomy | 721 | 703 | 51 | 9 | 22 | 1 | 607 | 13 |
| Chemistry | 1,126 | 1,103 | 69 | 36 | 39 | 11 | 936 | 12 |
| Earth, Atmospheric, \& Marine Sciences | 441 | 434 | 14 | 5 | 11 | 0 | 396 | 8 |
| Mathematics | 468 | 460 | 30 | 17 | 14 | 1 | 395 | 3 |
| Computer Sciences | 365 | 357 | 34 | 13 | 6 | 0 | 298 | 6 |
| Engineering | 2,139 | 2,092 | 256 | 82 | 73 | 7 | 1,645 | 29 |
| Life Sciences | 5,395 | 5,312 | 430 | 190 | 186 | 21 | 4,416 | 69 |
| Biological Sciences | 3,876 | 3,817 | 353 | 121 | 149 | 15 | 3,124 | 55 |
| Health Sciences | 1,070 | 1,056 | 69 | 60 | 23 | 6 | 887 | 11 |
| Agricultural Sciences | 449 | 439 | 8 | 9 | 14 | 0 | 405 | 3 |
| Social Sciences | 5,058 | 4,976 | 197 | 299 | 243 | 34 | 4,127 | 76 |
| Psychology | 2,938 | 2,895 | 101 | 169 | 159 | 17 | 2,400 | 49 |
| Anthropology | 319 | 310 | 12 | 10 | 17 | 8 | 257 | 6 |
| Economics | 353 | 346 | 28 | 6 | 11 | 2 | 296 | 3 |
| Political Science/International Relations | 541 | 526 | 17 | 42 | 11 | 4 | 442 | 10 |
| Sociology | 436 | 433 | 21 | 39 | 32 | 2 | 333 | 6 |
| Other Social Sciences | 471 | 466 | 18 | 33 | 13 | 1 | 399 | 2 |
| Humanities | 4,380 | 4,270 | 130 | 177 | 200 | 23 | 3,686 | 54 |
| History | 878 | 838 | 16 | 41 | 48 | 2 | 721 | 10 |
| American \& English Language \& Literature | 847 | 838 | 24 | 44 | 19 | 9 | 730 | 12 |
| Foreign Language \& Literature | 407 | 397 | 7 | 10 | 60 | 0 | 314 | 6 |
| Other Humanities | 2,248 | 2,197 | 83 | 82 | 73 | 12 | 1,921 | 26 |
| Education | 5,315 | 5,254 | 102 | 646 | 264 | 42 | 4,148 | 52 |
| Teacher Education | 240 | 237 | 5 | 28 | 9 | 2 | 192 | 1 |
| Teaching Fields | 556 | 548 | 17 | 53 | 19 | 5 | 446 | 8 |
| Other Education | 4,519 | 4,469 | 80 | 565 | 236 | 35 | 3,510 | 43 |
| Professional/Other | 1,499 | 1,474 | 69 | 130 | 61 | 9 | 1,188 | 17 |
| Business \& Management | 656 | 648 | 34 | 56 | 24 | 2 | 525 | 7 |
| Communications | 277 | 269 | 5 | 23 | 15 | 0 | 224 | 2 |
| Other Professional Fields | 566 | 557 | 30 | 51 | 22 | 7 | 439 | 8 |
| Other Fields | ----- | ----- | ----- | ----- | ----- | ----- | --- | ----- |

a Does not include Native Hawaiians and other Pacific Islanders.
${ }^{\mathrm{b}}$ Includes Alaskan Natives.
${ }^{\text {c I Includes multiple racial responses and Native Hawaiians/other Pacific Islanders. }}$
Source: NSF/NIH/NEH/USED/USDA/NASA, Survey of Earned Doctorates

Table 10. Leading doctorate-granting institutions of U.S. minority doctorate recipients, 1997-2001

| Institution | Number of doctorate recipients | Institution | Number of doctorate recipients |
| :---: | :---: | :---: | :---: |
| Asian a |  | Black |  |
| University of California-Los Angeles | 344 | Nova Southeastern University | 336 |
| University of California-Berkeley | 333 | Howard University | 241 |
| Stanford University | 190 | University of Michigan-Ann Arbor | 131 |
| Harvard University | 145 | University of Maryland-College Park | 124 |
| Massachusetts Institute of Technology | 144 | Ohio State University | 111 |
| University of Michigan-Ann Arbor | 130 | University of North Carolina-Chapel Hill | 110 |
| University of Southern California | 123 | Temple University | 108 |
| University of California-Davis | 116 | Florida State University | 106 |
| University of Illinois at Urbana-Champaign | 116 | Wayne State University | 106 |
| University of Washington-Seattle Campus | 113 | Virginia Polytechnic Institute and State University | 106 |
| Columbia University | 105 | University of Illinois at Urbana-Champaign | 99 |
| Purdue University-Main Campus | 100 | Teachers College at Columbia University | 99 |
| University of California-Irvine | 93 | North Carolina State University-Raleigh | 98 |
| University of Pennsylvania | 89 | The University of Texas at Austin | 96 |
| New York University | 88 | Clark Atlanta University | 94 |
| Northwestern University | 87 | Harvard University | 88 |
| Johns Hopkins University | 86 | University of South Carolina-Columbia | 85 |
| The University of Texas at Austin | 86 | Michigan State University | 83 |
| University of Chicago | 84 | University of California-Berkeley | 80 |
| University of California-San Diego | 83 | Pennsylvania State University-Main Campus | 79 |
| Top 20 institutions | 2,655 | Top 20 institutions | 2,380 |
| Total institutions reported (320) | 6,504 | Total institutions reported (327) | 7,683 |
| Hispanic |  | American Indian ${ }^{\text {b }}$ |  |
| University of Puerto Rico-Rio Piedras Campus | 222 | Oklahoma State University | 29 |
| The University of Texas at Austin | 208 | University of Oklahoma | 20 |
| Carlos Albizu University | 169 | University of California-Los Angeles | 18 |
| University of California-Berkeley | 157 | Nova Southeastern University | 18 |
| University of California-Los Angeles | 145 | University of Washington-Seattle Campus | 18 |
| Texas A \& M University | 110 | The University of Texas at Austin | 16 |
| Inter American Univ of Puerto Rico-Metro | 97 | University of Minnesota-Twin Cities | 15 |
| Stanford University | 92 | Stanford University | 15 |
| Harvard University | 91 | University of Arkansas Main Campus | 14 |
| University of Arizona | 83 | University of New Mexico | 14 |
| University of California-Davis | 81 | Pennsylvania State University-Main Campus | 13 |
| University of New Mexico | 80 | University of California-Berkeley | 12 |
| University of Michigan-Ann Arbor | 78 | University of Maryland-College Park | 12 |
| University of Wisconsin-Madison | 78 | University of Michigan-Ann Arbor | 12 |
| Arizona State University-Main Campus | 77 | University of Illinois at Urbana-Champaign | 11 |
| Nova Southeastern University | 71 | Ohio State University | 11 |
| New York University | 70 | University of Wisconsin-Madison | 11 |
| University of Southern California | 68 | Arizona State University-Main Campus | 10 |
| University of California-Santa Barbara | 67 | Harvard University | 10 |
| University of Miami | 65 | Montana State University-Bozeman | 10 |
|  |  | University of North Dakota | 10 |
| Top 20 institutions | 2,109 | Top 20 institutions | 289 |
| Total institutions reported (318) | 5,751 | Total institutions reported (230) | 903 |

[^14]${ }^{\text {b }}$ Includes Alaskan Natives.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 11. Citizenship status of doctorate recipients, by broad field for selected years, 1971-2001

| Field/Citizenship | 1971 | 1976 | 1981 | 1986 | 1991 | 1996 | 2001 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Total | 31,867 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

a Includes mathematics and computer sciences.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 12. Top 30 countries of origin of non-U.S. citizens earning doctorates at U.S. colleges
and universities, 2001
(ranked by number of doctorate recipients)

| Rank | Country | Number of doctorate recipients |
| :---: | :---: | :---: |
| 1. | China, Peoples Republic of a | 2,670 |
| 2. | Korea ${ }^{\text {b }}$ | 1,186 |
| 3. | India | 950 |
| 4. | China, Rep of (Taiwan) | 770 |
| 5. | Canada | 490 |
| 6. | Turkey | 353 |
| 7. | Thailand | 312 |
| 8. | Germany | 305 |
| 9. | Russia | 255 |
| 10. | Mexico | 242 |
| 11. | Japan | 234 |
| 12. | Great Britain, UK | 207 |
| 13. | Brazil | 169 |
| 14. | Italy | 147 |
| 15. | Romania | 126 |
| 16. | France | 120 |
| 17. | Spain | 118 |
| 18. | Greece | 111 |
| 19. | Iran | 107 |
| 20. | Egypt | 92 |
| 21. | Saudi Arabia | 88 |
| 22. | Jordan | 86 |
| 23. | Yugoslavia | 84 |
| 24. | Argentina | 81 |
| 25. | South Africa | 78 |
| 26. | Malaysia | 75 |
| 27. | Colombia | 72 |
| 28. | Israel | 71 |
| 29. | Australia | 67 |
| 30. | Venezuela | 62 |

a Includes Hong Kong.
${ }^{\text {b }}$ Includes Republic of Korea (South Korea) and Democratic People's Republic of Korea (North Korea).

Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 13. Leading doctorate-granting institutions of non-U.S. citizen doctorate recipients, 2001 (ranked by number of doctorate recipients)

| Institution | Number of doctorate recipients | Institution | Number of doctorate recipients |
| :---: | :---: | :---: | :---: |
| University of llinois at Urbana-Champaign | 266 | Massachusetts Institute of Technology | 175 |
| Ohio State University | 249 | University of California-Berkeley | 173 |
| Purdue University-Main Campus | 233 | Cornell University-Endowed Colleges | 172 |
| The University of Texas at Austin | 220 | University of Maryland-College Park | 161 |
| University of Minnesota-Twin Cities | 219 | Columbia University | 158 |
| Stanford University | 211 | Michigan State University | 155 |
| Pennsylvania State University-Main Campus | 206 | University of Michigan-Ann Arbor | 151 |
| University of Wisconsin-Madison | 193 | University of Southern California | 149 |
| Texas A \& M University | 179 | University of Pittsburgh | 139 |
| University of California-Los Angeles | 175 | Harvard University | 138 |
|  |  | Top 20 institutions | 3,722 |
|  |  | Total institutions reported (416) | 11,602 |

Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 14. Leading doctorate-granting institutions of non-U.S. citizen doctorate recipients, 2001
(ranked by percentage of institution's doctorate recipients)

| Institution a | Percent ${ }^{b}$ |  | Institution a |
| :--- | :---: | :--- | :--- |
|  |  |  |  |
| Polytechnic University | 81.6 |  | Percent ${ }^{b}$ |
| New Jersey Institute of Technology | 80.3 |  |  |
| University of Missouri-Rolla University-Main Campus | Kansas State University |  |  |
| Worcester Polytechnic Institute | 69.0 |  | Carnegie Mellon University |
| Clarkson University | 64.7 |  | Stevens Institute of Tech |
| Illinois Institute of Technology | 61.9 |  | Andrews University |
| Southern Methodist University | 61.4 |  | Georgia Institute of Technology-Main Campus |
| Northeastern University | 56.8 |  | 48.6 |
| The University of Tennessee Health Science Center | 55.7 |  | 48.3 |
| Loma Linda University | 53.1 |  | California Institute of Technology |

a The ranking excludes institutions with fewer than 10 non-U.S. citizen doctorate recipients.
${ }^{\mathrm{b}}$ The percent column is based on the number of non-U.S. citizens as a percentage of the total doctorates awarded by that institution.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 15. Parental educational attainment of 2001 doctorate recipients, by selected characteristics

|  | Percent high school or less | Percent college | Percent advanced degree | Total percent | Total number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  |  |  |  |  |
| Father's education | 29.8 | 35.3 | 34.9 | 100.0 | 36,858 |
| Mother's education | 38.7 | 39.8 | 21.5 | 100.0 | 36,940 |
| Sex |  |  |  |  |  |
| Male |  |  |  |  |  |
| Father's education | 30.5 | 35.3 | 34.2 | 100.0 | 20,653 |
| Mother's education | 40.8 | 38.7 | 20.5 | 100.0 | 20,695 |
| Female |  |  |  |  |  |
| Father's education | 29.0 | 35.4 | 35.7 | 100.0 | 16,205 |
| Mother's education | 35.9 | 41.2 | 22.8 | 100.0 | 16,245 |
| Race/Ethnicity (U.S. citizens only) |  |  |  |  |  |
|  |  |  |  |  |  |
| Father's education | 20.6 | 29.4 | 50.0 | 100.0 | 1,336 |
| Mother's education | 34.4 | 39.7 | 25.8 | 100.0 | 1,339 |
| Black |  |  |  |  |  |
| Father's education | 52.2 | 28.1 | 19.6 | 100.0 | 1,476 |
| Mother's education | 45.8 | 33.5 | 20.7 | 100.0 | 1,493 |
| Hispanic |  |  |  |  |  |
| Father's education | 43.8 | 27.5 | 28.7 | 100.0 | 1,071 |
| Mother's education | 49.8 | 33.1 | 17.0 | 100.0 | 1,074 |
| American Indian ${ }^{\text {b }}$ |  |  |  |  |  |
| Father's education | 41.3 | 38.7 | 20.0 | 100.0 | 155 |
| Mother's education | 47.7 | 38.1 | 14.2 | 100.0 | 155 |
| White |  |  |  |  |  |
| Father's education | 25.5 | 35.0 | 39.5 | 100.0 | 21,079 |
| Mother's education | 31.8 | 43.0 | 25.2 | 100.0 | 21,119 |
| Citizenship |  |  |  |  |  |
| U.S. Citizen |  |  |  |  |  |
| Father's education | 27.6 | 33.9 | 38.5 | 100.0 | 25,796 |
| Mother's education | 33.5 | 41.8 | 24.7 | 100.0 | 25,867 |
|  |  |  |  |  |  |
| Father's education | 32.0 | 35.5 | 32.4 | 100.0 | 1,732 |
| Mother's education | 47.6 | 33.8 | 18.6 | 100.0 | 1,735 |
| Non-U.S., Temporary visa |  |  |  |  |  |
| Father's education | 35.4 | 39.4 | 25.2 | 100.0 | 9,307 |
| Mother's education | 51.4 | 35.4 | 13.2 | 100.0 | 9,315 |
| Broad field of study |  |  |  |  |  |
| Physical Sciences ${ }^{\text {c }}$ |  |  |  |  |  |
| Father's education | 26.0 | 35.9 | 38.1 | 100.0 | 5,463 |
| Mother's education | 34.7 | 40.8 | 24.5 | 100.0 | 5,471 |
| Engineering |  |  |  |  |  |
| Father's education | 27.0 | 42.0 | 31.0 | 100.0 | 4,987 |
| Mother's education | 41.4 | 41.3 | 17.3 | 100.0 | 4,990 |
| Life Sciences |  |  |  |  |  |
| Father's education | 26.7 | 36.7 | 36.6 | 100.0 | 7,553 |
| Mother's education | 35.3 | 42.5 | 22.1 | 100.0 | 7,574 |
| Social Sciences |  |  |  |  |  |
| Father's education | 26.4 | 34.7 | 38.9 | 100.0 | 6,130 |
| Mother's education | 34.5 | 40.7 | 24.8 | 100.0 | 6,147 |
| Humanities |  |  |  |  |  |
| Father's education | 25.4 | 30.8 | 43.8 | 100.0 | 5,115 |
| Mother's education | 32.3 | 39.1 | 28.5 | 100.0 | 5,132 |
|  |  |  |  |  |  |
| Father's education | 45.8 | 32.0 | 22.2 | 100.0 | 5,630 |
| Mother's education | 52.1 | 34.7 | 13.2 | 100.0 | 5,642 |
| Professional/Other Fields |  |  |  |  |  |
| Father's education | 35.3 | 35.3 | 29.4 | 100.0 | 1,980 |
| Mother's education | 46.9 | 36.3 | 16.8 | 100.0 | 1,984 |

${ }^{\text {a }}$ Does not include Native Hawaiians and other Pacific Islanders.
b Includes Alaskan Natives.
c Includes mathematics and computer sciences.

Table 16. Median number of years from baccalaureate to doctorate award by broad field for selected years, 1976-2001

|  |  | 1976 | 1981 | 1986 | 1991 | 1996 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Fields | Total | 8.8 | 9.5 | 10.5 | 10.5 | 10.8 | 10.0 |
|  | Registered | 6.1 | 6.5 | 7.0 | 7.2 | 7.3 | 7.5 |
| Physical Sciences ${ }^{\text {a }}$ | Total | 6.9 | 6.9 | 7.3 | 8.0 | 8.3 | 7.8 |
|  | Registered | 5.8 | 6.0 | 6.1 | 6.5 | 6.8 | 6.7 |
| Engineering | Total | 7.5 | 8.0 | 8.2 | 8.6 | 9.0 | 8.4 |
|  | Registered | 5.8 | 5.8 | 6.0 | 6.3 | 6.5 | 6.7 |
| Life Sciences | Total | 7.3 | 7.4 | 8.7 | 9.1 | 9.6 | 9.0 |
|  | Registered | 5.8 | 6.0 | 6.5 | 6.9 | 7.0 | 7.0 |
| Social Sciences | Total | 7.9 | 9.0 | 10.0 | 10.7 | 10.3 | 9.7 |
|  | Registered | 6.0 | 6.7 | 7.3 | 7.7 | 7.5 | 7.6 |
| Humanities | Total | 9.9 | 11.0 | 12.2 | 12.3 | 11.8 | 11.5 |
|  | Registered | 7.0 | 8.0 | 8.5 | 8.7 | 8.5 | 9.0 |
| Education | Total | 12.8 | 13.6 | 15.9 | 18.5 | 20.3 | 19.0 |
|  | Registered | 6.6 | 7.2 | 8.0 | 8.4 | 8.6 | 8.3 |
| Professional/Other Fields | Total | 10.3 | 11.1 | 13.0 | 13.6 | 13.8 | 14.0 |
|  | Registered | 6.2 | 6.7 | 7.5 | 7.8 | 7.7 | 8.2 |

a Includes mathematics and computer sciences.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 17. Median number of years from baccalaureate to doctorate award, by demographic group and broad field, 2001

| Elapsed Time from Baccalaureate (years) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All Fields | Physical Sciences ${ }^{\text {a }}$ | Engineering | Life Sciences | Social Sciences | Humanities | Education | Professional/ Other |
| All doctorate recipients | 10.0 | 7.8 | 8.4 | 9.0 | 9.7 | 11.5 | 19.0 | 14.0 |
| Sex |  |  |  |  |  |  |  |  |
| Male | 9.6 | 7.8 | 8.5 | 8.8 | 9.9 | 11.5 | 18.0 | 13.4 |
| Female | 11.0 | 7.6 | 8.0 | 9.0 | 9.6 | 11.6 | 19.3 | 14.7 |
| Citizenship |  |  |  |  |  |  |  |  |
| U.S. citizen | 10.5 | 7.2 | 7.7 | 8.6 | 9.6 | 11.5 | 20.0 | 15.3 |
| Non-U.S., Permanent visa | 10.7 | 9.5 | 10.0 | 9.7 | 11.0 | 12.3 | 14.6 | 13.5 |
| Non-U.S., Temporary visa | 9.3 | 8.4 | 8.5 | 9.8 | 9.9 | 11.4 | 12.6 | 11.2 |
| Race/Ethnicity (U.S. citizens only) |  |  |  |  |  |  |  |  |
| Asian ${ }^{\text {b }}$ | 8.5 | 7.0 | 8.0 | 8.0 | 9.3 | 11.5 | 16.0 | 15.0 |
| Black | 12.6 | 7.3 | 8.0 | 8.6 | 10.0 | 11.0 | 21.0 | 16.2 |
| Hispanic | 10.6 | 7.3 | 8.0 | 8.4 | 9.9 | 11.0 | 17.4 | 13.0 |
| American Indian ${ }^{\text {c }}$ | 13.0 | 6.7 | 12.0 | 9.9 | 11.0 | 10.0 | 19.0 | 20.5 |
| White | 10.6 | 7.1 | 7.6 | 8.6 | 9.6 | 11.6 | 20.0 | 15.3 |


a Inlcudes mathematics and computer sciences.
${ }^{\text {b }}$ Does not include Native Hawaiians and other Pacific Islanders.
c Includes Alaskan Natives.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 18. Distribution of 2001 doctorate recipients by age at doctorate

| Field of study | Median age at doctorate | Age grouping |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 21-25 | 26-30 | 31-35 | 36-40 | 41-45 | Over 45 |
| All fields | 33.3 | 286 | 12,405 | 11,313 | 5,612 | 3,354 | 5,394 |
| Broad field |  |  |  |  |  |  |  |
| Physical Sciences ${ }^{\text {a }}$ | 30.6 | 86 | 2,950 | 1,657 | 560 | 224 | 191 |
| Engineering | 31.2 | 83 | 2,424 | 1,673 | 653 | 224 | 143 |
| Life Sciences | 31.8 | 61 | 3,181 | 2,412 | 1,059 | 543 | 549 |
| Social Sciences | 32.9 | 34 | 2,110 | 2,045 | 968 | 552 | 674 |
| Humanities | 35.0 | 8 | 1,009 | 1,914 | 1,025 | 556 | 783 |
| Education | 43.8 | 9 | 442 | 1,025 | 951 | 964 | 2,525 |
| Professional/Other Fields | 37.8 | 5 | 289 | 587 | 396 | 291 | 529 |
| Sex |  |  |  |  |  |  |  |
| Male | 32.8 | 191 | 7,416 | 6,858 | 3,281 | 1,701 | 2,065 |
| Female | 34.3 | 95 | 4,989 | 4,455 | 2,331 | 1,653 | 3,329 |
| Citizenship |  |  |  |  |  |  |  |
| U.S. citizen | 33.9 | 169 | 8,427 | 6,822 | 3,644 | 2,660 | 4,917 |
| Permanent visa | 34.3 | 13 | 429 | 668 | 378 | 172 | 139 |
| Temporary visa | 32.3 | 100 | 3,458 | 3,747 | 1,546 | 498 | 294 |
| Unknown | 33.6 | 4 | 91 | 76 | 44 | 24 | 44 |
| Race/Ethnicity (U.S. citizens only) |  |  |  |  |  |  |  |
| Asian ${ }^{\text {b }}$ | 31.2 | 28 | 620 | 362 | 153 | 84 | 117 |
| Black | 37.7 | 7 | 402 | 319 | 197 | 192 | 457 |
| Hispanic | 34.7 | 4 | 294 | 318 | 166 | 128 | 198 |
| American Indian ${ }^{\text {c }}$ | 38.7 | 0 | 28 | 38 | 27 | 25 | 42 |
| White | 33.9 | 125 | 6,869 | 5,583 | 2,989 | 2,159 | 3,978 |

a Includes mathematics and computer sciences.
${ }^{\mathrm{b}}$ Does not include Native Hawaiians and other Pacific Islanders.
${ }^{-}$Includes Alaskan Natives.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 19. Primary sources of financial support for doctorate recipients by broad field and demographic group, 2001 (includes only doctorate recipients who reported primary source of support)

| Primary source of support (responses only) |  | Total a | Sex |  | Citizenship |  |  | U.S citizens and permanent residents |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Men | Women | U.S. citizen | Permanent resident | Temporary resident | Asian ${ }^{\text {b }}$ | Black | Hispanic | American Indian c | White |
| All Fields | N | 40,744 | 22,769 | 17,901 | 26,907 | 1,822 | 9,780 | 2,154 | 1,721 | 1,262 | 163 | 22,587 |
| Teaching assistantships | \% | 17.8 | 18.3 | 17.1 | 17.0 | 21.7 | 19.2 | 14.6 | 9.6 | 14.4 | 13.2 | 18.3 |
| Research assistantships/Traineeships | \% | 263 | 31.7 | 195 | 19.9 | 319 | 43.4 | 352 | 9.6 | 133 | 8.6 | 20.6 |
| Fellowships/Dissertation grants | \% | 203 | 20.0 | 20.7 | 21.0 | 202 | 185 | 26.0 | 313 | 325 | 27.6 | 189 |
| Own resources | \% | 29.3 | 22.9 | 37.4 | 36.9 | 22.8 | 9.3 | 20.3 | 44.1 | 35.3 | 42.8 | 36.9 |
| Foreign government | \% | 2.3 | 2.9 | 1.5 | 0.1 | 1.6 | 8.7 | 0.5 | 0.1 | 0.8 | 1.3 | 0.1 |
| Employer | \% | 3.9 | 4.1 | 3.7 | 5.1 | 1.9 | 1.0 | 3.3 | 5.3 | 3.7 | 6.6 | 5.1 |
| Other | \% | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| Physical Sciences ${ }^{\text {d }}$ | N | 5,970 | 4,460 | 1,501 | 3,121 | 328 | 2,256 | 340 | 93 | 103 | 15 | 2,787 |
| Teaching assistantships | \% | 259 | 25.9 | 25.9 | 23.3 | 31.5 | 28.7 | 23.9 | 19.8 | 17.3 | 21.4 | 24.9 |
| Research assistantships/Traineeships | \% | 45.7 | 46.9 | 423 | 42.6 | 43.4 | 50.7 | 49.1 | 165 | 32.7 | 35.7 | 429 |
| Fellowships/Dissertation grants | \% | 16.0 | 14.5 | 203 | 19.0 | 135 | 119 | 155 | 48.4 | 34.7 | 143 | 169 |
| Own resources | \% | 8.6 | 8.5 | 9.0 | 11.8 | 10.3 | 3.7 | 7.8 | 14.3 | 11.2 | 28.6 | 12.2 |
| Foreign government | \% | 1.9 | 2.0 | 1.6 | 0.1 | 0.3 | 4.8 | 0.3 | 0.0 | 0.0 | 0.0 | 0.1 |
| Employer | \% | 1.9 | 2.2 | 0.9 | 3.1 | 1.0 | 0.2 | 3.4 | 1.1 | 4.1 | 0.0 | 3.0 |
| Other | \% | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Engineering | N | 5,502 | 4,564 | 925 | 2,139 | 296 | 2,772 | 417 | 92 | 91 | 14 | 1,746 |
| Teaching assistantships | \% | 82 | 8.3 | 8.1 | 6.6 | 9.8 | 9.4 | 8.4 | 6.0 | 3.5 | 8.3 | 6.6 |
| Research assistantships/Traineeships | \% | 569 | 57.8 | 52.8 | 45.3 | 62.7 | 655 | 55.8 | 29.8 | 395 | 25.0 | 47.1 |
| Fellowships/Dissertation grants | \% | 15.8 | 14.3 | 22.8 | 24.1 | 123 | 9.7 | 17.4 | 452 | 31.4 | 16.7 | 22.4 |
| Own resources | \% | 9.9 | 10.1 | 9.0 | 14.0 | 9.4 | 6.5 | 10.4 | 13.1 | 14.0 | 25.0 | 13.9 |
| Foreign government | \% | 4.4 | 4.5 | 3.8 | 0.2 | 2.5 | 7.9 | 1.0 |  | 2.3 | 8.3 | 0.2 |
| Employer | \% | 4.8 | 5.1 | 3.3 | 9.8 | 3.3 | 1.0 | 6.9 | 6.0 | 9.3 | 16.7 | 9.8 |
| Other | \% | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Life Sciences | N | 8,296 | 4,363 | 3,908 | 5,395 | 449 | 2,004 | 665 | 215 | 213 | 21 | 4,570 |
| Teaching assistantships | \% | 10.7 | 11.5 | 9.9 | 10.3 | 8.0 | 12.3 | 6.8 | 6.0 | 8.4 | 10.0 | 11.1 |
| Research assistantships/Traineeships | \% | 375 | 40.0 | 34.6 | 33.6 | 433 | 46.6 | 42.7 | 225 | 24.6 | 10.0 | 343 |
| Fellowships/Dissertation grants | \% | 30.7 | 30.5 | 30.8 | 33.1 | 32.0 | 23.7 | 383 | 51.0 | 46.8 | 55.0 | 305 |
| Own resources | \% | 15.1 | 11.9 | 18.7 | 19.1 | 11.9 | 4.9 | 9.3 | 17.5 | 15.8 | 20.0 | 20.1 |
| Foreign government | \% | 3.0 | 3.6 | 2.4 | 0.0 | 1.9 | 11.5 | 0.2 | 0.5 | 1.0 | 0.0 | 0.1 |
| Employer | \% | 3.0 | 2.5 | 3.5 | 3.7 | 2.9 | 1.0 | 2.5 | 2.5 | 3.4 | 5.0 | 3.9 |
| Other | \% | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 |
| Social Sciences | N | 6,825 | 3,109 | 3,707 | 5,058 | 238 | 1,081 | 265 | 324 | 279 | 36 | 4,226 |
| Teaching assistantships | \% | 212 | 24.4 | 18.5 | 19.6 | 29.3 | 26.8 | 22.2 | 12.5 | 14.4 | 12.5 | 21.0 |
| Research assistantships/Traineeships | \% | 14.6 | 12.8 | 16.1 | 14.6 | 11.7 | 15.0 | 125 | 112 | 9.8 | 9.4 | 153 |
| Fellowships/Dissertation grants | \% | 21.1 | 23.6 | 19.1 | 19.0 | 20.7 | 31.7 | 29.8 | 33.7 | 28.4 | 28.1 | 16.4 |
| Own resources | \% | 39.5 | 33.9 | 44.1 | 44.9 | 35.6 | 14.5 | 35.1 | 40.6 | 44.7 | 46.9 | 45.2 |
| Foreign government | \% | 1.9 | 2.9 | 1.1 | 0.0 | 2.7 | 11.0 | 0.0 | 0.0 | 1.1 | 3.1 | 0.1 |
| Employer | \% | 1.6 | 2.1 | 1.1 | 1.8 | 0.0 | 1.0 | 0.4 | 2.0 | 1.5 | 0.0 | 1.7 |
| Other | \% | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Humanities | N | 5,589 | 2,759 | 2,823 | 4,380 | 285 | 671 | 197 | 189 | 238 | 24 | 3,847 |
| Teaching assistantships | \% | 342 | 32.8 | 35.5 | 33.6 | 37.6 | 36.8 | 29.2 | 20.1 | 32.8 | 33.3 | 34.9 |
| Research assistantships/Traineeships | \% | 1.4 | 1.8 | 1.1 | 1.3 | 0.8 | 23 | 1.1 | 1.1 | 09 | 0.0 | 1.4 |
| Fellowships/Dissertation grants | \% | 26.7 | 26.9 | 26.6 | 25.9 | 25.6 | 33.1 | 36.0 | 50.6 | 36.7 | 333 | 235 |
| Own resources | \% | 34.8 | 34.6 | 35.0 | 37.1 | 35.0 | 18.8 | 33.1 | 25.9 | 27.5 | 29.2 | 38.2 |
| Foreign government | \% | 1.1 | 1.7 | 0.6 | 0.0 | 1.1 | 8.5 | 0.6 | 0.0 | 0.4 | 0.0 | 0.1 |
| Employer | \% | 1.7 | 2.2 | 1.2 | 2.0 | 0.0 | 0.5 | 0.0 | 2.3 | 1.7 | 4.2 | 1.9 |
| Other | \% | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Education | N | 6,324 | 2,234 | 4,085 | 5,315 | 116 | 500 | 145 | 667 | 272 | 44 | 4,188 |
| Teaching assistantships | \% | 8.1 | 8.4 | 8.0 | 7.2 | 17.1 | 15.0 | 9.0 | 3.8 | 4.2 | 2.4 | 8.0 |
| Research assistantships/Traineeships | \% | 63 | 6.2 | 6.4 | 5.6 | 11.4 | 12.6 | 13.4 | 43 | 42 | 0.0 | 5.8 |
| Fellowships/Dissertation grants | \% | 89 | 9.3 | 8.7 | 7.7 | 95 | 21.8 | 82 | 14.1 | 21.4 | 17.1 | 5.8 |
| Own resources | \% | 65.3 | 61.9 | 67.1 | 68.4 | 55.2 | 34.5 | 65.7 | 69.7 | 64.7 | 68.3 | 68.3 |
| Foreign government | \% | 1.2 | 1.8 | 0.8 | 0.1 | 0.0 | 13.1 | 0.0 | 0.0 | 0.4 | 0.0 | 0.1 |
| Employer | \% | 10.1 | 12.3 | 8.8 | 10.8 | 6.7 | 2.8 | 3.7 | 8.2 | 4.6 | 12.2 | 11.9 |
| Other | \% | 0.1 | 02 | 0.1 | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.4 | 0.0 | 0.1 |
| Professional/Other Fields | N | 2,238 | 1,280 | 952 | 1,499 | 110 | 496 | 125 | 141 | 66 | 9 | 1,223 |
| Teaching assistantships | \% | 213 | 22.1 | 20.1 | 20.1 | 25.5 | 23.7 | 20.5 | 16.5 | 16.9 | 11.1 | 21.1 |
| Research assistantships/Traineeships | \% | 10.7 | 10.6 | 10.8 | 7.5 | 12.7 | 19.8 | 9.8 | 4.7 | 5.1 | 0.0 | 83 |
| Fellowships/Dissertation grants | \% | 17.6 | 19.0 | 15.6 | 15.5 | 10.8 | 25.4 | 152 | 299 | 27.1 | 333 | 129 |
| Own resources | \% | 41.5 | 38.1 | 46.0 | 48.5 | 48.0 | 18.5 | 46.4 | 37.8 | 42.4 | 44.4 | 50.0 |
| Foreign government | \% | 2.6 | 3.2 | 1.8 | 0.2 | 2.0 | 10.2 | 3.6 | 0.0 | 0.0 | 0.0 | 0.1 |
| Employer | \% | 6.3 | 6.8 | 5.6 | 8.1 | 1.0 | 2.4 | 4.5 | 11.0 | 8.5 | 11.1 | 7.6 |
| Other | \% | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |

a Total includes 74 doctoral recipients for whom gender was not reported.
${ }^{\mathrm{b}}$ Does not include Native Hawaiians and other Pacific Islanders.
c Includes Alaskan Natives.
${ }^{d}$ Includes mathematics and computer science.

Table 20. Cumulative debt related to the education of the doctorate recipients, by broad field, 2001

| Cumulative debt | Total |  | Physical Sciences ${ }^{\text {a }}$ |  | Engineering |  | Life Sciences |  | Social Sciences |  | Humanities |  | Education |  | Professional/ Other Fields |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% |
| No Debt | 18,205 | 49.5 | 3,191 | 58.5 | 3,094 | 62.4 | 3,814 | 50.5 | 2,151 | 35.2 | 2,016 | 39.5 | 2,967 | 52.9 | 972 | 48.9 |
| \$5,000 or less | 2,908 | 7.9 | 458 | 8.4 | 431 | 8.7 | 627 | 8.3 | 421 | 6.9 | 402 | 7.9 | 433 | 7.7 | 136 | 6.8 |
| \$5,001-\$10,000 | 2,537 | 6.9 | 398 | 7.3 | 280 | 5.6 | 586 | 7.8 | 391 | 6.4 | 418 | 8.2 | 340 | 6.1 | 124 | 6.2 |
| \$10,001-\$15,000 | 2,048 | 5.6 | 328 | 6.0 | 215 | 4.3 | 448 | 5.9 | 374 | 6.1 | 339 | 6.6 | 247 | 4.4 | 97 | 4.9 |
| \$15,001-\$20,000 | 1,828 | 5.0 | 241 | 4.4 | 188 | 3.8 | 403 | 5.3 | 366 | 6.0 | 333 | 6.5 | 214 | 3.8 | 83 | 4.2 |
| \$20,001-\$25,000 | 1,403 | 3.8 | 173 | 3.2 | 123 | 2.5 | 300 | 4.0 | 280 | 4.6 | 267 | 5.2 | 186 | 3.3 | 74 | 3.7 |
| \$25,001-\$30,000 | 1,280 | 3.5 | 125 | 2.3 | 110 | 2.2 | 260 | 3.4 | 285 | 4.7 | 234 | 4.6 | 191 | 3.4 | 75 | 3.8 |
| \$30,001 or more | 6,564 | 17.9 | 544 | 10.0 | 517 | 10.4 | 1,108 | 14.7 | 1,846 | 30.2 | 1,096 | 21.5 | 1,027 | 18.3 | 426 | 21.4 |
| Total | 36,773 | 100.0 | 5,458 | 100.0 | 4,958 | 100.0 | 7,546 | 100.0 | 6,114 | 100.0 | 5,105 | 100.0 | 5,605 | 100.0 | 1,987 | 100.0 |

a Includes mathematics and computer sciences.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 21. Cumulative debt related to the education of the doctorate recipients, by demographic group, 2001

| Cumulative debt | Sex |  |  |  | Citizenship |  |  |  |  |  | Race/Ethnicity (U.S. citizens and permanent residents) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male |  | Female |  | U.S. citizen |  | Permanent visa |  | Temporary visa |  | Asian a |  | Black |  | Hispanic |  | American Indian ${ }^{\text {b }}$ |  | White |  |
|  | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% |
| No debt | 10,348 | 50.2 | 7,857 | 48.7 | 10,900 | 42.2 | 1,066 | 61.9 | 6,220 | 67.8 | 1,149 | 55.9 | 453 | 28.2 | 391 | 32.5 | 54 | 35.3 | 9,637 | 44.2 |
| \$5,000 or less | 1,716 | 8.3 | 1,192 | 7.4 | 1,956 | 7.6 | 118 | 6.8 | 818 | 8.9 | 138 | 6.7 | 128 | 8.0 | 97 | 8.1 | 10 | 6.5 | 1,647 | 7.6 |
| \$5,001-\$10,000 | 1,476 | 7.2 | 1,061 | 6.6 | 1,974 | 7.6 | 92 | 5.3 | 467 | 5.1 | 125 | 6.1 | 114 | 7.1 | 109 | 9.1 | 16 | 10.5 | 1,635 | 7.5 |
| \$10,001-\$15,000 | 1,203 | 5.8 | 845 | 5.2 | 1,687 | 6.5 | 80 | 4.6 | 280 | 3.1 | 122 | 5.9 | 89 | 5.5 | 79 | 6.6 | 9 | 5.9 | 1,407 | 6.5 |
| \$15,001-\$20,000 | 1,047 | 5.1 | 780 | 4.8 | 1,556 | 6.0 | 78 | 4.5 | 190 | 2.1 | 110 | 5.3 | 86 | 5.3 | 80 | 6.7 | 6 | 3.9 | 1,316 | 6.0 |
| \$20,001-\$25,000 | 757 | 3.7 | 646 | 4.0 | 1,211 | 4.7 | 50 | 2.9 | 141 | 1.5 | 76 | 3.7 | 89 | 5.5 | 59 | 4.9 | 5 | 3.3 | 999 | 4.6 |
| \$25,001-\$30,000 | 707 | 3.4 | 572 | 3.5 | 1,109 | 4.3 | 34 | 2.0 | 136 | 1.5 | 54 | 2.6 | 81 | 5.0 | 56 | 4.7 | 7 | 4.6 | 912 | 4.2 |
| \$30,001 or more | 3,376 | 16.4 | 3,188 | 19.8 | 5,429 | 21.0 | 205 | 11.9 | 925 | 10.1 | 283 | 13.8 | 569 | 35.4 | 332 | 27.6 | 46 | 30.1 | 4,242 | 19.5 |
| Total | 20,630 | 100.0 | 16,141 | 100.0 | 25,822 | 100.0 | 1,723 | 100.0 | 9,177 | 100.0 | 2,057 | 100.0 | 1,609 | 100.0 | 1,203 | 100.0 | 153 | 100.0 | 21,795 | 100.0 |

[^15]Table 22. Postgraduation status of doctorate recipients by broad field for selected years, 1981-2001

|  |  | All <br> Fields | Physical <br> Sciences ${ }^{\text {a }}$ |  |  | Life <br> Engineering | Social <br> Sciences | Sciences | Humanities |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Education | Professional/ |
| :--- |
| Other Fields |

[^16]Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 23. Postgraduation status of doctorate recipients by demographic group for selected years, 1981-2001

|  |  | Total | Sex |  | Citizenship |  |  | U.S. citizens \& permanent residents |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Men | Women | $\begin{gathered} \text { U.S. } \\ \text { citizens } \end{gathered}$ | Permanent visa | Temporary visa | Asian ${ }^{\text {a }}$ | Black | Hispanic | American Indian b | White |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | N | 31,356 | 21,464 | 9,892 | 25,068 | 1,281 | 3,984 | 1,070 | 1,109 | 529 | 85 | 22,473 |
| 1986 | N | 31,903 | 20,596 | 11,307 | 23,089 | 1,433 | 5,325 | 1,058 | 949 | 679 | 99 | 21,231 |
| 1991 c | N | 37,533 | 23,524 | 13,873 | 25,572 | 1,857 | 9,382 | 1,527 | 1,161 | 865 | 132 | 23,056 |
| $1996{ }^{\text {d }}$ | N | 42,438 | 25,286 | 16,957 | 27,777 | 3,765 | 9,649 | 3,674 | 1,447 | 1,112 | 187 | 24,670 |
| 2001 e | N | 40,744 | 22,769 | 17,901 | 26,907 | 1,822 | 9,780 | 2,154 | 1,721 | 1,262 | 163 | 22,587 |
| Total responses to postgraduation status |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | N | 28,802 | 19,717 | 9,085 | 23,970 | 1,183 | 3,624 | 988 | 1,051 | 505 | 82 | 21,742 |
| 1986 | N | 28,965 | 18,516 | 10,449 | 22,638 | 1,344 | 4,955 | 991 | 922 | 656 | 96 | 20,877 |
| 1991 | N | 34,352 | 21,492 | 12,855 | 24,290 | 1,719 | 8,338 | 1,422 | 1,049 | 819 | 127 | 22,250 |
| 1996 | N | 38,623 | 23,115 | 15,503 | 26,162 | 3,530 | 8,899 | 3,446 | 1,300 | 1,049 | 172 | 23,429 |
| 2001 | N | 36,907 | 20,686 | 16,220 | 25,877 | 1,724 | 9,258 | 2,064 | 1,604 | 1,206 | 152 | 21,840 |
| Definite commitments for employment or study |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | \% | 76.0 | 78.4 | 70.8 | 77.0 | 66.4 | 72.4 | 70.5 | 72.3 | 74.3 | 75.6 | 77.0 |
| 1986 | \% | 73.5 | 75.1 | 70.8 | 75.1 | 61.2 | 69.7 | 66.3 | 68.8 | 69.8 | 66.7 | 75.2 |
| 1991 | \% | 70.5 | 70.3 | 70.8 | 73.9 | 57.2 | 63.4 | 61.7 | 68.5 | 68.7 | 67.7 | 73.9 |
| 1996 | \% | 67.5 | 67.6 | 67.4 | 70.5 | 60.1 | 61.5 | 61.9 | 67.9 | 70.8 | 69.8 | 70.4 |
| 2001 | \% | 72.9 | 74.2 | 71.1 | 73.8 | 66.4 | 71.4 | 69.2 | 69.6 | 74.2 | 69.7 | 74.2 |
| Seeking employment or study |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | \% | 24.0 | 21.6 | 29.2 | 23.0 | 33.6 | 27.6 | 29.5 | 27.7 | 25.7 | 24.4 | 23.0 |
| 1986 | \% | 26.5 | 24.9 | 29.2 | 24.9 | 38.8 | 30.3 | 33.7 | 31.2 | 30.2 | 33.3 | 24.8 |
| 1991 | \% | 29.5 | 29.7 | 29.2 | 26.1 | 42.8 | 36.6 | 38.3 | 31.5 | 31.3 | 32.3 | 26.1 |
| 1996 | \% | 32.5 | 32.4 | 32.6 | 29.5 | 39.9 | 38.5 | 38.1 | 32.1 | 29.2 | 30.2 | 29.6 |
| 2001 | \% | 27.1 | 25.8 | 28.9 | 26.2 | 33.6 | 28.6 | 30.8 | 30.4 | 25.8 | 30.3 | 25.8 |

a Includes Native Hawaiians/Other Pacific Islanders through 2000, but excludes them in 2001 per revised OMB guidelines issued for 2001.
b Includes Alaskan Natives.
c Total includes 136 doctoral recipients for whom sex is not known.
${ }^{d}$ Total includes 195 doctoral recipients for whom sex is not known.
e Total includes 74 doctoral recipients for whom sex is not known.
Source: NSF/NIH/NEH/USED/USDA/NASA, Survey of Earned Doctorates

Table 24. Postgraduation commitments of doctorate recipients by type of plans and broad field for selected years, 1981-2001

|  |  | All Fields | Physical Sciences a | Engineering | Life Sciences | Social Sciences | Humanities | Education | Professional/ Other Fields |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All definite commitments |  |  |  |  |  |  |  |  |  |
| 1981 | N | 21,889 | 3,133 | 1,778 | 4,034 | 4,187 | 2,270 | 5,208 | 1,279 |
| 1986 | N | 21,301 | 3,300 | 2,066 | 4,013 | 3,842 | 2,007 | 4,629 | 1,444 |
| 1991 | N | 24,218 | 4,052 | 2,871 | 4,781 | 3,902 | 2,445 | 4,462 | 1,705 |
| 1996 | N | 26,072 | 4,120 | 3,652 | 5,395 | 4,049 | 2,750 | 4,483 | 1,623 |
| 2001 | N | 26,889 | 4,168 | 3,612 | 5,532 | 4,481 | 3,349 | 4,181 | 1,566 |
| Definite commitments with responses to type of plans |  |  |  |  |  |  |  |  |  |
| 1981 | N | 21,828 | 3,122 | 1,770 | 4,026 | 4,181 | 2,259 | 5,196 | 1,274 |
| 1986 | N | 21,186 | 3,290 | 2,059 | 3,998 | 3,817 | 1,983 | 4,600 | 1,439 |
| 1991 | N | 24,115 | 4,047 | 2,861 | 4,771 | 3,893 | 2,428 | 4,419 | 1,696 |
| 1996 | N | 26,026 | 4,114 | 3,646 | 5,387 | 4,042 | 2,742 | 4,476 | 1,619 |
| 2001 | N | 26,747 | 4,157 | 3,598 | 5,515 | 4,459 | 3,316 | 4,149 | 1,553 |
| Employment |  |  |  |  |  |  |  |  |  |
| 1981 | \% | 80.6 | 65.7 | 88.5 | 46.3 | 86.4 | 95.7 | 97.6 | 99.1 |
| 1986 | \% | 75.9 | 55.7 | 81.1 | 41.2 | 84.1 | 92.4 | 97.1 | 98.0 |
| 1991 | \% | 72.5 | 51.5 | 78.9 | 37.5 | 82.6 | 92.5 | 96.1 | 97.1 |
| 1996 | \% | 70.5 | 50.2 | 77.5 | 35.0 | 77.5 | 92.5 | 97.2 | 96.4 |
| 2001 | \% | 70.9 | 55.4 | 81.0 | 38.8 | 73.5 | 89.8 | 94.1 | 93.6 |
| Study |  |  |  |  |  |  |  |  |  |
| 1981 | \% | 19.4 | 34.3 | 11.5 | 53.7 | 13.6 | 4.3 | 2.4 | 0.9 |
| 1986 | \% | 24.1 | 44.3 | 18.9 | 58.8 | 15.9 | 7.6 | 2.9 | 2.0 |
| 1991 | \% | 27.5 | 48.5 | 21.1 | 62.5 | 17.4 | 7.5 | 3.9 | 2.9 |
| 1996 | \% | 29.5 | 49.8 | 22.5 | 65.0 | 22.5 | 7.5 | 2.8 | 3.6 |
| 2001 | \% | 29.1 | 44.6 | 19.0 | 61.2 | 26.5 | 10.2 | 5.9 | 6.4 |

a Includes mathematics and computer sciences.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 25. Postgraduation commitments of doctorate recipients by type of plans and demographic group for selected years, 1981-2001

|  |  | Total | Sex |  | Citizenship |  |  | U.S. citizens and permanent residents |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Male | Female | U.S. citizen | $\begin{gathered} \text { Permanent } \\ \text { visa } \\ \hline \end{gathered}$ | Temporary visa | Asian ${ }^{\text {a }}$ | Black | Hispanic | American Indian b | White |
| All definite commitments |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | $N$ | 21,889 | 15,461 | 6,428 | 18,461 | 786 | 2,623 | 697 | 760 | 375 | 62 | 16,741 |
| 1986 | $N$ | 21,301 | 13,905 | 7,396 | 17,010 | 822 | 3,456 | 657 | 634 | 458 | 64 | 15,702 |
| 1991 | N | 24,218 | 15,117 | 9,096 | 17,942 | 983 | 5,289 | 878 | 719 | 563 | 86 | 16,437 |
| 1996 | $N$ | 26,072 | 15,619 | 10,448 | 18,457 | 2,121 | 5,477 | 2,132 | 883 | 743 | 120 | 16,501 |
| 2001 | N | 26,889 | 15,356 | 11,532 | 19,107 | 1,145 | 6,610 | 1,429 | 1,117 | 895 | 106 | 16,200 |
| Definite commitments with responses to type of plans |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | $N$ | 21,828 | 15,414 | 6,414 | 18,423 | 782 | 2,605 | 694 | 758 | 374 | 62 | 16,708 |
| 1986 | $N$ | 21,186 | 13,841 | 7,345 | 16,930 | 820 | 3,424 | 653 | 627 | 458 | 63 | 15,634 |
| 1991 | N | 24,115 | 15,054 | 9,056 | 17,871 | 975 | 5,265 | 872 | 709 | 562 | 86 | 16,375 |
| 1996 | N | 26,026 | 15,592 | 10,429 | 18,429 | 2,115 | 5,466 | 2,127 | 882 | 743 | 120 | 16,473 |
| 2001 | N | 26,747 | 15,286 | 11,461 | 19,012 | 1,142 | 6,573 | 1,424 | 1,113 | 890 | 105 | 16,126 |
| Employment |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | \% | 80.6 | 79.3 | 83.7 | 80.8 | 82.6 | 78.7 | 77.2 | 93.9 | 85.3 | 90.3 | 80.4 |
| 1986 | \% | 75.9 | 73.5 | 80.2 | 77.6 | 75.7 | 67.1 | 67.7 | 88.5 | 79.0 | 71.4 | 77.6 |
| 1991 | \% | 72.5 | 69.8 | 77.0 | 75.6 | 69.5 | 62.6 | 63.2 | 86.3 | 74.4 | 77.9 | 75.5 |
| 1996 | \% | 70.5 | 68.0 | 74.3 | 74.7 | 59.4 | 60.7 | 55.4 | 84.9 | 75.2 | 82.5 | 74.7 |
| 2001 | \% | 70.9 | 70.0 | 72.2 | 72.9 | 69.0 | 65.5 | 64.0 | 77.7 | 72.2 | 81.0 | 73.1 |
| Study |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | \% | 19.4 | 20.7 | 16.3 | 19.2 | 17.4 | 21.3 | 22.8 | 6.1 | 14.7 | 9.7 | 19.6 |
| 1986 | \% | 24.1 | 26.5 | 19.8 | 22.4 | 24.3 | 32.9 | 32.3 | 11.5 | 21.0 | 28.6 | 22.4 |
| 1991 | \% | 27.5 | 30.2 | 23.0 | 24.4 | 30.5 | 37.4 | 36.8 | 13.7 | 25.6 | 22.1 | 24.5 |
| 1996 | \% | 29.5 | 32.0 | 25.7 | 25.3 | 40.6 | 39.3 | 44.6 | 15.1 | 24.8 | 17.5 | 25.3 |
| 2001 | \% | 29.1 | 30.0 | 27.8 | 27.1 | 31.0 | 34.5 | 36.0 | 22.3 | 27.8 | 19.0 | 26.9 |

a Includes Native Hawaiians/Other Pacific Islanders through 2000, but excludes them in 2001 per revised OMB guidelines issued for 2001.
${ }^{\mathrm{b}}$ Includes Alaskan Natives.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Table 26. Employment sector of doctorate recipients with postgraduation commitments in the United States, by demographic group for selected years, 1981-2001

|  |  | Total ${ }^{\text {a }}$ | Sex |  | Citizenship |  |  | U.S. citizens \& permanent residents |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Male | Female | $\begin{gathered} \text { U.S. } \\ \text { citizen } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Permanent } \\ \text { visa } \\ \hline \end{gathered}$ | Temporary visa | Asian ${ }^{\text {b }}$ | Black | Hispanic | American Indian c | White |
| All employment commitments |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | N | 16,007 | 10,887 | 5,120 | 14,675 | 596 | 721 | 511 | 704 | 312 | 56 | 13,224 |
| 1986 | N | 14,460 | 8,848 | 5,612 | 12,983 | 514 | 954 | 408 | 540 | 347 | 44 | 11,945 |
| 1991 | N | 15,463 | 8,919 | 6,544 | 13,261 | 583 | 1,619 | 519 | 604 | 409 | 64 | 12,092 |
| 1996 | N | 16,269 | 9,065 | 7,204 | 13,501 | 1,130 | 1,628 | 1,088 | 732 | 543 | 99 | 12,032 |
| 2001 | N | 17,060 | 9,402 | 7,658 | 13,473 | 721 | 2,858 | 860 | 851 | 621 | 79 | 11,437 |
| Employment commitments with responses to sector |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | N | 15,866 | 10,803 | 5,063 | 14,582 | 589 | 682 | 505 | 693 | 308 | 55 | 13,152 |
| 1986 | N | 14,236 | 8,726 | 5,510 | 12,849 | 502 | 877 | 400 | 522 | 340 | 43 | 11,840 |
| 1991 | N | 15,291 | 8,832 | 6,459 | 13,123 | 577 | 1,591 | 514 | 597 | 406 | 64 | 11,967 |
| 1996 | N | 16,169 | 9,024 | 7,145 | 13,418 | 1,120 | 1,621 | 1,075 | 725 | 541 | 99 | 11,962 |
| 2001 | N | 16,811 | 9,259 | 7,552 | 13,278 | 710 | 2,815 | 850 | 824 | 609 | 79 | 11,283 |
| Academe |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | \% | 50.8 | 47.7 | 57.6 | 51.2 | 43.3 | 50.4 | 32.1 | 55.3 | 64.3 | 43.6 | 51.0 |
| 1986 | \% | 49.4 | 46.5 | 54.0 | 48.5 | 50.4 | 62.4 | 34.5 | 51.0 | 58.2 | 62.8 | 48.6 |
| 1991 | \% | 52.6 | 48.6 | 58.1 | 52.3 | 53.0 | 55.1 | 37.9 | 59.3 | 63.3 | 53.1 | 52.2 |
| 1996 | \% | 49.1 | 43.5 | 56.2 | 51.8 | 38.6 | 34.2 | 27.7 | 53.4 | 60.4 | 54.5 | 52.2 |
| 2001 | \% | 48.6 | 42.8 | 57.2 | 53.0 | 41.5 | 30.1 | 34.5 | 51.8 | 61.4 | 53.2 | 53.2 |
| Industry/Self-employed |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | \% | 19.6 | 23.8 | 10.7 | 17.6 | 46.5 | 39.7 | 54.1 | 8.4 | 9.1 | 14.5 | 17.9 |
| 1986 | \% | 21.6 | 26.3 | 14.1 | 20.1 | 38.6 | 33.1 | 48.5 | 7.7 | 12.1 | 4.7 | 20.7 |
| 1991 | \% | 21.4 | 27.3 | 13.3 | 18.6 | 36.7 | 38.7 | 47.3 | 8.0 | 13.5 | 14.1 | 18.9 |
| 1996 | \% | 26.1 | 34.8 | 15.0 | 19.9 | 51.1 | 59.7 | 59.7 | 10.5 | 15.5 | 12.1 | 20.1 |
| 2001 | \% | 29.9 | 39.1 | 18.7 | 21.4 | 48.0 | 65.4 | 52.9 | 14.2 | 15.3 | 20.3 | 21.4 |
| Government |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | \% | 19.8 | 19.2 | 20.9 | 21.2 | 4.1 | 2.3 | 9.3 | 26.3 | 19.8 | 29.1 | 20.9 |
| 1986 | \% | 18.3 | 17.1 | 20.3 | 20.0 | 6.4 | 1.3 | 10.8 | 28.2 | 20.3 | 25.6 | 19.4 |
| 1991 | \% | 15.6 | 14.5 | 17.0 | 17.8 | 4.5 | 1.7 | 9.7 | 22.1 | 12.8 | 25.0 | 17.5 |
| 1996 | \% | 15.3 | 13.7 | 17.3 | 17.8 | 5.3 | 1.6 | 7.2 | 26.2 | 15.0 | 24.2 | 17.2 |
| 2001 | \% | 6.6 | 7.2 | 5.9 | 7.8 | 3.7 | 1.5 | 5.4 | 10.0 | 7.4 | 10.1 | 7.6 |
| Other |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | \% | 9.8 | 9.3 | 10.8 | 10.0 | 6.1 | 7.5 | 4.6 | 10.1 | 6.8 | 12.7 | 10.2 |
| 1986 | \% | 10.7 | 10.1 | 11.7 | 11.4 | 4.6 | 3.3 | 6.3 | 13.2 | 9.4 | 7.0 | 11.3 |
| 1991 | \% | 10.4 | 9.6 | 11.5 | 11.3 | 5.7 | 4.6 | 5.1 | 10.6 | 10.3 | 7.8 | 11.4 |
| 1996 | \% | 9.5 | 7.9 | 11.5 | 10.4 | 5.1 | 4.4 | 5.4 | 9.9 | 9.1 | 9.1 | 10.5 |
| 2001 | \% | 14.8 | 11.0 | 19.6 | 17.8 | 6.8 | 2.9 | 7.2 | 24.0 | 15.9 | 16.5 | 17.7 |

[^17]Table 27. Sources of support for doctorate recipients with postgraduation commitments for postdoctoral study, by demographic group for selected years, 1981-2001

|  |  | Total ${ }^{\text {a }}$ | Sex |  | Citizenship |  |  | U.S. citizens \& permanent visas |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Male | Female | $\begin{gathered} \text { U.S. } \\ \text { citizen } \end{gathered}$ | Permanent visa | $\begin{gathered} \text { Temporary } \\ \text { visa } \\ \hline \end{gathered}$ | Asian ${ }^{\text {b }}$ | Black | Hispanic | American Indian c | White |
| All postgraduate study commitments |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | N | 3,967 | 2,993 | 974 | 3,354 | 124 | 486 | 146 | 43 | 51 | 6 | 3,102 |
| 1986 | N | 4,372 | 3,149 | 1,223 | 3,357 | 156 | 857 | 183 | 50 | 73 | 17 | 3,111 |
| 1991 | N | 5,671 | 3,916 | 1,755 | 3,857 | 227 | 1,587 | 261 | 60 | 121 | 15 | 3,566 |
| 1996 | N | 6,539 | 4,238 | 2,301 | 4,092 | 723 | 1,723 | 813 | 92 | 155 | 19 | 3,690 |
| 2001 | N | 6,523 | 3,891 | 2,632 | 4,383 | 293 | 1,839 | 432 | 184 | 193 | 14 | 3,741 |
| Postgraduate study commitments with responses to source of support |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | N | 3,719 | 2,803 | 916 | 3,130 | 117 | 469 | 133 | 40 | 48 | 6 | 2,900 |
| 1986 | N | 4,103 | 2,955 | 1,148 | 3,146 | 145 | 810 | 171 | 47 | 69 | 15 | 2,916 |
| 1991 | N | 5,367 | 3,728 | 1,639 | 3,626 | 219 | 1,523 | 247 | 56 | 111 | 14 | 3,359 |
| 1996 | N | 6,280 | 4,094 | 2,186 | 3,943 | 684 | 1,652 | 770 | 86 | 150 | 19 | 3,559 |
| 2001 | N | 6,442 | 3,845 | 2,597 | 4,333 | 287 | 1,815 | 424 | 182 | 191 | 14 | 3,699 |
| U.S. Government |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | \% | 53.3 | 53.9 | 51.6 | 57.1 | 53.0 | 28.4 | 52.6 | 52.5 | 41.7 | 33.3 | 57.7 |
| 1986 | \% | 47.7 | 48.2 | 46.5 | 53.8 | 41.4 | 25.1 | 54.4 | 51.1 | 46.4 | 60.0 | 53.4 |
| 1991 | \% | 40.9 | 39.6 | 43.8 | 49.7 | 34.7 | 20.9 | 42.1 | 39.3 | 37.8 | 57.1 | 49.9 |
| 1996 | \% | 38.4 | 37.7 | 39.8 | 45.1 | 40.6 | 21.4 | 40.5 | 26.7 | 45.3 | 47.4 | 45.6 |
| 2001 | \% | 33.6 | 34.4 | 32.5 | 40.0 | 30.0 | 18.9 | 36.6 | 31.3 | 44.0 | 42.9 | 39.9 |
| College or university |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | \% | 17.4 | 18.2 | 15.1 | 14.8 | 22.2 | 33.9 | 20.3 | 17.5 | 20.8 | 16.7 | 14.8 |
| 1986 | \% | 22.7 | 24.0 | 19.3 | 16.8 | 26.9 | 44.4 | 19.9 | 25.5 | 17.4 | 13.3 | 17.0 |
| 1991 | \% | 27.2 | 28.8 | 23.4 | 20.6 | 26.5 | 42.8 | 26.7 | 37.5 | 33.3 | 21.4 | 19.8 |
| 1996 | \% | 29.9 | 31.8 | 26.3 | 24.0 | 31.4 | 43.3 | 28.8 | 38.4 | 28.7 | 26.3 | 23.8 |
| 2001 | \% | 38.5 | 38.5 | 38.5 | 33.4 | 44.9 | 49.8 | 33.5 | 42.3 | 38.7 | 28.6 | 33.5 |
| Private foundation |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | \% | 11.1 | 10.0 | 14.4 | 11.3 | 7.7 | 10.2 | 12.8 | 10.0 | 4.2 | 0.0 | 11.1 |
| 1986 | \% | 12.3 | 11.2 | 15.2 | 12.7 | 9.7 | 11.4 | 11.1 | 6.4 | 18.8 | 26.7 | 12.6 |
| 1991 | \% | 11.7 | 11.0 | 13.4 | 11.1 | 16.9 | 12.4 | 16.6 | 12.5 | 10.8 | 14.3 | 11.1 |
| 1996 | \% | 10.3 | 10.2 | 10.5 | 10.4 | 7.6 | 11.1 | 9.2 | 19.8 | 9.3 | 15.8 | 9.9 |
| 2001 | \% | 7.5 | 7.2 | 8.1 | 8.3 | 3.5 | 6.4 | 6.4 | 7.7 | 3.7 | 14.3 | 8.3 |
| Nonprofit, other than private foundation |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | \% | 2.7 | 2.2 | 4.0 | 2.6 | 5.1 | 2.6 | 3.8 | 5.0 | 14.6 | 16.7 | 2.4 |
| 1986 | \% | 2.8 | 2.7 | 3.0 | 2.6 | 6.2 | 2.8 | 4.7 | 2.1 | 2.9 | 0.0 | 2.6 |
| 1991 | \% | 2.6 | 2.4 | 2.8 | 2.2 | 3.2 | 3.4 | 2.4 | 3.6 | 1.8 | 0.0 | 2.2 |
| 1996 | \% | 3.2 | 3.1 | 3.6 | 2.8 | 3.9 | 4.1 | 4.2 | 0.0 | 2.7 | 0.0 | 2.8 |
| 2001 | \% | 3.0 | 2.6 | 3.7 | 2.6 | 3.8 | 4.0 | 3.3 | 3.8 | 1.6 | 0.0 | 2.6 |
| Other |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | \% | 7.5 | 8.2 | 5.6 | 6.6 | 4.3 | 14.5 | 3.8 | 5.0 | 6.3 | 16.7 | 6.5 |
| 1986 | \% | 7.2 | 7.6 | 6.2 | 6.8 | 6.9 | 8.6 | 5.8 | 8.5 | 8.7 | 0.0 | 6.9 |
| 1991 | \% | 10.8 | 11.5 | 9.0 | 9.6 | 11.0 | 13.5 | 7.7 | 1.8 | 11.7 | 7.1 | 9.8 |
| 1996 | \% | 10.0 | 9.9 | 10.2 | 9.6 | 8.2 | 11.8 | 8.2 | 7.0 | 7.3 | 5.3 | 9.8 |
| 2001 | \% | 11.1 | 11.6 | 10.4 | 9.7 | 12.9 | 14.2 | 12.7 | 7.7 | 8.4 | 14.3 | 9.8 |
| Unknown |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | \% | 7.9 | 7.5 | 9.3 | 7.6 | 7.7 | 10.4 | 6.8 | 10.0 | 12.5 | 16.7 | 7.4 |
| 1986 | \% | 7.4 | 6.4 | 9.8 | 7.2 | 9.0 | 7.7 | 4.1 | 6.4 | 5.8 | 0.0 | 7.4 |
| 1991 | \% | 6.9 | 6.5 | 7.6 | 6.8 | 7.8 | 7.0 | 4.5 | 5.4 | 4.5 | 0.0 | 7.2 |
| 1996 | \% | 8.1 | 7.3 | 9.7 | 8.1 | 8.2 | 8.2 | 9.1 | 8.1 | 6.7 | 5.3 | 8.0 |
| 2001 | \% | 6.2 | 5.8 | 6.8 | 6.0 | 4.9 | 6.8 | 7.5 | 7.1 | 3.7 | 0.0 | 5.8 |

a Includes doctoral recipients for whom sex is reported.
b Includes Native Hawaiians/ Other Pacific Islanders through 2000, but excludes them in 2001 per revised OMB guidelines issued for 2001.
c Includes Alaskan Natives.

## Table 28. Postdoctoral location of non-U.S. citizen doctorate recipients with postgraduation commitments by major field and visa status, 2001

| Field | Permanent visa |  |  |  |  | Temporary visa |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of responses | U.S. location |  | Foreign location |  | Number of responses | U.S. location |  | Foreign location |  |
|  |  | Employment $\%$ | Study | $\underset{\%}{\text { Employment }}$ | Study |  | Employment | Study | Employment | Study |
| All fields | 1,139 | 63.3 | 29.5 | 5.6 | 1.6 | 6,552 | 43.6 | 28.4 | 21.9 | 6.1 |
| Physical Sciences ${ }^{\text {a }}$ | 222 | 58.6 | 38.3 | 0.9 | 2.3 | 1,593 | 42.9 | 39.2 | 9.4 | 8.5 |
| Physics \& Astronomy | 46 | 43.5 | 47.8 | 0.0 | 8.7 | 391 | 40.7 | 41.2 | 6.9 | 11.3 |
| Chemistry | 74 | 50.0 | 48.6 | 0.0 | 1.4 | 479 | 34.7 | 55.7 | 5.6 | 4.0 |
| Earth, Atmospheric, \& Marine Sciences | 26 | 61.5 | 38.5 | 0.0 | 0.0 | 171 | 28.7 | 43.3 | 17.0 | 11.1 |
| Mathematics | 38 | 63.2 | 34.2 | 2.6 | 0.0 | 303 | 41.9 | 33.3 | 11.6 | 13.2 |
| Computer Science | 38 | 86.8 | 10.5 | 2.6 | 0.0 | 249 | 73.1 | 8.8 | 12.9 | 5.2 |
| Engineering | 197 | 83.2 | 11.2 | 5.6 | 0.0 | 1,853 | 64.6 | 17.5 | 15.3 | 2.6 |
| Life Sciences | 274 | 31.8 | 63.1 | 2.6 | 2.6 | 1,365 | 16.1 | 56.0 | 21.3 | 6.6 |
| Biological Sciences | 224 | 25.0 | 70.5 | 1.8 | 2.7 | 851 | 12.0 | 72.3 | 9.6 | 6.1 |
| Health Sciences | 31 | 61.3 | 32.3 | 6.5 | 0.0 | 214 | 33.2 | 19.6 | 38.3 | 8.9 |
| Agricultural Sciences | 19 | 63.2 | 26.3 | 5.3 | 5.3 | 300 | 15.7 | 35.7 | 42.3 | 6.3 |
| Social Sciences | 152 | 69.1 | 21.1 | 9.9 | 0.0 | 751 | 43.7 | 11.6 | 37.2 | 7.6 |
| Psychology | 52 | 51.9 | 42.3 | 5.8 | 0.0 | 100 | 35.0 | 33.0 | 19.0 | 13.0 |
| Anthropology | 14 | 64.3 | 21.4 | 14.3 | 0.0 | 37 | 32.4 | 16.2 | 21.6 | 29.7 |
| Economics | 33 | 81.8 | 6.1 | 12.1 | 0.0 | 372 | 48.7 | 5.1 | 42.5 | 3.8 |
| Political Science/International Relations | 18 | 77.8 | 11.1 | 11.1 | 0.0 | 77 | 36.4 | 10.4 | 39.0 | 14.3 |
| Sociology | 12 | 83.3 | 8.3 | 8.3 | 0.0 | 49 | 44.9 | 20.4 | 30.6 | 4.1 |
| Other Social Sciences | 23 | 78.3 | 8.7 | 13.0 | 0.0 | 116 | 43.1 | 9.5 | 42.2 | 5.2 |
| Humanities | 165 | 81.2 | 8.5 | 8.5 | 1.8 | 369 | 46.3 | 7.9 | 38.8 | 7.0 |
| History | 17 | 64.7 | 17.6 | 11.8 | 5.9 | 56 | 28.6 | 8.9 | 50.0 | 12.5 |
| English Language \& Literature | 20 | 75.0 | 5.0 | 20.0 | 0.0 | 36 | 44.4 | 8.3 | 41.7 | 5.6 |
| Foreign Language \& Literature | 47 | 91.5 | 2.1 | 4.3 | 2.1 | 65 | 61.5 | 10.8 | 24.6 | 3.1 |
| Other Humanities | 81 | 80.2 | 11.1 | 7.4 | 1.2 | 212 | 46.7 | 6.6 | 39.6 | 7.1 |
| Education | 62 | 75.8 | 11.3 | 11.3 | 1.6 | 271 | 22.9 | 5.5 | 61.6 | 10.0 |
| Teacher Education | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 14 | 14.3 | 0.0 | 85.7 | 0.0 |
| Teaching Fields | 18 | 88.9 | 0.0 | 11.1 | 0.0 | 68 | 19.1 | 4.4 | 70.6 | 5.9 |
| Other Education | 43 | 69.8 | 16.3 | 11.6 | 2.3 | 189 | 24.9 | 6.3 | 56.6 | 12.2 |
| Professional/Other Fields | 67 | 80.6 | 4.5 | 11.9 | 3.0 | 350 | 56.3 | 4.3 | 35.1 | 4.3 |
| Business \& Management | 34 | 85.3 | 5.9 | 5.9 | 2.9 | 216 | 66.2 | 0.9 | 30.6 | 2.3 |
| Communications | 11 | 81.8 | 9.1 | 9.1 | 0.0 | 47 | 44.7 | 10.6 | 42.6 | 2.1 |
| Other Professional Fields | 22 | 72.7 | 0.0 | 22.7 | 4.5 | 87 | 37.9 | 9.2 | 42.5 | 10.3 |

a Includes mathematics and computer sciences.
Source: NSF/NIH/NEH/USED/USDA/NASA, Survey of Earned Doctorates

Table 29. Postdoctoral location of non-U.S. citizen doctorate recipients with postgraduation commitments by visa status for selected years, 1981-2001

|  |  | All non-U.S. citizen | Permanent visa | Temporary visa |
| :---: | :---: | :---: | :---: | :---: |
| All definite commitments |  |  |  |  |
| 1981 | N | 3,409 | 786 | 2,623 |
| 1986 | N | 4,278 | 822 | 3,456 |
| 1991 | N | 6,272 | 983 | 5,289 |
| 1996 | N | 7,598 | 2,121 | 5,477 |
| 2001 | N | 7,755 | 1,145 | 6,610 |
| Definite commitments with response to location |  |  |  |  |
| $1981$ | N | 3,409 | 786 | 2,623 |
| 1986 | N | 4,278 | 822 | 3,456 |
| 1991 | N | 6,272 | 983 | 5,289 |
| 1996 | N | 7,598 | 2,121 | 5,477 |
| 2001 | N | 7,724 | 1,141 | 6,583 |
| U.S. location |  |  |  |  |
| 1981 | \% | 55.2 | 92.4 | 41.1 |
| 1986 | \% | 60.3 | 84.8 | 54.4 |
| 1991 | \% | 63.4 | 86.5 | 59.1 |
| 1996 | \% | 70.2 | 92.1 | 61.8 |
| 2001 | \% | 75.0 | 92.7 | 72.0 |
| Foreign location |  |  |  |  |
| 1981 | \% | 44.8 | 7.6 | 58.9 |
| 1986 | \% | 39.7 | 15.2 | 45.6 |
| 1991 | \% | 36.6 | 13.5 | 40.9 |
| 1996 | \% | 29.8 | 7.9 | 38.2 |
| 2001 | \% | 25.0 | 7.3 | 28.0 |

[^18]
## APPENDICES

## APPENDIX A: The Eight Basic Tables, 2001

Appendix A includes the following eight tables:
A-1 Number of doctorate recipients, by sex and subfield, 2001
A-2 Number of doctorate recipients, by citizenship, race/ethnicity, and subfield, 2001
A-3 Statistical profile of doctorate recipients, by major field, 2001
A-4 Statistical profile of doctorate recipients, by race/ethnicity and citizenship, 2001
A-5 Sources of graduate school support for doctorate recipients, by broad field and sex, 2001

A-6 State of doctoral institution of doctorate recipients, by broad field and sex, 2001
A-7 Institutions granting doctorates, by major field, 2001
A-8 Top 50 doctorate granting institutions, 2001

TABLE A-1 and TABLE A-2: Tables A-1 and A-2 display data for the most recent year by subfield of doctorate. Field groupings may differ from those in reports published by Federal sponsors of the Survey of Earned Doctorates (SED). 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 listed.

Table A-1 presents data by doctoral specialty and sex. 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.

TABLE A-3: Table A-3 is composed of three 2-page tables. The first table (A-3a) includes data on all research doctorate recipients from the most recent year; the other two tables (A-3b and A-3c) present the same data by sex. Field groupings may differ from those in reports published by Federal sponsors of the SED. Terms requiring definition are as follows:

- 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 Age at Doctorate: One-half of the respondents received the doctorate at or before this age. A recipient's age is obtained by subtracting the month/year of birth from the month/year of doctorate (see note on next page).
- Median Time Lapse: "Total Time" refers to the total calendar time elapsed between the month/year of baccalaureate and the month/year of doctorate. "Registered Time" refers to the actual time in attendance at colleges and universities between receipt of the baccalaureate and the doctorate.
- Postgraduation Plans: Each year's doctorate recipients provide information on postgraduation employment or study plans in response to items B1 through B9 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, although results vary by sector. (The SDR is a follow-up employment survey of a sample of doctorate recipients in science, engineering, and, until 1995, humanities fields.)

In Table A-3 the postgraduation plans of doctorate recipients are grouped as follows: "Postdoctoral Study Plans" (fellowship, research internship, traineeship, other), "Planned Employment after Doctorate" (educational institution, industry, etc.), and "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, 31.4 percent of all agricultural sciences doctorate recipients had postdoctoral study plans, 57.4 percent planned to be employed, and 11.1 percent did not report their post-graduation plans, totaling 99.9 percent. The missing .1 percent is due to the fact that the exact figure for each type of postdoctoral plans is not exact, but has been rounded (e.g. the actual figure for employment plans is 57.412935 which rounds to 57.4 ). The postdoctoral study row is further subdivided by type of study or appointment (fellowships, research associateships, traineeships, and other study). The percentages in these subdivisions sum to the percent of respondents in the given column who reported plans for postdoctoral study. The employment row is similarly subdivided by type of employer. The percentages for these rows add to percentage of respondents in the given column 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 B1: "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 B1: "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.)

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

| New England: | Connecticut, Maine, Massachusetts, New Hampshire, <br> Rhode Island, Vermont |
| :--- | :--- |
| Middle Atlantic: | New Jersey, New York, Pennsylvania |
| East North Central: | Illinois, Indiana, Michigan, Ohio, Wisconsin |
| West North Central: | Iowa, Kansas, Minnesota, Missouri, Nebraska, North <br> Dakota, South Dakota |
| South Atlantic: | Delaware, District of Columbia, Florida, Georgia, <br> Maryland, North Carolina, South Carolina, Virginia, West <br> Virginia |
| East South Central: | Alabama, Kentucky, Mississippi, Tennessee |
| West South Central: | Arkansas, Louisiana, Oklahoma, Texas |
| Mountain: | Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, |
| Pacific \& Insular: | Utah, Wyoming |$\quad$| 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.

The racial/ethnic question has undergone several revisions over the years. In 2001, 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.

In the section of "Doctoral Program Support" a recipient counts in more than one category if support was received from multiple sources. Because a student counts more than once for 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 in 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 A11 on financial resources used in support of the respondent's doctoral program, by broad field and sex of recipient. Field groupings may differ from those in reports published by Federal sponsors of the SED.

A recipient counts in more than one category in Table A-5 if more than one financial resource was reported. Because a student counts once for each of his/her financial resources, the vertical percentages sum to more than 100 percent. (Data on the primary financial resources for doctorate recipients are presented in the body of the report.) Please consult Appendix C: Technical Notes for additional information on changes in the coding of Sources of Support/Financial Resources.

TABLE A-6: Table A-6 shows, by broad field and sex, the number of persons receiving a research 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 Appendix E of the Summary Report for a description of field groupings as reported in this table; see the questionnaire's Specialties List in Appendix D of the Summary Report for the names and codes of the subfields included.

TABLE A-7: Table A-7 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) that awarded research 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.

TABLE A-8: Table A-8 presents the 50 doctorate granting institutions which conferred the greatest number of doctorates in AY 2001. The number of doctorate degrees granted is also shown for each ranked institution.

APPENDIX TABLE A-1. Number of doctorate recipients, by sex and subfield, 2001

| Subfield of doctorate | Number of doctorates |  |  |
| :---: | :---: | :---: | :---: |
|  | Total ${ }^{\text {a }}$ | Men | Women |
| TOTAL ALL FIELDS | 40,744 | 22,769 | 17,901 |
| PHYSICAL SCIENCES | 5,970 | 4,460 | 1,501 |
| MATHEMATICS | 1,006 | 730 | 276 |
| Applied Mathematics | 214 | 158 | 56 |
| Algebra | 67 | 48 | 19 |
| Analysis \& Functional Analysis | 91 | 71 | 20 |
| Geometry | 40 | 33 | 7 |
| Logic | 24 | 18 | 6 |
| Number Theory | 35 | 27 | 8 |
| Mathematical Statistics | 198 | 135 | 63 |
| Topology | 53 | 38 | 15 |
| Computing Theory \& Practice | 11 | 9 | 2 |
| Operations Research | 14 | 12 | 2 |
| Mathematics, General | 156 | 119 | 37 |
| Mathematics, Other | 103 | 62 | 41 |
| COMPUTER SCIENCE | 826 | 668 | 155 |
| Computer Science | 687 | 573 | 111 |
| Information Sciences \& Systems | 83 | 55 | 28 |
| Computer/Info Science, Other | 56 | 40 | 16 |
| PHYSICS \& ASTRONOMY | 1,379 | 1,181 | 196 |
| Astronomy | 89 | 68 | 21 |
| Astrophysics | 97 | 77 | 20 |
| Acoustics | 10 | 9 | 1 |
| Chemical \& Atomic/Molecular | 81 | 74 | 7 |
| Elementary Particles | 121 | 112 | 9 |
| Fluids | 8 | 7 | 1 |
| Nuclear | 79 | 66 | 13 |
| Optics | 107 | 93 | 14 |
| Plasma \& High-Temperature | 39 | 36 | 3 |
| Polymer | 18 | 13 | 5 |
| Solid State \& Low-Temperature | 294 | 262 | 32 |
| Physics, General | 207 | 182 | 23 |
| Physics, Other | 229 | 182 | 47 |
| CHEMISTRY | 1,979 | 1,348 | 628 |
| Analytical | 333 | 211 | 122 |
| Inorganic | 280 | 188 | 91 |
| Nuclear | 4 | 4 | 0 |
| Organic | 521 | 388 | 132 |
| Medicinal/Pharmaceutical | 115 | 69 | 45 |
| Physical | 286 | 194 | 92 |
| Polymer | 106 | 73 | 33 |
| Theoretical | 40 | 34 | 6 |
| Chemistry, General | 203 | 130 | 73 |
| Chemistry, Other | 91 | 57 | 34 |
| EARTH, ATMOS., \& MARINE SCI. | 780 | 533 | 246 |
| Atmospheric Physics \& Chemistry | 33 | 24 | 9 |
| Atmospheric Dynamics | 17 | 13 | 4 |
| Meteorology | 20 | 18 | 2 |
| Atmos. Sci./Meteorology, General | 34 | 23 | 10 |
| Atmos. Sci./Meteorology, Other | 12 | 9 | 3 |
| Geology | 115 | 77 | 38 |
| Geochemistry | 42 | 31 | 11 |
| Geophysics \& Seismology | 88 | 66 | 22 |
| Paleontology | 16 | 12 | 4 |


| Subfield of doctorate | Number of doctorates |  |  |
| :---: | :---: | :---: | :---: |
|  | Total ${ }^{\text {a }}$ | Men | Women |
| Mineralogy, Petrology | 15 | 11 | 4 |
| Stratigraphy, Sedimentation | 13 | 10 | 3 |
| Geomorphology \& Glacial Geology | 10 | 7 | 3 |
| Geological \& Related Sci., General | 16 | 10 | 6 |
| Geological \& Related Sci., Other | 34 | 24 | 10 |
| Environmental Science | 120 | 72 | 48 |
| Hydrology \& Water Resources | 45 | 31 | 14 |
| Oceanography | 85 | 54 | 31 |
| Marine Sciences | 34 | 20 | 14 |
| Misc. Physical Sciences, Other | 31 | 21 | 10 |
| ENGINEERING | 5,502 | 4,564 | 925 |
| Aerospace, Aeronautic., Astronautic. | 203 | 174 | 28 |
| Agricultural | 52 | 44 | 8 |
| Bioengineering \& Biomedical | 232 | 164 | 67 |
| Ceramic Sciences | 17 | 14 | 3 |
| Chemical | 631 | 475 | 155 |
| Civil | 499 | 416 | 82 |
| Communications | 47 | 35 | 12 |
| Computer | 183 | 150 | 33 |
| Electrical, Electronics | 1,347 | 1,187 | 158 |
| Engineering Mechanics | 75 | 70 | 5 |
| Engineering Physics | 22 | 20 | 2 |
| Engineering Science | 53 | 44 | 9 |
| Environmental Health Engineering | 94 | 65 | 29 |
| Industrial/Manufacturing | 205 | 160 | 44 |
| Materials Science | 450 | 350 | 99 |
| Mechanical | 878 | 789 | 86 |
| Metallurgical | 32 | 29 | 3 |
| Mining \& Mineral | 10 | 8 | 2 |
| Nuclear | 75 | 68 | 6 |
| Ocean | 28 | 25 | 3 |
| Operations Research | 55 | 38 | 17 |
| Petroleum | 37 | 29 | 7 |
| Polymer/Plastics | 58 | 40 | 18 |
| Systems | 46 | 39 | 7 |
| Engineering, General | 26 | 22 | 4 |
| Engineering, Other | 147 | 109 | 38 |
| LIFE SCIENCES | 8,296 | 4,363 | 3,908 |
| BIOLOGICAL SCIENCES | 5,678 | 3,125 | 2,545 |
| Biochemistry | 726 | 414 | 309 |
| Biomedical Sciences | 154 | 72 | 81 |
| Biophysics | 162 | 115 | 47 |
| Biotechnology Research | 9 | 6 | 3 |
| Bacteriology | 17 | 7 | 10 |
| Plant Genetics | 31 | 16 | 15 |
| Plant Pathology | 31 | 20 | 11 |
| Plant Physiology | 45 | 25 | 20 |
| Botany, Other | 75 | 42 | 33 |
| Anatomy | 29 | 17 | 12 |
| Biometrics and Biostatistics | 90 | 44 | 46 |
| Cell Biology | 312 | 165 | 147 |
| Ecology | 336 | 210 | 126 |
| Developmental Biology/Embryology | 106 | 52 | 53 |
| Endocrinology | 17 | 10 | 7 |
| Entomology | 89 | 59 | 30 |
| Biological Immunology | 266 | 144 | 122 |
| Molecular Biology | 707 | 383 | 324 |
| Microbiology | 397 | 213 | 183 |
| Neuroscience | 482 | 282 | 199 |
| Nutritional Sciences | 135 | 36 | 99 |

APPENDIX TABLE A-1. Number of doctorate recipients, by sex and subfield, 2001, continued

| Subfield of doctorate | Number of doctorates |  |  |
| :---: | :---: | :---: | :---: |
|  | Total ${ }^{\text {a }}$ | Men | Women |
| Parasitology | 22 | 12 | 10 |
| Toxicology | 133 | 71 | 62 |
| Human \& Animal Genetics | 197 | 91 | 106 |
| Human \& Animal Pathology | 116 | 60 | 56 |
| Human \& Animal Pharmacology | 258 | 143 | 115 |
| Human \& Animal Physiology | 214 | 124 | 90 |
| Zoology, Other | 103 | 63 | 40 |
| Biological Sciences, General | 197 | 110 | 87 |
| Biological Sciences, Other | 222 | 119 | 102 |
| HEALTH SCIENCES | 1,613 | 574 | 1,027 |
| Speech-Lang. Pathology \& Audiology | 92 | 19 | 73 |
| Environmental Health | 57 | 31 | 24 |
| Health Systems/Services Admin. | 49 | 24 | 25 |
| Public Health | 211 | 66 | 143 |
| Epidemiology | 167 | 53 | 113 |
| Exercise Physiology/Sci., Kinesiology | 153 | 92 | 61 |
| Nursing | 361 | 24 | 335 |
| Pharmacy | 147 | 90 | 57 |
| Rehabilitation/Therapeutic Services | 118 | 49 | 66 |
| Veterinary Medicine | 60 | 34 | 25 |
| Health Sciences, General | 35 | 15 | 20 |
| Health Sciences, Other | 163 | 77 | 85 |
| AGRICULTURAL SCIENCES | 1,005 | 664 | 336 |
| Agricultural Economics | 154 | 108 | 46 |
| Agricultural Business \& Management | 3 | 1 | 2 |
| Animal Breeding \& Genetics | 16 | 12 | 4 |
| Animal Nutrition | 45 | 39 | 6 |
| Dairy Science | 2 | 2 | 0 |
| Poultry Science | 11 | 6 | 5 |
| Fisheries Science \& Management | 44 | 34 | 9 |
| Animal Sciences, Other | 71 | 51 | 19 |
| Agronomy \& Crop Science | 75 | 54 | 21 |
| Plant Breeding \& Genetics | 37 | 27 | 10 |
| Plant Pathology | 51 | 35 | 16 |
| Plant Sciences, Other | 23 | 14 | 9 |
| Food Engineering | 13 | 6 | 7 |
| Food Sciences, Other | 128 | 64 | 62 |
| Soil Chemistry/Microbiology | 23 | 8 | 15 |
| Soil Sciences, Other | 55 | 40 | 15 |
| Horticulture Science | 37 | 24 | 13 |
| Forest Biology | 27 | 20 | 7 |
| Forest Engineering | 0 | 0 | 0 |
| Forest Management | 13 | 9 | 4 |
| Wood Sci. \& Pulp/Paper Tech. | 20 | 15 | 4 |
| Conservation/Renewable Nat. Res. | 32 | 14 | 18 |
| Forestry \& Related Sci., Other | 48 | 32 | 16 |
| Wildlife/Range Management | 40 | 26 | 14 |
| Agricultural Sciences, General | 2 | 2 | 0 |
| Agricultural Sciences, Other | 35 | 21 | 14 |
| SOCIAL SCIENCES \& PSYCHOLOGY | 6,825 | 3,109 | 3,707 |
| SOCIAL SCIENCES | 3,392 | 1,975 | 1,411 |
| Anthropology | 408 | 165 | 243 |
| Area Studies | 17 | 9 | 8 |
| Criminology | 62 | 33 | 29 |
| Demography/Population Studies | 12 | 4 | 8 |
| Economics | 917 | 657 | 258 |
| Econometrics | 13 | 11 | 2 |
| Geography | 186 | 120 | 66 |


|  |  |  |  |
| :--- | ---: | ---: | ---: |
| Number of doctorates |  |  |  |
|  | Total a |  | Men | Women

APPENDIX TABLE A-1. Number of doctorate recipients, by sex and subfield, 2001, continued

| Subfield of doctorate | Number of doctorates |  |  |
| :---: | :---: | :---: | :---: |
|  | Total ${ }^{\text {a }}$ | Men | Women |
| Chinese | 16 | 9 | 7 |
| Japanese | 17 | 5 | 12 |
| Hebrew | 6 | 3 | 3 |
| Arabic | 6 | 2 | 4 |
| Other Language \& Literature | 61 | 28 | 33 |
| OTHER HUMANITIES | 195 | 86 | 109 |
| Humanities, General | 29 | 18 | 11 |
| Humanities, Other | 166 | 68 | 98 |
| EDUCATION | 6,324 | 2,234 | 4,085 |
| RESEARCH \& ADMINISTRATION | 4,966 | 1,764 | 3,200 |
| Curriculum \& Instruction | 881 | 254 | 626 |
| Educational Admin. \& Supervision | 835 | 333 | 502 |
| Educational Leadership | 1,213 | 484 | 729 |
| Educ./Instruct. Media Design | 140 | 65 | 75 |
| Educ. Stat./Research Methods | 65 | 20 | 45 |
| Educ. Assess., Test., \& Meas. | 44 | 25 | 19 |
| Educational Psychology | 280 | 90 | 190 |
| School Psychology | 123 | 27 | 96 |
| Social/Phil. Found. Of Educ. | 141 | 56 | 85 |
| Special Education | 230 | 50 | 180 |
| Counseling Educ./Couns. \& Guidance | 210 | 70 | 139 |
| Higher Educ./Evaluation \& Research | 511 | 207 | 304 |
| Pre-elementary/Early Childhood | 47 | 6 | 41 |
| Elementary Education | 55 | 8 | 47 |
| Secondary Education | 22 | 10 | 12 |
| Adult \& Continuing Education | 169 | 59 | 110 |
| TEACHING FIELDS | 720 | 267 | 453 |
| Agricultural Education | 22 | 11 | 11 |
| Art Education | 31 | 6 | 25 |
| Business Education | 19 | 6 | 13 |
| English Education | 56 | 23 | 33 |
| Foreign Languages Education | 47 | 15 | 32 |
| Health Education | 65 | 18 | 47 |
| Home Economics Education | 8 | 0 | 8 |
| Technical/Industrial Arts Education | 16 | 7 | 9 |
| Mathematics Education | 81 | 34 | 47 |
| Music Education | 62 | 29 | 33 |
| Nursing Education | 5 | 1 | 4 |
| Physical Education and Coaching | 80 | 42 | 38 |
| Reading Education | 72 | 6 | 66 |
| Science Education | 71 | 34 | 37 |


| Subfield of doctorate | Number of doctorates |  |  |
| :---: | :---: | :---: | :---: |
|  | Total ${ }^{\text {a }}$ | Men | Women |
| Social Science Education | 12 | 6 | 6 |
| Technical Education | 10 | 7 | 3 |
| Trade \& Industrial Education | 7 | 4 | 3 |
| Teacher Ed./Spec. Acad. \& Voc., Other | 56 | 18 | 38 |
| OTHER EDUCATION | 638 | 203 | 432 |
| Education, General | 264 | 75 | 188 |
| Education, Other | 374 | 128 | 244 |
| PROFESSIONAL/OTHER FIELDS | 2,238 | 1,280 | 952 |
| BUSINESS AND MANAGEMENT | 1,049 | 691 | 356 |
| Accounting | 115 | 73 | 41 |
| Banking/Financial Support Services | 66 | 55 | 11 |
| Business Admin. \& Management | 343 | 232 | 111 |
| Business/Managerial Economics | 50 | 40 | 10 |
| International Business | 29 | 16 | 13 |
| Mgmt. Info. Sys./Bus. Data Proc. | 98 | 72 | 26 |
| Marketing Management \& Research | 113 | 65 | 48 |
| Operations Research | 39 | 32 | 7 |
| Organizational Behavior | 117 | 59 | 57 |
| Bus. Mgmt./Admin. Serv., General | 22 | 11 | 11 |
| Bus. Mgmt./Admin. Serv., Other | 57 | 36 | 21 |
| COMMUNICATIONS | 389 | 187 | 201 |
| Communications Research | 60 | 31 | 29 |
| Mass Communications | 153 | 85 | 68 |
| Communications Theory | 39 | 18 | 21 |
| Communications, General | 76 | 28 | 48 |
| Communications, Other | 61 | 25 | 35 |
| OTHER PROFESSIONAL FIELDS | 800 | 402 | 395 |
| Architectural/Environmental Design | 67 | 39 | 28 |
| Home Economics | 20 | 2 | 18 |
| Law | 32 | 16 | 15 |
| Library Science | 40 | 10 | 29 |
| Parks/Recreation/Leisure/Fitness | 41 | 25 | 16 |
| Public Administration | 96 | 55 | 41 |
| Social Work | 259 | 73 | 185 |
| Theology/Religious Education | 195 | 162 | 33 |
| Professional Fields, General | 7 | 5 | 2 |
| Professional Fields, Other | 43 | 15 | 28 |
| OTHER FIELDS | 0 | 0 | 0 |

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates.
a Totals include doctorate recipients whose gender was unknown (total is 74).
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

| Subfield of doctorate | Total doctorate recipients ${ }^{\text {b }}$ | Non-U.S. citizens temporary visas | U.S. citizens and non-U.S. with permanent visas a |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | American Indian c | Asian ${ }^{\text {d }}$ | Black | White | Puerto Rican | Mexican <br> American | Other Hispanic | Other/ Unknown Race ${ }^{e}$ |
| TOTAL ALL FIELDS | 40,744 | 9,780 | 28,729 | 151 | 2,154 | 1,721 | 22,587 | 301 | 401 | 560 | 854 |
| PHYSICAL SCIENCES | 5,970 | 2,256 | 3,449 | 15 | 340 | 93 | 2,787 | 20 | 29 | 54 | 111 |
| MATHEMATICS | 1,006 | 435 | 522 | 2 | 48 | 19 | 427 | 2 | 6 | 7 | 11 |
| Applied Mathematics | 214 | 97 | 115 | 0 | 13 | 8 | 88 | 0 | 0 | 4 | 2 |
| Algebra | 67 | 27 | 40 | 0 | 3 | 0 | 33 | 1 | 3 | 0 | 0 |
| Analysis \& Functional Analysis | 91 | 52 | 38 | 0 | 2 | 0 | 36 | 0 | 0 | 0 | 0 |
| Geometry | 40 | 27 | 13 | 0 | 0 | 0 | 12 | 0 | 0 | 1 | 0 |
| Logic | 24 | 6 | 16 | 0 | 3 | 0 | 11 | 0 | 0 | 1 | 1 |
| Number Theory | 35 | 16 | 19 | 0 | 2 | 0 | 16 | 0 | 0 | 0 | 1 |
| Mathematical Statistics | 198 | 96 | 94 | 2 | 13 | 4 | 71 | 0 | 1 | 0 | 3 |
| Topology | 53 | 23 | 29 | 0 | 0 | 0 | 27 | 0 | 1 | 1 | 0 |
| Computing Theory \& Practice | 11 | 4 | 6 | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 0 |
| Operations Research | 14 | 8 | 6 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 |
| Mathematics, General | 156 | 46 | 76 | 0 | 7 | 5 | 60 | 0 | 1 | 0 | 3 |
| Mathematics, Other | 103 | 33 | 70 | 0 | 4 | 2 | 62 | 1 | 0 | 0 | 1 |
| COMPUTER SCIENCE | 826 | 356 | 420 | 1 | 61 | 15 | 319 | 1 | 2 | 5 | 16 |
| Computer Science | 687 | 315 | 330 | 1 | 56 | 8 | 248 | 1 | 2 | 2 | 12 |
| Information Sciences \& Systems | 83 | 21 | 55 | 0 | 3 | 4 | 44 | 0 | 0 | 1 | 3 |
| Computer/Info Science, Other | 56 | 20 | 35 | 0 | 2 | 3 | 27 | 0 | 0 | 2 | 1 |
| PHYSICS \& ASTRONOMY | 1,379 | 533 | 799 | 1 | 75 | 12 | 658 | 3 | 9 | 10 | 31 |
| Astronomy | 89 | 22 | 59 | 0 | 1 | 0 | 53 | 0 | 3 | 0 | 2 |
| Astrophysics | 97 | 31 | 64 | 1 | 5 | 1 | 50 | 0 | 0 | 4 | 3 |
| Acoustics | 10 | 3 | 7 | 0 | 1 | 0 | 6 | 0 | 0 | 0 | 0 |
| Chemical \& Atomic/Molecular | 81 | 28 | 52 | 0 | 1 | 1 | 46 | 1 | 0 | 1 | 2 |
| Elementary Particles | 121 | 54 | 67 | 0 | 7 | 0 | 53 | 0 | 0 | 1 | 6 |
| Fluids | 8 | 3 | 5 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 1 |
| Nuclear | 79 | 29 | 50 | 0 | 1 | 0 | 48 | 0 | 0 | 0 | 1 |
| Optics | 107 | 49 | 58 | 0 | 8 | 1 | 46 | 1 | 0 | 0 | 2 |
| Plasma \& High-Temperature | 39 | 12 | 27 | 0 | 2 | 1 | 24 | 0 | 0 | 0 | 0 |
| Polymer | 18 | 14 | 4 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 0 |
| Solid State \& Low-Temperature | 294 | 138 | 155 | 0 | 20 | 1 | 124 | 1 | 3 | 2 | 4 |
| Physics, General | 207 | 65 | 112 | 0 | 9 | 1 | 94 | 0 | 1 | 1 | 6 |
| Physics, Other | 229 | 85 | 139 | 0 | 19 | 6 | 108 | 0 | 1 | 1 | 4 |
| CHEMISTRY | 1,979 | 671 | 1,229 | 11 | 122 | 42 | 974 | 11 | 7 | 25 | 37 |
| Analytical | 333 | 90 | 238 | 2 | 15 | 10 | 200 | 2 | 1 | 2 | 6 |
| Inorganic | 280 | 80 | 196 | 1 | 15 | 10 | 155 | 0 | 3 | 7 | 5 |
| Nuclear | 4 | 1 | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| Organic | 521 | 180 | 333 | 1 | 43 | 11 | 254 | 4 | 1 | 8 | 11 |
| Medicinal/Pharmaceutical | 115 | 51 | 58 | 0 | 9 | 1 | 42 | 0 | 0 | 3 | 3 |
| Physical | 286 | 102 | 180 | 3 | 23 | 1 | 146 | 2 | 1 | 2 | 2 |
| Polymer | 106 | 49 | 55 | 1 | 4 | 3 | 45 | 0 | 0 | 0 | 2 |
| Theoretical | 40 | 22 | 18 | 0 | 3 | 1 | 14 | 0 | 0 | 0 | 0 |
| Chemistry, General | 203 | 56 | 97 | 2 | 3 | 4 | 77 | 2 | 1 | 3 | 5 |
| Chemistry, Other | 91 | 40 | 51 | 1 | 7 | 1 | 38 | 1 | 0 | 0 | 3 |
| EARTH, ATMOS., \& MARINE SCI. | 780 | 261 | 479 | 0 | 34 | 5 | 409 | 3 | 5 | 7 | 16 |
| Atmospheric Physics \& Chemistry | 33 | 16 | 17 | 0 | 1 | 0 | 16 | 0 | 0 | 0 | 0 |
| Atmospheric Dynamics | 17 | 8 | 9 | 0 | 1 | 0 | 8 | 0 | 0 | 0 | 0 |
| Meteorology | 20 | 6 | 13 | 0 | 1 | 0 | 11 | 0 | 0 | 0 | 1 |
| Atmos. Sci./Meteorology, General | 34 | 15 | 15 | 0 | 2 | 0 | 11 | 0 | 0 | 0 | 2 |
| Atmos. Sci./Meteorology, Other | 12 | 4 | 7 | 0 | 0 | 0 | 5 | 0 | 0 | 1 | 1 |


| Subfield of doctorate | Total doctorate recipients ${ }^{b}$ | Non-U.S. <br> citizens temporary visas | U.S. citizens and non-U.S. with permanent visas a |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | American Indian ${ }^{\text {c }}$ | Asian ${ }^{\text {d }}$ | Black | White | Puerto Rican | Mexican <br> American | Other Hispanic | Other/ Unknown Race ${ }^{e}$ |
| Geology | 115 | 25 | 88 | 0 | 4 | 0 | 79 | 0 | 2 | 1 | 2 |
| Geochemistry | 42 | 12 | 29 | 0 | 6 | 0 | 21 | 1 | 0 | 0 | 1 |
| Geophysics \& Seismology | 88 | 43 | 41 | 0 | 4 | 1 | 35 | 0 | 0 | 0 | 1 |
| Paleontology | 16 | 4 | 12 | 0 | 1 | 0 | 11 | 0 | 0 | 0 | 0 |
| Mineralogy, Petrology | 15 | 7 | 8 | 0 | 1 | 0 | 7 | 0 | 0 | 0 | 0 |
| Stratigraphy, Sedimentation | 13 | 8 | 5 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| Geomorphology \& Glacial Geology | 10 | 1 | 9 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 |
| Geological \& Related Sci., General | 16 | 6 | 9 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 |
| Geological \& Related Sci., Other | 34 | 8 | 25 | 0 | 2 | 1 | 17 | 0 | 1 | 1 | 3 |
| Environmental Science | 120 | 42 | 71 | 0 | 7 | 0 | 58 | 2 | 1 | 3 | 0 |
| Hydrology \& Water Resources | 45 | 11 | 33 | 0 | 0 | 0 | 30 | 0 | 1 | 0 | 2 |
| Oceanography | 85 | 25 | 50 | 0 | 1 | 2 | 45 | 0 | 0 | 0 | 2 |
| Marine Sciences | 34 | 11 | 23 | 0 | 3 | 1 | 17 | 0 | 0 | 1 | 1 |
| Misc. Physical Sciences, Other | 31 | 9 | 15 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 |
| ENGINEERING | 5,502 | 2,772 | 2,435 | 7 | 417 | 92 | 1,746 | 13 | 18 | 60 | 82 |
| Aerospace, Aeronautic., Astronautic. | 203 | 87 | 102 | 0 | 12 | 1 | 79 | 1 | 1 | 3 | 5 |
| Agricultural | 52 | 29 | 23 | 0 | 1 | 1 | 19 | 0 | 0 | 2 | 0 |
| Bioengineering \& Biomedical | 232 | 59 | 159 | 0 | 21 | 6 | 122 | 1 | 1 | 2 | 6 |
| Ceramic Sciences | 17 | 10 | 7 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 |
| Chemical | 631 | 272 | 325 | 0 | 45 | 15 | 248 | 2 | 0 | 5 | 10 |
| Civil | 499 | 263 | 219 | 0 | 28 | 10 | 160 | 2 | 0 | 5 | 14 |
| Communications | 47 | 34 | 13 | 0 | 4 | 0 | 8 | 0 | 0 | 1 | 0 |
| Computer | 183 | 117 | 65 | 0 | 12 | 1 | 48 | 0 | 2 | 1 | 1 |
| Electrical \& Electronics | 1,347 | 776 | 483 | 1 | 116 | 21 | 314 | 2 | 6 | 10 | 13 |
| Engineering Mechanics | 75 | 37 | 37 | 0 | 4 | 1 | 29 | 0 | 0 | 2 | 1 |
| Engineering Physics | 22 | 10 | 12 | 0 | 1 | 0 | 11 | 0 | 0 | 0 | 0 |
| Engineering Science | 53 | 29 | 22 | 1 | 4 | 2 | 14 | 0 | 0 | 1 | 0 |
| Environmental Health Engineering | 94 | 34 | 50 | 0 | 9 | 1 | 34 | 0 | 1 | 1 | 4 |
| Industrial/Manufacturing | 205 | 108 | 88 | 1 | 21 | 6 | 53 | 2 | 0 | 1 | 4 |
| Materials Science | 450 | 219 | 205 | 1 | 34 | 5 | 149 | 1 | 3 | 5 | 7 |
| Mechanical | 878 | 454 | 390 | 1 | 71 | 16 | 271 | 1 | 4 | 14 | 12 |
| Metallurgical | 32 | 19 | 13 | 0 | 3 | 1 | 9 | 0 | 0 | 0 | 0 |
| Mining \& Mineral | 10 | 5 | 5 | 0 | 1 | 0 | 3 | 0 | 0 | 1 | 0 |
| Nuclear | 75 | 25 | 43 | 1 | 4 | 0 | 34 | 0 | 0 | 3 | 1 |
| Ocean | 28 | 14 | 10 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 |
| Operations Research | 55 | 27 | 22 | 0 | 3 | 0 | 17 | 0 | 0 | 1 | 1 |
| Petroleum | 37 | 30 | 6 | 0 | 2 | 0 | 4 | 0 | 0 | 0 | 0 |
| Polymer/Plastics | 58 | 33 | 24 | 1 | 5 | 2 | 16 | 0 | 0 | 0 | 0 |
| Systems | 46 | 20 | 21 | 0 | 1 | 1 | 19 | 0 | 0 | 0 | 0 |
| Engineering, General | 26 | 5 | 12 | 0 | 2 | 1 | 7 | 0 | 0 | 1 | 1 |
| Engineering, Other | 147 | 56 | 79 | 0 | 13 | 1 | 61 | 1 | 0 | 1 | 2 |
| LIFE SCIENCES | 8,296 | 2,004 | 5,844 | 21 | 665 | 215 | 4,570 | 56 | 58 | 99 | 160 |
| BIOLOGICAL SCIENCES | 5,678 | 1,239 | 4,216 | 15 | 540 | 136 | 3,240 | 48 | 47 | 69 | 121 |
| Biochemistry | 726 | 178 | 523 | 4 | 73 | 13 | 400 | 3 | 6 | 9 | 15 |
| Biomedical Sciences | 154 | 39 | 111 | 0 | 20 | 5 | 80 | 1 | 2 | 0 | 3 |
| Biophysics | 162 | 53 | 107 | 0 | 15 | 2 | 82 | 0 | 0 | 1 | 7 |
| Biotechnology Research | 9 | 3 | 6 | 0 | 3 | 1 | 2 | 0 | 0 | 0 | 0 |
| Bacteriology | 17 | 2 | 15 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 1 |
| Plant Genetics | 31 | 7 | 22 | 0 | 1 | 0 | 20 | 0 | 1 | 0 | 0 |
| Plant Pathology | 31 | 10 | 20 | 0 | 1 | 0 | 18 | 0 | 0 | 0 | 1 |
| Plant Physiology | 45 | 19 | 25 | 0 | 2 | 0 | 22 | 0 | 0 | 0 | 1 |
| Botany, Other | 75 | 19 | 54 | 1 | 2 | 2 | 46 | 0 | 1 | 0 | 2 |
| Anatomy | 29 | 4 | 25 | 0 | 2 | 2 | 20 | 0 | 0 | 1 | 0 |
| Biometrics and Biostatistics | 90 | 28 | 54 | 0 | 14 | 3 | 34 | 1 | 0 | 0 | 2 |
| Cell Biology | 312 | 66 | 241 | 1 | 44 | 3 | 180 | 2 | 4 | 2 | 5 |
| Ecology | 336 | 44 | 286 | 1 | 6 | 1 | 265 | 2 | 4 | 2 | 5 |
| Developmental Biology/Embryology | 106 | 23 | 77 | 0 | 20 | 5 | 50 | 1 | 0 | 0 | 1 |
| Endocrinology | 17 | 4 | 13 | 0 | 3 | 0 | 9 | 1 | 0 | 0 | 0 |
| Entomology | 89 | 29 | 59 | 0 | 1 | 1 | 51 | 1 | 1 | 3 | 1 |
| Biological Immunology | 266 | 44 | 216 | 1 | 43 | 9 | 148 | 0 | 2 | 6 | 7 |
| Molecular Biology | 707 | 189 | 488 | 1 | 76 | 10 | 366 | 6 | 6 | 8 | 15 |


| Subfield of doctorate | Total doctorate recipients ${ }^{b}$ | Non-U.S. citizens temporary visas | U.S. citizens and non-U.S. with permanent visas a |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | American Indian ${ }^{\text {c }}$ | Asian ${ }^{\text {d }}$ | Black | White | Puerto <br> Rican | Mexican <br> American | Other Hispanic | Other/ <br> Unknown Race ${ }^{e}$ |
| Microbiology | 397 | 94 | 286 | 0 | 37 | 18 | 197 | 13 | 1 | 8 | 12 |
| Neuroscience | 482 | 82 | 391 | 2 | 43 | 7 | 311 | 2 | 6 | 7 | 13 |
| Nutritional Sciences | 135 | 28 | 93 | 1 | 12 | 6 | 66 | 1 | 1 | 2 | 4 |
| Parasitology | 22 | 9 | 12 | 0 | 2 | 3 | 7 | 0 | 0 | 0 | 0 |
| Toxicology | 133 | 27 | 105 | 0 | 9 | 4 | 85 | 0 | 2 | 2 | 3 |
| Human \& Animal Genetics | 197 | 31 | 157 | 0 | 22 | 6 | 121 | 2 | 0 | 2 | 4 |
| Human \& Animal Pathology | 116 | 23 | 86 | 0 | 9 | 3 | 67 | 0 | 0 | 2 | 5 |
| Human \& Animal Pharmacology | 258 | 69 | 176 | 1 | 26 | 11 | 130 | 4 | 1 | 2 | 1 |
| Human \& Animal Physiology | 214 | 39 | 168 | 1 | 17 | 10 | 126 | 2 | 2 | 5 | 5 |
| Zoology, Other | 103 | 11 | 90 | 0 | 5 | 2 | 79 | 1 | 0 | 1 | 2 |
| Biological Sciences, General | 197 | 28 | 137 | 0 | 14 | 4 | 111 | 2 | 3 | 1 | 2 |
| Biological Sciences, Other | 222 | 37 | 173 | 1 | 18 | 5 | 133 | 3 | 4 | 5 | 4 |
| HEALTH SCIENCES | 1,613 | 317 | 1,139 | 6 | 104 | 64 | 910 | 4 | 7 | 18 | 26 |
| Speech-Lang. Pathology \& Audiology | 92 | 16 | 73 | 0 | 0 | 3 | 65 | 0 | 1 | 0 | 4 |
| Environmental Health | 57 | 10 | 33 | 0 | 1 | 2 | 29 | 0 | 0 | 1 | 0 |
| Health Systems/Services Admin. | 49 | 14 | 32 | 0 | 0 | 0 | 31 | 0 | 0 | 0 | 1 |
| Public Health | 211 | 35 | 169 | 2 | 22 | 20 | 118 | 1 | 1 | 4 | 1 |
| Epidemiology | 167 | 25 | 130 | 0 | 17 | 7 | 95 | 2 | 1 | 5 | 3 |
| Exercise Physiology/Sci., Kinesiology | 153 | 24 | 120 | 1 | 5 | 4 | 107 | 0 | 1 | 1 | 1 |
| Nursing | 361 | 50 | 300 | 3 | 13 | 15 | 259 | 0 | 2 | 1 | 7 |
| Pharmacy | 147 | 74 | 62 | 0 | 23 | 2 | 36 | 0 | 0 | 0 | 1 |
| Rehabilitation/Therapeutic Services | 118 | 4 | 58 | 0 | 11 | 3 | 39 | 1 | 1 | 1 | 2 |
| Veterinary Medicine | 60 | 27 | 29 | 0 | 3 | 0 | 23 | 0 | 0 | 1 | 2 |
| Health Sciences, General | 35 | 4 | 29 | 0 | 1 | 1 | 25 | 0 | 0 | 1 | 1 |
| Health Sciences, Other | 163 | 34 | 104 | 0 | 8 | 7 | 83 | 0 | 0 | 3 | 3 |
| AGRICULTURAL SCIENCES | 1,005 | 448 | 489 | 0 | 21 | 15 | 420 | 4 | 4 | 12 | 13 |
| Agricultural Economics | 154 | 90 | 57 | 0 | 5 | 3 | 46 | 0 | 0 | 1 | 2 |
| Agricultural Business \& Management | 3 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| Animal Breeding \& Genetics | 16 | 9 | 7 | 0 | 1 | 0 | 6 | 0 | 0 | 0 | 0 |
| Animal Nutrition | 45 | 16 | 29 | 0 | 0 | 0 | 28 | 0 | 0 | 1 | 0 |
| Dairy Science | 2 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Poultry Science | 11 | 8 | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| Animal Sciences, Other | 71 | 24 | 41 | 0 | 2 | 0 | 38 | 0 | 1 | 0 | 0 |
| Agronomy \& Crop Science | 75 | 34 | 35 | 0 | 1 | 2 | 31 | 0 | 0 | 1 | 0 |
| Plant Breeding \& Genetics | 37 | 21 | 16 | 0 | 1 | 0 | 12 | 0 | 1 | 1 | 1 |
| Plant Pathology | 51 | 24 | 27 | 0 | 1 | 0 | 25 | 1 | 0 | 0 | 0 |
| Plant Sciences, Other | 23 | 10 | 12 | 0 | 0 | 1 | 10 | 0 | 0 | 1 | 0 |
| Food Engineering | 13 | 11 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Food Sciences, Other | 128 | 73 | 45 | 0 | 4 | 1 | 35 | 1 | 0 | 0 | 4 |
| Soil Chemistry/Microbiology | 23 | 9 | 14 | 0 | 1 | 1 | 11 | 0 | 1 | 0 | 0 |
| Soil Sciences, Other | 55 | 30 | 23 | 0 | 1 | 0 | 19 | 2 | 0 | 0 | 1 |
| Horticulture Science | 37 | 19 | 17 | 0 | 0 | 1 | 15 | 0 | 0 | 0 | 1 |
| Fisheries Science \& Management | 44 | 5 | 26 | 0 | 1 | 0 | 23 | 0 | 0 | 1 | 1 |
| Forest Biology | 27 | 7 | 17 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 1 |
| Forest Engineering | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Forest Management | 13 | 5 | 7 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 1 |
| Wood Sci. \& Pulp/Paper Tech. | 20 | 7 | 7 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 |
| Conservation/Renewable Nat. Res. | 32 | 9 | 20 | 0 | 1 | 3 | 16 | 0 | 0 | 0 | 0 |
| Forestry \& Related Sci., Other | 48 | 14 | 32 | 0 | 2 | 0 | 26 | 0 | 0 | 4 | 0 |
| Wildlife/Range Management | 40 | 8 | 30 | 0 | 0 | 1 | 28 | 0 | 0 | 0 | 1 |
| Agricultural Sciences, General | 2 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Agricultural Sciences, Other | 35 | 13 | 17 | 0 | 0 | 2 | 12 | 0 | 1 | 2 | 0 |
| SOCIAL SCIENCES \& PSYCHOLOGY | 6,825 | 1,081 | 5,296 | 34 | 265 | 324 | 4,226 | 66 | 85 | 128 | 168 |
| SOCIAL SCIENCES | 3,392 | 929 | 2,283 | 17 | 151 | 150 | 1,788 | 21 | 29 | 55 | 72 |
| Anthropology | 408 | 61 | 340 | 8 | 18 | 13 | 264 | 7 | 4 | 9 | 17 |
| Area Studies | 17 | 2 | 15 | 0 | 0 | 2 | 11 | 0 | 1 | 1 | 0 |
| Criminology | 62 | 6 | 54 | 1 | 3 | 0 | 47 | 0 | 0 | 1 | 2 |
| Demography/Population Studies | 12 | 0 | 12 | 0 | 0 | 2 | 9 | 0 | 1 | 0 | 0 |
| Economics | 917 | 482 | 395 | 2 | 47 | 9 | 310 | 3 | 2 | 11 | 11 |
| Econometrics | 13 | 6 | 7 | 0 | 4 | 0 | 2 | 0 | 0 | 1 | 0 |


| Subfield of doctorate | Total doctorate recipients ${ }^{\text {b }}$ | Non-U.S. citizens temporary visas | U.S. citizens and non-U.S. with permanent visas a |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | American Indian c | Asian ${ }^{\text {d }}$ | Black | White | Puerto Rican | Mexican <br> American | Other Hispanic | Other/ <br> Unknown Race ${ }^{e}$ |
| Geography | 186 | 40 | 135 | 0 | 5 | 4 | 119 | 0 | 1 | 5 | 1 |
| International Relations/Affairs | 89 | 19 | 67 | 0 | 6 | 6 | 48 | 0 | 0 | 2 | 5 |
| Political Science and Government | 659 | 115 | 508 | 4 | 22 | 40 | 410 | 3 | 4 | 5 | 20 |
| Public Policy Analysis | 138 | 26 | 96 | 0 | 4 | 11 | 76 | 0 | 1 | 3 | 1 |
| Sociology | 565 | 80 | 457 | 2 | 27 | 42 | 340 | 7 | 15 | 15 | 9 |
| Statistics | 49 | 33 | 13 | 0 | 2 | 0 | 11 | 0 | 0 | 0 | 0 |
| Urban Affairs/Studies | 80 | 24 | 48 | 0 | 3 | 8 | 34 | 0 | 0 | 0 | 3 |
| Social Sciences, General | 24 | 5 | 17 | 0 | 1 | 1 | 15 | 0 | 0 | 0 | 0 |
| Social Sciences, Other | 173 | 30 | 119 | 0 | 9 | 12 | 92 | 1 | 0 | 2 | 3 |
| PSYCHOLOGY | 3,433 | 152 | 3,013 | 17 | 114 | 174 | 2,438 | 45 | 56 | 73 | 96 |
| Clinical | 1,256 | 23 | 1,121 | 5 | 48 | 61 | 911 | 22 | 18 | 29 | 27 |
| Cognitive \& Psycholinguistics | 142 | 26 | 113 | 1 | 5 | 2 | 99 | 1 | 1 | 0 | 4 |
| Comparative | 5 | 0 | 5 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 0 |
| Counseling | 480 | 4 | 469 | 3 | 19 | 48 | 351 | 4 | 11 | 14 | 19 |
| Developmental and Child | 193 | 10 | 176 | 0 | 9 | 6 | 141 | 2 | 8 | 5 | 5 |
| Human/Individual \& Family | 135 | 16 | 114 | 0 | 1 | 7 | 100 | 0 | 1 | 3 | 2 |
| Experimental | 134 | 5 | 128 | 0 | 3 | 2 | 114 | 0 | 0 | 1 | 8 |
| Educational | 47 | 3 | 43 | 1 | 0 | 0 | 39 | 0 | 0 | 1 | 2 |
| Family \& Marriage Counseling | 45 | 4 | 40 | 0 | 0 | 2 | 36 | 1 | 0 | 0 | 1 |
| Industrial \& Organizational | 172 | 13 | 146 | 3 | 4 | 8 | 122 | 2 | 2 | 3 | 2 |
| Personality | 11 | 1 | 10 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 |
| Physiological/Psychobiology | 93 | 8 | 82 | 0 | 0 | 2 | 74 | 0 | 3 | 1 | 2 |
| Psychometrics | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Quantitative | 10 | 2 | 8 | 0 | 1 | 0 | 6 | 0 | 0 | 0 | 1 |
| School | 109 | 3 | 102 | 0 | 1 | 3 | 93 | 2 | 2 | 0 | 1 |
| Social | 198 | 14 | 180 | 1 | 6 | 11 | 146 | 5 | 4 | 4 | 3 |
| Psychology, General | 228 | 8 | 137 | 1 | 12 | 12 | 86 | 4 | 4 | 6 | 12 |
| Psychology, Other | 173 | 12 | 138 | 2 | 4 | 10 | 105 | 2 | 2 | 6 | 7 |
| HUMANITIES | 5,589 | 671 | 4,665 | 23 | 197 | 189 | 3,847 | 43 | 72 | 123 | 171 |
| GENERAL HUMANITIES | 3,798 | 482 | 3,138 | 11 | 148 | 116 | 2,615 | 25 | 48 | 56 | 119 |
| History, American | 423 | 14 | 404 | 1 | 3 | 19 | 339 | 4 | 16 | 3 | 19 |
| History, Asian | 51 | 14 | 37 | 0 | 11 | 0 | 23 | 0 | 0 | 0 | 3 |
| History, European | 245 | 18 | 226 | 0 | 1 | 1 | 207 | 0 | 1 | 2 | 14 |
| History/Philosophy of Sci. \& Tech. | 40 | 1 | 39 | 0 | 3 | 1 | 31 | 1 | 1 | 0 | 2 |
| History, General | 75 | 4 | 51 | 0 | 1 | 3 | 40 | 1 | 1 | 1 | 4 |
| History, Other | 190 | 33 | 150 | 1 | 5 | 18 | 100 | 7 | 3 | 8 | 8 |
| Classics | 54 | 4 | 48 | 0 | 0 | 0 | 48 | 0 | 0 | 0 | 0 |
| Comparative Literature | 203 | 29 | 170 | 0 | 12 | 2 | 132 | 5 | 2 | 13 | 4 |
| Linguistics | 229 | 101 | 123 | 0 | 9 | 6 | 97 | 1 | 0 | 3 | 7 |
| Speech \& Rhetorical Studies | 126 | 6 | 118 | 0 | 4 | 4 | 102 | 0 | 4 | 0 | 4 |
| Letters, General | 34 | 1 | 32 | 0 | 1 | 1 | 28 | 0 | 1 | 0 | 1 |
| Letters, Other | 94 | 6 | 82 | 1 | 0 | 3 | 71 | 1 | 1 | 1 | 4 |
| American Studies | 127 | 9 | 115 | 2 | 4 | 15 | 87 | 0 | 2 | 1 | 4 |
| Archeology | 40 | 7 | 27 | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 2 |
| Art History/Criticism/Conservation | 223 | 18 | 199 | 0 | 8 | 7 | 170 | 0 | 3 | 5 | 6 |
| Music | 784 | 111 | 614 | 3 | 49 | 16 | 517 | 2 | 8 | 6 | 13 |
| Philosophy | 413 | 51 | 328 | 1 | 5 | 5 | 293 | 2 | 4 | 7 | 11 |
| Religion | 343 | 45 | 286 | 2 | 28 | 13 | 227 | 0 | 1 | 4 | 11 |
| Drama/Theater Arts | 104 | 10 | 89 | 0 | 4 | 2 | 78 | 1 | 0 | 2 | 2 |
| LANGUAGE \& LITERATURE | 1,596 | 174 | 1,361 | 9 | 42 | 57 | 1,110 | 18 | 22 | 62 | 41 |
| American Literature | 383 | 18 | 364 | 7 | 13 | 25 | 300 | 1 | 7 | 2 | 9 |
| English Literature | 469 | 36 | 430 | 2 | 16 | 15 | 383 | 3 | 2 | 0 | 9 |
| English Language | 125 | 13 | 83 | 0 | 2 | 6 | 65 | 2 | 1 | 3 | 4 |
| French | 141 | 21 | 116 | 0 | 2 | 7 | 100 | 0 | 1 | 3 | 3 |
| German | 84 | 9 | 70 | 0 | 0 | 0 | 68 | 0 | 0 | 0 | 2 |
| Italian | 16 | 4 | 12 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 2 |
| Spanish | 233 | 49 | 176 | 0 | 1 | 2 | 97 | 12 | 9 | 53 | 2 |
| Russian | 27 | 3 | 24 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 1 |
| Slavic | 12 | 0 | 10 | 0 | 1 | 0 | 7 | 0 | 0 | 0 | 2 |
| Chinese | 16 | 7 | 7 | 0 | 1 | 0 | 5 | 0 | 0 | 1 | 0 |


| Subfield of doctorate | Total doctorate recipients ${ }^{\text {b }}$ | Non-U.S. citizens temporary visas | U.S. citizens and non-U.S. with permanent visas a |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | American Indian c | Asian ${ }^{\text {d }}$ | Black | White | Puerto Rican | Mexican <br> American | Other Hispanic | Other/ Unknown Race ${ }^{e}$ |
| Japanese | 17 | 3 | 14 | 0 | 3 | 0 | 9 | 0 | 0 | 0 | 2 |
| Hebrew | 6 | 0 | 6 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 |
| Arabic | 6 | 1 | 5 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| Other Language \& Literature | 61 | 10 | 44 | 0 | 3 | 2 | 32 | 0 | 2 | 0 | 5 |
| OTHER HUMANITIES | 195 | 15 | 166 | 3 | 7 | 16 | 122 | 0 | 2 | 5 | 11 |
| Humanities, General | 29 | 1 | 25 | 0 | 1 | 2 | 20 | 0 | 0 | 0 | 2 |
| Humanities, Other | 166 | 14 | 141 | 3 | 6 | 14 | 102 | 0 | 2 | 5 | 9 |
| EDUCATION | 6,324 | 500 | 5,431 | 42 | 145 | 667 | 4,188 | 87 | 115 | 70 | 117 |
| RESEARCH \& ADMINISTRATION | 4,966 | 331 | 4,406 | 34 | 102 | 559 | 3,405 | 75 | 93 | 53 | 85 |
| Curriculum \& Instruction | 881 | 77 | 767 | 4 | 17 | 74 | 590 | 31 | 19 | 11 | 21 |
| Educational Admin. \& Supervision | 835 | 44 | 763 | 8 | 17 | 109 | 575 | 17 | 19 | 6 | 12 |
| Educational Leadership | 1,213 | 34 | 1,105 | 14 | 12 | 172 | 843 | 5 | 30 | 11 | 18 |
| Educ./Instruct. Media Design | 140 | 15 | 125 | 1 | 3 | 12 | 105 | 0 | 1 | 1 | 2 |
| Educ. Stat./Research Methods | 65 | 7 | 58 | 0 | 2 | 3 | 51 | 0 | 0 | 1 | 1 |
| Educ. Assess., Test., \& Meas. | 44 | 10 | 33 | 0 | 3 | 3 | 26 | 0 | 0 | 0 | 1 |
| Educational Psychology | 280 | 22 | 237 | 2 | 4 | 16 | 196 | 1 | 6 | 6 | 6 |
| School Psychology | 123 | 3 | 116 | 0 | 2 | 11 | 93 | 1 | 3 | 4 | 2 |
| Social/Phil. Found. Of Educ. | 141 | 12 | 129 | 0 | 6 | 20 | 90 | 4 | 3 | 2 | 4 |
| Special Education | 230 | 26 | 199 | 1 | 12 | 18 | 156 | 1 | 1 | 3 | 7 |
| Counseling Educ./Couns. \& Guidance | 210 | 8 | 173 | 0 | 7 | 31 | 124 | 7 | 2 | 1 | 1 |
| Higher Educ./Evaluation \& Research | 511 | 42 | 458 | 2 | 12 | 61 | 362 | 7 | 6 | 2 | 6 |
| Pre-elementary/Early Childhood | 47 | 10 | 37 | 0 | 3 | 5 | 26 | 0 | 2 | 1 | 0 |
| Elementary Education | 55 | 7 | 43 | 0 | 2 | 4 | 35 | 0 | 1 | 1 | 0 |
| Secondary Education | 22 | 1 | 21 | 1 | 0 | 3 | 16 | 0 | 0 | 0 | 1 |
| Adult \& Continuing Education | 169 | 13 | 142 | 1 | 0 | 17 | 117 | 1 | 0 | 3 | 3 |
| TEACHING FIELDS | 720 | 117 | 581 | 5 | 27 | 54 | 457 | 5 | 8 | 8 | 17 |
| Agricultural Education | 22 | 2 | 19 | 1 | 1 | 7 | 10 | 0 | 0 | 0 | 0 |
| Art Education | 31 | 5 | 26 | 0 | 2 | 2 | 20 | 0 | 0 | 1 | 1 |
| Business Education | 19 | 3 | 15 | 0 | 1 | 1 | 13 | 0 | 0 | 0 | 0 |
| English Education | 56 | 18 | 37 | 0 | 2 | 0 | 32 | 0 | 1 | 1 | 1 |
| Foreign Languages Education | 47 | 17 | 29 | 0 | 6 | 1 | 17 | 1 | 1 | 2 | 1 |
| Health Education | 65 | 2 | 58 | 0 | 3 | 5 | 46 | 0 | 0 | 1 | 3 |
| Home Economics Education | 8 | 1 | 7 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 |
| Technical/Industrial Arts Education | 16 | 2 | 13 | 0 | 1 | 1 | 11 | 0 | 0 | 0 | 0 |
| Mathematics Education | 81 | 7 | 72 | 0 | 2 | 11 | 55 | 1 | 0 | 1 | 2 |
| Music Education | 62 | 12 | 46 | 1 | 1 | 4 | 36 | 1 | 0 | 0 | 3 |
| Nursing Education | 5 | 1 | 4 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 |
| Physical Education and Coaching | 80 | 13 | 65 | 0 | 1 | 4 | 55 | 0 | 2 | 0 | 3 |
| Reading Education | 72 | 10 | 61 | 0 | 3 | 6 | 48 | 0 | 2 | 1 | 1 |
| Science Education | 71 | 14 | 57 | 0 | 1 | 5 | 48 | 1 | 1 | 1 | 0 |
| Social Science Education | 12 | 4 | 8 | 0 | 2 | 0 | 6 | 0 | 0 | 0 | 0 |
| Technical Education | 10 | 2 | 8 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 |
| Trade \& Industrial Education | 7 | 0 | 7 | 0 | 0 | 0 | 6 | 0 | 1 | 0 | 0 |
| Teacher Ed./Spec. Acad. \& Voc., Other | 56 | 4 | 49 | 3 | 1 | 6 | 36 | 1 | 0 | 0 | 2 |
| OTHER EDUCATION | 638 | 52 | 444 | 3 | 16 | 54 | 326 | 7 | 14 | 9 | 15 |
| Education, General | 264 | 21 | 152 | 1 | 3 | 26 | 109 | 1 | 3 | 4 | 5 |
| Education, Other | 374 | 31 | 292 | 2 | 13 | 28 | 217 | 6 | 11 | 5 | 10 |
| PROFESSIONAL/OTHER FIELDS | 2,238 | 496 | 1,609 | 9 | 125 | 141 | 1,223 | 16 | 24 | 26 | 45 |
| BUSINESS AND MANAGEMENT | 1,049 | 275 | 707 | 2 | 58 | 61 | 542 | 2 | 11 | 15 | 16 |
| Accounting | 115 | 26 | 88 | 0 | 5 | 8 | 71 | 0 | 1 | 0 | 3 |
| Banking/Financial Support Services | 66 | 36 | 29 | 0 | 5 | 0 | 22 | 1 | 0 | 0 | 1 |
| Business Admin. \& Management | 343 | 81 | 223 | 1 | 13 | 23 | 171 | 0 | 4 | 6 | 5 |
| Business/Managerial Economics | 50 | 13 | 36 | 0 | 9 | 3 | 23 | 0 | 0 | 0 | 1 |
| International Business | 29 | 12 | 16 | 0 | 1 | 1 | 12 | 0 | 1 | 0 | 1 |
| Mgmt. Info. Sys./Bus. Data Proc. | 98 | 26 | 67 | 0 | 11 | 6 | 48 | 0 | 0 | 0 | 2 |


| Subfield of doctorate | Total doctorate recipients ${ }^{\text {b }}$ | Non-U.S. citizens temporary visas | U.S. citizens and non-U.S. with permanent visas a |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | American Indian c | Asian ${ }^{\text {d }}$ | Black | White | Puerto <br> Rican | Mexican <br> American | Other Hispanic | Other/ Unknown Race ${ }^{e}$ |
| Marketing Management \& Research | 113 | 34 | 77 | 1 | 6 | 8 | 58 | 1 | 2 | 1 | 0 |
| Operations Research | 39 | 14 | 21 | 0 | 2 | 0 | 18 | 0 | 0 | 1 | 0 |
| Organizational Behavior | 117 | 13 | 102 | 0 | 3 | 7 | 83 | 0 | 3 | 4 | 2 |
| Bus. Mgmt./Admin. Serv., General | 22 | 3 | 16 | 0 | 2 | 2 | 11 | 0 | 0 | 1 | 0 |
| Bus. Mgmt./Admin. Serv., Other | 57 | 17 | 32 | 0 | 1 | 3 | 25 | 0 | 0 | 2 | 1 |
| COMMUNICATIONS | 389 | 71 | 299 | 0 | 11 | 27 | 235 | 4 | 6 | 6 | 10 |
| Communications Research | 60 | 10 | 49 | 0 | 0 | 5 | 37 | 2 | 0 | 3 | 2 |
| Mass Communications | 153 | 38 | 114 | 0 | 5 | 13 | 91 | 0 | 2 | 0 | 3 |
| Communications Theory | 39 | 6 | 32 | 0 | 1 | 3 | 23 | 1 | 1 | 1 | 2 |
| Communications, General | 76 | 7 | 59 | 0 | 3 | 4 | 49 | 1 | 1 | 0 | 1 |
| Communications, Other | 61 | 10 | 45 | 0 | 2 | 2 | 35 | 0 | 2 | 2 | 2 |
| OTHER PROFESSIONAL FIELDS | 800 | 150 | 603 | 7 | 56 | 53 | 446 | 10 | 7 | 5 | 19 |
| Architectural Environmental Design | 67 | 30 | 32 | 1 | 4 | 1 | 25 | 0 | 0 | 0 | 1 |
| Home Economics | 20 | 10 | 9 | 0 | 1 | 0 | 8 | 0 | 0 | 0 | 0 |
| Law | 32 | 15 | 10 | 0 | 0 | 1 | 9 | 0 | 0 | 0 | 0 |
| Library Science | 40 | 9 | 29 | 1 | 3 | 1 | 22 | 0 | 1 | 1 | 0 |
| Parks/Recreation/Leisure/Fitness | 41 | 14 | 25 | 0 | 1 | 1 | 21 | 0 | 0 | 0 | 2 |
| Public Administration | 96 | 11 | 76 | 1 | 4 | 14 | 52 | 2 | 1 | 0 | 2 |
| Social Work | 259 | 18 | 228 | 2 | 12 | 22 | 170 | 5 | 2 | 3 | 12 |
| Theology/Religious Education | 195 | 34 | 157 | 1 | 27 | 8 | 113 | 3 | 3 | 1 | 1 |
| Professional Fields, General | 7 | 1 | 3 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 |
| Professional Fields, Other | 43 | 8 | 34 | 1 | 4 | 5 | 24 | 0 | 0 | 0 | 0 |
| OTHER FIELDS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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.
a Persons reporting an Hispanic ethnicity, whether singly or in combination with another race/ethnicity, are included in the respondent-selected Hispanic ethnicity category.
${ }^{b}$ Includes 2,235 individuals who did not report their citizenship at time of doctorate. See Appendix $C$ for discussion of item response rate issues.

- Includes Alaskan Natives.
d Does not include Native Hawaiians and other Pacific Islanders.
${ }^{e}$ Includes Native Hawaiians and other Pacific Islanders, respondents choosing multiple races (excluding those selecting an Hispanic ethnicity), and respondents with unknown race/ethnicity.

Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

|  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates.
a Physical Sciences includes mathematics and computer sciences.
${ }^{\mathrm{b}}$ Includes 74 respondents not reporting gender.


[^19]|  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates.
a Physical Sciences includes mathematics and computer sciences.
${ }^{\mathrm{b}}$ Includes 2-year, 4-year, and foreign colleges and universities, medical schools, and elementary/secondary schools.

|  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

c Includes only recipients with definite employment plans.

|  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates.
a Physical Sciences includes mathematics and computer sciences.

|  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

${ }^{\text {b }}$ Includes 2-year, 4-year, and foreign colleges and universities, medical schools, and elementary/secondary schools. ${ }^{\text {c Includes only recipients with definite employment plans. }}$
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

Appendix Table A-4. Statistical profile of doctorate recipients, by race/ethnicity and citizenship, 2001

| Characteristics |  | Total ${ }^{\text {a }}$ |  |  |  | American Indian ${ }^{\text {b }}$ |  |  |  | Asian ${ }^{\text {c }}$ |  |  |  | Black/African-American |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | U.S. | Non-U.S. |  | Total | U.S. | Non-U.S. |  | Total | U.S. | Non-U.S. |  | Total | U.S. | Non-U.S. |  |
|  |  |  |  | Perm. | Temp. |  |  | Perm. | Temp. |  |  | Perm. | Temp. |  |  | Perm. | Temp. |
| Total number |  | 40,744 | 26,907 | 1,822 | 9,780 | 164 | 149 | 2 | 12 | 8,061 | 1,382 | 772 | 5,885 | 2,000 | 1,604 | 117 | 265 |
| Male | \% | 55.9 | 50.5 | 54.6 | 71.4 | 47.6 | 45.0 | 100.0 | 66.7 | 66.9 | 53.6 | 54.7 | 71.6 | 43.1 | 36.6 | 71.8 | 70.2 |
| Female |  | 43.9 | 49.5 | 45.4 | 28.6 | 52.4 | 55.0 | 0.0 | 33.3 | 33.1 | 46.4 | 45.3 | 28.4 | 56.9 | 63.4 | 28.2 | 29.8 |
| Doctoral field |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Physical Sciences ${ }^{\text {e }}$ | \% | 14.7 | 11.6 | 18.0 | 23.1 | 9.1 | 8.7 | 100.0 | 0.0 | 20.5 | 14.3 | 18.4 | 22.3 | 6.6 | 5.0 | 11.1 | 14.0 |
| Engineering |  | 13.5 | 8.0 | 16.2 | 28.3 | 8.5 | 4.7 | 0.0 | 58.3 | 29.1 | 18.5 | 20.9 | 32.6 | 6.3 | 5.1 | 8.5 | 12.5 |
| Life Sciences |  | 20.4 | 20.1 | 24.6 | 20.5 | 12.8 | 14.1 | 0.0 | 0.0 | 24.0 | 31.1 | 30.4 | 21.6 | 14.1 | 11.8 | 21.4 | 24.5 |
| Social Sciences |  | 16.8 | 18.8 | 13.1 | 11.1 | 22.6 | 22.8 | 0.0 | 16.7 | 9.5 | 14.3 | 8.8 | 8.5 | 18.1 | 18.6 | 21.4 | 14.0 |
| Humanities |  | 13.7 | 16.3 | 15.6 | 6.9 | 14.6 | 15.4 | 0.0 | 8.3 | 5.8 | 9.4 | 8.7 | 4.6 | 11.0 | 11.0 | 10.3 | 11.7 |
| Education |  | 15.5 | 19.8 | 6.4 | 5.1 | 26.8 | 28.2 | 0.0 | 16.7 | 5.7 | 7.4 | 5.6 | 5.3 | 35.9 | 40.3 | 17.9 | 15.8 |
| Professional/Other |  | 5.5 | 5.6 | 6.0 | 5.1 | 5.5 | 6.0 | 0.0 | 0.0 | 5.3 | 5.0 | 7.3 | 5.1 | 8.1 | 8.1 | 9.4 | 7.5 |
| Median age at doctorate | Yrs | 33.3 | 33.9 | 34.3 | 32.3 | 38.7 | 39.7 | 28.2 | 33.1 | 32.3 | 31.2 | 33.9 | 32.3 | 37.8 | 37.7 | 39.7 | 37.3 |
| Median time lapse from baccalaureate to doctorate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total time | Yrs | 10.0 | 10.5 | 10.7 | 9.3 | 13.0 | 13.3 | 6.2 | 11.0 | 9.5 | 8.5 | 11.0 | 9.7 | 12.5 | 12.6 | 14.0 | 12.0 |
| Registered time |  | 7.5 | 7.6 | 8.0 | 7.1 | 8.0 | 8.0 | 5.2 | 6.8 | 7.3 | 7.3 | 8.4 | 7.2 | 7.9 | 7.9 | 8.3 | 7.6 |
| Doctoral program support ${ }^{\text {f }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Teaching assistantships | \% | 17.8 | 17.0 | 21.7 | 19.2 | 13.2 | 13.0 | 50.0 | 8.3 | 16.6 | 12.7 | 18.1 | 17.4 | 11.9 | 8.7 | 21.7 | 27.2 |
| Research assistantships/ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Traineeships |  | 26.3 | 19.9 | 31.9 | 43.4 | 8.6 | 8.0 | 0.0 | 16.7 | 46.4 | 31.4 | 42.2 | 50.5 | 11.7 | 9.3 | 14.2 | 25.1 |
| Fellowships/Dissertation grants |  | 20.3 | 21.0 | 20.2 | 18.5 | 27.6 | 27.5 | 50.0 | 25.0 | 18.2 | 30.3 | 18.2 | 15.4 | 31.0 | 31.9 | 22.6 | 29.3 |
| Own resources |  | 29.3 | 36.9 | 22.8 | 9.3 | 42.8 | 45.7 | 0.0 | 16.7 | 12.8 | 21.4 | 18.2 | 10.1 | 39.3 | 44.5 | 37.7 | 7.9 |
| Foreign government |  | 2.3 | 0.1 | 1.6 | 8.7 | 1.3 | 0.0 | 0.0 | 16.7 | 4.4 | 0.4 | 0.8 | 5.8 | 1.1 | 0.0 | 0.9 | 8.4 |
| Employer |  | 3.9 | 5.1 | 1.9 | 1.0 | 6.6 | 5.8 | 0.0 | 16.7 | 1.5 | 3.7 | 2.4 | 0.8 | 4.9 | 5.5 | 2.8 | 2.1 |
| Other |  | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Postdoctoral plans |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Postdoctoral study plans | \% | 25.4 | 24.6 | 29.0 | 32.8 | 19.5 | 18.8 | 0.0 | 33.3 | 32.3 | 35.3 | 28.2 | 32.3 | 22.6 | 20.4 | 29.1 | 33.6 |
| Postdoctoral employment plans | \% | 64.3 | 70.6 | 65.0 | 61.4 | 73.2 | 74.5 | 100.0 | 58.3 | 62.7 | 60.9 | 65.7 | 62.9 | 69.4 | 72.0 | 64.1 | 59.6 |
| Educational institution ${ }^{\text {f }}$ |  | 34.8 | 41.7 | 27.8 | 24.7 | 40.9 | 45.0 | 0.0 | 0.0 | 21.7 | 23.8 | 20.3 | 21.4 | 45.4 | 48.3 | 29.9 | 36.6 |
| Industry/Business |  | 18.8 | 15.8 | 28.7 | 29.3 | 14.0 | 12.8 | 50.0 | 25.0 | 34.0 | 26.8 | 38.3 | 35.2 | 10.6 | 9.5 | 22.2 | 12.5 |
| Government |  | 4.3 | 4.9 | 2.2 | 3.8 | 5.5 | 6.0 | 0.0 | 0.0 | 3.2 | 4.0 | 1.4 | 3.2 | 6.2 | 6.4 | 5.1 | 5.7 |
| Nonprofit |  | 3.4 | 4.3 | 3.0 | 1.7 | 7.3 | 6.7 | 0.0 | 16.7 | 2.0 | 3.8 | 3.0 | 1.5 | 3.4 | 3.6 | 3.4 | 1.9 |
| Other/Unknown |  | 3.2 | 3.8 | 3.3 | 2.0 | 5.5 | 4.0 | 50.0 | 16.7 | 1.8 | 2.5 | 2.6 | 1.6 | 3.9 | 4.1 | 3.4 | 3.0 |
| Postdoctoral plans unknown | \% | 10.3 | 4.8 | 6.0 | 5.8 | 7.3 | 6.7 | 0.0 | 8.3 | 5.0 | 3.8 | 6.1 | 4.8 | 8.0 | 7.5 | 6.8 | 6.8 |
| Definite postdoctoral study | \% | 19.1 | 19.1 | 19.4 | 23.2 | 12.2 | 12.1 | 0.0 | 16.7 | 22.4 | 26.3 | 19.3 | 22.0 | 15.2 | 14.3 | 15.4 | 21.1 |
| Seeking postdoctoral study |  | 6.3 | 5.4 | 9.5 | 9.6 | 7.3 | 6.7 | 0.0 | 16.7 | 9.9 | 9.0 | 8.9 | 10.3 | 7.4 | 6.1 | 13.7 | 12.5 |
| Definite employment |  | 46.6 | 51.5 | 43.2 | 44.0 | 51.8 | 54.4 | 50.0 | 25.0 | 43.3 | 40.9 | 44.8 | 43.8 | 48.0 | 51.1 | 38.5 | 35.5 |
| Seeking employment |  | 17.8 | 19.1 | 21.7 | 17.3 | 21.3 | 20.1 | 50.0 | 33.3 | 19.4 | 20.0 | 20.9 | 19.1 | 21.5 | 20.9 | 25.6 | 24.2 |
| Employment location after doctorate ${ }^{h}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. | \% | 90.6 | 97.9 | 92.4 | 67.0 | 94.1 | 97.5 | 100.0 | 0.0 | 79.0 | 96.6 | 93.9 | 73.1 | 94.8 | 99.1 | 95.6 | 56.4 |
| Foreign |  | 9.0 | 1.8 | 7.2 | 32.7 | 5.9 | 2.5 | 0.0 | 100.0 | 20.7 | 3.2 | 5.8 | 26.6 | 5.2 | 0.9 | 4.4 | 43.6 |
| Unknown |  | 0.3 | 0.3 | 0.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.2 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 |

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates.

[^20]Appendix Table A-4. Statistical profile of doctorate recipients, by race/ethnicity and citizenship, 2001, continued

| Characteristics |  | White |  |  |  | Puerto Rican | Mexican American |  |  |  | Other Hispanic |  |  |  | Other/Unknown Race ${ }^{\text {d }}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | U.S. | Non-U.S. |  | Total | Total | U.S. | Non-U.S. |  | Total | U.S. | Non-U.S. |  | Total | U.S. | Non-U.S. |  |
|  |  |  |  | Perm. | Temp. |  |  |  | Perm. | Temp. |  |  | Perm. | Temp. |  |  | Perm. | Temp. |
| Total number |  | 25,354 | 21,842 | 745 | 2,634 | 301 | 484 | 377 | 24 | 83 | 1,103 | 441 | 119 | 530 | 3,277 | 811 | 43 | 371 |
| Male | \% | 53.7 | 51.5 | 52.3 | 71.3 | 40.2 | 53.1 | 50.1 | 37.5 | 71.1 | 57.5 | 42.4 | 52.9 | 71.7 | 55.3 | 54.7 | 58.1 | 70.1 |
| Female |  | 46.3 | 48.5 | 47.7 | 28.7 | 59.8 | 46.9 | 49.9 | 62.5 | 28.9 | 42.5 | 57.6 | 47.1 | 28.3 | 42.4 | 45.3 | 41.9 | 29.6 |
| Doctoral field |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Physical Sciences ${ }^{\text {e }}$ | \% | 13.8 | 12.1 | 20.8 | 26.9 | 6.6 | 9.9 | 6.9 | 12.5 | 22.9 | 13.1 | 10.4 | 6.7 | 16.8 | 13.6 | 13.1 | 11.6 | 24.0 |
| Engineering |  | 9.5 | 7.5 | 13.6 | 23.4 | 4.3 | 7.4 | 4.5 | 4.2 | 21.7 | 14.4 | 9.8 | 14.3 | 18.7 | 12.5 | 9.4 | 14.0 | 22.1 |
| Life Sciences |  | 19.7 | 20.2 | 20.7 | 15.9 | 18.6 | 17.1 | 15.1 | 4.2 | 30.1 | 23.0 | 16.6 | 21.8 | 28.7 | 20.1 | 18.7 | 18.6 | 19.7 |
| Social Sciences |  | 18.3 | 18.9 | 13.3 | 14.6 | 21.9 | 20.0 | 19.1 | 54.2 | 14.5 | 20.2 | 23.8 | 19.3 | 16.8 | 19.0 | 19.5 | 23.3 | 14.6 |
| Humanities |  | 16.3 | 16.9 | 21.6 | 10.4 | 14.3 | 15.5 | 17.8 | 20.8 | 3.6 | 16.8 | 20.4 | 27.7 | 11.5 | 13.7 | 20.2 | 16.3 | 8.6 |
| Education |  | 17.0 | 19.0 | 5.4 | 3.6 | 28.9 | 24.8 | 30.5 | 0.0 | 6.0 | 8.1 | 14.1 | 6.7 | 3.4 | 15.5 | 13.9 | 9.3 | 6.7 |
| Professional/Other |  | 5.4 | 5.4 | 4.7 | 5.1 | 5.3 | 5.2 | 6.1 | 4.2 | 1.2 | 4.4 | 5.0 | 3.4 | 4.2 | 5.6 | 5.2 | 7.0 | 4.3 |
| Median age at doctorate | Yrs | 33.5 | 33.9 | 33.7 | 31.4 | 36.1 | 34.7 | 34.7 | 33.4 | 35.3 | 34.8 | 34.2 | 35.8 | 35.1 | 33.5 | 34.2 | 34.9 | 32.6 |
| Median time lapse from baccalaureate to doctorate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total time | Yrs | 10.1 | 10.6 | 9.8 | 8.1 | 12.0 | 11.0 | 11.0 | 9.0 | 11.8 | 10.3 | 10.0 | 11.0 | 10.3 | 10.1 | 10.6 | 10.7 | 9.1 |
| Registered time |  | 7.6 | 7.6 | 7.5 | 6.7 | 8.5 | 7.7 | 7.8 | 7.9 | 7.2 | 7.3 | 7.9 | 7.6 | 6.8 | 7.6 | 7.9 | 8.0 | 7.0 |
| Doctoral program support ${ }^{\dagger}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Teaching assistantships | \% | 18.8 | 18.1 | 25.4 | 22.8 | 9.6 | 11.6 | 12.0 | 21.7 | 6.5 | 18.6 | 17.2 | 22.9 | 18.9 | 18.2 | 16.7 | 12.1 | 21.5 |
| Research assistantships/ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Traineeships |  | 22.2 | 20.3 | 26.8 | 36.4 | 13.2 | 12.2 | 11.7 | 13.0 | 14.3 | 18.7 | 12.8 | 21.1 | 23.0 | 21.4 | 19.9 | 21.2 | 24.4 |
| Fellowships/Dissertation grants |  | 19.1 | 18.8 | 20.3 | 21.3 | 34.6 | 33.0 | 33.1 | 39.1 | 31.2 | 28.5 | 32.7 | 22.9 | 26.3 | 25.2 | 24.8 | 30.3 | 28.9 |
| Own resources |  | 34.0 | 37.3 | 24.0 | 8.8 | 36.8 | 33.3 | 39.6 | 26.1 | 5.2 | 19.2 | 33.2 | 26.6 | 6.5 | 27.6 | 34.9 | 33.3 | 4.5 |
| Foreign government |  | 1.1 | 0.0 | 1.8 | 9.8 | 0.0 | 6.7 | 0.0 | 0.0 | 40.3 | 12.8 | 0.5 | 6.4 | 24.0 | 5.1 | 0.3 | 0.0 | 20.3 |
| Employer |  | 4.7 | 5.3 | 1.6 | 1.0 | 5.5 | 3.2 | 3.6 | 0.0 | 2.6 | 2.1 | 3.7 | 0.0 | 1.4 | 2.3 | 3.2 | 3.0 | 0.0 |
| Other |  | 0.1 | 0.1 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.1 | 0.0 | 0.4 |
| Postdoctoral plans |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Postdoctoral study plans | \% | 25.6 | 24.3 | 30.3 | 35.9 | 26.2 | 28.1 | 26.0 | 41.7 | 33.7 | 27.8 | 24.7 | 26.1 | 31.5 | 8.1 | 21.7 | 20.9 | 19.7 |
| Postdoctoral employment plans | \% | 69.7 | 71.4 | 64.8 | 59.9 | 66.8 | 68.6 | 70.8 | 58.3 | 61.4 | 66.2 | 68.0 | 67.2 | 65.8 | 22.1 | 64.5 | 53.5 | 43.1 |
| Educational institution 9 |  | 40.5 | 42.5 | 31.9 | 28.5 | 44.5 | 46.5 | 48.5 | 50.0 | 36.1 | 39.3 | 41.0 | 42.9 | 38.1 | 11.4 | 33.9 | 30.2 | 21.0 |
| Industry/Business |  | 16.6 | 15.7 | 23.1 | 23.5 | 10.3 | 9.7 | 10.3 | 4.2 | 8.4 | 14.9 | 15.0 | 16.8 | 14.7 | 6.5 | 18.0 | 16.3 | 14.3 |
| Government |  | 4.7 | 4.9 | 2.6 | 3.8 | 5.6 | 5.8 | 4.8 | 0.0 | 12.0 | 6.5 | 5.0 | 3.4 | 8.7 | 1.3 | 3.9 | 0.0 | 3.0 |
| Nonprofit |  | 4.1 | 4.4 | 3.4 | 1.7 | 3.0 | 3.5 | 3.7 | 0.0 | 3.6 | 3.0 | 4.1 | 1.7 | 2.3 | 1.3 | 3.7 | 2.3 | 2.4 |
| Other/Unknown |  | 3.7 | 3.9 | 3.9 | 2.5 | 3.3 | 3.1 | 3.4 | 4.2 | 1.2 | 2.4 | 2.9 | 2.5 | 2.1 | 1.7 | 4.9 | 4.7 | 2.4 |
| Postdoctoral plans unknown | \% | 4.8 | 4.3 | 4.8 | 4.2 | 7.0 | 3.3 | 3.2 | 0.0 | 4.8 | 6.0 | 7.3 | 6.7 | 2.6 | 69.7 | 13.8 | 25.6 | 37.2 |
| Definite postdoctoral study | \% | 20.0 | 19.2 | 21.1 | 27.3 | 19.3 | 21.7 | 20.7 | 16.7 | 27.7 | 21.2 | 19.5 | 17.6 | 24.0 | 5.6 | 15.9 | 11.6 | 12.1 |
| Seeking postdoctoral study |  | 5.6 | 5.1 | 9.3 | 8.6 | 7.0 | 6.4 | 5.3 | 25.0 | 6.0 | 6.6 | 5.2 | 8.4 | 7.5 | 2.6 | 5.8 | 9.3 | 7.5 |
| Definite employment |  | 51.2 | 52.5 | 42.0 | 45.6 | 47.8 | 52.7 | 54.9 | 50.0 | 43.4 | 50.4 | 50.8 | 47.1 | 52.1 | 15.1 | 43.4 | 34.9 | 32.1 |
| Seeking employment |  | 18.4 | 18.9 | 22.8 | 14.3 | 18.9 | 15.9 | 15.9 | 8.3 | 18.1 | 15.8 | 17.2 | 20.2 | 13.8 | 7.0 | 21.1 | 18.6 | 11.1 |
| Employment location after doctorate ${ }^{h}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. | \% | 94.5 | 97.8 | 92.0 | 62.9 | 100.0 | 88.6 | 99.0 | 83.3 | 30.6 | 70.1 | 97.8 | 87.5 | 44.2 | 85.0 | 96.6 | 80.0 | 51.3 |
| Foreign |  | 5.2 | 1.8 | 7.3 | 36.7 | 0.0 | 11.4 | 1.0 | 16.7 | 69.4 | 29.9 | 2.2 | 12.5 | 55.8 | 14.0 | 2.6 | 20.0 | 47.9 |
| Unknown |  | 0.4 | 0.3 | 0.6 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.9 | 0.0 | 0.8 |

${ }^{f}$ In this table a recipient counts once in each source category from which he or she received support. Because students indicate multiple sources of support, the vertical percentages can sum to more than 100 percent. (Data on the "primary" source of support for doctorate recipients are presented in the Summary Report.)
g Includes 2-year, 4-year, and foreign colleges and universities, medical schools, and elementary/secondary schools.
${ }^{\mathrm{h}}$ Includes only recipients with definite employment plans.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

| Financial Resource |  | Total |  | Physical Sciences ${ }^{\text {a }}$ |  | Engineering |  | Life Sciences |  | Social Sciences |  | Humanities |  | Education |  | Professional/ Other Fields |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women |
| Unduplicated Total b | N | 20,866 | 16,318 | 4,133 1,386 |  | $4,182 \quad 851$ |  | 4,002 3,614 |  | $2,819 \quad 3,361$ |  | $2,548 \quad 2,614$ |  | $2,016 \quad 3,641$ |  | 1,166 | 851 |
| Loans | N | 6,530 | 6,245 | 874 | 289 | 591 | 115 | 1,150 | 973 | 1,412 | 1,920 | 1,316 | 1,300 | 778 | 1,293 | 409 | 355 |
| (from any | V c | 31.3\% | 38.3\% | 21.1\% | 20.9\% | 14.1\% | 13.5\% | 28.7\%$17.6 \%$ | 26.9\% | 50.1\%21.6\% | 57.1\% | 51.6\% | 49.7\% | 38.6\% | 35.5\% | 35.1\% | 41.7\% |
| source) | $\mathrm{H}^{\mathrm{c}}$ | 100.0\% | 100.0\% | 13.4\% | 4.6\% | 9.1\% | 1.8\% |  | 15.6\% |  | 30.7\% | 20.2\% | 20.8\% | 11.9\% | 20.7\% | 6.3\% | 5.7\% |
| Foreign | N | 1,951 | 910 | 310 | 70 | 516 | 86 | 340 | 213 | 332 | 153 | 234 | 224 | 93 | 106 | 126 | 58 |
| (non-U.S.) | V | 9.4\% | 5.6\% | 7.5\% | 5.1\% | 12.3\% | 10.1\% | 8.5\% | 5.9\% | 11.8\% | 4.6\% | 9.2\% | 8.6\% | 4.6\% | 2.9\% | 10.8\% | 6.8\% |
| Support | H | 100.0\% | 100.0\% | 15.9\% | 7.7\% | 26.4\% | 9.5\% | 17.4\% | 23.4\% | 17.0\% | 16.8\% | 12.0\% | 24.6\% | 4.8\% | 11.6\% | 6.5\% | 6.4\% |
| Fellowship, | N | 11,336 | 9,183 | 2,179 | 830 | 1,881 | 500 | 2,465 | 2,288 | 1,780 | 1,993 | 1,818 | 1,868 | 604 | 1,242 | 609 | 462 |
| Scholarship | V | 54.3\% | 56.3\% | 52.7\% | 59.9\% | 45.0\% | 58.8\% | 61.6\% | 63.3\% | 63.1\% | 59.3\% | 71.4\% | 71.5\% | 30.0\% | 34.1\% | 52.2\% | 54.3\% |
|  | H | 100.0\% | 100.0\% | 19.2\% | 9.0\% | 16.6\% | 5.4\% | 21.7\% | 24.9\% | 15.7\% | 21.7\% | 16.0\% | 20.3\% | 5.3\% | 13.5\% | 5.4\% | 5.0\% |
| DissertationGrant | N | 2,856 | 3,120 | 275 | 118 | 193 | 65 | 506 | 608 | 711 | 904 | 839 | 892 | 141 | 358 | 191 | 175 |
|  | V | 13.7\% | 19.1\% | 6.7\% | 8.5\% | 4.6\% | 7.6\% | 12.6\% | 16.8\% | 25.2\% | 26.9\% | 32.9\% | 34.1\% | 7.0\% | 9.8\% | 16.4\% | 20.6\% |
|  | H | 100.0\% | 100.0\% | 9.6\% | 3.8\% | 6.8\% | 2.1\% | 17.7\% | 19.5\% | 24.9\% | 29.0\% | 29.4\% | 28.6\% | 4.9\% | 11.5\% | 6.7\% | 5.6\% |
| Teaching | N | 12,428 | 9,082 | 3,256 | 1,129 | 2,082 | 459 | 1,784 | 1,561 | 2,056 | 2,309 | 2,039 | 2,155 | 485 | 973 | 726 | 496 |
| Assistant | V | 59.6\% | 55.7\% | 78.8\% | 81.5\% | 49.8\% | 53.9\% | 44.6\% | 43.2\% | 72.9\% | 68.7\% | 80.0\% | 82.4\% | 24.1\% | 26.7\% | 62.3\% | 58.3\% |
|  | H | 100.0\% | 100.0\% | 26.2\% | 12.4\% | 16.8\% | 5.1\% | 14.4\% | 17.2\% | 16.5\% | 25.4\% | 16.4\% | 23.7\% | 3.9\% | 10.7\% | 5.8\% | 5.5\% |
| Research | N | 12,719 | 7,992 | 3,354 | 1,100 | 3,496 | 700 | 2,497 | 2,165 | 1,647 | 2,006 | 741 | 769 | 412 | 843 | 572 | 409 |
| Assistant | V | 61.0\% | 49.0\% | 81.2\% | 79.4\% | 83.6\% | 82.3\% | 62.4\% | 59.9\% | 58.4\% | 59.7\% | 29.1\% | 29.4\% | 20.4\% | 23.2\% | 49.1\% | 48.1\% |
|  | H | 100.0\% | 100.0\% | 26.4\% | 13.8\% | 27.5\% | 8.8\% | 19.6\% | 27.1\% | 12.9\% | 25.1\% | 5.8\% | 9.6\% | 3.2\% | 10.5\% | 4.5\% | 5.1\% |
| Traineeship | N | 912 | 1,060 | 112 | 52 | 85 | 26 | 498 | 546 | 162 | 364 | 21 | 14 | 19 | 44 | 15 | 14 |
|  | V | 4.4\% | 6.5\% | 2.7\% | 3.8\% | 2.0\% | 3.1\% | 12.4\% | 15.1\% | 5.7\% | 10.8\% | 0.8\% | 0.5\% | 0.9\% | 1.2\% | 1.3\% | 1.6\% |
|  | H | 100.0\% | 100.0\% | 12.3\% | 4.9\% | 9.3\% | 2.5\% | 54.6\% | 51.5\% | 17.8\% | 34.3\% | 2.3\% | 1.3\% | 2.1\% | 4.2\% | 1.6\% | 1.3\% |
| Internship orResidency | N | 1,442 | 1,662 | 254 | 78 | 357 | 81 | 93 | 75 | 503 | 1,086 | 71 | 64 | 124 | 249 | 40 | 29 |
|  | V | 6.9\% | 10.2\% | 6.1\% | 5.6\% | 8.5\% | 9.5\% | 2.3\% | 2.1\% | 17.8\% | 32.3\% | 2.8\% | 2.4\% | 6.2\% | 6.8\% | 3.4\% | 3.4\% |
|  | H | 100.0\% | 100.0\% | 17.6\% | 4.7\% | 24.8\% | 4.9\% | 6.4\% | 4.5\% | 34.9\% | 65.3\% | 4.9\% | 3.9\% | 8.6\% | 15.0\% | 2.8\% | 1.7\% |
| Personal | N | 10,256 | 8,925 | 1,473 | 496 | 1,628 | 286 | 1,695 | 1,574 | 1,693 | 2,022 | 1,584 | 1,502 | 1,405 | 2,474 | 778 | 571 |
| Savings | V | 49.2\% | 54.7\% | 35.6\% | 35.8\% | 38.9\% | 33.6\% | 42.4\% | 43.6\% | 60.1\% | 60.2\% | 62.2\% | 57.5\% | 69.7\% | 67.9\% | 66.7\% | 67.1\% |
|  | H | 100.0\% | 100.0\% | 14.4\% | 5.6\% | 15.9\% | 3.2\% | 16.5\% | 17.6\% | 16.5\% | 22.7\% | 15.4\% | 16.8\% | 13.7\% | 27.7\% | 7.6\% | 6.4\% |
| Other Personal | N | 8,023 | 8,120 | 881 | 266 | 855 | 162 | 1,003 | 1,074 | 1,570 | 1,974 | 1,773 | 1,698 | 1,335 | 2,466 | 606 | 480 |
| Earnings During | V | 38.5\% | 49.8\% | 21.3\% | 19.2\% | 20.4\% | 19.0\% | 25.1\% | 29.7\% | 55.7\% | 58.7\% | 69.6\% | 65.0\% | 66.2\% | 67.7\% | 52.0\% | 56.4\% |
| Grad School | H | 100.0\% | 100.0\% | 11.0\% | 3.3\% | 10.7\% | 2.0\% | 12.5\% | 13.2\% | 19.6\% | 24.3\% | 22.1\% | 20.9\% | 16.6\% | 30.4\% | 7.6\% | 5.9\% |
| Family | N | 7,528 | 7,897 | 1,062 | 460 | 1,018 | 253 | 1,369 | 1,546 | 1,334 | 1,876 | 1,340 | 1,447 | 876 | 1,890 | 529 | 425 |
| Earnings or | V | 36.1\% | 48.4\% | 25.7\% | 33.2\% | 24.3\% | 29.7\% | 34.2\% | 42.8\% | 47.3\% | 55.8\% | 52.6\% | 55.4\% | 43.5\% | 51.9\% | 45.4\% | 49.9\% |
| Savings ${ }^{\text {d }}$ | H | 100.0\% | 100.0\% | 14.1\% | 5.8\% | 13.5\% | 3.2\% | 18.2\% | 19.6\% | 17.7\% | 23.8\% | 17.8\% | 18.3\% | 11.6\% | 23.9\% | 7.0\% | 5.4\% |
| Employer | N | 2,326 | 2,112 | 266 | 70 | 427 | 77 | 318 | 383 | 229 | 258 | 227 | 172 | 642 | 1,009 | 217 | 143 |
| Reimbursement/ | V | 11.1\% | 12.9\% | 6.4\% | 5.1\% | 10.2\% | 9.0\% | 7.9\% | 10.6\% | 8.1\% | 7.7\% | 8.9\% | 6.6\% | 31.8\% | 27.7\% | 18.6\% | 16.8\% |
| Assistance | H | 100.0\% | 100.0\% | 11.4\% | 3.3\% | 18.4\% | 3.6\% | 13.7\% | 18.1\% | 9.8\% | 12.2\% | 9.8\% | 8.1\% | 27.6\% | 47.8\% | 9.3\% | 6.8\% |
| Other | N | 38 | 46 | 0 | 3 | 8 | 0 | 5 | 12 | 11 | 6 | 4 | 6 | 5 | 15 | 5 | 4 |
|  | V | 0.2\% | 0.3\% | 0.0\% | 0.2\% | 0.2\% | 0.0\% | 0.1\% | 0.3\% | 0.4\% | 0.2\% | 0.2\% | 0.2\% | 0.2\% | 0.4\% | 0.4\% | 0.5\% |
|  | H | 100.0\% | 100.0\% | 0.0\% | 6.5\% | 21.1\% | 0.0\% | 13.2\% | 26.1\% | 28.9\% | 13.0\% | 10.5\% | 13.0\% | 13.2\% | 32.6\% | 13.2\% | 8.7\% |

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 Summary Report.) Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. The table excludes 74 individuals for whom gender was not reported.
a Includes mathematics and computer sciences.
${ }^{\text {b }}$ The 3,556 Ph.D.s who did not report sources of support are omitted from this total. Percentages are based only on known responses.
c V denotes vertical percentage; H denotes horizontal percentage.
${ }^{d}$ This category includes spouses and significant others.

Source: NSF/NIH/NEH/USED/USDA/NASA, Survey of Earned Doctorates

| State | Total ${ }^{\text {a }}$ |  | Physical Sciences ${ }^{b}$ |  | Engineering |  | Life Sciences |  | Social Sciences |  | Humanities |  | Education |  | Professional/ Other Fields |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women |
| U.S. Total c | 22,769 | 17,901 | 4,460 | 1,501 | 4,564 | 925 | 4,363 | 3,908 | 3,109 | 3,707 | 2,759 | 2,823 | 2,234 | 4,085 | 1,280 | 952 |
| Alabama | 271 | 210 | 45 | 14 | 45 | 16 | 84 | 59 | 18 | 33 | 16 | 11 | 42 | 69 | 21 | 8 |
| Alaska | 10 | 17 | 5 | 5 | 1 | 1 | 4 | 9 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| Arizona | 373 | 302 | 81 | 27 | 86 | 15 | 59 | 46 | 32 | 60 | 47 | 48 | 42 | 86 | 26 | 20 |
| Arkansas | 65 | 73 | 6 | 1 | 5 | 0 | 22 | 22 | 4 | 9 | 3 | 5 | 20 | 31 | 5 | 5 |
| California | 2,707 | 2,102 | 628 | 195 | 582 | 134 | 467 | 452 | 422 | 589 | 319 | 343 | 173 | 302 | 116 | 87 |
| Colorado | 394 | 312 | 89 | 34 | 99 | 24 | 80 | 74 | 46 | 68 | 36 | 14 | 30 | 77 | 14 | 21 |
| Connecticut | 313 | 255 | 60 | 27 | 27 | 7 | 73 | 67 | 48 | 59 | 81 | 61 | 10 | 24 | 14 | 10 |
| Delaware | 103 | 88 | 24 | 12 | 32 | 6 | 9 | 10 | 15 | 17 | 6 | 14 | 17 | 28 | 0 | 1 |
| District of Columbia | 245 | 248 | 46 | 14 | 33 | 7 | 22 | 43 | 52 | 71 | 43 | 43 | 17 | 47 | 32 | 23 |
| Florida | 900 | 858 | 146 | 54 | 154 | 25 | 120 | 106 | 87 | 142 | 63 | 45 | 228 | 410 | 102 | 76 |
| Georgia | 517 | 452 | 90 | 31 | 145 | 39 | 98 | 95 | 64 | 76 | 49 | 59 | 49 | 129 | 22 | 23 |
| Hawaii | 76 | 68 | 13 | 5 | 6 | 2 | 21 | 12 | 21 | 15 | 14 | 21 | 1 | 10 | 0 | 3 |
| Idaho | 55 | 31 | 5 | 1 | 9 | 2 | 22 | 7 | 6 | 2 | 1 | 0 | 12 | 19 | 0 | 0 |
| Illinois | 1,213 | 904 | 249 | 79 | 247 | 58 | 198 | 171 | 188 | 180 | 177 | 158 | 81 | 204 | 73 | 54 |
| Indiana | 667 | 454 | 120 | 41 | 142 | 18 | 107 | 80 | 83 | 81 | 118 | 121 | 61 | 94 | 36 | 19 |
| lowa | 335 | 252 | 56 | 20 | 72 | 14 | 79 | 61 | 40 | 50 | 29 | 43 | 42 | 51 | 17 | 13 |
| Kansas | 234 | 190 | 36 | 19 | 46 | 3 | 49 | 46 | 37 | 34 | 29 | 27 | 33 | 51 | 4 | 10 |
| Kentucky | 195 | 141 | 18 | 9 | 13 | 2 | 51 | 27 | 26 | 36 | 27 | 19 | 33 | 35 | 27 | 13 |
| Louisiana | 331 | 245 | 76 | 25 | 37 | 10 | 79 | 59 | 48 | 29 | 40 | 48 | 18 | 60 | 33 | 14 |
| Maine | 23 | 18 | 10 | 0 | 3 | 3 | 7 | 5 | 0 | 3 | 2 | 2 | 1 | 5 | 0 | 0 |
| Maryland | 521 | 418 | 102 | 33 | 124 | 28 | 147 | 169 | 81 | 81 | 53 | 62 | 6 | 32 | 8 | 13 |
| Massachusetts | 1,278 | 820 | 274 | 80 | 292 | 58 | 247 | 204 | 183 | 166 | 165 | 140 | 54 | 125 | 63 | 47 |
| Michigan | 749 | 589 | 134 | 57 | 217 | 42 | 116 | 128 | 103 | 136 | 70 | 85 | 71 | 107 | 38 | 34 |
| Minnesota | 413 | 369 | 51 | 27 | 94 | 17 | 104 | 83 | 49 | 68 | 38 | 66 | 42 | 86 | 35 | 22 |
| Mississippi | 186 | 150 | 27 | 7 | 17 | 3 | 30 | 27 | 14 | 14 | 37 | 21 | 49 | 68 | 12 | 10 |
| Missouri | 403 | 336 | 57 | 25 | 62 | 8 | 98 | 86 | 56 | 66 | 45 | 48 | 54 | 88 | 31 | 15 |
| Montana | 40 | 18 | 13 | 4 | 2 | 0 | 11 | 4 | 4 | 4 | 0 | 0 | 10 | 6 | 0 | 0 |
| Nebraska | 156 | 118 | 26 | 9 | 9 | 3 | 49 | 24 | 26 | 24 | 14 | 14 | 21 | 35 | 11 | 9 |
| Nevada | 44 | 47 | 16 | 2 | 2 | 2 | 5 | 5 | 6 | 15 | 5 | 3 | 8 | 20 | 2 | 0 |
| New Hampshire | 58 | 35 | 17 | 11 | 9 | 0 | 23 | 15 | 2 | 2 | 5 | 5 | 2 | 2 | 0 | 0 |
| New Jersey | 531 | 409 | 129 | 50 | 118 | 41 | 64 | 79 | 67 | 73 | 81 | 97 | 31 | 43 | 41 | 26 |
| New Mexico | 144 | 118 | 37 | 12 | 25 | 8 | 19 | 12 | 17 | 15 | 14 | 29 | 21 | 38 | 11 | 4 |
| New York | 1,852 | 1,564 | 374 | 106 | 281 | 55 | 364 | 298 | 326 | 385 | 297 | 349 | 124 | 277 | 86 | 94 |
| North Carolina | 613 | 492 | 113 | 53 | 119 | 36 | 158 | 143 | 67 | 78 | 84 | 86 | 46 | 85 | 26 | 11 |
| North Dakota | 30 | 36 | 10 | 2 | 2 | 0 | 9 | 7 | 3 | 10 | 3 | 3 | 3 | 14 | 0 | 0 |
| Ohio | 984 | 713 | 178 | 59 | 243 | 40 | 185 | 166 | 101 | 137 | 119 | 107 | 98 | 170 | 60 | 34 |
| Oklahoma | 247 | 179 | 34 | 7 | 42 | 7 | 46 | 35 | 35 | 29 | 21 | 22 | 58 | 67 | 11 | 12 |
| Oregon | 220 | 159 | 49 | 19 | 23 | 5 | 63 | 39 | 32 | 32 | 21 | 17 | 21 | 40 | 11 | 7 |
| Pennsylvania | 1,182 | 935 | 215 | 69 | 283 | 57 | 198 | 170 | 141 | 192 | 143 | 150 | 119 | 239 | 83 | 58 |
| Puerto Rico | 44 | 107 | 7 | 5 | 1 | 1 | 13 | 17 | 9 | 44 | 2 | 6 | 12 | 34 | 0 | 0 |
| Rhode Island | 126 | 99 | 35 | 17 | 23 | 3 | 12 | 15 | 26 | 31 | 24 | 28 | 1 | 3 | 5 | 2 |
| South Carolina | 210 | 179 | 37 | 8 | 41 | 9 | 48 | 51 | 21 | 30 | 19 | 21 | 26 | 48 | 18 | 12 |
| South Dakota | 43 | 52 | 4 | 1 | 0 | 0 | 9 | 5 | 3 | 10 | 0 | 2 | 27 | 34 | 0 | 0 |
| Tennessee | 357 | 301 | 56 | 18 | 49 | 10 | 81 | 73 | 52 | 60 | 30 | 24 | 65 | 98 | 24 | 18 |
| Texas | 1,506 | 1,174 | 287 | 96 | 324 | 53 | 269 | 269 | 176 | 209 | 197 | 199 | 170 | 284 | 83 | 64 |
| Utah | 229 | 119 | 59 | 14 | 45 | 2 | 51 | 32 | 32 | 24 | 10 | 14 | 25 | 26 | 7 | 7 |
| Vermont | 27 | 35 | 7 | 0 | 4 | 2 | 11 | 16 | 2 | 10 | 0 | 2 | 3 | 5 | 0 | 0 |
| Virginia | 542 | 426 | 104 | 44 | 146 | 23 | 80 | 93 | 83 | 79 | 38 | 31 | 68 | 136 | 23 | 20 |
| Washington | 389 | 269 | 85 | 27 | 66 | 15 | 100 | 87 | 63 | 49 | 34 | 43 | 25 | 35 | 16 | 13 |
| West Virginia | 74 | 54 | 9 | 2 | 11 | 4 | 11 | 7 | 13 | 10 | 10 | 4 | 19 | 27 | 1 | 0 |
| Wisconsin | 503 | 332 | 102 | 23 | 104 | 7 | 81 | 94 | 75 | 61 | 80 | 62 | 29 | 65 | 32 | 20 |
| Wyoming | 41 | 29 | 9 | 1 | 2 | 0 | 10 | 4 | 4 | 8 | 0 | 0 | 16 | 16 | 0 | 0 |

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates.
${ }^{\text {a }}$ Totals exclude doctorate recipients whose gender was unknown (total is 74).
${ }^{\mathrm{b}}$ Includes mathematics and computer sciences.
c Includes the 50 states, District of Columbia, and Puerto Rico.

|  | $\begin{aligned} & 2001 \\ & \text { Total } \end{aligned}$ |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { 즌 } \\ & \frac{0}{0} \\ & \frac{0}{0} \\ & \stackrel{0}{\aleph} \end{aligned}$ |  | $\begin{aligned} & \frac{\grave{0}}{0} \\ & \frac{5}{I} \end{aligned}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TOTAL ALL INSTITUTIONS | 40,744 | 1,379 | 1,979 | 780 | 1,832 | 5,502 | 5,678 | 1,613 | 1,005 | 3,433 | 3,392 | 1,024 | 383 | 594 | 3,588 | 6,324 | 2,238 |
| ALABAMA | 482 | 13 | 21 | 6 | 19 | 61 | 92 | 33 | 19 | 33 | 18 | 7 | 0 | 5 | 15 | 111 | 29 |
| Auburn University-Main Campus | 153 | 1 | 7 | 0 | 14 | 25 | 16 | 7 | 19 | 11 | 9 | 5 | 0 | 3 | 0 | 32 | 4 |
| United States Sports Academy | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1 |
| Univ of Alabama-Birmingham | 120 | 0 | 4 | 0 | 2 | 10 | 61 | 22 | 0 | 7 | 1 | 0 | 0 | 0 | 0 | 13 | 0 |
| Univ of Alabama-Huntsville | 29 | 7 | 2 | 2 | 1 | 16 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Alabama | 164 | 5 | 8 | 3 | 2 | 10 | 11 | 4 | 0 | 15 | 8 | 2 | 0 | 2 | 15 | 55 | 24 |
| Univ of South Alabama | 8 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| ALASKA | 27 | 2 | 1 | 7 | 0 | 2 | 12 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| Univ of Alaska-Fairbanks | 27 | 2 | 1 | 7 | 0 | 2 | 12 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| ARIZONA | 675 | 32 | 25 | 37 | 14 | 101 | 70 | 16 | 19 | 42 | 50 | 17 | 7 | 9 | 62 | 128 | 46 |
| Arizona State Univ-Main Campus | 274 | 5 | 10 | 5 | 4 | 61 | 16 | 5 | 0 | 22 | 21 | 9 | 3 | 4 | 22 | 63 | 24 |
| Northern Arizona Univ | 40 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 2 | 1 | 0 | 0 | 3 | 22 | 0 |
| Univ of Arizona | 361 | 27 | 15 | 32 | 10 | 40 | 48 | 11 | 13 | 20 | 27 | 7 | 4 | 5 | 37 | 43 | 22 |
| ARKANSAS | 138 | 4 | 1 | 0 | 2 | 5 | 24 | 7 | 13 | 11 | 2 | 3 | 1 | 1 | 3 | 51 | 10 |
| Univ of Arkansas-Fayetteville | 90 | 4 | 1 | 0 | 2 | 5 | 6 | 4 | 13 | 11 | 2 | 3 | 1 | 1 | 3 | 24 | 10 |
| Univ of Arkansas-Little Rock | 28 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 0 |
| Univ of Arkansas for Med Sci | 20 | 0 | 0 | 0 | 0 | 0 | 17 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CALIFORNIA | 4,824 | 207 | 257 | 115 | 246 | 718 | 683 | 193 | 48 | 551 | 462 | 122 | 34 | 59 | 450 | 476 | 203 |
| Azusa Pacific University | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| Biola University | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 10 | 3 |
| California Inst of Integral Studies | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 16 | 0 | 0 | 0 | 6 | 0 | 0 |
| California Inst of Technology | 159 | 26 | 30 | 13 | 8 | 64 | 12 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calif Sch Prof Psych-Alameda | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calif Sch Prof Psych-Fresno | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calif Sch Prof Psych-LA | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calif Sch Prof Psych-San Diego | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Claremont Graduate Univ | 97 | 0 | 0 | 0 | 3 | 0 | 4 | 0 | 0 | 16 | 18 | 5 | 1 | 2 | 17 | 23 | 8 |
| Claremont School of Theology | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 |
| Fielding Graduate Institute | 111 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 47 | 10 | 0 | 0 | 0 | 0 | 29 | 22 |
| Fuller Theological Seminary in California | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 1 | 1 | 0 | 0 | 13 | 0 | 21 |
| Graduate Theological Union | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 17 | 1 | 3 |
| La Sierra Univ | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 |
| Loma Linda Univ | 30 | 0 | 0 | 0 | 0 | 0 | 15 | 7 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naval Postgraduate School | 9 | 1 | 0 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pacific Grad School of Psychology | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pepperdine Univ | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 0 |
| Rand Grad Schl of Policy Studies | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Scripps Research Institute | 23 | 0 | 10 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| San Diego State Univ | 22 | 1 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 7 | 1 | 0 | 0 | 0 | 0 | 8 | 0 |
| Santa Clara University | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Saybrook Grad School and Research Ctr | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Stanford University | 547 | 37 | 24 | 20 | 37 | 168 | 70 | 1 | 2 | 17 | 57 | 12 | 5 | 8 | 42 | 23 | 24 |
| United States International Univ | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 1 | 0 | 0 | 0 | 0 | 6 | 5 |
| Univ of California-Berkeley | 751 | 42 | 57 | 8 | 61 | 150 | 96 | 26 | 9 | 18 | 92 | 21 | 6 | 12 | 81 | 39 | 33 |
| Univ of California-Davis | 332 | 18 | 17 | 4 | 18 | 60 | 102 | 9 | 32 | 7 | 17 | 7 | 1 | 1 | 17 | 22 | 0 |
| Univ of California-Irvine | 187 | 4 | 21 | 6 | 16 | 24 | 30 | 3 | 0 | 12 | 25 | 9 | 2 | 5 | 17 | 5 | 8 |
| Univ of California-Los Angeles | 609 | 26 | 26 | 16 | 36 | 83 | 96 | 24 | 0 | 36 | 74 | 34 | 5 | 12 | 75 | 49 | 17 |
| Univ of California-Riverside | 94 | 8 | 13 | 1 | 1 | 1 | 21 | 0 | 5 | 9 | 13 | 4 | 4 | 6 | 4 | 4 | 0 |
| Univ of California-San Diego | 267 | 11 | 12 | 19 | 21 | 29 | 80 | 0 | 0 | 15 | 31 | 9 | 3 | 3 | 28 | 0 | 6 |
| Univ of California-San Francisco | 92 | 0 | 10 | 0 | 1 | 6 | 56 | 17 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of California-Santa Barbara | 259 | 15 | 12 | 10 | 12 | 58 | 23 | 0 | 0 | 21 | 35 | 7 | 2 | 2 | 44 | 18 | 0 |
| Univ of California-Santa Cruz | 104 | 11 | 8 | 14 | 8 | 2 | 15 | 0 | 0 | 9 | 13 | 9 | 3 | 1 | 11 | 0 | 0 |
| Univ of La Verne | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 0 |
| Univ of the Pacific | 19 | 0 | 3 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 |
| Univ of San Diego | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 |
| Univ of San Francisco | 76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 67 | 0 |
| Univ of Southern California | 529 | 7 | 13 | 2 | 22 | 68 | 45 | 94 | 0 | 22 | 45 | 3 | 2 | 7 | 74 | 77 | 48 |
| The Wright Institute | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| COLORADO | 707 | 22 | 27 | 30 | 44 | 123 | 102 | 29 | 23 | 52 | 62 | 3 | 3 | 3 | 41 | 107 | 36 |
| Colorado School of Mines | 42 | 4 | 0 | 7 | 1 | 29 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Colorado State Univ | 157 | 3 | 13 | 5 | 11 | 20 | 34 | 4 | 22 | 17 | 8 | 0 | 0 | 0 | 0 | 19 | 1 |
| Colorado Technical Univ | 13 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Univ of Colorado-Boulder | 287 | 15 | 13 | 17 | 21 | 69 | 32 | 8 | 1 | 14 | 38 | 3 | 2 | 1 | 32 | 10 | 11 |
| Univ of Colorado-Colorado Springs | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Colorado-Denver | 28 | 0 | 0 | 0 | 2 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 2 |
| Univ of Colorado-Health Sci Center | 40 | 0 | 0 | 0 | 0 | 0 | 31 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Denver | 68 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 17 | 13 | 0 | 1 | 2 | 2 | 15 | 14 |
| Univ of Northern Colorado | 69 | 0 | 1 | 0 | 4 | 0 | 2 | 4 | 0 | 4 | 2 | 0 | 0 | 0 | 7 | 45 | 0 |


|  | $\begin{aligned} & 2001 \\ & \text { Total } \end{aligned}$ |  | $\begin{aligned} & \text { Z } \\ & \stackrel{Z}{E N} \\ & \text { © } \\ & \text { U } \end{aligned}$ |  |  |  |  |  |  | $\begin{aligned} & \text { 지 } \\ & \frac{0}{0} \\ & \frac{0}{5} \\ & \text { ָ } \end{aligned}$ |  | $\begin{aligned} & \text { 른 } \\ & \frac{.5}{I} \end{aligned}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CONNECTICUT | 569 | 22 | 37 | 6 | 22 | 34 | 108 | 17 | 15 | 38 | 69 | 26 | 6 | 13 | 98 | 34 | 24 |
| Univ of Connecticut | 237 | 5 | 19 | 2 | 11 | 23 | 35 | 11 | 8 | 21 | 28 | 5 | 2 | 5 | 13 | 34 | 15 |
| Univ of New Haven | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Wesleyan Univ | 17 | 0 | 2 | 0 | 2 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 |
| Yale Univ | 311 | 17 | 16 | 4 | 9 | 11 | 63 | 6 | 7 | 17 | 41 | 21 | 4 | 8 | 82 | 0 | 5 |
| DELAWARE | 191 | 4 | 9 | 14 | 9 | 38 | 12 | 0 | 7 | 14 | 18 | 5 | 2 | 5 | 8 | 45 | 1 |
| Univ of Delaware | 162 | 4 | 9 | 14 | 9 | 38 | 12 | 0 | 7 | 14 | 18 | 5 | 2 | 5 | 8 | 16 | 1 |
| Wilmington College | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 |
| DISTRICT OF COLUMBIA | 494 | 11 | 19 | 1 | 29 | 41 | 54 | 11 | 0 | 52 | 71 | 20 | 2 | 4 | 60 | 64 | 55 |
| American Univ | 67 | 3 | 5 | 0 | 3 | 1 | 0 | 0 | 0 | 12 | 26 | 4 | 0 | 0 | 0 | 10 | 3 |
| Catholic Univ of America | 89 | 3 | 0 | 0 | 0 | 7 | 2 | 9 | 0 | 6 | 5 | 3 | 0 | 1 | 38 | 2 | 13 |
| Gallaudet Univ | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 5 | 0 |
| George Washington Univ | 174 | 2 | 3 | 1 | 23 | 29 | 18 | 1 | 0 | 16 | 8 | 2 | 1 | 2 | 5 | 44 | 19 |
| Georgetown Univ | 70 | 0 | 6 | 0 | 1 | 0 | 21 | 0 | 0 | 0 | 16 | 8 | 0 | 0 | 17 | 0 | 1 |
| Howard Univ | 82 | 3 | 5 | 0 | 2 | 4 | 13 | 1 | 0 | 11 | 16 | 3 | 1 | 1 | 0 | 3 | 19 |
| FLORIDA | 1,761 | 39 | 53 | 31 | 77 | 180 | 124 | 67 | 35 | 153 | 76 | 15 | 7 | 14 | 72 | 640 | 178 |
| Argosy University-Sarasota | 118 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 94 | 19 |
| Barry Univ | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 |
| Florida A\&M Univ | 8 | 0 | 1 | 0 | 0 | 2 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Florida Atlantic Univ-Boca Raton | 34 | 1 | 0 | 0 | 1 | 11 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 5 | 11 |
| Florida Inst of Technology-Melbourne | 17 | 0 | 1 | 2 | 6 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| Florida International Univ | 69 | 0 | 0 | 4 | 4 | 5 | 9 | 0 | 0 | 11 | 14 | 1 | 0 | 0 | 0 | 18 | 3 |
| Florida State Univ | 258 | 9 | 10 | 11 | 10 | 4 | 15 | 4 | 1 | 26 | 19 | 8 | 4 | 4 | 43 | 63 | 27 |
| Lynn University | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 |
| Nova Southeastern Univ | 469 | 0 | 0 | 0 | 23 | 0 | 0 | 18 | 0 | 27 | 1 | 0 | 0 | 0 | 2 | 314 | 84 |
| Univ of West Florida | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 |
| Univ of Central Florida | 89 | 6 | 0 | 0 | 7 | 36 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 35 | 0 |
| Univ of Florida | 417 | 20 | 30 | 2 | 17 | 91 | 56 | 26 | 33 | 33 | 30 | 4 | 2 | 5 | 9 | 36 | 23 |
| Univ of Miami | 91 | 3 | 4 | 5 | 0 | 11 | 15 | 4 | 0 | 17 | 7 | 2 | 0 | 2 | 12 | 8 | 1 |
| Univ of South Florida | 151 | 0 | 7 | 7 | 9 | 15 | 24 | 12 | 1 | 27 | 5 | 0 | 1 | 3 | 6 | 26 | 8 |
| GEORGIA | 970 | 22 | 48 | 8 | 43 | 184 | 135 | 35 | 24 | 77 | 63 | 17 | 11 | 14 | 66 | 178 | 45 |
| Clark Atlanta Univ | 29 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 8 | 0 | 0 | 1 | 2 | 9 | 6 |
| Emory University | 164 | 0 | 16 | 0 | 7 | 0 | 51 | 4 | 0 | 10 | 15 | 10 | 5 | 4 | 38 | 4 | 0 |
| Georgia Inst of Technology-Main Campus | 255 | 11 | 14 | 1 | 24 | 178 | 6 | 0 | 0 | 8 | 3 | 1 | 0 | 0 | 0 | 0 | 9 |
| Georgia Southern Univ | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 |
| Georgia State Univ | 134 | 2 | 3 | 0 | 2 | 0 | 13 | 9 | 0 | 22 | 15 | 2 | 0 | 6 | 1 | 53 | 6 |
| Institute of Paper Sci \& Tech | 8 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Medical College of Georgia | 13 | 0 | 0 | 0 | 0 | 0 | 9 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mercer University | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Morehouse School of Medicine | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Georgia | 352 | 9 | 14 | 7 | 10 | 4 | 54 | 18 | 18 | 35 | 22 | 4 | 6 | 3 | 25 | 99 | 24 |
| Valdosta State Univ | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| HAWAll | 144 | 9 | 1 | 6 | 2 | 8 | 24 | 4 | 5 | 11 | 25 | 2 | 0 | 0 | 33 | 11 | 3 |
| Univ of Hawaii at Manoa | 144 | 9 | 1 | 6 | 2 | 8 | 24 | 4 | 5 | 11 | 25 | 2 | 0 | 0 | 33 | 11 | 3 |
| IDAHO | 86 | 1 | 1 | 1 | 3 | 11 | 16 | 3 | 10 | 4 | 4 | 1 | 0 | 0 | 0 | 31 | 0 |
| Idaho State Univ | 23 | 0 | 0 | 0 | 2 | 1 | 6 | 2 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 5 | 0 |
| Univ of Idaho | 63 | 1 | 1 | 1 | 1 | 10 | 10 | 1 | 10 | 0 | 1 | 1 | 0 | 0 | 0 | 26 | 0 |
| ILLINOIS | 2,119 | 76 | 131 | 14 | 108 | 305 | 258 | 64 | 47 | 165 | 203 | 80 | 20 | 30 | 205 | 285 | 128 |
| Benedictine Univ | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 14 |
| Chicago Theological Seminary | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 3 |
| DePaul Univ | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Finch Univ of HIth Sci-Chicago Med Sch | 24 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Illinois Inst of Technology | 57 | 3 | 3 | 0 | 13 | 20 | 3 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| Illinois State Univ | 30 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 4 | 0 | 1 | 1 | 20 | 0 |
| Inst for Clinical Social Work | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Loyola Univ of Chicago | 118 | 0 | 8 | 0 | 0 | 0 | 16 | 4 | 0 | 22 | 6 | 1 | 4 | 0 | 3 | 50 | 4 |
| Lutheran School of Theol-Chicago | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| National-Louis Univ | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 |
| Northern Illinois Univ | 93 | 0 | 3 | 0 | 5 | 0 | 0 | 0 | 0 | 8 | 5 | 4 | 2 | 3 | 0 | 62 | 1 |
| Northwestern Univ | 350 | 5 | 23 | 2 | 16 | 98 | 54 | 3 | 0 | 23 | 36 | 11 | 1 | 3 | 49 | 9 | 17 |
| Roosevelt Univ | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 8 | 0 |
| Rush Univ | 21 | 2 | 0 | 0 | 0 | 0 | 12 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Southern II Univ-Carbondale | 120 | 0 | 2 | 0 | 0 | 2 | 13 | 5 | 1 | 17 | 12 | 2 | 1 | 2 | 15 | 30 | 18 |
| Southern II Univ-Edwardsville | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| Univ of Chicago | 370 | 24 | 19 | 7 | 18 | 0 | 59 | 1 | 0 | 9 | 90 | 34 | 8 | 5 | 67 | 10 | 19 |
| Univ of Illinois-Chicago | 198 | 3 | 25 | 1 | 11 | 25 | 33 | 24 | 0 | 13 | 16 | 8 | 1 | 6 | 6 | 15 | 11 |
| Univ of Illinois-Urbana | 673 | 39 | 48 | 4 | 45 | 160 | 55 | 20 | 46 | 37 | 37 | 15 | 3 | 10 | 58 | 68 | 28 |


|  | $\begin{aligned} & 2001 \\ & \text { Total } \end{aligned}$ |  | $\begin{aligned} & \text { E } \\ & \stackrel{\text { EN }}{E} \\ & \text { DU } \end{aligned}$ |  |  |  | $\begin{aligned} & \mathscr{0} \\ & \stackrel{U}{0} \\ & .0 \\ & \stackrel{0}{0} \\ & \hline 0 \end{aligned}$ |  |  | $\begin{aligned} & \text { 지 } \\ & \frac{0}{0} \\ & \frac{0}{5} \\ & \text { ָ } \end{aligned}$ |  | $\begin{aligned} & \text { तo } \\ & \frac{\text { bin }}{I} \end{aligned}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INDIANA | 1,121 | 29 | 78 | 16 | 38 | 160 | 119 | 32 | 36 | 77 | 87 | 37 | 9 | 29 | 164 | 155 | 55 |
| Ball State Univ | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 1 | 1 | 9 | 21 | 0 |
| Indiana State Univ | 44 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 11 | 3 | 0 | 0 | 0 | 0 | 26 | 0 |
| Indiana Univ-Bloomington | 430 | 9 | 16 | 11 | 11 | 0 | 54 | 9 | 0 | 23 | 42 | 23 | 2 | 13 | 105 | 82 | 30 |
| Indiana Univ-Purdue Univ-Indianapolis | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Purdue Univ-Main Campus | 469 | 11 | 50 | 3 | 23 | 140 | 44 | 19 | 36 | 23 | 20 | 3 | 6 | 12 | 34 | 26 | 19 |
| Univ of Notre Dame | 131 | 9 | 12 | 2 | 4 | 20 | 17 | 0 | 0 | 9 | 22 | 11 | 0 | 3 | 16 | 0 | 6 |
| IOWA | 588 | 11 | 38 | 5 | 22 | 86 | 90 | 29 | 21 | 45 | 46 | 6 | 5 | 9 | 52 | 93 | 30 |
| Drake Univ | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| Iowa State Univ | 232 | 8 | 25 | 2 | 7 | 53 | 36 | 1 | 21 | 24 | 18 | 4 | 0 | 0 | 2 | 28 | 3 |
| Maharishi Univ of Management | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of lowa | 334 | 3 | 13 | 3 | 15 | 23 | 54 | 28 | 0 | 20 | 28 | 2 | 5 | 9 | 50 | 54 | 27 |
| Univ of Northern lowa | 12 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| KANSAS | 425 | 9 | 30 | 2 | 14 | 49 | 41 | 22 | 33 | 44 | 27 | 8 | 2 | 3 | 43 | 84 | 14 |
| Kansas State University | 145 | 5 | 7 | 0 | 7 | 22 | 17 | 1 | 33 | 6 | 13 | 2 | 0 | 0 | 0 | 27 | 5 |
| University of Kansas | 248 | 4 | 21 | 2 | 5 | 15 | 24 | 18 | 0 | 31 | 14 | 6 | 2 | 3 | 43 | 51 | 9 |
| Wichita State University | 32 | 0 | 2 | 0 | 2 | 12 | 0 | 3 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 6 | 0 |
| KENTUCKY | 336 | 5 | 9 | 0 | 13 | 15 | 45 | 11 | 22 | 30 | 32 | 9 | 5 | 0 | 32 | 68 | 40 |
| Asbury Theological Seminary | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 |
| Southern Bapt Theol Seminary | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 13 | 14 | 13 |
| Spalding Univ | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 |
| Univ of Kentucky | 219 | 5 | 7 | 0 | 13 | 11 | 34 | 10 | 21 | 15 | 28 | 8 | 5 | 0 | 9 | 28 | 25 |
| Univ of Louisville | 65 | 0 | 2 | 0 | 0 | 4 | 11 | 1 | 1 | 15 | 4 | 0 | 0 | 0 | 7 | 19 | 1 |
| LOUISIANA | 578 | 15 | 41 | 15 | 30 | 47 | 82 | 34 | 22 | 37 | 41 | 14 | 12 | 15 | 47 | 79 | 47 |
| Grambling State University | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 |
| Louisiana State University \& A\&M College | 263 | 9 | 30 | 12 | 14 | 23 | 18 | 8 | 22 | 19 | 15 | 7 | 5 | 7 | 18 | 42 | 14 |
| Louisiana State University-Health Sci Center | 20 | 0 | 0 | 0 | 0 | 0 | 13 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Louisiana State University-Shreveport | 18 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Louisiana Tech University | 28 | 0 | 1 | 0 | 4 | 8 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 9 |
| New Orleans Bapt Theol Seminary | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 3 | 1 | 16 |
| Northwestern State Univ of Louisiana | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| University of Louisiana-Monroe | 10 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| Southern University and A\&M College | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 |
| Tulane University of Louisiana | 119 | 5 | 7 | 1 | 2 | 11 | 22 | 16 | 0 | 5 | 14 | 6 | 5 | 2 | 17 | 1 | 5 |
| University of New Orleans | 45 | 1 | 2 | 1 | 0 | 3 | 0 | 1 | 0 | 4 | 9 | 1 | 0 | 0 | 0 | 21 | 2 |
| University of Louisiana-Lafayette | 40 | 0 | 0 | 1 | 10 | 2 | 10 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 9 | 0 | 0 |
| MA NE | 41 | 3 | 3 | 1 | 3 | 6 | 4 | 1 | 7 | 3 | 0 | 4 | 0 | 0 | 0 | 6 | 0 |
| Univ of Maine | 41 | 3 | 3 | 1 | 3 | 6 | 4 | 1 | 7 | 3 | 0 | 4 | 0 | 0 | 0 | 6 | 0 |
| MARYLAND | 939 | 41 | 21 | 17 | 56 | 152 | 190 | 110 | 16 | 56 | 106 | 26 | 9 | 9 | 71 | 38 | 21 |
| Johns Hopkins Univ | 366 | 7 | 8 | 5 | 12 | 45 | 111 | 78 | 0 | 5 | 48 | 21 | 3 | 4 | 19 | 0 | 0 |
| Loyola College | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Morgan State Univ | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 |
| Peabody Inst of Johns Hopkins Univ | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 |
| Uniformed Svcs. Univ of HIth Sci | 13 | 0 | 0 | 0 | 0 | 0 | 11 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Maryland-Baltimore County | 48 | 2 | 2 | 0 | 6 | 14 | 7 | 0 | 0 | 12 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Maryland-College Park | 421 | 32 | 7 | 12 | 38 | 93 | 27 | 6 | 16 | 33 | 52 | 4 | 6 | 5 | 44 | 36 | 10 |
| Univ of Maryland-Baltimore | 72 | 0 | 4 | 0 | 0 | 0 | 34 | 25 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 8 |
| MASSACHUSETTS | 2,106 | 116 | 109 | 40 | 90 | 351 | 344 | 95 | 14 | 93 | 258 | 66 | 20 | 26 | 194 | 179 | 111 |
| American Internatl College | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 |
| Boston College | 108 | 2 | 6 | 0 | 0 | 0 | 8 | 7 | 0 | 11 | 22 | 10 | 1 | 1 | 12 | 20 | 8 |
| Boston Univ | 300 | 11 | 11 | 4 | 17 | 25 | 61 | 16 | 0 | 18 | 33 | 1 | 1 | 2 | 50 | 37 | 13 |
| Brandeis Univ | 96 | 6 | 6 | 0 | 5 | 0 | 23 | 1 | 0 | 2 | 28 | 10 | 1 | 5 | 8 | 0 | 1 |
| Clark Univ | 40 | 0 | 2 | 0 | 0 | 0 | 4 | 0 | 0 | 13 | 19 | 0 | 0 | 0 | 1 | 1 | 0 |
| Harvard Univ | 508 | 27 | 19 | 8 | 17 | 13 | 103 | 43 | 0 | 14 | 72 | 34 | 5 | 5 | 67 | 47 | 34 |
| Mass Coll Pharm \& Allied Health Sci | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mass Inst of Technology | 492 | 48 | 26 | 21 | 24 | 226 | 55 | 8 | 0 | 1 | 35 | 2 | 0 | 0 | 20 | 1 | 25 |
| New England Conserv of Music | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 |
| Northeastern Univ | 70 | 5 | 10 | 0 | 6 | 19 | 4 | 0 | 0 | 4 | 16 | 2 | 3 | 0 | 0 | 0 | 1 |
| Simmons College | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Smith College | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Springfield College | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Suffolk University | 88 | 4 | 5 | 0 | 3 | 2 | 39 | 1 | 0 | 6 | 10 | 1 | 4 | 4 | 9 | 0 | 0 |
| Tufts Univ | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Massachusetts-Amherst | 261 | 8 | 18 | 3 | 14 | 32 | 26 | 11 | 14 | 15 | 22 | 6 | 5 | 9 | 19 | 42 | 17 |
| Univ of Massachusetts-Boston | 23 | 0 | 0 | 3 | 0 | 0 | 0 | 6 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| Univ of Massachusetts-Lowell | 50 | 4 | 5 | 1 | 3 | 19 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 15 | 0 |
| Univ of Massachusetts Med Sch-Worcester | 20 | 0 | 0 | 0 | 0 | 1 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Worcester Polytechnic Inst | 17 | 1 | 0 | 0 | 1 | 14 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


|  | $\begin{aligned} & 2001 \\ & \text { Total } \end{aligned}$ |  |  |  |  | 옿 - © 든 | $\begin{aligned} & \mathscr{0} \\ & \stackrel{0}{0} \\ & .0 \\ & \hline 0 \\ & \hline 0 \end{aligned}$ |  |  |  |  | $\begin{aligned} & \text { त्ర } \\ & \frac{.0}{\underline{10}} \end{aligned}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MICHIGAN | 1,343 | 46 | 68 | 10 | 67 | 259 | 155 | 54 | 39 | 119 | 121 | 26 | 6 | 20 | 103 | 178 | 72 |
| Andrews Univ | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 5 | 12 | 2 |
| Calvin College | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Central Michigan Univ | 9 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Eastern Michigan Univ | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Michigan State Univ | 403 | 12 | 22 | 2 | 23 | 43 | 43 | 9 | 32 | 31 | 43 | 6 | 1 | 11 | 27 | 59 | 39 |
| Michigan Tech Univ | 21 | 2 | 2 | 1 | 1 | 5 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 |
| Oakland Univ | 17 | 0 | 0 | 0 | 1 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 |
| Univ of Detroit Mercy | 9 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Michigan | 565 | 22 | 27 | 7 | 29 | 166 | 58 | 40 | 2 | 26 | 58 | 18 | 4 | 4 | 58 | 29 | 17 |
| Wayne State Univ | 236 | 8 | 16 | 0 | 10 | 33 | 52 | 5 | 0 | 30 | 14 | 0 | 0 | 2 | 8 | 47 | 11 |
| Western Michigan Univ | 55 | 2 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 14 | 6 | 2 | 1 | 3 | 1 | 20 | 2 |
| M NNESOTA | 784 | 12 | 27 | 10 | 29 | 111 | 107 | 51 | 29 | 67 | 50 | 17 | 4 | 5 | 79 | 129 | 57 |
| Hamline Univ | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Luther Seminary | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 2 |
| Mayo Graduate School | 25 | 1 | 0 | 0 | 0 | 3 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Saint Mary's Univ of Minnesota | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 |
| Univ of Minnesota-Twin Cities | 633 | 11 | 27 | 9 | 28 | 108 | 86 | 42 | 29 | 37 | 47 | 17 | 4 | 5 | 73 | 87 | 23 |
| Univ of St Thomas | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 |
| Walden University | 97 | 0 | 0 | 1 | 1 | 0 | 0 | 9 | 0 | 30 | 3 | 0 | 0 | 0 | 1 | 22 | 30 |
| MISSISSIPPI | 338 | 3 | 20 | 5 | 7 | 20 | 26 | 13 | 19 | 19 | 9 | 10 | 10 | 4 | 34 | 117 | 22 |
| Delta State Univ | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Jackson State Univ | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 13 | 1 |
| Mississippi State Univ | 100 | 0 | 4 | 1 | 3 | 13 | 9 | 0 | 18 | 1 | 5 | 4 | 0 | 0 | 17 | 19 | 6 |
| Reformed Theological Seminary | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 6 |
| Univ of Mississippi-Main Campus | 92 | 2 | 7 | 0 | 2 | 6 | 6 | 8 | 0 | 5 | 2 | 6 | 7 | 3 | 4 | 30 | 4 |
| Univ of Mississippi-Med Ctr | 10 | 0 | 0 | 0 | 0 | 0 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Southern Mississippi | 111 | 1 | 9 | 4 | 2 | 1 | 5 | 1 | 1 | 13 | 1 | 0 | 3 | 1 | 11 | 53 | 5 |
| MISSOURI | 739 | 17 | 38 | 7 | 20 | 70 | 132 | 26 | 26 | 64 | 58 | 14 | 7 | 9 | 63 | 142 | 46 |
| Concordia Seminary | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| St. Louis Univ-Main Campus | 145 | 0 | 0 | 2 | 1 | 0 | 11 | 12 | 0 | 17 | 8 | 4 | 3 | 3 | 12 | 57 | 15 |
| Univ of Missouri-Columbia | 277 | 4 | 14 | 1 | 7 | 14 | 50 | 3 | 26 | 26 | 25 | 4 | 1 | 3 | 13 | 67 | 19 |
| Univ of Missouri-Kansas City | 75 | 2 | 6 | 0 | 4 | 0 | 7 | 4 | 0 | 11 | 3 | 4 | 0 | 0 | 22 | 10 | 2 |
| Univ of Missouri-Rolla | 42 | 3 | 5 | 1 | 2 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Missouri-St Louis | 30 | 0 | 4 | 0 | 0 | 0 | 6 | 4 | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 8 | 0 |
| Washington Univ | 169 | 8 | 9 | 3 | 6 | 25 | 58 | 3 | 0 | 7 | 17 | 2 | 3 | 3 | 16 | 0 | 9 |
| MONTANA | 58 | 5 | 4 | 2 | 6 | 2 | 10 | 0 | 5 | 7 | 1 | 0 | 0 | 0 | 0 | 16 | 0 |
| Montana State Univ | 31 | 5 | 4 | 0 | 6 | 2 | 3 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 9 | 0 |
| Univ of Montana | 27 | 0 | 0 | 2 | 0 | 0 | 7 | 0 | 4 | 7 | 0 | 0 | 0 | 0 | 0 | 7 | 0 |
| NEBRASKA | 274 | 3 | 9 | 5 | 18 | 12 | 37 | 7 | 29 | 32 | 18 | 6 | 3 | 6 | 13 | 56 | 20 |
| Creighton Univ | 5 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Nebraska-Lincoln | 235 | 3 | 8 | 5 | 18 | 12 | 14 | 3 | 29 | 32 | 15 | 6 | 3 | 6 | 13 | 49 | 19 |
| Univ of Nebraska-Med Center | 23 | 0 | 1 | 0 | 0 | 0 | 18 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Nebraska-Omaha | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 7 | 1 |
| NEVADA | 92 | 6 | 5 | 7 | 0 | 4 | 9 | 2 | 0 | 18 | 3 | 2 | 0 | 3 | 3 | 28 | 2 |
| Univ of Nevada-Las Vegas | 32 | 3 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 19 | 2 |
| Univ of Nevada-Reno | 60 | 3 | 5 | 6 | 0 | 1 | 9 | 2 | 0 | 18 | 1 | 1 | 0 | 2 | 3 | 9 | 0 |
| NEW HAMPSH RE | 93 | 9 | 9 | 6 | 4 | 9 | 30 | 3 | 5 | 3 | 1 | 6 | 1 | 1 | 2 | 4 | 0 |
| Dartmouth College | 50 | 5 | 5 | 2 | 4 | 6 | 24 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of New Hampshire-Main Campus | 43 | 4 | 4 | 4 | 0 | 3 | 6 | 0 | 5 | 2 | 1 | 6 | 1 | 1 | 2 | 4 | 0 |
| NEW JERSEY | 941 | 52 | 42 | 26 | 59 | 159 | 121 | 15 | 8 | 50 | 90 | 42 | 6 | 11 | 119 | 74 | 67 |
| Drew Univ | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 1 | 1 | 23 | 0 | 4 |
| Fairleigh Dickinson Univ-All Campuses | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Jersey Inst of Technology | 61 | 5 | 0 | 4 | 10 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Princeton Theol Seminary | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 6 | 0 | 13 |
| Princeton University | 267 | 33 | 12 | 3 | 22 | 45 | 32 | 1 | 0 | 3 | 42 | 23 | 0 | 4 | 45 | 0 | 2 |
| Rutgers Univ-New Brunswick | 371 | 9 | 17 | 19 | 21 | 59 | 48 | 6 | 8 | 18 | 44 | 15 | 5 | 6 | 45 | 33 | 18 |
| Rutgers Univ-Newark | 53 | 0 | 3 | 0 | 3 | 0 | 9 | 8 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 1 | 24 |
| Seton Hall Univ | 63 | 0 | 9 | 0 | 0 | 0 | 1 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 40 | 0 |
| Stevens Inst of Technology | 29 | 5 | 1 | 0 | 3 | 13 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Univ of Med \& Dent of NJ | 31 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NEW MEXICO | 263 | 16 | 14 | 8 | 11 | 34 | 15 | 6 | 10 | 16 | 16 | 8 | 7 | 5 | 23 | 59 | 15 |
| New Mexico Inst of Mining \& Tech | 12 | 0 | 4 | 5 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Mexico State Univ-Main Campus | 78 | 5 | 2 | 2 | 4 | 16 | 4 | 0 | 10 | 3 | 0 | 0 | 0 | 1 | 4 | 20 | 7 |
| Univ of New Mexico-Main Campus | 173 | 11 | 8 | 1 | 7 | 15 | 11 | 6 | 0 | 13 | 16 | 8 | 7 | 4 | 19 | 39 | 8 |


|  | $\begin{aligned} & 2001 \\ & \text { Total } \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & \mathscr{0} \\ & 0 \\ & \text { O} \\ & \hline 0.0 \\ & \hline 0 \\ & \hline 0 \end{aligned}$ |  |  | $\begin{aligned} & \text { 진 } \\ & \text { 음 } \\ & \text { ㅇ } \\ & \text { in } \end{aligned}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NEW YORK | 3,420 | 108 | 142 | 59 | 172 | 338 | 536 | 73 | 54 | 345 | 366 | 113 | 56 | 72 | 405 | 401 | 180 |
| Adelphi Univ | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Albany Medical College | 11 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alfred Univ | 11 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| CUNY Grad School \& Univ Center | 249 | 5 | 13 | 3 | 11 | 16 | 24 | 5 | 0 | 44 | 37 | 8 | 6 | 10 | 48 | 7 | 12 |
| Clarkson Univ | 21 | 0 | 2 | 0 | 1 | 16 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Columbia Univ | 407 | 15 | 18 | 12 | 19 | 41 | 68 | 13 | 0 | 8 | 63 | 33 | 9 | 11 | 69 | 0 | 28 |
| Columbia Univ -Teachers College | 194 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 24 | 3 | 0 | 0 | 1 | 2 | 161 | 0 |
| Cornell Univ | 417 | 19 | 27 | 10 | 31 | 71 | 73 | 5 | 47 | 6 | 48 | 13 | 4 | 6 | 27 | 12 | 18 |
| Cornell Univ Medical Campus | 33 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fordham University | 111 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 14 | 3 | 4 | 2 | 10 | 27 | 13 |
| Hebrew Union College | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Hofstra Univ | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 10 | 0 |
| Jewish Theol Sem of America | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 |
| The Juilliard School | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 |
| Long Island Univ-Brooklyn Campus | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Long Island Univ-C.W. Post Campus | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mount Sinai School of Medicine | 21 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New School University | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 23 | 0 | 0 | 0 | 6 | 0 | 0 |
| New York Medical College | 12 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New York Univ | 358 | 6 | 4 | 1 | 28 | 0 | 39 | 18 | 0 | 23 | 42 | 18 | 5 | 12 | 78 | 38 | 46 |
| Pace Univ-New York | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Polytechnic Univ | 38 | 2 | 13 | 0 | 5 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rensselaer Polytechnic Inst | 100 | 8 | 6 | 1 | 14 | 56 | 2 | 1 | 0 | 0 | 6 | 0 | 0 | 0 | 2 | 0 | 4 |
| Rochester Institute of Technology | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rockefeller Univ | 15 | 1 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| St Johns Univ-Queens | 45 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 14 | 0 | 2 | 1 | 0 | 1 | 22 | 0 |
| SUNY-Albany | 150 | 8 | 1 | 8 | 6 | 3 | 15 | 3 | 0 | 17 | 26 | 1 | 6 | 2 | 13 | 27 | 14 |
| SUNY-Binghamton | 118 | 0 | 7 | 2 | 11 | 7 | 10 | 0 | 0 | 10 | 20 | 11 | 3 | 6 | 26 | 3 | 2 |
| SUNY-Buffalo | 292 | 9 | 29 | 2 | 8 | 46 | 46 | 8 | 0 | 19 | 12 | 6 | 12 | 8 | 29 | 52 | 6 |
| SUNY-Stony Brook | 228 | 16 | 6 | 17 | 23 | 22 | 51 | 1 | 0 | 12 | 24 | 9 | 4 | 7 | 35 | 1 | 0 |
| SUNY Coll-Environ Sci \& Forestry | 16 | 0 | 1 | 2 | 0 | 1 | 5 | 0 | 7 | 0 | 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 | 0 |
| SUNY-HIth Sci Ctr-Brooklyn | 6 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| SUNY-Hlth Sci Ctr-Syracuse | 8 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Syracuse Univ | 129 | 4 | 7 | 0 | 9 | 13 | 7 | 1 | 0 | 12 | 27 | 4 | 0 | 1 | 10 | 24 | 10 |
| Union Theol Seminary | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 8 |
| Univ of Rochester | 195 | 15 | 8 | 0 | 5 | 23 | 45 | 7 | 0 | 12 | 21 | 5 | 2 | 6 | 30 | 13 | 3 |
| Yeshiva Univ | 59 | 0 | 0 | 0 | 0 | 0 | 41 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 1 | 7 |
| NORTH CAROL NA | 1,106 | 17 | 66 | 24 | 59 | 155 | 220 | 45 | 36 | 69 | 76 | 32 | 15 | 24 | 99 | 131 | 38 |
| Appalachian State Univ | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| Duke Univ | 251 | 5 | 17 | 6 | 11 | 37 | 72 | 0 | 0 | 8 | 20 | 16 | 2 | 7 | 45 | 2 | 3 |
| East Carolina Univ | 15 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| Fayetteville State Univ | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 |
| North Carolina A \& T St Univ | 6 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| North Carolina St U-Raleigh | 306 | 8 | 10 | 11 | 29 | 88 | 43 | 1 | 36 | 18 | 11 | 0 | 0 | 0 | 0 | 47 | 4 |
| Southeastern Baptist Theological Seminary | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 |
| Univ of N Carolina-Chapel Hill | 397 | 4 | 38 | 7 | 17 | 12 | 74 | 40 | 0 | 31 | 45 | 16 | 9 | 14 | 42 | 20 | 28 |
| Univ of N Carolina-Charlotte | 24 | 0 | 0 | 0 | 2 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 1 |
| Univ of N Carolina-Greensboro | 69 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 12 | 0 | 0 | 4 | 3 | 9 | 33 | 1 |
| Wake Forest University | 25 | 0 | 1 | 0 | 0 | 3 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NORTH DAKOTA | 66 | 0 | 8 | 1 | 3 | 2 | 9 | 0 | 7 | 13 | 0 | 2 | 0 | 3 | 1 | 17 | 0 |
| North Dakota State Univ-Main Campus | 22 | 0 | 6 | 0 | 3 | 1 | 5 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of North Dakota-Main Campus | 44 | 0 | 2 | 1 | 0 | 1 | 4 | 0 | 0 | 13 | 0 | 2 | 0 | 3 | 1 | 17 | 0 |
| OHIO | 1,697 | 74 | 87 | 30 | 46 | 283 | 240 | 78 | 33 | 154 | 84 | 49 | 20 | 20 | 137 | 268 | 94 |
| Air Force Inst of Tech | 8 | 1 | 0 | 0 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bowling Green State Univ-Main Campus | 100 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 0 | 17 | 4 | 8 | 2 | 4 | 29 | 16 | 8 |
| Case Western Reserve Univ | 195 | 6 | 15 | 2 | 2 | 47 | 45 | 25 | 0 | 8 | 9 | 4 | 1 | 3 | 6 | 0 | 22 |
| Cleveland State Univ | 36 | 0 | 4 | 0 | 2 | 10 | 8 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 7 | 3 |
| Hebrew Union College-Jewish Inst of Religion | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 |
| Kent State Univ-Main Campus | 119 | 11 | 2 | 1 | 7 | 0 | 12 | 5 | 0 | 17 | 9 | 4 | 3 | 2 | 4 | 34 | 8 |
| Medical College of Ohio | 12 | 0 | 0 | 0 | 0 | 0 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miami Univ-Oxford | 47 | 0 | 3 | 0 | 0 | 0 | 12 | 0 | 0 | 6 | 3 | 4 | 4 | 1 | 3 | 10 | 1 |
| Ohio State Univ-Main Campus | 591 | 31 | 23 | 23 | 24 | 90 | 84 | 26 | 33 | 37 | 42 | 21 | 3 | 3 | 54 | 78 | 19 |
| Ohio Univ-Main Campus | 105 | 6 | 3 | 0 | 2 | 6 | 7 | 0 | 0 | 13 | 0 | 4 | 1 | 1 | 6 | 38 | 18 |
| Univ of Akron-Main Campus | 120 | 10 | 15 | 0 | 1 | 42 | 3 | 0 | 0 | 21 | 4 | 1 | 0 | 0 | 0 | 20 | 3 |
| Univ of Cincinnati-Main Campus | 249 | 4 | 15 | 4 | 3 | 53 | 39 | 17 | 0 | 23 | 12 | 2 | 4 | 3 | 33 | 29 | 8 |
| Univ of Dayton | 28 | 3 | 0 | 0 | 0 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 |
| Univ of Toledo | 77 | 2 | 3 | 0 | 0 | 16 | 10 | 4 | 0 | 11 | 0 | 0 | 2 | 3 | 0 | 22 | 4 |
| Wright State Univ-Main Campus | 5 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Youngstown State Univ | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |


|  | $\begin{aligned} & 2001 \\ & \text { Total } \end{aligned}$ |  |  |  |  | $\begin{aligned} & \text { 은 } \\ & \text { © } \\ & \text { © } \\ & \text { 듶 } \end{aligned}$ | $\begin{aligned} & \mathscr{0} \\ & \stackrel{0}{0} \\ & .0 \\ & \hline 0 \\ & \hline 0 \end{aligned}$ |  |  | $\begin{aligned} & \text { 진 } \\ & \text { 은 } \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ |  | $\begin{aligned} & \text { तo } \\ & \frac{\text { bin }}{I} \end{aligned}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OKLAHOMA | 427 | 7 | 12 | 10 | 12 | 50 | 44 | 3 | 34 | 35 | 29 | 8 | 9 | 6 | 20 | 125 | 23 |
| Oklahoma State Univ-Main Campus | 228 | 2 | 6 | 2 | 4 | 16 | 20 | 1 | 34 | 16 | 7 | 3 | 5 | 0 | 4 | 99 | 9 |
| Univ of Oklahoma-Norman Campus | 176 | 5 | 6 | 7 | 6 | 25 | 23 | 2 | 0 | 11 | 22 | 5 | 4 | 5 | 15 | 26 | 14 |
| Univ of Tulsa | 23 | 0 | 0 | 1 | 2 | 9 | 1 | 0 | 0 | 8 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| OREGON | 383 | 15 | 17 | 22 | 14 | 28 | 65 | 12 | 28 | 24 | 41 | 4 | 3 | 5 | 26 | 61 | 18 |
| Oregon Graduate Inst of Sci \& Eng | 10 | 0 | 0 | 1 | 2 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oregon Health \& Science Univ | 21 | 0 | 0 | 3 | 0 | 0 | 9 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 5 | 0 | 0 |
| Oregon State Univ | 159 | 7 | 13 | 11 | 5 | 18 | 36 | 6 | 28 | 3 | 7 | 0 | 0 | 0 | 0 | 23 | 2 |
| Portland State Univ | 38 | 0 | 0 | 2 | 3 | 6 | 2 | 1 | 0 | 2 | 8 | 0 | 0 | 0 | 0 | 6 | 8 |
| Univ of Oregon | 155 | 8 | 4 | 5 | 4 | 0 | 15 | 2 | 0 | 18 | 26 | 4 | 3 | 5 | 21 | 32 | 8 |
| PENNSYLVANIA | 2,121 | 57 | 109 | 18 | 102 | 340 | 250 | 104 | 14 | 169 | 164 | 42 | 20 | 41 | 190 | 358 | 143 |
| Bryn Mawr College | 21 | 0 | 1 | 1 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 10 | 0 | 4 |
| Carnegie Mellon Univ | 175 | 10 | 8 | 1 | 31 | 78 | 4 | 0 | 0 | 5 | 15 | 4 | 0 | 0 | 8 | 1 | 10 |
| Drexel Univ | 51 | 0 | 7 | 2 | 0 | 19 | 3 | 0 | 0 | 8 | 5 | 0 | 0 | 0 | 0 | 3 | 4 |
| Duquesne Univ | 37 | 0 | 7 | 0 | 0 | 0 | 2 | 0 | 0 | 14 | 0 | 0 | 0 | 4 | 6 | 0 | 4 |
| Indiana Univ of Pennsylvania | 88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 6 | 0 | 7 | 17 | 15 | 25 | 1 |
| Lehigh Univ | 101 | 9 | 6 | 2 | 3 | 41 | 5 | 0 | 0 | 9 | 0 | 1 | 2 | 6 | 0 | 15 | 2 |
| Marywood Univ | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 2 | 0 |
| MCP Hahnemann University | 29 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pennsylvania State Univ-Main Campus | 541 | 20 | 32 | 12 | 16 | 126 | 62 | 15 | 14 | 35 | 34 | 3 | 4 | 6 | 34 | 93 | 35 |
| University of the Sciences in Philadelphia | 10 | 0 | 3 | 0 | 0 | 0 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Temple Univ | 238 | 0 | 3 | 0 | 13 | 1 | 30 | 17 | 0 | 24 | 24 | 14 | 2 | 4 | 32 | 63 | 11 |
| Thomas Jefferson Univ | 13 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Pennsylvania | 373 | 11 | 21 | 0 | 18 | 29 | 75 | 14 | 0 | 12 | 51 | 13 | 1 | 4 | 42 | 35 | 47 |
| Univ of Pittsburgh-Main Campus | 359 | 7 | 19 | 0 | 21 | 46 | 42 | 41 | 0 | 23 | 28 | 7 | 3 | 0 | 32 | 69 | 21 |
| Villanova Univ | 4 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Westminster Theol Seminary | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 4 |
| Widener Univ-Main Campus | 63 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 0 |
| PUERTO RICO | 151 | 0 | 12 | 0 | 0 | 2 | 27 | 0 | 3 | 53 | 0 | 4 | 0 | 0 | 4 | 46 | 0 |
| Carlos Albizu University-San Juan Campus | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inter Amer Univ PR-Metro | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 0 |
| Univ of Puerto Rico-Mayaguez | 7 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Puerto Rico-Med Science Campus | 10 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Puerto Rico-Rio Piedras | 74 | 0 | 12 | 0 | 0 | 0 | 15 | 0 | 0 | 17 | 0 | 4 | 0 | 0 | 4 | 22 | 0 |
| RHODE ISLAND | 225 | 10 | 12 | 14 | 16 | 26 | 20 | 6 | 1 | 29 | 28 | 7 | 4 | 8 | 33 | 4 | 7 |
| Brown Univ | 135 | 9 | 8 | 6 | 11 | 13 | 15 | 2 | 0 | 5 | 25 | 5 | 2 | 7 | 27 | 0 | 0 |
| Providence College | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Salve Regina Univ | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 |
| Univ of Rhode Island | 84 | 1 | 4 | 8 | 5 | 13 | 5 | 4 | 1 | 24 | 3 | 0 | 2 | 1 | 2 | 4 | 7 |
| SOUTH CAROLINA | 389 | 7 | 20 | 2 | 16 | 50 | 53 | 33 | 13 | 29 | 22 | 7 | 5 | 6 | 22 | 74 | 30 |
| Clemson University | 110 | 3 | 10 | 1 | 9 | 33 | 18 | 0 | 13 | 0 | 3 | 0 | 0 | 0 | 0 | 9 | 11 |
| Medical Univ of South Carolina | 23 | 0 | 0 | 0 | 0 | 0 | 21 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| South Carolina State Univ | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 |
| Univ of South Carolina | 231 | 4 | 10 | 1 | 7 | 17 | 14 | 31 | 0 | 29 | 19 | 7 | 5 | 6 | 22 | 40 | 19 |
| SOUTH DAKOTA | 97 | 0 | 2 | 4 | 0 | 1 | 8 | 0 | 6 | 8 | 5 | 0 | 1 | 1 | 0 | 61 | 0 |
| South Dakota Sch of Mines \& Tech | 4 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| South Dakota State Univ | 19 | 0 | 2 | 1 | 0 | 0 | 5 | 0 | 6 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of South Dakota | 74 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 8 | 0 | 0 | 1 | 1 | 0 | 61 | 0 |
| TENNESSEE | 659 | 22 | 27 | 2 | 23 | 60 | 123 | 27 | 4 | 75 | 37 | 3 | 3 | 5 | 43 | 163 | 42 |
| East Tennessee State Univ | 13 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| Meharry Medical College | 15 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mid-America Baptist Sem | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 |
| Middle Tennessee State Univ | 16 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 2 | 3 | 0 | 7 | 0 |
| Tennessee State Univ | 52 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 39 | 3 |
| Tennessee Technological Univ | 5 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Memphis | 92 | 0 | 4 | 0 | 10 | 4 | 4 | 3 | 0 | 20 | 0 | 0 | 0 | 0 | 9 | 26 | 12 |
| Univ of Tennessee-Knoxville | 238 | 13 | 9 | 2 | 8 | 32 | 27 | 11 | 4 | 30 | 23 | 1 | 1 | 2 | 6 | 47 | 22 |
| Univ of Tennessee-Memphis | 32 | 0 | 4 | 0 | 0 | 0 | 21 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vanderbilt Univ | 192 | 9 | 9 | 0 | 5 | 19 | 52 | 4 | 0 | 15 | 13 | 2 | 0 | 0 | 27 | 35 | 2 |
| TEXAS | 2,683 | 78 | 119 | 69 | 117 | 378 | 356 | 114 | 69 | 219 | 166 | 57 | 30 | 49 | 261 | 454 | 147 |
| Baylor College of Medicine | 47 | 0 | 0 | 0 | 0 | 0 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Baylor Univ | 62 | 2 | 2 | 0 | 3 | 0 | 5 | 0 | 0 | 1 | 3 | 0 | 3 | 3 | 8 | 32 | 0 |
| Dallas Theological Seminary | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 9 |
| Lamar Univ-Beaumont | 10 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Rice Univ | 128 | 11 | 13 | 5 | 18 | 20 | 2 | 0 | 0 | 9 | 11 | 6 | 7 | 3 | 23 | 0 | 0 |
| St. Mary's Univ | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| Sam Houston State Univ | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |


|  | $\begin{aligned} & 2001 \\ & \text { Total } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { तò } \\ & \frac{0}{\underline{\omega}} \end{aligned}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TEXAS, continued |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Southern Methodist Univ | 37 | 1 | 0 | 0 | 6 | 15 | 2 | 0 | 0 | 6 | 4 | 0 | 0 | 0 | 3 | 0 | 0 |
| Southwestern Baptist Theol Sem | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 18 | 1 | 22 |
| Southwest Texas State Univ | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stephen F Austin St Univ | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Texas A\&M Univ-College Station | 506 | 8 | 26 | 27 | 33 | 111 | 52 | 10 | 52 | 24 | 40 | 8 | 4 | 4 | 4 | 82 | 21 |
| Texas A\&M Univ-Commerce | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 1 | 0 | 31 | 0 |
| Texas A\&M Univ-Corpus Christi | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 |
| Texas A\&M Univ-Kingsville | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| Texas Christian Univ | 21 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 4 | 1 | 3 | 0 | 0 | 0 |
| Texas Southern Univ | 20 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 |
| Texas Tech Univ | 139 | 0 | 7 | 2 | 3 | 15 | 10 | 0 | 14 | 27 | 5 | 6 | 1 | 3 | 11 | 28 | 7 |
| Texas Tech Univ Health Sci Ctr | 7 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Texas Woman's Univ | 86 | 0 | 0 | 0 | 0 | 0 | 5 | 36 | 0 | 14 | 5 | 0 | 1 | 0 | 5 | 13 | 7 |
| Univ of Dallas | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 6 | 0 | 0 |
| Univ of Houston | 202 | 7 | 15 | 4 | 7 | 25 | 11 | 3 | 0 | 21 | 6 | 6 | 2 | 12 | 13 | 65 | 5 |
| Univ of North Texas | 159 | 3 | 5 | 4 | 9 | 2 | 10 | 0 | 0 | 28 | 9 | 5 | 5 | 4 | 13 | 58 | 4 |
| Univ of North Texas-Hlth Sci Ctr | 18 | 0 | 0 | 0 | 0 | 0 | 17 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| University of St. Thomas | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Univ of Texas-Arlington | 90 | 2 | 3 | 0 | 10 | 21 | 2 | 0 | 0 | 3 | 5 | 5 | 1 | 1 | 23 | 3 | 11 |
| Univ of Texas-Austin | 732 | 34 | 34 | 12 | 21 | 143 | 49 | 30 | 0 | 53 | 60 | 17 | 5 | 13 | 115 | 95 | 51 |
| Univ of Texas-Dallas | 66 | 6 | 9 | 8 | 7 | 7 | 6 | 0 | 0 | 1 | 8 | 0 | 0 | 1 | 8 | 0 | 5 |
| Univ of Texas-El Paso | 27 | 0 | 0 | 5 | 0 | 10 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| Univ of Texas-Pan American | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 |
| Univ Tex-Hlth Sci Ctr-Houston | 75 | 1 | 0 | 2 | 0 | 0 | 45 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Univ Tex-Hlth Sci Ctr-San Antonio | 35 | 0 | 0 | 0 | 0 | 0 | 30 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ Tex-Med Branch-Galveston | 27 | 0 | 0 | 0 | 0 | 0 | 24 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ Tex-Southwestern Med Ctr | 42 | 1 | 0 | 0 | 0 | 0 | 31 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UTAH | 348 | 19 | 30 | 8 | 16 | 47 | 55 | 23 | 5 | 39 | 17 | 2 | 0 | 5 | 17 | 51 | 14 |
| Brigham Young Univ | 79 | 2 | 8 | 0 | 2 | 10 | 8 | 5 | 1 | 21 | 1 | 1 | 0 | 0 | 5 | 15 | 0 |
| Univ of Utah | 204 | 14 | 19 | 8 | 9 | 30 | 35 | 18 | 0 | 8 | 10 | 1 | 0 | 5 | 12 | 22 | 13 |
| Utah State Univ | 65 | 3 | 3 | 0 | 5 | 7 | 12 | 0 | 4 | 10 | 6 | 0 | 0 | 0 | 0 | 14 | 1 |
| VERMONT | 62 | 0 | 7 | 0 | 0 | 6 | 24 | 0 | 3 | 12 | 0 | 0 | 0 | 0 | 2 | 8 | 0 |
| Middlebury College | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Univ of Vermont | 60 | 0 | 7 | 0 | 0 | 6 | 24 | 0 | 3 | 12 | 0 | 0 | 0 | 0 | 0 | 8 | 0 |
| $V$ RGINIA | 970 | 44 | 37 | 14 | 53 | 169 | 114 | 39 | 21 | 75 | 88 | 20 | 3 | 7 | 39 | 204 | 43 |
| College of William \& Mary | 54 | 10 | 1 | 6 | 3 | 0 | 3 | 0 | 2 | 1 | 0 | 4 | 0 | 0 | 5 | 19 | 0 |
| George Mason Univ | 138 | 0 | 1 | 3 | 26 | 9 | 5 | 6 | 1 | 15 | 38 | 1 | 0 | 0 | 0 | 32 | 1 |
| Hampton University | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Norfolk State Univ | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Old Dominion Univ | 62 | 6 | 0 | 0 | 5 | 12 | 15 | 2 | 0 | 2 | 12 | 0 | 0 | 0 | 0 | 3 | 5 |
| Regent Univ | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 5 |
| Union Theol Seminary in Virginia | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 3 | 2 |
| Univ of Virginia-Main Campus | 314 | 17 | 14 | 3 | 14 | 43 | 45 | 9 | 0 | 21 | 26 | 15 | 3 | 7 | 25 | 71 | 1 |
| Virginia Commonwealth Univ and Med Coll | 103 | 0 | 9 | 0 | 0 | 2 | 34 | 15 | 0 | 18 | 5 | 0 | 0 | 0 | 4 | 10 | 6 |
| Virginia Polytech Inst \& St Univ | 276 | 5 | 12 | 2 | 5 | 103 | 12 | 7 | 18 | 18 | 7 | 0 | 0 | 0 | 0 | 66 | 21 |
| WASHINGTON | 660 | 24 | 30 | 23 | 35 | 82 | 116 | 40 | 32 | 35 | 77 | 16 | 6 | 14 | 41 | 60 | 29 |
| Gonzaga Univ | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 1 | 5 | 0 |
| Seattle Pacific Univ | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| Seattle Univ | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 |
| Univ of Washington | 484 | 19 | 26 | 19 | 32 | 66 | 89 | 37 | 13 | 18 | 56 | 10 | 4 | 10 | 39 | 28 | 18 |
| Washington State Univ | 149 | 5 | 4 | 4 | 3 | 16 | 27 | 3 | 19 | 8 | 19 | 6 | 2 | 4 | 1 | 17 | 11 |
| WEST VIRGINIA | 128 | 5 | 3 | 1 | 2 | 15 | 16 | 1 | 1 | 17 | 6 | 8 | 3 | 1 | 2 | 46 | 1 |
| Marshall University | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| West Virginia Univ | 126 | 5 | 3 | 1 | 2 | 15 | 14 | 1 | 1 | 17 | 6 | 8 | 3 | 1 | 2 | 46 | 1 |
| WISCONSIN | 836 | 28 | 40 | 19 | 38 | 111 | 120 | 25 | 31 | 43 | 93 | 31 | 6 | 15 | 90 | 94 | 52 |
| Cardinal Strich University | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 |
| Marquette Univ | 56 | 0 | 2 | 0 | 2 | 13 | 5 | 0 | 0 | 9 | 0 | 3 | 0 | 1 | 9 | 7 | 5 |
| Medical College of Wisconsin | 16 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Univ of Wisconsin-Madison | 656 | 26 | 32 | 16 | 31 | 83 | 94 | 21 | 31 | 26 | 78 | 28 | 4 | 8 | 74 | 65 | 39 |
| Univ of Wisconsin-Milwaukee | 96 | 2 | 6 | 3 | 5 | 15 | 5 | 4 | 0 | 8 | 15 | 0 | 2 | 6 | 7 | 10 | 8 |
| WYOM NG | 70 | 2 | 3 | 2 | 3 | 2 | 11 | 0 | 3 | 7 | 5 | 0 | 0 | 0 | 0 | 32 | 0 |
| Univ of Wyoming | 70 | 2 | 3 | 2 | 3 | 2 | 11 | 0 | 3 | 7 | 5 | 0 | 0 | 0 | 0 | 32 | 0 |

NOTE: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates.
Source: NSF/NIH/NEH/USED/USDA/NASA, Survey of Earned Doctorates

APPENDIX TABLE A-8. Top 50 Doctorate-Granting Institutions, 2001


[^21]
## APPENDIX B: Trend Tables, 1991-2001

Appendix B includes the following two tables:
B-1: Number of doctorate recipients, by subfield, 1991-2001
B-2: Number of doctorate recipients, by sex, race/ethnicity, and citizenship, 1991-2001

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 in the questionnaire at the back of the Summary Report; some subfields, 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 of the Summary Report for a description of field groupings as reported in these tables. The "general" field categories-for example, "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-for example, "chemistry, other"-include individuals whose specified doctoral discipline was not among the specialty fields.

The eight tables in Appendix A present additional information on the most recent cohort of research doctorate recipients by field of doctorate.

TABLE B-2: Table B-2 displays, by sex and citizenship, data on the race/ethnicity of doctorate recipients for 1991-2001. Table B-2 contains three panels, each displayed on a separate page. The first panel includes all doctorates; the others disaggregate the data by sex.

Since 1982 respondents have been asked to first indicate whether or not they are Hispanic, and then check one or more of the various racial group categories: American Indian (indicating Tribal Affiliation in 2001), Asian, Native Hawaiians and Pacific Islanders, black, or white. In Table B-2, doctorate recipients who reported Hispanic heritage, regardless of racial designation, are counted as Hispanic. The remaining survey respondents are then counted in their respective racial groups or as "Other/Unknown" (which includes only those who did not indicate a specific race/ethnicity through 2000, and also includes those choosing "Multiple Race" or "Native Hawaiians and Pacific Islanders" in 2001). (Note: Doctorate recipients who checked the category "American Indian or Alaskan Native" are identified as American Indian in this report.)

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

|  | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TOTAL ALL FIELDS | 37,533 | 38,890 | 39,800 | 41,037 | 41,747 | 42,438 | 42,559 | 42,654 | 41,097 | 41,340 | 40,744 |
| PHYSICAL SCIENCES | 6,279 | 6,502 | 6,496 | 6,822 | 6,808 | 6,674 | 6,679 | 6,743 | 6,322 | 6,073 | 5,970 |
| MATHEMATICS | 1,038 | 1,058 | 1,146 | 1,118 | 1,190 | 1,122 | 1,123 | 1,177 | 1,083 | 1,049 | 1,006 |
| Applied Mathematics | 192 | 213 | 188 | 206 | 211 | 230 | 242 | 265 | 252 | 238 | 214 |
| Algebra | 72 | 69 | 84 | 78 | 82 | 78 | 78 | 75 | 84 | 82 | 67 |
| Analysis \& Functional Analysis | 132 | 105 | 105 | 107 | 99 | 100 | 103 | 130 | 86 | 81 | 91 |
| Geometry | 66 | 45 | 44 | 35 | 45 | 72 | 70 | 54 | 65 | 59 | 40 |
| Logic | 23 | 28 | 19 | 29 | 35 | 16 | 23 | 16 | 23 | 19 | 24 |
| Number Theory | 30 | 25 | 42 | 37 | 35 | 42 | 46 | 46 | 50 | 40 | 35 |
| Mathematical Statistics | 206 | 217 | 228 | 205 | 205 | 178 | 181 | 204 | 174 | 195 | 198 |
| Topology | 57 | 58 | 54 | 38 | 51 | 55 | 62 | 65 | 65 | 50 | 53 |
| Computing Theory \& Practice | 19 | 12 | 18 | 16 | 14 | 18 | 14 | 18 | 14 | 17 | 11 |
| Operations Research | 16 | 22 | 37 | 26 | 36 | 21 | 20 | 17 | 21 | 19 | 14 |
| Mathematics, General | 180 | 209 | 276 | 269 | 305 | 233 | 153 | 163 | 116 | 150 | 156 |
| Mathematics, Other | 45 | 55 | 51 | 72 | 72 | 79 | 131 | 124 | 133 | 99 | 103 |
| COMPUTER SCIENCE | 800 | 869 | 880 | 903 | 997 | 920 | 909 | 927 | 855 | 859 | 826 |
| Computer Science | 720 | 791 | 825 | 833 | 913 | 836 | 828 | 821 | 741 | 721 | 687 |
| Information Sciences \& Systems | 80 | 78 | 55 | 70 | 84 | 84 | 81 | 106 | 114 | 138 | 83 |
| Computer/Info Science, Other | ---- | ---- | ---- | ---- | ----- | ----- | ----- | ----- | ----- | ----- | 56 |
| PHYSICS AND ASTRONOMY | 1,411 | 1,537 | 1,544 | 1,692 | 1,652 | 1,677 | 1,599 | 1,585 | 1,430 | 1,390 | 1,379 |
| Astronomy | 50 | 55 | 76 | 66 | 89 | 84 | 71 | 91 | 59 | 78 | 89 |
| Astrophysics | 75 | 79 | 69 | 78 | 84 | 108 | 127 | 116 | 100 | 107 | 97 |
| Acoustics | 13 | 18 | 27 | 20 | 18 | 19 | 19 | 18 | 16 | 10 | 10 |
| Chem. \& Atomic/Molecular | 76 | 85 | 95 | 140 | 110 | 129 | 106 | 100 | 100 | 110 | 81 |
| Electron | 1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Elementary Particles | 182 | 153 | 170 | 176 | 183 | 176 | 170 | 173 | 169 | 147 | 121 |
| Fluids | 14 | 17 | 19 | 12 | 18 | 21 | 24 | 26 | 23 | 10 | 8 |
| Nuclear | 66 | 86 | 82 | 90 | 91 | 87 | 106 | 92 | 77 | 74 | 79 |
| Optics | 85 | 94 | 96 | 104 | 98 | 129 | 123 | 104 | 98 | 117 | 107 |
| Plasma \& High-Temperature | 58 | 65 | 62 | 79 | 46 | 48 | 39 | 55 | 49 | 38 | 39 |
| Polymer | 17 | 17 | 29 | 29 | 23 | 33 | 19 | 24 | 28 | 21 | 18 |
| Solid State \& Low-Temperature | 372 | 408 | 336 | 388 | 371 | 364 | 328 | 314 | 307 | 279 | 294 |
| Physics, General | 247 | 297 | 340 | 343 | 355 | 323 | 255 | 191 | 202 | 225 | 207 |
| Physics, Other | 155 | 163 | 143 | 167 | 166 | 156 | 212 | 281 | 202 | 174 | 229 |
| CHEMISTRY | 2,194 | 2,214 | 2,137 | 2,257 | 2,162 | 2,148 | 2,148 | 2,216 | 2,132 | 1,989 | 1,979 |
| Analytical | 304 | 304 | 286 | 334 | 317 | 346 | 350 | 383 | 333 | 326 | 333 |
| Inorganic | 260 | 268 | 237 | 262 | 258 | 249 | 279 | 287 | 279 | 221 | 280 |
| Nuclear | 14 | 7 | 8 | 10 | 5 | 5 | 8 | 6 | 10 | 9 | 4 |
| Organic | 538 | 512 | 518 | 544 | 483 | 506 | 567 | 598 | 563 | 524 | 521 |
| Medicinal/Pharmaceutical | 83 | 69 | 99 | 102 | 96 | 96 | 105 | 114 | 131 | 107 | 115 |
| Physical | 364 | 398 | 336 | 334 | 338 | 300 | 334 | 279 | 310 | 270 | 286 |
| Polymer | 111 | 83 | 107 | 117 | 116 | 121 | 110 | 122 | 95 | 107 | 106 |
| Theoretical | 45 | 59 | 53 | 52 | 40 | 57 | 48 | 41 | 56 | 52 | 40 |
| Chemistry, General | 400 | 449 | 431 | 447 | 458 | 396 | 261 | 285 | 196 | 263 | 203 |
| Chemistry, Other | 75 | 65 | 62 | 55 | 51 | 72 | 86 | 101 | 159 | 110 | 91 |
| EARTH, ATMOS., \& MARINE SCI. | 836 | 824 | 789 | 852 | 807 | 807 | 900 | 838 | 822 | 786 | 780 |
| Atmospheric Physics \& Chemistry | 20 | 36 | 13 | 27 | 27 | 22 | 45 | 38 | 43 | 39 | 33 |
| Atmospheric Dynamics | 21 | 23 | 23 | 27 | 16 | 21 | 25 | 24 | 16 | 17 | 17 |
| Meteorology | 31 | 28 | 34 | 32 | 25 | 35 | 28 | 25 | 22 | 34 | 20 |
| Atmos. Sci./Meteorology, General | 26 | 27 | 22 | 37 | 44 | 33 | 36 | 22 | 33 | 36 | 34 |
| Atmos. Sci./Meteorology, Other | 10 | 6 | 7 | 6 | 18 | 14 | 15 | 16 | 10 | 17 | 12 |
| Geology | 192 | 166 | 197 | 194 | 186 | 162 | 165 | 171 | 157 | 124 | 115 |
| Geochemistry | 64 | 62 | 50 | 59 | 42 | 49 | 49 | 58 | 55 | 48 | 42 |
| Geophysics \& Seismology | 117 | 108 | 101 | 106 | 93 | 101 | 108 | 106 | 100 | 70 | 88 |
| Paleontology | 24 | 25 | 21 | 17 | 20 | 14 | 23 | 23 | 15 | 31 | 16 |
| Mineralogy, Petrology | 36 | 29 | 9 | 21 | 19 | 23 | 19 | 14 | 14 | 5 | 15 |
| Stratigraphy, Sedimentation | 29 | 23 | 28 | 27 | 16 | 12 | 23 | 24 | 17 | 13 | 13 |
| Geomorphology \& Glacial Geology | 18 | 12 | 16 | 13 | 11 | 11 | 26 | 20 | 18 | 14 | 10 |
| Applied Geology | 1 | ---- | ----- | ----- | ----- | ---- | ----- | ----- | ----- | ---- | ----- |
| Geological \& Related Sci., General | 30 | 18 | 15 | 18 | 21 | 27 | 16 | 13 | 9 | 20 | 16 |
| Geological \& Related Sci., Other | 33 | 31 | 17 | 24 | 22 | 22 | 17 | 40 | 35 | 18 | 34 |
| Environmental Science | 35 | 57 | 68 | 61 | 81 | 83 | 96 | 73 | 99 | 94 | 120 |
| Hydrology \& Water Resources | 16 | 29 | 25 | 30 | 24 | 31 | 43 | 35 | 32 | 43 | 45 |
| Oceanography | 85 | 82 | 98 | 91 | 83 | 107 | 114 | 94 | 100 | 99 | 85 |


|  | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marine Sciences | 27 | 32 | 27 | 34 | 32 | 27 | 30 | 18 | 30 | 35 | 34 |
| Misc. Physical Sci., Other | 21 | 30 | 18 | 28 | 27 | 13 | 22 | 24 | 17 | 29 | 31 |
| ENGINEERING | 5,214 | 5,438 | 5,698 | 5,822 | 6,008 | 6,309 | 6,118 | 5,927 | 5,332 | 5,320 | 5,502 |
| Aerospace, Aeronautic. \& Astronautic. | 207 | 234 | 228 | 230 | 252 | 287 | 273 | 242 | 207 | 215 | 203 |
| Agricultural | 83 | 84 | 86 | 89 | 73 | 104 | 79 | 74 | 59 | 60 | 52 |
| Bioeng. \& Biomedical | 149 | 147 | 171 | 173 | 189 | 220 | 211 | 208 | 245 | 251 | 232 |
| Ceramic Sciences | 58 | 42 | 42 | 39 | 39 | 41 | 39 | 24 | 33 | 22 | 17 |
| Chemical | 621 | 607 | 624 | 630 | 602 | 681 | 662 | 669 | 576 | 619 | 631 |
| Civil | 509 | 540 | 563 | 602 | 572 | 600 | 593 | 587 | 506 | 479 | 499 |
| Communications | 21 | 30 | 22 | 33 | 29 | 32 | 33 | 40 | 39 | 42 | 47 |
| Computer | 178 | 175 | 167 | 202 | 189 | 208 | 227 | 210 | 204 | 172 | 183 |
| Electrical, Electronics | 1,206 | 1,278 | 1,354 | 1,438 | 1,513 | 1,501 | 1,461 | 1,346 | 1,235 | 1,328 | 1,347 |
| Engineering Mechanics | 113 | 132 | 128 | 132 | 108 | 105 | 93 | 86 | 68 | 57 | 75 |
| Engineering Physics | 23 | 25 | 21 | 17 | 17 | 37 | 24 | 15 | 28 | 26 | 22 |
| Engineering Science | 42 | 51 | 55 | 46 | 56 | 52 | 45 | 50 | 49 | 34 | 53 |
| Environmental Health Engineering | 66 | 54 | 61 | 82 | 84 | 98 | 63 | 63 | 78 | 76 | 94 |
| Ind./Manufacturing | 165 | 196 | 236 | 228 | 284 | 259 | 246 | 229 | 212 | 176 | 205 |
| Materials Science | 361 | 365 | 416 | 433 | 476 | 472 | 483 | 482 | 393 | 404 | 450 |
| Mechanical | 762 | 855 | 902 | 883 | 917 | 947 | 930 | 937 | 787 | 806 | 878 |
| Metallurgical | 70 | 78 | 77 | 67 | 73 | 61 | 60 | 59 | 43 | 25 | 32 |
| Mining \& Mineral | 38 | 26 | 24 | 23 | 19 | 31 | 33 | 21 | 18 | 10 | 10 |
| Naval Architecture, Marine Eng. | 5 | ---- | ---- | ---- | ----- | ----- | ----- | ---- | ---- | ---- | --- |
| Nuclear | 107 | 120 | 108 | 85 | 105 | 113 | 103 | 96 | 76 | 98 | 75 |
| Ocean | 21 | 21 | 24 | 29 | 21 | 26 | 34 | 29 | 16 | 18 | 28 |
| Operations Research | 76 | 56 | 56 | 47 | 48 | 74 | 74 | 62 | 67 | 51 | 55 |
| Petroleum | 28 | 54 | 52 | 42 | 48 | 52 | 51 | 48 | 45 | 44 | 37 |
| Polymer/Plastics | 42 | 64 | 61 | 53 | 58 | 65 | 54 | 59 | 53 | 62 | 58 |
| Systems | 48 | 37 | 57 | 51 | 47 | 47 | 49 | 68 | 42 | 34 | 46 |
| Engineering, General | 78 | 64 | 47 | 39 | 60 | 60 | 51 | 29 | 40 | 42 | 26 |
| Engineering, Other | 137 | 103 | 116 | 129 | 129 | 136 | 147 | 194 | 213 | 169 | 147 |
| LIFE SCIENCES | 6,933 | 7,115 | 7,395 | 7,739 | 7,917 | 8,255 | 8,326 | 8,540 | 8,107 | 8,525 | 8,296 |
| BIOLOGICAL SCIENCES | 4,650 | 4,799 | 5,092 | 5,203 | 5,375 | 5,724 | 5,789 | 5,846 | 5,583 | 5,849 | 5,678 |
| Biochemistry | 765 | 715 | 846 | 804 | 824 | 794 | 832 | 800 | 760 | 776 | 726 |
| Biomedical Sciences | ---- | ---- | --- | ----- | 93 | 141 | 158 | 183 | 176 | 155 | 154 |
| Biophysics | 100 | 125 | 103 | 123 | 155 | 142 | 147 | 166 | 173 | 164 | 162 |
| Biotechnology Research | ----- | -- | 8 | 14 | 4 | 6 | 11 | 12 | 19 | 14 | 9 |
| Bacteriology | 11 | 13 | 14 | 18 | 13 | 16 | 13 | 13 | 13 | 15 | 17 |
| Plant Genetics | 23 | 33 | 41 | 30 | 35 | 41 | 30 | 40 | 31 | 35 | 31 |
| Plant Pathology | 50 | 32 | 41 | 40 | 32 | 38 | 33 | 18 | 36 | 25 | 31 |
| Plant Physiology | 65 | 68 | 48 | 70 | 55 | 73 | 47 | 61 | 54 | 39 | 45 |
| Botany, Other | 105 | 107 | 105 | 117 | 102 | 105 | 91 | 113 | 67 | 92 | 75 |
| Anatomy | 77 | 75 | 76 | 66 | 64 | 47 | 50 | 35 | 33 | 39 | 29 |
| Biometrics \& Biostatistics | 59 | 63 | 74 | 72 | 67 | 81 | 84 | 75 | 76 | 92 | 90 |
| Cell Biology | 149 | 188 | 231 | 237 | 236 | 233 | 251 | 300 | 281 | 337 | 312 |
| Ecology | 189 | 180 | 177 | 201 | 203 | 245 | 255 | 293 | 273 | 296 | 336 |
| Developmental Biology/Embryology | 37 | 48 | 57 | 62 | 64 | 96 | 115 | 127 | 108 | 111 | 106 |
| Endocrinology | 33 | 27 | 16 | 26 | 20 | 24 | 17 | 30 | 19 | 20 | 17 |
| Entomology | 138 | 139 | 114 | 123 | 121 | 136 | 123 | 138 | 114 | 137 | 89 |
| Biological Immunology | 177 | 181 | 169 | 161 | 190 | 238 | 214 | 245 | 223 | 239 | 266 |
| Molecular Biology | 481 | 527 | 582 | 598 | 617 | 651 | 775 | 736 | 716 | 705 | 707 |
| Microbiology | 372 | 377 | 433 | 423 | 426 | 444 | 410 | 383 | 383 | 382 | 397 |
| Neuroscience | 238 | 238 | 276 | 284 | 308 | 404 | 437 | 413 | 431 | 495 | 482 |
| Nutritional Sciences | 106 | 132 | 134 | 147 | 136 | 142 | 124 | 139 | 102 | 150 | 135 |
| Parasitology | 20 | 17 | 17 | 22 | 14 | 22 | 17 | 15 | 13 | 19 | 22 |
| Toxicology | 86 | 105 | 100 | 120 | 126 | 138 | 180 | 155 | 114 | 123 | 133 |
| Human \& Animal Genetics | 160 | 142 | 172 | 203 | 202 | 212 | 217 | 197 | 216 | 227 | 197 |
| Human \& Animal Pathology | 122 | 114 | 130 | 128 | 109 | 135 | 106 | 90 | 120 | 105 | 116 |
| Human \& Animal Pharmacology | 266 | 279 | 274 | 259 | 278 | 316 | 300 | 255 | 254 | 267 | 258 |
| Human \& Animal Physiology | 272 | 266 | 271 | 289 | 262 | 275 | 227 | 258 | 244 | 241 | 214 |
| Zoology, Other | 125 | 134 | 114 | 117 | 145 | 100 | 97 | 111 | 126 | 133 | 103 |
| Biological Sciences, General | 278 | 315 | 305 | 288 | 348 | 291 | 209 | 217 | 182 | 199 | 197 |
| Biological Sciences, Other | 146 | 159 | 164 | 161 | 126 | 138 | 219 | 228 | 226 | 217 | 222 |
| HEALTH SCIENCES | 1,041 | 1,112 | 1,197 | 1,296 | 1,330 | 1,324 | 1,421 | 1,500 | 1,407 | 1,592 | 1,613 |
| Speech-Lang. Pathology \& Audiology | 90 | 82 | 98 | 95 | 106 | 94 | 88 | 95 | 86 | 106 | 92 |
| Environmental Health | 38 | 44 | 38 | 51 | 51 | 58 | 67 | 54 | 69 | 52 | 57 |
| Health Systems/Services Admin. | ---- | ---- | 35 | 53 | 62 | 60 | 66 | 62 | 62 | 59 | 49 |
| Public Health | 132 | 157 | 153 | 142 | 152 | 156 | 138 | 156 | 173 | 207 | 211 |
| Epidemiology | 115 | 108 | 120 | 168 | 153 | 149 | 151 | 165 | 179 | 191 | 167 |
| Exercise Physiology/Sci., Kinesiology | ----- | ----- | ---- | 87 | 118 | 105 | 105 | 129 | 104 | 130 | 153 |
| Nursing | 325 | 338 | 373 | 336 | 354 | 354 | 420 | 399 | 353 | 414 | 361 |


|  | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pharmacy | 115 | 160 | 146 | 148 | 144 | 145 | 142 | 156 | 137 | 164 | 147 |
| Rehabilitation/Therapeutic Services | 17 | 25 | 36 | 43 | 20 | 26 | 34 | 35 | 26 | 40 | 118 |
| Veterinary Medicine | 56 | 63 | 61 | 56 | 55 | 65 | 47 | 49 | 49 | 50 | 60 |
| Health Sciences, General | 28 | 30 | 38 | 41 | 35 | 22 | 45 | 17 | 32 | 50 | 35 |
| Health Sciences, Other | 125 | 105 | 99 | 76 | 80 | 90 | 118 | 183 | 137 | 129 | 163 |
| AGRICULTURAL SCIENCES | 1,242 | 1,204 | 1,106 | 1,240 | 1,212 | 1,207 | 1,116 | 1,194 | 1,117 | 1,084 | 1,005 |
| Agricultural Economics | 168 | 141 | 137 | 162 | 173 | 169 | 133 | 155 | 149 | 137 | 154 |
| Agricultural Business and Management | 1 | 0 | 1 | 0 | 3 | 2 | 1 | 2 | 2 | 5 | 3 |
| Animal Breeding \& Genetics | 18 | 23 | 18 | 17 | 19 | 12 | 24 | 18 | 21 | 22 | 16 |
| Animal Nutrition | 57 | 41 | 52 | 58 | 50 | 54 | 55 | 45 | 47 | 45 | 45 |
| Dairy Science | 19 | 14 | 11 | 11 | 14 | 9 | 14 | 10 | 12 | 9 | 2 |
| Poultry Science | 13 | 22 | 16 | 21 | 11 | 12 | 9 | 11 | 8 | 9 | 11 |
| Fisheries Science \& Management | 39 | 26 | 38 | 48 | 49 | 46 | 45 | 30 | 38 | 43 | 44 |
| Animal Sciences, Other | 92 | 97 | 74 | 86 | 85 | 90 | 62 | 60 | 70 | 73 | 71 |
| Agronomy \& Crop Science | 117 | 123 | 104 | 143 | 114 | 110 | 77 | 97 | 106 | 70 | 75 |
| Plant Breeding \& Genetics | 69 | 82 | 68 | 81 | 72 | 63 | 67 | 69 | 44 | 68 | 37 |
| Plant Pathology | 90 | 63 | 58 | 55 | 52 | 90 | 65 | 66 | 66 | 63 | 51 |
| Plant Protection-Pest Management | 2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ----- | ---- | ---- |
| Plant Sciences, Other | 17 | 29 | 28 | 24 | 30 | 21 | 20 | 37 | 38 | 29 | 23 |
| Food Distribution | ---- | ---- | --- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | -- |
| Food Engineering | 12 | 14 | 9 | 16 | 7 | 7 | 11 | 13 | 7 | 10 | 13 |
| Food Sciences, Other | 137 | 151 | 141 | 152 | 135 | 142 | 175 | 153 | 137 | 142 | 128 |
| Soil Chemistry/Microbiology | 24 | 24 | 26 | 21 | 27 | 29 | 32 | 27 | 29 | 26 | 23 |
| Soil Sciences, Other | 78 | 63 | 59 | 69 | 72 | 78 | 56 | 74 | 67 | 64 | 55 |
| Horticulture Science | 78 | 65 | 62 | 65 | 67 | 73 | 44 | 60 | 66 | 55 | 37 |
| Forest Biology | 17 | 29 | 18 | 20 | 24 | 19 | 22 | 20 | 14 | 22 | 27 |
| Forest Engineering | 2 | 2 | 3 | 0 | 4 | 0 | 13 | 2 | 1 | 3 | 0 |
| Forest Management | 22 | 16 | 17 | 17 | 20 | 22 | 21 | 27 | 17 | 13 | 13 |
| Wood Sci. \& Pulp/Paper Tech. | 16 | 21 | 20 | 26 | 26 | 18 | 25 | 25 | 21 | 11 | 20 |
| Conserv./Renewable Nat. Res. | 19 | 9 | 13 | 21 | 24 | 13 | 17 | 25 | 25 | 19 | 32 |
| Forestry \& Related Sci., Other | 45 | 62 | 55 | 59 | 71 | 55 | 50 | 69 | 50 | 54 | 48 |
| Wildlife/Range Mgt | 59 | 55 | 54 | 52 | 50 | 64 | 50 | 56 | 44 | 56 | 40 |
| Agricultural Sciences, General | 3 | 9 | 10 | 4 | 6 | 5 | 10 | 8 | 8 | 10 | 2 |
| Agricultural Sciences, Other | 28 | 23 | 14 | 11 | 7 | 4 | 18 | 35 | 30 | 26 | 35 |
| SOCIAL SCIENCES \& PSYCHOLOGY | 6,152 | 6,216 | 6,545 | 6,613 | 6,637 | 6,825 | 7,047 | 7,074 | 7,046 | 7,107 | 6,825 |
| SOCIAL SCIENCES | 2,902 | 2,953 | 3,125 | 3,234 | 3,207 | 3,328 | 3,485 | 3,398 | 3,373 | 3,489 | 3,392 |
| Anthropology | 341 | 320 | 342 | 384 | 375 | 397 | 434 | 425 | 463 | 446 | 408 |
| Area Studies | 24 | 33 | 36 | 34 | 27 | 28 | 10 | 14 | 11 | 14 | 17 |
| Criminology | 35 | 37 | 39 | 41 | 44 | 60 | 49 | 55 | 51 | 66 | 62 |
| Demography/Population Studies | 28 | 17 | 22 | 23 | 15 | 11 | 24 | 30 | 28 | 19 | 12 |
| Economics | 861 | 885 | 906 | 913 | 952 | 979 | 999 | 976 | 911 | 933 | 917 |
| Econometrics | 24 | 25 | 24 | 26 | 27 | 29 | 31 | 25 | 15 | 15 | 13 |
| Geography | 108 | 111 | 137 | 146 | 150 | 165 | 149 | 154 | 144 | 197 | 186 |
| International Relations/Affairs | 88 | 76 | 102 | 112 | 73 | 99 | 88 | 96 | 119 | 77 | 89 |
| Political Science \& Government | 434 | 513 | 507 | 589 | 600 | 622 | 665 | 662 | 655 | 669 | 659 |
| Public Policy Analysis | 111 | 107 | 98 | 94 | 94 | 104 | 127 | 97 | 125 | 137 | 138 |
| Sociology | 465 | 495 | 513 | 525 | 540 | 517 | 577 | 549 | 544 | 614 | 565 |
| Statistics | 31 | 29 | 48 | 46 | 48 | 48 | 56 | 61 | 72 | 60 | 49 |
| Urban Affairs/Studies | 90 | 86 | 123 | 132 | 103 | 108 | 93 | 77 | 57 | 78 | 80 |
| Social Sciences, General | 36 | 33 | 32 | 21 | 35 | 26 | 26 | 30 | 25 | 38 | 24 |
| Social Sciences, Other | 226 | 186 | 196 | 148 | 124 | 135 | 157 | 147 | 153 | 126 | 173 |
| PSYCHOLOGY | 3,250 | 3,263 | 3,420 | 3,379 | 3,430 | 3,497 | 3,562 | 3,676 | 3,673 | 3,618 | 3,433 |
| Clinical | 1,305 | 1,309 | 1,373 | 1,285 | 1,291 | 1,329 | 1,259 | 1,344 | 1,444 | 1,354 | 1,256 |
| Cognitive \& Psycholinguistics | 94 | 101 | 104 | 129 | 104 | 128 | 166 | 113 | 143 | 140 | 142 |
| Comparative | 7 | 2 | 5 | 8 | 4 | 3 | 6 | 6 | 11 | 7 | 5 |
| Counseling | 497 | 507 | 488 | 497 | 471 | 465 | 488 | 448 | 460 | 475 | 480 |
| Developmental and Child | 155 | 170 | 202 | 179 | 152 | 188 | 215 | 267 | 193 | 203 | 193 |
| Human/Individual \& Family Develop. | ----- | ----- | ----- | 129 | 150 | 151 | 126 | 119 | 135 | 148 | 135 |
| Experimental | 142 | 154 | 143 | 139 | 151 | 128 | 146 | 149 | 139 | 133 | 134 |
| Educational | 110 | 91 | 91 | 69 | 74 | 92 | 61 | 61 | 64 | 97 | 47 |
| Family \& Marriage Counseling | ----- | --- | --- | ----- | 57 | 51 | 64 | 51 | 56 | 54 | 45 |
| Industrial \& Organizational | 142 | 138 | 159 | 137 | 155 | 162 | 187 | 189 | 159 | 188 | 172 |
| Personality | 13 | 17 | 22 | 19 | 16 | 24 | 26 | 25 | 16 | 23 | 11 |
| Physiological/Psychobiology | 45 | 55 | 85 | 93 | 92 | 80 | 77 | 92 | 87 | 89 | 93 |
| Psychometrics | 9 | 5 | 9 | 5 | 10 | 11 | 11 | 9 | 15 | 13 | 2 |
| Quantitative | 7 | 10 | 16 | 17 | 13 | 19 | 17 | 15 | 14 | 8 | 10 |
| School | 82 | 88 | 95 | 84 | 91 | 82 | 84 | 106 | 121 | 99 | 109 |
| Social | 147 | 139 | 125 | 153 | 155 | 170 | 181 | 186 | 176 | 207 | 198 |
| Psychology, General | 324 | 295 | 306 | 280 | 306 | 281 | 318 | 300 | 236 | 239 | 228 |
| Psychology, Other | 171 | 182 | 197 | 156 | 138 | 133 | 130 | 196 | 204 | 141 | 173 |


|  | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HUMANITIES | 4,099 | 4,444 | 4,481 | 4,744 | 5,062 | 5,115 | 5,436 | 5,513 | 5,458 | 5,633 | 5,589 |
| GENERAL HUMANITIES | 2,642 | 2,879 | 2,852 | 3,103 | 3,208 | 3,366 | 3,564 | 3,611 | 3,655 | 3,750 | 3,798 |
| History, American | 251 | 277 | 269 | 310 | 344 | 355 | 373 | 408 | 418 | 442 | 423 |
| History, Asian | ----- | --- | ----- | ---- | 43 | 54 | 54 | 70 | 68 | 51 | 51 |
| History, European | 127 | 176 | 162 | 180 | 185 | 187 | 245 | 230 | 235 | 243 | 245 |
| History/Philosophy of Sci. \& Tech. | 27 | 28 | 37 | 27 | 41 | 37 | 36 | 43 | 50 | 42 | 40 |
| History, General | 121 | 102 | 116 | 140 | 148 | 101 | 82 | 86 | 75 | 103 | 75 |
| History, Other | 137 | 141 | 142 | 144 | 128 | 123 | 176 | 152 | 164 | 179 | 190 |
| Classics | 55 | 58 | 61 | 84 | 62 | 72 | 53 | 85 | 77 | 64 | 54 |
| Comparative Literature | 150 | 163 | 153 | 163 | 191 | 164 | 181 | 164 | 166 | 188 | 203 |
| Linguistics | 227 | 266 | 214 | 221 | 201 | 230 | 244 | 220 | 251 | 229 | 229 |
| Speech \& Rhetoric al Studies | 86 | 98 | 111 | 142 | 139 | 155 | 138 | 169 | 150 | 143 | 126 |
| Letters, General | 17 | 18 | 18 | 22 | 43 | 28 | 23 | 22 | 19 | 55 | 34 |
| Letters, Other | 44 | 38 | 37 | 25 | 34 | 61 | 60 | 82 | 82 | 92 | 94 |
| American Studies | 92 | 81 | 101 | 88 | 94 | 115 | 84 | 100 | 98 | 113 | 127 |
| Archeology | 33 | 33 | 38 | 34 | 35 | 21 | 35 | 34 | 26 | 36 | 40 |
| Art History/Criticism/Conservation | 125 | 154 | 158 | 182 | 181 | 177 | 188 | 221 | 188 | 228 | 223 |
| Music | 587 | 641 | 613 | 685 | 713 | 697 | 727 | 696 | 766 | 748 | 784 |
| Philosophy | 285 | 279 | 274 | 302 | 298 | 369 | 446 | 410 | 389 | 364 | 413 |
| Religion | 187 | 231 | 257 | 252 | 248 | 317 | 303 | 327 | 334 | 348 | 343 |
| Drama/Theater Arts | 91 | 95 | 91 | 102 | 80 | 103 | 116 | 92 | 99 | 82 | 104 |
| LANGUAGE AND LITERATURE | 1,350 | 1,465 | 1,523 | 1,537 | 1,718 | 1,618 | 1,747 | 1,721 | 1,648 | 1,711 | 1,596 |
| American Literature | 253 | 291 | 293 | 296 | 327 | 314 | 408 | 389 | 372 | 460 | 383 |
| English Language \& Literature | 599 | 612 | 655 | 647 | 752 | 699 | 686 | 689 | 650 | 610 | 594 |
| French | 100 | 124 | 137 | 129 | 151 | 142 | 150 | 137 | 148 | 143 | 141 |
| German | 71 | 96 | 105 | 67 | 93 | 88 | 82 | 106 | 90 | 83 | 84 |
| Italian | 32 | 20 | 19 | 32 | 35 | 24 | 23 | 33 | 20 | 16 | 16 |
| Spanish | 173 | 179 | 178 | 212 | 209 | 196 | 250 | 207 | 201 | 218 | 233 |
| Russian | 25 | 28 | 28 | 38 | 28 | 37 | 39 | 43 | 25 | 29 | 27 |
| Slavic | 14 | 15 | 13 | 10 | 16 | 11 | 9 | 15 | 17 | 14 | 12 |
| Chinese | 19 | 20 | 21 | 25 | 20 | 29 | 23 | 19 | 27 | 21 | 16 |
| Japanese | 7 | 12 | 11 | 12 | 7 | 10 | 19 | 11 | 10 | 18 | 17 |
| Hebrew | 11 | 20 | 15 | 10 | 11 | 12 | 7 | 8 | 4 | 11 | 6 |
| Arabic | 4 | 12 | 10 | 4 | 8 | 6 | 4 | 9 | 12 | 15 | 6 |
| Other Language \& Literature | 42 | 36 | 38 | 55 | 61 | 50 | 47 | 55 | 72 | 73 | 61 |
| OTHER HUMANITIES | 107 | 100 | 106 | 104 | 136 | 131 | 125 | 181 | 155 | 172 | 195 |
| Humanities, General | 29 | 21 | 30 | 32 | 25 | 39 | 25 | 23 | 24 | 40 | 29 |
| Humanities, Other | 78 | 79 | 76 | 72 | 111 | 92 | 100 | 158 | 131 | 132 | 166 |
| EDUCATION | 6,454 | 6,677 | 6,689 | 6,711 | 6,649 | 6,784 | 6,580 | 6,575 | 6,545 | 6,419 | 6,324 |
| RESEARCH \& ADMINISTRATION | 4,675 | 4,894 | 4,997 | 4,929 | 4,941 | 5,234 | 5,039 | 4,995 | 5,064 | 4,936 | 4,966 |
| Curriculum \& Instruction | 807 | 900 | 856 | 819 | 896 | 899 | 918 | 885 | 993 | 966 | 881 |
| Educational Admin. and Supervision | 1,428 | 1,290 | 1,340 | 1,207 | 1,086 | 1,172 | 1,020 | 952 | 895 | 812 | 835 |
| Educational Leadership | 485 | 694 | 783 | 793 | 889 | 992 | 1,033 | 1,117 | 1,148 | 1,201 | 1,213 |
| Educ./Instruct. Media Design | 73 | 62 | 96 | 112 | 121 | 107 | 92 | 91 | 123 | 138 | 140 |
| Educ. Stat./Research Methods | 80 | 61 | 64 | 68 | 63 | 76 | 58 | 56 | 57 | 55 | 65 |
| Educ. Assess., Test., \& Meas. | 32 | 45 | 23 | 28 | 19 | 32 | 30 | 35 | 39 | 45 | 44 |
| Educational Psychology | 323 | 346 | 290 | 311 | 297 | 309 | 359 | 327 | 298 | 278 | 280 |
| School Psychology | 90 | 88 | 86 | 97 | 71 | 114 | 118 | 112 | 108 | 137 | 123 |
| Social/Phil. Found. of Educ. | 109 | 101 | 109 | 140 | 130 | 125 | 138 | 129 | 125 | 135 | 141 |
| Special Education | 226 | 260 | 277 | 241 | 254 | 278 | 270 | 248 | 262 | 259 | 230 |
| Counseling Educ./Couns. \& Guidance | 270 | 259 | 288 | 284 | 268 | 278 | 207 | 270 | 260 | 212 | 210 |
| Higher Educ./ Evaluation \& Research | 344 | 381 | 357 | 428 | 457 | 481 | 506 | 431 | 464 | 438 | 511 |
| Pre-elementary/Early Childhood | 85 | 98 | 97 | 91 | 70 | 81 | 43 | 54 | 49 | 34 | 47 |
| Elementary Education | 73 | 73 | 65 | 71 | 61 | 46 | 56 | 62 | 59 | 53 | 55 |
| Secondary Education | 40 | 28 | 33 | 24 | 24 | 34 | 27 | 54 | 31 | 23 | 22 |
| Adult \& Continuing Education | 210 | 208 | 233 | 215 | 235 | 210 | 164 | 172 | 153 | 150 | 169 |
| TEACHING FIELDS | 973 | 1,008 | 943 | 960 | 924 | 864 | 919 | 954 | 892 | 827 | 720 |
| Agricultural Education | 49 | 43 | 54 | 52 | 35 | 32 | 38 | 25 | 38 | 22 | 22 |
| Art Education | 28 | 46 | 38 | 33 | 39 | 41 | 30 | 46 | 47 | 31 | 31 |
| Business Education | 32 | 16 | 27 | 25 | 21 | 20 | 26 | 31 | 45 | 37 | 19 |
| English Education | 58 | 61 | 53 | 56 | 60 | 57 | 62 | 53 | 64 | 44 | 56 |
| Foreign Languages Education | 46 | 50 | 48 | 54 | 60 | 45 | 47 | 73 | 62 | 43 | 47 |
| Health Education | 78 | 98 | 83 | 97 | 99 | 90 | 58 | 70 | 58 | 71 | 65 |
| Home Economics Education | 21 | 12 | 14 | 11 | 15 | 13 | 13 | 8 | 10 | 14 | 8 |
| Technical/Industrial Arts Education | 13 | 11 | 16 | 20 | 15 | 11 | 19 | 30 | 21 | 21 | 16 |
| Mathematics Education | 73 | 62 | 69 | 74 | 92 | 100 | 93 | 115 | 101 | 90 | 81 |


|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|  |  |  |  |  |  |  |  |  |  |  |

NOTE: Dashes (-----) indicate 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.
a Includes 5 respondents with missing data for doctoral field 1997.
${ }^{b}$ Includes 7 respondents with missing data for doctoral field 1998.
c Includes 1 respondent with missing data for doctoral field 1999.
d Includes 6 respondents with missing data for doctoral field 2000.
Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

## APPENDIX TABLE B-2a. Number of doctorate recipients, by sex, race/ethnicity, and citizenship, 1991-2001 Total all doctorates

|  | Year of doctorate |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| Total all doctorates a | 37,533 | 38,890 | 39,800 | 41,037 | 41,747 | 42,438 | 42,559 | 42,654 | 41,097 | 41,340 | 40,744 |
| U.S. citizens | 25,572 | 26,010 | 26,448 | 27,150 | 27,743 | 27,777 | 28,162 | 28,459 | 27,984 | 27,955 | 26,907 |
| Permanent visas | 1,857 | 1,980 | 2,259 | 3,747 | 4,318 | 3,765 | 2,931 | 2,702 | 2,306 | 1,957 | 1,822 |
| Temporary visas | 9,382 | 9,989 | 9,973 | 9,425 | 8,829 | 9,649 | 9,193 | 9,496 | 9,059 | 9,649 | 9,780 |
| Unknown citizenship | 722 | 911 | 1,120 | 715 | 857 | 1,247 | 2,273 | 1,997 | 1,748 | 1,779 | 2,235 |
| Total known race/ethnicity | 35,784 | 37,205 | 38,296 | 39,851 | 40,347 | 40,708 | 38,913 | 39,394 | 38,681 | 38,764 | 37,878 |
| U.S. citizens | 25,087 | 25,662 | 26,220 | 26,901 | 27,448 | 27,447 | 27,076 | 27,543 | 27,525 | 27,399 | 26,435 |
| Permanent visas | 1,796 | 1,906 | 2,225 | 3,700 | 4,276 | 3,732 | 2,868 | 2,614 | 2,267 | 1,899 | 1,790 |
| Temporary visas | 8,854 | 9,571 | 9,718 | 9,133 | 8,563 | 9,403 | 8,852 | 9,089 | 8,801 | 9,358 | 9,450 |
| Unknown citizenship | 47 | 66 | 133 | 117 | 60 | 126 | 117 | 148 | 88 | 108 | 203 |
| American Indian ${ }^{\text {b }}$ | 132 | 152 | 121 | 146 | 147 | 189 | 167 | 191 | 214 | 169 | 164 |
| U.S. citizens | 130 | 149 | 120 | 143 | 147 | 186 | 167 | 190 | 214 | 169 | 149 |
| Permanent visas | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| Temporary visas | 0 | 3 | 1 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 12 |
| Unknown citizenship | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Asian ${ }^{\text {d }}$ | 7,524 | 8,280 | 8,659 | 9,353 | 9,691 | 9,802 | 9,007 | 8,563 | 7,997 | 8,049 | 8,061 |
| U.S. citizens | 787 | 839 | 876 | 937 | 1,129 | 1,066 | 1,297 | 1,155 | 1,308 | 1,362 | 1,382 |
| Permanent visas | 742 | 915 | 1,126 | 2,596 | 3,168 | 2,608 | 1,813 | 1,552 | 1,191 | 909 | 772 |
| Temporary visas | 5,979 | 6,517 | 6,623 | 5,806 | 5,382 | 6,105 | 5,865 | 5,826 | 5,470 | 5,755 | 5,885 |
| Unknown citizenship | 16 | 9 | 34 | 14 | 12 | 23 | 32 | 30 | 28 | 23 | 22 |
| Black/ African-American | 1,465 | 1,427 | 1,610 | 1,682 | 1,807 | 1,826 | 1,760 | 1,915 | 2,050 | 2,094 | 2,000 |
| U.S. citizens | 1,009 | 966 | 1,109 | 1,100 | 1,293 | 1,306 | 1,335 | 1,487 | 1,627 | 1,630 | 1,604 |
| Permanent visas | 156 | 143 | 169 | 178 | 168 | 141 | 139 | 119 | 133 | 119 | 117 |
| Temporary visas | 295 | 315 | 325 | 391 | 336 | 366 | 276 | 297 | 281 | 333 | 265 |
| Unknown citizenship | 5 | 3 | 7 | 13 | 10 | 13 | 10 | 12 | 9 | 12 | 14 |
| Hispanic ${ }^{\text {e }}$ | 1,320 | 1,402 | 1,430 | 1,534 | 1,544 | 1,632 | 1,695 | 1,879 | 1,898 | 1,961 | 1,888 |
| U.S. citizens | 732 | 778 | 833 | 884 | 922 | 957 | 1,064 | 1,205 | 1,184 | 1,179 | 1,119 |
| Permanent visas | 136 | 131 | 139 | 146 | 142 | 156 | 135 | 122 | 139 | 128 | 143 |
| Temporary visas | 452 | 486 | 454 | 503 | 475 | 514 | 484 | 543 | 561 | 648 | 613 |
| Unknown citizenship | 0 | 7 | 4 | , | 5 | 5 | 12 | 9 | 14 | 6 | 13 |
| White | 25,331 | 25,913 | 26,433 | 27,087 | 27,084 | 27,158 | 26,250 | 26,786 | 26,410 | 26,363 | 25,354 |
| U.S. citizens | 22,420 | 22,904 | 23,244 | 23,795 | 23,893 | 23,847 | 23,181 | 23,454 | 23,092 | 22,945 | 21,842 |
| Permanent visas | 760 | 714 | 791 | 779 | 796 | 823 | 781 | 819 | 800 | 742 | 745 |
| Temporary visas | 2,125 | 2,248 | 2,310 | 2,424 | 2,362 | 2,404 | 2,225 | 2,417 | 2,481 | 2,609 | 2,634 |
| Unknown citizenship | 26 | 47 | 88 | 89 | 33 | 84 | 63 | 96 | 37 | 67 | 133 |
| Other/Unknown race/ethnicity ${ }^{\text {f }}$ | 1,761 | 1,716 | 1,547 | 1,235 | 1,474 | 1,831 | 3,680 | 3,320 | 2,528 | 2,704 | 3,277 |
| U.S. citizens | 494 | 374 | 266 | 291 | 359 | 415 | 1,118 | 968 | 559 | 670 | 811 |
| Permanent visas | 61 | 77 | 34 | 48 | 44 | 36 | 63 | 90 | 43 | 59 | 43 |
| Temporary visas | 531 | 420 | 260 | 298 | 274 | 258 | 343 | 413 | 266 | 304 | 371 |
| Unknown citizenship | 675 | 845 | 987 | 598 | 797 | 1,122 | 2,156 | 1,849 | 1,660 | 1,671 | 2,052 |

a Total includes doctorate recipients whose gender was unknown.
${ }^{\mathrm{b}}$ Includes Alaskan Natives.
c In most cases, non-U.S. American Indians are citizens of Canada or of a Latin American country.
d Includes Native Hawaiians/Other Pacific Islanders through 2000, but excludes them in 2001 per revised OMB guidelines issued for 2001.
e Persons reporting an Hispanic ethnicity, whether singly or in combination with another race/ethnicity, are included in the respondent-selected Hispanic ethnicity category.
${ }^{\text {f }}$ Includes only those with unknown race/ethnicity through 2000. In 2001 this category was expanded to include Native Hawaiians and other Pacific Islanders and respondents choosing multiple races (excluding those selecting an Hispanic ethnicity).

APPENDIX TABLE B-2b. Number of doctorate recipients, by sex, race/ethnicity, and citizenship, 1991-2001 Total men

|  | Year of doctorate |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| Total men | 23,524 | 24,235 | 24,384 | 25,061 | 25,161 | 25,286 | 24,951 | 24,641 | 23,435 | 23,155 | 22,769 |
| U.S. citizens | 14,384 | 14,518 | 14,512 | 14,734 | 14,966 | 14,721 | 15,049 | 14,875 | 14,513 | 14,146 | 13,593 |
| Permanent visas | 1,223 | 1,290 | 1,468 | 2,636 | 2,908 | 2,483 | 1,834 | 1,665 | 1,378 | 1,141 | 995 |
| Temporary visas | 7,562 | 7,974 | 7,865 | 7,322 | 6,853 | 7,415 | 6,974 | 7,007 | 6,632 | 6,840 | 6,985 |
| Unknown citizenship | 355 | 453 | 539 | 369 | 434 | 667 | 1,094 | 1,094 | 912 | 1,028 | 1,196 |
| Total Known race/ethnicity | 22,355 | 23,172 | 23,537 | 24,330 | 24,308 | 24,275 | 23,017 | 22,730 | 22,067 | 21,610 | 21,160 |
| U.S. citizens | 14,031 | 14,266 | 14,345 | 14,568 | 14,760 | 14,499 | 14,439 | 14,334 | 14,221 | 13,816 | 13,309 |
| Permanent visas | 1,177 | 1,236 | 1,444 | 2,602 | 2,882 | 2,461 | 1,795 | 1,605 | 1,351 | 1,102 | 974 |
| Temporary visas | 7,124 | 7,633 | 7,672 | 7,107 | 6,640 | 7,233 | 6,717 | 6,714 | 6,446 | 6,638 | 6,753 |
| Unknown citizenship | 23 | 37 | 76 | 53 | 26 | 82 | 66 | 77 | 49 | 54 | 124 |
| American Indian a | 74 | 82 | 61 | 74 | 80 | 103 | 79 | 105 | 96 | 76 | 78 |
| U.S. citizens | 74 | 82 | 60 | 71 | 80 | 102 | 79 | 105 | 96 | 76 | 67 |
| Permanent visas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Temporary visas | 0 | 0 | 1 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 8 |
| Unknown citizenship | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Asian ${ }^{\text {c }}$ | 5,869 | 6,414 | 6,596 | 7,052 | 7,094 | 7,197 | 6,426 | 6,027 | 5,529 | 5,341 | 5,393 |
| U.S. citizens | 481 | 529 | 543 | 582 | 662 | 603 | 743 | 641 | 766 | 739 | 741 |
| Permanent visas | 489 | 603 | 732 | 1,877 | 2,197 | 1,787 | 1,142 | 985 | 711 | 501 | 422 |
| Temporary visas | 4,890 | 5,274 | 5,297 | 4,584 | 4,226 | 4,792 | 4,522 | 4,385 | 4,031 | 4,085 | 4,213 |
| Unknown citizenship | 9 | 8 | 24 | 9 | 9 | 15 | 19 | 16 | 21 | 16 | 17 |
| Black/ African-American | 788 | 768 | 839 | 889 | 877 | 930 | 858 | 822 | 908 | 878 | 862 |
| U.S. citizens | 421 | 394 | 441 | 411 | 487 | 532 | 529 | 526 | 608 | 559 | 587 |
| Permanent visas | 131 | 122 | 138 | 142 | 125 | 107 | 108 | 86 | 91 | 82 | 84 |
| Temporary visas | 234 | 250 | 255 | 330 | 261 | 287 | 212 | 203 | 204 | 232 | 186 |
| Unknown citizenship | 2 | 2 | 5 | 6 | 4 | 4 | 9 | 7 | 5 | 5 | 5 |
| Hispanic ${ }^{\text {d }}$ | 807 | 860 | 874 | 866 | 914 | 935 | 981 | 1,060 | 990 | 1,070 | 1,012 |
| U.S. citizens | 371 | 410 | 423 | 438 | 463 | 480 | 544 | 610 | 510 | 546 | 497 |
| Permanent visas | 88 | 72 | 94 | 80 | 79 | 87 | 81 | 72 | 68 | 63 | 72 |
| Temporary visas | 348 | 374 | 356 | 347 | 370 | 364 | 350 | 375 | 405 | 459 | 439 |
| Unknown citizenship | 0 | 4 | 1 | 1 | 2 | 4 | 6 | 3 | 7 | 2 | 4 |
| White | 14,812 | 15,032 | 15,145 | 15,422 | 15,308 | 15,062 | 14,657 | 14,683 | 14,495 | 14,187 | 13,611 |
| U.S. citizens | 12,681 | 12,838 | 12,858 | 13,042 | 13,038 | 12,743 | 12,529 | 12,423 | 12,199 | 11,845 | 11,257 |
| Permanent visas | 469 | 437 | 480 | 503 | 480 | 480 | 464 | 461 | 478 | 455 | 390 |
| Temporary visas | 1,650 | 1,734 | 1,761 | 1,840 | 1,779 | 1,781 | 1,632 | 1,748 | 1,802 | 1,856 | 1,879 |
| Unknown citizenship | 12 | 23 | 46 | 37 | 11 | 58 | 32 | 51 | 16 | 31 | 85 |
| Other/Unknown race/ethnicity e | 1,174 | 1,079 | 869 | 758 | 888 | 1,059 | 1,950 | 1,944 | 1,417 | 1,603 | 1,813 |
| U.S. citizens | 356 | 265 | 187 | 190 | 236 | 261 | 625 | 570 | 334 | 381 | 444 |
| Permanent visas | 46 | 56 | 24 | 34 | 27 | 22 | 39 | 61 | 30 | 40 | 25 |
| Temporary visas | 440 | 342 | 195 | 218 | 217 | 190 | 258 | 296 | 190 | 208 | 260 |
| Unknown citizenship | 332 | 416 | 463 | 316 | 408 | 586 | 1,028 | 1,017 | 863 | 974 | 1,084 |

a Includes Alaskan Natives.
b In most cases, non-U.S. American Indians are citizens of Canada or of a Latin American country.
c Includes Native Hawaiians/Other Pacific Islanders through 2000, but excludes them in 2001 per revised OMB guidelines issued for 2001.
d Persons reporting an Hispanic ethnicity, whether singly or in combination with another race/ethnicity, are included in the respondent-selected Hispanic ethnicity category,
e Includes only those with unknown race/ethnicity through 2000. In 2001 this category was expanded to include Native Hawaiians and other Pacific Islanders and respondents choosing multiple races (excluding those selecting an Hispanic ethnicity).

## APPENDIX TABLE B-2c. Number of doctorate recipients, by sex, race/ethnicity, and citizenship, 1991-2001 Total women

|  | Year of doctorate |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| Total women | 13,873 | 14,436 | 15,121 | 15,821 | 16,416 | 16,957 | 17,249 | 17,849 | 17,484 | 18,114 | 17,901 |
| U.S. citizens | 11,185 | 11,491 | 11,931 | 12,413 | 12,775 | 13,056 | 13,079 | 13,570 | 13,471 | 13,806 | 13,314 |
| Permanent visas | 633 | 687 | 788 | 1,110 | 1,409 | 1,282 | 1,096 | 1,021 | 928 | 814 | 827 |
| Temporary visas | 1,809 | 1,997 | 2,080 | 2,080 | 1,959 | 2,221 | 2,204 | 2,469 | 2,423 | 2,808 | 2,794 |
| Unknown citizenship | 246 | 261 | 322 | 218 | 273 | 398 | 870 | 789 | 662 | 686 | 966 |
| Total Known race/ethnicity | 13,419 | 14,020 | 14,740 | 15,506 | 16,031 | 16,428 | 15,883 | 16,639 | 16,613 | 17,152 | 16,718 |
| U.S. citizens | 11,054 | 11,396 | 11,873 | 12,330 | 12,688 | 12,948 | 12,634 | 13,206 | 13,304 | 13,582 | 13,126 |
| Permanent visas | 619 | 669 | 779 | 1,097 | 1,393 | 1,271 | 1,072 | 1,001 | 916 | 797 | 816 |
| Temporary visas | 1,722 | 1,927 | 2,033 | 2,018 | 1,917 | 2,166 | 2,126 | 2,362 | 2,354 | 2,720 | 2,697 |
| Unknown citizenship | 24 | 28 | 55 | 61 | 33 | 43 | 51 | 70 | 39 | 53 | 79 |
| American Indian a | 58 | 70 | 60 | 72 | 67 | 86 | 88 | 86 | 118 | 93 | 86 |
| U.S. citizens | 56 | 67 | 60 | 72 | 67 | 84 | 88 | 85 | 118 | 93 | 82 |
| Permanent visas | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Temporary visas | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 4 |
| Unknown citizenship | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Asian c | 1,647 | 1,855 | 2,049 | 2,291 | 2,590 | 2,600 | 2,574 | 2,520 | 2,467 | 2,708 | 2,668 |
| U.S. citizens | 305 | 310 | 332 | 354 | 467 | 463 | 553 | 513 | 542 | 623 | 641 |
| Permanent visas | 253 | 311 | 392 | 718 | 970 | 821 | 671 | 560 | 480 | 408 | 350 |
| Temporary visas | 1,082 | 1,233 | 1,316 | 1,216 | 1,150 | 1,309 | 1,337 | 1,434 | 1,438 | 1,670 | 1,672 |
| Unknown citizenship | 7 | 1 | 9 | 3 | 3 | 7 | 13 | 13 | 7 | 7 | 5 |
| Black/ African-American | 677 | 659 | 769 | 791 | 930 | 896 | 902 | 1,091 | 1,142 | 1,216 | 1,138 |
| U.S. citizens | 588 | 572 | 668 | 689 | 806 | 774 | 806 | 961 | 1,019 | 1,071 | 1,017 |
| Permanent visas | 25 | 21 | 31 | 36 | 43 | 34 | 31 | 32 | 42 | 37 | 33 |
| Temporary visas | 61 | 65 | 69 | 60 | 75 | 79 | 64 | 93 | 77 | 101 | 79 |
| Unknown citizenship | 3 | 1 | 1 | 6 | 6 | 9 | 1 | 5 | 4 | 7 | 9 |
| Hispanic ${ }^{\text {d }}$ | 513 | 542 | 555 | 668 | 630 | 697 | 714 | 817 | 908 | 890 | 876 |
| U.S. citizens | 361 | 368 | 410 | 446 | 459 | 477 | 520 | 594 | 674 | 632 | 622 |
| Permanent visas | 48 | 59 | 45 | 66 | 63 | 69 | 54 | 50 | 71 | 65 | 71 |
| Temporary visas | 104 | 112 | 97 | 156 | 105 | 150 | 134 | 167 | 156 | 189 | 174 |
| Unknown citizenship | 0 | 3 | 3 | 0 | 3 | 1 | 6 | 6 | 7 | 4 | 9 |
| White | 10,517 | 10,879 | 11,286 | 11,662 | 11,775 | 12,096 | 11,587 | 12,098 | 11,915 | 12,175 | 11,743 |
| U.S. citizens | 9,738 | 10,066 | 10,385 | 10,751 | 10,855 | 11,104 | 10,650 | 11,030 | 10,893 | 11,100 | 10,585 |
| Permanent visas | 291 | 277 | 311 | 276 | 316 | 343 | 316 | 358 | 322 | 287 | 355 |
| Temporary visas | 474 | 513 | 548 | 583 | 583 | 623 | 590 | 665 | 679 | 753 | 755 |
| Unknown citizenship | 14 | 23 | 42 | 52 | 21 | 26 | 31 | 45 | 21 | 35 | 48 |
| Other/Unknown race/ethnicity e | 461 | 431 | 402 | 337 | 424 | 582 | 1,384 | 1,237 | 934 | 1,032 | 1,390 |
| U.S. citizens | 137 | 108 | 76 | 101 | 121 | 154 | 462 | 387 | 225 | 287 | 367 |
| Permanent visas | 14 | 19 | 9 | 14 | 17 | 14 | 24 | 21 | 13 | 17 | 18 |
| Temporary visas | 88 | 71 | 50 | 65 | 46 | 59 | 79 | 110 | 73 | 95 | 110 |
| Unknown citizenship | 222 | 233 | 267 | 157 | 240 | 355 | 819 | 719 | 623 | 633 | 895 |

a Includes Alaskan Natives.
${ }^{\mathrm{b}}$ In most cases, non-U.S. American Indians are citizens of Canada or of a Latin American country.
c Includes Native Hawaiians/Other Pacific Islanders through 2000, but excludes them in 2001 per revised OMB guidelines issued for 2001.
d Persons reporting an Hispanic ethnicity, whether singly or in combination with another race/ethnicity, are included in the respondent-selected Hispanic ethnicity category.
e Includes only those with unknown race/ethnicity through 2000. In 2001 this category was expanded to include Native Hawaiians and other Pacific Islanders and respondents choosing multiple races (excluding those selecting an Hispanic ethnicity).

## Appendix C: Technical Notes

## Survey Overview

The Survey of Earned Doctorates (SED) is designed to obtain data on the number and characteristics of individuals receiving research doctoral degrees from U.S. institutions. The results of the survey are used to assess trends in doctorate production. This information is vital for educational and labor force planners within the Federal Government and in academia. The survey has been completed by individuals receiving research doctorates since 1958. The graduate schools are responsible for submitting completed forms and sending them to be compiled in the Doctorate Records File (DRF).

Key variables of the survey include:
Academic institution attended
Citizenship status at graduation
Country of birth
Country of citizenship
Date of birth
Disability status
Educational attainment of parents
Educational history after high school
Field of degree specialty ( $\mathrm{N}=287$ )
Field of employment
Field of science and engineering
Level of degree
Marital status
Number of dependents
Place of birth
Postgraduate plans
Primary type of financial support
Race and Hispanic ethnicity (by subgroup)
Sex
Type of academic institution that conferred degrees
Type of employment planned
Type of financial support (e.g., fellowship, research assistantship, etc.)
Type of institutional control (public versus private)
Work activity planned after doctoral degree
A complete questionnaire is contained in appendix D .

## Data Collection

The population eligible for the 2001 survey consisted of all individuals who received a research doctorate (only first doctorates are included) from a U.S. academic institution in the 12month period ending on June 30, 2001. The total universe consisted of 40,744 persons in over 400 institutions that confer research doctorates awards in 2001.

Survey instruments were mailed to institutional coordinators in the graduate schools who distributed the survey forms to individuals receiving a research doctorate. The institutional coordinators also collected the forms and returned them to the contractor for editing/processing. Follow-up of missing critical items and forms is also conducted.

Since the survey collects a complete college education history, coding of institutions is very important. Because one-third of doctorate recipients from U.S. universities are from foreign countries, a coding manual for foreign institutions of higher education was developed by the U.S. Department of Education, entitled "Mapping the World of Education: The Comparative Database System" (3 Volumes).

The survey was conducted by the National Research Council of the National Academy of Sciences under contract to the National Science Foundation until 1997; the National Opinion Research Center (Chicago, Illinois) currently conducts the survey under contract.

## Survey Response Rates

Of the 40,744 new research doctorates granted in 2001, 92.1 percent of degree recipients returned their completed survey instruments. Limited records (containing field of study, doctorate institution and sex) for nonrespondents are constructed based on information collected from administrative lists of the university -- commencement programs, graduation lists, and other similar public records. Nonresponse was concentrated in certain institutions; graduates from 10 institutions accounted for 28 percent of the total nonrespondents.

Appendix Table C-1. Survey response rates ${ }^{\text {a }}$

| Year | Self-report <br> rate | Year | Self-report <br> rate |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| 1967 | 97.3 | 1985 | 94.8 |
| 1968 | 97.6 | 1986 | 93.5 |
| 1969 | 96.6 | 1987 | 93.1 |
| 1970 | 98.1 | 1988 | 92.9 |
| 1971 | 97.5 | 1989 | 92.3 |
| 1972 | 97.3 | 1999 | 93.6 |
| 1973 | 97.5 | 1991 | 94.6 |
| 1974 | 94.2 | 1992 | 95.1 |
| 1975 | 97.3 | 1993 | 94.7 |
| 1976 | 97.2 | 1994 | 94.6 |
| 1977 | 96.6 | 1995 | 94.1 |
| 1978 | 96.3 | 1996 | 92.9 |
| 1979 | 96.4 | 1997 | 91.5 |
| 1980 | 96.2 | 1998 | 91.9 |
| 1981 | 95.7 | 1999 | 91.9 |
| 1982 | 95.3 | 2000 | 92.3 |
| 1983 | 95.5 | 2001 | 92.1 |
| 1984 | 95.1 |  |  |

a The rates for 1967-2000 reflect late responses. The rate for 2001 may increase slightly in the next year if additional questionnaires are received after survey closure.

Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

The percentage of doctorate recipients completing the survey form is referred to as the "self-report" rate. The remaining doctorate recipients have either "skeletal" records containing only doctoral institution, degree date, field of degree, and gender, or "institution provided" records including the skeletal information above as well as information provided by the institution in "missing information rosters (MIRs)" where available.

Wherever possible this report includes data from all Ph.D. records whether complete or skeletal; thus the reported total number of doctorate recipients for $2001(40,744)$ includes both respondents and non-respondents. It should also be noted that, in keeping with the practice of earlier data collection cycles, counts for previous years were corrected by the addition of data from surveys received after the close of data collection for a given year.

## A Comparison of Self-Reported and Institution-Supplied Data

Table C-2 presents the results of a chi-square test comparing respondent-completed cases and nonresponding cases where institutions supplied data on critical items. The profile of nonrespondents is significantly different from the profile of respondents in five of the eight critical item variables. Nonrespondents appear to be slightly older than respondents.

Nonrespondents are more likely to be non-U.S. citizens, non-white, graduates of non-U.S. bachelors' institutions and pursuing postdoctoral studies or employment outside the U.S. These findings should be considered suggestive only, as there is a high proportion of missing data from institutions on bachelor's institution, year of bachelor's degree and post-graduation location.

Appendix Table C-2. Profiles of respondents versus nonrespondents for critical item data, by source of response, 2001

| Critical item (variable name) | Respondents (self-report) | Nonrespondents (institution-provided) | Difference |
| :---: | :---: | :---: | :---: |
| Year of Birth* Missing data | 1.6 | 8.5 |  |
| Before 1970 1970 and later | $\begin{aligned} & 65.7 \\ & 34.2 \end{aligned}$ | $\begin{aligned} & 71.7 \\ & 28.3 \end{aligned}$ | $\begin{array}{r} -6.0 \\ 5.9 \end{array}$ |
| Sex Missing data | 0.0 | 0.3 |  |
| Male Female | $\begin{aligned} & 56.1 \\ & 43.9 \end{aligned}$ | $\begin{aligned} & 54.6 \\ & 45.1 \end{aligned}$ | $\begin{array}{r} 1.5 \\ -1.2 \end{array}$ |
| Citizenship Status* Missing data | 0.7 | 20.3 |  |
| U.S. citizen <br> Permanent resident <br> Temporary resident | $\begin{array}{r} 70.1 \\ 4.7 \\ 25.3 \end{array}$ | $\begin{array}{r} 65.6 \\ 5.7 \\ 28.7 \end{array}$ | $\begin{array}{r} 4.5 \\ -1.0 \\ -3.4 \end{array}$ |
| Country of Citizenship (for non-U.S. citizens only)* Country reported Country not reported | $\begin{array}{r} 99.4 \\ 0.6 \end{array}$ | 82.1 17.9 | $\begin{array}{r} 17.3 \\ -17.3 \end{array}$ |
| Race/Ethnicity* (U.S. citizens \& perm residents only) Missing data | 0.8 | 8.5 |  |
| American Indian a | 0.6 | 0.7 | -0.1 |
| Asian b | 7.5 | 7.7 | -0.2 |
| Black | 5.9 | 11.4 | -5.5 |
| Hispanic c | 4.4 | 6.0 | -1.6 |
| White | 79.6 | 73.2 | 6.4 |
| Other d | 2.0 | 1.0 | 1.0 |
| Bachelor's institution Missing data | 2.6 | 35.5 |  |
| U.S. <br> Non-U.S. | $\begin{aligned} & 72.9 \\ & 27.1 \end{aligned}$ | $\begin{aligned} & 73.5 \\ & 26.5 \end{aligned}$ | $\begin{array}{r} -0.6 \\ 0.6 \end{array}$ |
| Year of bachelor's degree Missing data | 5.4 | 93.5 |  |
| Before 1992 <br> 1992-after | $\begin{aligned} & 58.0 \\ & 42.0 \end{aligned}$ | $\begin{aligned} & 78.2 \\ & 21.8 \end{aligned}$ | $\begin{array}{r} -20.2 \\ 20.2 \end{array}$ |
| Post-graduation location Missing data | 1.8 | 58.9 |  |
| U.S. <br> Non-U.S. | $\begin{aligned} & 89.9 \\ & 10.1 \end{aligned}$ | $\begin{aligned} & 89.3 \\ & 10.7 \end{aligned}$ | $\begin{array}{r} 0.6 \\ -0.6 \end{array}$ |

*Significant at .05 level, chi-square test performed on non-missing data.
Note: Missing data percentages calculated from all data, missing and non-missing. All other percentages calculated on non-missing data.
a Includes Alaskan Natives. b Does not include Native Hawaiians and other Pacific Islanders.
c Persons reporting an Hispanic ethnicity, whether singly or in combination with another race/ethnicity, are included in the respondentselected Hispanic ethnicity category.
${ }^{\text {d }}$ Includes Native Hawaiians and other Pacific Islanders, respondents choosing multiple races (excluding those selecting an Hispanic ethnicity), and respondents with unknown race/ethnicity.

Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

## Item Response Rates

Item nonresponse rates in 2001 for the main SED demographic variables ranged from 0.2 percent for sex to 6.2 percent for race/ethnicity. No imputation was performed for missing data items.

| Key variable | Item response rate |
| :--- | :---: |
| Sex | $99.8 \%$ |
| Citizenship | 94.1 |
| Country of non-U.S. citizens | 98.8 |
| Race/ethnicity | 93.8 |
| Postgraduation location (U.S. or foreign) | 92.1 |

Appendix table C-3 on the following pages shows the response rates for each item in the Survey of Earned Doctorates for 1991 through 2001. The numbers and percentages shown in the tables and figures in the body of the summary report are based only on the number of research doctorate recipients who responded to the applicable survey items. For cross-tabulations, the response rate for a given tabulation will be no greater than the lowest response rate for the items involved in the tabulation.

Appendix Table C-3. Item response rates, 1991-2001

| Variable name | Field | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | $\begin{gathered} 2000 \\ \text { (Prelim) } \end{gathered}$ | $\begin{gathered} 2000 \\ \text { (Adjusted) } \end{gathered}$ | $\begin{gathered} 2001 \\ \text { (Prelim) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RACE ${ }^{\text {a }}$ | Race/Ethnic group (recoded) | 95.3 | 95.6 | 96.2 | 97.6 | 97.1 | 96.4 | 93.0 | 93.6 | 95.1 | 94.5 | 94.8 | 93.8 |
| PHDENTRY | First graduate year in Ph.D. institution | NA | NA | 86.9 | 86.7 | 86.5 | 85.5 | 79.0 | 83.7 | 85.9 | 84.8 | 85.2 | 84.8 |
| EDFATHER | Father's education | 92.3 | 93.1 | 92.7 | 92.7 | 92.3 | 91.4 | 89.4 | 89.8 | 90.4 | 90.4 | 90.8 | 90.5 |
| EDMOTHER | Mother's education | 92.2 | 93.0 | 92.6 | 92.5 | 92.1 | 91.6 | 89.6 | 90.0 | 90.7 | 90.7 | 91.0 | 90.7 |
| BIRTHYR | Year of birth | 98.2 | 97.7 | 97.3 | 98.2 | 97.5 | 96.8 | 92.8 | 92.7 | 95.0 | 95.0 | 95.2 | 94.2 |
| BIRTHPL | Place of birth | 94.1 | 95.1 | 94.9 | 94.9 | 94.5 | 93.0 | 90.5 | 90.9 | 91.2 | 91.0 | 91.4 | 91.0 |
| SEX | Sex | 99.6 | 99.4 | 99.2 | 99.6 | 99.6 | 99.5 | 99.2 | 99.6 | 99.6 | 99.8 | 99.8 | 99.8 |
| MARITAL | Marital status | 91.5 | 92.0 | 91.6 | 91.5 | 91.0 | 91.7 | 89.2 | 90.2 | 90.8 | 90.7 | 91.1 | 90.6 |
| DEPENDS | Number of dependents | 89.5 | 89.8 | 89.8 | 89.7 | 89.4 | 89.5 | 88.2 | 88.7 | 89.1 | 89.0 | 89.3 | 89.0 |
| DEPEND5 | Dependents aged 5 or younger | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 64.6 |
| DEPEND18 | Dependents aged 6-18 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 62.9 |
| DEPEND19 | Dependents aged 19 or older | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 56.6 |
| CITIZ | Citizenship | 97.9 | 97.6 | 97.1 | 98.2 | 97.9 | 97.0 | 94.6 | 95.3 | 95.7 | 95.4 | 95.7 | 94.5 |
| CNTRYCIT ${ }^{\text {b }}$ | Country of citizenship | 29.2 | 30.3 | 30.2 | 31.8 | 31.3 | 31.3 | 26.5 | 26.9 | 26.6 | 27.4 | 27.4 | 28.1 |
|  |  | (98.0) | (98.5) | (98.6) | (99.3) | (99.4) | (98.5) | (95.6) | (94.1) | (99.1) | (97.6) | (99.3) | (98.8) |
| HANDICAP ${ }^{\text {c }}$ | Handicap indicated (including "no") | 93.4 | 93.9 | 93.6 | 93.7 | 93.3 | 91.8 | 90.0 | 90.0 | 90.1 | 90.3 | 90.8 | 90.4 |
| HSPLACE | Place of high school | 93.5 | 94.5 | 94.0 | 93.9 | 93.5 | 92.2 | 90.1 | 90.8 | 91.4 | 91.4 | 91.8 | 90.5 |
| HSYEAR | Year of high school graduation | 90.9 | 92.1 | 92.1 | 91.7 | 91.6 | 90.5 | 89.0 | 94.1 | 93.0 | 90.7 | 94.0 | NA |
| JRCOLL | Junior college indicated (including "no") | 92.0 | 92.7 | 92.9 | 92.5 | 92.4 | 90.6 | 91.4 | 91.9 | 91.8 | 91.8 | 92.2 | 91.6 |
| REGNURSE ${ }^{\text {d }}$ | Registered nurse | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| CEPLACE | Place of college entrance | 91.8 | 92.7 | 92.8 | 92.3 | 92.1 | 90.6 | 82.5 | 90.4 | 90.6 | 89.5 | 89.8 | 91.7 |
| CEYEAR | Year of college entrance | 91.3 | 92.2 | 91.7 | 91.5 | 91.3 | 89.1 | 82.6 | 88.7 | 89.1 | 86.9 | 87.2 | 89.0 |
| BAINST | Baccalaureate institution | 96.5 | 96.4 | 96.3 | 96.6 | 95.8 | 94.9 | 89.0 | 90.6 | 91.9 | 90.5 | 90.8 | 92.2 |
| BAFIELD | Field of baccalaureate | 92.3 | 92.4 | 91.9 | 91.6 | 90.9 | 89.3 | 82.7 | 85.2 | 84.5 | 86.2 | 86.5 | 86.5 |
| BAYEAR | Year of baccalaureate | 95.5 | 96.0 | 95.7 | 96.2 | 95.5 | 94.7 | 88.1 | 90.1 | 91.7 | 89.8 | 90.1 | 91.7 |
| BANONE ${ }^{\text {d, e }}$ | No baccalaureate/master's | 1.1 | 0.9 | 8.6 | 9.1 | 9.7 | 11.4 | 6.9 | 8.1 | 8.0 | 2.7 | 2.7 | 9.5 |
| GEYEAR | Year of graduate entrance | 89.4 | 89.5 | 88.6 | 88.2 | 87.4 | 85.7 | 77.3 | 81.4 | 84.8 | 83.2 | 83.6 | 83.8 |


| Variable Name | Field | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | $\begin{gathered} 2000 \\ \text { (Prelim) } \end{gathered}$ | $\begin{gathered} 2000 \\ \text { (Adjusted) } \end{gathered}$ | $\begin{gathered} 2001 \\ \text { (Prelim) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MAINST | Master's institution | 78.4 | 79.0 | 78.6 | 78.9 | 78.0 | 77.2 | 72.5 | 73.0 | 73.0 | 73.1 | 73.4 | 73.0 |
| MAFIELD | Field of master's | 76.3 | 77.0 | 76.1 | 76.1 | 75.3 | 74.6 | 68.7 | 70.4 | 70.7 | 70.8 | 71.2 | 70.9 |
| MAYEAR | Year of master's | 77.1 | 77.7 | 77.0 | 77.1 | 76.3 | 75.5 | 71.2 | 72.8 | 72.0 | 72.1 | 72.4 | 71.8 |
| PROFDEG ${ }^{\text {d }}$ | Type of professional doctorate | 1.6 | 1.6 | 1.6 | 1.7 | 1.8 | 1.9 | 1.9 | 2.2 | 2.0 | 2.2 | 2.2 | 1.8 |
| PROFYEAR ${ }^{\text {d }}$ | Year of professional doctorate | 1.6 | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | 1.8 | 2.2 | 2.8 | 2.2 | 2.2 | 1.8 |
| PHDINST | Doctorate institution | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| PHDFIELD | Field of doctorate | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| PHDCY | Calendar year of doctorate | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| PHDMONTH | Month of doctorate | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| PHDFY | Fiscal year of doctorate | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| PHDTYPE1 | Type of doctorate | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| PHDTYPE2 ${ }^{\text {d }}$ | Applied research doctorate | 2.3 | 2.4 | 2.4 | 2.7 | 2.5 | 2.2 | 1.0 | 1.0 | 1.4 | 1.4 | 1.4 | 1.6 |
| TOCEBAd | Time out college entry-baccalaureate | 89.7 | 90.5 | 89.7 | 89.7 | 88.9 | 86.8 | 82.7 | 82.9 | 83.9 | 84.3 | 84.7 | 85.5 |
| TOBAGE ${ }^{\text {d }}$ | Time out baccalaureate-graduate entry | 89.5 | 89.6 | 88.6 | 88.2 | 87.4 | 85.7 | 77.3 | 81.4 | 84.8 | 83.2 | 83.6 | 83.7 |
| TOGEMAd | Time out graduate entry-master's | 73.3 | 74.0 | 73.1 | 73.1 | 72.0 | 70.5 | 61.7 | 63.9 | 66.4 | 65.6 | 65.9 | 66.2 |
| TOMAPHD ${ }^{\text {d }}$ | Time out master's-Ph.D. | 69.9 | 71.1 | 69.9 | 70.0 | 69.0 | 68.2 | 68.0 | 65.4 | 66.4 | 65.2 | 65.5 | 65.2 |
| TOGEPHD | Time out graduate entry-Ph.D. | 84.0 | 84.5 | 83.1 | 82.5 | 81.8 | 80.2 | 75.9 | 74.9 | 79.5 | 77.5 | 77.8 | 86.3 |
| TICEPHD | Time in college entry-Ph.D. | 83.4 | 84.3 | 83.0 | 82.9 | 82.4 | 80.9 | 75.7 | 78.3 | 79.8 | 78.6 | 78.9 | 84.5 |
| YEARSFT | Full-time enrollment | 73.9 | 75.7 | 75.7 | 75.2 | 74.5 | 77.1 | 82.6 | 89.7 | 90.4 | 90.4 | 90.8 | NA |
| PHDDISS ${ }^{\dagger}$ | Field of dissertation | NA | $65.0{ }^{\text {b }}$ | 92.7 | 93.3 | 92.4 | 92.1 | 89.1 | 90.1 | 90.9 | 91.1 | 91.4 | 90.1 |
| SRCEPRIM ${ }^{\text {g }}$ | Primary source of support | 77.7 | 69.7 | 66.1 | 72.4 | 74.9 | 87.9 c | 87.8 | 88.7 | 89.9 | 90.0 | 90.2 | 89.6 |
| SRCE1ED 9 | Primary source of support (Edited) | 77.6 | 69.7 | 66.2 | 72.4 | 74.9 | 87.9 | 87.8 | 88.6 | 89.9 | 90.0 | 90.2 | 89.6 |
| DEBTIND | Debt level | 93.1 | 93.3 | 92.8 | 92.8 | 92.4 | 91.1 | 89.3 | 89.7 | 90.6 | 91.0 | 91.0 | 90.3 |
| TUITREMS | Received tuition remission | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 74.2 |
| UDEBTLVL | Undergraduate debt level | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 75.9 |
| GDEBTLVL | Graduate debt level | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 75.7 |
| YRSGRAD | Years in graduate school | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 76.4 |
| YRSCOURS | Years in coursework | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 76.4 |
| YRSDISST | Years working on dissertation | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 76.5 |
| PRESTAT | Predoctoral status | 93.5 | 93.5 | 93.1 | 93.0 | 92.6 | 91.8 | 88.2 | 90.1 | 90.8 | 91.0 | 91.4 | NA |
| PDOCSTAT | Postdoctoral status | 91.6 | 92.1 | 91.8 | 91.7 | 91.0 | 91.0 | 88.9 | 89.7 | 90.4 | 90.8 | 91.1 | 90.6 |
| PDOCPLAN | Postdoctoral plans | NA | 92.1 | 92.5 | 92.4 | 92.4 | 91.9 | 91.2 | 88.0 | 89.3 | 90.3 | 90.7 | 89.7 |

Appendix Table C-3. Item response rates, 1991-2001, continued

| Variable Name | Field | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | $\begin{gathered} 2000 \\ \text { (Prelim) } \end{gathered}$ | $\begin{gathered} 2000 \\ \text { (Adjusted) } \\ \hline \end{gathered}$ | $\begin{gathered} 2001 \\ \text { (Prelim) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PDSTDFLD ${ }^{\text {n }}$ | Postdoctoral study field | $\begin{array}{r} 24.4 \\ (95.1) \end{array}$ | $\begin{array}{r} 24.3 \\ (93.4) \end{array}$ | $\begin{array}{r} 25.1 \\ (94.0) \end{array}$ | $\begin{array}{r} 25.3 \\ (93.8) \end{array}$ | $\begin{array}{r} 25.0 \\ (93.9) \end{array}$ | $\begin{array}{r} 25.4 \\ (97.4) \end{array}$ | $\begin{array}{r} 25.6 \\ (99.0) \end{array}$ | $\begin{array}{r} 25.4 \\ (96.0) \end{array}$ | $\begin{array}{r} 25.4 \\ (96.9) \end{array}$ | $\begin{array}{r} 24.9 \\ (96.6) \end{array}$ | $\begin{array}{r} 25.0 \\ (96.6) \end{array}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \end{aligned}$ |
| PDSTDSUP ${ }^{\text {n }}$ | Sources of study support | $\begin{array}{r} 24.0 \\ (93.4) \end{array}$ | $\begin{array}{r} 24.2 \\ (92.9) \end{array}$ | $\begin{array}{r} 24.7 \\ (92.4) \end{array}$ | $\begin{array}{r} 25.1 \\ (93.1) \end{array}$ | $\begin{array}{r} 24.6 \\ (92.5) \end{array}$ | $\begin{array}{r} 24.7 \\ (94.9) \end{array}$ | $\begin{array}{r} 25.0 \\ (100.0) \end{array}$ | $\begin{array}{r} 25.2 \\ (95.8) \end{array}$ | $\begin{array}{r} 25.3 \\ (96.5) \end{array}$ | $\begin{array}{r} 24.8 \\ (96.1) \end{array}$ | $\begin{array}{r} 24.8 \\ (96.1) \end{array}$ | $\begin{array}{r} 26.1 \\ (98.3) \end{array}$ |
| PDEMPLOY ${ }^{\text {i }}$ | Type of employer | $\begin{array}{r} 63.3 \\ (94.9) \end{array}$ | $\begin{array}{r} 62.9 \\ (94.3) \end{array}$ | $\begin{array}{r} 61.4 \\ (93.5) \end{array}$ | $\begin{array}{r} 61.1 \\ (93.5) \end{array}$ | $\begin{array}{r} 60.9 \\ (93.4) \end{array}$ | $\begin{array}{r} 61.4 \\ (94.2) \end{array}$ | $\begin{array}{r} 60.2 \\ (92.7) \end{array}$ | $\begin{array}{r} 62.0 \\ (95.5) \end{array}$ | $\begin{array}{r} 60.5 \\ (96.0) \end{array}$ | $\begin{array}{r} 61.6 \\ (94.3) \end{array}$ | $\begin{array}{r} 62.7 \\ (96.5) \end{array}$ | $\begin{array}{r} 63.1 \\ (98.1) \end{array}$ |
| PDWKPRIM ${ }^{\text {i }}$ | Primary work activity | $\begin{array}{r} 55.9 \\ (83.8) \end{array}$ | $\begin{array}{r} 55.7 \\ (83.5) \end{array}$ | $\begin{array}{r} 54.7 \\ (83.3) \end{array}$ | $\begin{array}{r} 56.3 \\ (86.1) \end{array}$ | 56.6 $(86.8)$ | 60.8 $(93.3)$ | $\begin{array}{r} 60.4 \\ (93.0) \end{array}$ | 61.3 $(94.5)$ | 60.2 (95.3) | 62.0 $(95.0)$ | $\begin{array}{r} 62.3 \\ (95.7) \end{array}$ | 61.0 (95.6) |
| PDWKSEC ${ }^{\text {i }}$ | Secondary work activity | $\begin{array}{r} 39.6 \\ (59.3) \end{array}$ | $\begin{array}{r} 37.4 \\ (56.0) \end{array}$ | $\begin{array}{r} 36.7 \\ (55.9) \end{array}$ | $\begin{array}{r} 38.2 \\ (58.4) \end{array}$ | $\begin{array}{r} 38.4 \\ (58.8) \end{array}$ | $\begin{array}{r} 48.5 \\ (74.4) \end{array}$ | $\begin{array}{r} 49.7 \\ (76.4) \end{array}$ | $\begin{array}{r} 50.3 \\ (78.0) \end{array}$ | 49.9 $(79.2)$ | 51.5 $(78.7)$ | $\begin{array}{r} 51.6 \\ (79.7) \end{array}$ | $\begin{array}{r} 49.0 \\ (77.0) \end{array}$ |
| PDWK1ED ${ }^{\text {i }}$ | Primary work activity (edited) | $\begin{array}{r} 55.9 \\ (83.8) \end{array}$ | $\begin{array}{r} 55.7 \\ (83.5) \end{array}$ | $\begin{array}{r} 54.7 \\ (83.3) \end{array}$ | $\begin{array}{r} 56.3 \\ (86.1) \end{array}$ | $\begin{array}{r} 56.6 \\ (86.8) \end{array}$ | $\begin{array}{r} 60.8 \\ (93.3) \end{array}$ | $\begin{array}{r} 60.3 \\ (92.8) \end{array}$ | $\begin{array}{r} 61.1 \\ (94.3) \end{array}$ | 60.2 $(94.9)$ | 62.0 $(95.0)$ | 62.3 (95.7) | $\begin{array}{r} 61.0 \\ (95.6) \end{array}$ |
| PDWK2ED ${ }^{\text {i }}$ | Secondary work activity (edited) | $\begin{array}{r} 39.5 \\ (59.3) \end{array}$ | $\begin{array}{r} 37.4 \\ (56.0) \end{array}$ | $\begin{array}{r} 36.7 \\ (55.8) \end{array}$ | $\begin{array}{r} 38.2 \\ (58.4) \end{array}$ | $\begin{array}{r} 38.4 \\ (58.8) \end{array}$ | $\begin{array}{r} 48.5 \\ (74.4) \end{array}$ | $\begin{array}{r} 51.7 \\ (79.6) \end{array}$ | $\begin{array}{r} 52.3 \\ (80.9) \end{array}$ | $\begin{array}{r} 49.9 \\ (79.2) \end{array}$ | $\begin{array}{r} 51.5 \\ (78.7) \end{array}$ | $\begin{array}{r} 51.6 \\ (79.7) \end{array}$ | $\begin{array}{r} 49.0 \\ (77.0) \end{array}$ |
| PDEMPFLD ${ }^{\text {i }}$ | Field of employment | $\begin{array}{r} 47.3 \\ (70.8) \end{array}$ | $\begin{array}{r} 45.3 \\ (68.0) \end{array}$ | $\begin{array}{r} 44.0 \\ (67.0) \end{array}$ | $\begin{array}{r} 45.4 \\ (69.4) \end{array}$ | $\begin{array}{r} 45.7 \\ (70.1) \end{array}$ | $\begin{array}{r} 58.4 \\ (89.6) \end{array}$ | $\begin{array}{r} 59.5 \\ (91.5) \end{array}$ | $\begin{array}{r} 60.3 \\ (93.3) \end{array}$ | $\begin{array}{r} 60.2 \\ (95.4) \end{array}$ | $\begin{array}{r} 61.2 \\ (93.6) \end{array}$ | 61.5 (94.6) | $\begin{aligned} & \text { NA } \\ & \text { NA } \end{aligned}$ |
| PDUSFOR | Postdoctoral location U.S. or foreign | NA | NA | NA | 94.6 | 94.2 | 92.7 | 91.4 | 89.6 | 92.0 | 92.0 | 92.3 | 92.1 |

$N A=$ not available because it was not collected in that year.
NOTE: The first year a variable is collected will have a lower response rate because some respondents would have completed an older survey form.
a The percentage represents the race/ethnic groups conventionally reported by the Doctorate Data Project; multiple and "other" races are excluded.
${ }^{b}$ The percentages on the first line are based on the total doctoral cohort for a fiscal year. The percentages on the second line (enclosed in parentheses) are based on the number of non-U.S. citizens in that year
c The percentages from 1985-1988 represent the numbers of doctorate recipients with handicaps. Beginning in 1989, the response rates include doctorate recipients who reported "no" handicap. Note: The definition of "handicapped" was much more restrictive in 1990 and 1991.

e "No Baccalaureate/Master's" represents only "no baccalaureate" from 1983 to 1992. Beginning in 1993, it indicates that the Ph.D. held no baccalaureate and/or master's degree.
fThe percentage was low in 1992 because $28 \%$ of the doctorate recipients completed earlier survey forms that did not request field of dissertation.
${ }^{9}$ As of FY 1996, the percentage included recipients who said they had no primary source of support.
${ }^{n}$ The percentages on the first line are based on the total doctoral cohort for a fiscal year. The percentages on the second line (enclosed in parentheses) are based on the number of recipients who reported plans for postdoctoral study.
i The percentages on the first line are based on the total doctoral cohort for a fiscal year. The percentages on the second line (enclosed in parentheses) are based on the number of recipients who reported plans for postdoctoral employment.

## Derived Variables

The following derived variables deserve further explanation.

## Postdoctoral Plans to Stay in the United States

Starting in 1997, the planned postdoctoral location of doctorate recipients was coded in a new variable called PDLOC using FIPS codes for U.S. states and territories and countries. Values of PDLOC less than 100 indicate a postdoctoral location in the United States.

Also beginning in 1997, a dichotomous variable, PDUSFOR, was created to index whether the planned postdoctoral location reported by the respondent was in the United States or in a foreign location.

For years prior to 1997, this variable is based on PDAFFIL. The first character of PDAFFIL flags whether the respondent's planned postdoctoral location is in the United States; a numeric character in this position indicates a United States location. Non-numeric values in the first position of PDAFFIL (except "R") indicate non-U.S. locations. A value of "R" for PDAFFIL signifies the respondent's refusal to provide information.

For the interested user, the following SAS code produces "USPLAN" as an index of plans to stay in the United States following the doctorate using PDAFFIL1 (a variable created using the first character of PDAFFIL).

```
USPLAN=2; /* Outside the U.S. */
if PDAFFIL1 in ("0","1","2","3","4","5","6","7","8","9")
    then USPLAN=1;/* U.S. */
if PDAFFIL1 eq "R" then USPLAN=.;
if PDAFFIL1 eq " " then USPLAN=.;
```


## Firm Postdoctoral Plans

Postdoctoral plans are coded using the values of PDOCSTAT, which indicate that the doctorate recipient's postdoctoral plans were definite at the time the survey was completed. That is, codes 0,1 , or A on PDOCSTAT indicate that the respondent had definite postdoctoral plans, whereas codes 2,3 , and 4 indicate that the respondent was still seeking to determine postdoctoral placement.

The following is the SAS code used to derive FIRMPLAN from PDOCSTAT :

```
if PDOCSTAT in ("0","1","A") then FIRMPLAN=1; /* Definite */
if PDOCSTAT in ("2","3","4") FIRMPLAN=2; /* Seeking */
if PDOCSTAT eq " " then FIRMPLAN=.;
```


## Firm Plans to Stay in the United States

This variable is derived from USPLAN and FIRMPLAN. A respondent is coded as having firm plans to stay in the United States if the reported postdoctoral location was in the United States and the reported postdoctoral plans were coded "definite."

The following is the SAS code that creates the variable FIRMUS from USPLAN and FIRMPLAN as described above.

```
FIRMUS=2;
if (USPLAN eq 1 and FIRMPLAN eq 1) then FIRMUS=1;
if USPLAN eq . or FIRMPLAN eq . then FIRMUS=.;
```


## Time to Doctorate

Total time to degree (TTD): TTD measures the total elapsed time between the baccalaureate and the doctorate (including time not enrolled in school). TTD can be computed only for individuals whose baccalaureate year is known. Baccalaureate year is often obtained from commencement programs or doctorate institutions when not reported by the recipient. Months are now included in the computation (see note below).

Registered time to degree (RTD): RTD gauges the time in attendance at colleges and universities between receipt of the baccalaureate and the doctorate. Enrollment may include years of attendance not related to a recipient's doctoral program. RTD can only be computed for individuals who provided all years of college attendance after the baccalaureate. Months are now included in the computation (see note below).

Note about medians: The method of computing medians, beginning with Summary Report 1994, is as follows. Months (of birth, baccalaureate, and doctorate) are included in the calculations whenever available; if months are missing, only years are used in the calculations. (However, medians are not computed for years prior to 1969 because doctorate month is unavailable for all doctorate recipients.) Medians presented in previous summary reports were based only on years. Some medians would be the same regardless of the method of computation, but the new method generally computes slightly different results. While differences are small (usually one- or two-tenths of a year), readers should consider these differences when comparing medians presented in the report with those in earlier reports.

## Changes to the 2001 SED

## Race and Hispanic Ethnicity

In 2001, a new set of questionnaire items was used to collect information about citizenship. Just as in the past, respondents have been asked to first indicate whether or not they are Hispanic, and then check one or more of the various racial group categories (e.g., American

Indian, indicating Tribal Affiliation, Asian (including Native Hawaiians and Pacific Islanders through the year 2000), black, or white). Doctorate recipients who reported Hispanic heritage, regardless of racial designation, are counted as Hispanic in this report. The remaining survey respondents are then counted in their respective racial groups or as "Other/Unknown" (which includes only those who did not indicate a specific race/ethnicity through 2000, and also includes those choosing "Multiple Race" in 2001). (Note: Doctorate recipients who checked the category "American Indian or Alaskan Native" are identified as American Indian in this report.) For a complete view of the new questionnaire items, see the reproduction of the SED questionnaire, items C-12 through C-14 below.

## Citizenship

As in the past, the variable CITIZ is used to identify non-U.S. citizens for whom visa status was unknown. The new code frame for the data introduced in the year 2000 was as follows:

| Code | Citizenship Categorv |
| :---: | :--- |
| 0 | U.S. Native |
| 1 | U.S. Naturalized Citizen |
| 2 | Non-U.S. Immigrant (Permanent Resident) |
| 3 | Non-U.S. Non-immigrant (Temporary Resident) |
| 4 | Non-U.S., Visa Status Unknown |
| Blank | Missing/Citizenship Unknown |

Beginning in 2000, a logical assignment to code 4 was made if all follow-up attempts for missing citizenship were unsuccessful. The assignment was made for 1997, 1998, 1999, and 2000 records if three out of four variables - BIRTHPL, HSPLACE, EDPLACE, PDUSFOR - were non-U.S. locations. For the purposes of the tabulations in this report, code 4 was combined with code 3. This is consistent with what was done in previous rounds and seems well justified by an examination of the data. However, the existence of this new code will allow the data user to exclude the cases for which visa status is unknown if desired. One should keep in mind that the number of cases in this group (code 4) is not sufficient to warrant analysis as a separate group ( $n=342$ ).

To match the numbers in this report, use the following code before analyzing citizenship:
> /*RECODE CITIZ 4 */
> IF (CITIZ eq '4') THEN CITIZ='3';

## Debt

This item indexing debt was changed this year to allow the identification of debt due to undergraduate education separately from that due to graduate education (see item A9). The
resulting variables identify 8 ranges of debt for each referent (undergraduate or graduate). To estimate overall debt, we took the midpoint of the chosen range for undergraduate and for graduate debt. These two values were summed to yield a total debt amount. These amounts were then assigned to the appropriate range as shown below:

> Cumulative Debt
> No Debt
> $\$ 5,000$ OR LESS
> $\$ 5,001-\$ 10,000$
> $\$ 10,001-\$ 15,000$
> $\$ 15,001-\$ 20,000$
> $\$ 20,001-\$ 25,000$
> $\$ 25,001-\$ 30,000$
> $\$ 30,001$ and up

## Availability of Data

The survey has collected information on doctoral recipients annually since 1957. More limited information is contained on the SED data file for research doctorate recipients from 1920-1956.

The data from this survey are published annually in Detailed Statistical Tables in the series Science and Engineering Doctorate Awards, available on the SRS Website at (www.nsf.gov/sbe/srs/ssed/ssedmeth.htm). These reports focus on science and engineering fields of study. (The list of how fields of study are grouped for this report is shown at the end of the Technical Notes.) Companion data from this survey for earlier years (1960-1991) were published in Detailed Statistical Tables in the report Science and Engineering Doctorates:196091 (NSF 93-301). This report is out of print, but tables from it are available on request.

Information from the survey is also included in the report series Science and Engineering Degrees; in Science and Engineering Indicators; in Women, Minorities, and Persons With Disabilities in Science and Engineering; in Foreign Participation in U.S. Academic Science and Engineering; and in special occasional publications such as Undergraduate Origins of Recent Science and Engineering Doctorate Recipients.

Results are also included in a publication series on ALL fields of study -- Doctorate Recipients from United States Universities: Summary Report; this interagency report is sponsored by the Federal agencies that support the Survey of Earned Doctorates (6 in 2001). The report is available on the Web at: www.norc.uchicago.edu/issues/docdata.htm.

Selected summary data from this survey are available on the NSF-SRS Website and in the NSF-SRS WebCASPAR database by institution. Access to restricted data for researchers interested in analyzing microdata can be arranged through a licensing agreement.

A complete methodology report for the 2001 SED is available upon request from NSFSRS. A complete list of methodological research concerning the Survey of Earned Doctorates is also available upon request from NSF-SRS.

Additional information about this survey can be obtained by contacting:

Susan T. Hill<br>Director, Doctorate Data Project<br>Human Resources Statistics Program<br>Division of Science Resources Statistics<br>National Science Foundation<br>4201 Wilson Boulevard, Suite 965<br>Arlington, VA 22230

Phone: (703) 292-7790
E-mail: sthill@,nsf.gov

Or

Tom Hoffer

Doctorate Data Project
NORC at the University of Chicago
1155 E. 60th Street
Chicago, IL 60637

Phone: (773) 256-6097
E-mail: THOFFER@NORCMAIL.UCHICAGO.EDU

## APPENDIX D

## Survey of Earned Doctorates Questionnaire Academic Year 2001

## Survey of Earned Doctorates

## July 1, 2000, to June 30, 2001

## Conducted by

The National Opinion Research Center at the University of Chicago
for
The National Science Foundation
The National Institutes of Health
The U.S. Department of Education
The National Endowment for the Humanities
The U.S. Department of Agriculture
The National Aeronautics and Space Administration

[^22]
## INSTRUCTIONS

Thank you for taking the time to complete this questionnaire. Directions are provided for each question. Because not all questions will apply to everyone, you may be asked to skip certain questions.

- If you have not already done so, please print your name on the front cover.
- Please print all responses; you may use either a pen or pencil.
- When answering questions that require marking a box, please use an "X."
- If you need to change an answer, please make sure that your old answer is either completely erased or clearly crossed out.
- On page 7 (inside the back cover) is a Specialties List for classifying your field(s) of specialization in questions A2 and A8.


## PART A - Education

A1. What is the title of your dissertation?

$\square$
Please mark ( $X$ ) this box if the title below refers to a performance, project report, or a musical or literary composition required instead of a dissertation.

Title
$\square$
A2. Using the Specialties List (page 7), please write the name and number of the primary field of your dissertation research.

Name of Field
Number of Field $\square$
If you had a secondary field for your dissertation research, list the name and number.

Name of Field
Number of Field $\square$
A3. Please name the department (or interdisciplinary committee, center, institute, etc.) of the university that supervised your doctoral program.
$\square$ Mark (X) box if none


A4. Please name the school or college within the university that supervised your doctoral program.
$\square$ Mark (X) box if not applicable

School or College within University

## A5. Which of the following were sources of support during

 graduate school?Mark (X) Yes or No for each
a. Fellowship, scholarship
b. Dissertation grant
c. Teaching assistantship
d. Research assistantship
e. Traineeship
f. Internship or residency
g. Loans (from any source)
h. Foreign (non-U.S.) support
i. Personal savings
j. Personal earnings during graduate school (other than sources listed above)
k. Spouse's, partner's, or family earnings or savings

1. Employer reimbursement/assistance
m. Other - Specify


A6. Which TWO sources listed in A5 provided the most support? Enter letters of primary and secondary sources

1. $\qquad$ Primary source of support
 Mark (X) if no primary source
2. Secondary source of support


Mark (X) if no secondary source
A7. If you received full or partial tuition remission for your doctoral studies, was it:

0I did not receive any tuition remission
1for less than $1 / 3$ of tuition
2 between $1 / 3$ and $2 / 3$ of tuition
3 $\square$ more than $2 / 3$ of tuition

A8. Please 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 DOCTORAL DEGREE AT THE END.
$\square$ Mark (X) box if bachelor's degree (or equivalent) was never received. $\quad$ Mark (X) box if master's degree (or equivalent) was never received.


| Institution and Location |  |  | Years Attended |  | Field of Study |  | Degree (if any) Granted |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Use specialties List, page 7 |  |  |  |
| Institution |  |  |  |  | From | To | Field Name | Number | Title | Mo. | Yr. |
| Branch or City | State or Province | Country (if not U.S.) |  |  |  |  |  |  |  |
| Institution |  |  | From | To | Field Name | Number | Title | Mo. | Yr. |  |  |
| Branch or City | State or Province | Country (if not U.S.) |  |  |  |  |  |  |  |  |  |
| Institution |  |  | From | To | Field Name | Number | Title | Mo. | Yr. |  |  |
| Branch or City | State or Province | Country (if not U.S.) |  |  |  |  |  |  |  |  |  |


| Institution |  | From | To | Field Name | Number | Title | Mo. | Yr. |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Branch or City | State or Province | Country (if not U.S.) |  |  |  |  |  |


| Institution |  |  | From | To | Field Name | Number | Title | Mo. | Yr. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Branch or City | State or Province | Country (if not U.S.) |  |  |  |  |  |  |  |
| Institution |  |  | From | To | Field Name | Number | Title | Mo. | Yr. |
| Branch or City | State or Province | Country (if not U.S.) |  |  |  |  |  |  |  |

[^23]A9. When you receive your doctoral degree, how much money will you owe that is directly related to your undergraduate and graduate education?

| Mark ( $X$ ) one in each column |  |  |  |
| :---: | :---: | :---: | :---: |
| Undergraduate |  | Graduate |  |
| 0 | None |  | None |
| 1 | \$5,000 or less |  | \$5,000 or less |
| 2 | \$5,001-\$10,000 | 2 | \$5,001-\$10,000 |
| 3 | \$10,001-\$15,000 | 3 | \$10,001-\$15,000 |
| 4 | \$15,001-\$20,000 | 4 | \$15,001-\$20,000 |
| 5 | \$20,001-\$25,000 | 5 | \$20,001-\$25,000 |
| $6 \square$ | \$25,001-\$30,000 | 6 | \$25,001-\$30,000 |
| 7 | \$30,001-\$35,000 | 7 | \$30,001-\$35,000 |
| 8 | \$35,001 - or more | 8 | \$35,001 - or more |

A10. How many years were there between the date you first entered graduate school in any program or capacity and the date your doctorate was granted?

Years $\square$ Round to whole years

A11. How many years were you taking courses or preparing for exams required for or related to your doctoral degree?

Years


Round to whole years

A12. How many years did you spend on your dissertation (non-course related preparation or research, writing and defense)?

Years


Round to whole years

## PART B - Postgraduation Plans

B1. How definite are your immediate (within the next year) postgraduate plans?

## Mark ( $X$ ) one

Am returning to, or continuing in, predoctoral employmentHave signed contract or made definite commitment for other work or study2Am negotiating with one or more specific organizations
3Am seeking position but have no specific prospects
4
 Other - Specify



B2. Please name the organization and geographic location where you will work or study.


B3. In what state or country do you intend to live after graduation (within the next year)?


B4. What best describes your immediate (within the next year) postgraduate plans?

Mark ( $X$ ) one
Further Training or Study


## Career Employment



B5. What will be the main source of financial support for your postdoctoral study/research within the next year?

## Mark (X) one


U.S. Government

Industry/Business
College or university
Private foundation
Nonprofit, other than private foundation
Other - Specify $\qquad$
Unknown

B6. For what type of employer will you be working within the next year?
Mark ( $X$ ) one

## EDUCATION

a.U.S. 4-year college or university other than medical school
b.U.S. medical school (including university-affiliated hospital or medical center)
c.U.S. junior or community college or technical institute
d.Preschool, elementary, or secondary school in the U.S.
e.Foreign educational institution

## GOVERNMENT

f. $\square$ 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
1.Self-employed
OTHER
m. $\square$ Other - Specify

B7. From the list below, please indicate what your primary and secondary work activities will be by entering the numbers of your selections in the appropriate boxes:
Enter numbers from below:


Primary Activity
b. $\square$

Secondary Activity
0 Research and development
1 Teaching
2 Administration
3 Professional services to individuals
4 Other - Specify

## PART C - Background Information

C1. Are you -Male
2


C2. What is your marital status?
Mark ( $X$ ) one
$1 \square$ Married

2Living in a marriage-like relationship
3Widowed

4 $\qquad$ Separated/divorced
5Never married

C3. Not including yourself (or your spouse/partner), how many dependents do you have - that is, how many others receive at least one half of their support from you?

Mark ( $X$ ) box if none

## Number

5 years of age or younger 6 to 18 years

19 years or older


C4. What is the highest educational attainment of your mother and father?

Mark (X) one for each parent

| a. Mother |  | b. Father |
| :--- | :--- | :--- |
| Less than high school/secondary school | $1 \square$ | $1 \square$ |
| High-school/secondary-school graduate | $2 \square$ | $2 \square$ |
| Some college | $3 \square$ | $3 \square$ |
| Bachelor's degree | $4 \square$ | $4 \square$ |
| Master's degree | $5 \square$ | $5 \square$ |
| Professional degree | $6 \square$ | $6 \square$ |
| Doctoral degree | $7 \square$ | $7 \square$ |

C5. What is your place of birth?


Country (if not U.S.)

C6. What is your date of birth?


C7. What is your citizenship status?
Mark (X) one
U.S. Citizen:

0


Native Born
Naturalized


## Non-U.S. Citizen:

2With a Permanent U.S. Resident Visa ("Green Card")

3With a Temporary U.S. Visa
C8. (IF A NON-U.S. CITIZEN) Of which country are you a citizen?

[^24]C9. In what state or country was the high school/secondary school that you last attended?

## -

State (if U.S.)

## OR

## Country (if not U.S.)

C10. Are you a person with a disability?


C11. (IF YES) Which of the following categories describes your disability(ies)?
Mark (X) one or more
a. $\square$ Blind/Visually Impaired
b.Deaf/Hard of Hearing
c.Physical/Orthopedic Disability
d.
 Learning/Cognitive Disability
e.Vocal/Speech Disability
f.


Other - Specify

C12. Are you Hispanic (or Latino)?


C13. (IF YES TO C12) Which of the following describes your Hispanic origin or descent?


Mexican American or Chicano
$2 \square$
Puerto Rican
3
Cuban
4
Other Hispanic - Specify

## C14. What is your racial background?

## Mark ( $X$ ) one or more

a. American Indian or Alaska Native

Specify tribal affiliation(s)
b.Native Hawaiian or other Pacific Islander
c. $\square$ Asian
d.Black or African-American
e. $\square$ White

C15. Please fill in your U.S. Social Security number.


C16. In case we need to clarify some of the information you have provided, please list an E-mail address, website address (if applicable), and telephone numbers where you can be reached.

E-mail address
Website address
Daytime telephone
Evening telephone
C17. Please provide your address and the name and address of a person through which you could always be reached.

## Current Address

| Number | Street |  |  |
| :---: | :---: | :---: | :---: |
| City | State | Country | Zip or Postal Code |
| Contact Person |  |  |  |
| Name |  |  |  |
| Number | Street |  |  |
| City | State | Country | Zip or Postal Code |
| Phone Number (including area or country code) |  |  |  |

E-mail Address
C18. Please sign and date.

## Signature

Date

Mark (X) box if you would like a summary of the results of this survey (available as funding permits).

Results of the Survey of Earned Doctorates can be found on the National Science Foundation's World Wide Web page at http://www nsf.gov/sbe/srs/srs00410

Please use the back cover to make any additional comments you may have about this survey.

Thank you for completing the questionnaire. Please return it to the GRADUATE DEAN for forwarding to Survey of Earned Doctorates, NORC at the University of Chicago, 1525 East 55th Street, Chicago, IL 60615. Should you need to call us, our toll free number is $\mathbf{1 - 8 0 0 - 2 4 8}$ 8649.

## SPECIALTIES LIST

INSTRUCTIONS: The following field listing is to be used in responding to items A2 and A8. If you choose a field marked with an asterisk (*), please write in your field of specialization in the space provided in those items.

AGRICULTURAL

## SCIENCES

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

## bIOLOGICAL SCIENCES

100 Biochemistry
103 Biomedical Sciences
105 Biophysics
107 Biotechnology
Research
110 Bacteriology
115 Plant Genetics
120 Plant Pathology
(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./Embryology
145 Endocrinology
148 Entomology
151 Biological
Immunology
154 Molecular Biology
157 Microbiology
160 Neuroscience
163 Nutritional Sciences
166 Parasitology
169 Toxicology
170 Genetics, Human \& Animal
175 Pathology, Human \& Animal
(See also 120)

 Physiology, Human \& Animal
189 Zoology, Other*
198 Biological Sciences, General
199 Biological Sciences, Other*

HEALTH SCIENCES
200 Speech-Lang. Path. \& Audiology
210 Environmental Health
212 Health Systems/
Service Admin.
215 Public Health
220 Epidemiology
(See also 133)
222 Exercise Physiology/ Sci., Kinesiology
230 Nursing
240 Pharmacy
245 Rehabilitation/ Therapeutic Services
250 Veterinary Medicine
298 Health Sciences,
General
299 Health Sciences, Other*

ENGINEERING
300 Aerospace, Aeronaut. \& Astronaut.
303 Agricultural
306 Bioengineering \& Biomedical
309 Ceramic Sciences
312 Chemical
315 Civil
318 Communications
321 Computer
324 Electrical \&
Electronics
327 Engineering Mechanics
330 Engineering Physics
333 Engineering Science
336 Environmental Health Engineering
339 Industrial \& Manufacturing
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 \& Plastics
372 Systems
398 Engineering, General
399 Engineering, Other*

COMPUTER AND
INFORMATION
SCIENCES
400 Computer Science
410 Info. Sci. \& Sys.
419 Computer/Info. Sci, Other*
MATHEMATICS
420 Applied Mathematics
425 Algebra
430 Analysis \& Functional Analysis

| 435 | Geometry |
| :--- | :--- |
| 440 | Logic |
|  | (See also 785) |
| 445 | Number Theory |
| 450 | Mathematical |
|  | Statistics |
| 455 | Topology |
| 460 |  |
|  | Practice |
| 465 | Operations |
|  | Research |
|  | (See also 363, 930) |
| 498 | Mathematics, |
| General |  |
| 499 | Mathematics, |
|  | Other |

PHYSICAL SCIENCES
Astronomy
500 Astronomy
505 Astrophysics
Atmospheric Sci. and
Meteorology
510 Atmospheric Physics \& Chemistry
512 Atmospheric Dynamics
514 Meteorology
518 Atmos. Sci./Meteorol, General
519 Atmos. Sci./Meteorol, Other*

Chemistry
520 Analytical
522 Inorganic
524 Nuclear
526 Organic
Pharmaceutical
530 Physical
532 Polymer
534 Theoretical
538 Chemistry,
General
539 Chemistry, Other*
(See 100 Biochemistry)
Geological \& Related
Sciences
540 Geology
542 Geochemistry
544 Geophysics \&
Seismology
546 Paleontology
548 Mineralogy \& Petrology
550 Stratigraphy \& Sedimentation
552 Geomorphology \& Glacial Geology
558 Geolog. \& Related Sci., General
559 Geolog. \& Related
Sci., Other*

## Physics

560 Acoustics
561 Chemical \&

## Atomic/Molecular

564 Elementary
Particle
566 Fluids
568 Nuclear
569 Optics
570 Plasma \& High-
Temperature
572 Polymer
574 Solid State \& LowTemperature
578 Physics, General
579 Physics, Other*

Miscellaneous Physical 738 Letters, General

## Sciences <br> 739 Letters, Other*

580 Environmental
Science
585 Hydrology \& Water Resources
590 Oceanography
595 Marine Sciences
599 Misc. Physical
Sciences, Other*
PSYCHOLOGY
600 Clinical
603 Cognitive \& Psycholinguistics
606 Comparative
609 Counseling
612 Developmental \& Child
613 Human/Indiv. \& Family Devipmt.
615 Experimental
618 Educational
(See also 822)
620 Family \& Marriage
Counseling
621 Indust. \& Organiz.
(See also 935)
624 Personality
627 Physiological/
Psychobiology
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/
Population Studies
666 Economics
668 Econometrics
670 Geography
674 International Relations/Affairs
678 Political Sci. \& Government
682 Public Policy Analysis
686 Sociology
690 Statistics
(See also 450)
694 Urban Affairs/Studies
698 Social Sciences, General
699 Social Sciences, Other*

HUMANITIES
History
700 History, American
703 History, Asian
705 History, European
710 History/Philosophy of Sci. \& Tech.
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 \& Rhetorical
738 Letters, General

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 \& Literature*

Other Humanities
777 American Studies
773 Archeology
776 Art History/ Criticism/Conserv.
780 Music
785 Philosophy
(See also 440)
790 Religion (See also 984)
795 Dramal Theater Arts
798 Humanities, General
799 Humanities, Other*
EDUCATION
800 Curriculum \& Instruction
805 Educational Admin. \& Supervision
807 Educational Leadership
810 Educ./Instruct. Media Design
815 Educ. Stat / Research Methods
820 Educ. Assess./ Test./Meas.
822 Educ. Psychology (See also 618)
825 School Psychology
(See also 636)
830 Social/Phil. Found. of Education
835 Special Education
840 Couns.
Educ./Couns. \&
Guid. Serv.
845 Higher
Education/Eval. \&
Research
Teacher Education
850 Pre-elementary/ Early Childhood
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

## To the Doctorate Recipient:

Congratulations on earning a doctoral degree! This is an important accomplishment for you. Your accomplishment is also significant for both this nation and others, as the new knowledge generated by research doctorates enhances the quality of life in this country and throughout the world. Because of the importance of persons earning research doctorates, several Federal agencies-listed on the cover-sponsor this Survey of Earned Doctorates.

The basic purpose of this survey is to gather objective data about doctoral graduates. These data are important in improving graduate education both at your home institution and beyond. Often, decisions made by governmental and private agencies to develop new programs, or to support present ones, are based in part on the data developed from this survey. If you have any comments about the survey, please provide them in the space below.

On behalf of the sponsoring Federal agencies, I thank you for your participation in this survey.

Best wishes,
Dr. Lynda Carlson
National Science Foundation

## Comments About This Survey

| Please return this questionnaire to your GRADUATE DEAN for forwarding to Survey of Earned Doctorates, NORC at the University of Chicago, 1525 East 55th Street, Chicago, IL 60615. <br> Should you need to call us, our toll free number is 1-800-248-8649. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| OFFICE USE ONLY |  |  |  |  |  |
| Case ID | Instit. Coode: |  | Grad Date: | Main Disp.: |  |
| PRocessing |  |  |  |  |  |
| Receipt |  | Editing |  | CADE |  |
| Iritials | Date | Iritials | Date | Iritials | Date |
|  |  |  |  |  |  |
| Iritials | Date | Irititils | Date | Irititils | Date |

## APPENDIX E

Field Classification and Research Degree Titles

## APPENDIX E: Field Classification and Research Degree Titles

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, 590-599)
Mathematics (420-499)
Computer Sciences (400410) $\}$ Combined in Table A -7
Engineering (300-399)
Life Sciences (000-299)
Biological Sciences (100-199)
Biochemistry (100)
Other Biological Sciences (103-199)
Health Sciences (200-299)
Agricultural Sciences (000-099)
Social Sciences (600-699)
Psychology (600-649)
Economics and Econometrics $(666,668)$
Anthropology and Sociology $(650,686)$
Political Science and International Relations $(674,678)$
Other Social Sciences (652-662, 670, 672, 682, 690-699)

## 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)
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 specialty. Their choices may differ from departmental names.

| DA/DAT | Doctor of Arts/Arts in Teaching | DMM | Doctor of Music Ministry |
| :--- | :--- | :--- | :--- |
| DArch | Doctor of Architecture | DMSc | Doctor of Medical Science |
| DAS | Doctor of Applied Science | DNSc | Doctor of Nursing Science |
| DBA | Doctor of Business Administration | DPA | Doctor of Public Administration |
| DChem | Doctor of Chemistry | DPE | Doctor of Physical Education |
| DCJ | Doctor of Criminal Justice | DPH | Doctor of Public Health |
| DCL | Doctor of Comparative Law/Civil Law | DPS | Doctor of Professional Studies |
| DCrim | Doctor of Criminology | DrDES | Doctor of Design |
| DED | Doctor of Environmental Design | DRec/DR | Doctor of Recreation |
| DEng | Doctor of Engineering | DSc/ScD | Doctor of Science |
| DEnv | Doctor of Environment | DScD | 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 | DdD | 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 | DJD | Doctor of Juridical Science |
| DML | Doctor of Modern Languages | Doctor of Theology |  |


[^0]:    ${ }^{1}$ The Survey of Earned Doctorates collects information on research doctorate recipients only. This survey differs from the U.S. Department of Education's collection of the number of doctoral degrees awarded per institution for all fields. For an evaluation of the differences, see National Science Foundation, 1993, Science and Engineering Doctorates 1960-1991, NSF 93-301, Detailed Statistical Tables, pp. 2-6, Washington, DC.
    ${ }^{2}$ See appendix C for information on response rates for the SED.

[^1]:    ${ }^{3}$ In the 2001 survey year, about 14 percent of doctorate recipients completed the SED form from a year that did not correspond to the actual degree year. This does not present a problem unless there are significant changes in the content of the questionnaires between years.

[^2]:    ${ }^{4}$ Doctorates are reported by academic year (from July 1 of one year through June 30 of the following year) and include research doctorates in all fields. Doctoral degrees such as the Ph.D., D.Sc., and research Ed.D. are covered by this survey; professional degrees (e.g., M.D., D.D.S., J.D., Psy.D., and D.Min.) are not. A full list of included degrees can be found in appendix E. For convenience throughout this report, the terms "Ph.D." or "doctorate" are used to represent any of the research doctoral degrees covered by the survey. Please note that if an individual earned a second research doctorate, the second doctorate is not included in the SED.

[^3]:    See Table 1.
    Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

[^4]:    ${ }^{5}$ Calculations derived from appendix table A-7.

[^5]:    ${ }^{6}$ The physical sciences also include mathematics and computer sciences in this report.

[^6]:    ${ }^{7}$ The life sciences encompass biological, agricultural, and health sciences in this report.

[^7]:    ${ }^{8}$ For 2001, sex could not be determined for 74 doctorate recipients; these 74 are not part of these and

[^8]:    ${ }^{9}$ The percentage of cases with missing data on citizenship status (U.S. versus non-U.S.) and country of citizenship has fluctuated more year to year than other SED variables (see appendix table C-3), and the over-time comparisons are thus subject to some uncertainty.

[^9]:    ${ }^{10}$ Includes Hong Kong beginning with the 2000 SED cycle.

[^10]:    ${ }^{11}$ The Federal government and other governments can be the original source of these funds.

[^11]:    ${ }^{12}$ See the special section on indebtedness in the Summary Report 1998 for more detail on debt levels and financial support for doctoral education. The report is available on the NORC Website (http://www.norc.uchicago.edu/issues/docdata.htm).

[^12]:    ${ }^{13}$ The items in the postgraduation plans section of the questionnaire are not classified as "critical items" which become the focus of missing data follow-ups. Thus, the response rates to the postgraduation plan items mirror the returns of the actual questionnaire ( 92.1 percent in 2001), minus a low rate of item nonresponse. For the 2001 SED cycle, the overall response rate for the first item, asking whether the respondent has definite plans for either career employment or study, was 90.6 percent.

[^13]:    a Group total for 1991 excludes 136 individual of unknown sex.
    ${ }^{\text {b }}$ Group total for 1996 excludes 195 individuals of unknown sex
    c Group total for 2001 excludes 74 individuals of unknown sex.
    ${ }^{d}$ Includes mathematics and computer sciences.

[^14]:    a Does not include Native Hawaiians and other Pacific Islanders in 2001.

[^15]:    ${ }^{\text {a }}$ Does not include Native Hawaiians and other Pacific Islanders.
    ${ }^{\mathrm{b}}$ Includes Alaskan Natives.
    Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

[^16]:    a Includes mathematics and computer sciences.

[^17]:    a Includes doctoral recipients for whom sex is reported
    ${ }^{\text {b }}$ Includes Native Hawaiians/Other Pacific Islanders through 2000, but excludes them in 2001 per revised OMB guidelines issued for 2001.
    c Includes Alaskan Natives.
    Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

[^18]:    Source: NSF/NIH/NEH/USED/USDA/NASA, Survey of Earned Doctorates

[^19]:    
    ${ }^{\mathrm{a}}$ Includes only recipients with definite employment plans.
    Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

[^20]:    Totals include 74 individuals who did not report their gender and 2,235 individuals who did not report their citizenship at time of doctorate
    ${ }^{\mathrm{b}}$ Includes Alaskan Native.
    c Does not include Native Hawaiians and other Pacific Islanders.
    ${ }^{\text {d }}$ Includes Native Hawaiians and other Pacific Islanders, respondents choosing multiple races (excluding those selecting an Hispanic ethnicity), and respondents with unknown race/ethnicity.
    ${ }^{\mathrm{e}}$ Includes mathematics and computer sciences.

[^21]:    Source: NSF/NIH/NEH/USED/USDA/NASA, Survey of Earned Doctorates

[^22]:    This information is solicited under the authority of the National Science Foundation Act of 1950, as amended. ALL INFORMATION YOU PROVIDE WILL BE TREATED AS CONFIDENTIAL and used only for research or statistical purposes by your doctoral institution, the survey sponsors, their contractors, and collaborating researchers for the purpose of analyzing data, preparing scientific reports and articles, and selecting samples for a limited number of carefully defined follow-up studies. Any information publicly released (such as statistical summaries) will be in a form that does not personally identify you. Your response is voluntary and failure to provide some or all of the requested information will not in any way adversely affect you. Your Social Security number is also solicited under the NSF Act of 1950, as amended; providing it is also voluntary. It is used for survey quality control, program evaluation, and for matching with other databases.

    The time needed to complete this form varies according to individual circumstances, but the average time is estimated to be 20 minutes. If you have comments regarding this time estimate, you may write to the National Science Foundation, 4201 Wilson Blvd., Arlington, VA 22230, Attention: NSF Reports Clearance Officer.

[^23]:    If you have attended more than six institutions of higher education, please continue this list in the "Comments" section on the back cover. Remember to include your doctoral institution and degree.

[^24]:    (Specify country of present citizenship)

