Doctorate Recipients from United States Universities

Summary Report 2006

SED

Survey of Earned Doctorates

Sponsored by:

The National Science Foundation

The National Institutes of Health

The United States Department of Education

The National Endowment for the Humanities

The United States Department of Agriculture

The National Aeronautics and Space Administration

HIGHLIGHTS

This report presents data on the 45,596 recipients of research doctorates awarded by 417 U.S. universities from July 1, 2005, through June 30, 2006. This information is taken from the 2006 Survey of Earned Doctorates (SED), an annual census of new research doctorate recipients.

- The 45,596 research doctorates awarded during the 2005-2006 academic year represent an increase of 5.1 percent from the 43,385 doctorates awarded in 2005, and is the highest number in the history of the SED. (See tables 1 and 2)

- The number of research doctorates awarded by broad field in 2006 was greatest in life sciences, which conferred 9,683 research doctorates. The numbers in the other broad areas were 7,461 in physical sciences; 7,191 in engineering; 6,873 in social sciences and psychology; 6,123 in education; 5,576 in humanities; and 2,689 in other fields. (See table 5)

- Women received 20,539 doctorates, or 45 percent of all research doctorates granted in 2006. Women earned 65 percent of the doctorates granted in education, 57 percent in social sciences and psychology, 52 percent in life sciences, 51 percent in humanities, and 48 percent in other fields. In physical sciences and engineering, women constituted 28 percent and 20 percent, respectively. (See table 7)

- In 2006, 51 percent of all research doctorates awarded to U.S. citizens went to women, the same percentage as 2005, marking the fifth consecutive year U.S. women were awarded more doctorates than their male counterparts. In addition, 2006 was the first year in which U.S. citizen women were the majority within each of the racial/ethnic minority groups. The number of doctorates awarded to Asian women surpassed the number awarded to Asian men for the first time in 2006. (See tables B-2a, B-2b, B-2c)

- Twenty percent of all research doctorates awarded to U.S. citizens in 2006 were earned by U.S. racial/ethnic minority group members. This is the highest percentage recorded in the SED. Among the 26,491 doctorates earned in 2006 by U.S. citizens who identified their race/ethnicity (98 percent of all U.S. citizen doctorates), 1,659 doctorates were earned by Blacks or African Americans, 1,560 were earned by Asians, 1,370 were earned by Hispanics, 118 were earned by American Indians or Alaska Natives, 59 were earned by Native Hawaiian or other Pacific Islanders, and 445 were earned by non-Hispanic individuals who identified more than one racial background. 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. (See table 9)

- U.S. citizens received 63 percent of all research doctorates and 56 percent of science and engineering doctorate recipients earned in 2006 by individuals who identified their citizenship status (94 percent of all doctorate recipients identified their citizenship). China was the country of origin for the largest number of non-U.S. doctorates in 2006, with 4,774, followed by India with 1,742, Korea with 1,648, Taiwan with 718, and Canada with 561. The percentage of doctorates earned by U.S. citizens ranged from lows of 32 percent in engineering and 47 percent in physical sciences, to highs of 87 percent in education and 78 percent in humanities. (See tables 11 and 12)

- Median time to degree since receipt of the baccalaureate was 9.5 years in 2006, and has shown little change over the past 25 years. Median time to degree since first enrollment in any graduate program has also shown little change in this time period and was 7.9 years in 2006. (See table 18)

- Most of the 2006 doctorate recipients (74 percent) received their primary financial support for graduate education from such program- or institution-administered sources as university fellowships or teaching and research assistantships. Just over half (52 percent) of the 2006 doctorate recipients reported no educational indebtedness at completion of the doctorate; 13 percent reported cumulative education-related debt levels of $50,001 or more. (See tables 22 and 23)

- Seventy-two percent of the new doctorate recipients had definite postgraduation plans for employment or continued study when they completed the SED survey. Of those, 66 percent planned to work and 34 percent planned to continue their studies as postdoctoral scholars. For the graduates with firm commitments for employment in the U.S., 54 percent planned to work at educational institutions, while 26 percent planned to work in industry or be self-employed, and 6 percent had definite plans for government work. (See tables 26, 28, and 30)

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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 at the University of Chicago, 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 upon request (see inside back cover). Standardized trend tables on citizenship, race/ethnicity, and sex of doctorate recipients by fine field of doctorate and baccalaureate-origins of doctorate recipients by broad field of doctorate, demographic characteristics, and Carnegie classification are available at cost. Customized tables and Institution Datasets can also be prepared at cost. For more information, please contact:

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This report is available on the NORC Web site: http://www.norc.org/SED.htm. The SED 2006 tables are available as Excel and PDF files on this site. Reports on science and engineering doctorates can be found on the National Science Foundation's Web site: http://www.nsf.gov/statistics/doctorates.

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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 officers, 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 those among the 45,596 new research doctorate recipients who took the time to complete and return their copy of the 2006 survey.

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DOCTORATE RECIPIENTS FROM UNITED STATES UNIVERSITIES: SUMMARY REPORT 2006

Introduction

Doctorate Recipients from United States Universities: Summary Report 2006 is the fortieth 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 45,596 research doctorate recipients who earned their degrees between July 1, 2005, and June 30, 2006. Conducted since 1957, this survey is sponsored by 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. Records on all doctorate recipients from 1920 to 1957 were collected from universities in the early years of the SED and have been added to the cumulative survey data. All survey responses become part of the Doctorate Records File (DRF), a cumulative database on research doctorate recipients from 1920 to 2006. For the 2006 survey, 92 percent of the 45,596 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 1,648,744 records on individuals completing doctorates over the last 87 years at U.S. institutions.

[1] The Survey of Earned Doctorates collects information on *research* doctorate recipients only. This survey differs from the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS), which collects the number of doctoral degrees awarded per institution by field of study. For an evaluation of the differences, see National Science Foundation, 1993, *Science and Engineering Doctorates 1960-1991*, NSF 93-301, pp. 2-6, Washington, DC.

[2] See Appendix C for information on response rates for the SED. The National Opinion Research Center at the University of Chicago (NORC) is the current data collection contractor and has been since 1997. The Office of Scientific and Engineering Personnel of the National Research Council conducted the survey from 1958 to 1996.

Organization

Summary Report 2006 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, as well as by sex, race/ethnicity, and citizenship. Cross-sectional data on the educational pathways that doctorate recipients take en route to the research doctoral degree are reported for the 2006 cohort. Trends in the average amount of time taken to complete the doctoral degree are reported as well as cross-sectional data for the 2006 cohort on the numbers of doctorate recipients reporting disabilities. Cross-sectional data for the 2006 cohort are also presented on the sources of financial support during graduate school, and the postgraduation status and plans of doctorate recipients. Continuing on work that was done in the *Summary Report 2005* and the *Summary Report 2004*, data on recent trends in non-U.S. citizens' decisions to stay in the U.S. or leave are presented, with a special focus on whether any changes that might be related to the events of September 11, 2001 and their aftermath. Finally, *Summary Report 2006* concludes with a special section focusing on the work activities of doctorate recipients across fields of study, historical doctoral cohorts, employment sectors, and demographic groups. Past *Summary Reports* have included special sections focusing on:

- Non-U.S. Citizen Doctorate Recipients (1989 and 1997)
- U.S. Citizen Minority Doctorates (1990)
- U.S. Citizen Female Doctorates (1991)
- Contribution of India, China, Taiwan, and Korea to the Growth of Non-U.S. Ph.D.s (1995)
- A Profile of International Students (1997)
- Indebtedness of Doctorate Recipients (1998)
- Interstate Migration Patterns of Doctorate Recipients (1999)
- First-Generation College Graduates Earning Research Doctorates (2002)
- Baccalaureate-Institution Origins of Recent (1999-2003) Research Doctorate Recipients (2003).

Throughout the report, 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 2006 research doctorate recipients are shown in Appendix A, and trend tabulations for the previous ten-year period (1996 to 2006) 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 2006 academic year. Field of study classifications and research degree titles included in the SED are listed in Appendix E.

Related Publications

The NSF publishes an annual volume of tabulations using the SED data, *Science and Engineering Doctorate Awards* (http://www.nsf.gov/statistics/doctorates). A comprehensive special statistical report funded by the SED federal sponsors, *U.S. Doctorates in the 20th Century*, is available on the NSF website above. Another noteworthy report was based on the first year of a new annual Canadian SED. The report, *Survey of Earned Doctorates: A Profile of Doctoral Degree Recipients*, used data collected from the 2003-2004 Canadian Survey of Earned Doctorates by Statistics Canada (http://www.statcan.ca/english/research/81-595-MIE/81-595-MIE2005032.pdf). Copies of the annual *Summary Report* from recent years and corresponding questionnaires are available on the NORC Website (http://www.norc.org/SED.htm). At this same URL, the 2006 tables are available as Excel and PDF files. The methodology of the SED 2006 survey is described in detail on the NSF Website (http://www.nsf.gov/statistics/survey.cfm). Further information is available upon request from:

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Trends in Doctorate Recipients

The individual research doctorate recipients[3] from 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. The lists of new doctorate recipients are carefully checked and edited by the data collection contractor with the close cooperation of the universities. 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 doctorate recipients 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, 2006, U.S. universities awarded 45,596 research doctoral degrees, compared with 43,385 in 2005 and 42,123 in 2004. (See table 1.) The 2006 total reflected a 5.1 percent increase from 2005, and this is the highest number of research doctorates awarded in the history of higher education in the United States.

The long-term trend in the number of new research doctorates has been one of considerable growth. Since the SED began in 1957, the number of doctorates granted by U.S. universities has, on average, increased by approximately 3.5 percent per year. The

[3] 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. Research doctoral programs are oriented toward preparing students to make original contributions to knowledge in a field and typically entail writing a dissertation. 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., D.V.M., 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 "doctorate" and "doctoral degree" are used to represent any of the research doctoral degrees covered by the survey. Since 2001, individuals who had also earned an earlier research doctorate have been included in the SED. In 2006, a total of 46 individuals earned a second research doctorate, much less than the 109 in 2005.

expansion has been characterized by two periods of rapid growth followed by stability and a few slight declines. Between 1961 – the year when the number of annual doctorates awarded surpassed 10,000 for the first time – and 1971, the average annual growth rate was nearly 12 percent, so that the number of doctorates awarded almost tripled (31,867) during that 10-year period. The number of doctoral degrees annually awarded during the late 1970s and through the early 1980s remained moderately stable at about 31,000 each year. In 1986, a second period of growth began that persisted until 1998, when 42,637 research doctorates were awarded. From 1998-2002, the number of doctorates awarded each year generally declined, reaching a low point in 2002. The trend reversed from 2003-2006 and the four years of growth have led to an all-time high for number of doctorates earned in 2006. (See figures 1 and 2.)

Figure 1. Doctorates awarded by U.S. colleges and universities, 1957-2006

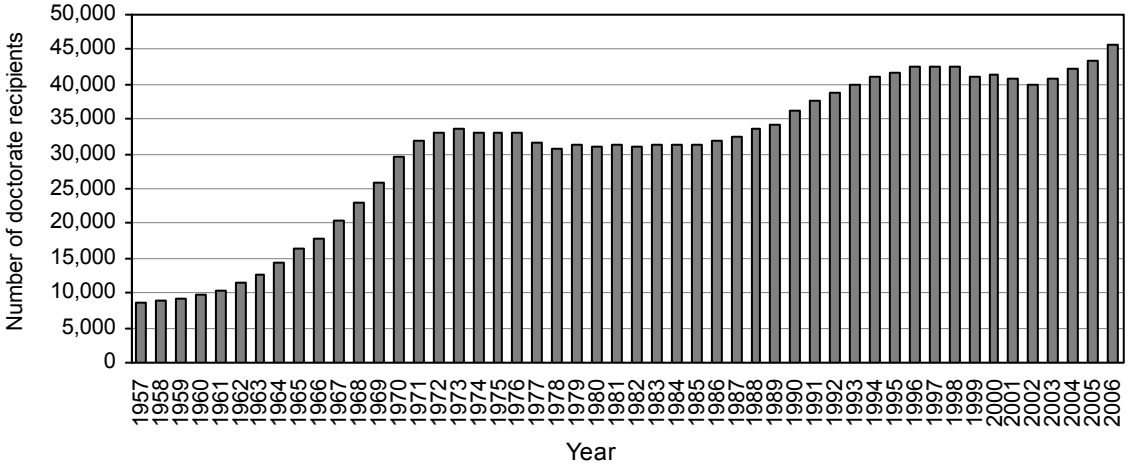
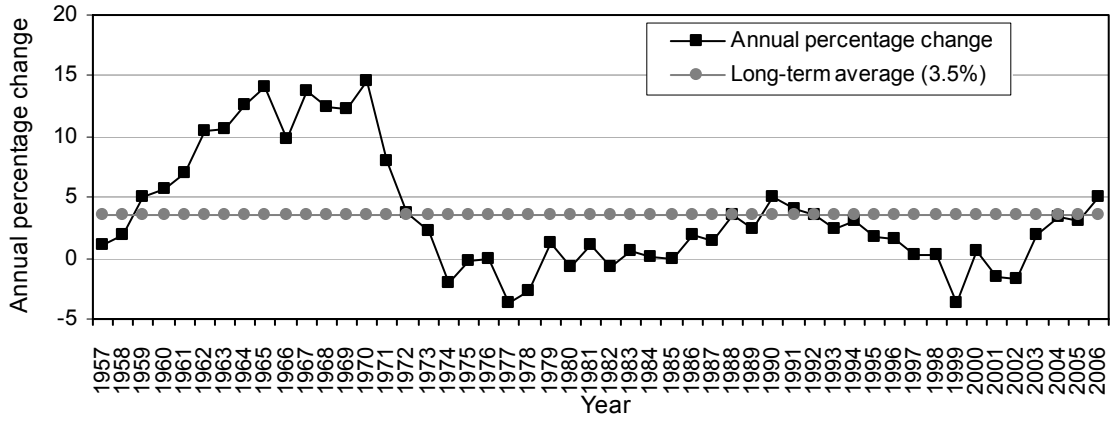


Figure 2. Annual rate of change in doctorates awarded by U.S. colleges and universities, 1957-2006



See Table 1
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

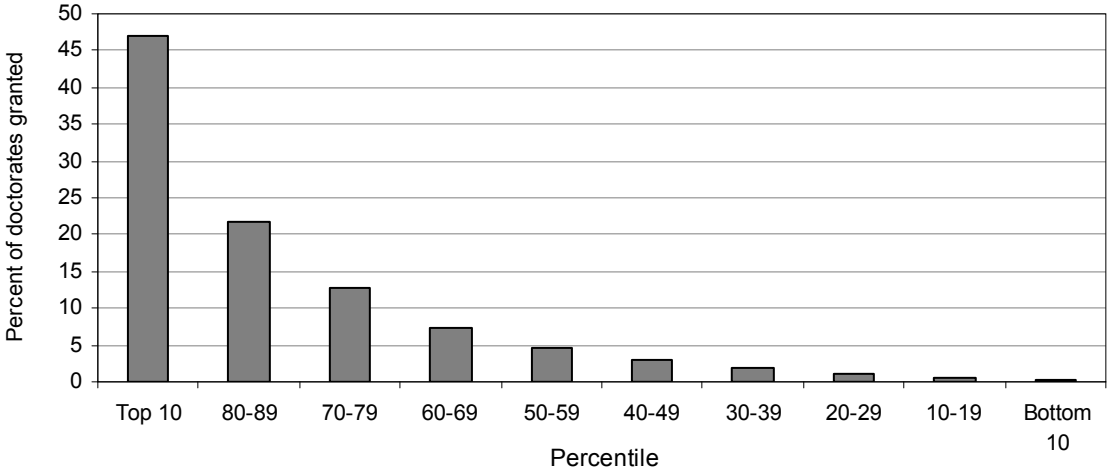
Doctorate-granting Institutions, Doctorate Recipients per Institution, and Geographical Distribution

The SED project closely monitors 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 that the university deems to be a research doctorate. Appendix Table A-8 contains the full list of institutions granting research doctorates in the 2006 academic year.

During the 2006 academic year, there were 417 universities in the United States and Puerto Rico that awarded at least one research doctorate (table 2). In 2006, the mean number of doctorates awarded per institution was 109, while the median was 40. (See table 2 for the mean and median numbers of doctorates awarded per institution from 1966 to 2006.) As the substantial difference between the mean and the median indicates, a relatively small number of institutions award a disproportionately large number of doctorates. The top ten percent of institutions granted nearly half (47 percent) of all doctorates in 2006. Institutions in the 80th to 89th percentile accounted for more than one fifth (22 percent) of all doctorates; the next decile accounted for 13 percent of all doctorates; the remaining 69 percent of institutions accounted for the final 19 percent of doctorates in 2006 (figure 3).[4]

[4] Calculations derived from Appendix Table A-8. See Appendix Table A-9 for a list of the 50 largest institutions.

Figure 3. Percentage of doctorates granted, by institution doctorate cohort size percentile, 2006



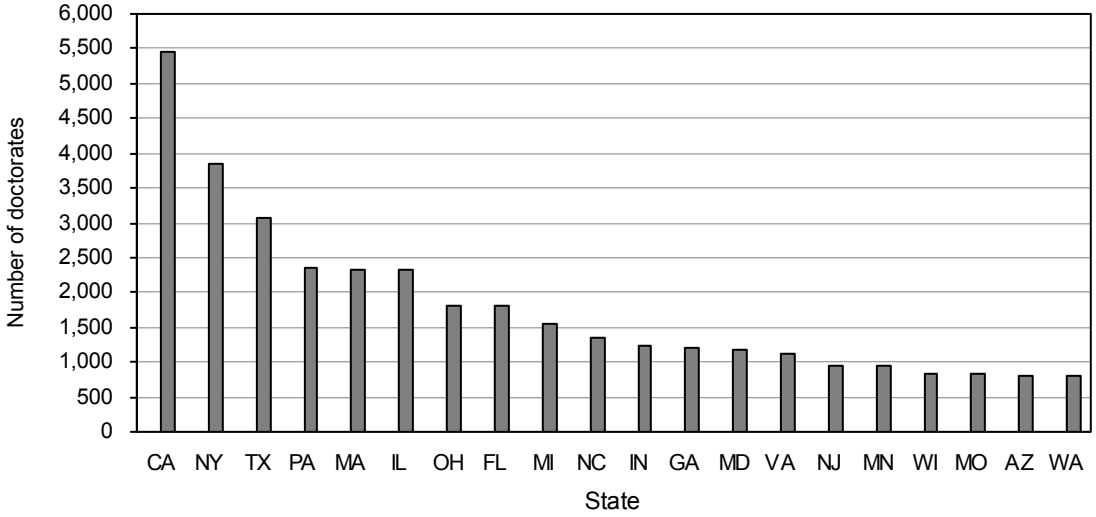
See Appendix Table A8.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

The trend data in Table 2 show that the median number of degrees awarded per institution grew rapidly during the late 1960s, from 32 in 1966 to 55 in 1970. Following the end of the Vietnam War in 1972 and the enrollment boosts that accompanied the availability of student deferments from military service, the median number quickly dropped to 42 and has vacillated between 35 and 45 since.

In the 2006 academic year, the University of Texas-Austin granted the largest number of doctorates, 796, or 2 percent of all doctorates awarded in 2006, followed by the University of Michigan-Ann Arbor (754), the University of California-Berkeley (747), the University of Minnesota-Twin Cities (720), and University of California-Los Angeles (702). In 2006 (as has been the case for the past several years), the ten institutions awarding the highest number of doctoral degrees granted approximately 15 percent of all doctorates. (See table 3; appendix table A-8 contains the complete list of institutions and their numbers of doctorate recipients by field of study.)

The state-by-state totals in Figure 4 and Table 4 show that California universities led the nation by awarding 5,464 doctorates or 12 percent of all doctorates in 2006. New York institutions granted the next highest number (3,855), followed by institutions in Texas (3,066), Pennsylvania (2,348), Massachusetts (2,331), Illinois (2,312), Ohio (1,814), Florida (1,813), and Michigan (1,556). These nine states accounted for 54 percent of all doctorates awarded in 2006. (See figure 4 and table 4.)

Figure 4. Top 20 doctorate-granting states, 2006



See Table 4.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

Doctorate Recipients by Field of Study

There were 279 fields of specialization into which the SED classified research doctoral degrees in 2006 (these are listed on page 7 of the questionnaire included in Appendix D). Because fields of specialization are dynamic entities that reflect the evolving programs of researchers and their constituencies, the SED list is assessed periodically in order to identify emerging fields and modified, as needed, to accommodate changes in the world of doctoral education.

Consistent with past practice in presenting the SED data, the fields of specialization are grouped into seven broad fields: life sciences,[5] physical sciences,[6] social sciences,[7] engineering, education, humanities, and a heterogeneous group of 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.

The institutions granting the largest numbers of doctorates in each of the seven broad fields in 2006 are listed in Table 3. The Johns Hopkins University led all universities in life sciences (213) while the Massachusetts Institute of Technology

[5] Life sciences encompasses agricultural sciences/natural resources, biological/biomedical sciences, and health sciences in this report.
[6] Physical sciences also includes mathematics and computer & information sciences in this report.
[7] Social sciences includes psychology in this report.

awarded the most doctorates in physical sciences (198). The University of California – Berkeley granted the most doctorates in the social sciences (117) and the Georgia Institute of Technology granted the most engineering doctorates (261). In education, the Teacher's College of Columbia University led all the universities in doctorates awarded (149). The University of Texas – Austin had the highest total in the humanities (148), while Nova Southeastern University granted the most doctorates in the diverse "other fields" category (58).

The numbers of doctorates awarded in the seven broad fields were also concentrated in a relatively small number of institutions. While the ten institutions that granted the largest number of doctorates awarded 15 percent of all doctorates in 2006, the concentration was higher in six of the seven broad fields: 18 percent in life sciences, 20 percent in physical sciences, 27 percent in engineering, 16 percent in education, 21 percent in humanities, and 17 percent in other fields. The concentration was about the same as the overall average in social sciences (15 percent). (Derived from table 3.)

The overall increase of five percent in doctorates awarded between the 2005 and 2006 academic years was a result of increases in six of the seven broad fields. Engineering and physical sciences showed the largest increases (12 percent). Other fields, humanities, and life sciences showed smaller increases (six percent, four percent, and four percent respectively) while social sciences increased minimally by less than one percent. The number in education dropped two percent since 2005. (See appendix table B-1.)

Since 1990, life sciences has been the largest broad field, with 9,683 doctorates awarded in 2006. Over the last five years, the number of doctorates awarded in engineering, physical sciences, and other fields, showed the largest increases: 31 percent, 27 percent, and 20 percent higher respectively in 2006 than in 2001. (See table 5). Life sciences and social sciences also awarded more doctorates: 16 percent and 1 percent respectively, while the total number completing doctorates in humanities and education was slightly lower, with less than 1 percent and 4 percent fewer degrees awarded respectively in 2006 than five years earlier. (See table 5 and figures 5 and 6.)

Figure 5. Science and engineering doctorates awarded, by broad field of study, for selected years, 1976-2006

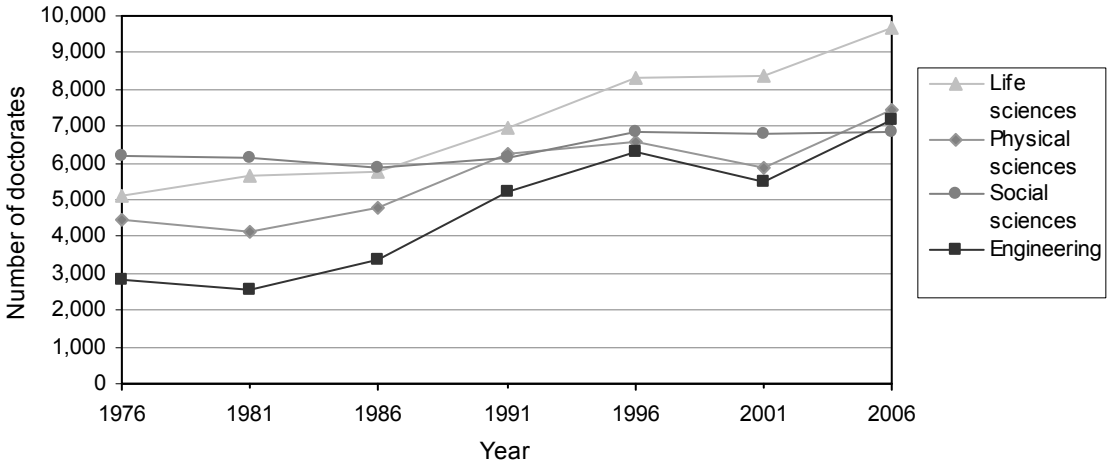
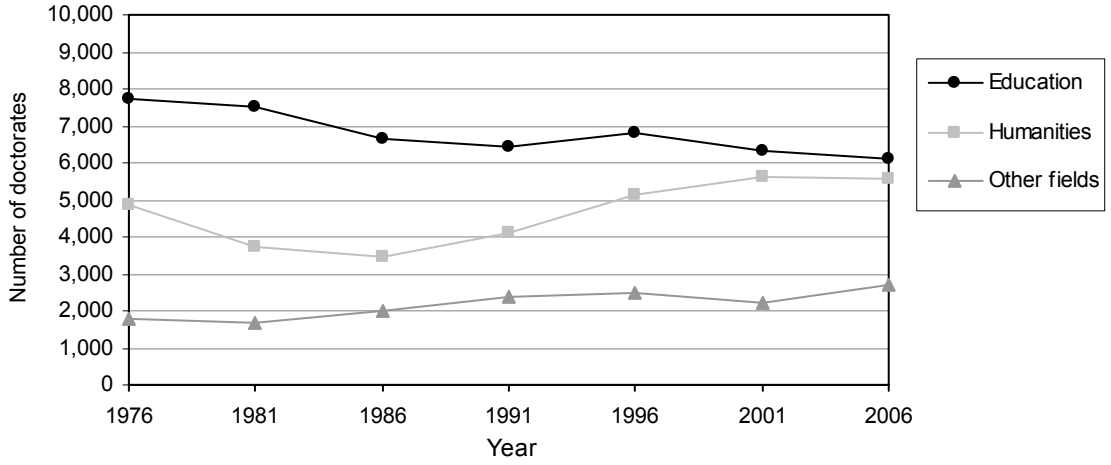


Figure 6. Education, humanities, and other fields doctorates awarded, for selected years, 1976-2006



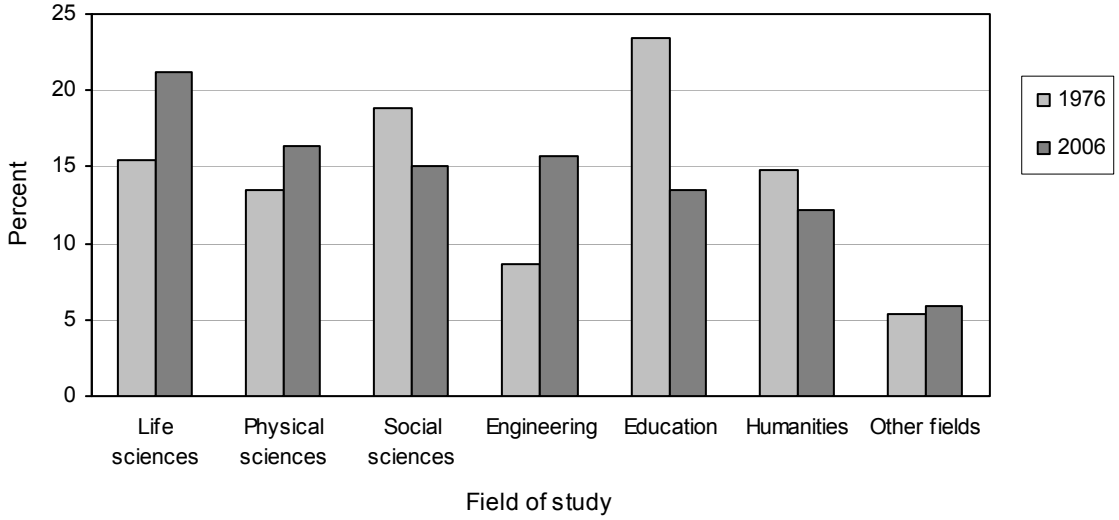
See Table 5.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

Life sciences, physical sciences, social sciences, and engineering – the four broad fields that together constitute "science and engineering" (S&E) – represented 68 percent of all doctorates awarded in 2006. S&E doctorates accounted for close to the same percentage of all doctorates (66 percent) in 1996, but only 62 percent of the total in 1986 and 56 percent in 1976. (See table 5.)

The 30-year comparisons for all seven broad fields are shown in Figure 7. The relative shares of graduates in life sciences, physical sciences, and engineering were greater in 2006 than in 1976, while the relative shares in social sciences, humanities, and

education were smaller in 2006. The relative shares of graduates in other fields in 1976 and 2006 were about the same. (See figure 7.)

Figure 7. Percentage distribution of doctorate recipients, by broad field of study, 1976 and 2006



See Table 5.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

The numbers of doctorate recipients in the largest subfields within the seven broad fields are also shown in Table 5. The main fields of growth since 1976 within life sciences were health sciences, which grew from 503 to 1,906 doctorate recipients in 2006, and biological/biomedical sciences, which grew from 3,573 to 6,631. In physical sciences, the most growth occurred in computer sciences, which was not even a defined field of doctoral study in 1976, going from 232 doctorate recipients in 1981 to 1,452 in 2006. In the broad field of social sciences, psychology showed the most growth over the 30-year period in terms of number of doctorate recipients, even though the percentage of the doctorate cohort earning a degree in psychology in 2006 was at its lowest level (7 percent) in 30 years. In the broad field of engineering, electrical and related engineering showed the greatest growth, almost one-third of the total increase in engineering doctorate recipients, going from 711 in 1976 to 2,133 in 2006. In the non-S&E fields, the numbers of new doctorate recipients increased in two of the three broad fields (humanities and other fields); however there was a decrease in the proportion of the cohort that earned doctoral degrees in humanities. A numeric decrease was evidenced in

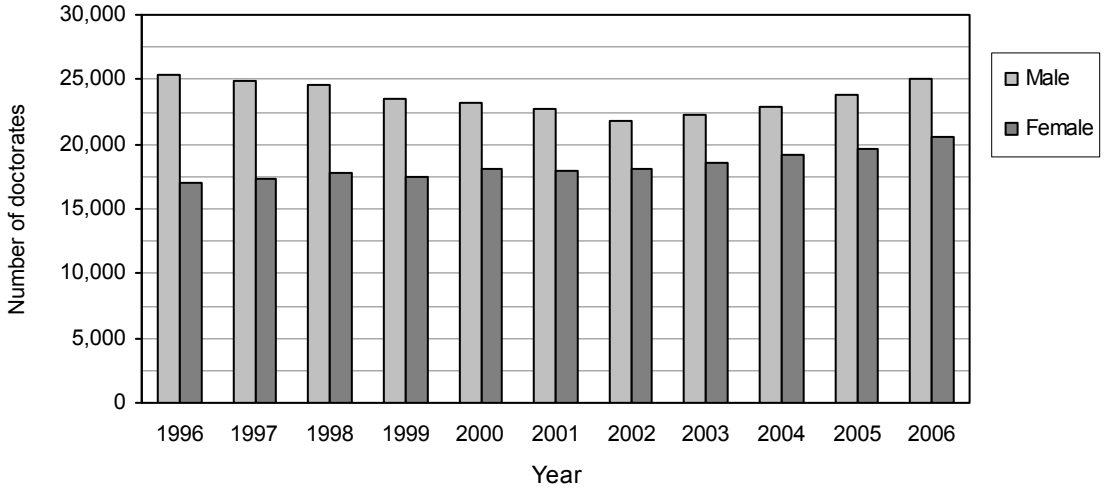
education in the thirty-year period. The only subfield within education that showed growth from 1976 to 2006 was education administration, from 1,683 doctorates to 2,052. The largest growth in humanities subfields was in the "other humanities" grouping and thus outside the areas of history, letters, and foreign languages and literature. The detailed field totals in Appendix Table B-1 indicate that, over the past decade, the other humanities fields with increasing numbers of doctorate recipients included music, religion/religious studies, and art history/criticism/conservation. Within other fields, the largest growth was seen in the subfield of business and management, from 739 in 1976 to 1,312 in 2006. (See table 5 and appendix table B-1.)

Doctorate Recipients by Sex

The 5.1 percent increase in total doctorates awarded between 2005 and 2006 reflected increases in the numbers earned by both men and women. The number of doctorates awarded to men rose by 1,248 and increased for women by 960 in 2006 compared to 2005. The net proportional effect is that for 2006, women received 45 percent of all doctorates, which is virtually unchanged from 2005[8] (figure 8). This number signifies the eleventh consecutive year in which the representation of female doctorate recipients has surpassed 40 percent (appendix tables B-2a, B-2b, and B-2c). Five years ago (2001) women comprised 44 percent of all doctorate recipients, 10 years ago (1996) they comprised 40 percent, and 30 years ago (1976) 23 percent. (See figure 8 and table 7.)

[8] For 2006, sex category could not be determined for 71 doctorate recipients; these 71 are not part of this and other gender percentage calculations.

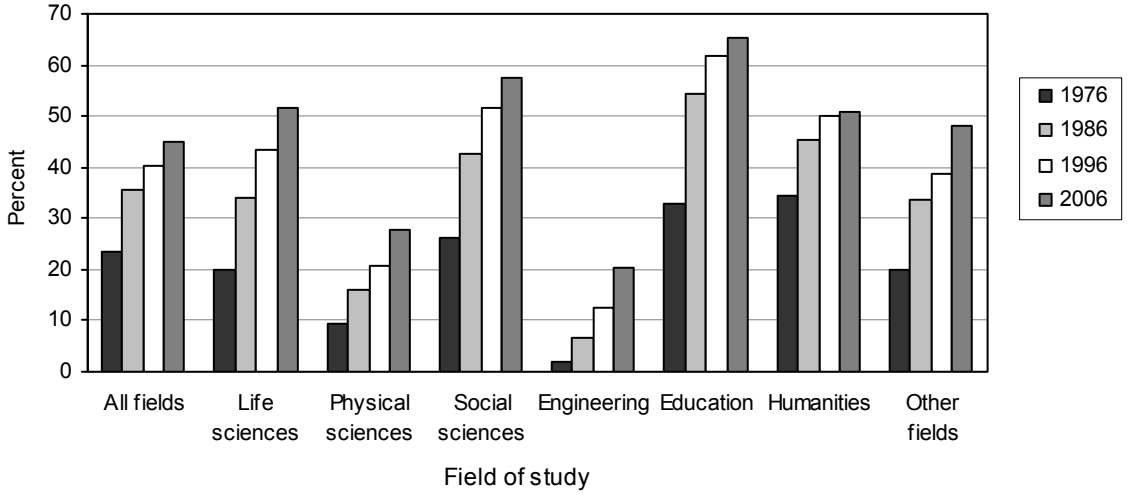
Figure 8. Doctorate recipients, by sex, 1996-2006



See Appendix Tables B-2b and B-2c.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

The proportion of doctorates earned by women has also grown consistently within all of the broad fields of study. Women constituted nearly two thirds (65 percent) of all education doctorate recipients for 2006, as well as the majority in social sciences (57 percent), life sciences (52 percent), and humanities (51 percent). In contrast, the representation of women among doctorate recipients in physical sciences and engineering for 2006 was 28 percent and 20 percent, respectively (figure 9). However, these percentages represent significant increases over the last 30 years. In 1976, when 23 percent of all doctorate recipients were women, 9 percent of the doctorates in physical sciences and 2 percent in engineering were awarded to women. Similar long-term trends are discernible in other broad fields as well: in life sciences, from 20 percent in 1976 to 52 percent in 2006; social sciences rose from 26 percent to 57 percent over that same period; and humanities changed from 34 percent in 1976 to the current 51 percent. (See figure 9 and table 7.)

Figure 9. Percentage of doctorate recipients who are female, by broad field of study, for selected years, 1976-2006



See Table 7.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

In 2006, women constituted 40 percent of S&E doctorate recipients and 56 percent of those in non-S&E fields from U.S. universities. With regard to finer field distinctions, Table 6 shows that all of the fields that evidenced greater than 70 percent growth in the representation of women were in engineering. The share of female doctorate recipients grew the most from 1996 to 2006 in civil and related engineering (93 percent); mechanical and related engineering (85 percent); other engineering (72 percent); and materials/metallurgical engineering (71 percent). (See table 6.)

Doctorate Recipients by Race/Ethnicity

A total of 5,211 U.S. citizens who were members of racial/ethnic minority groups[9] were awarded doctorates, representing 20 percent of the U.S. citizens earning research doctorates in 2006. (See table 8.) This number is higher than in 2005, when 5,075 minority group members earned their research doctorates, and the 2006 minority percentage is the highest percentage recorded in the SED. (See appendix table B-2a.) Blacks or African Americans earned the most doctorates (1,659) of the five main minority populations in 2006, followed by Asians (1,560), Hispanics (1,370), American Indians or Alaska Natives (118), and Native Hawaiians or other Pacific Islanders (59)[10]. (See table 8.) A total of 445 non-Hispanic U.S. citizens reported more than one racial background in the 2006 survey, and are counted here as racial/ethnic minorities, but they and the 59 Pacific Islanders are grouped in the "other" category and not shown separately in Table 8 or Figure 10 because of the lack of trend data.[11]

In 2006, the number of minority doctorate recipients was 12 percent higher than the total in 2001 and 45 percent higher than in 1996. Conversely, there were 3 percent fewer non-Hispanic White doctorate recipients in 2006 compared to 2001, and 11 percent fewer than in 1996. As the numbers in the first panel of Table 8 indicate, doctorates awarded to minority groups increased more in the ten-year period from 1986 to 1996 than in the ten-year period from 1996 to 2006. However, the historical trend of growth in the number of doctorates awarded to racial/ethnic minorities continued throughout the entire twenty-year period. The twenty-year increases were greater for Asians (194 percent) and

[9] As used here, minority groups include Asians, Blacks, Hispanics, American Indians or Alaska Natives, Native Hawaiians or other Pacific Islanders, and individuals who indicated more than one racial background. Only U.S. citizens are included in the minority groups.

[10] American Indians or Alaska Natives are referred to as American Indians hereafter in the text of this report. Blacks or African Americans are referred to as Blacks hereafter, and Native Hawaiians or other Pacific Islanders are referred to as Pacific Islanders.

[11] Following the 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 starting with the 2001 questionnaire. The new format asked respondents to mark one or more racial categories that apply to them, rather than a single category as had been requested since 1974 when race and ethnicity questions were first added to the SED questionnaire. Additional changes included separating Pacific Islanders from Asians and creating a new category, Native Hawaiians or other Pacific Islanders, and adding a Cuban response option to the Hispanic ethnicity question. A copy of the 2006 questionnaire is included in Appendix D.

Hispanics (140 percent), and Blacks (101 percent) than for American Indians (19 percent). (See figures 10 and 11 and table 8.)

Figure 10. Doctorates awarded to racial/ethnic minority U.S. citizens, by race/ethnicity, for selected years, 1986-2006

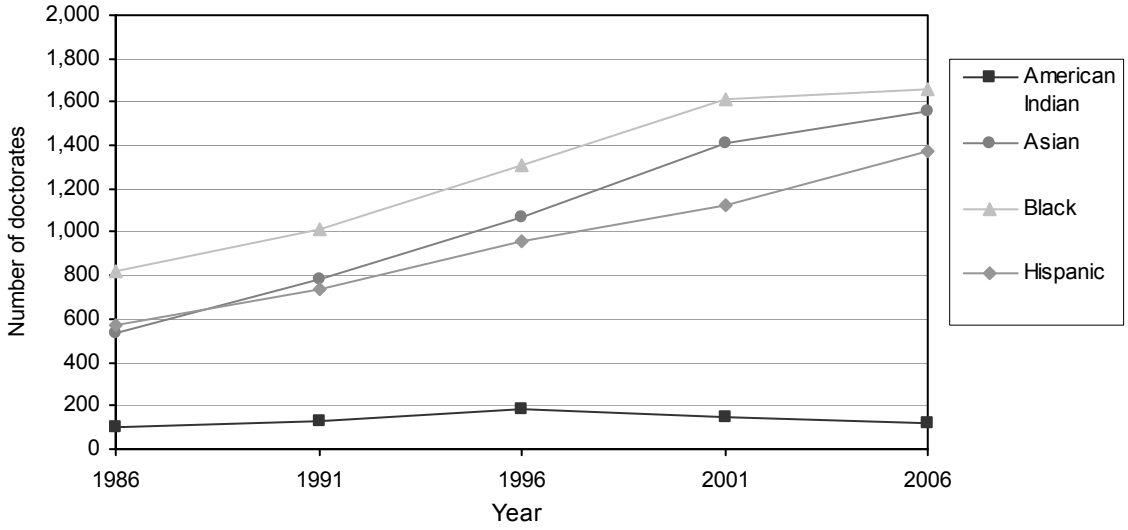
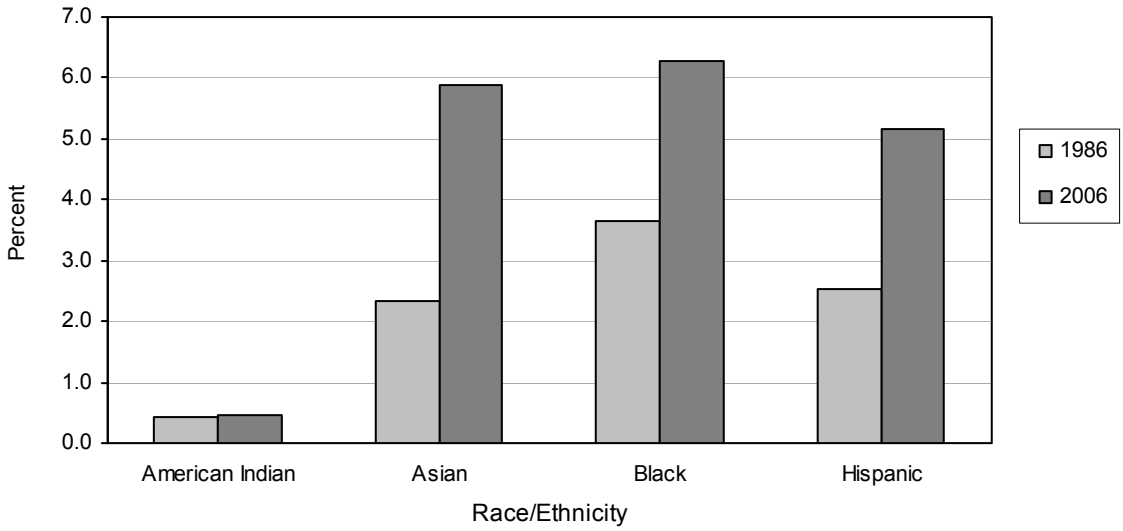


Figure 11. Percentage of U.S. citizen doctorates earned by minority group members, by race/ethnicity, 1986 and 2006

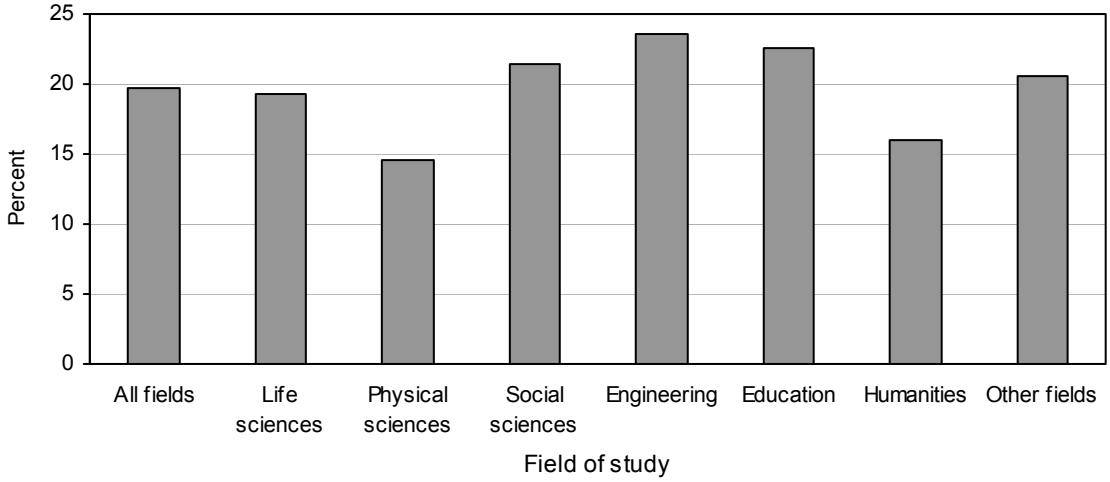


See Table 8.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

Minority group members had their largest presence in the broad fields of engineering (24 percent of U.S. citizens earning doctorates), education (23 percent), social sciences (19 percent) and other fields (19 percent) in 2006. The lowest percentage

representations were in physical sciences (15 percent) and humanities (16 percent). (See figure 12.) The proportional representation of the different minority groups varied by broad field. Asians were the largest contingent in engineering, physical sciences, and life sciences; representing 53 percent, 48 percent, and 42 percent, respectively, of all minority group members earning doctorates in those broad fields during the 2006 academic year. Blacks were the largest minority population in education and other fields; representing 55 percent and 44 percent, respectively. Hispanics were the largest minority population in humanities and social sciences, representing 33 percent and 32 percent, respectively. This pattern of relative representation is observed for each year shown in Table 8, back to 1986. (See table 9 for the numbers of minority doctorate recipients in each of the 25 subfields in 2006.)

Figure 12. Percentage of U.S. citizen doctorates earned by racial/ethnic minorities, by broad field of study, 2006



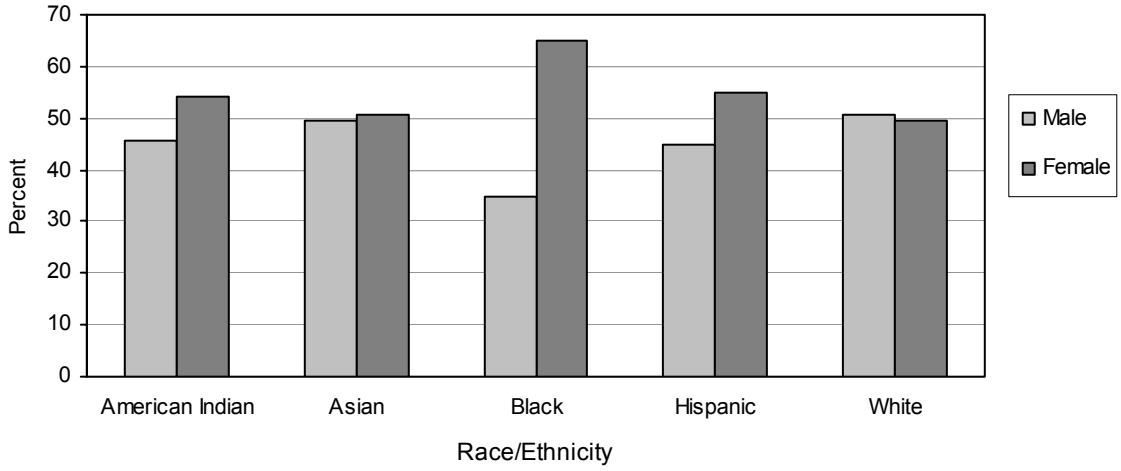
See Table 8.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

The pattern of growth for the aggregate U.S. citizen minority populations also held for most of the separate minority groups within most of the seven broad fields of study from 1986 to 2006. The general pattern for minority recipients had been one of consistent increases from 1986 to 2006. Within the broad fields of study, there were some notable exceptions to the trend of increases. One was that the number of American Indian doctorate recipients fell in all but two broad field categories, humanities and other

fields and, in those fields, it remained stable in 2006[12] relative to 2001. Another exception is that the increases in Black, Hispanic, and Asian representation within the life sciences have been especially large over the past decade. (See table 8.)

Among U.S. citizens, the balance of male and female doctorate recipients in 2006 varied among racial/ethnic groups. Just under half (49 percent) of doctorates earned by Whites were awarded to women. For the first time ever, women were the majority doctorate recipients in all U.S. citizen minority populations with 65 percent of Blacks, 55 percent of Hispanics, 54 percent of American Indians, and 51 percent of Asians. This marks the first time that Asian women earned more doctorates than their male counterparts. (See figure 13 and appendix table A-4.)

Figure 13. Sex distribution of doctorates earned by U.S. citizens, by race/ethnicity, 2006



See Appendix Tables B-2b and B-2c.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

Table 10 lists the universities that awarded the largest number of doctorates to members of the four primary minority groups between 2002 and 2006, and the number granted by each university. Over that five-year interval, four California institutions – UCLA, Berkeley, Stanford, and USC – and two in Massachusetts – Harvard and MIT –

[12] The decline in the number of doctorate recipients identifying themselves as American Indians on the SED questionnaire may be related in part to the introduction in the 2001 questionnaire of the option to select one or more racial categories. Of the 445 non-Hispanic U.S. citizen respondents indicating more than one race, 183 selected American Indian/Alaska Native as one of their races. However, there were declines in the number of American Indian doctorate recipients both before (1999-2000) and after (2002-2006) the introduction of the revised item; see Appendix Table B-2a.

awarded a total of 1,633 doctorates to Asians, or 23 percent of all doctorates awarded by U.S. universities to Asians. Nova Southeastern University and Howard University awarded, by far, the most doctorates to Blacks (332 and 287, respectively), 7 percent of all the doctorates granted to Blacks over this five-year period. The leading institutions awarding doctorates to Hispanics were the University of Puerto Rico-Rio Piedras, UC-Berkeley, the University of Texas-Austin, and UCLA. Oklahoma State University awarded the largest number of doctorates (33) to American Indians.

The concentration of minority doctorate recipients in certain institutions is noticeably greater than for the doctoral population as a whole. Over the 2002-2006 period, the ten universities granting the largest numbers of doctorates to all doctorate recipients conferred 15 percent of all doctorates. However, over the same time period, the ten universities that awarded the most doctorates to Asians (table 10) granted 30 percent of all Asian doctorates; for Blacks the corresponding figure was 18 percent; for Hispanics it was 21 percent, and for American Indians it was 24 percent. (See table 10.)

Doctorate Recipients by Citizenship

Each year, the SED gathers information concerning the U.S. citizenship status and country of citizenship of the new doctorate recipients at the time of graduation. Of the 2006 doctorate recipients with known citizenship status (94 percent of the total), 63 percent were U.S. citizens, 4 percent were non-U.S. citizen permanent residents (i.e., "green card" holders), and 33 percent were non-U.S. citizen temporary visa holders. (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 11 percent of all doctorate recipients who reported citizenship in 1976 to 33 percent in 2006. The growing numbers of doctorates awarded to foreign students on temporary visas has accounted for virtually all of the overall growth in the number of doctorate recipients since 1976.

The number of doctorate recipients with permanent residence has shown more fluctuation over time. The 2006 total of 1,829 represents an increase of 14 percent from 2005. The number of doctorate recipients with permanent residence ranged between approximately 1,500 and 1,800 from 1976 until the early 1990s, increased to historical highs in the mid-1990s[13], and returned to approximately 1,800 in the early 2000s. (See table 11.)

U.S. citizens earned more than three fourths of the doctorates awarded in social sciences, education, and humanities (75 percent, 87 percent, and 78 percent of those reporting citizenship status, respectively), and were two thirds of the doctorate recipients in life sciences (66 percent) in 2006 (table 11). Non-U.S. citizens earned the majority of doctorates awarded in engineering (63 percent earned by temporary visa holders, plus 4 percent by permanent residents) and 53 percent of the doctorates awarded in physical sciences. In absolute numbers, U.S. citizens earned more doctorates in life sciences than in any of the other broad fields; permanent residents also had their highest total in life sciences; engineering was the most frequently occurring broad field for those in the United States on temporary visas.

The trend towards increasing female representation in the doctoral cohorts is particularly striking for U.S. citizens. In 2006, 51 percent of all doctorates awarded to U.S. citizens went to women. This marks the fifth consecutive year in which the majority of U.S. citizens receiving research doctorates were women. (See appendix table B-2.)

Among permanent residents earning doctorates in 2006, 53 percent were women, and among those doctorate recipients holding temporary visas, 34 percent were women (appendix table A-4). Both of those percentages are, like the figure for U.S. women, near all-time highs. (See appendix table B-2; further historical data available from the authors.)

Women holding temporary visas were more concentrated in the S&E fields of study than female U.S. citizens. While women with temporary visas represented 23

[13] The large increase in doctorate recipients with permanent residency in the 1990s was primarily a consequence of the Chinese Student Protection Act of 1992. This federal law made thousands of students from the People's Republic of China who were enrolled in U.S. universities in 1989 at the time of the Tiananmen Square incident eligible to apply for permanent residency in 1993. The numbers of Chinese students with permanent residency dropped in 1996 and 1997 as the number of students eligible for permanent residency under the act declined.

percent of all female doctorate recipients in 2006, they earned 26 percent of the doctorates granted to women in life sciences, 44 percent of the doctorates earned by women in physical sciences, and 54 percent of the female-earned doctorates in engineering. (See appendix table A-3c.)

In 2006, 4,774 doctorate recipients were citizens of China[14], comprising 11 percent of the total number of degrees awarded to individuals who reported citizenship. (See table 12 for a listing of the top 30 countries/economies 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 2006 were the same as in 2005. Some changes in rankings occurred within the top 15. The leading five countries (China, India, Korea, Taiwan, and Canada) accounted for 22 percent of all doctorates awarded by U.S. universities to individuals of known citizenship in 2006. Six percent of the total citizenship-known 2006 doctoral cohort were citizens of the next 10 nations listed in Table 12, and 4 percent were citizens of the next 15 nations. Doctorate recipients who were citizens of one of the 31 nations shown in the table accounted for 32 percent of the doctorates awarded in 2006 with country of citizenship reported, including U.S. citizens.

The twenty institutions awarding the largest numbers of doctorates to non-U.S. citizens in 2006 are listed in Table 13. The University of Illinois at Urbana-Champaign awarded the largest number of doctorates to non-U.S. citizens, with 364 doctorates granted to non-U.S. citizens.

Doctorate Recipients by Parental Education Background

Since 1963, the SED has asked new doctorate recipients to report their fathers' and mothers' highest level of educational attainment. As was the case in the *Summary Report* 2005, responses are grouped into four categories: high school diploma or less, some college, earned baccalaureate, and advanced degree, including the master's, doctorate, or a professional degree.[15]

[14] Includes Hong Kong.

[15] Versions prior to the 2005 *Summary Report* combined the 'some college' and 'earned baccalaureate' categories into a single category. The *Summary Report 2002* included a special section on first-generation college graduates earning research doctorates which relied on the respondents' reports of their parents' educations.

Higher levels of education were reported for doctorate recipients' fathers. The 2006 data shown in Table 14 indicate that 27 percent of recipients' fathers had earned no more than a high school diploma; the corresponding figure for their mothers was 36 percent. Thirteen percent of doctorate recipients had a father who had attended at least some college, but did not attain a baccalaureate degree; 17 percent of the mothers of doctorate recipients in 2006 achieved this level of education. Over one fourth (26 percent) of doctorate recipients indicated that their fathers earned a baccalaureate degree; the percentage whose mother earned a baccalaureate degree was 25 percent. At the upper end of the parental education range, one third (33 percent) of doctorate recipients' fathers held an advanced degree, compared with the 22 percent whose mothers had an advanced degree.

Male and female doctorate recipients showed some differences in parental education backgrounds. Female doctorate recipients tended to report higher educational attainment for their mothers than did their male counterparts. Specifically, 23 percent of women versus 21 percent of men reported that their mothers attained an advanced degree and 34 percent (versus 38 percent) reported that their mothers attained no more than a high school diploma. The reported educational backgrounds of fathers differed little between male and female doctorate recipients.

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 groups to come from families in which one or both parents attained at least a baccalaureate degree. Black, Hispanic, and American Indian recipients' parents were less likely to have gone beyond high school and were far less likely to have attained a baccalaureate or advanced degree than Whites and Asians. Doctorate recipients who were U.S. citizens were more likely than those with either permanent residency status or holding temporary visas to report that their mothers attained at least a baccalaureate degree (51 percent versus 45 percent and 40 percent, respectively). U.S. citizens reported that their fathers attained at least a baccalaureate degree at about the same rate as non-U.S. citizen permanent residents (60 percent versus 61 percent) and were more likely to report that their fathers attained at

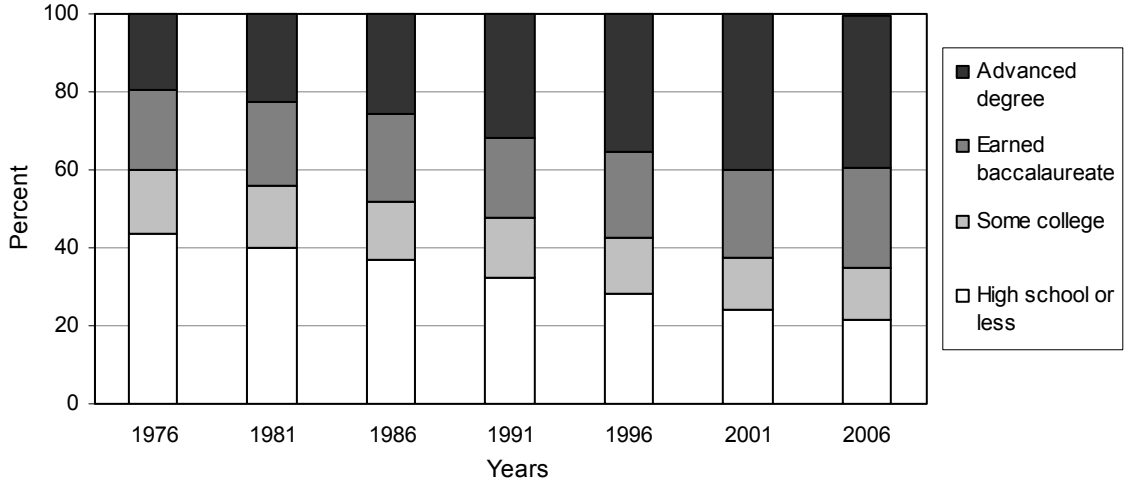
least a baccalaureate degree than non-U.S. citizens who were on a temporary visa (57 percent).

The distributions of parental education by the broad fields in Table 14 reflect, in part, the different racial/ethnic and citizenship compositions of the fields. Doctorate recipients in humanities displayed the highest percentages of both mothers (65 percent) and fathers (54 percent) with at least a baccalaureate degree. The lowest percentages of baccalaureate or higher degrees by fathers or mothers were reported by doctorate recipients in the broad field of education (42 percent for fathers and 33 percent for mothers). Education also had the highest percentage of parents whose formal education ended at high school or before. The broad field of humanities has the lowest percentage of parents who did not go beyond high school.

There has been an overall trend of parents of doctorate recipients being more highly educated over the past thirty years (figure 14 and table 15). In 1976, 44 percent of doctorate recipients reported that neither of their parents had attained an education beyond a high school diploma and one in five (20 percent) reported that at least one parent had an advanced degree. By 1991, the proportion of doctorate recipients whose highest parental educational attainment was a high school diploma or less and those whose highest parental educational attainment was an advanced degree had nearly equalized (33 percent and 32 percent, respectively). By 2006, the proportions in the most and least educated groups had almost completely reversed, with 22 percent of doctorate recipients reporting highest parental education of a high school diploma or less and 39 percent reporting at least one parent with an advanced degree.

The proportion of doctorate recipients reporting 'some college' as the highest parental education category has shown a gradual decrease over the past thirty years (from 16 percent in 1976 to 13 percent in 2006). At the same time, the proportion indicating an earned baccalaureate degree as either parent's highest education level has shown an increase of about the same magnitude (from 20 percent in 1976 to 25 percent in 2006).

Figure 14. Highest educational attainment of either parent, 1976-2006



See Table 15.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

Educational History

The SED collects information about several aspects of doctorate recipients' educational history that, taken together, provide insight into the educational pathways that students take on the way to earning their research doctoral degree. Since the start of the survey in 1957, the SED has collected detailed information about the most recent master's degree and the first baccalaureate degree earned by research doctorates. Information pertaining to additional postsecondary degrees earned, as well as community college enrollments have also been collected. The SED questionnaire was modified in 2004 to improve the coverage of master's degree attainments and community college participation, and this section draws on the data from those enhancements.

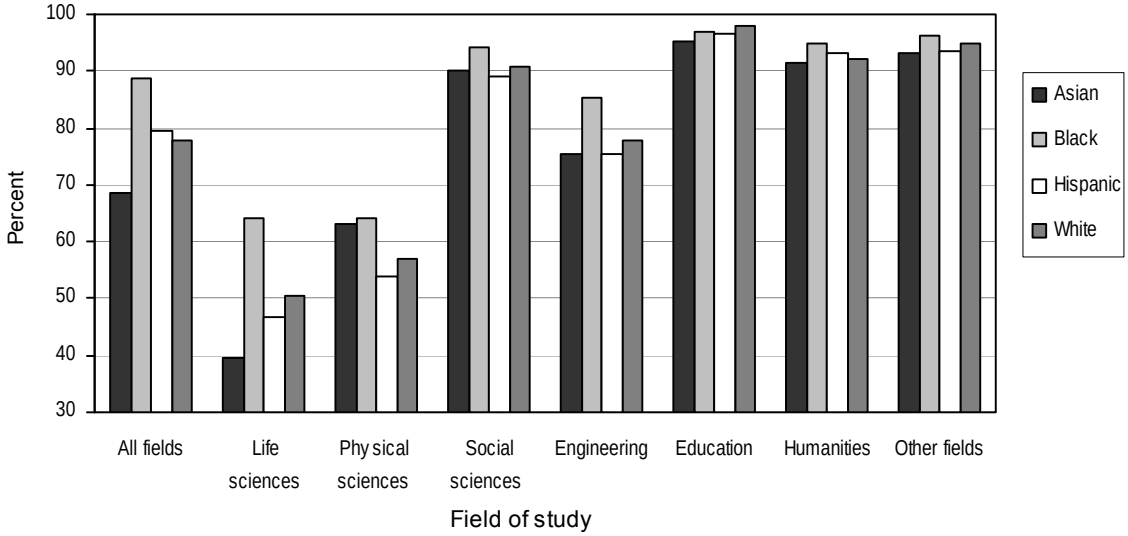
Overall, 80 percent of all 2006 research doctorate recipients reported earning a master's degree (table 16). However, there is significant variation in reported rates of master's attainment by broad field of doctoral study. Overall, research doctorate recipients in the S&E fields reported attaining a master's degree at a lower rate than their non-S&E counterparts. Doctorate recipients in life sciences (57 percent) and physical sciences (69 percent) reported attaining a master's degree at a lower rate than doctorate recipients in engineering (85 percent), social sciences (91 percent), and any of the non-

science and engineering fields - humanities, other fields, and education (92 percent, 94 percent, and 97 percent, respectively).

Men and women attained master's degrees at similar rates, with men slightly lower than women (79 percent versus 82 percent). However, there is a pattern of non-U.S. citizens, both permanent residents and those on temporary visas, earning master's degrees at a somewhat higher rate than their U.S. citizen counterparts (85 percent for permanent residents and 84 percent for temporary visa holders, versus 78 percent for U.S. citizens).

Among U.S. citizens, master's attainment differed by the doctorate recipients' race/ethnicity. (See table 16.) Overall, Blacks (89 percent) and American Indians (88 percent) reported earning a master's degree at a higher rate than Asians (69 percent), Hispanics (79 percent), and Whites (78 percent). Differences in the racial/ethnic composition of S&E fields do not appear to fully account for this observed difference in master's attainment. Blacks reported attaining master's degrees at a higher rate than Hispanics, Asians, and Whites in all four broad S&E fields. In the non-science and engineering fields, there are no major differences in master's attainment by race/ethnicity.

Figure 15. Percentage of U.S. citizen doctorate recipients who earned a master's degree, by broad field of doctoral study, and race/ethnicity, 2006



See Table 16.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

Overall, about 60 percent of doctorate recipients reported earning a master's degree that was related to their doctoral degree (i.e., in the same major field of study).[16] The percentage earning a master's in the same field as the doctorate varied significantly by field of doctoral study. The broad fields of education and life sciences had the lowest proportion of doctorate recipients who earned a related master's degree with 41 percent and 43 percent, respectively. All other broad fields of study had over half of doctorate recipients report earning a related master's degree. Fifty-eight percent of doctorate recipients in physical sciences, 67 percent in engineering, and 69 percent in other fields reported earning a related master's degree. Over three fourths of doctorate recipients in social sciences and humanities (77 percent and 78 percent, respectively) reported earning a related master's.

In all of the science and engineering broad fields of study, except social sciences, non-U.S. citizens reported earning a related master's degree at a higher percentage than their U.S. citizen counterparts. In social sciences, U.S. citizens reported earning a related master's degree at the same rate as non-U.S. citizens (77 percent for U.S. citizens, non-U.S. citizen permanent residents, and non-U.S. citizens on temporary visas). Within the non-science and engineering fields, U.S. citizens reported earning a related master's degree at a higher rate in humanities and other fields. In education, U.S. citizens were slightly less likely to earn a related master's degree (41 percent versus 43 percent for non-U.S. citizen permanent residents and 45 percent for non-U.S. citizens on temporary visas). (See table 16.)

Nearly all (97 percent) research doctorate recipients who completed the SED reported earning a baccalaureate degree. However, there was slight variation in baccalaureate attainment by citizenship status. Ninety-nine percent of all U.S. citizens reported earning a baccalaureate degree compared to 94 percent of non-U.S. citizen permanent residents and 96 percent of non-U.S. citizens with temporary visas.[17]

[16] Refer to Appendix E for details on the aggregation of subfields to determine major field. A related master's degree does not necessarily indicate that the degree was earned as a part of the doctoral program. This report does not differentiate between master's degrees earned as a part of the doctoral program versus master's degrees not earned as part of the doctoral program. See item A8 in Appendix D for questions pertaining to the master's degree referenced in this report.

[17] Table not presented. Available upon request.

Overall, 54 percent of research doctorate recipients earned their baccalaureate degree in the same major field of study as their doctoral degree. However, this percentage varied by broad field of doctoral study. In the S&E fields, 60 percent of doctorate recipients earned their baccalaureate degree in the same major field as their doctoral degree versus 40 percent in the non-S&E fields. Within the broad S&E fields, the percentage of doctorate recipients whose baccalaureate field was the same as their doctoral field ranged from a high of more than three fourths of engineering doctorate recipients (76 percent) to a low of just under half (49 percent) of life scientists. Physical sciences and social sciences fell between the two with 65 percent and 55 percent, respectively. (See table A-3a.)

Since 2004, the SED has explicitly asked doctorate recipients if they have ever attended a community or junior college. (See item A14 in Appendix D.) The responses to this item show that the community college system is a contributor to the education of a non-trivial proportion of research doctorate recipients in all of the broad fields of doctorate study. Overall, 14 percent of research doctorate recipients indicated that they had attended a community college at some point in their educational history. This percentage varied widely by broad field of doctoral study - from a high of 24 percent of doctorate recipients in education to lows of 10 percent in physical sciences and 7 percent in engineering. In all other broad fields of study, the percentage of doctorate recipients who indicated that they had attended a community college ranged between 14 and 16 percent. (See table 17.)

U.S. citizens were far more likely than their non-U.S. citizen counterparts, either permanent residents or those with temporary visas, to have attended community college (21 percent versus 7 percent and 2 percent, respectively). This relationship held across all broad fields of doctoral study. Among U.S. citizen doctorate recipients, American Indians and Hispanics were more likely to have attended community college (35 percent and 27 percent, respectively) than were Whites, Blacks, or Asians (21 percent, 20 percent, and 17 percent, respectively).

Time to Degree

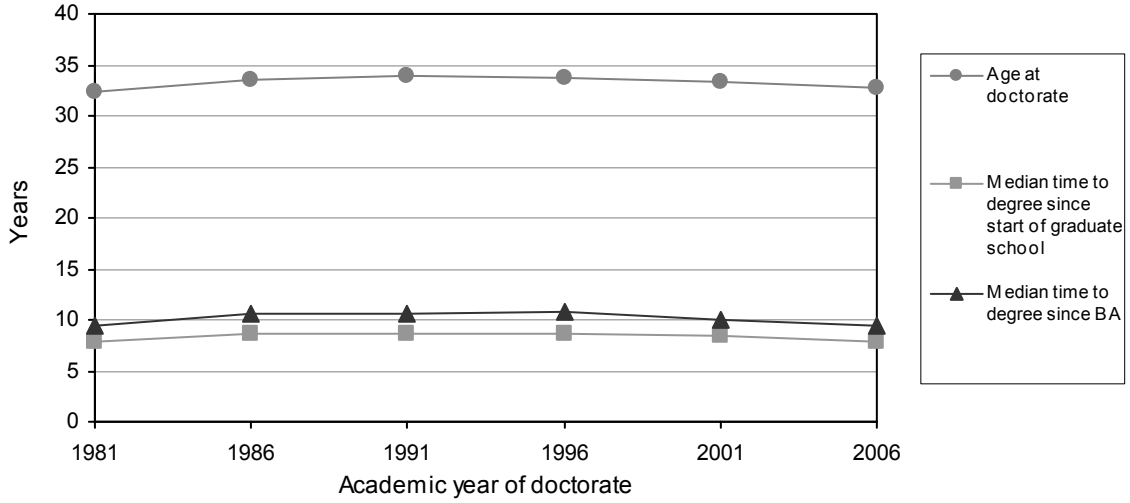
The amount of time needed to complete a doctorate is a key concern for those pursuing the degree, as well as for the faculties and administrations of the degree-granting institutions and national public agencies and private organizations that support doctoral study. Time to degree completion is likely to be affected by a number of factors, including individual preferences, economic constraints, labor markets for new doctorate recipients, 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 from the start of any graduate school to completion of the doctorate, and (3) the age of the doctorate recipient at the time the doctorate is awarded. In this section, the 2006 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 demographic variables of sex, race/ethnicity, and citizenship.

For the 2006 doctorate recipients, the median total time span from baccalaureate to doctorate was 9.5 years (table 18). The median total time span was shortest in physical sciences (7.7 years) and longest in education (16.7 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 2006 median total time to degree was about seven months shorter than in 2001 and 15 months shorter than in 1996 after increases in length from 1981 to 1996. (See figure 16 and table 18.) From 2001 to 2006, all of the broad fields showed the same or slightly shorter times.

Figure 16. Median number of years to doctorate from baccalaureate award and from graduate school entry, and age at doctorate, for selected years, 1981-2006



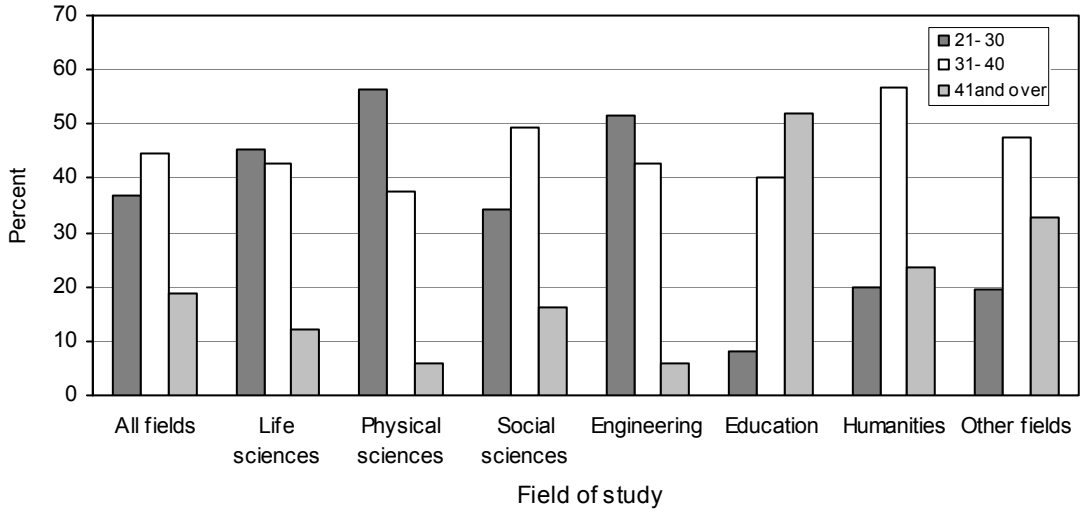
See Table 18.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

The median duration between starting and completing graduate school was 7.9 years for the 2006 doctorate recipients (table 18). Graduate-school time to degree was shortest in physical sciences (6.7 years), engineering (6.9 years), and life sciences (7.0 years), and longest in education (12.7 years) (table 18). The trend for time spent in graduate school is one of small but continual increases over the span from 1981 to 1996 and then declines in most of the seven broad fields. Time spent in graduate school was the same or higher in 2006 than in 1981 in all broad fields. (See table 18.)

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 19). Across the whole population of new doctorate recipients, women had longer total and graduate-school times to degree than did men, but the sex differences tend to be much smaller, or even reverse, when men and women are compared within specific broad fields (table 19). Similar patterns hold for comparisons of U.S. and non-U.S. citizens, and of the U.S. racial/ethnic groups: the overall time-to-degree differences between the groups diminish or even reverse when comparisons are made within broad fields of study. (See table 19.)

A third measure of time to degree gathered in the SED is age at receipt of the doctorate. The median ages of the 2006 doctorate recipients are tabulated in Appendix Tables A-3 by major field of degree and A-4 by citizenship and race/ethnicity. For all doctorate recipients in 2006, the median age at receipt of the doctorate was 32.7 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 2006 doctorate recipients in the S&E fields was 31.3 years old. In comparison, median age at doctorate was 35.2 years in humanities, 41.7 years in education, and 36.2 years in the other fields category. (See appendix table A-3a and table 20.)

Figure 17. Distribution of age at time of doctorate, by broad field of study, 2006



See Table 20.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

Doctorate Recipients with Disabilities

Since 1985, the SED has included questions asking whether the doctorate recipient has a physical or other kind of disability. The question format used in 2006 (see items C10 and C11 in Appendix D) has been in place since 2001, and asks respondents to indicate all applicable response options. Among the 2006 doctorate recipients, a total of 616 individuals (about one percent of the doctoral cohort) indicated having one or more disabilities. The most frequently reported disabilities were physical or orthopedic, with

211 doctorate recipients indicating this disability, followed by learning or cognitive disabilities, with 178. Doctorate recipients with disabilities were more likely to earn their degrees in non-S&E fields of study (47 percent) compared with persons who reported no disabilities (31 percent). Women reported a disability more often than men, with the gender difference being slightly larger for those with a physical or orthopedic disability. U.S. citizens were more likely to report one or more disabilities than non-U.S. citizens. (See table 21.)

Financial Resources in Support of Doctorate Recipients, Including Indebtedness

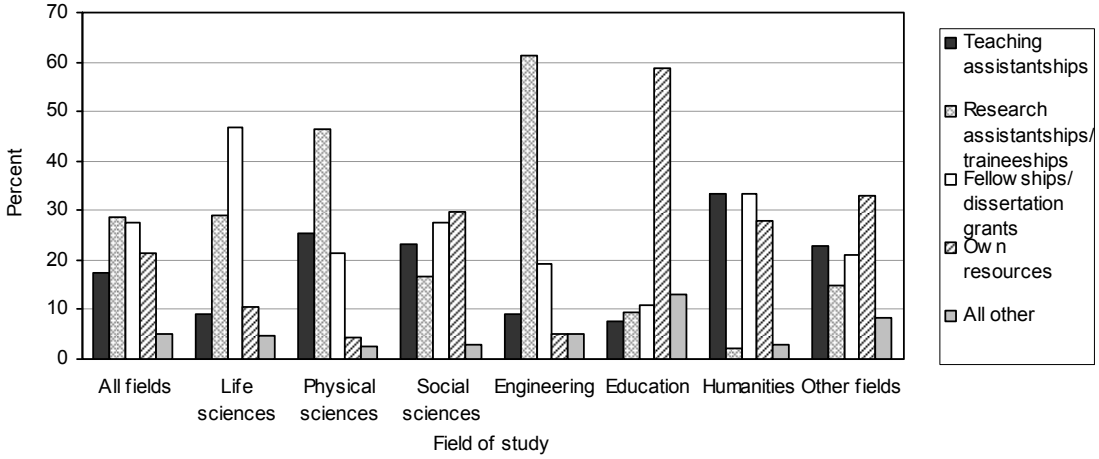
Sources of Financial Support

The SED asks two questions that, taken together, provide information on the financial sources of support utilized by the new doctorate recipients during graduate school (for the exact formats and wordings, see Appendix D). The first question asks respondents to complete a checklist of 14 different potential sources of support, such as fellowships and scholarships, 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 secondary source of support. Respondents are grouped in terms of their primary sources of support for purposes here. The 14 sources are combined into the seven categories that form the rows in Table 22.

Three fourths (74 percent) of the 2006 doctorate recipients reported the primary source of support during graduate school as program- or institution-administered sources, such as teaching assistantships, research assistantships/traineeships, and fellowships/dissertation grants.[18] About one in five (21 percent) 2006 doctorate recipients reported that their own resources (which include funds from savings, loans, one's spouse and family, and non-academic employment) were the primary sources they utilized to finance their graduate studies. Non-U.S. sources, employer contributions, and other sources accounted for the remaining 5 percent of the cases. (See figure 18 and table 22.)

[18] Private foundations, U.S. government agencies, and state governments tend to be the original sources of these funds.

Figure 18. Primary sources of financial support for doctorate recipients, by broad field of study, 2006



See Table 22.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

Sources of support differ substantially by field of study. For example, within each science and engineering broad field, at least two thirds of doctorate recipients indicated institution- or program-administered support (i.e., teaching/research assistantships or fellowships) as their primary source of support. None of the science and engineering fields had more than 30 percent of doctorate recipients report relying on their own resources as a primary source of support. In contrast, in the non-science and engineering fields, humanities was the only broad field with at least two thirds (69 percent) of doctorate recipients reporting institution- or program-administered support as their primary source. In all other non-science and engineering fields, at least one third of doctorate recipients reported relying on their own resources as their primary source of graduate schools support. Ninety-three percent of physical science doctorate recipients reported institution- or program-administered support as their primary source of support. Within engineering, 90 percent of the research doctorate recipients in 2006 listed teaching/research assistantships or fellowships as their principal form of support, as did 85 percent of respondents in life sciences. In the non-science and engineering fields, 59 percent of doctorate recipients in other fields and 28 percent of those in the broad field of education reported these categories as the primary sources of financial support for their doctoral program.

Overall, women were more likely to indicate that personal resources were their primary source of support than were men (28 percent versus 16 percent). The gender differences in sources of support are in large part a reflection of gender differences in broad fields of specialization, and the field differences in sources of support. (See table 22.)

Non-U.S. citizens tended to be more concentrated in fields where the majority of doctoral students receive institution- and/or program-administered support. Mirroring this concentration, non-U.S. citizens with permanent residency or temporary visas reported lower percentages of reliance on their own resources (16 percent and 5 percent, respectively) than did U.S. citizen respondents (30 percent). The source of support differences between U.S. and non-U.S. citizens were smaller within the broad fields of study than overall; however, U.S. citizens were generally still more likely to rely on their own resources than non-U.S. citizens, especially temporary visa holders, in all the broad fields. (See table 22.)

Differences in the various modes of financial support were found among the main racial/ethnic groups, as noted earlier, sources of support differ substantially by field of study (figure 18 and table 22). American Indian and Black doctorate recipients indicated the greatest reliance on their own resources to finance their doctoral program (41 percent and 39 percent, respectively), followed by Hispanics, Whites, and Asians (31 percent, 30 percent and 17 percent, respectively) (table 22). Racial/ethnic differences in reliance on own resources also diminished within most of the broad fields of study. The exception to this pattern was within humanities, where American Indians reported relying on their own resources at a rate (52 percent) that was 20 percentage points higher than the nearest other racial/ethnic group, Whites (32 percent), and more than twice the rate of all other racial/ethnic groups. However, some substantial racial/ethnic differences within fields were found in terms of use of the different types of program- and institution-administered support. In engineering, Asians and Whites were both more likely than Blacks and Hispanics to rely on research assistantships and less likely to have fellowships or grants as their primary source of support. (See table 22.)

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 and graduate educational programs. Just over half (52 percent) of the respondents in 2006 reported having no graduate or undergraduate education-related debt, while another 20 percent reported cumulative debt of $20,000 or less (table 23). However, 13 percent of all new doctorate recipients reported debt over $50,000, creating a bulge at the high end of the debt distribution. Examining the debt distributions within each of the seven broad fields, substantial differences were evident. Graduates in engineering and physical sciences were most likely to complete their doctorate with no education-related debt (67 percent and 63 percent, respectively). About half of graduates in life sciences (52 percent), other fields (50 percent), and education (49 percent) had no education-related debt. Graduates in humanities (41 percent) and social science (38 percent) were least likely to have no education-related debt. Debt levels of $50,000 or more were most common among graduates in social science fields (23 percent), humanities (17 percent), other fields (17 percent), and education (16 percent).

Data separating graduate from undergraduate debt are shown in the lower two panels of Table 23. These data show, first, more debt from graduate school was reported, and second, that the cumulative debt differences among the broad fields of doctoral study were greater for graduate education. Overall, 72 percent of the 2006 doctoral cohort reported no remaining undergraduate debt and 1 percent reported remaining undergraduate debt greater than $50,000. While the number reporting no graduate school debt (68 percent) was comparable to the undergraduate debt figures, the percentage reporting the very highest levels of graduate school debt (i.e., greater than $50,000) was substantially higher (10 percent). The difference in levels of existing indebtedness between undergraduate and graduate school was particularly large for doctorate recipients in social sciences, education, humanities, and other broad fields. (See table 23.)

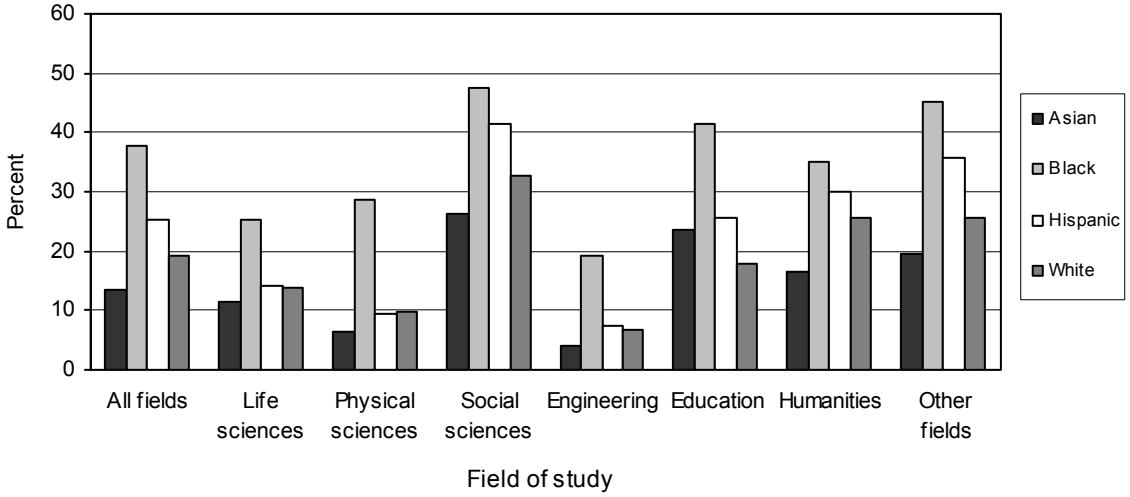
The pattern of debt levels for the study's main demographic groups is shown in Table 24. Debt differences between the sexes were not large, with new male doctorate recipients about three percentage points more likely to have no debt than their female counterparts (54 percent versus 51 percent). U.S. citizen doctorate recipients were less

likely to have no higher-education-related debt than non-U.S. citizen graduates with permanent residency or temporary visas (41 percent, versus 68 percent and 72 percent, respectively), and more likely to have debts totaling over $50,000 (16 percent, versus 7 percent for permanent residents and 6 percent for temporary visa holders). (See table 24.)

Particularly noteworthy in the cumulative debt tabulations (first panel of table 24) is the much higher incidence of Blacks, American Indians, and Hispanics sustaining high levels of education-related debt. Of doctorate recipients, one in three Blacks, 31 percent of American Indians and 21 percent of Hispanics owed over $50,000; these figures compare to 11 percent of Asians and 15 percent of Whites with that level of debt. Similarly, Asians (49 percent) and Whites (43 percent) were more likely to have no education-related debt at completion of the doctorate. The lower panels of the table show that most of the racial/ethnic group indebtedness differences were graduate school debt rather than undergraduate debt.

The racial/ethnic group graduate debt differences are likely to be at least in part a function of the racial/ethnic differences in fields of doctoral study, which, as seen in Table 23, were also associated with indebtedness. A preliminary assessment of this possibility is provided in Table 25 and Figure 19, which show the percentages of each racial/ethnic group with graduate debt greater than $30,000 separately for each broad field of doctoral study. Comparing Black doctorate recipients with their White and Asian counterparts, it is clear that Blacks in all broad fields were much more likely to complete graduate school with high levels of debt. Hispanic doctorate recipients were also more likely than Whites and Asians to incur high levels of graduate school debt, but the differences are smaller than for Blacks in most broad fields.

Figure 19. Percentage of doctorate recipients with levels of graduate school debt greater than $30,000, by broad field of study and race/ethnicity (U.S. citizens only), 2006



See Table 25.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

Postgraduation Plans, Employment, and Location

The SED questionnaire includes a number of questions about the graduates' immediate plans for work or further study.[19] 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. The data on work activities is the subject of a special section of the report that follows this section.

There are five aspects of postgraduation plans examined in this report. The first 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 26 and 27). The second aspect is the distribution of graduates with definite commitments for career employment versus postdoctoral 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 28 and 29). The third aspect examined is the distribution of graduates across U.S.-based employment sectors, broken down by broad field of study (table 30), sex, race/ethnicity, and citizenship status (table 31). The final aspects discussed are financial support for postdoctoral study (table 32) and anticipated location of postgraduate commitment (non-U.S. versus U.S.) for non-U.S. citizens (tables 33 and 34).

Definite Commitments

Slightly more than seven in ten (72 percent) of all doctorate recipients in 2006 reported having definite commitments for employment or postdoctoral study or research. As defined here, a definite commitment is indicated by a respondent reporting either that

[19] 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 percent in 2006), minus a low, often negligible, rate of item nonresponse. For the 2006 SED cycle the overall response rate for the item asking whether the respondent had definite plans for either career employment or study (item B3) was 91 percent.

(a) he or she was returning to, or continuing in, predoctoral employment; or (b) he or she had signed a contract or made a definite commitment for other work or study. Those without commitments included respondents who (c) were negotiating with one or more specific organizations, (d) were seeking a position but had no specific prospects yet, (e) did not plan to work or study or (f) had some other situation, usually described by the respondent as "have not made a plan yet." Of the 28 percent without definite commitments, over a quarter (28 percent) indicated they were in category (c), negotiating, 66 percent were still seeking a position, and 3 percent were not seeking one. (See survey question B3 in the 2006 questionnaire included in Appendix D for the item wording.)

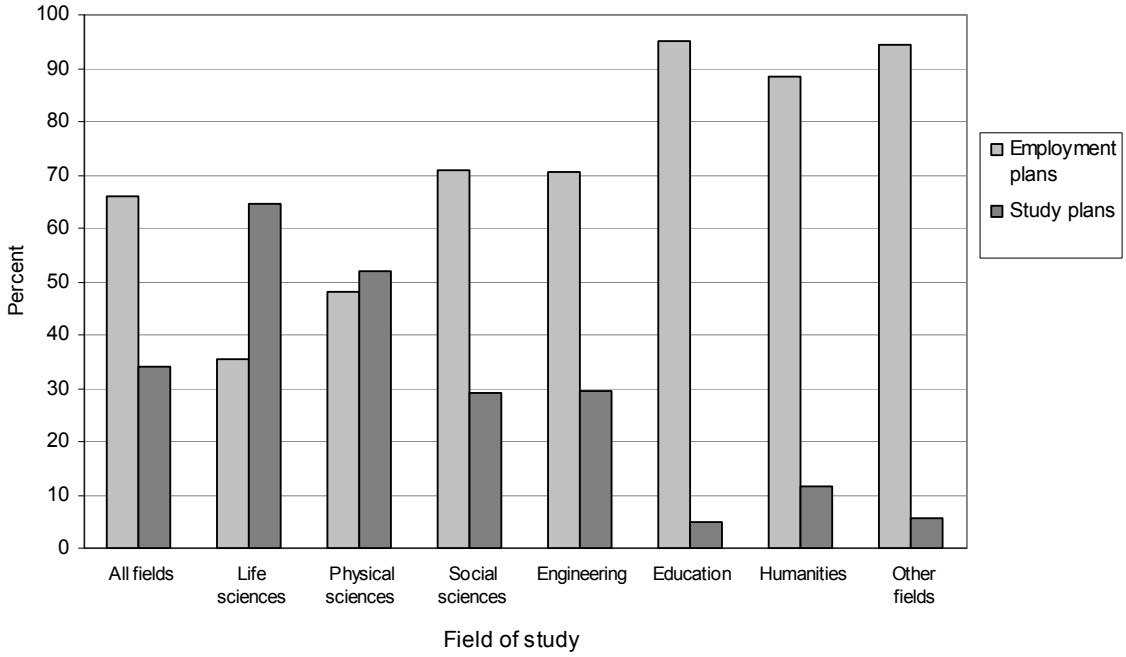
The 72 percent of respondents with definite commitments is similar to 2005, when 71 percent reported such commitments. The percentages with definite commitments in 2006 vary little by broad field with the noteworthy exceptions of engineering and humanities where 67 percent and 68 percent, respectively, have a definite commitment, and other fields, where 78 percent have a definite commitment. (See table 26.)

The percentages of graduates from various demographic groups with definite commitments are shown in Table 27. In 2006, about 2 percent fewer women than men (71 percent compared to 73 percent) reported having definite plans. U.S. citizens were more likely to have definite commitments (75 percent) than non-U.S. citizens with either permanent residency (66 percent) or temporary visas (68 percent). Among U.S. citizens, Whites (76 percent) were more likely than American Indians, Asians, Blacks, and Hispanics (all of which showed 71 or 72 percent with definite plans) to have definite commitments. The trend data in Table 27 show considerable stability for all of these demographic groups.

Career Employment versus Postdoctoral Training or Study

Among the doctoral recipients reporting definite commitments[20], nearly two thirds (66 percent) indicated commitments to enter career employment as opposed to pursuing further study within a postdoctoral research or teaching program (table 28). The 34 percent committed to a postdoc (a temporary position primarily for gaining additional education and training in research) represent the second highest level ever recorded in the SED, down one percentage point from the record high 35 percent in 2005. Commitments for postdoctoral study were more far common among graduates in life sciences (65 percent) and physical sciences (52 percent) than in the other broad fields (figure 20).

Figure 20. Postgraduation plans of doctorate recipients with definite postgraduation commitments, by broad field of study, 2006



See Table 28.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

Compared to 1986, the percentages of new doctorate recipients entering postdoctoral study programs have increased in all of the broad fields, most notably within social sciences (an increase of 13 percentage points since 1986) and engineering (an

[20] Only doctorate recipients with definite commitments for work or study are discussed in the sections of this report pertaining to post-graduation plans, sectors of U.S. employment, and sources of support for postdoctoral appointments.

increase of 11 percentage points). Commitments for postdoctoral study within the non-science and engineering fields have increased slightly over the past two decades and remain overall rare.

Differences among demographic subgroups are shown in Table 29. Men were more likely than women to have plans for postdoctoral study (36 versus 32 percent). The percentage of men with plans for postdoctoral study decreased slightly from the all-time high level (38 percent) recorded in 2004. The percentage of women with plans for postdoctoral study slightly decreased as well, from its all-time high in 2005 of 33 percent. (See table 27 in the *Summary Report 2005*.)

Among those with definite commitments, non-U.S. citizens with temporary visas were more likely than those with permanent residency and U.S. citizens to pursue postdoctoral studies (the exchange visitor visa allows the student to remain in the U.S. for a duration not to exceed 36 months). Among U.S. citizens, Asian doctorate recipients were more likely than other racial/ethnic subgroups to pursue postdoctoral study, followed by non-Hispanic White and Hispanic recipients. Black and American Indian doctorate recipients were least likely to plan postdocs (table 29). These differences among citizenship and racial/ethnic subgroups reflect the greater number of postdocs in physical and life sciences, and the greater concentrations of non-U.S. citizens and U.S. citizen Asian students in those fields. (See appendix table A-4.)

Employment Sectors in the United States

The most common employment sector of the 2006 doctorate recipients with definite employment commitments within the United States was higher education, identified by over half (54 percent) of the 2006 respondent subpopulation. (See the total column in table 30.) The next largest group had plans to enter industry or some form of self-employment (26 percent)[21] while 6 percent planned to work for U.S. federal, state, or local government. Fourteen percent of the 2006 doctorate recipients indicated a type of employment that did not correspond to these main sectors, and are grouped into the "other" category in Tables 30 and 31. These included a mix of employment in public and

[21] In 2006, 24 percent of respondents with definite plans for employment in the U.S. had plans to enter industry and 2 percent had plans for self-employment.

private elementary and secondary schools or school systems, non-profit organizations not affiliated with universities, foreign governments, and non-governmental organizations. The historical trend indicated in the five-year intervals back to 1986 shows reductions in government employment, coupled with relatively steady employment in the higher education sector, with a noticeable increase between 2001 and 2006 (49 to 54 percent). The turn of the twenty-first century (the 2001 time point in table 30) was the main exception to the growth in higher education, reflecting a surge in industry and self-employment during the boom economy of those years. The percentage of new doctorate recipients with definite employment commitments in industry or some form of self-employment increased by a notable percentage in the past three years, from 19 percent in 2004, to 23 percent in 2005, to 26 percent in 2006. The three-percentage point gain in industry and self-employment in 2006 was accompanied by declines of over one percentage point in the academic and the "other" sectors, relative to 2005, along with a small decline, less than one percentage point, in the government sector. (See table 27 in the *Summary Report 2004* and table 29 in the *Summary Report 2005*.)

The relative shares of doctorate recipients in the main employment sectors varied by broad field of doctorate (table 30). The proportion employed in academe in 2006 was highest among humanities doctorate recipients (85 percent) and lowest among the engineering doctorate recipients (15 percent). The proportion employed in industry or self-employed in 2006 ranged from highs of 76 percent of the engineering doctorate recipients and 53 percent of physical science graduates, to lows of 4 percent of humanities and education doctorate recipients. Humanities doctorate recipients were particularly unlikely to have work commitments in government (two percent). The percentage of doctorate recipients classified as having "other" work commitments was by far the greatest among education graduates (39 percent), reflecting the high rates at which these individuals are employed in elementary and secondary schools or school systems.

The distribution of graduates across the U.S. employment sectors is broken down by sex, citizenship status, and race/ethnicity in Table 31. As has been noted in connection with demographic group differences on other variables in this report, at least some part of the group differences in employment sectors are reflections of demographic differences in doctoral fields of study and the different early career patterns of those

specializations. Among 2006 female doctorate recipients, 17 percent had plans to enter industry or some form of self-employment, compared to 35 percent of their male counterparts. Women were more likely than men to have commitments to academe (60 percent versus 49 percent) and other (18 percent versus 10 percent); this reflects the relatively high concentration of women earning their doctorates in humanities, social sciences, life sciences, and education.

Non-U.S. citizens on temporary visas with definite commitments to remain in the United States after graduation were less likely than U.S. citizens to have work commitments in academe (40 percent versus 58 percent). Reflecting their concentration in the broad fields of physical sciences and engineering, temporary visa holders were much more likely than U.S. citizens to have plans for employment in industry or self-employment (56 versus 17 percent). Permanent residents were less likely to have plans for employment in academe than U.S. citizens (50 percent versus 58 percent, respectively), but, like those on temporary visas, were more likely than U.S. citizens to take employment in industry or be self-employed (39 percent versus 17 percent). (See table 31.)

Among U.S. citizens, Asians were less likely than other racial/ethnic groups to go into academe (44 percent) and were more likely than all others to go into industry or self-employment (35 percent). Blacks were least likely to have work commitments in industry or self-employment (10 percent) and were more likely than all racial/ethnic groups to have commitments in the "other" category (26 percent). This latter pattern reflects the high representation of Blacks in the broad field of education and the high rate of employment of those doctorate recipients by elementary and secondary schools or school systems. (See table 31.)

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. In 2006, 48 percent of all postdocs named a college or university as their main source of funding, followed by 30 percent indicating the U.S.

government.[22] Private foundations and other types of nonprofit organizations supported another 8 percent. (See table 32.) About 9 percent indicated some other kind of support than those listed in the questionnaire; inspection of the descriptions written by these respondents reveals that many had support from international organizations.

Gender differences in main source of postdoctoral support were very small (table 32). Similarly, the racial/ethnic breakdowns in Table 32 show little difference among U.S. citizens in the funding sources for American Indians, Asians, Blacks, Hispanics, and Whites. However, a number of differences in sources of support are apparent among U.S. citizens, non-U.S. citizen permanent residents, 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. However, substantial numbers of non-U.S. citizens, especially permanent residents, also received U.S. government support, though the percentages, but not the absolute numbers, were generally lower in 2006 than in the other years shown in Table 32. An overall trend of a decreasing share of U.S. government support for postdoctoral study since 1986 is evident. Non-U.S. citizens with postdoctoral appointments were more likely than U.S. citizens to have university or college funding as their main source of support.

Postdoctoral Location of Non-U.S. Citizens

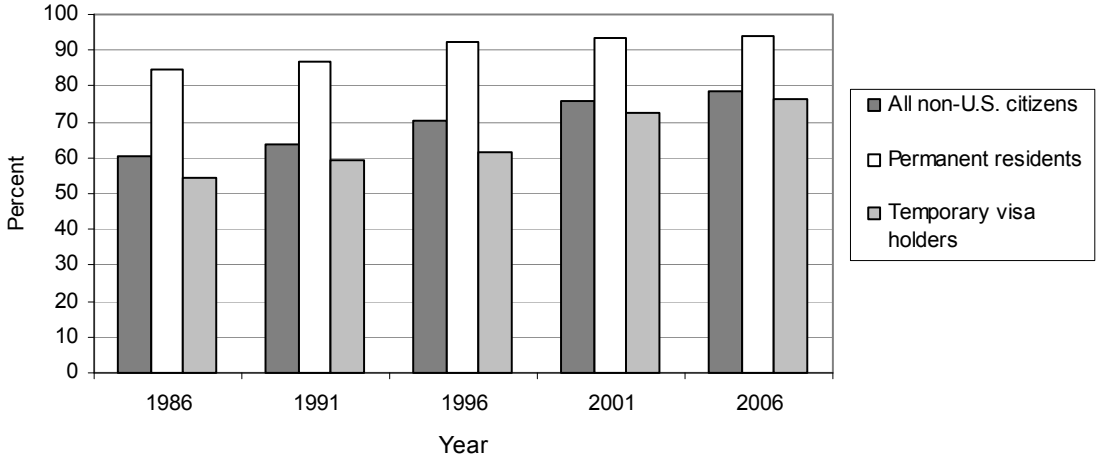
Among non-U.S. citizens with definite plans for work or study, 94 percent of all new doctorate recipients holding permanent residency and 77 percent of temporary visa holders indicated that they would remain in the United States following graduation (table 34). In 2006, chemistry, biological/biomedical sciences, and electrical and related engineering were the fields with the highest concentrations of new doctorate recipients with temporary visas staying in the United States (90 percent, 88 percent, and 87 percent, respectively). The lowest concentrations were in the broad fields of education (43 percent), social sciences (60 percent) and humanities (62 percent). (See table 33.)

The number of non-U.S. citizens earning research doctorates in the United States has increased over the past 20 years, as has the tendency for those students with definite

[22] Some college or university support may derive from federal funds, and this may not be clear to the SED respondents.

commitments to remain in the United States following graduation. Table 34 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 1986, a little over half (54 percent) of those with temporary visas had firm commitments to positions in the United States. A decade later, 62 percent of them had firm commitments to stay in the United States; in 2006, the number had increased to 77 percent. (See figure 21.)

Figure 21. Percentage of non-U.S. citizen doctorate recipients with definite postgraduation commitments in the U.S., by citizenship status, for selected years 1986-2006



See Table 34.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

The imposition of travel restrictions and other constraints on non-U.S. citizens studying in the U.S. in the wake of the terrorist attacks on September 11, 2001, raised concerns among many involved in doctoral education that the numbers of non-U.S. citizens pursuing doctorates in the U.S. and staying in the U.S. after earning the doctorate might decline.[23] There is no evidence yet of declining numbers of non-U.S. citizens pursuing doctorates in the United States. As is evident in Appendix Table B-2a, the number of doctorates earned by individuals holding temporary residency visas reached all-time highs in 2005 and again in 2006. But since the median time from starting

[23] *Policy Implications of International Graduate Students and Postdoctoral Scholars in the United States,* Committee on Policy Implications of International Graduate Students and Postdoctoral Scholars in the United States, Board on Higher Education and Workforce, National Research Council, National Academies of Science, National Academies Press, Washington, DC, 2005.

graduate school to completing the doctorate is about nine years, declining numbers of non-U.S. citizens earning doctorates may not be apparent until the end of this decade.

With respect to all non-U.S. citizens earning U.S. doctoral degrees, including those without definite commitments, Table 35 indicates that there is little difference in the percentage indicating intentions to stay in the U.S. after earning the degree in the two academic years prior to 9/11 versus the five years since 9/11 (70 percent pre-9/11 versus 71 percent post-9/11). However, when the seven years are viewed as a year-by-year trend, it is apparent that the percentage indicating the intention to remain in the U.S. was higher in 2001 (72 percent) than in 2000 (68 percent). The next three years, 2002, 2003, and 2004, the percentage reporting intentions to stay (71 percent, 69 percent, and 69 percent, respectively) was slightly lower than in 2001. Then, in the past two years, 2005 and 2006, the percentage reporting an intention to stay in the U.S. has exceeded the levels observed in the pre-9/11 years (73 percent and 75 percent, respectively). Disaggregating the foreign graduates by country of citizenship and geographical region of citizenship, Table 35 shows that this general pattern in intentions to stay in the U.S., characterized by slight declines from 2001 to 2004 followed by an increase to equal or exceed pre-9/11 levels in 2005 and 2006, held in most regions.

Special Section: Work Activities of Doctorate Recipients

As documented in the preceding section of this *Summary Report*, the new doctorate recipients planned to pursue a wide variety of postgraduation career paths. While the institutional settings of these paths have been identified, the nature of the work that the doctorate recipients will do is likely to vary both within and between settings. In this Special Section, information on the anticipated postgraduation work activities of the doctorate recipients is examined.

Since it began in 1957, the SED has asked the doctorate recipients with definite postgraduation commitments to identify their main work activities (see Appendix D for the 2006 question wording). The categories of activities include:

- research and development,
- teaching,
- management or administration, and
- professional services to individuals.

Respondents were asked to indicate which of those activities would be their primary work activity and which, if any, would be their secondary activity.

This Special Section focuses on the distribution of these work activities across fields of study, historical doctoral cohorts, employment sectors, and demographic groups among those completing doctorates in each of the main broad fields of study. For most of this section, the focus is on those doctorate recipients who indicated that they had definite plans for employment as opposed to postdoctoral study. This restriction is made because postdocs are overwhelmingly engaged in research and development work and, as will be evident, quite different from those entering employment. Nonetheless, postdocs do show some important differences in their primary activities and the second part of this section presents findings on the activities of postdocs.

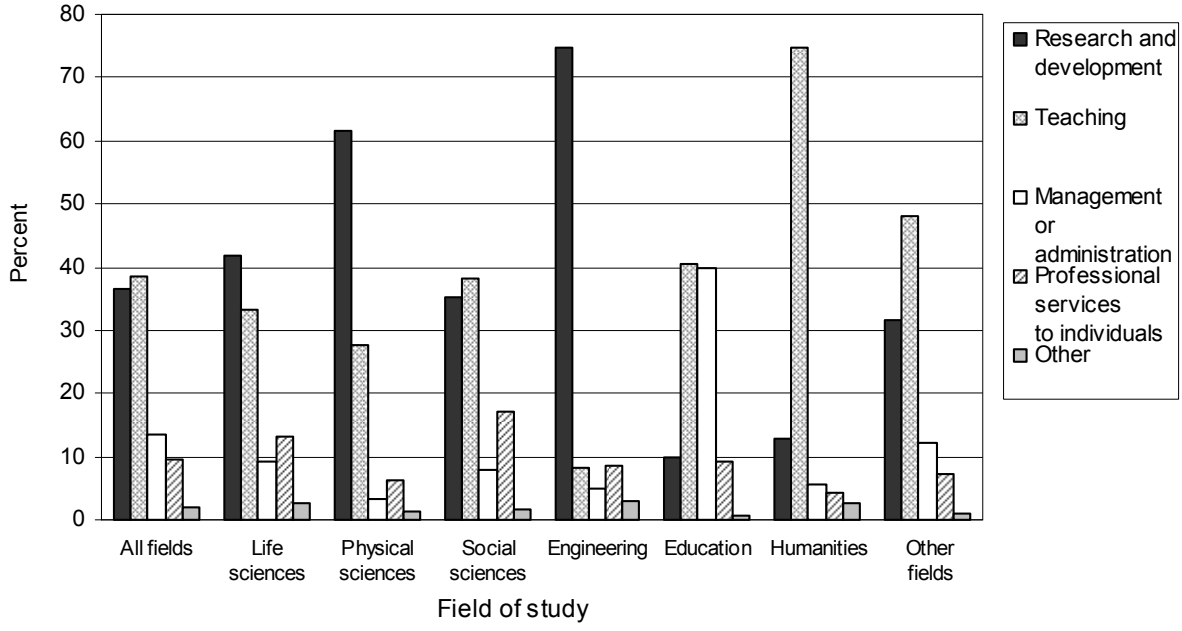
Doctoral Fields of Study and Work Activities

Among the 2006 doctorate recipients with definite plans for employment (as opposed to a temporary postdoctoral scholar appointment or further study), the most frequently identified primary work activities were teaching (39 percent) and research and

development (37 percent) (table 36). Another 13 percent identified management or administration as their primary activity, and about 10 percent indicated professional services to individuals.

Primary work activities differed by the doctorate recipients' major fields of doctoral study (table 36 and figure 22). Doctorate recipients in life sciences as a whole were more likely to identify research and development as their primary activity (42 percent) and were more likely than physical scientists and engineers to indicate teaching as their primary activity (33 percent versus 28 percent and 8 percent, respectively). Within life sciences, graduates in the major field of health sciences were distinctive with the lowest rate of recipients identifying research and development as primary (32 percent), and the highest rates of those identifying teaching (42 percent) and management or administration (12 percent) as their primary work activities. Graduates from all of the major fields in the life sciences reported relatively high rates of professional service to individuals as their primary work activity (13 percent on average).

Figure 22. Primary work activities of doctorate recipients with definite plans for postgraduation employment, by broad field of study, 2006



See Table 36.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

The majority of physical scientists reported research and development as their primary activity (62 percent). Within the broad field of physical sciences, computer scientists (71 percent) and chemists (71 percent) were more likely to be engaged primarily in research and development. Teaching was identified as the primary work activity by 28 percent of the physical scientists. Doctorate recipients in mathematics were much more likely than other physical scientists to have teaching as their primary activity (47 percent of mathematics graduates). As is evident in the relatively large difference in the numbers reporting primary and secondary work activities, physical scientists were relatively likely to specialize in just one type of work activity. This corresponds to a high rate of working outside of academe, typically in industry or self-employment (38 percent of physical scientists planned to work in academe; see table 30 in the previous section).

Among doctorate recipients in the social sciences, psychologists and other social scientists presented very different profiles. Psychologists were the most likely of any major field to identify professional service to individuals as their primary work activity (38 percent). Other social scientists were more likely to identify research and development (41 percent) and teaching (43 percent) as primary activities.

Engineering graduates were the most likely of any group to have research and development as their primary work activity (75 percent). Only eight percent of the engineers reported teaching as a primary activity and were least likely to report a secondary activity.

Graduates in education were the most likely to report management or administration as the primary work activity (40 percent), and were the least likely of any major field of study group to identify research and development as primary (10 percent).

Doctorate recipients in the humanities were by far the most likely of all groups to report teaching as their primary activity (75 percent overall). Graduates in humanities were more likely than those in the other major fields to report a secondary field of work activity, and this was research for most (62 percent overall).

Work Activities of Postdocs

As noted earlier in this report, about one-third of doctorate recipients with definite postgraduation commitments were taking postdoctoral scholar ("postdoc") positions. These positions have been and continue to be most common in the life sciences, physical sciences, and engineering, but their numbers have been increasing in social sciences, psychology, and humanities. The great majority (85 percent) of the 2006 doctorate recipients committed to postdocs indicated that research and development was going to be their primary work activity, while 4 percent identified teaching as primary (table 37). The primacy of research for postdoc holders is especially strong in the physical sciences and engineering, where over 95 percent indicated that primary activity. Within the broad field of physical science, the greatest difference was between mathematics and the other major fields. Mathematicians were more likely to indicate that teaching would be their primary activity (9 percent compared to 3 percent for the other fields of physical sciences).

Teaching was most likely to be the primary activity among those planning on postdocs whose doctoral field of study was in the humanities, with 37 percent expecting mainly to teach. Providing professional services to individuals was identified as the primary activity by 7 percent of the postdocs and was overwhelmingly concentrated among those whose doctoral field was psychology (44 percent).

The much lower number of reported secondary work activities than primary work activities identified by the postdocs (3,852 versus 9,634) indicates that these positions are often specialized research appointments. However, teaching is a frequent secondary activity for postdocs in most fields.

Doctoral Fields of Study and Trends in Primary Work Activities

Drawing on the SED historical record, Table 38 shows the distribution of primary and secondary work activities at five-year intervals from 1976 to 2006. The main trend in these data is the increasing percentage of new doctorate recipients primarily engaged in research and the decreasing percentage primarily teaching. This is evident overall (see the first panel of table 38), and for the graduates of most broad fields of study. The increases in the percentage primarily doing research and development and the declines in

the percentage primarily teaching appear to have been greatest among doctorate recipients in the social sciences, engineering, humanities, and the heterogeneous other field category consisting mainly of doctorate recipients in various business and professional fields.

Employment Sectors and Primary Work Activities

Primary work activities vary greatly by employment sector (table 39). Across all fields of doctoral study, among doctorate recipients who indicated a defined employment sector, the new doctorate recipients going into higher education were least likely to identify research and development as their primary work activity (25 percent) and were the most likely to have teaching as their primary activity (64 percent). Those in industry and self-employment were the most likely to have research as the primary activity (70 percent) and least likely to teach (1 percent). Of those taking positions in government, 46 percent indicated they would be primarily conducting research, and 27 percent were primarily doing management or administration. The residual other group of doctorate recipients were mainly employed in K-12 educational institutions and not-for-profit organizations. The modal primary activity for these individuals was management or administration (43 percent), followed by teaching (21 percent), professional services to individuals (18 percent), and research (16 percent).

The overall patterns by sector are generally found within the broad field of study groupings shown in Table 39. Among those taking positions in academe, engineers were the most likely to have research and development as their primary work activity (55 percent), while humanities and education graduates were the least likely to work primarily on research (12 percent and 13 percent, respectively). Conversely, humanities graduates were the most likely to identify teaching as their primary activity (82 percent) while engineers were the least likely primarily to teach (42 percent).

Of those taking positions in industry or self-employment, graduates in the physical sciences and engineering were the most likely to identify research and development (85 percent and 81 percent, respectively). Professional services to individuals was the primary work activity for those in this sector for large shares of social

scientists (45 percent), those who earned doctorates in education-related fields (42 percent), humanities graduates (33 percent), and life scientists (27 percent).

Among those entering government employment, the most likely to cite research and development as their main work activity were doctorate recipients in the physical sciences and engineering (68 percent and 65 percent, respectively). Management and administration was a distant second most common primary work activity (behind research) in the government sector in most fields. The main exception was doctorate recipients in education with plans to work in government, 67 percent of whom identified management and administration as their primary work activity.

Demographic Characteristics and Primary Work Activities

The differences in primary work activities documented here by field of study and sector of employment are correlated with key demographic variables of sex, citizenship status, and race/ethnicity. As shown in Table 40, men were much more likely than women to identify research and development as their primary work activity (45 percent versus 27 percent), and were much less likely than women to have teaching as primary (34 percent versus 44 percent). U.S citizens were less likely than non-U.S. citizens, especially temporary visa holders, to indicate research and development as primary, and were more likely to teach and work in management or administration. Among the U.S. citizens reporting race/ethnicity, Table 40 shows that Asians were the most likely to identify research as primary (48 percent) and Blacks were the least likely to do so (18 percent). Hispanics and non-Hispanic Whites were the most likely to primarily teach (44 percent and 45 percent), and Blacks were the most likely to identify management or administration as their primary work activity (31 percent). Again, all of these demographic variables are strongly associated with fields of study and sectors of employment, and the differences seen in Table 40 are likely to be reflections of those field and sector differences.

MAIN DATA TABLES

TABLE 1. Number of doctorates awarded and annual percentage change in doctorates awarded by U.S. colleges and universities, 1957–2006

Year	Number of doctorate recipients	Percent change from previous year
1957	8,611	1.1
1958	8,773	1.9
1959	9,213	5.0
1960	9,733	5.6
1961	10,413	7.0
1962	11,500	10.4
1963	12,728	10.7
1964	14,325	12.5
1965	16,340	14.1
1966	17,949	9.8
1967	20,403	13.7
1968	22,937	12.4
1969	25,743	12.2
1970	29,498	14.6
1971	31,867	8.0
1972	33,041	3.7
1973	33,755	2.2
1974	33,047	-2.1
1975	32,952	-0.3
1976	32,946	0.0
1977	31,716	-3.7
1978	30,875	-2.7
1979	31,238	1.2
1980	31,019	-0.7
1981	31,355	1.1
1982	31,108	-0.8
1983	31,280	0.6
1984	31,334	0.2
1985	31,295	-0.1
1986	31,897	1.9
1987	32,365	1.5
1988	33,497	3.5
1989	34,325	2.5
1990	36,065	5.1
1991	37,530	4.1
1992	38,886	3.6
1993	39,800	2.4
1994	41,033	3.1
1995	41,747	1.7
1996	42,437	1.7
1997	42,539	0.2
1998	42,637	0.2
1999	41,097	-3.6
2000	41,365	0.7
2001	40,737	-1.5
2002	40,025	-1.7
2003	40,757	1.8
2004	42,123	3.4
2005	43,385	3.0
2006	45,596	5.1

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 2. Number of U.S. colleges and universities awarding doctorates and average doctorate recipients per institution, 1966-2006

Year	Number of doctorate recipients	Number of institutions	Mean number of doctorate recipients per institution	Median number of doctorate recipients per institution
1966	17,949	215	83	32.0
1967	20,403	219	93	40.0
1968	22,937	229	100	43.0
1969	25,743	231	111	52.0
1970	29,498	240	123	55.0
1971	31,867	260	123	48.5
1972	33,041	267	124	52.0
1973	33,755	286	118	42.0
1974	33,047	292	113	39.5
1975	32,952	292	113	43.5
1976	32,946	294	112	43.5
1977	31,716	304	104	41.0
1978	30,875	311	99	36.0
1979	31,238	311	100	40.0
1980	31,019	320	97	37.0
1981	31,355	323	97	41.0
1982	31,108	328	95	35.0
1983	31,280	332	94	37.0
1984	31,334	331	95	39.0
1985	31,295	337	93	36.0
1986	31,897	340	94	36.0
1987	32,365	349	93	38.0
1988	33,497	351	95	36.0
1989	34,325	356	96	36.0
1990	36,065	354	102	42.5
1991	37,530	364	103	38.5
1992	38,886	367	106	42.0
1993	39,800	372	107	42.5
1994	41,033	374	110	43.0
1995	41,747	382	109	43.0
1996	42,437	390	109	44.0
1997	42,539	384	111	44.5
1998	42,637	388	110	43.5
1999	41,097	397	104	41.0
2000	41,365	409	101	40.0
2001	40,737	420	97	35.5
2002	40,025	418	96	37.5
2003	40,757	425	96	36.0
2004	42,123	420	100	38.5
2005	43,385	418	104	41.0
2006	45,596	417	109	40.0

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 3. Top 20 doctorate-granting institutions, by broad field of study, 2006

Institution	Number of doctorate recipients
All Fields	45,596
U. TX-Austin	796
U. MI	754
U. CA, Berkeley	747
U. MN	720
U. CA, Los Angeles	702
U. IL-Urbana-Champaign	690
PA State U., The	674
OH State U., The	664
U. WI-Madison	649
Stanford U.	644
Harvard U.	637
MA Institute of Technology	602
U. FL	599
U. WA	578
U. MD	567
Purdue U.	561
U. Southern CA	561
TX A&M U.	548
U. PA	495
Columbia U.	488
Physical sciences [b]	7,461
MA Institute of Technology	198
U. IL-Urbana-Champaign	187
U. CA, Berkeley	175
Stanford U.	158
U. WA	140
U. WI-Madison	134
U. CA, Los Angeles	131
U. MD	126
U. MI	126
PA State U., The	117
U. MN	115
U. TX-Austin	114
Purdue U.	108
Columbia U.	107
OH State U., The	103
U. FL	103
Cornell U.	102
TX A&M U.	102
Carnegie Mellon U.	97
Harvard U.	97

Institution	Number of doctorate recipients
Life sciences [a]	9,683
Johns Hopkins U.	213
Harvard U.	208
U. WI-Madison	177
U. NC Chapel Hill	175
U. CA, Davis	172
U. MN	170
U. WA	165
U. FL	157
OH State U., The	147
Cornell U.	146
U. MI	145
U. CA, Los Angeles	137
PA State U., The	126
TX A&M U.	126
U. IL-Urbana-Champaign	125
Purdue U.	121
MI State U.	119
U. CA, Berkeley	113
U. PA	112
U. Pittsburgh	107
Social sciences [c]	6,873
U. CA, Berkeley	117
U. TX-Austin	111
U. MD	108
U. MI	106
Harvard U.	105
OH State U., The	103
U. Chicago, The	103
Graduate School & U. Ctr., CUNY	101
U. CA, Los Angeles	101
NY U.	82
U. MN	82
PA State U., The	79
U. IL-Urbana-Champaign	76
U. PA	74
Columbia U.	73
U. WI-Madison	73
TX A&M U.	71
Stanford U.	67
U. GA	64
MI State U.	62
U. WA	62

Institution	Number of doctorate recipients
Engineering	7,191
GA Institute of Technology	261
MA Institute of Technology	230
Stanford U.	202
U. MI	196
Purdue U.	191
U. TX-Austin	190
U. CA, Berkeley	173
PA State U., The	170
U. FL	167
U. IL-Urbana-Champaign	146
VA Polytechnic Institute and State U.	136
TX A&M U.	135
U. Southern CA	125
U. MD	121
OH State U., The	119
U. MN	119
NC State U.	113
Northwestern U.	111
U. CA, Los Angeles	106
Cornell U.	94
Humanities	5,576
U. TX-Austin	148
U. CA, Los Angeles	141
Harvard U.	126
U. Chicago, The	126
Columbia U.	114
U. CA, Berkeley	114
IN U.	108
NY U.	105
U. MI	105
Graduate School & U. Ctr., CUNY	98
Yale U.	92
U. MN	91
U. PA	86
U. WI-Madison	86
U. NC Chapel Hill	84
FL State U.	73
U. MD	72
Rutgers U.	70
OH State U., The	69
Princeton U.	67
Stanford U.	67

Institution	Number of doctorate recipients
Education	6,123
Teachers C., Columbia U.	149
U. Southern CA	134
U. TX-Austin	103
PA State U., The	98
U. MN	95
U. GA	88
IN U.	87
OH State U., The	86
U. PA	81
Loyola U. Chicago	80
AZ State U.	79
TX A&M U.	74
FL State U.	68
U. KS	66
U. VA	63
VA Polytechnic Institute and State U.	63
U. IL-Urbana-Champaign	62
U. Central FL	60
St. Louis U.	59
U. NE-Lincoln	59
U. North TX	59
Other fields	2,689
Nova Southeastern U.	58
George Washington U.	56
Walden U.	50
U. MN	48
U. TX-Austin	46
NY U.	45
U. GA	41
U. PA	41
Columbia U.	40
U. MI	40
IN U.	38
MI State U.	37
OH State U., The	37
PA State U., The	36
Southern IL U.	36
U. NC Chapel Hill	36
U. IL-Urbana-Champaign	34
FL State U.	32
Harvard U.	32
U. Pittsburgh	32

[a] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[b] Includes mathematics and computer & information sciences.

[c] Includes psychology.

NOTE: Two or more institutions with the same number of doctorate recipients are listed in alphabetical order.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 4. State of awarding institution, including the District of Columbia and Puerto Rico, ranked by number of doctorate recipients, 2006

Rank	State	Number of doctorate recipients
1	California	5,464
2	New York	3,855
3	Texas	3,066
4	Pennsylvania	2,348
5	Massachusetts	2,331
6	Illinois	2,312
7	Ohio	1,814
8	Florida	1,813
9	Michigan	1,556
10	North Carolina	1,357
11	Indiana	1,244
12	Maryland	1,216
13	Georgia	1,170
14	Virginia	1,111
15	New Jersey	961
16	Minnesota	944
17	Wisconsin	846
18	Missouri	821
19	Arizona	809
20	Washington	796
21	Colorado	725
22	Tennessee	710
23	Iowa	641
24	Connecticut	627
25	District Of Columbia	559
26	Alabama	534
27	Louisiana	528
28	Kansas	479
29	Oregon	443
30	Kentucky	422
31	South Carolina	414
32	Oklahoma	370
33	Mississippi	366
34	Utah	352
35	Nebraska	292
36	Rhode Island	288
37	New Mexico	281
38	Delaware	238
39	Arkansas	191
40	West Virginia	183
41	Nevada	155
42	Idaho	154
43	Hawaii	147
44	New Hampshire	126
45	Puerto Rico	118
46	Montana	83
47	North Dakota	81
48	South Dakota	73
49	Vermont	64
50	Wyoming	59
51	Maine	38
52	Alaska	21

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 5. Major field of study of doctorate recipients for selected years, 1976–2006

Field of study	1976		1981		1986		1991		1996		2001		2006	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
All fields	32,946	100.0	31,355	100.0	31,897	100.0	37,530	100.0	42,437	100.0	40,737	100.0	45,596	100.0
Life sciences	5,087	15.4	5,665	18.1	5,767	18.1	6,967	18.6	8,337	19.6	8,370	20.5	9,683	21.2
Agricultural sciences/natural resources	1,011	3.1	1,205	3.8	1,191	3.7	1,277	3.4	1,289	3.0	1,132	2.8	1,146	2.5
Biological/biomedical sciences	3,573	10.8	3,803	12.1	3,807	11.9	4,649	12.4	5,724	13.5	5,697	14.0	6,631	14.5
Health sciences	503	1.5	657	2.1	769	2.4	1,041	2.8	1,324	3.1	1,541	3.8	1,906	4.2
Physical sciences	4,448	13.5	4,116	13.1	4,772	15.0	6,244	16.6	6,592	15.5	5,864	14.4	7,461	16.4
Chemistry	1,624	4.9	1,612	5.1	1,903	6.0	2,194	5.8	2,149	5.1	1,981	4.9	2,363	5.2
Computer & information sciences [a]	na	na	232	0.7	399	1.3	800	2.1	920	2.2	830	2.0	1,452	3.2
Earth, atmospheric, & marine sciences	584	1.8	529	1.7	554	1.7	801	2.1	724	1.7	660	1.6	757	1.7
Mathematics	1,003	3.0	728	2.3	729	2.3	1,038	2.8	1,122	2.6	1,010	2.5	1,327	2.9
Physics & astronomy	1,237	3.8	1,015	3.2	1,187	3.7	1,411	3.8	1,677	4.0	1,383	3.4	1,562	3.4
Social sciences	6,214	18.9	6,141	19.6	5,893	18.5	6,151	16.4	6,822	16.1	6,794	16.7	6,873	15.1
Anthropology	428	1.3	369	1.2	381	1.2	341	0.9	397	0.9	411	1.0	472	1.0
Economics	885	2.7	824	2.6	859	2.7	885	2.4	1,008	2.4	927	2.3	1,029	2.3
Political science/international relations	791	2.4	532	1.7	490	1.5	522	1.4	721	1.7	749	1.8	729	1.6
Psychology	2,883	8.8	3,358	10.7	3,126	9.8	3,250	8.7	3,494	8.2	3,399	8.3	3,263	7.2
Sociology	734	2.2	605	1.9	491	1.5	465	1.2	517	1.2	567	1.4	578	1.3
Other social sciences	493	1.5	453	1.4	546	1.7	688	1.8	685	1.6	741	1.8	802	1.8
Engineering	2,834	8.6	2,528	8.1	3,375	10.6	5,213	13.9	6,309	14.9	5,511	13.5	7,191	15.8
Aerospace/aeronautical engineering	122	0.4	97	0.3	118	0.4	206	0.5	287	0.7	203	0.5	238	0.5
Chemical & related engineering	331	1.0	317	1.0	531	1.7	691	1.8	798	1.9	730	1.8	893	2.0
Civil & related engineering	388	1.2	358	1.1	429	1.3	575	1.5	698	1.6	595	1.5	803	1.8
Electrical & related engineering	711	2.2	549	1.8	805	2.5	1,405	3.7	1,741	4.1	1,579	3.9	2,133	4.7
Industrial engineering	67	0.2	66	0.2	101	0.3	165	0.4	259	0.6	206	0.5	235	0.5
Materials/metallurgical engineering	252	0.8	234	0.7	305	1.0	489	1.3	574	1.4	497	1.2	624	1.4
Mechanical & related engineering	417	1.3	360	1.1	536	1.7	875	2.3	1,052	2.5	953	2.3	1,148	2.5
Other engineering	546	1.7	547	1.7	550	1.7	807	2.2	900	2.1	748	1.8	1,117	2.4
Education	7,725	23.4	7,497	23.9	6,649	20.8	6,454	17.2	6,785	16.0	6,349	15.6	6,123	13.4
Education administration	1,683	5.1	1,659	5.3	1,638	5.1	1,913	5.1	2,165	5.1	2,070	5.1	2,052	4.5
Education research	3,379	10.3	3,168	10.1	2,725	8.5	2,354	6.3	2,699	6.4	2,637	6.5	2,750	6.0
Teacher education	588	1.8	639	2.0	490	1.5	408	1.1	371	0.9	296	0.7	252	0.6
Teaching fields	1,418	4.3	1,437	4.6	1,142	3.6	973	2.6	864	2.0	723	1.8	707	1.6
Other education	657	2.0	594	1.9	654	2.1	806	2.1	686	1.6	623	1.5	362	0.8
Humanities	4,881	14.8	3,751	12.0	3,460	10.8	4,099	10.9	5,114	12.1	5,615	13.8	5,576	12.2
American literature	236	0.7	145	0.5	215	0.7	253	0.7	314	0.7	385	0.9	382	0.8
English language & literature	978	3.0	675	2.2	504	1.6	599	1.6	699	1.6	593	1.5	572	1.3
Foreign language & literature	835	2.5	576	1.8	445	1.4	498	1.3	605	1.4	620	1.5	614	1.3
History	1,095	3.3	692	2.2	563	1.8	663	1.8	857	2.0	1,031	2.5	973	2.1
Other humanities	1,737	5.3	1,663	5.3	1,733	5.4	2,086	5.6	2,639	6.2	2,986	7.3	3,035	6.7

TABLE 5. Major field of study of doctorate recipients for selected years, 1976–2006

Field of study	1976		1981		1986		1991		1996		2001		2006	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Other fields	1,757	5.3	1,657	5.3	1,981	6.2	2,402	6.4	2,478	5.8	2,234	5.5	2,689	5.9
Business & management	739	2.2	624	2.0	902	2.8	1,163	3.1	1,279	3.0	1,064	2.6	1,312	2.9
Communications	295	0.9	240	0.8	258	0.8	332	0.9	389	0.9	390	1.0	507	1.1
Fields not elsewhere classified	723	2.2	793	2.5	821	2.6	907	2.4	810	1.9	780	1.9	870	1.9

na = Not applicable (i.e., the field was not on the questionnaire's Specialties list for that year).

[a] Computer & information sciences first appeared on the survey form in 1978.

NOTE: Major field of study definitions are detailed in Appendix E.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 6. Number of doctorate recipients and percent female, by major field of study, 1996 and 2006

Field of study	1996 [a]		2006 [b]		Change in percentage earned by females, 1996-2006
	Number of doctorate recipients	Percent of doctorates to females	Number of doctorate recipients	Percent of doctorates to females	
All fields	42,240	40.1	45,525	45.1	12.4
Life sciences	8,304	43.5	9,668	51.6	18.6
Agricultural sciences/natural resources	1,286	26.5	1,146	39.0	47.1
Biological/biomedical sciences	5,702	42.4	6,621	49.3	16.3
Health sciences	1,316	65.3	1,901	67.5	3.4
Physical sciences	6,542	20.8	7,449	27.7	33.1
Chemistry	2,131	28.4	2,358	34.4	21.0
Computer & information sciences	914	15.2	1,451	21.4	40.5
Earth, atmospheric, & marine sciences	717	21.2	755	35.4	66.8
Mathematics	1,112	20.8	1,327	29.6	42.6
Physics & astronomy	1,668	14.0	1,558	18.1	29.0
Social sciences	6,804	51.7	6,867	57.4	11.0
Anthropology	397	53.9	472	57.0	5.7
Economics	1,001	22.6	1,027	30.1	33.3
Political science/international relations	718	30.4	729	38.5	27.0
Psychology	3,491	66.7	3,259	71.4	7.0
Sociology	512	53.5	578	62.5	16.7
Other social sciences	685	37.2	802	48.9	31.3
Engineering	6,265	12.4	7,176	20.2	63.1
Aerospace/aeronautical engineering	286	8.4	236	10.6	26.2
Chemical & related engineering	796	18.0	891	25.9	44.3
Civil & related engineering	695	11.4	802	21.9	93.1
Electrical & related engineering	1,725	9.8	2,128	14.9	52.1
Industrial engineering	259	19.7	235	28.5	44.8
Materials/metallurgical engineering	567	14.8	623	25.4	71.2
Mechanical & related engineering	1,041	7.5	1,146	13.9	85.2
Other engineering	896	16.6	1,115	28.6	72.0
Education	6,766	61.9	6,115	65.2	5.4
Education administration	2,160	55.5	2,051	59.1	6.5
Education research	2,695	66.9	2,748	68.6	2.5
Teacher education	371	69.0	251	74.9	8.5
Teaching fields	861	58.4	705	64.8	11.0
Other education	679	62.9	360	68.3	8.7
Humanities	5,096	49.9	5,570	50.6	1.5
American literature	314	62.1	382	53.9	-13.2
English language & literature	698	60.0	572	61.9	3.1
Foreign language & literature	602	60.5	614	61.6	1.8
History	854	41.6	973	40.9	-1.6
Other humanities	2,628	46.1	3,029	49.0	6.4
Other fields	2,463	38.7	2,680	47.9	23.8
Business & management	1,269	30.0	1,304	38.8	29.2
Communications	389	50.6	507	56.6	11.8
Fields not elsewhere classified	805	46.7	869	56.6	21.2

[a] 1996 field total excludes 197 individuals for whom sex was not reported.

[b] 2006 field total excludes 71 individuals for whom sex was not reported.

NOTES: Major field of study definitions are detailed in Appendix E. Change in percent to females computed as (2006 percent - 1996 percent) / 1996 percent. See Appendix Table A-1.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 7. Number and percent of doctorate recipients, by sex within broad field of study for selected years, 1976–2006

Field of study and sex	1976		1981		1986		1991		1996		2001		2006	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All fields [a]	32,946	100.0	31,355	100.0	31,897	100.0	37,394	100.0	42,240	100.0	40,660	100.0	45,525	100.0
Male	25,262	76.7	21,463	68.5	20,592	64.6	23,521	62.9	25,285	59.9	22,775	56.0	24,986	54.9
Female	7,684	23.3	9,892	31.5	11,305	35.4	13,873	37.1	16,955	40.1	17,885	44.0	20,539	45.1
Life sciences [b]	5,087	100.0	5,665	100.0	5,767	100.0	6,943	100.0	8,304	100.0	8,344	100.0	9,668	100.0
Male	4,064	79.9	4,119	72.7	3,812	66.1	4,242	61.1	4,688	56.5	4,417	52.9	4,675	48.4
Female	1,023	20.1	1,546	27.3	1,955	33.9	2,701	38.9	3,616	43.5	3,927	47.1	4,993	51.6
Physical sciences [c]	4,448	100.0	4,116	100.0	4,772	100.0	6,220	100.0	6,542	100.0	5,856	100.0	7,449	100.0
Male	4,038	90.8	3,624	88.0	4,006	83.9	5,059	81.3	5,181	79.2	4,399	75.1	5,387	72.3
Female	410	9.2	492	12.0	766	16.1	1,161	18.7	1,361	20.8	1,457	24.9	2,062	27.7
Social sciences [d]	6,214	100.0	6,141	100.0	5,893	100.0	6,139	100.0	6,804	100.0	6,784	100.0	6,867	100.0
Male	4,580	73.7	3,944	64.2	3,381	57.4	3,099	50.5	3,288	48.3	3,100	45.7	2,928	42.6
Female	1,634	26.3	2,197	35.8	2,512	42.6	3,040	49.5	3,516	51.7	3,684	54.3	3,939	57.4
Engineering	2,834	100.0	2,528	100.0	3,375	100.0	5,169	100.0	6,265	100.0	5,501	100.0	7,176	100.0
Male	2,780	98.1	2,429	96.1	3,150	93.3	4,702	91.0	5,488	87.6	4,571	83.1	5,724	79.8
Female	54	1.9	99	3.9	225	6.7	467	9.0	777	12.4	930	16.9	1,452	20.2
Education	7,725	100.0	7,497	100.0	6,649	100.0	6,444	100.0	6,766	100.0	6,344	100.0	6,115	100.0
Male	5,185	67.1	3,957	52.8	3,036	45.7	2,696	41.8	2,579	38.1	2,247	35.4	2,128	34.8
Female	2,540	32.9	3,540	47.2	3,613	54.3	3,748	58.2	4,187	61.9	4,097	64.6	3,987	65.2
Humanities	4,881	100.0	3,751	100.0	3,460	100.0	4,089	100.0	5,096	100.0	5,607	100.0	5,570	100.0
Male	3,208	65.7	2,203	58.7	1,896	54.8	2,170	53.1	2,552	50.1	2,770	49.4	2,749	49.4
Female	1,673	34.3	1,548	41.3	1,564	45.2	1,919	46.9	2,544	49.9	2,837	50.6	2,821	50.6
Other fields	1,757	100.0	1,657	100.0	1,981	100.0	2,390	100.0	2,463	100.0	2,224	100.0	2,680	100.0
Male	1,407	80.1	1,187	71.6	1,311	66.2	1,553	65.0	1,509	61.3	1,271	57.1	1,395	52.1
Female	350	19.9	470	28.4	670	33.8	837	35.0	954	38.7	953	42.9	1,285	47.9

[a] Group totals exclude individuals for whom sex was not reported; 136 in 1991, 197 in 1996, 77 in 2001, and 71 in 2006.

[b] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[c] Includes mathematics and computer & information sciences.

[d] Includes psychology.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 8 (Revised June 2008). Number of U.S. citizen doctorate recipients, by race/ethnicity and broad field of study, for selected years, 1986–2006

Field of study and race/ethnicity	1986	1991	1996	2001	2006
All fields	23,097	25,583	27,777	27,042	26,917
Known race/ethnicity	22,685	25,098	27,444	26,560	26,491
American Indian [a]	99	130	185	149	118
Asian [b]	531	787	1,066	1,413	1,560
Black	824	1,011	1,305	1,614	1,659
Hispanic	572	733	957	1,123	1,370
White	20,640	22,428	23,846	21,921	21,280
Other [c]	19	9	85	340	504
Life sciences [d]	4,382	4,752	5,058	5,493	6,014
Known race/ethnicity	4,308	4,678	4,996	5,406	5,936
American Indian [a]	24	19	32	21	15
Asian [b]	155	195	283	439	483
Black	64	92	142	195	274
Hispanic	72	100	150	192	261
White	3,992	4,271	4,374	4,492	4,788
Other	1	1	15	67	115
Physical sciences [e]	2,978	3,537	3,407	3,082	3,315
Known race/ethnicity	2,889	3,436	3,337	3,019	3,254
American Indian [a]	7	14	12	13	7
Asian [b]	106	145	172	205	228
Black	26	42	66	81	73
Hispanic	53	82	85	86	116
White	2,693	3,152	2,994	2,592	2,778
Other	4	1	8	42	52
Social sciences [f]	4,581	4,714	5,204	5,054	4,872
Known race/ethnicity	4,501	4,623	5,154	4,967	4,791
American Indian [a]	20	21	37	34	26
Asian [b]	69	88	122	200	242
Black	164	210	245	300	319
Hispanic	132	182	235	241	327
White	4,110	4,120	4,495	4,116	3,763
Other	6	2	20	76	114
Engineering	1,383	2,087	2,596	2,156	2,185
Known race/ethnicity	1,354	1,993	2,558	2,108	2,138
American Indian [a]	6	6	14	6	3
Asian [b]	80	187	271	263	266
Black	14	43	59	82	89
Hispanic	25	49	87	74	101
White	1,229	1,708	2,126	1,653	1,633
Other	0	0	1	30	46
Education	5,631	5,617	5,879	5,346	4,974
Known race/ethnicity	5,553	5,576	5,832	5,286	4,907
American Indian [a]	26	55	60	43	35
Asian [b]	60	85	87	104	125
Black	422	437	580	650	606
Hispanic	190	175	205	267	279
White	4,851	4,822	4,879	4,169	3,797
Other	4	2	21	53	65

TABLE 8 (Revised June 2008). Number of U.S. citizen doctorate recipients, by race/ethnicity and broad field of study, for selected years, 1986–2006

Field of study and race/ethnicity	1986	1991	1996	2001	2006
Humanities	2,732	3,224	3,961	4,412	4,063
Known race/ethnicity	2,685	3,170	3,913	4,301	4,000
American Indian [a]	7	10	20	23	23
Asian [b]	30	47	86	130	157
Black	71	94	116	178	164
Hispanic	76	116	143	202	210
White	2,499	2,900	3,531	3,714	3,358
Other	2	3	17	54	88
Other fields	1,410	1,652	1,672	1,499	1,494
Known race/ethnicity	1,395	1,622	1,654	1,473	1,465
American Indian [a]	9	5	10	9	9
Asian [b]	31	40	45	72	59
Black	63	93	97	128	134
Hispanic	24	29	52	61	76
White	1,266	1,455	1,447	1,185	1,163
Other	2	0	3	18	24

[a] Includes Alaska Natives.

[b] Includes Native Hawaiians or other Pacific Islanders through 2000, but excludes them thereafter.

[c] Includes 59 Native Hawaiians or other Pacific Islanders and 445 respondents choosing multiple races (excluding those selecting an Hispanic ethnicity) in 2006 and 45 Native Hawaiians or other Pacific Islanders and 295 respondents choosing multiple races in 2001; prior to 2001, this category included only non-Hispanic respondents choosing multiple races.

[d] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[e] Includes mathematics and computer & information sciences.

[f] Includes psychology.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 9 (Revised June 2008). Major field of study for U.S. citizen doctorate recipients, by race/ethnicity, 2006

Field of study	Total U.S. citizen doctorate recipients	Number with known race/ethnicity	Race/ethnicity					
			American Indian [a]	Asian [b]	Black	Hispanic	White	Other [c]
All fields	26,917	26,491	118	1,560	1,659	1,370	21,280	504
Life sciences	6,014	5,936	15	483	274	261	4,788	115
Agricultural sciences/natural resources	581	572	3	16	22	25	500	6
Biological/biomedical sciences	4,165	4,120	6	387	133	195	3,303	96
Health sciences	1,268	1,244	6	80	119	41	985	13
Physical sciences	3,315	3,254	7	228	73	116	2,778	52
Chemistry	1,170	1,152	3	79	28	53	973	16
Computer & information sciences	484	474	2	60	14	6	382	10
Earth, atmospheric, & marine sciences	445	436	1	15	3	19	393	5
Mathematics	549	538	0	35	16	23	452	12
Physics & astronomy	667	654	1	39	12	15	578	9
Social sciences	4,872	4,791	26	242	319	327	3,763	114
Anthropology	382	366	4	13	18	17	301	13
Economics	290	285	2	33	11	14	218	7
Political science/international relations	506	496	2	15	34	32	405	8
Psychology	2,722	2,688	15	150	169	203	2,082	69
Sociology	443	440	0	14	40	34	345	7
Other social sciences	529	516	3	17	47	27	412	10
Engineering	2,185	2,138	3	266	89	101	1,633	46
Aerospace/aeronautical engineering	77	72	0	8	1	1	60	2
Chemical & related engineering	352	348	0	44	13	21	264	6
Civil & related engineering	200	197	0	19	10	11	155	2
Electrical & related engineering	459	444	0	75	18	15	326	10
Industrial engineering	59	59	0	1	6	6	45	1
Materials/metallurgical engineering	213	208	0	24	10	13	158	3
Mechanical & related engineering	341	333	3	40	13	11	259	7
Other engineering	484	477	0	55	18	23	366	15
Education	4,974	4,907	35	125	606	279	3,797	65
Education administration	1,821	1,799	20	30	259	87	1,383	20
Education research	2,215	2,184	12	64	258	137	1,686	27
Teacher education	189	183	0	5	12	15	148	3
Teaching fields	498	494	1	17	43	20	404	9
Other education	251	247	2	9	34	20	176	6
Humanities	4,063	4,000	23	157	164	210	3,358	88
American literature	333	326	2	16	31	14	251	12
English language & literature	469	462	3	10	9	11	418	11
Foreign language & literature	349	344	0	7	9	62	256	10
History	807	794	6	37	38	33	668	12
Other humanities	2,105	2,074	12	87	77	90	1,765	43
Other fields	1,494	1,465	9	59	134	76	1,163	24
Business & management	593	579	5	24	47	21	478	4
Communications	335	327	0	12	20	15	275	5
Fields not elsewhere classified	566	559	4	23	67	40	410	15

[a] Includes Alaska Natives.

[b] Does not include Native Hawaiians or other Pacific Islanders.

[c] Includes Native Hawaiians or other Pacific Islanders and respondents choosing multiple races (excluding those selecting Hispanic ethnicity).

NOTE: Major field of study definitions are detailed in appendix E.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 10. Doctorate-granting institutions having the largest number of U.S. citizen minority doctorate recipients, by race/ethnicity, 2002-2006

Institution	Number of doctorate recipients
American Indian [a]	
OK State U.	33
AZ State U.	18
U. ND	18
U. OK	17
Fielding Graduate Institute	13
U. NM	13
U. CA, Berkeley	12
TX A&M U.	11
U. AZ	11
U. TX-Austin	11
Nova Southeastern U.	10
U. MI	10
U. KS	9
U. MN	9
Stanford U.	8
U. IA	8
U. MO-Columbia	8
U. MO-Kansas City	8
U. Southern CA	8
U. AR	7
U. CA, Santa Barbara	7
U. NE-Lincoln	7
U. NC Chapel Hill	7
U. WI-Madison	7
Top 20 Institutions	*270*
Total institutions reported (192)	*667*
Black	
Nova Southeastern U.	332
Howard U.	287
U. MI	163
Walden U.	133
Loyola U. Chicago	125
U. NC Chapel Hill	118
U. MD	116
George Washington U.	108
Wayne State U.	104
OH State U., The	102
Harvard U.	100
Jackson State U.	97
Teachers C., Columbia U.	97
Argosy U./Sarasota	96
U. PA	96
Temple U.	94
MI State U.	91
U. TX-Austin	89
Morgan State U.	88
NC State U.	87
PA State U., The	87
Top 20 Institutions	*2,610*
Total institutions reported (360)	*8,608*

Institution	Number of doctorate recipients
Asian [b]	
U. CA, Berkeley	403
U. CA, Los Angeles	382
Stanford U.	266
Harvard U.	236
MA Institute of Technology	177
U. Southern CA	169
U. MI	152
Columbia U.	141
U. PA	141
U. CA, Davis	132
Johns Hopkins U.	121
U. IL-Urbana-Champaign	121
U. CA, San Diego	120
U. WA	116
U. CA, Irvine	111
NY U.	97
Northwestern U.	96
U. TX-Austin	86
U. WI-Madison	81
U. Chicago, The	80
Yale U.	80
Top 20 Institutions	*3,308*
Total institutions reported (334)	*7,246*
Hispanic	
U. PR-Rio Piedras	226
U. CA, Berkeley	179
U. TX-Austin	164
U. CA, Los Angeles	143
U. Southern CA	119
Harvard U.	115
U. AZ	110
TX A&M U.	105
Stanford U.	104
U. MI	103
Nova Southeastern U.	98
U. FL	98
AZ State U.	92
U. CA, San Diego	86
Graduate School & U. Ctr., CUNY	84
U. WI-Madison	83
U. CA, Davis	81
U. NM	80
U. CA, Santa Barbara	73
U. IL-Urbana-Champaign	71
Top 20 Institutions	*2,214*
Total institutions reported (336)	*6,365*

[a] Includes Alaska Natives.

[b] Does not include Native Hawaiians or other Pacific Islanders.

NOTE: Two or more institutions with the same number of doctorate recipients are listed in alphabetical order.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 11. Citizenship status of doctorate recipients, by broad field of study for selected years, 1976-2006

Field/citizenship	1976	1981	1986	1991	1996	2001	2006
All fields							
All doctorates	32,946	31,355	31,897	37,530	42,437	40,737	45,596
U.S. citizen	27,331	25,080	23,097	25,583	27,777	27,042	26,917
Non-U.S., permanent resident	1,494	1,280	1,431	1,851	3,765	1,832	1,829
Non-U.S., temporary visa holder	3,566	3,993	5,318	9,374	9,735	9,810	14,118
Unknown	555	1,002	2,051	722	1,160	2,053	2,732
Life sciences [a]							
All doctorates	5,087	5,665	5,767	6,967	8,337	8,370	9,683
U.S. citizen	4,054	4,578	4,382	4,752	5,058	5,493	6,014
Non-U.S., permanent resident	243	208	206	344	1,025	456	425
Non-U.S., temporary visa holder	679	750	881	1,765	2,088	2,050	2,708
Unknown	111	129	298	106	166	371	536
Physical sciences [b]							
All doctorates	4,448	4,116	4,772	6,244	6,592	5,864	7,461
U.S. citizen	3,383	3,037	2,978	3,537	3,407	3,082	3,315
Non-U.S., permanent resident	302	224	239	321	831	321	345
Non-U.S., temporary visa holder	714	755	1,263	2,294	2,154	2,217	3,427
Unknown	49	100	292	92	200	244	374
Social sciences [c]							
All doctorates	6,214	6,141	5,893	6,151	6,822	6,794	6,873
U.S. citizen	5,372	5,179	4,581	4,714	5,204	5,054	4,872
Non-U.S., permanent resident	195	192	223	263	405	242	236
Non-U.S., temporary visa holder	565	544	679	1,023	1,021	1,077	1,360
Unknown	82	226	410	151	192	421	405
Engineering							
All doctorates	2,834	2,528	3,375	5,213	6,309	5,511	7,191
U.S. citizen	1,559	1,171	1,383	2,087	2,596	2,156	2,185
Non-U.S., permanent resident	390	301	343	388	793	299	300
Non-U.S., temporary visa holder	824	952	1,383	2,644	2,763	2,789	4,272
Unknown	61	104	266	94	157	267	434
Education							
All doctorates	7,725	7,497	6,649	6,454	6,785	6,349	6,123
U.S. citizen	7,132	6,588	5,631	5,617	5,879	5,346	4,974
Non-U.S., permanent resident	114	129	172	171	196	116	135
Non-U.S., temporary visa holder	346	543	475	516	489	504	605
Unknown	133	237	371	150	221	383	409
Humanities							
All doctorates	4,881	3,751	3,460	4,099	5,114	5,615	5,576
U.S. citizen	4,385	3,226	2,732	3,224	3,961	4,412	4,063
Non-U.S., permanent resident	181	150	152	241	353	287	270
Non-U.S., temporary visa holder	239	240	325	551	650	674	886
Unknown	76	135	251	83	150	242	357
Other fields							
All doctorates	1,757	1,657	1,981	2,402	2,478	2,234	2,689
U.S. citizen	1,446	1,301	1,410	1,652	1,672	1,499	1,494
Non-U.S., permanent resident	69	76	96	123	162	111	118
Non-U.S., temporary visa holder	199	209	312	581	570	499	860
Unknown	43	71	163	46	74	125	217

[a] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[b] Includes mathematics and computer & information sciences.

[c] Includes psychology.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 12. Top 30 countries/economies of origin of non-U.S. citizens earning doctorates at U.S. colleges and universities (ranked by number of doctorate recipients), 2006

Rank	Country/ economy	Number of doctorate recipients
1	China [a]	4,774
2	India	1,742
3	Korea	1,648
4	Taiwan	718
5	Canada	561
6	Turkey	454
7	Japan	322
8	Thailand	268
9	Germany	257
10	Russia	253
11	Mexico	227
12	Romania	210
13	Italy	196
14	Brazil	191
15	Great Britain, UK	170
16	Iran	158
17	France	156
18	Egypt	144
19	Greece	133
20	Argentina	127
21	Colombia	120
21	Jordan	120
23	Israel	110
24	Spain	103
25	Bangladesh	102
26	Saudi Arabia	99
27	Malaysia	89
28	Kenya	88
29	Singapore	82
30	Australia	81
30	Bulgaria	81
	Top 30 countries/economies of origin	*13,784*
	Total non-U.S. citizens (158 countries/economies) [b]	*15,916*

[a] Includes Hong Kong.

[b] Excludes cases with unknown country/economy of origin.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 13. Doctorate-granting institutions having the largest number of non-U.S. citizen doctorate recipients (ordered by number of doctorate recipients), 2006

Institution	Number of doctorate recipients
U. IL-Urbana-Champaign	364
OH State U., The	346
PA State U., The	308
TX A&M U.	299
Purdue U.	298
U. MN	295
U. MI	287
U. MD	283
U. FL	275
Stanford U.	261
U. Southern CA	253
U. TX-Austin	252
U. CA, Los Angeles	246
Cornell U.	234
U. CA, Berkeley	228
GA Institute of Technology	226
U. WI-Madison	225
Columbia U.	224
MA Institute of Technology	203
NC State U.	171
Top 20 institutions	*5,278*
Total institutions reported (417)	*15,947*

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 14. Parental education attainment of doctorate recipients, by selected demographic characteristics and field of study, 2006

Demographic characteristics and field of study	Total percent	Parental education attainment: High school or less	Some college [a]	Baccalaureate degree	Advanced degree	Total number
All doctorate recipients						
Father's education [b]	100.0	27.4	13.2	26.1	33.3	40,277
Mother's education [c]	100.0	36.0	17.1	25.1	21.8	40,377
Sex						
Male						
Father's education	100.0	28.0	12.6	26.4	33.0	22,020
Mother's education	100.0	38.0	16.0	25.2	20.8	22,053
Female						
Father's education	100.0	26.8	13.9	25.6	33.7	18,256
Mother's education	100.0	33.6	18.4	25.0	23.0	18,323
Race/ethnicity (U.S. citizens only)						
American Indian [d]						
Father's education	100.0	52.4	14.3	19.0	14.3	105
Mother's education	100.0	48.1	25.0	14.4	12.5	104
Asian [e]						
Father's education	100.0	18.2	9.8	24.2	47.8	1,477
Mother's education	100.0	28.7	13.2	32.3	25.8	1,485
Black						
Father's education	100.0	44.7	20.4	13.2	21.8	1,474
Mother's education	100.0	39.1	23.1	15.8	22.0	1,519
Hispanic						
Father's education	100.0	43.1	15.4	17.6	23.9	1,237
Mother's education	100.0	48.6	18.2	16.7	16.5	1,249
White						
Father's education	100.0	23.0	14.4	23.2	39.4	20,276
Mother's education	100.0	27.7	20.1	25.4	26.8	20,341
Citizenship						
U.S. Citizen						
Father's education	100.0	25.1	14.6	22.2	38.1	25,319
Mother's education	100.0	29.5	19.8	24.7	26.0	25,455
Non-U.S. citizen, permanent resident						
Father's education	100.0	27.7	11.2	29.9	31.2	1,687
Mother's education	100.0	41.8	13.5	24.8	19.9	1,690
Non-U.S. citizen, temporary visa holder						
Father's education	100.0	31.9	10.9	32.9	24.3	13,247
Mother's education	100.0	47.9	12.3	25.9	13.9	13,208
Broad field of study						
Life sciences [f]						
Father's education	100.0	24.5	13.3	26.2	36.1	8,706
Mother's education	100.0	32.1	17.9	26.8	23.2	8,719
Physical sciences [g]						
Father's education	100.0	25.2	12.8	28.9	33.1	6,727
Mother's education	100.0	34.5	15.4	27.1	23.0	6,736
Social sciences [h]						
Father's education	100.0	24.4	13.7	23.5	38.4	5,982
Mother's education	100.0	31.3	19.0	24.3	25.4	6,007
Engineering						
Father's education	100.0	26.6	11.2	34.1	28.1	6,379
Mother's education	100.0	40.6	14.0	28.3	17.1	6,375
Education						
Father's education	100.0	41.9	16.6	18.5	23.0	5,316
Mother's education	100.0	47.0	20.3	17.9	14.8	5,350

Demographic characteristics and field of study	Total percent	Parental education attainment: High school or less	Some college [a]	Baccalaureate degree	Advanced degree	Total number
Humanities						
Father's education	100.0	30.5	15.9	25.1	28.5	4,900
Mother's education	100.0	23.2	11.6	22.9	42.3	4,882
Other fields						
Father's education	100.0	41.2	17.6	23.5	17.7	2,290
Mother's education	100.0	31.0	13.7	26.0	29.3	2,285

[a] Includes those who have attended college, but not earned a bachelor's.

[b] Total count excludes 314 (0.7%) cases who reported 'not applicable' for father's education.

[c] Total count excludes 274 (0.6%) cases who reported 'not applicable' for mother's education.

[d] Includes Alaska Natives.

[e] Does not include Native Hawaiians or other Pacific Islanders.

[f] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[g] Includes mathematics and computer & information sciences.

[h] Includes psychology.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 15. Highest educational attainment of either parent for selected years, 1976-2006

Year	High school or less	Some college [a]	Earned baccalaureate	Advanced degree
1976	43.8	16.3	20.1	19.7
1981	39.9	15.8	21.8	22.4
1986	37.1	14.6	22.6	25.7
1991	32.5	15.3	20.3	31.9
1996	28.2	14.3	21.9	35.5
2001	23.9	13.6	22.3	40.1
2006 [b]	21.6	13.3	25.5	39.1

[a] Includes those who have attended college, but not earned a bachelor's.

[b] In 2006 0.5 percent (n=194) doctorate recipients chose 'Not Applicable' for both father's and mother's education.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 16. Percentage of doctorate recipients who earned a master's degree, by whether related to field of doctorate, broad field of doctoral study, and demographic characteristics, 2006

Demographic characteristic	All doctorates		Life sciences [a]		Physical sciences [b]		Social sciences [c]		Engineering		Education		Humanities		Other fields	
	Master's	Related Master's	Master's	Related Master's	Master's	Related Master's	Master's	Related Master's	Master's	Related Master's	Master's	Related Master's	Master's	Related Master's	Master's	Related Master's
All fields	80.2	59.8	57.0	43.2	68.9	57.9	90.6	77.1	85.4	66.9	97.1	41.1	92.3	77.5	93.7	69.3
Sex																
Male	78.9	60.6	54.9	40.4	69.5	58.9	89.1	75.2	86.0	67.9	97.0	41.4	92.1	77.5	93.3	70.1
Female	81.8	58.9	58.9	45.8	67.6	55.4	91.8	78.4	82.8	62.7	97.1	40.9	92.5	77.4	94.1	68.4
Citizenship status																
U.S. citizen	78.1	56.8	49.9	38.4	57.4	48.6	90.7	77.3	77.7	62.6	97.5	40.8	92.3	78.2	94.8	70.8
Non-U.S., permanent resident	84.9	63.8	68.6	49.0	80.5	70.4	93.1	77.3	93.1	67.5	96.9	42.6	90.9	73.5	93.8	62.5
Non-U.S., temporary visa holder	84.2	65.5	71.5	53.4	79.2	66.1	91.4	77.2	88.9	69.3	95.5	44.5	93.7	77.0	91.9	67.2
Race/ethnicity (U.S. citizens only)																
American Indian [d]	88.2	50.9	71.4	57.1	D	D	90.5	71.4	D	D	97.1	22.9	87.0	65.2	88.9	66.7
Asian [e]	68.5	52.8	39.6	29.0	63.1	50.7	90.0	80.9	75.6	61.5	95.1	40.2	91.6	74.8	93.2	76.3
Black	88.7	56.4	64.0	52.1	64.3	54.3	94.2	71.5	85.4	67.4	97.1	41.4	94.9	73.7	96.1	69.0
Hispanic	79.4	59.0	46.8	38.1	54.1	47.7	89.2	78.4	75.3	58.8	96.7	42.6	93.1	80.4	93.4	72.4
White	77.9	57.1	50.5	38.7	56.9	48.5	90.7	77.7	77.7	62.7	97.9	41.1	92.2	78.5	95.0	70.8
Other [f]	75.0	55.5	39.0	31.2	54.4	44.1	87.1	75.7	80.6	61.3	97.7	31.4	94.2	81.7	90.0	66.7

D = suppressed to avoid disclosure of confidential information.

[a] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[b] Includes mathematics and computer & information sciences.

[c] Includes psychology.

[d] Includes Alaska Natives.

[e] Does not include Native Hawaiians or other Pacific Islanders.

[f] Includes Native Hawaiians or other Pacific Islanders and respondents choosing multiple races (excluding those selecting Hispanic ethnicity) in 2006.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 17. Percentage of doctorate recipients who attended community college, broad field of study and demographic characteristics, 2006

Demographic characteristic	All doctorates	Life sciences [a]	Physical sciences [b]	Social sciences [c]	Engineering	Education	Humanities	Other fields
All doctorate recipients	14.4	15.6	9.6	16.3	7.3	24.4	13.7	16.2
Sex								
Male	13.2	15.0	9.9	15.3	7.3	26.5	14.9	16.7
Female	15.8	16.1	8.9	17.0	7.5	23.3	12.5	15.6
Citizenship status								
U.S. citizen	21.4	22.1	18.4	20.5	19.1	27.2	16.9	24.5
Non-U.S., permanent resident	7.2	6.4	6.0	11.6	5.1	12.7	6.3	6.7
Non-U.S., temporary visa	2.0	2.7	1.5	2.5	1.4	4.5	1.5	3.2
Race/ethnicity (U.S. citizens only)								
American Indian [d]	35.2	D	D	38.1	D	37.1	42.9	D
Asian [e]	16.9	19.5	13.5	15.5	17.8	19.3	12.5	16.1
Black	20.3	19.9	14.9	16.1	13.6	25.5	15.8	21.0
Hispanic	27.3	26.9	25.0	22.7	12.5	37.1	28.1	31.5
White	21.3	22.2	18.8	20.7	20.1	26.8	16.1	24.8
Other [f]	23.2	21.2	15.2	25.7	18.0	37.8	21.0	16.7

D = suppressed to avoid disclosure of confidential information.

[a] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[b] Includes mathematics and computer & information sciences.

[c] Includes psychology.

[d] Includes Alaska Natives.

[e] Does not include Native Hawaiians or other Pacific Islanders.

[f] Includes Native Hawaiians or other Pacific Islanders and respondents choosing multiple races (excluding those selecting Hispanic ethnicity) in 2006.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 18. Median number of years to doctorate award, by broad field of study, for selected years, 1981–2006

Field of study and time to degree	1981	1986	1991	1996	2001	2006
All fields						
Since baccalaureate	9.5	10.5	10.5	10.8	10.1	9.5
Since starting graduate school	7.9	8.7	8.7	8.7	8.2	7.9
Life sciences [a]						
Since baccalaureate	7.5	8.7	9.2	9.6	9.0	8.6
Since starting graduate school	6.4	7.2	7.7	7.9	7.2	7.0
Physical sciences [b]						
Since baccalaureate	6.9	7.3	8.0	8.3	7.7	7.7
Since starting graduate school	6.0	6.2	6.7	7.0	6.7	6.7
Social sciences [c]						
Since baccalaureate	9.0	10.1	10.7	10.3	9.7	9.6
Since starting graduate school	7.7	8.7	8.7	8.2	7.9	7.9
Engineering						
Since baccalaureate	8.0	8.2	8.6	9.0	8.4	8.1
Since starting graduate school	6.7	6.7	6.9	7.2	7.1	6.9
Education						
Since baccalaureate	13.5	15.9	18.5	20.3	19.0	16.7
Since starting graduate school	10.9	13.2	15.2	15.9	13.9	12.7
Humanities						
Since baccalaureate	11.0	12.2	12.3	11.8	11.6	11.5
Since starting graduate school	9.7	10.7	10.2	9.7	9.7	9.7
Other fields						
Since baccalaureate	11.1	13.0	13.6	13.8	14.0	12.5
Since starting graduate school	9.2	10.5	10.7	10.7	10.7	9.9

[a] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[b] Includes mathematics and computer & information sciences.

[c] Includes psychology.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 19. Median number of years from baccalaureate to doctorate award, by selected demographic group and broad field of study, 2006

Time to degree and demographic characteristics	All fields		Life sciences [a]		Physical sciences [b]		Social sciences [c]		Engineering		Education		Humanities		Other fields	
	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number
Elapsed time from baccalaureate (years)																
All doctorate recipients [d]	9.5	40,298	8.6	8,593	7.7	6,607	9.6	6,110	8.1	6,372	16.7	5,343	11.5	4,945	12.5	2,328
Sex																
Male	9.1	22,122	8.6	4,144	7.8	4,780	10.0	2,593	8.2	5,096	16.0	1,854	11.6	2,446	12.4	1,209
Female	10.0	18,174	8.6	4,448	7.4	1,826	9.4	3,517	7.8	1,276	17.0	3,489	11.4	2,499	12.6	1,119
Citizenship																
U.S. citizen	10.0	25,599	8.3	5,756	6.9	3,191	9.7	4,624	7.0	2,084	17.6	4,640	11.6	3,883	14.7	1,421
Non-U.S., permanent resident	10.3	1,632	10.0	376	9.0	300	10.5	222	9.2	278	14.4	115	12.5	237	12.0	104
Non-U.S., temporary visa holder	8.9	12,848	9.0	2,435	8.3	3,082	9.3	1,242	8.4	3,949	11.9	540	10.8	811	10.4	789
Race/ethnicity (U.S. citizens only)																
American Indian [e]	13.5	108	11.3	15	D	D	11.3	23	D	D	17.1	32	11.6	22	17.1	8
Asian [f]	8.6	1,472	8.1	461	7.2	214	9.0	226	7.0	249	15.5	116	11.0	151	12.3	55
Black	12.5	1,550	8.8	256	8.0	70	10.7	295	8.0	87	17.0	559	12.0	155	17.0	128
Hispanic	10.1	1,284	8.0	246	7.0	109	9.6	303	8.0	98	16.7	253	12.0	202	12.9	73
White	10.0	20,395	8.3	4,608	6.8	2,698	9.7	3,609	7.0	1,572	18.0	3,579	11.6	3,216	14.8	1,113
Years in graduate school																
All doctorate recipients [g]	7.9	40,345	7.0	8,656	6.7	6,715	7.9	6,048	6.9	6,359	12.7	5,318	9.7	4,943	9.9	2,306
Sex																
Male	7.7	22,180	6.9	4,168	6.9	4,860	8.0	2,574	7.0	5,079	12.5	1,864	9.7	2,441	9.7	1,194
Female	8.3	18,164	7.1	4,488	6.5	1,854	7.7	3,474	6.8	1,280	13.0	3,454	9.7	2,502	10.0	1,112
Citizenship																
U.S. citizen	8.1	25,504	6.7	5,761	6.0	3,186	7.9	4,555	6.3	2,072	13.6	4,650	9.7	3,874	11.5	1,406
Non-U.S., permanent resident	8.7	1,688	8.2	400	8.2	313	8.7	225	7.9	279	10.9	119	10.7	248	9.2	104
Non-U.S., temporary visa holder	7.7	13,140	7.8	2,492	7.6	3,213	7.9	1,267	7.2	4,006	8.7	548	9.1	820	8.4	794
Race/ethnicity (U.S. citizens only)																
American Indian [e]	10.7	107	8.3	13	D	D	9.7	21	D	D	14.1	34	10.3	22	14.3	9
Asian [f]	7.1	1,473	6.7	466	6.2	215	7.3	220	6.2	251	12.0	117	9.7	149	11.2	55
Black	10.0	1,535	7.4	254	7.1	70	9.0	298	7.3	86	12.7	554	10.0	149	12.7	124
Hispanic	8.3	1,255	6.7	244	6.0	107	8.2	280	6.5	95	12.6	253	9.4	201	10.8	75
White	8.0	20,390	6.7	4,623	6.0	2,703	7.7	3,580	6.2	1,563	13.7	3,594	9.7	3,223	11.3	1,104

D = suppressed to avoid disclosure of confidential information.

[a] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[b] Includes mathematics and computer & information sciences.

[c] Includes psychology.

[d] Includes only cases with a valid year of bachelor's award.

[e] Includes Alaska Natives.

[f] Does not include Native Hawaiians or other Pacific Islanders.

[g] Includes only cases with a valid year of graduate entry.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 20. Median age and number of doctorate recipients at different age groups, by field of study and demographic characteristics, 2006

Field of study and demographic characteristics	Median age at doctorate	Age					
		21–25	26–30	31–35	36–40	41–45	Over 45
All fields	32.7	271	15,395	13,159	5,744	2,935	4,987
Broad field of study							
Life sciences [a]	31.4	39	4,052	2,919	947	480	624
Physical sciences [b]	30.3	84	3,860	2,082	555	218	196
Social sciences [c]	32.9	30	2,187	2,155	1,018	428	626
Engineering	30.8	90	3,361	2,206	650	222	160
Education	41.7	6	453	1,196	1,076	796	2,142
Humanities	35.0	12	1,008	1,874	1,052	511	713
Other fields	36.2	10	474	727	446	280	526
Sex							
Male	32.4	171	8,797	7,663	3,324	1,479	1,863
Female	33.2	100	6,597	5,495	2,420	1,456	3,124
Citizenship							
U.S. citizen	33.4	162	9,249	6,831	3,589	2,196	4,503
Permanent resident	33.9	5	466	658	345	167	135
Temporary visa holder	31.8	102	5,591	5,563	1,759	545	296
Race/ethnicity (U.S. citizens only)							
American Indian [d]	39.1	D	19	19	25	11	43
Asian [e]	31.1	17	722	436	174	73	109
Black	36.7	8	378	388	268	180	415
Hispanic	34.2	5	409	393	206	131	212
White	33.3	123	7,416	5,377	2,806	1,735	3,594

D = suppressed to avoid disclosure of confidential information.

[a] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[b] Includes mathematics and computer & information sciences.

[c] Includes psychology.

[d] Includes Alaska Natives.

[e] Does not include Native Hawaiians or other Pacific Islanders.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 21. Percentage of doctorate recipients indicating one or more disabilities, by selected demographic characteristics, 2006

Demographic characteristic	One or more disabilities of any type		Blind/visually impaired		Physical/ orthopedic disability		Deaf/hard of hearing		Learning/ cognitive disability		Vocal/speech disability		Other/ unspecified disability	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All doctorate recipients [a]	616	1.4	68	0.1	211	0.5	80	0.2	178	0.4	19	0.0	103	0.2
Field of study														
Life sciences [b]	96	1.0	11	0.1	29	0.3	16	0.2	32	0.3	D	D	11	0.1
Physical sciences [c]	62	0.8	8	0.1	12	0.2	10	0.1	22	0.3	D	D	10	0.1
Social sciences [d]	129	1.9	14	0.2	51	0.7	18	0.3	31	0.5	D	D	20	0.3
Engineering	38	0.5	D	D	12	0.2	6	0.1	10	0.1	D	D	7	0.1
Education	146	2.4	16	0.3	53	0.9	20	0.3	39	0.6	D	D	27	0.4
Humanities	93	1.7	12	0.2	40	0.7	8	0.1	26	0.5	D	D	15	0.3
Other fields	52	1.9	6	0.2	14	0.5	D	D	18	0.7	D	D	13	0.5
Sex														
Male	293	1.2	37	0.1	91	0.4	41	0.2	79	0.3	13	0.1	46	0.2
Female	323	1.6	31	0.2	120	0.6	39	0.2	99	0.5	6	0.0	57	0.3
Citizenship														
U.S. citizens	552	2.1	55	0.2	187	0.7	65	0.2	172	0.6	16	0.1	95	0.4
Non-U.S. citizens	63	0.4	13	0.1	24	0.2	15	0.1	5	0.0	D	D	8	0.1

D = suppressed to avoid disclosure of confidential information.

[a] Total includes 1 doctorate recipient for whom citizenship is not reported.

[b] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[c] Includes mathematics and computer & information sciences.

[d] Includes psychology.

NOTE: Individual doctorate recipients could report more than one disability.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 22 (Revised June 2008). Primary source of financial support for doctorate recipients, by broad field of study and demographic group, 2006

Primary source of support and broad field of study	Total [a]	Sex		Citizenship			Race/ethnicity (U.S. citizens)				
		Male	Female	U.S. citizen	Permanent resident	Temporary visa holder	American Indian [b]	Asian [c]	Black	Hispanic	White
All fields	40,272	22,076	18,192	25,301	1,688	13,164	106	1,487	1,503	1,243	20,187
Teaching assistantships	17.4	18.2	16.5	15.5	21.3	20.6	6.6	12.2	6.9	12.7	16.7
Research assistantships/traineeships	28.6	34.2	21.9	17.3	31.8	50.0	8.5	21.6	9.6	11.7	18.0
Fellowships/dissertation grants	27.5	26.3	28.9	31.6	27.0	19.6	35.8	45.5	38.5	39.8	29.4
Own resources	21.3	15.9	27.8	30.0	15.9	5.3	40.6	16.9	38.8	30.7	30.1
Foreign government	1.4	1.6	1.1	*	1.4	4.0	D	D	D	0.4	D
Employer	3.7	3.8	3.7	5.5	2.7	0.5	7.5	3.6	6.1	4.4	5.7
Other	0.1	0.1	0.1	0.1	0.0	0.0	D	D	D	0.2	D
Life sciences [d]	8,683	4,150	4,532	5,741	399	2,521	13	466	256	245	4,591
Teaching assistantships	8.9	9.4	8.5	7.9	11.8	10.8	D	4.7	D	2.4	8.8
Research assistantships/traineeships	29.2	31.3	27.2	19.8	36.3	49.5	D	16.5	D	14.3	21.0
Fellowships/dissertation grants	46.8	46.6	47.0	53.9	42.4	31.4	46.2	68.0	63.7	69.4	50.7
Own resources	10.4	8.3	12.4	13.9	7.8	3.0	D	7.9	15.6	D	14.7
Foreign government	1.5	1.5	1.5	D	D	4.8	D	D	D	D	D
Employer	3.1	2.9	3.3	4.4	D	D	D	D	5.5	3.3	4.7
Other	0.0	0.0	0.0	D	0.0	D	0.0	D	0.0	D	D
Physical sciences [e]	6,731	4,858	1,870	3,173	324	3,213	D	221	D	108	2,682
Teaching assistantships	25.3	25.7	24.4	21.4	25.6	29.2	D	19.9	D	20.4	21.9
Research assistantships/traineeships	46.6	47.6	43.9	37.4	47.5	55.4	D	35.3	D	26.9	38.4
Fellowships/dissertation grants	21.3	20.1	24.5	30.9	18.2	12.2	D	36.2	D	47.2	29.2
Own resources	4.2	4.0	4.9	7.3	4.6	1.1	D	D	D	D	7.4
Foreign government	0.9	0.8	0.9	D	D	1.7	D	D	D	D	D
Employer	1.7	1.8	1.3	2.8	D	D	D	D	D	D	2.9
Other	0.0	0.0	0.1	D	D	D	0.0	D	D	0.0	D
Social sciences [f]	5,991	2,553	3,438	4,490	221	1,265	21	224	292	270	3,524
Teaching assistantships	23.3	28.3	19.6	19.7	29.4	34.9	D	17.4	D	14.4	21.0
Research assistantships/traineeships	16.6	14.8	18.0	16.0	14.5	19.1	D	D	12.3	12.6	17.0
Fellowships/dissertation grants	27.4	28.6	26.6	26.5	29.9	30.2	57.1	37.5	39.7	36.3	23.8
Own resources	29.7	24.4	33.7	35.6	24.9	9.8	28.6	29.5	32.9	34.1	36.1
Foreign government	1.2	2.0	0.7	D	D	5.5	D	D	D	D	D
Employer	1.7	2.0	1.4	2.1	D	D	D	D	D	2.2	2.1
Other	0.0	0.0	0.0	D	0.0	D	0.0	0.0	0.0	D	D
Engineering	6,372	5,087	1,285	2,077	269	4,002	D	257	D	93	1,553
Teaching assistantships	8.9	9.3	7.5	4.9	9.3	11.0	D	D	D	7.5	5.2
Research assistantships/traineeships	61.3	62.4	56.8	37.9	54.6	73.8	D	45.1	D	26.9	38.0
Fellowships/dissertation grants	19.3	17.3	27.5	37.7	18.2	9.9	D	34.2	59.8	D	36.8
Own resources	5.2	5.5	4.4	10.5	10.4	2.2	D	9.7	D	9.7	10.9

TABLE 22 (Revised June 2008). Primary source of financial support for doctorate recipients, by broad field of study and demographic group, 2006

Primary source of support and broad field of study	Total [a]	Sex		Citizenship			Race/ethnicity (U.S. citizens)				
		Male	Female	U.S. citizen	Permanent resident	Temporary visa holder	American Indian [b]	Asian [c]	Black	Hispanic	White
Foreign government	1.7	1.7	1.6	D	D	2.6	D	D	D	D	D
Employer	3.5	3.8	2.3	8.9	D	D	D	D	8.0	11.8	9.0
Other	0.0	0.0	0.0	D	D	D	0.0	D	0.0	D	D
Education	5,321	1,853	3,468	4,629	123	553	34	116	535	262	3,579
Teaching assistantships	7.6	7.4	7.7	6.3	17.1	16.5	D	D	3.0	4.2	6.8
Research assistantships/traineeships	9.6	8.3	10.3	7.1	24.4	27.1	D	D	7.3	3.8	7.4
Fellowships/dissertation grants	10.9	11.9	10.3	10.4	10.6	15.0	26.5	17.2	17.0	17.2	8.5
Own resources	58.8	55.3	60.8	63.2	43.9	25.7	52.9	56.0	63.0	66.0	63.3
Foreign government	1.5	2.4	1.0	D	D	13.9	D	D	D	D	D
Employer	11.3	14.4	9.7	12.7	D	D	D	D	9.3	8.4	13.7
Other	0.2	0.3	0.2	D	0.0	D	D	D	D	D	D
Humanities	4,893	2,397	2,496	3,815	252	813	21	150	149	192	3,177
Teaching assistantships	33.5	31.9	35.0	32.5	35.7	37.4	D	28.7	D	32.8	33.7
Research assistantships/traineeships	2.3	2.2	2.5	2.0	3.2	3.4	D	D	D	3.1	2.1
Fellowships/dissertation grants	33.3	34.4	32.1	32.5	32.5	37.1	28.6	49.3	55.7	37.5	30.2
Own resources	28.1	28.0	28.2	31.2	25.0	14.8	52.4	17.3	25.5	24.5	32.2
Foreign government	1.3	1.5	1.0	D	D	6.8	D	D	D	D	D
Employer	1.5	1.8	1.1	1.7	D	D	D	D	D	D	1.7
Other	0.1	0.1	0.2	D	D	D	0.0	0.0	D	0.5	D
Other fields	2,281	1,178	1,103	1,376	100	797	9	53	120	73	1,081
Teaching assistantships	22.9	23.8	22.0	19.8	28.0	27.5	D	22.6	D	13.7	21.9
Research assistantships/traineeships	14.7	14.3	15.2	9.8	20.0	22.3	D	D	6.7	9.6	10.2
Fellowships/dissertation grants	21.1	21.0	21.3	16.9	18.0	28.9	D	26.4	D	D	13.9
Own resources	32.9	31.9	34.0	44.6	22.0	14.4	D	D	49.2	43.8	44.4
Foreign government	2.4	2.9	1.8	D	D	5.8	D	D	D	D	D
Employer	5.8	6.1	5.5	8.6	D	D	D	D	6.7	D	9.5
Other	0.1	0.1	0.1	D	D	D	0.0	D	D	D	D

D = suppressed to avoid disclosure of confidential information.; * = value < 0.1%.

[a] Total includes 4 persons for whom sex was not reported, 119 missing citizenship status, and 775 U.S. citizens with missing race/ethnicity (n=183) or racial/ ethnic identifications not listed above (n=592).

[b] Includes Alaska Natives.

[c] Does not include Native Hawaiians and other Pacific Islanders.

[d] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[e] Includes mathematics and computer & information sciences.

[f] Includes psychology.

NOTE: Includes only doctorate recipients who reported a primary source of support.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 23. Education-related debt of doctorate recipients, by broad field of study, 2006

Debt level	Total		Life sciences [a]		Physical sciences [b]		Social sciences [c]		Engineering		Education		Humanities		Other fields	
Cumulative debt																
Mean	$15,172		$13,856		$9,584		$23,472		$8,403		$17,626		$19,924		$17,743	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	21,268	52.4	4,526	51.8	4,289	63.3	2,293	37.9	4,330	67.5	2,652	49.0	2,018	40.9	1,160	50.3
$10,000 or less	4,629	11.4	1,059	12.1	756	11.2	603	10.0	753	11.7	598	11.1	601	12.2	259	11.2
$10,001-$20,000	3,604	8.9	930	10.6	639	9.4	548	9.1	428	6.7	396	7.3	515	10.4	148	6.4
$20,001-$30,000	2,664	6.6	694	7.9	328	4.8	493	8.2	279	4.3	344	6.4	390	7.9	136	5.9
$30,001-$40,000	1,743	4.3	381	4.4	194	2.9	359	5.9	142	2.2	266	4.9	286	5.8	115	5.0
$40,001-$50,000	1,620	4.0	320	3.7	168	2.5	384	6.4	100	1.6	270	5.0	280	5.7	98	4.3
$50,001 and up	5,098	12.5	832	9.5	404	6.0	1,366	22.6	384	6.0	882	16.3	842	17.1	388	16.8
Total	40,626	100.0	8,742	100.0	6,778	100.0	6,046	100.0	6,416	100.0	5,408	100.0	4,932	100.0	2,304	100.0
Graduate debt																
Mean	$9,894		$7,642		$5,025		$16,815		$4,917		$12,750		$13,951		$13,078	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	27,619	68.1	6,349	72.8	5,366	79.3	3,251	53.9	5,061	78.9	3,352	62.1	2,829	57.4	1,411	61.3
$10,000 or less	3,092	7.6	641	7.3	505	7.5	416	6.9	531	8.3	406	7.5	399	8.1	194	8.4
$10,001-$20,000	1,896	4.7	394	4.5	246	3.6	357	5.9	232	3.6	253	4.7	312	6.3	102	4.4
$20,001-$30,000	1,517	3.7	306	3.5	159	2.3	303	5.0	146	2.3	241	4.5	271	5.5	91	4.0
$30,001-$40,000	1,185	2.9	255	2.9	110	1.6	237	3.9	88	1.4	210	3.9	204	4.1	81	3.5
$40,001-$50,000	1,089	2.7	177	2.0	94	1.4	273	4.5	81	1.3	194	3.6	193	3.9	77	3.3
$50,001 and up	4,164	10.3	600	6.9	286	4.2	1,198	19.9	273	4.3	744	13.8	717	14.6	346	15.0
Total	40,562	100.0	8,722	100.0	6,766	100.0	6,035	100.0	6,412	100.0	5,400	100.0	4,925	100.0	2,302	100.0
Undergraduate debt																
Mean	$5,304		$6,245		$4,575		$6,698		$3,494		$4,908		$6,005		$4,685	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	29,318	72.3	5,874	67.3	5,047	74.6	4,028	66.7	5,152	80.4	4,103	76.1	3,337	67.8	1,777	77.3
$10,000 or less	3,663	9.0	867	9.9	572	8.5	595	9.9	487	7.6	415	7.7	549	11.2	178	7.7
$10,001-$20,000	3,220	7.9	861	9.9	559	8.3	566	9.4	335	5.2	327	6.1	451	9.2	121	5.3
$20,001-$30,000	2,077	5.1	576	6.6	301	4.4	394	6.5	217	3.4	224	4.2	272	5.5	93	4.0
$30,001-$40,000	1,090	2.7	284	3.3	144	2.1	216	3.6	93	1.5	144	2.7	151	3.1	58	2.5
$40,001-$50,000	659	1.6	147	1.7	77	1.1	148	2.5	57	0.9	105	1.9	95	1.9	30	1.3
$50,001 and up	522	1.3	114	1.3	67	1.0	89	1.5	67	1.0	75	1.4	67	1.4	43	1.9
Total	40,549	100.0	8,723	100.0	6,767	100.0	6,036	100.0	6,408	100.0	5,393	100.0	4,922	100.0	2,300	100.0

[a] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[b] Includes mathematics and computer & information sciences.

[c] Includes psychology.

NOTES: Mean calculations are based on all valid responses to the debt item. See appendix C for details on calculations of means.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 24. Education-related debt of doctorate recipients, by demographic group, 2006

Debt level	Sex				Citizenship						Race/ethnicity (U.S. citizens)									
	Male		Female		U.S. citizen		Permanent resident		Temporary visa holder		American Indian [a]		Asian [b]		Black		Hispanic		White	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Cumulative debt																				
Mean	$14,196		$16,357		$19,564		$9,035		$7,543		$28,271		$14,722		$31,832		$24,467		$18,572	
No debt	11,934	53.6	9,333	50.8	10,544	41.3	1,155	67.7	9,492	71.6	28	26.2	738	49.4	379	24.6	370	29.4	8,709	42.8
$10,000 or less	2,661	12.0	1,967	10.7	2,924	11.5	181	10.6	1,511	11.4	17	15.9	161	10.8	160	10.4	179	14.2	2,323	11.4
$10,001-$20,000	2,010	9.0	1,593	8.7	2,836	11.1	104	6.1	656	4.9	9	8.4	190	12.7	132	8.6	147	11.7	2,278	11.2
$20,001-$30,000	1,444	6.5	1,220	6.6	2,213	8.7	64	3.8	384	2.9	10	9.3	118	7.9	132	8.6	130	10.3	1,760	8.6
$30,001-$40,000	907	4.1	836	4.6	1,476	5.8	44	2.6	219	1.7	D	D	71	4.7	106	6.9	83	6.6	1,171	5.8
$40,001-$50,000	837	3.8	783	4.3	1,389	5.4	36	2.1	187	1.4	D	D	60	4.0	115	7.5	84	6.7	1,077	5.3
$50,001 and up	2,472	11.1	2,626	14.3	4,153	16.3	121	7.1	814	6.1	33	30.8	157	10.5	515	33.5	264	21.0	3,031	14.9
Total	22,265	100.0	18,358	100.0	25,535	100.0	1,705	100.0	13,263	100.0	107	100.0	1,495	100.0	1,539	100.0	1,257	100.0	20,349	100.0
Graduate debt																				
Mean	$8,862		$11,146		$12,530		$6,213		$5,320		$19,579		$8,394		$22,220		$15,455		$11,820	
No debt	15,506	69.8	12,112	66.1	15,878	62.3	1,313	77.1	10,337	78.0	52	48.6	1,094	73.4	656	42.7	664	53.0	12,943	63.7
$10,000 or less	1,806	8.1	1,285	7.0	1,836	7.2	125	7.3	1,125	8.5	8	7.5	90	6.0	111	7.2	123	9.8	1,446	7.1
$10,001-$20,000	1,040	4.7	856	4.7	1,367	5.4	53	3.1	470	3.5	D	D	61	4.1	88	5.7	81	6.5	1,095	5.4
$20,001-$30,000	779	3.5	738	4.0	1,175	4.6	49	2.9	290	2.2	9	8.4	46	3.1	100	6.5	69	5.5	910	4.5
$30,001-$40,000	598	2.7	587	3.2	944	3.7	33	1.9	205	1.5	6	5.6	32	2.1	73	4.8	52	4.1	758	3.7
$40,001-$50,000	558	2.5	531	2.9	870	3.4	32	1.9	183	1.4	D	D	36	2.4	74	4.8	57	4.5	678	3.3
$50,001 and up	1,943	8.7	2,221	12.1	3,421	13.4	97	5.7	639	4.8	27	25.2	132	8.9	434	28.3	208	16.6	2,485	12.2
Total	22,230	100.0	18,330	100.0	25,491	100.0	1,702	100.0	13,249	100.0	107	100.0	1,491	100.0	1,536	100.0	1,254	100.0	20,315	100.0
Undergraduate debt																				
Mean	$5,357		$5,238		$7,066		$2,840		$2,234		$8,692		$6,355		$9,674		$9,078		$6,781	
No debt	16,013	72.0	13,303	72.6	16,273	63.8	1,431	84.1	11,518	87.0	57	53.3	985	65.9	888	57.8	690	55.1	13,148	64.7
$10,000 or less	2,043	9.2	1,620	8.8	2,758	10.8	106	6.2	790	6.0	23	21.5	141	9.4	167	10.9	170	13.6	2,173	10.7
$10,001-$20,000	1,761	7.9	1,458	8.0	2,753	10.8	76	4.5	385	2.9	8	7.5	184	12.3	162	10.5	153	12.2	2,167	10.7
$20,001-$30,000	1,152	5.2	925	5.0	1,835	7.2	34	2.0	204	1.5	5	4.7	101	6.8	125	8.1	114	9.1	1,442	7.1
$30,001-$40,000	600	2.7	490	2.7	915	3.6	24	1.4	149	1.1	7	7	42	2.8	83	5.4	58	4.6	694	3.4
$40,001-$50,000	349	1.6	310	1.7	568	2.2	18	1.1	71	0.5	D	D	22	1.5	54	3.5	39	3.1	425	2.1
$50,001 and up	308	1.4	214	1.2	393	1.5	12	0.7	115	0.9	D	D	19	1.3	57	3.7	29	2.3	272	1.3
Total	22,226	100.0	18,320	100.0	25,495	100.0	1,701	100.0	13,232	100.0	107	100.0	1,494	100.0	1,536	100.0	1,253	100.0	20,321	100.0

D = suppressed to avoid disclosure of confidential information.

[a] Includes Alaska Natives.

[b] Does not include Native Hawaiians or other Pacific Islanders.

NOTES: Mean calculations are based on all valid responses to the debt item. See Appendix C for details on calculations of means.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 25. Number of U.S. citizen doctorate recipients reporting graduate school debt and percentage with levels of graduate school debt greater than $30,000, by broad field of study and race/ethnicity, 2006

Broad field of study	Total [a]		American Indian [b]		Asian [c]		Black		Hispanic		White		Other [d]	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All fields	25,491	20.5	107	32.7	1,491	13.4	1,536	37.8	1,254	25.3	20,315	19.3	471	24.6
Life sciences [e]	5,759	14.2	14	35.7	463	11.4	258	25.2	246	14.2	4,607	13.9	109	10.1
Physical sciences [f]	3,180	9.9	D	D	220	6.4	66	28.8	107	9.3	2,691	9.8	48	D
Social sciences [g]	4,521	34.0	21	38.1	225	26.2	296	47.6	271	41.3	3,545	32.7	107	37.4
Engineering	2,088	6.8	D	D	256	3.9	88	19.3	95	7.4	1,562	6.7	43	D
Education	4,698	21.6	34	17.6	119	23.5	553	41.6	266	25.6	3,619	18.0	59	32.2
Humanities	3,844	26.5	21	52.4	152	16.4	151	35.1	196	30.1	3,194	25.7	83	37.3
Other fields	1,401	28.0	9	D	56	19.6	124	45.2	73	35.6	1,097	25.5	22	31.8

D = suppressed to avoid disclosure of confidential information.

[a] Includes U.S. citizens who did not report race or ethnicity.

[b] Includes Alaska Natives.

[c] Does not include Native Hawaiians or other Pacific Islanders.

[d] Includes Native Hawaiians or other Pacific Islanders and respondents choosing multiple races (excluding those selecting an Hispanic ethnicity) in 2006.

[e] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[f] Includes mathematics and computer & information sciences.

[g] Includes psychology.

NOTE: Cell percentages are calculated on the number of cases listed in the adjacent cell.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 26. Postgraduation status of doctorate recipients, by broad field of study for selected years, 1986–2006

Year and commitments	All fields	Life sciences [a]	Physical sciences [b]	Social sciences [c]	Engineering	Education	Humanities	Other fields
	Number							
All doctorate recipients								
1986	31,897	5,767	4,772	5,893	3,375	6,649	3,460	1,981
1991	37,530	6,967	6,244	6,151	5,213	6,454	4,099	2,402
1996	42,437	8,337	6,592	6,822	6,309	6,785	5,114	2,478
2001	40,737	8,370	5,864	6,794	5,511	6,349	5,615	2,234
2006	45,596	9,683	7,461	6,873	7,191	6,123	5,576	2,689
All responses to postgraduation status								
1986	28,963	5,326	4,284	5,337	2,960	6,140	3,137	1,779
1991	34,350	6,481	5,732	5,587	4,597	5,976	3,807	2,170
1996	38,624	7,689	6,039	6,186	5,743	6,054	4,700	2,213
2001	37,117	7,717	5,400	6,146	5,025	5,668	5,158	2,003
2006 [d]	41,221	8,850	6,876	6,130	6,498	5,491	5,014	2,362
	Percent							
Definite commitments for employment or study [e]								
1986	73.5	75.8	76.5	72.0	69.8	75.4	63.9	81.2
1991	70.5	74.0	70.4	69.8	62.5	74.7	64.2	78.6
1996	67.5	70.7	67.6	65.5	63.6	74.1	58.5	73.3
2001	72.9	72.9	76.5	72.8	72.5	74.3	65.6	78.3
2006	72.2	72.1	73.4	75.1	66.5	75.8	67.5	78.0
Without definite commitments for employment or study [e, f]								
1986	26.5	24.2	23.5	28.0	30.2	24.6	36.1	18.8
1991	29.5	26.0	29.6	30.2	37.5	25.3	35.8	21.4
1996	32.5	29.3	32.4	34.5	36.4	25.9	41.5	26.7
2001	27.1	27.1	23.5	27.2	27.5	25.7	34.4	21.7
2006 [d]	27.8	27.9	26.6	24.9	33.5	24.2	32.5	22.0

[a] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[b] Includes mathematics and computer & information sciences.

[c] Includes psychology.

[d] Does not include respondents who indicated 'do not plan to work or study' in 2006.

[e] Percent calculated on those responding to the item on postgraduation status.

[f] Includes respondents who indicated 'other' in all years.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 27. Postgraduation status of doctorate recipients, by selected demographic groups for selected years, 1986–2006

Year and status	Total	Sex		Citizenship			Race/ethnicity (U.S. citizens only)				
		Men	Women	U.S. citizen	Permanent resident	Temporary visa holder	American Indian [a]	Asian [b]	Black	Hispanic	White
	Number										
All doctorate recipients											
1986	31,897	20,592	11,305	23,097	1,431	5,318	99	531	824	572	20,640
1991 [c]	37,530	23,521	13,873	25,583	1,851	9,374	130	787	1,011	733	22,428
1996 [d]	42,437	25,285	16,955	27,777	3,765	9,735	185	1,066	1,305	957	23,846
2001 [e]	40,737	22,775	17,885	27,042	1,832	9,810	149	1,413	1,614	1,123	21,921
2006 [f]	45,596	24,986	20,539	26,917	1,829	14,118	118	1,560	1,659	1,370	21,280
All responses to postgraduation status											
1986	28,963	18,514	10,449	22,646	1,342	4,947	96	504	803	554	20,316
1991	34,350	21,490	12,855	24,300	1,713	8,332	125	732	912	692	21,540
1996	38,624	23,115	15,504	26,162	3,530	8,902	170	1,000	1,172	901	22,652
2001	37,117	20,813	16,303	26,039	1,735	9,299	141	1,371	1,503	1,072	21,224
2006 [g]	41,221	22,656	18,562	25,927	1,746	13,473	106	1,513	1,574	1,283	20,635
	Percent										
Definite commitment for employment or study [h]											
1986	73.5	75.1	70.8	75.1	61.1	69.7	66.7	68.5	73.0	71.8	75.5
1991	70.5	70.3	70.8	73.9	57.2	63.4	68.0	69.8	71.9	71.7	74.2
1996	67.5	67.6	67.4	70.5	60.1	61.5	70.0	66.8	70.0	71.7	70.7
2001	72.9	74.2	71.1	73.8	66.3	71.4	70.9	69.7	70.9	74.9	74.5
2006	72.2	73.2	70.9	74.7	66.4	68.0	71.7	71.2	70.6	71.8	75.5
Without definite commitment for employment or study [h, i]											
1986	26.5	24.9	29.2	24.9	38.9	30.3	33.3	31.5	27.0	28.2	24.5
1991	29.5	29.7	29.2	26.1	42.8	36.6	32.0	30.2	28.1	28.3	25.8
1996	32.5	32.4	32.6	29.5	39.9	38.5	30.0	33.2	30.0	28.3	29.3
2001	27.1	25.8	28.9	26.2	33.7	28.6	29.1	30.3	29.1	25.1	25.5
2006 [g]	27.8	26.8	29.1	25.3	33.6	32.0	28.3	28.8	29.4	28.2	24.5

[a] Includes Alaska Natives.

[b] Includes Native Hawaiians or other Pacific Islanders through 2000, but excludes them from 2001-2006.

[c] Group total for 1991 includes 136 doctorate recipients for whom sex was not reported.

[d] Group total for 1996 includes 197 doctorate recipients for whom sex was not reported.

[e] Group total for 2001 includes 77 doctorate recipients for whom sex was not reported.

[f] Group total for 2006 includes 71 doctorate recipients for whom sex was not reported.

[g] Does not include respondents who indicated 'do not plan to work or study' in 2006.

[h] Percent calculated on those responding to the item on postgraduation status.

[i] Includes respondents who indicated 'other' in all years.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 28. Postgraduation plans of doctorate recipients with definite commitments, by broad field of study for selected years,1986-2006

Year and commitments	All fields	Life sciences [a]	Physical sciences [b]	Social sciences [c]	Engineering	Education	Humanities	Other fields
	Count							
All definite commitments								
1986	21,300	4,036	3,277	3,842	2,066	4,629	2,006	1,444
1991	24,217	4,798	4,034	3,902	2,871	4,462	2,445	1,705
1996	26,072	5,434	4,081	4,049	3,652	4,484	2,749	1,623
2001	27,045	5,628	4,132	4,477	3,643	4,213	3,383	1,569
2006	29,745	6,384	5,044	4,606	4,322	4,161	3,386	1,842
Definite commitments with responses to type of plans								
1986	21,185	4,021	3,267	3,817	2,059	4,600	1,982	1,439
1991	24,114	4,788	4,029	3,893	2,861	4,419	2,428	1,696
1996	26,026	5,426	4,075	4,042	3,646	4,477	2,741	1,619
2001	26,899	5,610	4,121	4,454	3,629	4,181	3,348	1,556
2006	29,137	6,242	4,980	4,517	4,256	4,045	3,296	1,801
	Percent [d]							
Employment								
1986	75.9	41.5	55.6	84.1	81.1	97.1	92.4	98.0
1991	72.5	37.6	51.5	82.6	78.9	96.1	92.5	97.1
1996	70.5	35.2	50.1	77.5	77.5	97.2	92.4	96.4
2001	71.0	39.1	55.4	73.6	81.1	94.1	89.8	93.7
2006	66.1	35.4	48.1	70.8	70.4	95.2	88.6	94.3
Study								
1986	24.1	58.5	44.4	15.9	18.9	2.9	7.6	2.0
1991	27.5	62.4	48.5	17.4	21.1	3.9	7.5	2.9
1996	29.5	64.8	49.9	22.5	22.5	2.8	7.6	3.6
2001	29.0	60.9	44.6	26.4	18.9	5.9	10.2	6.3
2006	33.9	64.6	51.9	29.2	29.6	4.8	11.4	5.7

[a] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[b] Includes mathematics and computer & information sciences.

[c] Includes psychology.

[d] Percentages are based on the number reporting definite commitments with responses to type of plan (employment or study).

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 29. Postgraduation plans of doctorate recipients with definite commitments, by demographic group for selected years, 1986–2006

Year and commitment	Total	Sex		Citizenship			Race/ethnicity (U.S. citizens only)				
		Male	Female	U.S. citizen	Permanent resident	Temporary visa holder	American Indian [a]	Asian [b]	Black	Hispanic	White
	Count										
All definite commitments											
1986	21,300	13,904	7,396	17,017	820	3,450	64	345	586	398	15,344
1991	24,217	15,116	9,096	17,950	979	5,284	85	511	656	496	15,985
1996	26,072	15,618	10,449	18,457	2,121	5,478	119	668	820	646	16,025
2001	27,045	15,450	11,594	19,224	1,151	6,644	100	956	1,065	803	15,804
2006	29,745	16,585	13,158	19,366	1,159	9,163	76	1,078	1,112	921	15,587
Definite commitments with responses to type of plans											
1986	21,185	13,840	7,345	16,937	818	3,418	63	342	579	398	15,276
1991	24,114	15,053	9,056	17,879	971	5,260	85	509	647	495	15,926
1996	26,026	15,591	10,430	18,429	2,115	5,467	119	667	819	646	15,999
2001	26,899	15,379	11,520	19,127	1,147	6,606	99	953	1,061	798	15,729
2006	29,137	16,280	12,855	18,949	1,126	9,017	75	1,054	1,080	892	15,278
	Percent [c]										
Employment											
1986	75.9	73.5	80.2	77.6	75.8	67.1	71.4	62.3	88.4	80.2	77.6
1991	72.5	69.8	77.0	75.6	69.5	62.5	77.6	63.3	87.2	76.0	75.6
1996	70.5	68.0	74.3	74.7	59.4	60.7	83.2	57.7	86.3	74.8	74.8
2001	71.0	70.0	72.2	72.9	69.1	65.7	81.8	61.2	78.0	72.1	73.3
2006	66.1	64.4	68.3	69.4	65.0	59.4	84.0	54.9	77.5	70.5	69.8
Study											
1986	24.1	26.5	19.8	22.4	24.2	32.9	28.6	37.7	11.6	19.8	22.4
1991	27.5	30.2	23.0	24.4	30.5	37.5	22.4	36.7	12.8	24.0	24.4
1996	29.5	32.0	25.7	25.3	40.6	39.3	16.8	42.3	13.7	25.2	25.2
2001	29.0	30.0	27.8	27.1	30.9	34.3	18.2	38.8	22.0	27.9	26.7
2006	33.9	35.6	31.7	30.6	35.0	40.6	16.0	45.1	22.5	29.5	30.2

[a] Includes Alaska Natives.

[b] Includes Native Hawaiians or other Pacific Islanders through 2000, but excludes them from 2001-2006.

[c] Percent based on those with definite commitments and type of plan.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 30. Employment sector of doctorate recipients with definite postgraduation employment commitments in the U.S., by broad field of study for selected years, 1986–2006

Year and commitment	Total	Life sciences [a]	Physical sciences [b]	Social sciences [c]	Engineering	Education	Humanities	Other fields
	Count							
All employment commitments								
1986	14,459	1,345	1,637	2,926	1,408	4,187	1,674	1,282
1991	15,465	1,427	1,837	2,888	1,831	3,997	2,011	1,474
1996	16,271	1,542	1,829	2,749	2,428	4,113	2,296	1,314
2001	17,297	1,846	2,115	2,922	2,627	3,708	2,770	1,309
2006	17,411	1,953	2,189	2,809	2,664	3,656	2,663	1,477
Employment commitments with responses to sector								
1986	14,299	1,333	1,632	2,877	1,395	4,127	1,658	1,277
1991	15,311	1,413	1,826	2,844	1,825	3,943	1,996	1,464
1996	16,177	1,532	1,823	2,727	2,421	4,084	2,285	1,305
2001	17,069	1,814	2,082	2,888	2,603	3,650	2,740	1,292
2006	16,562	1,818	2,083	2,670	2,545	3,503	2,533	1,410
	Percent [d]							
Academe								
1986	49.5	52.4	35.1	45.8	32.2	44.4	77.4	72.8
1991	52.6	51.6	38.8	51.8	25.9	47.2	84.4	77.1
1996	49.1	52.1	34.6	52.7	14.2	46.8	81.7	73.7
2001	49.0	46.6	30.9	53.6	13.5	49.8	80.8	73.2
2006	53.6	50.7	38.3	62.4	14.9	53.2	85.2	77.4
Industry/self-employed								
1986	21.5	25.7	53.6	18.6	55.2	7.1	7.1	10.6
1991	21.4	25.5	48.5	17.6	60.5	5.8	4.1	7.5
1996	26.1	24.7	55.6	18.3	73.2	6.3	5.3	13.3
2001	29.8	33.6	59.8	20.9	76.7	6.7	7.2	14.5
2006	26.3	27.9	53.3	15.0	76.3	3.8	4.2	11.6
Government								
1986	10.9	15.7	9.1	15.7	10.8	11.3	3.6	6.2
1991	8.7	14.9	9.9	12.9	11.2	6.7	2.4	3.9
1996	8.0	15.3	7.1	11.6	10.7	6.4	1.5	4.3
2001	6.6	11.8	5.7	10.9	7.4	4.5	2.1	4.6
2006	6.3	13.0	5.9	10.1	5.9	4.0	2.3	5.0
Other [e]								
1986	18.0	6.3	2.1	19.9	1.9	37.2	11.8	10.3
1991	17.3	8.0	2.7	17.7	2.5	40.3	9.1	11.5
1996	16.8	8.0	2.7	17.4	1.9	40.5	11.5	8.7
2001	14.6	7.9	3.6	14.6	2.3	38.9	9.8	7.7
2006	13.7	8.4	2.4	12.5	2.9	39.0	8.3	6.0

[a] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[b] Includes mathematics and computer & information sciences.

[c] Includes psychology.

[d] Percent based on those with definite employment commitments and sector.

[e] "Other" is mainly composed of elementary and secondary schools and non-profit organizations.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 31. Employment sector of doctorate recipients with definite postgraduation employment commitments in the U.S., by selected demographic characteristics for selected years, 1986–2006

Commitments	Total	Sex		Citizenship			Race/ethnicity (U.S. citizens only)				
		Male	Female	U.S. citizen	Permanent resident	Temporary visa holder	American Indian [a]	Asian [b]	Black	Hispanic	White
	Count										
All employment commitments											
1986	14,459	8,847	5,612	12,982	514	954	44	206	510	316	11,708
1991 [c]	15,465	8,919	6,544	13,263	582	1,618	63	314	561	371	11,811
1996 [d]	16,271	9,064	7,205	13,501	1,130	1,628	99	367	698	476	11,733
2001	17,297	9,547	7,750	13,648	732	2,908	79	561	821	568	11,275
2006 [e]	17,411	9,295	8,115	12,856	684	3,838	61	543	832	609	10,439
Employment commitments with responses to sector											
1986	14,299	8,773	5,526	12,856	510	925	43	204	493	311	11,613
1991 [c]	15,311	8,849	6,460	13,127	578	1,604	63	312	554	368	11,690
1996 [d]	16,177	9,028	7,147	13,421	1,122	1,622	99	361	692	474	11,668
2001	17,069	9,415	7,654	13,468	721	2,871	79	555	797	560	11,136
2006 [e]	16,562	8,816	7,745	12,241	628	3,667	58	516	777	574	9,979
	Percent [f]										
Academe											
1986	49.5	46.7	54.1	48.5	51.0	63.1	62.8	35.8	50.1	56.6	48.4
1991	52.6	48.7	58.1	52.3	53.3	55.1	54.0	39.4	58.5	63.3	52.0
1996	49.1	43.5	56.2	51.8	38.6	34.3	54.5	31.6	52.7	60.5	52.0
2001	49.0	43.1	56.3	53.3	42.3	30.6	54.4	39.5	52.8	60.4	53.7
2006	53.6	48.7	59.2	57.9	49.5	40.0	70.7	44.2	53.8	57.7	59.0
Industry/self-employed											
1986	21.5	26.1	14.1	20.1	38.0	31.4	D	40.7	7.1	11.9	20.5
1991	21.4	27.2	13.3	18.6	36.7	38.3	12.7	41.3	7.0	12.5	18.7
1996	26.1	34.8	15.0	19.9	51.0	59.7	12.1	48.8	10.4	14.6	19.8
2001	29.8	38.9	18.6	21.4	47.6	64.7	19.0	45.0	12.9	14.6	21.0
2006	26.3	34.8	16.7	17.0	39.0	55.5	D	35.3	9.8	15.0	16.6
Government											
1986	10.9	11.7	9.7	11.8	5.7	2.4	D	11.3	15.6	14.5	11.5
1991	8.7	9.5	7.6	9.8	4.0	1.9	9.5	10.9	9.6	8.2	9.8
1996	8.0	8.7	7.0	9.0	4.5	1.6	15.2	10.2	10.5	8.9	8.9
2001	6.6	7.2	5.8	7.8	3.6	1.7	10.1	7.4	9.8	8.2	7.6
2006	6.3	6.5	6.1	8.0	3.3	1.3	D	10.3	10.7	9.4	7.5
Other [g]											
1986	18.0	15.4	22.2	19.6	5.3	3.1	16.3	12.3	27.2	17.0	19.6
1991	17.3	14.7	20.9	19.3	6.1	4.7	23.8	8.3	24.9	16.0	19.5
1996	16.8	12.9	21.8	19.2	6.0	4.4	18.2	9.4	26.3	16.0	19.3
2001	14.6	10.8	19.3	17.5	6.5	3.0	16.5	8.1	24.5	16.8	17.7
2006	13.7	10.0	18.0	17.1	8.1	3.3	10.3	10.3	25.7	17.9	16.9

D = suppressed to avoid disclosure of confidential information.

[a] Includes Alaska Natives.

[b] Includes Native Hawaiians or other Pacific Islanders through 2000, but excludes them from 2001-2006.

[c] Total for 1991 includes 2 respondents not reporting sex.

[d] Total for 1996 includes 2 respondents not reporting sex.

[e] Total for 2006 includes 1 respondent not reporting sex.

[f] Percent based on those with definite employment commitments and sector.

[g] "Other" is mainly composed of elementary and secondary schools and non-profit organizations.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 32 (Revised June 2008). Sources of support for doctorate recipients with postgraduation plans for postdoctoral study, by selected demographic characteristics for selected years, 1986–2006

Commitments	Total	Sex		Citizenship			Race/ethnicity (U.S. citizens only)				
		Male	Female	U.S. citizen	Permanent resident	Temporary visa holder	American Indian [a]	Asian [b]	Black	Hispanic	White
	Count										
All postgraduate study commitments											
1986	4,372	3,149	1,223	3,360	155	855	17	118	46	59	3,049
1991 [c]	5,671	3,915	1,755	3,856	227	1,587	15	164	52	100	3,469
1996 [d]	6,540	4,238	2,301	4,092	723	1,723	18	245	80	137	3,572
2001	6,551	3,910	2,641	4,409	293	1,842	14	312	174	171	3,629
2006 [e]	7,987	4,682	3,304	4,858	304	2,815	11	371	186	209	3,919
Postgraduate study commitments with responses to source of support											
1986	4,103	2,955	1,148	3,148	144	809	15	108	45	56	2,859
1991 [c]	5,367	3,727	1,639	3,625	219	1,523	14	152	48	91	3,266
1996 [d]	6,281	4,094	2,186	3,943	684	1,652	18	233	74	133	3,447
2001	6,467	3,863	2,604	4,357	287	1,817	14	307	172	169	3,588
2006 [e]	7,880	4,619	3,260	4,796	298	2,777	11	366	182	204	3,872
	Percent [f]										
U.S. government											
1986	47.7	48.2	46.5	53.8	41.7	25.1	60.0	58.3	53.3	51.8	53.6
1991	40.9	39.7	43.8	49.7	34.7	20.9	57.1	49.3	43.8	39.6	50.1
1996	38.4	37.7	39.8	45.1	40.6	21.4	44.4	38.2	24.3	45.9	45.9
2001	33.7	34.4	32.6	40.1	30.0	18.9	D	37.8	30.8	45.6	40.5
2006	30.3	29.9	30.7	37.3	26.5	18.5	D	35.5	28.0	37.3	37.9
College or university											
1986	22.7	24.0	19.3	16.9	26.4	44.5	D	16.7	24.4	16.1	16.8
1991	27.1	28.8	23.4	20.6	26.5	42.8	D	25.7	37.5	31.9	19.8
1996	29.9	31.8	26.3	24.0	31.4	43.3	27.8	26.6	36.5	28.6	23.4
2001	38.5	38.5	38.6	33.4	44.6	49.8	D	30.6	43.0	36.1	33.1
2006	48.3	49.6	46.4	42.1	47.0	59.0	D	42.6	48.4	44.1	41.8
Private foundation											
1986	12.3	11.2	15.2	12.7	9.7	11.4	D	13.0	D	16.1	12.7
1991	11.7	11.0	13.4	11.1	16.9	12.4	D	13.8	10.4	11.0	11.1
1996	10.3	10.2	10.5	10.4	7.6	11.1	D	12.4	23.0	9.0	10.0
2001	7.5	7.2	8.1	8.3	3.8	6.4	D	7.2	8.1	4.1	8.5
2006	5.4	4.8	6.2	6.2	4.4	4.0	D	7.1	9.9	5.9	6.0
Nonprofit, other than private foundation											
1986	2.8	2.7	3.0	2.6	6.3	2.8	D	D	D	D	2.6
1991	2.6	2.4	2.8	2.2	3.2	3.4	D	D	D	D	2.2
1996	3.2	3.1	3.6	2.8	3.9	4.1	D	3.9	D	D	2.8
2001	3.0	2.6	3.6	2.6	4.2	4.0	D	3.3	2.9	D	2.6
2006	2.7	2.4	3.1	2.5	3.7	3.0	D	2.2	4.4	3.4	2.4

TABLE 32 (Revised June 2008). Sources of support for doctorate recipients with postgraduation plans for postdoctoral study, by selected demographic characteristics for selected years, 1986–2006

		Sex		Citizenship			Race/ethnicity (U.S. citizens only)				
Commitments	Total	Male	Female	U.S. citizen	Permanent resident	Temporary visa holder	American Indian[a]	Asian[b]	Black	Hispanic	White
Other											
1986	7.2	7.6	6.2	6.8	6.9	8.7	0.0	4.6	6.7	10.7	6.9
1991	10.8	11.5	9.0	9.6	11.0	13.5	7.1	7.2	D	12.1	9.6
1996	10.0	9.9	10.2	9.6	8.2	11.8	5.6	10.3	D	8.3	9.7
2001	11.1	11.5	10.4	9.7	12.5	14.1	14.3	12.7	8.1	8.9	9.5
2006	8.7	8.8	8.5	7.5	9.1	10.6	9.1	7.7	5.5	6.4	7.7
Unknown											
1986	7.4	6.4	9.8	7.2	9.0	7.5	0.0	D	6.7	D	7.5
1991	6.9	6.5	7.6	6.8	7.8	7.0	0.0	D	4.2	D	7.2
1996	8.1	7.3	9.7	8.1	8.2	8.2	5.6	8.6	9.5	D	8.1
2001	6.2	5.8	6.7	6.0	4.9	6.8	0.0	8.5	7.0	D	5.8
2006	4.8	4.5	5.1	4.3	9.4	5.0	9.1	4.9	3.8	2.9	4.3

D = suppressed to avoid disclosure of confidential information.

[a] Includes Alaska Natives.

[b] Includes Native Hawaiians or other Pacific Islanders through 2000, but excludes them from 2001-2006.

[c] Total for 1991 includes 1 respondent not reporting sex.

[d] Total for 1996 includes 1 respondent not reporting sex.

[e] Total for 2006 includes 1 respondent not reporting sex.

[f] Percent based on those with definite commitments for postdoctoral study or training.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 33. Postgraduation location and type of plan of non-U.S. citizen doctorate recipients with definite postgraduation commitments, by major field of study and visa residency status, 2006

Field of study	Permanent residents					Temporary visa holders				
		U.S. location		Foreign location			U.S. location		Foreign location	
	Number of responses	Employment percent	Study percent	Employment percent	Study percent	Number of responses	Employment percent	Study percent	Employment percent	Study percent
All fields	1,125	60.8	33.2	4.3	1.8	9,010	42.6	34.1	16.8	6.5
Life sciences	256	29.7	66.8	D	D	1,733	16.1	64.5	12.4	7.0
Agricultural sciences/natural resource	21	42.9	47.6	D	D	264	21.6	37.9	31.4	9.1
Biological/biomedical sciences	183	21.9	75.4	D	D	1,229	11.0	77.5	4.6	7.0
Health sciences	52	51.9	44.2	D	D	240	36.3	27.1	31.7	5.0
Physical sciences	223	50.7	44.8	D	D	2,315	37.9	44.8	7.8	9.5
Chemistry	61	37.7	57.4	D	D	627	25.2	64.3	5.3	5.3
Computer sciences	58	87.9	8.6	D	D	541	69.9	14.2	11.6	4.3
Earth, atmospheric, & marine science	17	D	82.4	D	D	161	24.2	46.6	13.0	16.1
Mathematics	47	55.3	40.4	D	D	467	45.0	35.5	8.6	10.9
Physics & astronomy	40	D	67.5	D	D	519	17.7	60.9	4.6	16.8
Social sciences	153	62.1	28.8	D	D	940	45.6	14.8	31.9	7.7
Anthropology	8	D	D	D	D	17	D	D	41.2	35.3
Economics	50	82.0	D	D	D	477	50.1	6.3	39.6	4.0
Political science/international relations	14	57.1	28.6	D	D	111	49.5	12.6	29.7	8.1
Psychology	48	45.8	50.0	D	D	153	30.1	46.4	14.4	9.2
Sociology	15	D	D	D	D	64	D	D	25.0	18.8
Other social sciences	18	66.7	22.2	D	D	118	51.7	10.2	28.0	10.2
Engineering	189	80.4	17.5	D	D	2,595	57.6	26.5	12.2	3.7
Aerospace/aeronautical engineering	6	D	D	D	D	74	44.6	32.4	D	D
Chemical & related engineering	17	52.9	41.2	D	D	298	48.0	33.6	14.4	4.0
Civil & related engineering	23	69.6	26.1	D	D	293	53.6	27.6	12.6	6.1
Electrical & related engineering	68	89.7	8.8	D	D	941	70.9	16.4	10.3	2.4
Industrial engineering	6	D	D	D	D	73	61.6	19.2	D	D
Materials/metallurgical engineering	12	91.7	D	D	D	210	48.6	34.8	11.0	5.7
Mechanical & related engineering	24	87.5	D	D	D	418	51.0	31.6	13.2	4.3
Other engineering	33	75.8	21.2	D	D	288	46.5	37.8	11.8	3.8
Education	63	82.5	11.1	D	D	318	36.8	5.7	49.1	8.5
Education administration	D	D	D	D	D	42	D	D	57.1	D
Education research	37	83.8	D	D	D	180	40.0	5.6	46.7	7.8
Teacher education	D	D	D	D	D	13	D	D	53.8	D
Teaching fields	14	78.6	D	D	D	60	35.0	D	53.3	D
Other education	6	D	D	D	D	23	43.5	D	39.1	D
Humanities	160	81.3	D	8.8	D	505	52.7	9.1	31.3	6.9
American literature	7	85.7	D	D	D	13	D	D	69.2	D
English language & literature	8	87.5	D	D	D	31	67.7	D	D	16.1
Foreign language & literature	43	90.7	D	D	D	115	67.0	9.6	D	D
History	21	66.7	28.6	D	D	63	D	14.3	34.9	D
Other humanities	81	79.0	D	13.6	D	283	48.4	8.5	36.0	7.1
Other fields	81	81.5	6.2	12.3	D	604	62.3	4.6	30.6	2.5
Business & management	52	82.7	D	13.5	D	406	68.7	3.7	26.1	1.5
Communications	12	66.7	D	D	D	81	60.5	D	33.3	D
Fields not elsewhere classified	17	88.2	D	D	D	109	39.4	9.2	45.0	6.4
Fields not listed above	D	D	D	D	D	8	D	D	D	D

D = suppressed to avoid disclosure of confidential information.

NOTES: Postdoctoral plans are categorized as either employment or study. Major field of study definitions are detailed in appendix C in the section on "Derived Variables." Percentages are based on the number of non-U.S. citizens reporting definite commitments with responses to type of plan (employment or study) and location (U.S. or foreign).

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 34. Postgraduation location of non-U.S. citizen doctorate recipients with definite postgraduation commitments, by visa residency status for selected years, 1986–2006

Year and location	All non-U.S. citizens	Permanent resident	Temporary visa holder
	Number		
All definite commitments			
1986	4,270	820	3,450
1991	6,264	980	5,284
1996	7,601	2,122	5,479
2001	7,794	1,151	6,643
2006	10,322	1,159	9,163
Definite commitments with response to location			
1986	4,270	820	3,450
1991	6,264	980	5,284
1996	7,601	2,122	5,479
2001	7,763	1,147	6,616
2006	10,304	1,157	9,147
	Percent [a]		
U.S. location			
1986	60.3	84.9	54.5
1991	63.5	86.7	59.2
1996	70.3	92.1	61.8
2001	75.7	93.3	72.7
2006	78.5	93.9	76.5
Foreign location			
1986	39.7	15.1	45.5
1991	36.5	13.3	40.8
1996	29.7	7.9	38.2
2001	24.3	6.7	27.3
2006	21.5	6.1	23.5

[a] Percent based on those with definite commitments with response to location.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 35. Percentage of non-U.S. citizen doctorate recipients intending to stay in the United States after doctorate receipt, by country of citizenship, 2000-2006

Place of origin	Total, 2000-2006		2000		2001		2002		2003		2004		2005		2006	
	Number non-U.S. citizens	Percent staying in U.S. [a]	Number non-U.S. citizens	Percent staying in U.S. [a]	Number non-U.S. citizens	Percent staying in U.S. [a]	Number non-U.S. citizens	Percent staying in U.S. [a]	Number non-U.S. citizens	Percent staying in U.S. [a]	Number non-U.S. citizens	Percent staying in U.S. [a]	Number non-U.S. citizens	Percent staying in U.S. [a]	Number non-U.S. citizens	Percent staying in U.S. [a]
All non-U.S. citizens	90,418	71.0	11,614	67.6	11,642	71.7	11,405	70.6	12,224	69.0	13,160	69.3	14,426	72.7	15,947	74.7
Africa	3,761	65.0	537	56.8	486	71.6	449	63.7	481	64.2	568	62.5	597	65.8	643	69.5
Egypt	884	61.2	92	56.5	92	65.2	113	58.4	129	62.8	150	65.3	164	56.1	144	63.9
Nigeria	271	80.1	45	73.3	39	82.1	28	96.4	31	71.0	35	71.4	38	84.2	55	83.6
South Africa	358	54.7	62	51.6	78	65.4	43	53.5	40	52.5	48	45.8	52	50.0	35	60.0
Other	2,248	66.2	338	55.6	277	74.0	265	64.2	281	65.8	335	62.7	343	70.8	409	70.4
East/South Asia	50,443	76.2	6,302	73.7	6,277	76.7	6,136	76.3	6,590	73.3	7,198	75.3	8,260	77.3	9,680	79.1
China [b]	22,596	90.6	2,619	90.5	2,675	92.3	2,654	92.5	2,787	90.9	3,222	89.7	3,865	89.8	4,774	89.8
India	7,752	87.8	1,000	87.2	958	89.8	839	90.6	913	86.1	1,014	87.5	1,286	86.3	1,742	88.1
Japan	1,980	55.7	302	49.7	235	55.7	237	56.1	296	57.4	278	54.7	310	55.2	322	60.9
South Korea	9,393	63.6	1,064	58.4	1,185	63.0	1,193	66.1	1,308	62.2	1,453	66.0	1,542	65.4	1,648	63.0
Taiwan	5,276	55.9	950	56.1	775	61.7	675	60.3	725	51.0	704	50.1	729	58.2	718	53.3
Other	3,446	32.3	367	27.0	449	29.2	538	25.8	561	28.2	527	33.2	528	37.3	476	45.2
Europe	14,908	73.8	1,937	71.2	2,107	74.3	2,027	74.7	2,082	74.0	2,198	71.4	2,275	75.6	2,282	75.4
Bulgaria	489	87.5	59	91.5	58	86.2	54	92.6	61	82.0	83	84.3	93	88.2	81	88.9
France	913	72.5	122	73.8	121	77.7	122	64.8	113	70.8	129	70.5	150	74.0	156	75.0
Germany	1,888	68.4	291	65.3	310	68.4	257	65.0	271	69.7	250	67.6	252	67.9	257	75.1
Greece	776	66.4	101	69.3	115	66.1	99	64.6	99	66.7	120	66.7	109	68.8	133	63.2
Italy	1,145	65.4	112	63.4	148	60.1	154	66.9	159	56.6	193	71.0	183	69.9	196	66.8
Romania	1,155	88.0	119	84.0	128	94.5	151	84.8	145	88.3	186	87.6	216	88.9	210	87.6
Russia	1,704	84.4	234	83.8	252	86.1	229	88.2	256	84.8	221	78.7	259	85.7	253	83.0
Spain	818	66.1	108	62.0	119	66.4	113	66.4	139	69.1	115	60.0	121	70.2	103	68.0
United Kingdom	1,311	76.9	184	69.6	208	82.7	224	81.3	171	75.4	185	73.0	169	77.5	170	77.1
Other	4,709	71.4	607	68.0	648	70.2	624	74.4	668	74.3	716	67.3	723	72.2	723	73.2
North/South America	10,916	57.8	1,533	54.5	1,393	59.2	1,395	56.6	1,564	57.1	1,650	57.5	1,719	59.0	1,662	60.3
Argentina	722	67.6	99	63.6	81	64.2	93	72.0	99	71.7	116	65.5	107	68.2	127	67.7
Brazil	1,269	42.9	178	38.2	170	38.2	171	40.4	162	40.1	191	44.0	206	48.1	191	49.2
Canada	3,781	63.5	525	63.6	496	66.3	498	65.1	539	62.3	603	61.7	559	61.4	561	64.7
Chile	414	41.5	48	52.1	38	50.0	53	28.3	80	47.5	59	40.7	65	44.6	71	31.0
Colombia	669	57.8	74	52.7	74	70.3	67	62.7	107	52.3	89	59.6	138	53.6	120	59.2
Mexico	1,683	47.2	247	37.2	243	48.6	221	45.7	258	50.0	232	48.3	255	51.4	227	49.3
Peru	297	72.1	35	60.0	36	75.0	47	72.3	43	74.4	36	75.0	48	68.8	52	76.9
Other	2,081	62.9	327	59.0	255	63.9	245	56.3	276	60.1	324	61.7	341	68.3	313	68.7
Pacifica/Australasia	1,648	60.1	249	52.6	219	54.8	237	58.2	224	57.6	226	65.0	249	63.5	244	68.4
Australia	495	64.0	72	48.6	68	67.6	65	64.6	69	66.7	63	73.0	77	58.4	81	70.4
Indonesia	481	51.1	76	40.8	57	42.1	76	51.3	56	50.0	77	54.5	76	53.9	63	65.1
New Zealand	265	60.0	34	64.7	43	55.8	36	58.3	40	47.5	39	61.5	35	60.0	38	73.7

TABLE 35. Percentage of non-U.S. citizen doctorate recipients intending to stay in the United States after doctorate receipt, by country of citizenship, 2000-2006

Place of origin	Total, 2000-2006		2000		2001		2002		2003		2004		2005		2006	
	Number non-U.S. citizens	Percent staying in U.S. [a]	Number non-U.S. citizens	Percent staying in U.S. [a]	Number non-U.S. citizens	Percent staying in U.S. [a]	Number non-U.S. citizens	Percent staying in U.S. [a]	Number non-U.S. citizens	Percent staying in U.S. [a]	Number non-U.S. citizens	Percent staying in U.S. [a]	Number non-U.S. citizens	Percent staying in U.S. [a]	Number non-U.S. citizens	Percent staying in U.S. [a]
Other	407	65.8	67	64.2	51	51.0	60	60.0	59	61.0	47	74.5	61	83.6	62	66.1
West Asia	8,043	58.9	975	54.2	1,054	61.8	1,031	58.7	1,128	56.2	1,213	53.2	1,238	62.6	1,404	64.3
Iran	696	88.9	88	89.8	108	88.9	67	89.6	70	85.7	64	92.2	141	89.4	158	88.0
Israel	643	63.6	67	49.3	72	68.1	75	66.7	92	68.5	114	63.2	113	65.5	110	61.8
Jordan	667	51.9	83	57.8	87	57.5	68	61.8	96	52.1	115	45.2	98	44.9	120	50.0
Saudi Arabia	744	8.2	90	8.9	89	11.2	105	4.8	115	7.8	134	9.7	112	8.9	99	6.1
Turkey	2,842	59.2	331	49.2	356	61.8	400	58.3	447	57.0	432	54.2	422	66.6	454	65.4
Other	2,451	66.2	316	62.3	342	66.1	316	68.0	308	64.0	354	60.7	352	68.2	463	71.9
Country unknown	699	39.5	81	30.9	106	27.4	130	27.7	155	61.3	107	30.8	88	52.3	32	37.5

[a] Percentage based on all doctorate recipients, not just those with definite commitments.

[b] Includes Hong Kong.

NOTE: Data include foreign doctorate recipients who were either permanent residents or temporary visa holders and who indicated whether they intended to stay in the U.S. after graduation.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 36 (Revised June 2008). Number and percentage of doctorate recipients with definite plans for postgraduation employment identifying various roles as primary and secondary work activities, by major field of study, 2006

Field of Study	Response to work activity		Research and development		Teaching		Management or administration		Professional services to individuals		Other	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
	Number		Percent									
All fields	18,099	12,995	36.7	44.7	38.5	24.5	13.4	18.1	9.5	10.4	1.9	2.2
Life sciences	2,026	1,529	41.9	41.6	33.3	18.5	9.2	25.3	13.0	12.7	2.5	1.9
Agricultural sciences/natural resources	808	536	48.1	37.9	28.5	16.2	5.8	31.0	14.7	12.5	2.8	2.4
Biological/biomedical sciences	828	686	31.5	45.8	41.8	19.2	12.4	19.8	12.3	13.6	1.9	1.6
Health sciences	390	307	51.0	38.8	25.4	20.8	9.5	27.7	11.0	11.1	3.1	1.6
Physical sciences	2,258	1,370	61.5	43.6	27.5	18.5	3.4	25.0	6.1	10.7	1.4	2.1
Chemistry	277	155	57.0	47.1	25.6	8.4	3.6	27.1	11.6	14.2	2.2	3.2
Computer & information sciences	544	289	70.6	32.2	19.1	6.2	3.3	45.0	5.7	13.8	1.3	2.8
Earth, atmospheric, & marine sciences	211	148	48.8	49.3	32.7	15.5	7.1	20.9	8.5	12.8	2.8	1.4
Mathematics	494	362	45.3	58.6	46.8	20.7	1.0	9.9	5.9	9.7	1.0	1.1
Physics & astronomy	732	416	71.0	35.3	20.1	30.0	4.0	24.8	3.8	7.5	1.1	2.4
Social sciences	3,004	2,409	35.4	46.0	38.0	29.6	7.8	14.5	17.2	8.3	1.7	1.7
Anthropology	157	122	24.2	55.7	51.6	16.4	15.3	14.8	7.0	7.4	1.9	5.7
Economics	677	549	54.9	41.9	29.5	36.2	3.8	14.6	8.9	6.6	2.8	0.7
Political science/international relations	417	356	31.4	53.1	53.0	34.8	7.9	8.4	6.5	2.5	1.2	1.1
Psychology	1,039	777	24.2	41.7	28.9	25.2	7.6	18.5	37.8	12.2	1.5	2.3
Sociology	309	267	37.2	52.4	55.7	31.1	4.9	9.0	1.9	5.6	0.3	1.9
Other social sciences	405	338	38.3	46.2	41.7	26.9	13.8	15.7	4.7	10.7	1.5	0.6
Engineering	2,839	1,476	74.9	27.9	8.3	19.9	5.1	36.0	8.7	14.4	3.0	1.8
Aerospace/aeronautical engineering	93	52	77.4	25.0	7.5	13.5	D	38.5	D	21.2	6.5	1.9
Chemical & related engineering	340	170	80.0	24.1	4.7	8.8	4.4	48.2	7.4	15.9	3.5	2.9
Civil & related engineering	296	210	39.9	41.0	10.5	25.7	8.8	20.5	34.1	12.4	6.8	0.5
Electrical & related engineering	1,044	426	84.4	24.6	7.5	23.0	2.6	37.1	3.9	14.1	1.6	1.2
Industrial engineering	88	64	45.5	35.9	23.9	29.7	17.0	21.9	10.2	10.9	3.4	1.6
Materials/metallurgical engineering	429	233	76.7	27.0	10.5	18.5	3.5	39.5	7.5	13.7	1.9	1.3
Mechanical & related engineering	205	95	85.9	18.9	3.4	10.5	D	53.7	D	15.8	5.4	1.1
Other engineering	344	226	69.2	27.9	9.3	21.2	11.3	31.9	7.6	15.0	2.6	4.0
Education	3,627	2,528	9.9	38.7	40.4	28.4	39.8	15.1	9.1	15.7	0.8	2.1
Education administration	1,336	744	3.7	21.0	21.4	37.1	67.6	16.4	6.4	23.7	0.9	1.9
Education research	1,606	1,253	14.4	43.5	45.5	27.4	26.6	14.7	13.0	12.8	0.6	1.7
Teacher education	141	107	5.7	52.3	61.7	22.4	25.5	13.1	6.4	10.3	0.7	1.9
Teaching fields	408	325	11.3	58.2	75.0	16.9	8.8	12.6	3.7	10.8	1.2	1.5
Other education	136	99	16.9	33.3	42.6	21.2	30.1	20.2	8.8	15.2	1.5	10.1
Humanities	2,746	2,256	12.7	62.1	74.7	18.2	5.6	10.3	4.3	5.1	2.7	4.3
American literature	503	400	16.9	63.0	68.2	20.8	7.6	7.8	4.8	4.8	2.6	3.8
English language & literature	211	181	11.4	65.7	80.6	13.3	3.8	14.9	3.3	4.4	0.9	1.7

TABLE 36 (Revised June 2008). Number and percentage of doctorate recipients with definite plans for postgraduation employment identifying various roles as primary and secondary work activities, by major field of study, 2006

Field of Study	Response to work activity		Research and development		Teaching		Management or administration		Professional services to individuals		Other	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
	Number		Percent									
History	289	244	12.1	66.0	77.9	18.4	6.2	10.7	2.4	2.0	1.4	2.9
Other humanities	1,743	1,431	11.8	60.8	75.3	18.1	5.2	10.3	4.5	5.8	3.2	5.0
Other fields	1,599	1,427	31.5	47.7	48.0	35.8	12.2	9.5	7.2	5.9	1.1	1.1
Business & management	844	766	42.4	44.6	42.9	44.5	10.2	7.4	3.8	3.1	0.7	0.3
Communications	309	277	18.8	62.1	68.3	20.9	7.8	9.7	4.2	5.8	1.0	1.4
Fields not elsewhere classified	446	384	19.5	43.5	43.7	29.2	19.1	13.3	15.7	11.5	2.0	2.6

D = suppressed to avoid disclosure of confidential information.

NOTE: Only includes doctorate recipients with definite plans for postgraduation employment.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 37 (Revised June 2008). Number and percentage of doctorate recipients with definite plans for postgraduation study or training identifying various roles as primary and secondary work activities, by major field of study, 2006

Field of Study	Response to work activity		Research and development		Teaching		Management or administration		Professional services to individuals		Other	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
	Number		Percent									
All fields	9,634	3,852	85.1	19.2	4.4	51.9	1.0	14.4	6.6	12.2	2.7	2.3
Life Sciences	3,905	1,260	88.6	12.4	1.4	56.3	0.7	16.9	4.3	11.6	5.0	2.8
Agricultural sciences/natural resources	3,302	952	88.7	11.2	1.0	60.4	0.4	15.9	4.3	9.8	5.5	2.7
Biological/biomedical sciences	337	178	84.9	19.7	4.5	41.0	D	17.4	5.0	18.5	D	3.4
Health sciences	266	130	91.7	10.8	2.3	47.7	D	23.8	3.0	15.4	D	2.3
Physical sciences	2,548	806	95.6	10.0	2.8	65.8	D	13.4	D	9.1	0.8	1.7
Chemistry	737	173	97.7	7.5	D	64.2	D	14.5	0.7	12.1	0.3	1.7
Computer & information sciences	940	222	96.2	7.7	1.3	55.0	D	24.8	D	11.7	1.6	0.9
Earth, atmospheric, & marine sciences	286	106	95.1	D	3.5	56.6	D	13.2	D	15.1	1.0	D
Mathematics	412	248	90.3	15.3	9.2	79.0	D	2.8	D	2.0	0.0	0.8
Physics & astronomy	173	57	97.1	D	D	71.9	D	12.3	D	8.8	0.0	D
Social sciences	1,301	767	60.1	36.1	5.1	28.8	1.6	12.0	32.1	21.0	1.0	2.1
Anthropology	73	43	82.2	30.2	15.1	46.5	D	14.0	D	D	0.0	D
Economics	70	35	80.0	34.3	17.1	54.3	D	D	D	D	D	D
Plolitical science/international relations	55	36	72.7	33.3	21.8	52.8	D	D	D	D	3.6	0.0
Psychology	950	578	52.6	39.3	1.9	20.1	1.3	13.3	43.6	24.9	0.6	2.4
Sociology	78	32	84.6	15.6	10.3	56.3	D	D	D	D	2.6	0.0
Other social sciences	75	43	80.0	18.6	8.0	67.4	8.0	D	D	D	D	2.3
Engineering	1,236	562	94.7	8.0	2.7	62.3	0.6	16.9	0.7	10.7	1.2	2.1
Aerospace/aeronautical engineering	35	13	D	D	D	76.9	D	D	D	D	0.0	0.0
Chemical and related engineering	195	69	99.0	D	D	62.3	D	23.2	D	11.6	0.0	D
Civil and related engineering	133	75	94.0	10.7	4.5	64.0	D	10.7	D	13.3	0.0	1.3
Electrical and related engineering	245	114	93.9	7.9	3.7	57.9	D	21.1	D	9.6	1.2	3.5
Industrial engineering	21	19	D	D	D	73.7	D	D	D	D	0.0	D
Materials/metallurgical engineering	206	84	94.2	9.5	2.4	64.3	D	15.5	D	9.5	1.9	1.2
Mechanical and related engineering	142	59	95.8	8.5	D	62.7	D	16.9	D	11.9	0.7	0.0
Other engineering	259	129	91.9	10.1	2.7	60.5	D	15.5	D	10.1	2.7	3.9
Education	184	138	43.5	39.9	26.1	33.3	18.5	15.9	11.4	8.0	0.5	2.9
Education administration	40	32	22.5	37.5	22.5	34.4	47.5	D	D	D	D	6.3
Education research	98	68	48.0	44.1	24.5	35.3	9.2	13.2	17.3	D	1.0	D
Teacher education	7	6	D	D	D	D	D	D	D	D	0.0	0.0
Teaching fields	26	22	50.0	36.4	38.5	31.8	D	22.7	D	D	0.0	D
Other education	13	10	D	D	D	D	D	D	D	D	D	0.0
Humanities	362	252	56.1	44.0	36.5	43.7	D	5.2	D	5.2	5.0	2.0
American literature	79	48	59.5	43.8	32.9	47.9	D	D	D	D	6.3	0.0
English language and literature	22	16	45.5	62.5	45.5	D	D	D	D	D	D	0.0
History	42	28	23.8	75.0	64.3	D	D	D	D	D	D	0.0
Other humanities	219	160	62.1	36.9	31.5	47.5	D	6.9	D	5.6	3.7	3.1

TABLE 37 (Revised June 2008). Number and percentage of doctorate recipients with definite plans for postgraduation study or training identifying various roles as primary and secondary work activities, by major field of study, 2006

Field of Study	Response to work activity		Research and development		Teaching		Management or administration		Professional services to individuals		Other	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
	Number		Percent									
Other fields	98	67	71.4	23.9	21.4	46.3	D	17.9	D	7.5	2.0	4.5
Business & management	39	25	66.7	36.0	25.6	48.0	D	D	D	D	2.6	0.0
Communications	18	12	66.7	D	D	41.7	D	D	D	D	5.6	0.0
Fields not elsewhere classified	41	30	78.0	D	D	46.7	D	16.7	D	D	0.0	10.0

D = suppressed to avoid disclosure of confidential information.

NOTE: Only includes doctorate recipients with definite plans for postgraduation study or training.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 38. Primary and secondary work activities of doctorate recipients with definite plans for postgraduation employment, by broad field of study for selected years, 1976-2006

Year and broad field	Response to work activity		Research and development		Teaching		Management or administration		Professional services to individuals		Other	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
	Number		Percent									
All fields												
1976	16,783	8,847	22.5	50.5	50.9	17.8	14.3	15.9	10.0	12.9	2.3	2.9
1981	16,666	9,915	27.6	44.6	41.7	21.0	14.9	17.2	12.7	13.6	3.0	3.6
1986	15,080	9,319	29.0	43.9	38.9	24.2	14.7	15.9	14.2	12.3	3.2	3.7
1991	14,916	10,478	33.1	43.0	37.6	23.7	12.7	15.4	13.9	13.0	2.7	5.0
1996	17,646	13,809	30.5	40.9	39.1	22.8	13.4	17.2	13.3	14.9	3.7	4.2
2001	18,421	14,671	33.8	40.2	37.7	24.2	12.4	17.8	13.2	14.7	2.9	3.1
2006	18,055	12,977	36.7	44.8	38.5	24.5	13.4	18.2	9.5	10.4	1.9	2.2
Life sciences [a]												
1976	1,678	1,009	42.9	46.8	39.9	24.6	5.7	15.7	8.5	11.6	2.9	1.4
1981	1,797	1,172	50.4	41.1	31.6	28.2	5.9	17.0	8.5	11.7	3.7	2.0
1986	1,567	1,057	49.7	40.5	29.9	28.8	5.0	17.5	11.3	11.4	4.1	1.9
1991	1,569	1,167	49.5	39.9	27.1	25.9	8.1	18.4	12.4	12.1	2.9	3.7
1996	1,829	1,474	44.0	38.9	32.3	23.7	7.0	18.1	12.8	16.0	3.9	3.3
2001	2,105	1,702	43.0	38.2	31.6	23.9	6.2	20.3	15.6	14.8	3.5	2.9
2006	2,015	1,526	41.9	41.5	33.2	18.5	9.2	25.4	13.1	12.6	2.5	1.9
Physical sciences [b]												
1976	1,677	816	53.1	54.8	38.9	19.2	1.8	14.7	3.5	9.4	2.7	1.8
1981	1,961	928	69.1	45.3	24.0	20.4	1.6	20.8	3.0	11.3	2.2	2.3
1986	1,747	900	68.8	41.7	23.9	27.0	1.7	19.0	3.5	9.7	2.2	2.7
1991	1,850	1,211	64.3	38.1	26.6	22.0	1.7	21.4	5.1	12.9	2.3	5.7
1996	1,969	1,410	56.8	41.5	28.3	17.5	2.4	21.5	8.9	16.3	3.5	3.2
2001	2,190	1,506	62.4	37.5	23.3	19.5	2.6	23.1	9.2	16.4	2.5	3.5
2006	2,255	1,367	61.6	43.7	27.5	18.6	3.4	25.0	6.1	10.7	1.4	2.0
Social sciences [c]												
1976	3,566	2,232	20.4	59.6	52.5	18.0	4.8	11.8	20.5	8.8	1.9	1.7
1981	3,447	2,288	23.5	48.2	37.2	22.7	7.2	15.7	29.0	10.5	3.0	2.8
1986	3,030	2,031	24.6	46.0	30.3	24.9	6.2	15.4	35.5	9.5	3.5	4.1
1991	2,748	2,035	26.3	42.8	29.7	27.6	5.4	14.1	35.8	8.8	2.8	6.7
1996	3,003	2,457	26.0	45.6	35.6	25.7	6.0	14.6	28.9	10.1	3.6	3.9
2001	3,164	2,685	32.5	42.5	32.3	27.5	6.2	16.5	25.8	11.4	3.3	2.1
2006	2,999	2,406	35.4	46.0	38.0	29.6	7.8	14.5	17.1	8.3	1.7	1.7
Engineering												
1976	1,483	616	63.6	48.4	22.5	18.3	3.4	17.4	6.9	13.1	3.7	2.8
1981	1,485	775	66.0	42.8	23.0	22.8	2.5	17.8	5.7	13.7	2.8	2.8
1986	1,553	849	66.5	43.3	23.6	28.4	1.9	15.4	5.3	10.6	2.7	2.2
1991	2,028	1,214	71.3	32.9	17.6	24.4	1.6	20.5	6.9	16.6	2.7	5.6
1996	2,737	1,846	71.7	27.0	12.2	20.0	2.0	26.4	9.7	20.9	4.3	5.7

TABLE 38. Primary and secondary work activities of doctorate recipients with definite plans for postgraduation employment, by broad field of study for selected years, 1976-2006

Year and broad field	Response to work activity		Research and development		Teaching		Management or administration		Professional services to individuals		Other	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
2001	2,842	1,868	72.5	25.1	10.8	21.6	1.9	27.0	11.5	22.4	3.2	3.9
2006	2,831	1,474	74.9	27.9	8.3	19.9	5.0	36.1	8.7	14.4	3.0	1.8
Education												
1976	4,743	2,238	6.4	31.6	43.9	20.1	37.8	21.6	10.3	22.5	1.6	4.2
1981	4,716	2,669	6.4	33.4	41.8	21.6	37.6	18.9	12.3	21.8	1.9	4.2
1986	4,109	2,327	5.6	32.3	39.9	22.3	39.7	19.4	12.6	21.5	2.1	4.4
1991	3,464	2,234	7.4	35.0	39.2	22.7	39.1	15.8	12.4	22.0	1.8	4.5
1996	4,174	3,220	5.8	30.4	39.5	27.4	40.8	17.3	11.4	21.1	2.5	3.9
2001	3,797	3,082	6.6	32.1	39.9	30.3	41.0	15.8	11.1	19.8	1.4	2.0
2006	3,618	2,526	9.9	38.8	40.5	28.4	39.7	15.1	9.1	15.7	0.8	2.1
Humanities												
1976	2,402	1,157	3.6	64.3	85.3	8.6	5.2	14.8	3.2	8.0	2.7	4.2
1981	2,062	1,239	5.2	59.4	77.3	10.9	6.7	15.3	5.4	7.1	5.4	7.3
1986	1,735	1,121	7.4	60.7	76.0	13.2	6.7	12.9	4.5	6.6	5.4	6.5
1991	1,858	1,444	10.1	63.6	75.8	14.5	4.7	10.2	5.3	6.6	4.0	5.0
1996	2,431	2,074	7.1	58.7	76.8	14.1	4.9	13.6	6.6	7.4	4.5	6.1
2001	2,906	2,536	8.7	58.2	76.6	14.2	5.0	13.7	5.8	8.2	3.9	5.7
2006	2,742	2,254	12.8	62.2	74.7	18.2	5.7	10.3	4.3	5.1	2.7	4.2
Other fields												
1976	1,234	779	8.7	60.1	72.2	13.7	10.2	13.7	6.9	9.0	2.0	3.5
1981	1,198	844	11.8	54.3	60.9	18.7	12.8	13.9	10.9	10.5	3.8	2.6
1986	1,339	1,034	19.0	53.5	55.1	28.2	10.7	8.6	11.4	7.6	3.8	2.0
1991	1,399	1,173	25.8	51.4	53.3	29.0	8.3	8.8	9.5	8.4	3.1	2.5
1996	1,503	1,328	19.6	50.8	55.4	27.9	8.8	9.2	11.5	9.3	4.7	2.7
2001	1,417	1,292	25.9	47.2	49.3	32.0	10.1	10.5	12.0	9.1	2.7	1.2
2006	1,595	1,424	31.5	47.7	48.0	35.8	12.2	9.5	7.1	5.9	1.1	1.1

[a] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[b] Includes mathematics and computer & information sciences.

[c] Includes psychology.

NOTE: Only includes doctorate recipients with definite plans for postgraduation employment.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 39. Primary and secondary work activities of doctorate recipients with definite plans for postgraduation employment, by broad field of study and employment sector, 2006

Broad field and employment sector	Response to work activity		Research and development		Teaching		Management or administration		Professional services to individuals		Other	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
	Number		Percent									
All fields												
Academe	9,966	8,568	25.0	56.7	63.7	28.4	7.9	8.4	2.9	5.1	0.5	1.5
Government	1,232	839	45.6	28.2	5.6	14.9	26.5	37.2	17.0	15.4	5.4	4.3
Industry/self-employed	4,557	2,211	70.3	19.1	1.1	11.5	7.3	46.0	17.7	20.2	3.6	3.1
Other	2,300	1,359	15.9	21.6	20.7	26.9	42.5	22.9	18.3	24.9	2.5	3.8
Life sciences [a]												
Academe	1,049	881	30.2	54.5	59.8	24.0	4.6	12.1	4.1	8.6	1.3	0.8
Government	281	213	53.7	28.2	2.8	13.1	21.0	40.8	15.7	13.6	6.8	4.2
Industry/self-employed	519	310	60.3	19.0	1.3	7.1	9.2	50.0	27.0	21.0	2.1	2.9
Other	166	122	38.6	28.7	16.3	D	18.7	31.1	22.3	18.9	4.2	D
Physical sciences [b]												
Academe	909	782	31.1	62.8	65.1	27.9	1.9	5.1	D	3.5	D	0.8
Government	136	79	68.4	26.6	9.6	11.4	11.8	41.8	6.6	13.9	3.7	6.3
Industry/self-employed	1,157	478	84.8	15.7	0.4	5.2	3.5	54.0	9.1	22.0	2.2	3.1
Other	53	28	58.5	35.7	18.9	D	D	39.3	13.2	D	D	D
Social sciences [c]												
Academe	1,897	1,687	33.8	54.2	58.5	35.6	3.2	5.9	4.1	3.4	0.4	0.9
Government	326	219	43.9	28.3	2.1	15.1	21.5	37.4	27.6	15.1	4.9	4.1
Industry/self-employed	422	268	39.8	26.1	D	15.3	8.8	34.7	45.3	20.5	D	3.4
Other	354	232	30.8	25.9	5.6	16.4	18.4	31.9	43.8	23.3	1.4	2.6
Engineering												
Academe	522	444	55.4	45.7	41.8	45.7	D	5.9	D	2.5	D	D
Government	195	133	64.6	25.6	5.6	12.8	16.4	46.6	8.7	D	4.6	D
Industry/self-employed	2,036	851	81.1	18.8	D	7.9	4.6	50.6	10.5	20.3	D	2.4
Other	78	46	69.2	30.4	D	D	7.7	28.3	15.4	26.1	D	D
Education												
Academe	1,988	1,635	12.9	48.7	56.6	26.2	25.4	13.8	4.6	9.7	0.5	1.5
Government	150	97	D	32.0	10.7	21.6	66.7	14.4	11.3	26.8	D	5.2
Industry/self-employed	128	93	18.0	21.5	D	34.4	26.6	25.8	42.2	14.0	5.5	D
Other	1,352	701	4.6	18.7	23.2	33.7	59.1	16.8	12.4	28.2	0.8	2.6
Humanities												
Academe	2,354	1,974	12.0	68.2	81.9	16.9	3.7	8.1	1.7	3.4	0.7	3.3
Government	63	40	30.2	27.5	14.3	12.5	19.0	40.0	17.5	D	19.0	D
Industry/self-employed	116	86	13.8	19.8	13.8	32.6	21.6	17.4	32.8	18.6	18.1	11.6
Other	209	154	15.8	17.5	44.5	27.9	14.8	26.6	13.4	17.5	11.5	10.4

TABLE 39. Primary and secondary work activities of doctorate recipients with definite plans for postgraduation employment, by broad field of study and employment sector, 2006

Broad field and employment sector	Response to work activity		Research and development		Teaching		Management or administration		Professional services to individuals		Other	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Other fields												
Academe	1,247	1,165	34.1	53.5	59.8	37.8	4.7	5.1	D	3.0	D	0.7
Government	81	58	18.5	31.0	D	20.7	45.7	31.0	25.9	D	D	D
Industry/self-employed	179	125	27.9	17.6	D	32.0	31.3	33.6	35.2	D	D	D
Other	88	76	14.8	21.1	12.5	23.7	47.7	21.1	18.2	27.6	6.8	6.6

D = suppressed to avoid disclosure of confidential information.

[a] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[b] Includes mathematics and computer & information sciences.

[c] Includes psychology.

NOTE: Only includes doctorate recipients with definite plans for postgraduation employment.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

TABLE 40. Primary and secondary work activities of doctorate recipients with definite plans for postgraduation employment, by demographic characteristics, 2006

Demographic characteristic	Response to work activity		Research and development		Teaching		Management or administration		Professional services to individuals		Other	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
	Number		Percent									
All doctorate recipients	18,099	12,995	36.7	44.7	38.5	24.5	13.4	18.1	9.5	10.4	1.9	2.2
Sex												
Male	9,829	6,880	44.6	42.5	33.7	24.9	11.4	20.9	8.2	9.9	2.1	1.8
Female	8,269	6,115	27.2	47.2	44.2	24.1	15.8	15.0	11.1	11.0	1.6	2.7
Citizenship status												
U.S. Citizen	12,332	9,224	25.8	45.7	43.2	23.1	18.0	17.8	11.0	10.9	2.0	2.5
Permanent resident	661	465	47.0	43.0	35.2	23.9	5.6	20.6	8.6	9.9	3.5	2.6
Temporary visa	5,084	3,293	61.6	42.4	27.4	28.6	3.4	18.8	6.2	9.0	1.4	1.3
Race/ethnicity (U.S. citizens only)												
American Indian [a]	60	48	21.7	50.0	43.3	14.6	25.0	D	D	18.8	D	D
Asian [b]	540	379	48.1	39.3	29.4	21.1	10.7	23.5	8.9	12.1	2.8	4.0
Black	768	561	17.6	38.1	36.7	32.3	31.1	13.0	12.8	15.0	1.8	1.6
Hispanic	581	444	25.8	46.4	44.2	23.4	15.0	15.8	13.1	12.6	1.9	1.8
White	10,047	7,545	25.1	46.4	44.5	22.5	17.6	18.0	10.8	10.5	1.9	2.6

D = suppressed to avoid disclosure of confidential information.

[a] Includes Alaska Natives.

[b] Does not include Native Hawaiians or other Pacific Islanders.

NOTE: Only includes doctorate recipients with definite postgraduation plans.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

APPENDICES

APPENDIX A: The Nine Basic Tables, 2006

Appendix A includes the following nine tables:

- A-1 (Revised June 2008). Number of doctorate recipients, by sex and subfield of study, 2006
- A-2 (Revised June 2008). Number of doctorate recipients, by citizenship, race/ethnicity, and subfield of study, 2006
- A-3 (Revised June 2008). Statistical profile of doctorate recipients, by major field of study, 2006
- A-4 (Revised June 2008). Statistical profile of doctorate recipients, by race/ethnicity and citizenship, 2006
- A-5 (Revised June 2008). Doctorate recipients' financial resources in support of doctoral programs, by broad field of study and sex, 2006
- A-6 (Revised June 2008). Distribution of doctorate recipients' financial resources in support of doctoral programs, by broad field of study and sex, 2006
- A-7 (Revised June 2008). State of doctoral institution of doctorate recipients, by broad field of study and sex, 2006
- A-8 Institutions granting research doctorates, by major field of study, 2006
- A-9 Top 50 doctorate-granting institutions, 2006

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 four-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 about medians* in Appendix C).

— *Median Time Lapse*: "Total Time" refers to the total calendar time elapsed between the month/year of baccalaureate and the month/year of doctorate. "Time since starting graduate school" refers to the elapsed calendar time between the month/year of starting at the first post-baccalaureate institution and the month/year of the doctorate.

— *Postgraduation Plans:* Each year's doctorate recipients provide information on post-graduation employment or study plans in response to items B1 through B8 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 field of study. (The SDR is a follow-up survey of a sample of doctorate recipients in science, engineering, health, and until 1995, humanities fields.)

In Table A-3 the postgraduation plans of doctorate recipients are grouped as follows: "Definite postdoctoral study", "Definite employment", "Seeking employment or study", and "Other/Unknown." "Definite postdoctoral study" includes recipients who indicated that they had definite commitments at the time of survey completion (item B3: "Returning to, or continuing in, predoctoral employment" or "Have signed contract or made definite commitment for other work or study") and that their plans were for further training or study (item B4: "Postdoctoral fellowship", "Postdoctoral research associateship", "Traineeship", "Intern, clinical residency", or "Other"). "Definite employment" includes recipients who indicated that they had definite plans at the time of survey completion and their plans were for employment (item B4: "Employment", "Military service", or "Other"). "Seeking employment or study" includes recipients who

indicated that they were still seeking or negotiating a position at the time of survey completion (item B3: “Negotiating with one or more specific organizations,” “Seeking position but have no specific prospects,”). "Other/unknown" includes recipients who reported not planning to work or study at the time of survey completion and recipients who indicated "Other" in item B3. The sum of these lines equals 100 percent for each column, with allowance for rounding.

The postdoctoral study row is further subdivided by type of study or appointment (fellowships, research associateships, traineeships, internships, and other study). The percentages in these subdivisions sum to the percent of respondents in the given column who reported definite 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 had definite employment commitments at the time of survey completion. 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 percentages in these columns are based on recipients who indicated that they had definite postgraduation commitments and responded to the nature of those commitments (i.e., postdoctoral study or employment plans).

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 with definite plans for postdoctoral study (as described above) and recipients with indefinite plans at the time they completed the questionnaire.

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

New England:	Connecticut, Maine, Massachusetts, New Hampshire, 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 Dakota, South Dakota
South Atlantic:	Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia

East South Central:	Alabama, Kentucky, Mississippi, Tennessee
West South Central:	Arkansas, Louisiana, Oklahoma, Texas
Mountain:	Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming
Pacific & Insular:	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 of study 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. From that year on, the question allowed respondents to choose more than one option for their race.

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 the relevant sections in Appendix Table A-3.

TABLE A-5: Table A-5 displays data reported in item A5 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 he or she reported more than one financial resource. 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.)

TABLE A-6: Table A-6 displays data reported in item A5 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.

The value listed in the "all fields" column reflects the number of respondents that indicated the particular financial resource as a source of support of the doctoral program. Percentages reflect the distribution of respondents indicating each type of financial resource by broad field.

TABLE A-7: Table A-7 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 for a description of field groupings as reported in this table; see the questionnaire's Field of Study list in Appendix D for the names and codes of the subfields included.

TABLE A-8: Table A-8 displays data by doctorate-granting institution and major field. It includes all institutions in the United States that awarded research doctoral degrees in the most recent year, listed by 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 and from departmental designations at institutions. A small, but growing, number of research doctoral degrees are awarded as a part of a joint doctoral program (i.e., a research doctorate recipient studied at more than one institution in pursuit of the doctoral degree). In these instances, the contractor relies on the information provided by the doctorate granting institution to attribute the doctorate to the appropriate doctorate-granting institution.

TABLE A-9: Table A-9 presents the 50 doctorate granting institutions which conferred the greatest number of doctorates in AY 2006. The number of doctorate degrees granted is also shown for each ranked institution.

APPENDIX TABLE A-1 (Revised June 2008). Number of doctorate recipients, by sex and subfield of study, 2006

Field of study	Number of doctorates		
	Total [a]	Male	Female
All fields	45,596	24,986	20,539
Life sciences	9,683	4,675	4,993
Agricultural sciences/natural resources	1,146	699	447
Agricultural & horticultural plant breeding	41	32	9
Agricultural animal breeding	12	8	4
Agricultural economics	113	77	36
Agronomy & crop science	56	39	17
Animal nutrition	46	31	15
Animal sciences, other	72	47	25
Environmental science	131	72	59
Fishing & fisheries sciences & management	53	40	13
Food science	97	43	54
Food science & technology, other	45	18	27
Forest sciences & biology	32	22	10
Forest/resources management	38	21	17
Forestry & related science, other	28	19	9
Horticulture science	54	32	22
Natural resources/conservation	60	34	26
Plant pathology/phytopathology	62	29	33
Poultry science	15	11	4
Plant sciences, other	43	24	19
Soil chemistry/microbiology	20	12	8
Soil sciences, other	48	29	19
Wildlife/range management	51	38	13
Wood science & pulp/paper technology	12	9	3
Agriculture, general	6	5	1
Agricultural sciences, other	11	7	4
Biological/biomedical sciences	6,631	3,359	3,262
Anatomy	20	13	7
Bacteriology	10	4	6
Biochemistry	783	434	347
Biomedical sciences	278	131	145
Biometrics & biostatistics	106	49	57
Biophysics	183	121	62
Biotechnology	32	20	12
Botany/plant biology	93	45	48
Cell/cellular biology & histology	335	164	170
Developmental biology/embryology	148	71	77
Ecology	388	207	181
Endocrinology	18	5	13
Entomology	117	84	33
Human & animal genetics	282	133	148
Human & animal pathology	79	40	39
Human & animal pharmacology	327	159	167
Human & animal physiology	220	118	102
Immunology	391	180	211
Microbiology	492	234	258
Molecular biology	778	382	395
Neuroscience	737	390	346
Nutrition sciences	148	28	120
Parasitology	27	11	16
Plant genetics	62	28	34
Plant pathology/phytopathology	26	10	16
Plant physiology	40	19	21
Toxicology	100	51	49
Zoology, other	102	67	35

APPENDIX TABLE A-1 (Revised June 2008). Number of doctorate recipients, by sex and subfield of study, 2006

Field of study	Number of doctorates		
	Total [a]	Male	Female
Biology/biological sciences, general	189	102	86
Biology/biomedical sciences, other	120	59	61
Health sciences	1,906	617	1,284
Environmental health	75	37	38
Environmental toxicology	43	19	24
Epidemiology	229	66	162
Health systems/services administration	71	34	37
Kinesiology/exercise science	189	107	82
Nursing science	415	33	382
Pharmacy	155	77	76
Public health	295	80	214
Rehabilitation/therapeutic services	74	27	47
Speech-language pathology & audiology	119	27	92
Veterinary medicine	38	20	18
Health sciences, general	44	18	26
Health sciences, other	159	72	86
Physical sciences	7,461	5,387	2,062
Astronomy	197	140	56
Astronomy	64	40	24
Astrophysics	133	100	32
Atmospheric sci. & meteorology	147	99	46
Atmospheric chemistry & climatology	30	18	12
Atmospheric physics & dynamics	30	22	8
Meteorology	18	14	4
Atmospheric science/meteorology, general	40	28	12
Atmospheric science/meteorology, other	29	17	10
Chemistry	2,363	1,548	810
Analytical chemistry	367	199	167
Inorganic chemistry	267	159	108
Medicinal/pharmaceutical chemistry	150	96	54
Organic chemistry	624	450	174
Physical chemistry	376	262	113
Polymer chemistry	134	102	32
Theoretical chemistry	85	60	25
Chemistry, general	213	140	70
Chemistry, other	147	80	67
Computer & information sciences	1,452	1,141	310
Computer science	1,215	997	217
Information science & systems	135	85	50
Computer & information science, other	102	59	43
Geological & earth sciences	432	279	153
Geochemistry	53	26	27
Geology	126	86	40
Geomorphology & glacial geology	24	19	5
Geophysics & seismology	81	57	24
Mineralogy & petrology	17	11	6
Paleontology	30	16	14
Stratigraphy & sedimentation	19	14	5
Geological & earth sciences, general	30	20	10
Geological & earth sciences, other	52	30	22
Mathematics	1,327	934	393
Algebra	124	100	24
Analysis & functional analysis	98	72	26

APPENDIX TABLE A-1 (Revised June 2008). Number of doctorate recipients, by sex and subfield of study, 2006

Field of study	Number of doctorates		
	Total [a]	Male	Female
Applied mathematics	348	254	94
Computing theory & practice	15	14	1
Geometry/geometric analysis	89	73	16
Logic	20	17	3
Number theory	60	47	13
Operations research	32	17	15
Statistics	301	168	133
Topology/foundations	72	54	18
Mathematics/statistics, general	107	71	36
Mathematics/statistics, other	61	47	14
Ocean/marine sciences	178	110	68
Hydrology & water resources	37	25	12
Marine sciences	61	36	25
Oceanography, chemical & physical	60	35	25
Ocean/marine sciences, other	20	14	6
Physics	1,365	1,136	226
Acoustics	15	13	2
Applied physics	98	78	19
Atomic/molecular/chemical physics	90	75	15
Biophysics	96	74	22
Condensed matter/low temp physics	335	287	48
Elementary particle physics	200	172	28
Nuclear physics	85	71	14
Optics/phototonics	144	125	19
Plasma/fusion physics	43	37	6
Polymer physics	24	19	5
Physics, general	144	117	25
Physics, other	91	68	23
Social sciences & psychology	6,873	2,928	3,939
Psychology	3,263	932	2,327
Clinical psychology	1,118	267	849
Cognitive psychology & psycholinguistics	181	79	102
Comparative psychology	5	2	3
Counseling	411	135	275
Developmental & child psychology	202	38	164
Educational psychology	60	20	40
Experimental psychology	126	50	76
Family psychology	22	5	17
Human development & family studies	182	34	147
Industrial & organizational psychology	173	68	105
Personality	30	9	21
Physiological/psychobiology	94	29	65
Psychometrics & quantitative psychology	20	9	11
School psychology	123	23	100
Social psychology	172	56	116
Psychology, general	211	73	138
Psychology, other	133	35	98
Social sciences	3,610	1,996	1,612
Anthropology	472	203	269
Area studies	23	14	9
Criminology	100	45	55
Demography/population studies	24	12	12
Econometrics	33	26	7
Economics	996	692	302
Geography	206	121	85

APPENDIX TABLE A-1 (Revised June 2008). Number of doctorate recipients, by sex and subfield of study, 2006

Field of study	Number of doctorates		
	Total [a]	Male	Female
International relations/affairs	115	54	61
Political science & government	614	394	220
Public policy analysis	171	88	83
Sociology	578	217	361
Statistics	22	9	13
Urban affairs/studies	85	49	36
Social sciences, general	45	19	26
Social sciences, other	126	53	73
Engineering	7,191	5,724	1,452
Aerospace/aeronautical engineering	238	211	25
Chemical & related engineering	893	660	231
Chemical engineering	800	583	216
Petroleum engineering	48	43	4
Polymer & plastics engineering	45	34	11
Civil & related engineering	803	626	176
Civil engineering	654	537	116
Environmental health engineering	149	89	60
Electrical & related engineering	2,133	1,811	317
Communications engineering	26	20	6
Computer engineering	323	260	61
Electrical & electronics engineering	1,784	1,531	250
Industrial engineering	235	168	67
Materials/metallurgical engineering	624	465	158
Ceramic sciences engineering	8	7	1
Materials science engineering	582	430	151
Metallurgical engineering	34	28	6
Mechanical & related engineering	1,148	987	159
Engineering mechanics	102	86	16
Mechanical engineering	1,046	901	143
Other engineering	1,117	796	319
Agricultural engineering	53	34	19
Bioengineering & biomedical engineering	525	344	179
Engineering physics	35	24	11
Engineering science	44	33	11
Mining & mineral engineering	16	15	1
Nuclear engineering	68	56	12
Ocean engineering	15	13	2
Operations research	89	72	17
Systems engineering	79	64	15
Engineering, general	60	48	12
Engineering, other	133	93	40
Education	6,123	2,128	3,987
Education administration	2,052	839	1,212
Educational administration & supervision	629	257	371
Educational leadership	1,423	582	841
Education research	2,750	864	1,884
Counseling education/counseling & guidance	201	52	149
Curriculum & instruction	1,005	278	727
Educational assessment/testing/measure	58	25	33
Educational psychology	254	71	181
Educational statistics/research methods	72	30	42

APPENDIX TABLE A-1 (Revised June 2008). Number of doctorate recipients, by sex and subfield of study, 2006

Field of study	Number of doctorates		
	Total [a]	Male	Female
Educational/instructional media design	155	67	88
Higher education/evaluation & research	493	213	280
School psychology	115	24	91
Social/philosophical foundations of education	160	58	102
Special education	237	46	191
Teacher education	252	63	188
Adult & continuing education	116	33	83
Elementary education	38	6	31
Pre-elementary/early childhood education	57	9	48
Secondary education	41	15	26
Teaching fields	707	248	457
Agricultural education	21	13	8
Art education	35	15	20
Business education	9	2	7
English education	48	14	32
Family & consumer sci./home economics	13	2	11
Foreign languages education	60	16	44
Health education	43	14	29
Mathematics education	98	41	57
Music education	83	36	47
Nursing education	7	0	7
Physical education & coaching	49	28	21
Reading education	68	7	61
Science education	81	28	53
Social science education	20	11	9
Trade & industrial education	14	8	6
Teacher education & prof. dev. other	58	13	45
Other education	362	114	246
Education, general	133	37	94
Education, other	229	77	152
Humanities	5,576	2,749	2,821
Foreign languages & literature	614	236	378
Arabic	10	7	3
Chinese	19	9	10
French	111	22	89
German	75	23	52
Italian	29	7	22
Japanese	26	13	13
Russian	28	9	19
Slavic (other than Russian)	11	3	8
Spanish	232	102	130
Other languages & literature	73	41	32
History	973	575	398
African history	27	19	8
American history	391	231	160
Asian history	80	50	30
European history	216	129	87
History/philosophy of science & technology	56	31	25
Latin American history	49	29	20
History, general	59	34	25
History, other	95	52	43
Letters	1,709	716	992
American literature	382	176	206
Classics	78	42	36

APPENDIX TABLE A-1 (Revised June 2008). Number of doctorate recipients, by sex and subfield of study, 2006

Field of study	Number of doctorates		
	Total [a]	Male	Female
Comparative literature	165	64	101
English language	136	44	92
English literature	436	174	262
Folklore	14	6	8
Linguistics	252	99	152
Speech & rhetorical studies	142	60	82
Letters, general	21	11	10
Letters, other	83	40	43
Other humanities	2,280	1,222	1,053
American/U.S. studies	107	42	65
Archeology	39	20	19
Art history/criticism/conservation	246	64	182
Drama/theater arts	85	31	54
Music	919	483	432
Philosophy	370	264	106
Religion/religious studies	381	279	101
Humanities, general	24	4	20
Humanities, other	109	35	74
Other fields	2,689	1,395	1,285
Business mgmt./administrative services	1,312	798	506
Accounting	138	74	64
Banking/financial support services	104	71	33
Business administration & management	354	231	119
Business/managerial economics	45	32	13
Human resources development	94	39	55
International business/trade/commerce	33	19	11
Management information systems/business data	137	95	41
Marketing management & research	162	93	69
Operations research	65	51	14
Organizational behavior	112	54	58
Business management/administration serv., general	27	15	12
Business management/administration serv., other	41	24	17
Communications	507	220	287
Communication theory	47	17	30
Communications research	80	29	51
Mass communications/media studies	228	120	108
Communications, general	100	36	64
Communications, other	52	18	34
Fields not elsewhere classified	828	360	467
Architectural environmental design	92	54	37
Family/consumer sci./human sci., general	52	13	39
Law	76	40	36
Library science	30	16	14
Parks/sports/rec./leisure/fitness	59	33	26
Public administration	98	52	46
Social work	308	80	228
Theology/religious education	113	72	41
Fields not listed above	42	17	25

[a] Totals include doctorate recipients who did not report sex (n=71).

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

APPENDIX TABLE A-2 (Revised June 2008). Number of doctorate recipients, by citizenship, race/ethnicity, and subfield of study, 2006

Subfield of study	Total doctorate recipients [b]	Non-U.S. citizens	U.S. citizens [a]								
			Total	American Indian [c]	Asian [d]	Black	White	Puerto Rican	Mexican	Other Hispanic	Other/ unknown race [e]
All fields	45,596	15,947	26,917	118	1,560	1,659	21,280	321	516	533	930
Life sciences	9,683	3,133	6,014	15	483	274	4,788	63	93	105	193
Agricultural sciences/natural resources	1,146	500	581	3	16	22	500	7	8	10	15
Agricultural & horticultural plant breeding	41	22	19	0	0	0	19	0	0	0	0
Agricultural animal breeding	12	3	9	0	0	0	9	0	0	0	0
Agricultural economics	113	72	35	0	2	2	28	0	0	2	1
Agronomy & crop science	56	24	28	0	0	1	26	0	0	0	1
Animal nutrition	46	15	30	0	0	1	26	1	1	1	0
Animal sciences, other	72	20	42	0	1	2	38	0	0	1	0
Environmental science	131	46	79	0	2	8	62	0	1	0	6
Fishing & fisheries sciences & management	53	10	39	1	1	3	32	0	1	0	1
Food science	97	70	22	0	1	3	14	0	0	1	3
Food science & technology, other	45	25	18	0	3	0	14	1	0	0	0
Forest sciences & biology	32	13	18	0	2	0	16	0	0	0	0
Forest/resources management	38	9	26	0	0	1	24	0	0	0	1
Forestry & related science, other	28	8	12	1	0	0	10	0	1	0	0
Horticulture science	54	30	22	0	0	0	19	0	1	2	0
Natural resources/conservation	60	21	38	0	1	0	35	0	0	1	1
Plant pathology/phytopathology	62	34	27	0	0	0	25	1	1	0	0
Poultry science	15	6	6	0	0	0	6	0	0	0	0
Plant sciences, other	43	22	18	0	1	0	16	0	0	1	0
Soil chemistry/microbiology	20	6	14	0	0	0	11	2	0	0	1
Soil sciences, other	48	24	23	0	0	0	22	0	1	0	0
Wildlife/range management	51	8	39	1	1	0	33	2	1	1	0
Wood science & pulp/paper technology	12	9	3	0	1	0	2	0	0	0	0
Agriculture, general	6	2	4	0	0	0	4	0	0	0	0
Agricultural sciences, other	11	1	10	0	0	1	9	0	0	0	0
Biological/biomedical sciences	6,631	2,148	4,165	6	387	133	3,303	49	69	77	141
Anatomy	20	5	14	0	0	1	12	0	0	0	1
Bacteriology	10	3	7	0	1	1	5	0	0	0	0
Biochemistry	783	302	452	2	54	11	351	4	2	9	19
Biomedical sciences	278	101	169	1	19	7	131	0	2	5	4
Biometrics & biostatistics	106	68	33	0	5	0	27	0	0	0	1
Biophysics	183	84	94	0	15	1	71	0	2	1	4
Biotechnology	32	13	18	0	5	0	12	0	1	0	0
Botany/plant biology	93	24	63	1	2	0	55	1	0	1	3
Cell/cellular biology & histology	335	99	220	0	26	5	171	1	5	5	7
Developmental biology/embryology	148	53	94	0	12	2	71	2	3	2	2

APPENDIX TABLE A-2 (Revised June 2008). Number of doctorate recipients, by citizenship, race/ethnicity, and subfield of study, 2006

Subfield of study	Total doctorate recipients [b]	Non-U.S. citizens	U.S. citizens [a]								
			Total	American Indian [c]	Asian [d]	Black	White	Puerto Rican	Mexican	Other Hispanic	Other/ unknown race [e]
Ecology	388	53	321	0	4	4	294	2	2	5	10
Endocrinology	18	5	13	0	0	1	12	0	0	0	0
Entomology	117	42	71	0	4	0	63	1	1	1	1
Human & animal genetics	282	65	196	0	24	5	149	2	2	6	8
Human & animal pathology	79	24	50	0	8	1	37	0	3	1	0
Human & animal pharmacology	327	138	178	0	21	13	129	2	4	2	7
Human & animal physiology	220	64	144	0	4	6	123	3	0	1	7
Immunology	391	113	276	0	34	8	212	3	5	5	9
Microbiology	492	135	334	0	24	14	272	7	5	6	6
Molecular biology	778	278	449	0	46	21	347	5	8	8	14
Neuroscience	737	218	483	2	49	15	362	9	13	12	21
Nutrition sciences	148	57	88	0	5	5	72	1	1	3	1
Parasitology	27	8	19	0	1	1	15	0	2	0	0
Plant genetics	62	29	33	0	1	0	28	0	1	1	2
Plant pathology/phytopathology	26	10	16	0	2	0	12	0	1	0	1
Plant physiology	40	17	20	0	1	0	17	0	1	0	1
Toxicology	100	34	60	0	7	3	46	0	1	1	2
Zoology, other	102	20	77	0	2	1	69	0	2	0	3
Biology/biological sciences, general	189	51	98	0	4	2	78	5	2	2	5
Biology/biomedical sciences, other	120	35	75	0	7	5	60	1	0	0	2
Health sciences	1,906	485	1,268	6	80	119	985	7	16	18	37
Environmental health	75	18	44	0	4	5	33	0	1	1	0
Environmental toxicology	43	12	22	0	2	1	16	0	1	2	0
Epidemiology	229	40	165	0	18	10	125	0	1	3	8
Health systems/services administration	71	25	38	0	5	5	27	0	0	0	1
Kinesiology/exercise science	189	40	146	0	1	5	131	2	2	1	4
Nursing science	415	67	339	1	10	27	284	3	5	3	6
Pharmacy	155	110	28	0	3	3	19	0	0	1	2
Public health	295	67	218	1	22	38	144	2	4	3	4
Rehabilitation/therapeutic services	74	19	51	0	3	3	44	0	0	0	1
Speech-language pathology & audiology	119	25	81	1	2	8	67	0	0	1	2
Veterinary medicine	38	21	16	1	1	2	10	0	0	0	2
Health sciences, general	44	8	36	0	4	4	25	0	0	1	2
Health sciences, other	159	33	84	2	5	8	60	0	2	2	5
Physical sciences	7,461	3,772	3,315	7	228	73	2,778	37	37	42	113
Astronomy	197	69	117	0	8	0	102	0	3	0	4
Astronomy	64	24	39	0	1	0	36	0	1	0	1
Astrophysics	133	45	78	0	7	0	66	0	2	0	3

APPENDIX TABLE A-2 (Revised June 2008). Number of doctorate recipients, by citizenship, race/ethnicity, and subfield of study, 2006

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Atmospheric sci. & meteorology	147	71	60	0	2	1	52	2	0	2	1
Atmospheric chemistry & climatology	30	16	13	0	0	0	12	0	0	1	0
Atmospheric physics & dynamics	30	16	14	0	0	0	13	0	0	1	0
Meteorology	18	11	6	0	1	0	5	0	0	0	0
Atmospheric science/meteorology, general	40	20	16	0	1	0	14	1	0	0	0
Atmospheric science/meteorology, other	29	8	11	0	0	1	8	1	0	0	1
Chemistry	2,363	1,050	1,170	3	79	28	973	24	14	15	34
Analytical chemistry	367	165	186	1	10	7	150	8	4	3	3
Inorganic chemistry	267	106	155	0	8	2	141	0	1	1	2
Medicinal/pharmaceutical chemistry	150	84	63	0	7	2	49	1	0	2	2
Organic chemistry	624	285	330	1	23	7	280	3	6	1	9
Physical chemistry	376	173	191	1	15	0	160	3	2	5	5
Polymer chemistry	134	62	66	0	1	4	59	0	1	0	1
Theoretical chemistry	85	44	41	0	4	0	33	0	0	1	3
Chemistry, general	213	63	68	0	3	4	48	6	0	0	7
Chemistry, other	147	68	70	0	8	2	53	3	0	2	2
Computer & information sciences	1,452	890	484	2	60	14	382	1	1	4	20
Computer science	1,215	788	365	1	51	9	283	0	1	3	17
Information science & systems	135	52	72	1	4	4	61	0	0	0	2
Computer & information science, other	102	50	47	0	5	1	38	1	0	1	1
Geological & earth sciences	432	137	273	1	8	1	248	1	6	3	5
Geochemistry	53	15	38	0	2	1	31	0	1	1	2
Geology	126	41	74	0	0	0	71	1	0	1	1
Geomorphology & glacial geology	24	2	22	0	0	0	20	0	2	0	0
Geophysics & seismology	81	41	37	0	2	0	33	0	1	0	1
Mineralogy & petrology	17	3	14	0	0	0	13	0	1	0	0
Paleontology	30	6	24	0	0	0	24	0	0	0	0
Stratigraphy & sedimentation	19	6	13	0	0	0	13	0	0	0	0
Geological & earth sciences, general	30	9	17	1	2	0	14	0	0	0	0
Geological & earth sciences, other	52	14	34	0	2	0	29	0	1	1	1
Mathematics	1,327	734	549	0	35	16	452	4	9	10	23
Algebra	124	49	74	0	3	1	66	0	1	2	1
Analysis & functional analysis	98	53	43	0	0	0	40	1	2	0	0
Applied mathematics	348	203	141	0	12	5	115	2	1	4	2
Computing theory & practice	15	9	4	0	0	0	3	0	0	0	1
Geometry/geometric analysis	89	46	43	0	2	1	36	0	2	0	2
Logic	20	9	11	0	1	0	10	0	0	0	0
Number theory	60	32	28	0	2	1	22	0	0	0	3

APPENDIX TABLE A-2 (Revised June 2008). Number of doctorate recipients, by citizenship, race/ethnicity, and subfield of study, 2006

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Operations research	32	19	13	0	3	0	8	0	0	0	2
Statistics	301	220	68	0	8	1	54	1	1	0	3
Topology/foundations	72	28	43	0	1	1	33	0	2	0	6
Mathematics/statistics, general	107	45	41	0	1	3	30	0	0	4	3
Mathematics/statistics, other	61	21	40	0	2	3	35	0	0	0	0
Ocean/marine sciences	178	60	112	0	5	1	93	2	0	3	8
Hydrology & water resources	37	18	18	0	0	0	18	0	0	0	0
Marine sciences	61	10	49	0	2	1	38	2	0	1	5
Oceanography, chemical & physical	60	27	30	0	1	0	26	0	0	2	1
Ocean/marine sciences, other	20	5	15	0	2	0	11	0	0	0	2
Physics	1,365	761	550	1	31	12	476	3	4	5	18
Acoustics	15	4	11	0	0	0	10	0	0	0	1
Applied physics	98	57	38	0	3	2	32	0	0	0	1
Atomic/molecular/chemical physics	90	44	41	0	5	0	35	0	0	0	1
Biophysics	96	53	42	0	6	0	33	0	0	1	2
Condensed matter/low temp physics	335	219	111	0	4	3	99	1	0	1	3
Elementary particle physics	200	110	84	0	4	2	76	0	1	0	1
Nuclear physics	85	42	42	0	2	0	38	0	1	1	0
Optics/phototonics	144	85	56	0	2	2	50	0	0	1	1
Plasma/fusion physics	43	20	23	0	0	1	18	0	1	1	2
Polymer physics	24	15	9	0	1	0	8	0	0	0	0
Physics, general	144	68	46	0	0	0	38	2	1	0	5
Physics, other	91	44	47	1	4	2	39	0	0	0	1
Social sciences & psychology	6,873	1,596	4,872	26	242	319	3,763	74	116	137	195
Psychology	3,263	319	2,722	15	150	169	2,082	56	64	83	103
Clinical psychology	1,118	47	991	8	66	53	748	17	22	39	38
Cognitive psychology & psycholinguistics	181	43	134	0	7	0	117	2	1	1	6
Comparative psychology	5	0	5	0	0	0	4	0	0	1	0
Counseling	411	33	364	4	15	43	259	4	16	9	14
Developmental & child psychology	202	22	174	0	12	12	131	3	5	3	8
Educational psychology	60	4	47	0	3	3	37	0	2	2	0
Experimental psychology	126	27	96	0	6	0	82	0	3	1	4
Family psychology	22	4	18	0	0	1	15	0	0	1	1
Human development & family studies	182	40	129	0	5	14	105	2	1	1	1
Industrial & organizational psychology	173	19	151	0	8	6	125	5	0	4	3
Personality	30	4	23	0	4	0	16	1	0	1	1
Physiological/psychobiology	94	15	77	0	6	5	58	1	3	2	2
Psychometrics & quantitative psychology	20	7	13	0	2	0	9	0	1	1	0

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School psychology	123	5	113	0	2	4	97	1	0	2	7
Social psychology	172	11	153	0	7	11	119	0	4	5	7
Psychology, general	211	20	128	3	2	9	79	18	2	8	7
Psychology, other	133	18	106	0	5	8	81	2	4	2	4
Social sciences	3,610	1,277	2,150	11	92	150	1,681	18	52	54	92
Anthropology	472	60	382	4	13	18	301	2	9	6	29
Area studies	23	8	13	1	0	1	7	1	0	0	3
Criminology	100	12	85	1	2	6	70	1	1	1	3
Demography/population studies	24	17	7	0	1	0	6	0	0	0	0
Econometrics	33	28	5	0	1	2	2	0	0	0	0
Economics	996	647	285	2	32	9	216	2	7	5	12
Geography	206	61	126	1	2	2	112	1	2	2	4
International relations/affairs	115	46	68	0	0	5	55	0	0	7	1
Political science & government	614	152	438	2	15	29	350	3	12	10	17
Public policy analysis	171	46	117	0	5	19	86	1	0	3	3
Sociology	578	119	443	0	14	40	345	6	10	18	10
Statistics	22	19	3	0	0	0	3	0	0	0	0
Urban affairs/studies	85	37	44	0	2	4	34	0	3	0	1
Social sciences, general	45	7	29	0	1	3	21	0	2	0	2
Social sciences, other	126	18	105	0	4	12	73	1	6	2	7
Engineering	7,191	4,572	2,185	3	266	89	1,633	38	30	33	93
Aerospace/aeronautical engineering	238	129	77	0	8	1	60	1	0	0	7
Chemical & related engineering	893	492	352	0	44	13	264	14	4	3	10
Chemical engineering	800	420	337	0	42	13	251	14	4	3	10
Petroleum engineering	48	37	5	0	0	0	5	0	0	0	0
Polymer & plastics engineering	45	35	10	0	2	0	8	0	0	0	0
Civil & related engineering	803	554	200	0	19	10	155	6	3	2	5
Civil engineering	654	445	164	0	17	10	123	6	3	2	3
Environmental health engineering	149	109	36	0	2	0	32	0	0	0	2
Electrical & related engineering	2,133	1,563	459	0	75	18	326	4	5	6	25
Communications engineering	26	25	1	0	0	0	1	0	0	0	0
Computer engineering	323	249	64	0	14	1	41	1	2	0	5
Electrical & electronics engineering	1,784	1,289	394	0	61	17	284	3	3	6	20
Industrial engineering	235	155	59	0	1	6	45	3	0	3	1
Materials/metallurgical engineering	624	367	213	0	24	10	158	3	5	5	8
Ceramic sciences engineering	8	2	6	0	0	1	5	0	0	0	0

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Materials science engineering	582	348	197	0	24	7	146	3	4	5	8
Metallurgical engineering	34	17	10	0	0	2	7	0	1	0	0
Mechanical & related engineering	1,148	757	341	3	40	13	259	3	4	4	15
Engineering mechanics	102	71	27	0	2	2	18	1	3	0	1
Mechanical engineering	1,046	686	314	3	38	11	241	2	1	4	14
Other engineering	1,117	555	484	0	55	18	366	4	9	10	22
Agricultural engineering	53	31	18	0	0	2	12	0	2	0	2
Bioengineering & biomedical engineering	525	224	281	0	40	7	212	2	4	3	13
Engineering physics	35	18	17	0	3	0	9	1	0	3	1
Engineering science	44	27	13	0	2	1	9	0	0	0	1
Mining & mineral engineering	16	10	6	0	0	0	6	0	0	0	0
Nuclear engineering	68	38	23	0	1	1	18	1	0	2	0
Ocean engineering	15	10	5	0	0	0	5	0	0	0	0
Operations research	89	67	21	0	4	0	16	0	0	0	1
Systems engineering	79	41	34	0	0	1	28	0	2	1	2
Engineering, general	60	30	10	0	2	0	8	0	0	0	0
Engineering, other	133	59	56	0	3	6	43	0	1	1	2
Education	6,123	740	4,974	35	125	606	3,797	55	140	84	132
Education administration	2,052	92	1,821	20	30	259	1,383	8	56	23	42
Educational administration & supervision	629	25	550	5	6	66	434	3	22	5	9
Educational leadership	1,423	67	1,271	15	24	193	949	5	34	18	33
Education research	2,750	409	2,215	12	64	258	1,686	37	63	37	58
Counseling education/counseling & guidance	201	15	172	0	3	22	131	4	3	3	6
Curriculum & instruction	1,005	164	798	2	16	92	599	24	28	15	22
Educational assessment/testing/measure	58	18	40	0	1	1	36	1	1	0	0
Educational psychology	254	41	182	3	11	22	133	1	5	4	3
Educational statistics/research methods	72	16	52	0	3	2	39	0	4	1	3
Educational/instructional media design	155	56	96	0	4	7	81	1	1	1	1
Higher education/evaluation & research	493	36	442	4	11	74	333	0	8	5	7
School psychology	115	8	104	0	3	12	75	1	8	1	4
Social/philosophical foundations of education	160	24	133	1	5	9	104	3	2	4	5
Special education	237	31	196	2	7	17	155	2	3	3	7
Teacher education	252	36	189	0	5	12	148	4	5	6	9
Adult & continuing education	116	15	92	0	2	5	73	1	1	4	6
Elementary education	38	2	30	0	1	2	24	0	2	1	0
Pre-elementary/early childhood education	57	14	35	0	1	4	24	3	1	1	1
Secondary education	41	5	32	0	1	1	27	0	1	0	2

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Teaching fields	707	147	498	1	17	43	404	2	7	11	13
Agricultural education	21	3	17	0	0	3	13	1	0	0	0
Art education	35	7	25	0	3	1	20	0	0	1	0
Business education	9	1	6	0	0	3	3	0	0	0	0
English education	48	13	25	0	0	1	22	0	1	1	0
Family & consumer sci./home economics	13	7	5	0	0	0	5	0	0	0	0
Foreign languages education	60	28	26	0	3	0	17	0	3	2	1
Health education	43	2	36	1	0	7	25	0	1	1	1
Mathematics education	98	17	74	0	3	7	62	0	0	0	2
Music education	83	15	66	0	2	3	59	0	0	1	1
Nursing education	7	1	6	0	0	2	3	0	0	0	1
Physical education & coaching	49	11	33	0	0	1	32	0	0	0	0
Reading education	68	10	55	0	0	5	44	0	1	3	2
Science education	81	20	55	0	2	1	47	1	1	1	2
Social science education	20	6	14	0	0	2	10	0	0	0	2
Trade & industrial education	14	2	11	0	1	2	8	0	0	0	0
Teacher education & prof. dev. other	58	4	44	0	3	5	34	0	0	1	1
Other education	362	56	251	2	9	34	176	4	9	7	10
Education, general	133	18	81	0	3	12	53	2	4	5	2
Education, other	229	38	170	2	6	22	123	2	5	2	8
Humanities	5,576	1,156	4,063	23	157	164	3,358	34	75	101	151
Foreign languages & literature	614	237	349	0	7	9	256	20	12	30	15
Arabic	10	2	7	0	0	0	4	0	0	1	2
Chinese	19	13	6	0	1	0	5	0	0	0	0
French	111	47	60	0	0	4	53	0	0	0	3
German	75	29	42	0	0	1	37	1	1	0	2
Italian	29	15	14	0	1	0	12	0	0	0	1
Japanese	26	8	18	0	2	0	15	0	0	0	1
Russian	28	8	19	0	0	0	18	1	0	0	0
Slavic (other than Russian)	11	5	5	0	0	0	5	0	0	0	0
Spanish	232	85	139	0	1	2	78	16	10	29	3
Other languages & literature	73	25	39	0	2	2	29	2	1	0	3
History	973	131	807	6	37	38	668	5	14	14	25
African history	27	12	13	0	0	5	7	0	0	0	1
American history	391	18	364	5	13	23	299	0	9	6	9
Asian history	80	31	48	0	13	0	33	0	0	0	2
European history	216	21	192	0	5	2	178	0	1	2	4

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History/philosophy of science & technology	56	13	42	1	3	1	34	0	1	0	2
Latin American history	49	10	37	0	0	0	30	2	1	3	1
History, general	59	5	39	0	1	2	30	3	0	1	2
History, other	95	21	72	0	2	5	57	0	2	2	4
Letters	1,709	335	1,289	9	47	50	1,075	4	19	30	55
American literature	382	42	333	2	16	31	251	0	6	8	19
Classics	78	18	59	0	0	0	54	0	1	2	2
Comparative literature	165	54	103	0	4	1	86	1	4	5	2
English language	136	21	83	2	2	7	67	0	0	1	4
English literature	436	46	386	1	8	2	351	3	2	5	14
Folklore	14	1	12	0	1	0	11	0	0	0	0
Linguistics	252	137	102	1	10	4	76	0	0	5	6
Speech & rhetorical studies	142	5	135	2	4	3	112	0	6	3	5
Letters, general	21	4	17	0	0	0	15	0	0	0	2
Letters, other	83	7	59	1	2	2	52	0	0	1	1
Other humanities	2,280	453	1,618	8	66	67	1,359	5	30	27	56
American/U.S. studies	107	4	99	0	9	11	68	0	6	2	3
Archeology	39	5	33	0	3	0	25	0	1	3	1
Art history/criticism/conservation	246	43	191	1	7	6	169	0	4	0	4
Drama/theater arts	85	8	73	0	0	2	64	1	2	1	3
Music	919	237	565	2	28	12	481	1	9	10	22
Philosophy	370	61	296	2	7	6	258	1	3	8	11
Religion/religious studies	381	75	272	1	11	18	227	2	4	2	7
Humanities, general	24	3	15	0	0	1	14	0	0	0	0
Humanities, other	109	17	74	2	1	11	53	0	1	1	5
Other fields	2,689	978	1,494	9	59	134	1,163	20	25	31	53
Business mgmt./administrative services	1,312	599	593	5	24	47	478	5	7	9	18
Accounting	138	69	62	0	4	3	51	0	1	1	2
Banking/financial support services	104	77	25	0	0	3	21	0	0	0	1
Business administration & management	354	136	150	2	6	13	121	0	1	1	6
Business/managerial economics	45	27	17	0	0	1	13	0	0	2	1
Human resources development	94	16	78	1	0	8	66	1	0	0	2
International business/trade/commerce	33	15	11	0	0	2	6	3	0	0	0
Management information systems/business data	137	77	56	0	5	5	40	1	1	1	3
Marketing management & research	162	90	61	0	3	2	54	0	0	2	0
Operations research	65	46	18	0	1	1	14	0	1	1	0
Organizational behavior	112	26	79	1	4	4	65	0	2	1	2
Business management/administration serv., general	27	5	13	0	0	1	11	0	1	0	0

APPENDIX TABLE A-2 (Revised June 2008). Number of doctorate recipients, by citizenship, race/ethnicity, and subfield of study, 2006

Subfield of study	Total doctorate recipients [b]	Non-U.S. citizens	U.S. citizens [a]								
			Total	American Indian [c]	Asian [d]	Black	White	Puerto Rican	Mexican	Other Hispanic	Other/ unknown race [e]
Business management/administration serv., other	41	15	23	1	1	4	16	0	0	0	1
Communications	507	142	335	0	12	20	275	4	6	5	13
Communication theory	47	6	41	0	0	1	37	0	1	1	1
Communications research	80	25	53	0	2	2	43	1	0	1	4
Mass communications/media studies	228	71	147	0	8	11	115	2	3	2	6
Communications, general	100	22	60	0	2	4	51	1	1	0	1
Communications, other	52	18	34	0	0	2	29	0	1	1	1
Fields not elsewhere classified	828	223	547	4	22	64	396	11	12	16	22
Architectural environmental design	92	56	31	0	2	1	23	1	3	0	1
Family/consumer sci./human sci., general	52	19	24	0	1	2	17	0	1	1	2
Law	76	35	21	0	2	1	17	0	0	0	1
Library science	30	7	21	0	1	1	18	0	0	1	0
Parks/sports/rec./leisure/fitness	59	19	35	0	0	2	32	0	0	1	0
Public administration	98	28	65	0	0	12	47	0	2	2	2
Social work	308	34	263	3	8	36	182	8	5	8	13
Theology/religious education	113	25	87	1	8	9	60	2	1	3	3
Fields not listed above	42	14	19	0	1	3	14	0	0	1	0

[a] Persons reporting Hispanic ethnicity, whether singly or in combination with another race/ethnicity, are included in the respondent-selected Hispanic ethnicity category.

[b] Includes 2,732 individuals who did not report their citizenship at time of doctorate.

[c] Includes Alaska Natives.

[d] Does not include Native Hawaiians or other Pacific Islanders.

[e] Includes Native Hawaiians or other Pacific Islanders, respondents choosing multiple races (excluding those selecting an Hispanic ethnicity), and respondents with unknown race/ethnicity.

NOTES: Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. Refer also to the explanatory note about this table in front of Appendix A.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

APPENDIX TABLE A-3a (Revised June 2008). Statistical profile of doctorate recipients, by major field of study, 2006 - Total all doctorates

Characteristics	2006 Total	Total science & engineering	Life sciences	Agricultural sciences/ natural resources	Biochemistry	Health sciences	Other biological sciences	Physical sciences[a]	Chemistry	Computer sciences	Earth, atmos., & marine sci.	Mathematics	Physics & astronomy	Social sci. & psychology	Anthropology & sociology	Economics
	Count															
Number in field	45,596	31,208	9,683	1,146	783	1,906	5,848	7,461	2,363	1,452	757	1,327	1,562	6,873	1,050	1,029
	Percent															
Sex																
Male	54.8	60.0	48.3	61.0	55.4	32.4	50.0	72.2	65.5	78.6	64.5	70.4	81.7	42.6	40.0	69.8
Female	45.0	39.9	51.6	39.0	44.3	67.4	49.8	27.6	34.3	21.3	35.3	29.6	18.1	57.3	60.0	30.0
Unknown[b]	0.2	0.2	0.2	0.0	0.3	0.3	0.1	0.2	0.2	0.1	0.3	0.0	0.3	0.1	0.0	0.2
Citizenship																
U.S. citizenship	59.0	52.5	62.1	50.7	57.7	66.5	63.5	44.4	49.5	33.3	58.8	41.4	42.7	70.9	78.6	28.2
Non-U.S., permanent resident	4.0	4.2	4.4	3.4	4.6	4.4	4.5	4.6	4.1	6.5	3.7	5.0	3.8	3.4	3.9	6.4
Non-U.S., temporary visa holder	31.0	37.7	28.0	40.2	34.0	21.0	27.0	45.9	40.4	54.8	31.7	50.3	49.3	19.8	13.1	59.2
Unknown	6.0	5.6	5.5	5.7	3.7	8.0	4.9	5.0	6.1	5.4	5.8	3.3	4.2	5.9	4.4	6.2
Marital status																
Never married	26.8	30.0	28.8	21.0	36.9	21.6	31.6	32.5	34.3	27.3	23.5	37.1	35.3	26.9	24.9	33.8
Married	51.6	50.6	51.6	58.2	46.7	54.9	49.9	50.0	48.9	55.8	55.6	47.0	46.2	48.3	49.5	47.4
Separated	0.5	0.4	0.5	D	D	0.6	0.4	0.3	D	D	D	D	D	0.5	0.7	D
Divorced	4.0	2.7	2.7	3.0	1.4	4.4	2.3	2.0	1.8	1.9	2.4	2.1	2.4	4.6	7.1	2.9
Marriage-like relationship	6.0	6.0	6.8	6.3	6.9	5.0	7.4	6.2	5.8	4.3	9.4	6.2	7.1	7.4	9.1	4.6
Widowed	0.3	0.1	0.2	D	D	0.6	0.1	0.1	D	D	D	D	D	0.2	0.5	D
Unknown	10.8	10.1	9.4	10.4	7.8	12.9	8.3	8.8	8.8	10.3	8.9	7.3	8.8	12.1	8.2	11.0
Bachelor's in same field as doctorate	53.8	60.3	48.9	48.2	29.9	44.7	52.9	65.1	71.1	47.2	52.4	69.9	74.6	55.0	45.6	60.4
Percent with master's	74.8	68.9	53.3	81.7	37.9	80.5	41.0	65.2	43.1	82.8	73.2	76.8	68.3	83.2	87.7	80.3
	Count															
Postgraduation plans[c]																
Definite postdoctoral study	9,869	9,197	4,030	275	430	346	2,979	2,587	953	177	288	418	751	1,321	152	73
Definite employment	19,268	10,798	2,212	418	85	884	825	2,393	576	768	221	522	306	3,196	496	702
Seeking employment or study	11,234	7,841	2,407	318	198	402	1,489	1,800	616	343	178	285	378	1,490	293	140
Other/unknown[d]	1,233	756	278	33	20	63	162	148	41	41	16	25	25	181	42	13
	Percent															
Definite postdoctoral study[e]																
Fellowship	54.6	54.3	59.7	33.8	60.5	64.5	61.5	47.4	47.3	33.3	42.4	61.0	45.3	69.6	65.8	47.9
Research associateship	36.1	37.0	27.6	61.1	29.1	23.7	24.8	50.1	49.8	62.1	55.6	36.8	52.7	19.5	28.9	41.1
Traineeship	1.3	1.2	1.5	D	1.4	D	1.4	0.8	D	D	D	1.4	0.9	1.1	D	D
Intern, clinical residency	3.1	3.2	4.6	D	3.5	D	5.2	0.4	D	D	D	D	D	6.4	D	D
Other study	4.9	4.3	6.6	2.5	5.6	6.6	7.1	1.3	2.3	0.6	0.7	D	D	3.4	4.6	9.6
Definite employment after doctorate[f]																
Educational institution[g]	59.8	42.2	49.6	46.4	34.1	60.2	41.6	38.8	22.7	38.4	43.9	59.6	30.7	62.5	79.8	57.7
Industry/business	24.1	39.0	24.2	25.4	45.9	14.5	31.9	48.9	65.6	52.9	33.0	29.5	52.0	13.7	4.0	19.5
Government	6.5	8.9	13.1	D	D	11.7	11.8	5.8	4.7	4.0	16.3	5.2	5.9	10.4	6.7	14.1
Nonprofit	4.4	4.5	5.8	D	D	7.8	5.6	1.8	2.6	1.3	2.3	1.1	2.6	7.5	5.6	3.7
Other & unknown	5.2	5.5	7.2	5.5	10.6	5.9	9.2	4.7	4.3	3.4	4.5	4.6	8.8	5.9	3.8	5.0
Primary activity[h,i]																
R & D	36.7	53.6	41.9	51.0	49.3	31.5	48.0	61.5	70.6	71.0	48.8	45.3	57.0	35.4	32.8	54.9
Teaching	38.5	26.4	33.3	25.4	29.3	41.8	28.4	27.5	19.1	20.1	32.7	46.8	25.6	38.0	54.3	29.5
Administration	13.4	6.3	9.2	D	D	12.4	5.9	3.4	3.3	4.0	7.1	D	D	7.8	8.4	3.8

APPENDIX TABLE A-3a (Revised June 2008). Statistical profile of doctorate recipients, by major field of study, 2006 - Total all doctorates

Characteristics	2006 Total	Total science & engineering	Life sciences	Agricultural sciences/ natural resources	Biochemistry	Health sciences	Other biological sciences	Physical sciences[a]	Chemistry	Computer sciences	Earth, atmos., & marine sci.	Mathematics	Physics & astronomy	Social sci. & psychology	Anthropology & sociology	Economics
Professional services	9.5	11.5	13.0	11.0	12.0	12.3	15.0	6.1	5.7	3.8	8.5	5.9	11.6	17.2	3.6	8.9
Other	1.9	2.2	2.5	D	D	1.9	2.7	1.4	1.3	1.1	2.8	D	D	1.7	0.9	2.8
Secondary activity [h,i]																
R & D	32.1	27.2	31.4	30.5	21.3	37.9	25.5	26.5	17.1	20.1	34.6	42.9	26.4	36.9	44.6	34.0
Teaching	17.6	15.2	14.0	16.4	10.7	15.9	10.8	11.2	3.3	17.1	10.9	15.2	4.7	23.7	22.1	29.4
Administration	13.0	15.9	19.1	21.8	20.0	16.4	20.6	15.1	23.9	14.1	14.7	7.3	15.2	11.6	9.0	11.8
Professional services	7.5	7.4	9.6	8.7	6.7	11.2	8.5	6.5	7.4	4.2	9.0	7.1	7.9	6.7	5.2	5.3
Other	1.6	1.2	1.4	1.3	1.3	1.3	1.6	1.3	1.5	1.4	0.9	0.8	1.8	1.3	2.6	0.6
No secondary activity	28.2	33.0	24.5	21.3	40.0	17.1	33.0	39.3	46.9	43.2	29.9	26.7	44.0	19.8	16.5	18.9
Activity(ies) unknown	6.1	6.2	8.4	6.7	11.8	6.3	11.2	5.6	5.6	4.7	4.5	5.4	9.5	6.0	6.0	3.6
Region of employment after doctorate [l]																
New England	5.9	6.7	6.6	3.3	15.3	5.7	8.5	7.3	10.4	5.7	5.4	6.1	8.5	6.9	7.9	5.8
Middle Atlantic	13.9	14.0	12.4	4.8	14.1	13.9	14.5	16.7	19.4	14.5	9.5	19.2	18.3	16.0	15.9	13.7
East North Central	12.8	11.5	12.0	12.0	15.3	12.1	11.6	10.7	12.2	8.6	6.8	14.2	10.1	12.0	15.1	10.1
West North Central	6.8	5.2	7.6	D	D	6.2	6.7	4.6	5.4	3.3	D	5.7	D	5.5	6.5	3.7
South Atlantic	17.3	16.4	18.8	13.4	18.8	21.6	18.5	14.8	13.7	13.0	14.0	19.0	14.7	19.6	14.7	20.2
East South Central	4.4	3.5	4.5	D	D	5.1	4.0	2.3	2.8	1.7	D	3.6	D	4.3	3.6	1.7
West South Central	8.2	7.7	8.6	D	D	10.0	6.1	6.5	4.5	4.0	21.7	5.4	7.5	7.0	5.8	3.7
Mountain	5.7	5.6	5.1	D	D	4.4	5.1	4.8	4.9	3.4	9.0	4.0	6.9	4.8	7.7	1.0
Pacific & insular	15.5	18.7	12.9	8.1	12.9	11.1	17.3	23.8	20.3	36.8	17.2	14.2	19.0	12.0	14.3	10.3
Non-U.S.	9.4	10.7	11.4	22.2	9.4	10.0	7.6	8.4	6.4	9.0	10.4	8.6	8.5	11.7	8.3	29.6
Region unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1
	Years															
Median age at doctorate	32.7	31.3	31.4	33.2	30.0	36.1	30.7	30.3	29.5	31.4	32.0	30.0	30.4	32.9	35.1	31.7
Median time lapse from baccalaureate to doctorate																
Since baccalaureate	9.5	8.4	8.6	9.8	7.4	12.5	8.0	7.7	6.8	8.9	9.0	7.3	7.6	9.6	11.5	8.7
Since starting graduate school	7.9	7.1	7.0	7.9	6.3	9.7	6.7	6.7	5.9	7.7	7.7	6.7	6.8	7.9	9.7	7.2

APPENDIX TABLE A-3a (Revised June 2008). Statistical profile of doctorate recipients, by major field of study, 2006 - Total all doctorates

Characteristics	Political sci./ internatn'l rel.	Psychology	Other social sciences	Engineering	Total nonsciences	Education	Humanities	American literature	English lang. & literature	Foreign lang. & literature	History	Other humanities	Other fields	Business & management	Fields not elsewhere classified
	Count														
Number in field	729	3,263	802	7,191	14,388	6,123	5,576	382	572	614	973	3,035	2,689	1,312	1,372
	Percent														
Sex															
Male	61.5	28.6	51.1	79.6	43.6	34.8	49.3	46.1	38.1	38.4	59.1	50.9	51.9	60.8	43.3
Female	38.5	71.3	48.9	20.2	56.2	65.1	50.6	53.9	61.9	61.6	40.9	48.9	47.8	38.6	56.6
Unknown [b]	0.0	0.1	0.0	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.3	0.6	0.1
Citizenship															
U.S. citizenship	69.4	83.4	66.0	30.4	73.2	81.2	72.9	87.2	82.0	56.8	82.9	69.4	55.6	45.2	65.5
Non-U.S., permanent resident	3.3	2.3	3.6	4.2	3.6	2.2	4.8	2.1	1.7	10.3	3.5	5.1	4.4	5.3	3.5
Non-U.S., temporary visa holder	23.9	7.4	24.4	59.4	16.3	9.9	15.9	8.9	10.0	28.3	10.0	17.3	32.0	40.3	24.1
Unknown	3.4	6.8	6.0	6.0	6.8	6.7	6.4	1.8	6.3	4.6	3.6	8.3	8.1	9.1	6.9
Marital status															
Never married	28.1	26.6	21.1	32.1	19.7	14.1	25.1	30.9	22.9	23.3	22.6	25.9	21.5	20.6	22.3
Married	53.6	45.9	53.1	51.8	53.9	59.3	48.4	47.4	44.8	51.1	55.5	46.3	53.3	55.3	51.5
Separated	D	0.5	D	D	0.8	0.8	0.7	D	D	D	D	0.6	0.8	D	D
Divorced	3.7	4.0	6.5	1.8	6.7	8.3	5.7	5.5	5.6	6.8	5.9	5.4	5.1	4.3	5.9
Marriage-like relationship	7.1	7.7	7.6	3.5	5.9	4.4	8.2	12.0	10.3	8.3	7.0	7.6	4.9	3.0	6.6
Widowed	D	0.2	D	D	0.5	0.9	0.3	D	D	D	D	0.3	0.2	D	D
Unknown	6.7	15.1	11.0	10.5	12.4	12.2	11.7	3.9	15.2	9.6	7.7	13.8	14.3	16.1	12.5
Bachelor's in same field as doctorate	55.8	64.4	21.1	75.7	39.8	29.8	53.9	40.3	65.4	47.6	57.6	53.6	33.2	34.9	31.6
Percent with master's	85.6	81.2	86.8	80.1	87.5	90.2	85.6	92.9	84.8	89.3	87.1	83.7	85.2	80.2	89.9
	Count														
Postgraduation plans [c]															
Definite postdoctoral study	56	963	77	1,259	672	193	376	22	42	38	82	192	103	43	60
Definite employment	436	1,129	433	2,997	8,470	3,852	2,920	215	310	345	529	1,521	1,698	888	809
Seeking employment or study	180	672	205	2,144	3,393	1,295	1,598	120	143	165	272	898	500	177	321
Other/unknown [d]	16	87	23	149	477	218	177	12	15	22	38	90	82	28	54
	Percent														
Definite postdoctoral study [e]															
Fellowship	75.0	72.3	59.7	35.3	58.3	37.8	71.3	81.8	78.6	71.1	74.4	67.2	49.5	48.8	50.0
Research associateship	21.4	15.4	31.2	58.7	23.1	37.3	12.5	D	D	D	15.9	14.6	35.0	32.6	36.7
Traineeship	D	1.2	D	1.0	3.9	5.2	D	D	D	D	D	D	D	D	D
Intern, clinical residency	D	8.7	D	1.4	1.2	2.6	D	D	D	D	D	D	D	D	D
Other study	D	2.4	7.8	3.7	13.5	17.1	12.0	9.1	16.7	10.5	7.3	13.5	12.6	11.6	D
Definite employment after doctorate [f]															
Educational institution [g]	78.4	51.0	64.4	17.7	82.2	83.7	84.3	97.2	90.3	92.5	81.7	80.3	75.2	77.5	72.7
Industry/business	6.0	19.3	8.3	69.0	5.2	3.6	4.0	D	2.3	D	4.2	5.2	10.8	13.5	7.8
Government	8.3	10.3	11.3	6.6	3.6	4.0	2.2	D	D	D	6.4	1.8	4.9	3.3	6.8
Nonprofit	3.7	11.4	9.2	2.3	4.2	4.2	4.3	D	D	D	3.6	6.5	4.3	1.7	7.2
Other & unknown	3.7	8.0	6.7	4.3	4.8	4.5	5.2	0.5	6.1	4.3	4.2	6.2	4.8	4.1	5.6
Primary activity [h,i]															
R & D	31.4	24.2	38.3	74.9	15.2	9.9	12.7	11.4	12.1	9.6	16.9	12.3	31.5	42.4	19.2
Teaching	53.0	28.9	41.7	8.3	53.8	40.4	74.7	80.6	77.9	83.0	68.2	73.5	48.0	42.9	53.7
Administration	7.9	7.6	13.8	5.1	22.5	39.8	5.6	3.8	6.2	4.6	7.6	5.4	12.2	10.2	14.5

APPENDIX TABLE A-3a (Revised June 2008). Statistical profile of doctorate recipients, by major field of study, 2006 - Total all doctorates

Characteristics	Political sci./ internatn'l rel.	Psychology	Other social sciences	Engineering	Total nonsciences	Education	Humanities	American literature	English lang. & literature	Foreign lang. & literature	History	Other humanities	Other fields	Business & management	Fields not elsewhere classified
Professional services	6.5	37.8	4.7	8.7	7.0	9.1	4.3	3.3	2.4	2.5	4.8	5.0	7.2	3.8	11.0
Other	1.2	1.5	1.5	3.0	1.5	0.8	2.7	0.9	1.4	0.3	2.6	3.8	1.1	0.7	1.6
Secondary activity [h,i]															
R & D	45.3	31.2	38.5	14.5	38.4	27.0	51.1	56.4	55.7	65.7	50.1	46.3	42.6	40.5	45.0
Teaching	29.7	18.9	22.5	10.4	20.6	19.8	15.0	11.4	15.6	11.1	16.5	15.7	32.0	40.4	22.5
Administration	7.2	13.9	13.1	18.7	9.4	10.5	8.4	12.8	9.0	3.1	6.2	9.7	8.4	6.8	10.2
Professional services	2.2	9.1	8.9	7.5	7.5	10.9	4.2	D	1.7	D	3.8	5.6	5.3	2.8	8.0
Other	1.0	1.7	0.5	0.9	2.1	1.4	3.5	D	2.4	D	3.0	4.8	1.0	0.2	1.9
No secondary activity	14.6	25.2	16.5	48.0	22.1	30.3	17.8	14.2	15.6	17.9	20.5	17.9	10.8	9.2	12.5
Activity(ies) unknown	4.4	8.0	6.5	5.3	5.9	5.8	6.0	1.9	6.8	6.1	4.9	6.7	5.8	5.0	6.8
Region of employment after doctorate [i]															
New England	8.0	6.2	8.3	6.0	4.9	3.2	7.2	6.0	10.6	9.9	6.4	6.4	5.0	5.9	4.1
Middle Atlantic	13.8	19.2	13.4	10.9	13.8	12.7	15.1	15.8	15.2	15.4	15.1	15.0	13.7	12.5	15.0
East North Central	11.2	12.5	11.1	11.2	14.5	15.7	13.8	14.0	14.8	13.9	14.4	13.4	12.9	12.8	13.0
West North Central	6.4	6.7	3.5	3.4	8.9	10.3	8.0	6.0	7.7	5.8	8.7	8.5	7.2	7.2	7.2
South Atlantic	23.4	17.7	24.9	12.5	18.5	19.4	17.4	20.5	18.7	16.5	21.4	15.5	18.4	18.9	17.8
East South Central	5.3	5.0	6.5	2.7	5.5	6.0	4.9	5.1	5.8	5.5	5.1	4.5	5.7	4.7	6.8
West South Central	7.3	9.2	7.9	8.6	8.9	9.8	7.4	6.5	6.8	8.4	7.2	7.6	9.4	9.1	9.8
Mountain	5.7	5.8	4.6	7.4	5.8	6.7	5.5	7.0	5.5	4.6	4.9	5.7	4.4	3.8	4.9
Pacific & insular	8.5	14.1	10.2	26.1	11.5	11.3	12.2	14.4	11.0	11.6	9.8	13.0	10.7	11.1	10.3
Non-U.S.	10.3	3.5	9.2	11.0	7.7	4.9	8.5	4.7	3.9	8.1	7.0	10.5	12.5	13.7	11.2
Region unknown	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.1	0.0
	Years														
Median age at doctorate	34.1	31.8	35.3	30.8	37.4	41.7	35.0	34.2	34.0	35.9	35.5	35.0	36.2	35.2	37.2
Median time lapse from baccalaureate to doctorate															
Since baccalaureate	11.0	8.8	11.8	8.1	13.4	16.7	11.5	11.1	10.6	11.6	12.0	11.5	12.5	11.8	13.3
Since starting graduate school	9.1	7.0	9.2	6.9	10.7	12.7	9.7	9.2	8.9	9.7	9.7	9.7	9.9	9.2	10.7

D = suppressed to avoid disclosure of confidential information.

[a] Includes mathematics and computer sciences.

[b] Includes 71 respondents not reporting sex.

[c] Includes only respondents who responded to post graduation status.

[d] Includes respondents who indicated that they did not plan to work or study and a small number of respondents who indicated some other type of postgraduation plans.

[e] Percentages are based upon only those doctorate recipients who indicated definite postdoctoral plans for study and who indicated the type of study.

[f] Percentages are based upon only those doctorate recipients who indicated definite postgraduation plans for employment and who indicated the sector of employment.

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

[h] Includes only respondents with definite employment plans.

[i] Percentages are based upon only those doctorate recipients who indicated their primary and secondary work activities.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

APPENDIX TABLE A-3b (Revised June 2008). Statistical profile of doctorate recipients, by major field of study, 2006 - Total all males

Characteristics	2006 Total	Total science & engineering	Life sciences	Agricultural sciences/ natural resources	Biochemistry	Health sciences	Other biological sciences	Physical sciences	Chemistry	Computer & information sciences	Earth, atmos., & marine sci.	Mathematics	Physics & astronomy	Social sci. & psychology	Anthropology & sociology	Economics
	Count															
Number in field	24,986	18,714	4,675	699	434	617	2,925	5,387	1,548	1,141	488	934	1,276	2,928	420	718
	Percent															
Males as percent of total doctorates	54.8	60.0	48.3	61.0	55.4	32.4	50.0	72.2	65.5	78.6	64.5	70.4	81.7	42.6	40.0	69.8
Citizenship																
U.S. citizenship	53.1	47.0	60.4	51.1	60.6	54.8	63.8	44.7	49.9	34.4	57.8	43.9	43.3	63.6	75.7	28.4
Non-U.S., permanent resident	3.5	3.6	3.5	3.0	3.9	4.5	3.4	3.7	3.4	5.3	2.7	3.9	3.1	3.0	2.9	4.9
Non-U.S., temporary visa holder	37.4	43.8	30.1	40.5	31.8	29.7	27.4	46.7	40.7	55.4	33.6	48.9	49.5	27.2	14.5	59.7
Unknown	6.0	5.7	6.0	5.4	3.7	11.0	5.5	4.9	6.1	5.0	5.9	3.3	4.2	6.2	6.9	7.0
Marital status																
Never married	27.3	30.2	27.6	16.7	37.1	18.3	30.8	32.7	33.5	28.7	22.3	38.2	35.1	25.4	20.5	31.3
Married	53.7	52.2	53.8	66.1	47.2	57.2	51.0	50.4	49.7	54.8	59.0	46.8	46.6	52.3	55.7	50.0
Separated	0.3	0.2	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Divorced	2.6	2.0	2.1	2.3	D	D	2.2	2.0	1.7	1.8	2.3	2.0	2.4	3.0	5.0	2.1
Marriage-like relationship	5.3	5.2	6.1	4.3	7.1	3.7	6.8	5.9	5.9	4.5	7.0	5.8	6.9	6.6	6.7	4.0
Widowed	0.1	0.0	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Unknown	10.8	10.1	10.1	9.9	7.6	18.2	8.8	8.8	8.9	9.9	9.2	7.0	8.7	12.3	11.9	12.3
Bachelor's in same field as doctorate	57.0	62.5	47.4	52.1	32.0	37.9	50.6	65.1	70.7	48.5	52.3	70.6	74.1	53.4	45.2	59.7
Percent with master's	73.6	69.2	51.1	83.1	37.3	71.6	41.2	65.7	44.3	82.6	75.2	74.0	67.0	82.0	85.2	79.5
	Count															
Postgraduation plans [a]																
Definite postdoctoral study	5,794	5,477	2,129	176	247	101	1,605	1,891	654	141	180	316	600	463	57	49
Definite employment	10,486	6,733	992	269	37	279	407	1,759	374	609	158	355	263	1,532	206	486
Seeking employment or study	5,954	4,555	1,045	176	112	118	639	1,260	382	268	107	194	309	587	108	96
Other/unknown [b]	574	380	110	19	11	20	60	100	23	34	8	14	21	50	10	10
	Percent															
Definite postdoctoral study [c]																
Fellowship	50.3	49.9	57.4	30.1	54.7	62.4	60.4	46.4	45.9	33.3	38.3	60.4	45.0	63.5	64.9	51.0
Research associateship	40.5	41.5	27.8	65.3	30.4	26.7	23.3	51.1	50.9	63.1	59.4	37.7	53.0	25.5	28.1	36.7
Traineeship	1.2	1.1	1.4	D	D	D	1.4	D	D	D	D	D	D	1.1	D	D
Intern, clinical residency	2.9	3.0	5.7	D	D	D	6.2	D	D	D	D	D	D	5.4	D	D
Other study	5.0	4.5	7.8	2.8	8.5	2.0	8.6	1.3	D	D	0.6	0.6	0.8	4.5	D	D
Definite employment after doctorate [d]																
Educational institution [e]	52.9	37.0	44.5	48.0	32.4	49.8	39.6	36.7	21.1	33.7	38.0	63.7	28.5	64.4	81.6	58.2
Industry/business	31.4	45.9	28.8	24.2	48.6	23.7	33.7	50.9	67.6	57.0	36.1	26.2	55.5	12.7	2.4	17.7
Government	6.9	8.7	13.9	D	D	12.9	12.3	6.0	4.3	D	17.1	6.2	D	11.9	7.8	14.6
Nonprofit	3.4	3.0	4.7	D	D	6.8	4.7	1.6	1.9	D	D	D	D	5.2	D	3.9
Other & unknown	5.4	5.4	8.1	5.9	13.5	6.8	9.8	4.8	5.1	3.4	D	D	D	5.8	D	5.6
Primary activity [f,g]																
R & D	44.6	60.2	47.0	50.0	51.6	37.5	51.3	63.3	72.9	74.1	54.1	42.1	58.8	39.4	30.0	57.8
Teaching	33.7	22.6	28.0	24.8	29.0	34.8	25.2	26.2	17.7	16.9	29.7	51.5	23.1	39.1	57.9	27.6
Administration	11.4	5.6	8.1	D	D	10.7	5.0	3.2	D	3.8	4.7	D	D	7.6	8.4	4.5
Professional services	8.2	9.5	14.5	D	D	15.8	16.5	6.0	4.6	4.0	D	4.4	D	11.9	2.6	6.9
Other	2.1	2.2	2.4	D	D	1.2	2.0	1.3	D	1.2	D	D	1.7	1.9	1.1	3.2

APPENDIX TABLE A-3b (Revised June 2008). Statistical profile of doctorate recipients, by major field of study, 2006 - Total all males

Characteristics	2006 Total	Total science & engineering	Life sciences	Agricultural sciences/ natural resources	Biochemistry	Health sciences	Other biological sciences	Physical sciences	Chemistry	Computer & information sciences	Earth, atmos., & marine sci.	Mathematics	Physics & astronomy	Social sci. & psychology	Anthropology & sociology	Economics
Secondary activity [f,g]																
R & D	29.8	24.7	29.0	32.5	35.5	32.8	23.2	25.8	15.7	18.5	32.4	46.5	24.8	38.0	48.4	32.5
Teaching	17.4	14.7	14.9	D	D	15.8	14.6	10.8	D	15.0	11.5	14.7	D	26.3	21.6	32.3
Administration	14.6	17.4	21.4	D	D	19.8	22.7	16.7	28.6	15.4	D	6.5	D	11.8	7.4	11.6
Professional services	6.9	7.0	9.6	D	D	11.9	9.2	6.3	6.6	4.1	D	7.1	D	5.9	5.8	5.4
Other	1.3	0.8	0.7	0.4	3.2	0.4	0.8	1.2	D	1.0	D	0.9	1.3	0.7	1.1	0.4
No secondary activity	30.0	35.3	24.5	20.7	38.7	19.4	29.4	39.2	43.1	45.9	27.7	24.4	45.4	17.3	15.8	17.8
Activity(ies) unknown	6.3	6.4	10.6	8.6	16.2	9.3	12.3	5.9	6.4	4.9	6.3	4.2	9.5	5.7	7.8	3.9
Region of employment after doctorate [l]																
New England	5.9	6.7	6.6	3.3	15.3	5.7	8.5	7.3	10.4	5.7	D	D	8.5	6.9	7.9	5.8
Middle Atlantic	13.9	14.0	12.4	4.8	14.1	13.9	14.5	16.7	19.4	14.5	9.5	19.2	18.3	16.0	15.9	13.7
East North Central	12.8	11.5	12.0	12.0	15.3	12.1	11.6	10.7	12.2	8.6	6.8	14.2	10.1	12.0	15.1	10.1
West North Central	6.8	5.2	7.6	D	D	6.2	6.7	4.6	5.4	3.3	D	5.7	D	5.5	6.5	3.7
South Atlantic	17.3	16.4	18.8	13.4	18.8	21.6	18.5	14.8	13.7	13.0	14.0	19.0	14.7	19.6	14.7	20.2
East South Central	4.4	3.5	4.5	D	D	5.1	4.0	2.3	D	1.7	D	D	D	4.3	3.6	1.7
West South Central	8.2	7.7	8.6	D	D	10.0	6.1	6.5	D	4.0	21.7	5.4	D	7.0	5.8	3.7
Mountain	5.7	5.6	5.1	D	D	4.4	5.1	4.8	D	3.4	9.0	D	D	4.8	7.7	D
Pacific & insular	15.5	18.7	12.9	8.1	12.9	11.1	17.3	23.8	20.3	36.8	17.2	14.2	19.0	12.0	14.3	10.3
Non-U.S.	9.4	10.7	11.4	D	D	10.0	7.6	8.4	6.4	9.0	10.4	8.6	8.5	11.7	8.3	29.6
Region unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	D
	Years															
Median age at doctorate	32.4	31.3	31.6	33.5	30.2	34.6	31.1	30.4	29.7	31.3	32.4	30.1	30.5	33.4	35.3	32.2
Median time lapse from baccalaureate to doctorate																
Since baccalaureate	9.1	8.4	8.6	10.0	7.6	11.3	8.2	7.8	7.0	8.7	9.0	7.3	7.8	10.0	11.7	8.8
Since starting graduate school	7.7	7.1	6.9	8.0	6.3	8.4	6.7	6.9	5.9	7.7	7.9	6.7	7.0	8.0	9.7	7.2

APPENDIX TABLE A-3b (Revised June 2008). Statistical profile of doctorate recipients, by major field of study, 2006 - Total all males

Characteristics	Political sci./ internatn'l rel.	Psychology	Other social sciences	Engineering	Total non-science & engineering	Education	Humanities	American literature	English lang. & literature	Foreign lang. & literature	History	Other humanities	Other fields	Business & management	Fields not elsewhere classified
	Count														
Number in field	448	932	410	5,724	6,272	2,128	2,749	176	218	236	575	1,544	1,395	798	594
	Percent														
Males as percent of total doctorates	61.5	28.6	51.1	79.6	43.6	34.8	49.3	46.1	38.1	38.4	59.1	50.9	51.9	60.8	43.3
Citizenship															
U.S. citizenship	71.4	82.1	62.4	29.6	71.5	81.1	74.6	88.6	80.3	57.6	84.2	71.3	50.7	45.2	58.1
Non-U.S., permanent resident	2.9	1.5	3.4	3.7	3.2	1.7	3.9	1.7	0.9	9.3	2.4	4.3	3.9	3.9	3.9
Non-U.S., temporary visa holder	22.8	9.1	28.8	60.9	18.3	10.3	15.0	6.8	10.6	27.1	10.3	16.5	36.8	42.6	29.1
Unknown	2.9	7.3	5.4	5.8	7.1	6.8	6.4	2.8	8.3	5.9	3.1	7.9	8.7	8.3	8.9
Marital status															
Never married	25.7	26.1	18.0	32.3	18.6	12.4	23.0	30.7	22.0	19.1	21.9	23.3	19.6	19.9	19.4
Married	56.7	47.5	58.5	52.6	58.2	66.4	52.0	49.4	45.0	54.2	58.1	50.6	58.2	58.8	57.6
Separated	D	D	D	D	0.6	0.5	D	D	D	D	D	D	D	D	D
Divorced	2.7	2.4	4.4	1.5	4.2	4.7	4.3	3.4	5.0	6.8	5.0	3.6	3.2	3.5	2.9
Marriage-like relationship	8.5	7.7	6.6	3.1	5.5	3.8	7.7	13.1	8.3	7.6	6.1	7.6	3.8	2.5	5.6
Widowed	D	D	D	D	0.1	0.3	D	D	D	D	D	D	D	D	D
Unknown	5.8	16.1	11.5	10.3	12.7	12.1	12.3	D	19.3	D	7.8	14.1	14.6	15.0	13.8
Bachelor's in same field as doctorate	55.8	64.6	22.9	77.0	40.8	25.9	55.4	46.6	61.9	44.9	60.3	55.2	34.6	35.0	34.2
Percent with master's	84.6	79.2	86.6	80.8	86.7	90.2	85.2	92.6	82.6	90.7	89.2	82.3	84.4	81.5	88.4
	Count														
Postgraduation plans [a]															
Definite postdoctoral study	37	279	41	994	317	73	190	7	15	16	47	105	54	29	25
Definite employment	268	351	221	2,450	3,753	1,383	1,460	104	108	144	310	794	910	555	355
Seeking employment or study	116	163	104	1,663	1,399	411	763	53	58	50	173	429	225	96	128
Other/unknown [b]	6	13	11	120	194	71	85	6	7	4	18	50	38	16	22
	Percent														
Definite postdoctoral study [c]															
Fellowship	70.3	65.2	58.5	34.3	56.8	35.6	68.4	D	80.0	D	74.5	63.8	44.4	41.4	48.0
Research associateship	D	21.9	34.1	60.0	24.6	41.1	15.3	D	D	D	17.0	15.2	35.2	D	D
Traineeship	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Intern, clinical residency	D	8.6	D	D	D	D	D	D	D	D	D	D	D	D	D
Other study	D	D	D	3.7	13.2	D	11.6	14.3	D	D	6.4	16.2	D	10.3	D
Definite employment after doctorate [d]															
Educational institution [e]	79.1	51.6	64.3	17.0	81.5	84.4	83.1	97.1	88.0	93.1	80.6	79.7	74.7	76.6	71.8
Industry/business	6.3	20.5	6.8	69.8	5.5	3.1	3.9	D	D	D	4.2	4.8	11.8	14.2	7.9
Government	9.0	11.7	14.0	6.7	3.7	4.6	2.5	D	D	D	7.1	1.8	4.2	3.4	5.4
Nonprofit	D	9.4	6.8	2.0	4.0	3.3	4.6	D	D	D	3.2	6.5	4.1	1.3	8.5
Other & unknown	D	6.8	8.1	4.5	5.3	4.6	5.9	0.0	7.4	4.2	4.8	7.2	5.3	4.5	6.5
Primary activity [f,g]															
R & D	29.5	28.9	35.6	75.9	16.7	10.0	12.6	9.7	13.3	11.9	16.0	11.6	33.6	42.2	20.0
Teaching	55.0	28.0	45.4	7.7	53.5	35.8	74.3	81.6	79.6	83.0	67.6	73.7	46.8	44.1	51.2
Administration	8.1	7.4	13.7	5.0	21.9	46.7	5.0	D	D	D	7.5	4.9	11.3	9.7	13.9
Professional services	6.6	34.5	2.9	8.5	6.0	6.7	4.9	D	D	D	5.5	5.7	6.7	3.4	11.8
Other	0.8	1.2	2.4	2.9	1.9	0.8	3.1	1.0	2.0	0.0	3.4	4.1	1.5	0.6	3.0

APPENDIX TABLE A-3b (Revised June 2008). Statistical profile of doctorate recipients, by major field of study, 2006 - Total all males

Characteristics	Political sci./ internatn'l rel.	Psychology	Other social sciences	Engineering	Total non-science & engineering	Education	Humanities	American literature	English lang. & literature	Foreign lang. & literature	History	Other humanities	Other fields	Business & management	Fields not elsewhere classified
Secondary activity [f,g]															
R & D	46.9	31.4	40.0	14.1	38.8	24.6	50.4	52.4	57.1	67.4	48.5	47.0	41.8	41.4	42.4
Teaching	27.5	23.7	19.5	10.3	22.2	22.3	14.9	11.7	13.3	12.6	17.4	15.0	33.8	38.4	26.4
Administration	8.5	16.0	14.1	19.9	9.7	10.9	9.1	16.5	D	D	6.5	10.4	8.8	7.4	10.9
Professional services	D	7.4	D	7.3	6.7	10.7	4.3	D	D	D	4.1	5.3	4.3	3.0	6.4
Other	D	1.5	D	0.7	2.0	1.2	3.7	D	D	D	2.0	4.9	0.5	0.2	0.9
No secondary activity	14.3	20.0	17.1	47.8	20.6	30.2	17.5	12.6	16.3	14.1	21.5	17.5	10.9	9.5	13.0
Activity(ies) unknown	3.7	7.4	7.2	5.4	6.1	6.0	6.3	1.0	9.3	6.3	5.5	6.9	5.9	5.2	7.0
Region of employment after doctorate [i]															
New England	8.0	6.2	8.3	6.0	4.9	3.2	7.2	6.0	10.6	9.9	6.4	6.4	5.0	5.9	4.1
Middle Atlantic	13.8	19.2	13.4	10.9	13.8	12.7	15.1	15.8	15.2	15.4	15.1	15.0	13.7	12.5	15.0
East North Central	11.2	12.5	11.1	11.2	14.5	15.7	13.8	14.0	14.8	13.9	14.4	13.4	12.9	12.8	13.0
West North Central	6.4	6.7	3.5	3.4	8.9	10.3	8.0	6.0	7.7	5.8	8.7	8.5	7.2	7.2	7.2
South Atlantic	23.4	17.7	24.9	12.5	18.5	19.4	17.4	20.5	18.7	16.5	21.4	15.5	18.4	18.9	17.8
East South Central	5.3	5.0	6.5	2.7	5.5	6.0	4.9	5.1	5.8	5.5	5.1	4.5	5.7	4.7	6.8
West South Central	7.3	9.2	7.9	8.6	8.9	9.8	7.4	6.5	6.8	8.4	7.2	7.6	9.4	9.1	9.8
Mountain	5.7	5.8	D	7.4	5.8	6.7	5.5	D	D	4.6	4.9	5.7	4.4	3.8	4.9
Pacific & insular	8.5	14.1	10.2	26.1	11.5	11.3	12.2	14.4	11.0	11.6	9.8	13.0	10.7	11.1	10.3
Non-U.S.	10.3	3.5	9.2	11.0	7.7	4.9	8.5	D	D	8.1	7.0	10.5	12.5	13.7	11.2
Region unknown	0.0	0.0	D	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.1	0.0
	Years														
Median age at doctorate	34.3	32.5	35.3	31.0	37.0	40.6	35.3	34.6	34.2	37.3	35.8	35.2	36.4	35.3	37.5
Median time lapse from baccalaureate to doctorate															
Since baccalaureate	11.0	8.7	11.9	8.2	13.0	16.0	11.6	11.0	10.5	12.0	12.4	11.4	12.4	12.0	13.7
Since starting graduate school	9.1	7.0	9.2	7.0	10.3	12.5	9.7	9.0	8.9	9.7	9.9	9.7	9.7	9.3	10.7

D = suppressed to avoid disclosure of confidential information.

[a] Includes only respondents with responses to post graduation status

[b] Includes respondents who indicated that they did not plan to work or study and a small number of respondents who indicated some other type of postgraduation plans.

[c] Percentages are based upon only those doctorate recipients who indicated definite postgraduation plans for study and who indicated the type of study.

[d] Percentages are based upon only those doctorate recipients who indicated definite postgraduation plans for employment and who indicated the sector of employment.

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

[f] Includes only respondents with definite employment plans.

[g] Percentages are based upon only those doctorate recipients who indicated their primary and secondary work activities.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

APPENDIX TABLE A-3c (Revised June 2008). Statistical profile of doctorate recipients, by major field of study, 2006 - Total all females

Characteristics	2006 Total	Total science & engineering	Life sciences	Agricultural sciences/ natural resources	Biochemistry	Health sciences	Other biological sciences	Physical sciences	Chemistry	Computer & information sciences	Earth, atmos., & marine sci.	Mathematics	Physics & astronomy	Social sci. & psychology	Anthropology & sociology	Economics
	Count															
Number in field	20,539	12,446	4,993	447	347	1,284	2,915	2,062	810	310	267	393	282	3,939	630	309
	Percent															
Females as percent of total doctorates	45.0	39.9	51.6	39.0	44.3	67.4	49.8	27.6	34.3	21.3	35.3	29.6	18.1	57.3	60.0	30.0
Citizenship																
U.S. citizenship	66.4	61.0	63.9	50.1	54.5	72.4	63.4	44.0	49.1	29.7	61.0	35.4	40.8	76.4	80.5	27.8
Non-U.S., permanent resident	4.7	5.2	5.2	4.0	5.5	4.4	5.8	7.0	5.4	11.3	5.6	7.6	7.4	3.8	4.6	10.0
Non-U.S., temporary visa holder	23.2	28.6	26.1	39.8	36.9	17.0	26.7	44.2	40.0	52.6	28.5	53.7	48.6	14.3	12.2	58.3
Unknown	5.6	5.2	4.8	6.0	3.2	6.2	4.2	4.8	5.4	6.5	4.9	3.3	3.2	5.5	2.7	3.9
Marital status																
Never married	26.3	30.0	30.0	27.7	36.9	23.2	32.5	32.3	36.0	21.9	25.8	34.4	36.5	28.1	27.8	39.8
Married	49.2	48.3	49.7	45.9	46.4	54.0	48.8	49.3	47.5	59.7	49.8	47.6	45.0	45.5	45.4	41.7
Separated	0.7	0.6	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Divorced	5.7	3.8	3.3	4.0	D	D	2.5	2.1	1.9	1.9	2.6	2.3	2.1	5.8	8.6	4.9
Marriage-like relationship	6.9	7.3	7.5	9.4	6.6	5.7	8.0	7.0	5.7	3.5	13.9	7.1	8.2	7.9	10.8	5.8
Widowed	0.5	0.3	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Unknown	10.6	9.7	8.5	11.2	7.5	10.0	7.5	8.5	8.1	11.3	7.5	8.1	7.8	11.8	5.7	7.4
Bachelor's in same field as doctorate	50.0	57.1	50.4	42.1	27.4	48.1	55.4	65.2	71.9	42.9	53.2	68.4	77.7	56.2	45.9	62.5
Percent with master's	76.4	68.6	55.6	79.4	38.9	85.1	40.9	63.9	41.0	83.5	70.0	83.5	74.8	84.2	89.4	82.5
	Count															
Postgraduation plans [a]																
Definite postdoctoral study	4,074	3,719	1,901	99	183	245	1,374	695	298	36	108	102	151	858	95	24
Definite employment	8,781	4,064	1,220	149	48	605	418	633	201	159	63	167	43	1,664	290	216
Seeking employment or study	5,279	3,285	1,362	142	86	284	850	539	234	75	71	91	68	903	185	44
Other/unknown [b]	659	376	168	14	9	43	102	48	18	7	8	11	4	131	32	3
	Percent															
Definite postdoctoral study [c]																
Fellowship	60.8	60.9	62.4	40.4	68.3	65.3	62.7	50.2	50.3	33.3	49.1	62.7	46.4	72.8	66.3	41.7
Research associateship	29.7	30.5	27.5	53.5	27.3	22.4	26.6	47.3	47.7	58.3	49.1	34.3	51.7	16.3	29.5	50.0
Traineeship	1.5	1.3	1.5	D	D	D	1.4	D	D	D	D	D	D	1.0	D	D
Intern, clinical residency	3.3	3.5	3.3	D	D	D	4.0	D	D	D	D	D	D	7.0	D	D
Other study	4.7	3.8	5.3	2.0	1.6	8.6	5.4	1.4	D	D	0.9	D	D	2.8	D	D
Definite employment after doctorate [d]																
Educational institution [e]	68.0	50.9	53.9	43.6	35.4	65.0	43.5	44.7	25.9	56.6	58.7	50.9	44.2	60.8	78.6	56.5
Industry/business	15.4	27.6	20.5	27.5	43.8	10.2	30.1	43.1	61.7	37.1	25.4	36.5	30.2	14.5	5.2	23.6
Government	6.1	9.1	12.4	D	D	11.1	11.2	5.4	5.5	D	14.3	3.0	D	9.0	5.9	13.0
Nonprofit	5.5	6.8	6.7	D	D	8.3	6.5	2.4	4.0	D	D	D	D	9.6	D	3.2
Other & unknown	5.0	5.6	6.6	4.7	8.3	5.5	8.6	4.4	3.0	3.1	D	D	D	6.0	D	3.7
Primary activity [f,g]																
R & D	27.2	42.7	37.9	52.8	47.7	28.9	44.9	56.6	66.3	59.5	36.5	52.6	46.2	31.6	34.8	48.6
Teaching	44.2	32.8	37.5	26.4	29.5	44.9	31.4	31.2	21.8	32.0	39.7	36.4	41.0	37.1	51.8	33.8
Administration	15.8	7.6	10.1	D	D	13.2	6.6	4.0	D	4.6	12.7	D	D	7.9	8.3	2.4
Professional services	11.1	14.8	11.9	D	D	10.8	13.6	6.3	7.8	3.3	D	9.1	D	22.1	4.3	13.3
Other	1.6	2.1	2.6	D	D	2.3	3.5	1.8	D	0.7	D	D	D	1.4	0.7	1.9

APPENDIX TABLE A-3c (Revised June 2008). Statistical profile of doctorate recipients, by major field of study, 2006 - Total all females

Characteristics	2006 Total	Total science & engineering	Life sciences	Agricultural sciences/ natural resources	Biochemistry	Health sciences	Other biological sciences	Physical sciences	Chemistry	Computer & information sciences	Earth, atmos., & marine sci.	Mathematics	Physics & astronomy	Social sci. & psychology	Anthropology & sociology	Economics
Secondary activity [f,g]																
R & D	34.9	31.2	33.3	27.1	11.4	40.2	27.7	28.4	19.7	26.1	39.7	35.1	35.9	35.8	42.0	37.1
Teaching	17.8	16.1	13.3	D	D	16.0	7.2	12.6	D	24.8	9.5	16.2	D	21.4	22.5	22.9
Administration	11.1	13.4	17.3	D	D	15.0	18.6	11.0	15.5	9.2	D	9.1	D	11.4	10.1	12.4
Professional services	8.1	8.1	9.6	D	D	11.0	7.7	7.0	8.8	4.6	D	7.1	D	7.4	4.7	5.2
Other	2.0	1.9	2.0	2.8	0.0	1.7	2.4	1.5	D	2.6	D	0.6	5.1	1.9	3.6	1.0
No secondary activity	26.0	29.3	24.6	22.2	40.9	16.2	36.4	39.5	53.4	32.7	34.9	31.8	35.9	22.1	17.0	21.4
Activity(ies) unknown	5.8	6.0	6.6	3.4	8.3	5.0	10.0	4.9	4.0	3.8	0.0	7.8	9.3	6.3	4.8	2.8
Region of employment after doctorate [l]																
New England	6.1	7.4	6.6	4.7	16.7	5.0	8.6	8.2	12.4	6.3	D	D	16.3	8.2	9.0	10.2
Middle Atlantic	14.7	15.3	13.0	7.4	10.4	14.0	13.9	17.4	20.4	15.7	11.1	19.8	9.3	17.6	15.2	15.7
East North Central	13.3	12.0	11.7	10.7	14.6	12.4	10.8	12.3	13.4	8.2	9.5	15.6	14.0	13.1	17.2	12.0
West North Central	7.4	5.6	7.3	D	D	6.6	6.7	4.7	5.0	3.8	D	6.6	D	5.3	3.4	3.2
South Atlantic	19.1	18.6	20.2	12.1	20.8	20.7	22.2	16.0	13.4	17.6	22.2	16.2	11.6	19.0	16.9	17.1
East South Central	4.5	3.8	4.1	D	D	5.5	3.1	3.2	D	3.8	D	D	D	4.2	3.4	2.3
West South Central	8.1	7.5	8.2	D	D	10.1	5.0	6.3	D	5.7	14.3	6.6	D	7.3	6.9	2.3
Mountain	5.7	5.5	4.9	D	D	4.5	4.8	4.1	D	4.4	7.9	D	D	5.0	7.9	D
Pacific & insular	13.8	16.1	13.9	9.4	14.6	11.7	18.4	20.7	18.4	27.7	17.5	18.0	20.9	12.8	13.4	12.0
Non-U.S.	7.3	8.3	10.1	D	D	9.6	6.5	7.1	6.5	6.9	7.9	6.6	11.6	7.4	6.6	24.1
Region unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	D
	Years															
Median age at doctorate	33.2	31.2	31.3	32.8	29.5	37.2	30.3	29.9	29.2	31.9	31.5	29.7	29.8	32.5	34.9	30.6
Median time lapse from baccalaureate to doctorate																
Since baccalaureate	10.0	8.6	8.6	9.6	7.1	13.0	7.9	7.4	6.7	9.3	8.7	7.3	7.2	9.4	11.4	8.2
Since starting graduate school	8.3	7.2	7.1	7.9	6.3	10.1	6.5	6.5	5.7	8.1	7.3	6.6	6.5	7.7	9.7	7.2

APPENDIX TABLE A-3c (Revised June 2008). Statistical profile of doctorate recipients, by major field of study, 2006 - Total all females

Characteristics	Political sci./ internatn'l rel.	Psychology	Other social sciences	Engineering	Total non-science & engineering	Education	Humanities	American literature	English lang. & literature	Foreign lang. & literature	History	Other humanities	Other fields	Business & management	Fields not elsewhere classified
	Count														
Number in field	281	2,327	392	1,452	8,093	3,987	2,821	206	354	378	398	1,485	1,285	506	777
	Percent														
Females as percent of total doctorates	38.5	71.3	48.9	20.2	56.2	65.1	50.6	53.9	61.9	61.6	40.9	48.9	47.8	38.6	56.6
Citizenship															
U.S. citizenship	66.2	84.1	69.6	33.8	74.7	81.5	71.3	85.9	83.1	56.3	81.2	67.6	61.2	45.8	71.3
Non-U.S., permanent resident	3.9	2.7	3.8	6.0	4.0	2.5	5.8	2.4	2.3	10.8	5.0	6.0	5.0	7.7	3.2
Non-U.S., temporary visa holder	25.6	6.8	19.9	54.1	14.9	9.7	16.8	10.7	9.6	29.1	9.5	18.1	27.0	37.4	20.2
Unknown	4.3	6.4	6.6	6.1	6.4	6.4	6.2	1.0	5.1	3.7	4.3	8.3	6.8	9.1	5.3
Marital status															
Never married	32.0	26.9	24.2	31.6	20.6	15.0	27.2	31.1	23.4	25.9	23.6	28.8	23.6	21.9	24.6
Married	48.8	45.3	47.4	49.2	50.7	55.6	44.9	45.6	44.6	49.2	51.8	42.0	48.3	50.6	46.8
Separated	D	D	D	D	0.9	1.0	D	D	D	D	D	D	D	D	D
Divorced	5.3	4.7	8.7	2.9	8.6	10.2	7.0	7.3	5.9	6.9	7.0	7.3	7.2	5.7	8.2
Marriage-like relationship	5.0	7.6	8.7	5.4	6.3	4.7	8.7	11.2	11.6	8.7	8.3	7.7	6.1	4.0	7.5
Widowed	D	D	D	D	0.8	1.3	D	D	D	D	D	D	D	D	D
Unknown	8.2	14.6	10.5	10.2	11.9	12.1	11.0	D	12.7	D	7.5	13.1	13.3	16.4	11.3
Bachelor's in same field as doctorate	55.9	64.5	19.1	71.2	39.1	31.9	52.7	35.0	67.5	49.2	53.5	52.3	31.9	35.4	29.7
Percent with master's	87.2	82.2	87.0	78.2	88.3	90.4	86.3	93.2	86.2	88.4	83.9	85.5	86.5	79.4	91.1
	Count														
Postgraduation plans [a]															
Definite postdoctoral study	19	684	36	265	355	120	186	15	27	22	35	87	49	14	35
Definite employment	168	778	212	547	4,717	2,469	1,460	111	202	201	219	727	788	333	454
Seeking employment or study	64	509	101	481	1,994	884	835	67	85	115	99	469	275	81	193
Other/unknown [b]	10	74	12	29	283	147	92	6	8	18	20	40	44	12	32
	Percent														
Definite postdoctoral study [c]															
Fellowship	84.2	75.1	61.1	39.2	59.7	39.2	74.2	D	77.8	D	74.3	71.3	55.1	64.3	51.4
Research associateship	D	12.7	27.8	54.0	21.7	35.0	9.7	D	D	D	14.3	13.8	34.7	D	D
Traineeship	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Intern, clinical residency	D	8.8	D	D	D	D	D	D	D	D	D	D	D	D	D
Other study	D	D	D	3.4	13.8	D	12.4	6.7	D	D	8.6	10.3	D	14.3	D
Definite employment after doctorate [d]															
Educational institution [e]	77.4	50.8	64.6	21.0	82.7	83.3	85.5	97.3	91.6	92.0	83.1	81.0	75.8	79.0	73.3
Industry/business	5.4	18.8	9.9	65.4	4.9	3.8	4.2	D	D	D	4.1	5.6	9.6	12.3	7.7
Government	7.1	9.6	8.5	6.4	3.5	3.7	1.8	D	D	D	5.5	1.8	5.8	3.0	7.9
Nonprofit	D	12.3	11.8	3.7	4.5	4.7	4.0	D	D	D	4.1	6.5	4.6	2.4	6.2
Other & unknown	D	8.5	5.2	3.5	4.4	4.5	4.5	0.9	5.4	4.5	3.2	5.1	4.2	3.3	4.8
Primary activity [f,g]															
R & D	34.6	22.0	41.0	70.2	14.0	9.8	12.9	13.0	11.5	7.9	18.1	13.1	28.9	42.8	18.6
Teaching	49.7	29.3	38.0	11.3	54.0	43.0	75.0	79.6	77.0	83.1	69.0	73.2	49.4	40.9	55.7
Administration	7.5	7.7	14.0	5.4	22.9	35.9	6.2	D	D	D	7.6	5.9	13.2	11.0	14.9
Professional services	6.3	39.4	6.5	9.6	7.9	10.4	3.6	D	D	D	3.8	4.3	7.8	4.4	10.4
Other	1.9	1.7	0.5	3.5	1.2	0.8	2.2	0.9	1.0	0.5	1.4	3.5	0.7	0.9	0.5

APPENDIX TABLE A-3c (Revised June 2008). Statistical profile of doctorate recipients, by major field of study, 2006 - Total all females

Characteristics	Political sci./ internatn'l rel.	Psychology	Other social sciences	Engineering	Total non-science & engineering	Education	Humanities	American literature	English lang. & literature	Foreign lang. & literature	History	Other humanities	Other fields	Business & management	Fields not elsewhere classified
Secondary activity [f,g]															
R & D	42.8	31.1	37.0	16.5	38.1	28.3	51.7	60.2	55.0	64.6	52.4	45.6	43.5	39.0	46.9
Teaching	33.3	16.7	25.5	10.7	19.3	18.4	15.0	11.1	16.8	10.1	15.2	16.5	29.9	43.7	19.6
Administration	5.0	12.9	12.0	13.6	9.2	10.3	7.8	9.3	D	D	5.7	9.0	8.1	5.7	9.7
Professional services	D	9.9	D	8.3	8.1	11.1	4.1	D	D	D	3.3	5.9	6.3	2.5	9.2
Other	D	1.8	D	1.7	2.1	1.5	3.3	D	D	1.1	4.3	4.7	1.6	0.3	2.6
No secondary activity	15.1	27.6	16.0	49.1	23.3	30.3	18.1	15.7	15.2	20.6	19.0	18.4	10.6	8.8	12.0
Activity(ies) unknown	5.4	8.2	5.7	4.8	5.7	5.8	5.6	2.7	5.4	6.0	4.1	6.5	5.7	4.5	6.6
Region of employment after doctorate [i]															
New England	7.7	7.2	9.0	5.7	5.1	3.3	8.0	5.4	10.9	8.5	6.8	7.8	5.3	6.6	4.4
Middle Atlantic	13.1	20.7	15.1	10.8	14.1	12.8	16.2	16.2	16.3	16.9	15.1	16.4	14.3	11.4	16.5
East North Central	8.9	12.7	13.2	8.6	14.4	15.4	13.2	15.3	13.9	12.9	12.3	13.1	13.6	15.6	12.1
West North Central	8.9	6.4	2.8	3.8	9.0	9.4	8.8	6.3	9.9	7.0	11.0	8.8	8.1	8.4	7.9
South Atlantic	23.2	17.5	25.9	16.6	19.5	20.8	17.6	17.1	17.8	18.9	22.4	15.8	18.9	18.9	18.7
East South Central	6.5	4.2	5.2	2.4	5.1	6.0	3.6	6.3	5.9	5.5	2.3	2.3	5.5	4.2	6.4
West South Central	7.1	8.4	9.0	8.2	8.5	9.8	6.7	7.2	5.9	7.0	7.3	6.6	8.1	6.9	9.0
Mountain	5.4	5.4	D	9.5	5.9	6.8	5.5	D	D	4.0	5.0	5.8	4.2	3.6	4.6
Pacific & insular	8.9	14.5	9.4	25.8	11.8	11.3	12.3	16.2	9.9	12.4	11.0	12.7	12.6	15.0	10.8
Non-U.S.	10.1	3.0	5.7	8.6	6.5	4.6	8.1	D	D	7.0	6.8	10.7	9.3	9.0	9.5
Region unknown	0.0	0.0	D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0
	Years														
Median age at doctorate	33.7	31.5	35.2	30.2	37.7	42.5	34.7	34.1	34.0	35.2	35.0	34.9	35.9	34.8	36.9
Median time lapse from baccalaureate to doctorate															
Since baccalaureate	11.0	8.8	11.7	7.8	13.9	17.0	11.4	11.3	10.6	11.4	11.4	11.6	12.6	11.5	13.1
Since starting graduate school	9.2	7.0	9.3	6.8	11.0	13.0	9.7	9.7	9.0	9.6	9.7	9.7	10.0	9.0	10.7

D = suppressed to avoid disclosure of confidential information.

[a] Includes only respondents with responses to post graduation status

[b] Includes respondents who indicated that they did not plan to work or study and a small number of respondents who indicated some other type of postgraduation plans.

[c] Percentages are based upon only those doctorate recipients who indicated definite postgraduation plans for study and who indicated the type of study.

[d] Percentages are based upon only those doctorate recipients who indicated definite postgraduation plans for employment and who indicated the sector of employment.

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

[f] Includes only respondents with definite employment plans.

[g] Percentages are based upon only those doctorate recipients who indicated their primary and secondary work activities.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

APPENDIX TABLE A-4 (Revised June 2008). Statistical profile of doctorate recipients, by race/ethnicity and citizenship, 2006

Characteristics	Total [a]				American Indian [b]				Asian [c]				Black			
			Non-U.S.				Non-U.S.				Non-U.S.				Non-U.S.	
	Total	U.S.	Perm.	Temp.	Total	U.S.	Perm.	Temp.	Total	U.S.	Perm.	Temp.	Total	U.S.	Perm.	Temp.
	Count															
Total number	45,596	26,917	1,829	14,118	131	118	1	11	11,706	1,560	824	9,247	2,206	1,659	130	385
	Percent															
Male	54.9	49.3	47.2	66.2	47.3	45.8	100.0	63.6	62.9	49.4	45.1	66.7	42.1	35.0	60.0	67.3
Female	45.1	50.7	52.8	33.8	52.7	54.2	0.0	36.4	37.1	50.6	54.9	33.3	57.9	65.0	40.0	32.7
Field of study																
Life sciences [e]	21.2	22.3	23.2	19.2	13.7	12.7	0.0	27.3	21.6	31.0	25.4	19.8	18.2	16.5	21.5	24.9
Physical sciences [f]	16.4	12.3	18.9	24.3	5.3	5.9	0.0	0.0	22.6	14.6	21.2	24.1	7.5	4.4	11.5	19.7
Social sciences [g]	15.1	18.1	12.9	9.6	20.6	22.0	0.0	9.1	8.5	15.5	8.9	7.3	17.8	19.2	18.5	12.2
Engineering	15.8	8.1	16.4	30.3	4.6	2.5	100.0	9.1	31.8	17.1	20.9	35.2	6.7	5.4	10.8	11.4
Education	13.4	18.5	7.4	4.3	29.0	29.7	0.0	27.3	4.7	8.0	6.3	4.0	32.0	36.5	21.5	14.3
Humanities	12.2	15.1	14.8	6.3	17.6	19.5	0.0	0.0	5.0	10.1	10.0	3.7	9.6	9.9	10.8	8.3
Other fields	5.9	5.6	6.5	6.1	9.2	7.6	0.0	27.3	5.7	3.8	7.4	5.9	8.3	8.1	5.4	9.1
Graduate school primary source of support [h]																
Teaching assistantships	17.4	15.5	21.3	20.6	7.0	6.6	D	D	18.0	12.2	17.5	19.0	12.2	6.9	17.9	32.2
Research and other non-teaching assistantships/traineeships	28.6	17.3	31.8	50.0	8.8	8.5	D	D	50.9	21.6	39.8	56.8	14.4	9.6	21.4	31.7
Fellowships/dissertation grants	27.5	31.6	27.0	19.6	36.0	35.8	D	D	20.7	45.5	25.1	16.1	35.7	38.5	29.9	26.4
Own resources	21.3	30.0	15.9	5.3	38.6	40.6	D	D	7.6	16.9	12.4	5.5	32.4	38.8	29.1	6.7
Foreign government	1.4	*	D	D	D	D	D	D	1.7	D	D	2.0	0.5	D	D	D
Employer	3.7	5.5	2.7	0.5	7.0	7.5	D	D	1.1	3.6	3.7	0.5	4.7	6.1	D	D
Other	0.1	0.1	D	D	D	D	D	D	*	D	D	*	0.1	D	D	D
	Count															
Postgraduation plans [i]																
Definite postdoctoral study	9,869	5,801	394	3,664	13	D	D	D	3,021	475	179	2,367	344	243	20	81
Definite employment	19,268	13,148	732	5,353	66	63	D	D	4,430	579	326	3,519	1,031	837	41	152
Seeking employment or study	11,234	6,416	573	4,227	36	30	D	D	3,626	427	263	2,934	636	449	55	132
Other/unknown [j]	1,233	814	70	337	4	D	D	D	294	48	35	211	79	62	9	8
	Percent															
Postdoctoral study plans	33.9	30.6	35.0	40.6	D	D	D	D	40.5	45.1	35.4	40.2	25.0	22.5	32.8	34.8
Postgraduation employment plans																
Educational institution [k]	59.8	65.9	49.7	46.2	69.7	71.4	D	D	38.8	47.2	37.4	37.5	68.7	68.1	58.5	74.3
Industry/business	24.1	16.0	33.7	42.7	9.1	9.5	D	D	49.1	32.3	47.2	52.1	9.8	9.1	12.2	13.2
Government	6.5	7.6	3.3	4.6	7.6	7.9	D	D	4.4	9.3	4.0	3.6	9.5	9.9	D	D
Nonprofit	4.4	5.3	4.4	2.1	7.6	D	D	D	2.8	5.9	2.8	2.2	5.6	5.9	D	D
Other/unknown	5.2	5.2	8.9	4.5	6.1	D	D	D	5.0	5.4	8.6	4.6	6.4	7.0	D	D

APPENDIX TABLE A-4 (Revised June 2008). Statistical profile of doctorate recipients, by race/ethnicity and citizenship, 2006

Characteristics	White				Puerto Rican	Mexican				Other Hispanic				Other/unknown race [d]			
			Non-U.S.					Non-U.S.				Non-U.S.				Non-U.S.	
	Total	U.S.	Perm.	Temp.	Total	Total	U.S.	Perm.	Temp.	Total	U.S.	Perm.	Temp.	Total	U.S.	Perm.	Temp.
	Count																
Total number	25,399	21,280	669	3,279	321	729	516	20	192	1,254	533	120	587	3,850	930	65	417
	Percent																
Male	52.4	50.6	46.5	65.1	42.7	52.4	46.9	55.0	66.7	54.5	44.3	50.8	64.9	56.4	51.4	44.6	63.8
Female	47.6	49.4	53.5	34.9	57.3	47.6	53.1	45.0	33.3	45.5	55.7	49.2	35.1	43.6	48.6	55.4	36.2
Field of study																	
Life sciences [e]	21.5	22.5	20.8	15.4	19.6	19.5	18.0	20.0	23.4	22.8	19.7	30.0	24.2	20.4	20.8	13.8	20.6
Physical sciences [f]	15.1	13.1	19.4	27.6	11.5	11.0	7.2	15.0	20.8	11.6	7.9	10.8	15.3	14.4	12.2	13.8	20.6
Social sciences [g]	17.2	17.7	15.4	13.8	23.1	21.9	22.5	25.0	20.3	20.6	25.7	15.8	17.0	15.7	21.0	18.5	10.3
Engineering	9.7	7.7	13.5	21.9	11.8	9.3	5.8	15.0	17.7	12.5	6.2	6.7	19.8	15.4	10.0	18.5	25.4
Education	15.8	17.8	5.8	3.6	17.1	20.3	27.1	5.0	3.6	9.6	15.8	6.7	4.1	12.7	14.2	10.8	6.7
Humanities	15.2	15.8	19.3	11.2	10.6	13.2	14.5	15.0	9.4	18.1	18.9	28.3	15.3	13.9	16.2	12.3	8.4
Other fields	5.6	5.5	5.8	6.5	6.2	4.8	4.8	5.0	4.7	4.7	5.8	1.7	4.3	7.4	5.7	12.3	7.9
Graduate school primary source of support [h]																	
Teaching assistantships	17.8	16.7	25.2	23.7	12.5	12.7	11.5	D	15.1	19.8	14.1	27.4	23.2	15.5	14.1	20.0	19.7
Research and other non-teaching assistantships/traineeships	21.0	18.0	28.4	39.2	15.0	11.4	9.8	D	14.5	22.0	11.8	12.4	33.0	22.0	16.4	24.4	33.3
Fellowships/dissertation grants	28.9	29.4	27.8	25.7	41.8	36.9	38.3	30.0	33.9	33.2	40.2	30.1	27.7	32.7	35.5	33.3	26.9
Own resources	26.5	30.1	15.6	4.8	24.9	27.1	36.1	D	4.3	16.1	28.4	23.9	3.6	24.1	30.5	22.2	6.4
Foreign government	0.8	D	D	6.1	D	8.6	D	D	30.6	6.2	D	D	11.6	2.6	D	D	12.8
Employer	4.9	5.7	1.9	0.4	D	3.0	3.5	D	D	2.6	4.6	D	0.9	3.0	D	D	D
Other	0.1	D	D	*	D	0.3	D	D	D	0.1	D	D	0.0	0.1	D	D	D
	Count																
Postgraduation plans [i]																	
Definite postdoctoral study	5,767	4,620	153	992	53	175	110	8	57	251	100	27	124	245	188	7	42
Definite employment	12,177	10,658	281	1,235	134	342	250	10	82	557	245	55	257	531	382	19	105
Seeking employment or study	6,023	4,935	207	877	83	188	140	D	D	328	132	30	165	314	220	16	67
Other/unknown [j]	722	625	17	79	11	17	12	D	D	45	20	6	19	61	32	2	16
	Percent																
Postdoctoral study plans	32.1	30.2	35.3	44.5	28.3	33.8	30.6	44.4	41.0	31.1	29.0	32.9	32.5	31.6	33.0	26.9	28.6
Postgraduation employment plans																	
Educational institution [k]	66.1	66.9	57.7	61.1	61.2	68.7	70.8	60.0	63.4	66.4	66.1	70.9	65.8	57.6	57.3	57.9	61.0
Industry/business	17.2	15.7	25.6	27.8	20.1	13.7	10.4	D	D	17.1	14.7	18.2	19.1	20.2	19.1	D	D
Government	6.8	7.2	D	D	8.2	8.2	8.4	D	D	8.8	9.0	D	D	8.3	7.9	D	D
Nonprofit	4.9	5.2	D	D	3.7	3.8	4.0	D	D	3.8	6.1	D	D	4.5	5.8	D	D
Other/unknown	5.0	4.9	10.3	4.6	6.7	5.6	6.4	0.0	3.7	3.9	4.1	7.3	3.1	9.4	9.9	5.3	4.8

APPENDIX TABLE A-4 (Revised June 2008). Statistical profile of doctorate recipients, by race/ethnicity and citizenship, 2006

Characteristics	Total [a]				American Indian [b]				Asian [c]				Black			
			Non-U.S.				Non-U.S.				Non-U.S.				Non-U.S.	
	Total	U.S.	Perm.	Temp.	Total	U.S.	Perm.	Temp.	Total	U.S.	Perm.	Temp.	Total	U.S.	Perm.	Temp.
Employment location after doctorate [l]																
U.S.	90.6	98.0	93.6	72.0	95.5	96.8	D	D	80.9	94.0	93.3	77.7	93.6	99.5	95.1	60.5
Non-U.S.	9.4	D	D	D	D	D	D	D	18.9	D	D	D	D	D	D	D
Unknown	*	D	D	D	D	D	0.0	0.0	0.1	D	D	D	D	D	D	D
	Years															
Median age at doctorate	32.7	33.4	33.9	31.8	38.0	39.1	D	33.5	31.8	31.1	33.7	31.7	36.9	36.7	38.7	36.9
Median time lapse from baccalaureate to doctorate																
Since baccalaureate	9.5	10.0	10.3	8.9	13.0	13.5	D	10.2	9.0	8.6	10.7	9.0	12.3	12.5	13.0	11.1
Since starting graduate school	7.9	8.1	8.7	7.7	10.3	10.7	D	6.4	7.9	7.1	9.0	7.9	9.7	10.0	9.9	8.2

APPENDIX TABLE A-4 (Revised June 2008). Statistical profile of doctorate recipients, by race/ethnicity and citizenship, 2006

Characteristics	White				Puerto Rican	Mexican				Other Hispanic				Other/unknown race [d]			
			Non-U.S.					Non-U.S.				Non-U.S.				Non-U.S.	
	Total	U.S.	Perm.	Temp.	Total	Total	U.S.	Perm.	Temp.	Total	U.S.	Perm.	Temp.	Total	U.S.	Perm.	Temp.
Employment location after doctorate [l]																	
U.S.	94.8	98.1	93.2	66.0	97.0	84.2	98.4	D	D	75.9	97.6	94.5	51.4	87.0	97.4	94.7	D
Non-U.S.	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	54.3
Unknown	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
	Years																
Median age at doctorate	32.9	33.3	33.6	31.2	33.3	34.5	34.6	33.2	34.4	34.1	33.8	35.6	34.0	32.8	32.9	34.1	32.7
Median time lapse from baccalaureate to doctorate																	
Since baccalaureate	9.7	10.0	9.5	8.1	9.6	10.1	10.0	11.0	10.1	9.9	10.4	10.9	9.7	9.5	9.6	10.3	9.4
Since starting graduate school	7.9	8.0	8.2	7.2	8.3	8.2	8.3	8.6	8.0	7.9	8.3	9.0	7.4	7.7	7.9	7.9	7.6

D = suppressed to avoid disclosure of confidential information.

* = value < 0.1%.

[a] Totals include 71 individuals who did not report their sex and 2,732 individuals who did not report their citizenship at time of doctorate.

[b] Includes Alaska Natives.

[c] Does not include Native Hawaiians or other Pacific Islanders.

[d] Includes Native Hawaiians or other Pacific Islanders, respondents choosing multiple races (excluding those selecting an Hispanic ethnicity), and respondents with unknown race/ethnicity.

[e] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[f] Includes mathematics and computer & information sciences.

[g] Includes psychology.

[h] Percentages are based on the number indicating a primary source of financial support during graduate school.

[i] Includes only respondents who responded to post graduation status.

[j] Includes respondents who indicated that they did not plan to work or study and respondents who did not indicate their postgraduation plans.

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

[l] Includes only respondents with definite employment plans.

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

APPENDIX TABLE A-5 (Revised June 2008). Doctorate recipients' financial resources in support of doctoral programs, by broad field of study and sex, 2006

Financial resource	Total		Life sciences [a]		Physical sciences [b]		Social sciences [c]		Engineering		Education		Humanities		Other fields	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Count															
Unduplicated total [d]	22,425	18,493	4,210	4,592	4,940	1,903	2,586	3,492	5,172	1,315	1,886	3,522	2,434	2,539	1,197	1,130
	Percent															
Fellowship, scholarship	49.0	52.0	51.5	55.1	48.5	53.6	59.6	56.8	40.5	52.5	26.8	28.6	71.1	71.5	47.0	49.8
Grant, stipend	32.0	36.1	51.9	51.9	27.6	31.4	38.1	39.3	20.4	28.0	14.8	15.7	40.4	43.0	26.5	26.8
Teaching assistantship	58.4	54.3	41.9	41.2	77.0	79.1	74.1	69.0	49.2	49.5	20.6	24.4	80.1	80.5	61.1	60.3
Research assistantship	60.0	48.4	53.9	49.9	79.2	79.4	56.0	56.1	83.5	82.7	17.7	23.2	25.0	28.5	47.9	49.4
Other assistantship	3.3	5.3	1.8	1.9	1.8	1.4	6.3	9.6	2.0	2.0	5.8	7.6	6.3	7.2	4.0	4.5
Traineeship	1.8	2.9	5.4	6.6	1.2	1.1	2.0	4.7	0.9	1.9	D	0.4	0.3	0.3	D	0.7
Internship, clinical residency	3.2	4.9	0.8	1.1	3.4	3.7	8.6	17.5	4.7	3.5	1.4	2.0	0.7	1.3	1.3	1.8
Loans (from any source)	23.2	31.3	20.6	21.6	13.5	12.6	40.4	48.8	8.6	7.8	37.9	36.7	46.2	42.1	28.9	34.7
Personal savings	28.0	32.7	21.1	24.1	17.6	15.6	39.2	37.4	19.5	17.3	52.3	48.2	40.7	37.9	42.9	38.8
Other personal earnings during graduate school	20.7	30.7	11.6	16.7	9.6	8.8	34.1	37.7	8.1	7.9	45.5	50.2	47.6	45.5	30.5	35.0
Family earnings or savings [e]	21.2	32.3	19.7	24.6	13.0	15.9	32.0	41.6	13.1	14.6	25.9	38.2	37.4	44.0	31.6	38.2
Employer reimbursement/assistance	7.6	9.0	5.6	7.2	3.4	3.0	6.0	5.0	6.5	4.0	28.2	22.7	5.3	4.5	12.5	11.9
Foreign (non-U.S.) support	4.6	3.1	3.3	3.0	3.3	3.0	6.3	2.8	4.9	2.8	3.7	2.2	6.3	4.9	8.4	4.4
Other	0.1	0.2	*	0.2	0.1	0.2	0.2	0.1	*	0.1	0.5	0.4	0.3	0.4	0.2	0.3

D = suppressed to avoid disclosure of confidential information.

* = value < 0.1%.

[a] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[b] Includes mathematics and computer & information sciences.

[c] Includes psychology.

[d] The 4,674 doctorate recipients who did not report sources of support are omitted from this total. Percentages are based only on known responses.

[e] This category includes spouses and significant others.

NOTES: In this table a respondent counts once in each source category from which he or she received support. Because students indicate multiple sources of support, the percentages sum to more than 100 percent. (Data on the "primary" source of support for doctorate recipients are presented in the body of this report.) Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates. The table excludes 71 individuals for whom sex was not reported.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

APPENDIX TABLE A-6 (Revised June 2008). Distribution of doctorate recipients' financial resources in support of doctoral programs, by sex and broad field of study, 2006

Financial resource	All fields	Life sciences [a]	Physical sciences [b]	Social sciences [c]	Engineering	Education	Humanities	Other fields
	Count	Percent						
Male								
Unduplicated count [d]	22,425	18.8	22.0	11.5	23.1	8.4	10.9	5.3
Fellowship, scholarship	10,997	19.7	21.8	14.0	19.0	4.6	15.7	5.1
Grant, stipend	7,171	30.5	19.0	13.7	14.7	3.9	13.7	4.4
Teaching assistantship	13,099	13.5	29.0	14.6	19.4	3.0	14.9	5.6
Research assistantship	13,463	16.8	29.1	10.8	32.1	2.5	4.5	4.3
Other assistantship	737	10.0	11.9	22.0	13.7	14.9	20.9	6.5
Traineeship	403	56.3	15.1	13.2	11.4	D	1.7	D
Internship, clinical residency	726	4.7	23.0	30.7	33.3	3.6	2.5	2.2
Loans (from any source)	5,205	16.7	12.8	20.1	8.5	13.7	21.6	6.6
Personal savings	6,274	14.1	13.9	16.2	16.1	15.7	15.8	8.2
Other personal earnings during graduate school	4,648	10.5	10.2	19.0	9.1	18.5	24.9	7.9
Family earnings or savings [e]	4,757	17.4	13.5	17.4	14.3	10.3	19.1	7.9
Employer reimbursement/assistance	1,710	13.9	9.8	9.1	19.8	31.1	7.6	8.8
Foreign (non-U.S.) support	1,042	13.5	15.6	15.5	24.2	6.6	14.8	9.7
Other	32	6.3	18.8	12.5	6.3	28.1	21.9	6.3
Female								
Unduplicated count [f]	18,493	24.8	10.3	18.9	7.1	19.0	13.7	6.1
Fellowship, scholarship	9,610	26.3	10.6	20.6	7.2	10.5	18.9	5.9
Grant, stipend	6,667	35.7	9.0	20.6	5.5	8.3	16.4	4.5
Teaching assistantship	10,044	18.8	15.0	24.0	6.5	8.6	20.4	6.8
Research assistantship	8,950	25.6	16.9	21.9	12.2	9.1	8.1	6.2
Other assistantship	976	8.8	2.8	34.3	2.7	27.6	18.6	5.2
Traineeship	541	56.2	3.7	30.1	4.6	2.4	1.5	1.5
Internship, clinical residency	901	5.7	7.8	67.9	5.1	7.8	3.6	2.2
Loans (from any source)	5,790	17.1	4.1	29.4	1.8	22.3	18.5	6.8
Personal savings	6,038	18.4	4.9	21.6	3.8	28.1	15.9	7.3
Other personal earnings during graduate school	5,674	13.5	2.9	23.2	1.8	31.2	20.4	7.0
Family earnings or savings [e]	5,975	18.9	5.1	24.3	3.2	22.5	18.7	7.2
Employer reimbursement/assistance	1,664	19.8	3.5	10.5	3.2	48.1	6.8	8.1
Foreign (non-U.S.) support	580	23.4	10.0	16.7	6.4	13.3	21.6	8.6
Other	40	20.0	7.5	7.5	2.5	32.5	22.5	7.5

D = suppressed to avoid disclosure of confidential information.

[a] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[b] Includes mathematics and computer & information sciences.

[c] Includes psychology.

[d] The 2,561 male doctorate recipients who did not report sources of support are omitted from this count.

[e] This category includes spouses and significant others.

[f] The 2,046 female doctorate recipients who did not report sources of support are omitted from this count.

NOTES: 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 sum of the individual sources of support will be greater than the unduplicated total. (Data on the "primary" source of support for doctorate recipients are presented in the body of this report.) Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

APPENDIX TABLE A-7 (Revised June 2008). State of doctoral institution of doctorate recipients, by broad field of study and sex, 2006

State	Total [a]		Life sciences [b]		Physical sciences [c]		Social sciences [d]		Engineering		Education		Humanities		Other fields	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
United States [e]	24,986	20,539	4,675	4,993	5,387	2,062	2,928	3,939	5,724	1,452	2,128	3,987	2,749	2,821	1,395	1,285
Alabama	317	217	74	72	50	20	25	27	88	20	35	57	14	13	31	8
Alaska	12	9	2	7	8	1	0	1	1	0	0	0	1	0	0	0
Arizona	461	348	67	70	95	32	53	52	124	20	51	89	45	67	26	18
Arkansas	111	80	30	24	17	3	8	13	19	3	25	30	7	4	5	3
California	3,083	2,372	459	552	798	279	407	558	805	204	178	334	326	337	110	108
Colorado	384	341	67	87	92	41	42	65	94	17	33	68	30	37	26	26
Connecticut	332	295	96	92	64	25	43	59	54	18	6	17	58	64	11	20
Delaware	129	109	10	11	31	9	10	12	46	13	22	49	9	14	1	1
District of Columbia	252	307	35	58	23	15	55	78	46	18	11	45	53	48	29	45
Florida	985	827	155	143	212	107	90	135	226	64	102	236	90	73	110	69
Georgia	628	534	108	117	131	53	47	94	212	55	44	123	44	55	42	37
Hawaii	74	73	14	19	16	5	10	17	9	0	3	14	16	16	6	2
Idaho	75	78	20	12	11	7	5	1	9	3	30	51	0	2	0	2
Illinois	1,292	1,019	176	216	314	127	160	207	267	63	111	216	160	135	104	55
Indiana	736	507	121	106	127	48	71	70	194	47	76	115	108	95	39	26
Iowa	370	271	88	72	68	32	31	25	89	25	39	63	38	36	17	18
Kansas	257	222	74	47	47	9	35	39	28	4	37	73	29	32	7	18
Kentucky	238	184	57	56	26	15	28	40	41	13	20	27	40	16	26	17
Louisiana	278	248	76	67	49	32	17	46	53	13	20	41	42	34	21	15
Maine	18	20	8	4	2	2	1	5	5	1	0	6	1	2	1	0
Maryland	623	587	150	221	150	59	84	104	145	46	26	66	51	67	17	24
Massachusetts	1,314	1,008	259	276	352	114	178	222	279	93	37	90	141	155	68	58
Michigan	885	668	146	161	179	66	104	137	264	45	69	104	79	105	44	50
Minnesota	481	462	81	120	85	35	58	77	97	29	56	107	40	56	64	38
Mississippi	190	176	34	38	28	9	24	36	17	6	44	68	17	6	26	13
Missouri	478	342	103	77	87	30	56	59	103	20	60	81	43	51	26	24
Montana	46	37	18	17	14	4	1	6	3	3	10	7	0	0	0	0
Nebraska	151	141	40	34	20	10	14	21	14	4	29	36	20	22	14	14
Nevada	81	74	12	13	13	5	9	21	25	2	11	19	8	9	3	5
New Hampshire	64	61	18	22	24	8	9	11	8	4	1	8	2	6	2	2
New Jersey	563	398	76	80	141	57	68	73	133	45	27	49	92	76	26	18
New Mexico	160	121	23	18	43	16	13	20	43	7	15	41	19	12	4	7
New York	1,975	1,877	370	402	415	165	329	464	329	89	120	249	317	369	95	139
North Carolina	733	624	191	215	162	55	68	82	148	45	60	102	77	90	27	35
North Dakota	47	34	15	8	12	2	5	7	6	0	5	9	2	4	2	4
Ohio	1,008	803	195	189	226	68	94	142	273	70	76	172	96	98	48	64
Oklahoma	214	156	47	31	25	4	18	42	47	10	38	42	21	16	18	11
Oregon	225	217	76	85	45	19	29	34	34	8	19	37	17	30	5	4
Pennsylvania	1,266	1,079	189	250	275	107	124	188	313	90	131	207	158	157	76	80
Puerto Rico	38	80	3	9	8	7	10	32	7	1	5	20	4	9	1	2
Rhode Island	158	130	37	29	53	16	23	39	18	6	1	2	25	36	1	2
South Carolina	235	179	47	51	42	19	21	21	53	21	37	39	25	18	10	10
South Dakota	39	34	14	4	5	1	6	6	1	0	12	21	1	2	0	0

APPENDIX TABLE A-7 (Revised June 2008). State of doctoral institution of doctorate recipients, by broad field of study and sex, 2006

	Total [a]		Life sciences [b]		Physical sciences [c]		Social sciences [d]		Engineering		Education		Humanities		Other fields	
State	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Tennessee	360	350	86	87	53	26	40	65	64	21	59	105	40	29	18	17
Texas	1,687	1,366	314	326	335	133	165	223	452	86	142	351	184	155	95	92
Utah	236	114	40	24	43	13	32	24	71	6	25	22	12	13	13	12
Vermont	35	29	19	8	7	0	7	6	1	1	1	11	0	3	0	0
Virginia	595	516	111	112	117	54	72	96	158	47	66	131	37	42	34	34
Washington	446	348	98	117	109	46	55	50	87	24	44	49	33	44	20	18
West Virginia	108	75	19	17	20	2	18	21	25	3	16	23	10	9	0	0
Wisconsin	480	366	100	115	107	47	54	62	90	18	36	52	67	52	26	20
Wyoming	33	26	7	5	11	3	2	4	6	1	7	13	0	0	0	0

[a] Totals exclude doctorate recipients who did not report sex (n=71).

[b] Includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences.

[c] Includes mathematics and computer & information sciences.

[d] Includes psychology.

[e] Includes the 50 states, District of Columbia, and Puerto Rico.

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

Institution	2006 Total	Agricultural sciences/ natural resources	Biological/biomedical sciences	Health sciences	Chemistry	Computer & information sciences	Earth, atmos., & marine sciences	Mathematics	Physics & astronomy	Psychology	Other social sciences	Engineering	Education	American literature	English language & literature	History	Other humanities	Other fields
All U.S. Institutions	45,596	1,146	6,631	1,906	2,363	1,452	757	1,327	1,562	3,263	3,610	7,191	6,123	382	572	973	3,649	2,689
Alabama	534	18	86	42	16	13	9	18	14	33	19	108	92	4	8	6	9	39
AL A&M U.	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AL State U.	5	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0
Auburn U.	164	13	17	4	5	5	1	4	1	15	9	46	29	1	1	3	1	9
U. AL Birmingham	134	0	53	28	1	3	0	3	3	9	2	19	12	0	0	0	0	1
U. AL in Huntsville	31	0	3	0	0	2	4	1	5	0	0	16	0	0	0	0	0	0
U. AL, The	180	0	6	6	10	3	3	9	5	9	8	27	44	3	7	3	8	29
U. South AL	15	0	7	4	0	0	1	1	0	0	0	0	2	0	0	0	0	0
Alaska	21	1	8	0	1	0	7	0	1	0	1	1	0	0	0	0	1	0
U. AK	21	1	8	0	1	0	7	0	1	0	1	1	0	0	0	0	1	0
Arizona	809	27	85	25	22	19	36	14	36	45	60	144	140	3	8	14	87	44
AZ State U.	379	1	29	6	5	16	9	3	8	27	26	92	79	1	7	6	33	31
Northern AZ U.	38	1	3	0	0	0	0	0	0	5	4	0	23	0	0	0	2	0
U. AZ	392	25	53	19	17	3	27	11	28	13	30	52	38	2	1	8	52	13
Arkansas	191	14	30	10	8	4	1	0	7	9	12	22	55	1	2	7	1	8
AR State U.	19	2	1	0	0	0	0	0	0	0	0	1	12	0	0	2	0	1
U. AR	134	12	12	7	8	3	1	0	7	9	12	17	30	1	2	5	1	7
U. AR Little Rock	19	0	0	1	0	1	0	0	0	0	0	4	13	0	0	0	0	0
U. AR for Medical Sciences	19	0	17	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
California	5,464	76	799	138	332	211	118	178	239	474	492	1,013	512	36	43	134	451	218
Alliant International U./Alameda	36	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0	1
Alliant International U./Alhambra	31	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0
Alliant International U./Fresno	25	0	0	0	0	0	0	0	0	24	1	0	0	0	0	0	0	0
Alliant International U./San Diego	56	0	0	2	0	0	0	0	0	41	0	0	0	0	0	0	0	13
Azusa Pacific U.	13	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	1
Biola U.	23	0	0	0	0	0	0	0	0	7	2	0	10	0	0	0	0	4
CA Institute Integral Studies	25	0	0	1	0	0	0	0	0	5	3	0	2	0	0	2	12	0
CA Institute of Technology	178	1	31	0	28	3	12	12	39	1	2	49	0	0	0	0	0	0
Claremont Graduate U.	100	0	0	0	0	8	0	4	0	14	18	2	20	5	3	4	16	6
Claremont School of Theology	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2
Fielding Graduate Institute	103	0	0	0	0	0	0	0	0	50	5	0	31	0	0	0	1	16
Fuller Theological Seminary	45	0	0	0	0	0	0	0	0	15	1	0	1	0	0	0	18	10
Graduate Theological Union	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	18	4
La Sierra U.	12	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0
Loma Linda U.	24	0	7	4	0	0	0	0	0	12	0	0	0	0	0	0	0	1

Institution	2006 Total	Agricultural sciences/ natural resources	Biological/biomedical sciences	Health sciences	Chemistry	Computer & information sciences	Earth, atmos., & marine sciences	Mathematics	Physics & astronomy	Psychology	Other social sciences	Engineering	Education	American literature	English language & literature	History	Other humanities	Other fields
Naval Postgraduate School	3	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0
Pacific Graduate School of Psychology	42	0	0	0	0	0	0	0	0	42	0	0	0	0	0	0	0	0
Pardee RAND Graduate School	11	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0
Pepperdine U.	68	0	0	0	0	0	0	0	0	1	1	0	47	0	0	0	0	19
San Diego State U.	7	0	0	0	0	0	0	0	0	0	1	0	6	0	0	0	0	0
Santa Clara U.	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
Saybrook Graduate School	45	0	0	1	0	0	0	0	0	38	1	0	0	0	0	0	2	3
Scripps Research Institute, The	31	0	11	0	18	0	0	0	1	1	0	0	0	0	0	0	0	0
Stanford U.	644	2	89	3	28	26	23	31	50	9	58	202	27	1	3	16	47	29
U. CA, Berkeley	747	21	69	23	65	29	12	35	34	22	95	173	26	3	6	28	77	29
U. CA, Davis	413	36	127	9	31	12	11	13	15	13	38	63	14	4	5	5	16	1
U. CA, Irvine	266	1	48	4	30	19	4	5	8	14	29	68	8	1	3	5	17	2
U. CA, Los Angeles	702	0	109	28	30	35	8	33	25	23	78	106	58	6	6	29	100	28
U. CA, Riverside	165	7	27	1	15	13	7	4	5	5	16	23	7	6	3	13	13	0
U. CA, San Diego	362	0	98	5	18	20	20	14	17	18	34	81	6	1	2	7	17	4
U. CA, San Francisco	118	0	75	20	7	0	0	0	0	0	7	8	0	0	0	1	0	0
U. CA, Santa Barbara	338	4	21	0	25	11	8	13	24	14	34	93	31	4	7	8	37	4
U. CA, Santa Cruz	135	4	23	1	13	9	5	6	13	11	15	15	0	0	1	7	10	2
U. San Diego	30	0	0	17	0	0	0	0	0	0	1	0	12	0	0	0	0	0
U. San Francisco	49	0	0	1	0	0	0	0	0	0	0	0	39	0	1	0	0	8
U. Southern CA	561	0	62	18	24	25	7	8	8	17	41	125	134	5	3	7	46	31
U. the Pacific	11	0	2	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0
Wright Institute, The	11	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0
Colorado	725	17	105	32	44	19	25	15	30	43	64	111	101	3	9	2	53	52
CO School of Mines	39	0	0	0	4	3	6	0	2	0	3	20	0	0	0	0	0	1
CO State U.	186	17	39	5	10	5	9	3	5	21	12	21	34	0	0	0	0	5
U. CO	296	0	28	4	27	11	10	9	22	14	31	65	7	2	2	2	39	23
U. CO Health Sciences Ctr.	51	0	35	13	2	0	0	0	0	0	0	1	0	0	0	0	0	0
U. CO-Colorado Springs	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0
U. CO-Denver	30	0	0	6	0	0	0	3	0	0	6	0	9	0	0	0	0	6
U. Denver	76	0	3	0	0	0	0	0	1	7	10	1	24	1	7	0	8	14
U. Northern CO	44	0	0	4	1	0	0	0	0	1	2	0	27	0	0	0	6	3
Connecticut	627	19	151	18	35	9	5	15	25	42	60	72	23	8	12	39	63	31
U. CT	304	10	64	13	23	4	3	6	8	32	23	48	23	6	6	4	14	17
U. New Haven	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Wesleyan U.	10	0	4	0	2	0	0	1	3	0	0	0	0	0	0	0	0	0
Yale U.	312	9	83	5	10	5	2	8	14	10	37	24	0	2	6	35	49	13

Institution	2006 Total	Agricultural sciences/ natural resources	Biological/biomedical sciences	Health sciences	Chemistry	Computer & information sciences	Earth, atmos., & marine sciences	Mathematics	Physics & astronomy	Psychology	Other social sciences	Engineering	Education	American literature	English language & literature	History	Other humanities	Other fields
Delaware	238	7	10	4	11	10	14	3	2	6	16	59	71	5	4	4	10	2
U. DE	190	7	10	4	11	10	14	2	2	5	16	59	25	5	4	4	10	2
Wilmington C.	48	0	0	0	0	0	0	1	0	1	0	0	46	0	0	0	0	0
District of Columbia	559	2	76	15	11	10	3	9	5	40	93	64	56	9	10	31	51	74
American U.	58	0	1	0	3	0	0	2	0	9	31	0	6	0	0	2	0	4
Catholic U. America	67	0	5	7	0	0	0	0	2	7	8	3	2	1	6	4	18	4
Gallaudet U.	8	0	0	1	0	0	0	0	0	3	0	0	3	0	0	0	1	0
George Washington U.	243	2	17	5	3	10	0	4	1	11	18	57	37	6	4	7	5	56
Georgetown U.	87	0	35	0	3	0	0	0	0	0	12	0	1	0	0	12	24	0
Howard U.	96	0	18	2	2	0	3	3	2	10	24	4	7	2	0	6	3	10
Florida	1,813	48	179	71	97	84	30	41	67	123	102	290	339	16	13	27	107	179
Barry U.	39	0	0	0	0	0	0	0	0	0	0	0	33	0	0	0	0	6
FL A&M U.	18	4	2	3	1	0	0	0	0	0	0	5	3	0	0	0	0	0
FL Atlantic U.	66	0	7	4	3	1	0	2	5	3	1	7	22	0	0	0	1	10
FL Institute of Technology	26	1	4	0	3	1	0	5	0	2	0	7	2	0	0	0	0	1
FL International U.	86	0	9	0	6	6	1	0	4	5	6	12	25	0	0	0	5	7
FL State U.	324	1	20	8	10	5	11	9	12	25	31	19	68	4	4	18	47	32
Lynn U.	18	0	0	0	0	1	0	0	0	0	1	0	5	0	0	0	0	11
Nova Southeastern U.	125	0	0	0	0	39	1	0	0	17	0	0	7	0	0	0	3	58
U. Central FL	178	0	2	2	1	16	0	4	19	14	5	41	60	0	0	0	1	13
U. FL	599	42	87	28	46	13	4	16	24	26	34	167	43	9	5	7	21	27
U. Miami	134	0	25	10	12	0	8	2	0	17	12	11	7	1	0	2	23	4
U. South FL	174	0	23	15	15	2	5	3	3	13	11	21	41	2	4	0	6	10
U. West FL	26	0	0	1	0	0	0	0	0	1	1	0	23	0	0	0	0	0
Georgia	1,170	21	161	44	64	52	15	32	22	84	58	267	170	8	16	13	62	81
Clark Atlanta U.	32	0	3	0	0	0	0	1	0	1	3	0	18	0	0	0	3	3
Emory U.	172	0	60	7	17	0	0	5	0	11	19	2	2	1	4	9	32	3
GA Institute of Technology	395	0	15	0	25	38	8	13	10	7	5	261	0	0	0	2	0	11
GA Southern U.	27	0	0	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0
GA State U.	145	0	16	5	1	9	0	0	6	18	14	1	35	5	5	1	6	23
Medical C. GA	13	0	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercer U. Southern School of Pharmacy	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Morehouse School of Medicine	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. GA	374	21	53	21	21	5	7	13	6	47	17	3	88	2	7	1	21	41
Hawaii	147	5	17	11	1	4	13	1	2	8	19	9	17	0	0	7	25	8
U. HI Manoa	147	5	17	11	1	4	13	1	2	8	19	9	17	0	0	7	25	8

Institution	2006 Total	Agricultural sciences/ natural resources	Biological/biomedical sciences	Health sciences	Chemistry	Computer & information sciences	Earth, atmos., & marine sciences	Mathematics	Physics & astronomy	Psychology	Other social sciences	Engineering	Education	American literature	English language & literature	History	Other humanities	Other fields
Idaho	154	13	18	1	6	4	5	2	1	2	4	12	82	0	1	1	0	2
Boise State U.	9	0	0	0	0	0	1	0	0	0	0	0	8	0	0	0	0	0
ID State U.	40	1	5	0	0	1	1	1	0	2	4	2	21	0	1	0	0	1
U. ID	105	12	13	1	6	3	3	1	1	0	0	10	53	0	0	1	0	1
Illinois	2,312	31	278	83	159	97	15	75	96	162	205	330	327	13	26	62	194	159
Benedictine U.	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Chicago Theological Seminary	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
DePaul U.	21	0	0	0	0	6	0	0	0	10	0	0	0	0	0	0	5	0
Rosalind Franklin U. of Med & Sci.	11	0	4	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0
Garrett Evangelical Theological Seminary	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
IL Institute of Technology	63	0	3	0	2	15	0	1	0	11	0	26	0	0	0	0	0	5
IL State U.	52	0	3	1	0	0	0	0	0	2	0	0	36	1	5	0	3	1
Institute for Clinical Social Work	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Loyola U. Chicago	141	0	17	6	3	0	0	0	0	12	6	0	80	0	2	4	8	3
Lutheran School of Theology Chicago	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
National-Louis U.	34	0	0	0	0	0	0	0	0	0	0	0	34	0	0	0	0	0
Northern IL U.	103	1	3	1	4	0	2	3	4	20	10	0	51	2	0	1	0	1
Northwestern U.	339	0	44	6	32	6	1	12	10	18	30	111	6	1	3	7	32	20
Roosevelt U.	7	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0
Rush U.	22	0	13	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Southern IL U.	139	2	13	2	3	0	0	1	0	15	13	7	34	1	3	1	8	36
U. Chicago, The	397	0	41	0	35	4	8	23	24	16	87	1	2	3	7	32	84	30
U. IL-Chicago	277	2	54	42	24	9	0	17	6	13	21	39	15	3	2	6	10	14
U. IL-Urbana-Champaign	690	26	83	16	56	57	4	18	52	38	38	146	62	2	4	11	43	34
Indiana	1,244	48	141	38	64	32	11	42	26	61	80	241	192	13	25	30	135	65
Ball State U.	60	1	1	2	2	0	0	0	0	8	0	0	29	1	1	0	15	0
IN State U.	57	0	1	0	0	2	0	0	0	8	1	5	36	0	0	0	0	4
IN U.	408	1	56	19	7	11	4	11	6	16	43	1	87	4	5	18	81	38
Purdue U.	561	46	58	17	50	17	4	22	15	23	18	191	39	6	10	4	21	20
U. Notre Dame	158	0	25	0	5	2	3	9	5	6	18	44	1	2	9	8	18	3
Iowa	641	22	106	32	40	5	10	28	17	29	27	114	102	5	5	10	54	35
Drake U.	7	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0
IA State U.	281	22	52	1	27	3	4	14	10	14	12	75	32	0	1	3	6	5
Maharishi U. Management	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
St. Ambrose U.	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
U. IA	328	0	54	31	13	2	6	14	7	15	14	36	47	5	4	7	48	25
U. Northern IA	19	0	0	0	0	0	0	0	0	0	0	3	16	0	0	0	0	0

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Kansas	479	30	72	19	33	3	3	10	7	43	31	32	110	2	3	13	43	25
KS State U.	160	30	31	4	7	0	0	6	3	5	10	17	40	0	0	4	0	3
U. KS	295	0	41	14	22	3	3	4	4	29	21	9	66	2	3	9	43	22
Wichita State U.	24	0	0	1	4	0	0	0	0	9	0	6	4	0	0	0	0	0
Kentucky	422	11	80	22	17	8	4	9	3	36	32	54	47	0	7	5	44	43
Asbury Theological Seminary	5	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	2
Southern Baptist Theological Seminary, The	39	0	0	0	0	0	0	0	0	1	0	0	6	0	0	0	23	9
U. KY	243	11	51	15	12	3	3	8	3	20	25	29	20	0	2	5	14	22
U. Louisville	135	0	29	7	5	5	1	1	0	15	6	25	21	0	5	0	5	10
Louisiana	528	22	69	53	26	18	7	23	7	32	31	67	61	6	8	9	53	36
Grambling State U.	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
LA State U. & A&M C.	252	21	24	9	16	8	6	11	5	9	14	36	33	5	2	7	33	13
LA State U. Health Sciences Ctr. New Orleans	12	0	7	4	0	0	0	0	0	1	0	0	0	0	0	0	0	0
LA State U. Shreveport	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LA Tech U.	31	0	0	0	0	1	0	5	0	2	0	15	1	0	0	0	0	7
New Orleans Baptist Theological Seminary	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Southern U. and A&M C.	12	0	0	6	0	0	0	0	0	0	1	0	5	0	0	0	0	0
Tulane U.	96	1	22	18	3	5	1	2	1	8	12	6	0	1	1	1	6	8
U. LA Lafayette	34	0	3	2	0	4	0	5	0	2	0	3	0	0	5	0	10	0
U. LA Monroe	23	0	3	13	0	0	0	0	0	3	0	0	4	0	0	0	0	0
U. New Orleans	51	0	2	1	7	0	0	0	1	7	4	7	17	0	0	1	0	4
Maine	38	5	6	1	1	0	2	0	1	6	0	6	6	0	0	3	0	1
U. ME	38	5	6	1	1	0	2	0	1	6	0	6	6	0	0	3	0	1
Maryland	1,216	18	216	138	36	55	23	40	58	61	127	193	92	8	6	18	86	41
Baltimore Hebrew U.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Bowie State U.	10	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0
Johns Hopkins U.	404	0	124	89	17	12	9	4	13	5	35	50	2	1	3	14	25	1
Loyola C. in MD	6	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
Morgan State U.	40	0	0	6	0	0	0	0	0	0	0	8	25	0	0	0	0	1
Towson U.	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Uniformed Services U. the Health Sciences	12	0	7	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
U. MD	567	14	38	9	13	33	11	29	40	30	78	121	49	7	3	4	58	30
U. MD Baltimore	89	0	11	2	5	10	3	7	5	14	12	14	4	0	0	0	2	0
U. MD Eastern Shore	8	4	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
U. MD School of Medicine	78	0	35	32	1	0	0	0	0	1	1	0	0	0	0	0	0	8

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Massachusetts	2,331	13	429	96	137	92	34	74	130	129	271	375	127	13	23	64	196	128
American International C.	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
Boston C.	115	0	2	5	5	0	0	0	4	14	19	0	20	0	3	6	20	17
Boston U.	271	0	74	7	6	5	1	7	10	14	32	42	9	1	0	8	47	8
Brandeis U.	94	0	18	5	6	4	0	6	3	4	28	1	0	2	2	5	4	6
Clark U.	33	0	2	0	3	0	0	0	2	10	15	0	0	0	0	0	1	0
Harvard U.	637	0	155	53	28	7	4	20	38	33	72	16	53	4	9	40	73	32
MA C. Pharmacy & Health Sciences	3	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0
MA Institute of Technology	602	1	72	10	38	49	23	34	54	3	46	230	1	0	0	2	14	25
New England Conservatory of Music	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
Northeastern U.	89	0	9	4	14	6	0	3	5	6	5	27	0	1	3	0	1	5
Simmons C.	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3
Smith C.	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Springfield C.	6	0	1	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0
Suffolk U.	7	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0
Tufts U.	103	0	45	0	7	0	1	1	3	15	14	7	0	2	2	1	3	2
U. MA Amherst	253	12	23	7	26	15	3	2	8	14	36	27	31	3	4	2	20	20
U. MA Dartmouth	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
U. MA Harbor campus	26	0	1	4	0	0	2	0	0	8	4	0	6	0	0	0	0	1
U. MA Lowell	5	0	0	0	1	0	0	0	0	0	0	4	0	0	0	0	0	0
U. MA Worcester	25	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worcester Polytechnic Institute	30	0	2	0	1	6	0	1	3	0	0	17	0	0	0	0	0	0
Michigan	1,556	53	191	64	77	40	19	54	56	112	129	310	173	12	18	25	129	94
Andrews U.	17	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	4	4
Calvin Theological Seminary	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Central MI U.	31	0	0	0	0	0	0	2	0	20	0	0	9	0	0	0	0	0
Eastern MI U.	10	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0
MI State U.	452	43	63	13	19	10	4	16	18	30	32	51	55	4	7	8	42	37
MI Technological U.	41	2	6	0	2	2	2	2	2	0	0	21	0	0	1	0	1	0
Oakland U.	26	0	1	0	1	2	0	1	0	1	0	6	14	0	0	0	0	0
U. Detroit Mercy	5	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
U. MI	754	8	93	44	41	18	13	24	30	32	74	196	36	3	7	17	78	40
Wayne State U.	168	0	26	7	12	6	0	6	4	14	14	34	31	3	1	0	2	8
Western MI U.	50	0	2	0	2	2	0	3	2	10	9	2	9	2	2	0	1	4
Minnesota	944	33	108	60	39	29	11	23	18	84	51	126	163	4	6	26	60	103
Hamline U.	8	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0
Luther Seminary	7	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5	1

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Mayo Graduate School	21	0	15	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0
St. Mary's U. MN	14	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	2
U. MN	720	33	93	44	39	26	11	21	18	41	41	119	95	4	6	26	55	48
U. St. Thomas	17	0	0	0	0	0	0	0	0	1	0	0	14	0	0	0	0	2
Walden U.	157	0	0	16	0	3	0	2	0	41	10	1	34	0	0	0	0	50
Mississippi	366	20	27	25	17	9	2	6	3	40	20	23	112	3	3	8	9	39
Delta State U.	3	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1
Jackson State U.	35	3	0	0	0	0	0	0	0	5	3	0	16	0	0	0	0	8
MS State U.	111	14	4	2	3	7	0	1	0	1	7	15	48	0	0	0	0	9
U. MS	94	0	7	7	6	1	2	4	1	15	6	7	16	2	1	5	1	13
U. MS Medical Ctr.	19	0	11	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Southern MS	104	3	5	8	8	1	0	1	2	19	4	1	30	1	2	3	8	8
Missouri	821	22	117	41	39	14	11	23	30	65	50	124	141	12	12	13	57	50
Concordia Seminary	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
St. Louis U.	137	0	11	13	1	0	4	0	0	13	2	0	59	2	4	5	18	5
U. MO-Columbia	278	22	30	11	14	5	1	13	8	23	18	31	48	5	3	8	11	27
U. MO-Kansas City	60	0	2	11	2	1	1	1	1	9	6	3	10	0	0	0	12	1
U. MO-Rolla	74	0	0	0	8	1	2	2	9	0	0	52	0	0	0	0	0	0
U. MO-St. Louis	53	0	4	4	3	0	0	2	0	10	6	1	23	0	0	0	0	0
Washington U.	217	0	70	2	11	7	3	5	12	10	18	37	1	5	5	0	14	17
Montana	83	13	21	1	9	1	3	2	3	7	0	6	17	0	0	0	0	0
MT State U.	38	4	13	0	2	1	0	0	3	0	0	6	9	0	0	0	0	0
U. MT	45	9	8	1	7	0	3	2	0	7	0	0	8	0	0	0	0	0
Nebraska	292	24	39	11	8	8	4	5	5	17	18	18	65	8	7	4	23	28
Creighton U.	11	0	7	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0
U. NE Medical Ctr.	20	0	13	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0
U. NE-Lincoln	244	24	19	2	7	7	4	5	5	17	9	18	59	8	7	3	23	27
U. NE-Omaha	17	0	0	0	0	1	0	0	0	0	9	0	6	0	0	0	0	1
Nevada	155	2	22	1	3	2	10	0	3	26	4	27	30	4	4	1	8	8
U. NV, Las Vegas	59	2	2	0	0	1	1	0	1	7	2	8	19	3	1	1	4	7
U. NV, Reno	96	0	20	1	3	1	9	0	2	19	2	19	11	1	3	0	4	1
New Hampshire	126	5	31	4	13	7	4	3	5	10	10	12	9	1	2	2	3	5
Antioch New England Graduate School	4	1	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Dartmouth C.	60	0	23	3	10	6	1	1	1	6	0	8	0	0	0	0	1	0
Southern NH U.	7	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	4

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U. NH	55	4	7	1	3	1	3	2	4	4	5	4	9	1	2	2	2	1
New Jersey	961	21	116	19	48	50	15	36	49	39	102	178	76	9	14	29	116	44
Drew U.	23	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	16	1
Fairleigh Dickinson U.	8	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0
Montclair State U.	8	0	0	4	0	0	0	0	0	0	0	0	4	0	0	0	0	0
NJ Institute Technology	72	4	0	1	4	17	0	3	5	0	0	38	0	0	0	0	0	0
Princeton Theological Seminary	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	6
Princeton U.	288	0	26	0	17	15	6	14	26	5	48	61	0	2	5	17	43	3
Rutgers U.	365	17	48	12	17	14	7	16	15	12	48	54	22	5	7	10	48	13
Rutgers State U.-Newark	43	0	7	2	3	2	1	0	0	5	6	0	1	0	0	0	0	16
Seton Hall U.	64	0	2	0	4	0	0	0	0	9	0	0	49	0	0	0	0	0
Stevens Institute of Technology	41	0	0	0	2	2	1	3	3	0	0	25	0	0	0	0	0	5
U. Medicine & Dentistry of NJ	34	0	33	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
New Mexico	281	7	31	3	27	10	3	7	12	10	23	50	56	1	2	4	24	11
NM Institute of Mining & Technology	19	0	0	0	2	4	1	0	3	0	0	9	0	0	0	0	0	0
NM State U.	79	6	9	0	12	2	0	3	3	3	0	6	29	0	0	0	2	4
U. NM	183	1	22	3	13	4	2	4	6	7	23	35	27	1	2	4	22	7
New York	3,855	77	607	90	157	118	32	131	143	365	428	418	369	55	59	104	468	234
Adelphi U.	33	0	0	0	0	0	0	0	0	29	0	0	0	0	0	0	0	4
Albany Medical C.	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alfred U.	3	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0
Clarkson U.	28	0	0	1	0	0	0	1	4	0	0	22	0	0	0	0	0	0
Columbia U.	488	2	81	23	31	14	10	21	31	13	60	47	1	5	9	23	77	40
Cornell U.	477	61	83	2	23	11	5	27	36	8	53	94	5	2	5	12	30	20
Cornell U. Weill Med. College	38	0	37	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Fordham U.	120	1	2	0	0	1	0	0	0	36	16	0	30	2	1	3	14	14
Graduate School & U. Ctr., CUNY	331	1	35	2	17	8	2	9	8	48	53	27	7	11	14	8	65	16
Hofstra U.	30	0	0	0	0	0	0	0	0	20	0	0	9	0	0	0	1	0
Jewish Theological Seminary of America	8	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	6	1
Juilliard School, The	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0
Long Island U.-Brooklyn campus	13	0	0	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0
Long Island U.-C.W. Post campus	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0
Mt. Sinai School of Medicine	26	0	25	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
New School, The	55	0	0	0	0	0	0	0	0	14	32	0	0	0	0	1	8	0
NY Medical C.	9	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
NY U.	360	1	47	12	5	14	1	13	6	27	55	0	29	6	5	19	75	45
Polytechnic U.	25	0	0	0	3	6	0	0	0	0	0	16	0	0	0	0	0	0

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Rensselaer Polytechnic Institute	146	0	4	0	7	15	1	12	6	1	3	82	0	0	0	3	2	10
Rochester Institute of Technology	7	0	0	0	0	0	0	0	4	0	0	3	0	0	0	0	0	0
Rockefeller U., The	28	0	27	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
SUNY Binghamton U.	122	0	1	4	8	5	0	5	0	18	22	13	9	3	3	6	23	2
SUNY C. of Environmental Science and Forestry	24	10	4	0	4	0	1	0	0	0	1	3	1	0	0	0	0	0
SUNY Health Science Ctr. Brooklyn	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUNY Stony Brook U.	254	0	54	1	16	11	5	32	10	15	14	39	1	5	2	6	41	2
SUNY U. Albany	138	1	9	6	3	4	3	1	5	19	31	1	17	4	1	1	16	16
SUNY U. Buffalo	310	0	48	17	23	12	2	2	7	15	31	39	38	14	9	6	35	12
SUNY Upstate Medical U.	16	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. John's U.-Queens	61	0	7	2	0	0	0	0	0	19	0	0	25	1	2	4	1	0
Syracuse U.	162	0	8	2	8	5	1	3	3	17	29	18	31	0	4	4	12	17
Teachers C., Columbia U.	223	0	2	14	2	1	0	1	0	33	9	0	149	0	0	1	9	2
Union Theological Seminary	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	10
U. Rochester	200	0	44	3	6	8	1	3	21	7	17	12	15	2	4	5	40	12
Yeshiva U.	77	0	47	0	1	0	0	0	0	14	2	0	1	0	0	1	0	11
North Carolina	1,357	43	270	93	76	41	17	57	26	50	100	193	162	9	22	28	108	62
Appalachian State U.	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
Duke U.	293	2	80	3	19	7	5	11	12	7	31	44	0	3	7	12	39	11
East Carolina U. School of Medicine	35	0	7	3	0	0	0	0	0	0	1	0	24	0	0	0	0	0
NC A&T State U.	11	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0
NC State U.	369	32	55	2	13	11	7	27	6	12	25	113	56	0	0	0	0	10
Southeastern Baptist Theological Seminary	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	3
U. NC Chapel Hill	478	9	87	79	41	19	5	14	7	14	43	10	30	5	13	16	50	36
U. NC Charlotte	43	0	3	0	0	4	0	5	1	2	0	12	15	0	0	0	0	1
U. NC Greensboro	76	0	3	6	0	0	0	0	0	15	0	1	34	1	2	0	13	1
U. NC Wilmington	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wake Forest U.	39	0	34	0	3	0	0	0	0	0	0	2	0	0	0	0	0	0
North Dakota	81	8	11	4	9	5	0	0	0	12	0	6	14	1	4	1	0	6
ND State U.	42	8	8	1	7	5	0	0	0	2	0	5	0	0	0	0	0	6
U. ND	39	0	3	3	2	0	0	0	0	10	0	1	14	1	4	1	0	0
Ohio	1,814	38	264	83	122	35	14	42	82	147	89	343	248	9	14	33	139	112
Air Force Institute of Technology	16	0	0	0	0	0	0	3	2	0	0	11	0	0	0	0	0	0
Bowling Green State U.	93	0	6	2	11	0	0	6	1	16	5	0	12	0	1	0	22	11
Case Western Reserve U.	188	0	47	15	16	4	0	3	6	9	7	63	0	0	1	3	2	12
Cleveland Institute of Music	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
Cleveland State U.	31	0	9	0	1	0	0	0	0	0	2	6	9	0	0	0	0	4

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Hebrew Union C.	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1
Kent State U.	124	0	9	6	4	3	3	2	11	16	9	0	39	1	0	2	7	12
Medical C. OH	15	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miami U.	47	0	11	2	7	0	1	0	0	11	4	0	6	0	3	2	0	0
OH State U., The	664	38	79	30	28	15	9	22	29	53	50	119	86	2	6	13	48	37
OH U.	108	0	12	2	3	3	0	1	10	10	0	13	18	1	3	5	7	20
U. Akron	113	0	1	2	38	1	0	0	4	12	5	33	15	0	0	0	0	2
U. Cincinnati	265	0	54	21	10	6	1	1	5	9	7	58	33	5	0	2	44	9
U. Dayton	27	0	5	0	0	0	0	0	5	0	0	13	4	0	0	0	0	0
U. Toledo	80	0	10	3	4	0	0	4	9	8	0	17	15	0	0	6	0	4
Wright State U.	22	0	6	0	0	3	0	0	0	3	0	10	0	0	0	0	0	0
Youngstown State U.	11	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0
Oklahoma	370	24	49	5	7	5	5	3	9	35	25	57	80	7	7	3	20	29
OK State U.	168	24	20	2	1	1	0	1	5	17	8	23	45	4	2	2	0	13
U. OK	182	0	29	3	6	4	5	2	4	13	17	25	35	1	1	1	20	16
U. Tulsa	20	0	0	0	0	0	0	0	0	5	0	9	0	2	4	0	0	0
Oregon	443	32	111	19	18	9	18	11	8	26	37	42	56	5	4	4	34	9
OR Health & Science U.	61	0	45	6	2	3	0	0	0	0	0	5	0	0	0	0	0	0
OR State U.	166	30	37	9	4	1	16	5	1	5	5	29	23	0	0	1	0	0
Portland State U.	41	1	3	0	1	2	0	1	1	4	11	8	8	0	0	0	0	1
U. OR	175	1	26	4	11	3	2	5	6	17	21	0	25	5	4	3	34	8
Pennsylvania	2,348	19	316	105	116	112	24	65	65	156	157	403	339	28	45	51	191	156
Bryn Mawr C.	27	0	1	0	1	0	0	2	2	8	0	0	0	0	0	0	9	4
Carnegie Mellon U.	241	0	8	0	8	60	0	18	11	15	10	85	1	0	1	2	9	13
Drexel U.	75	2	8	1	3	4	1	0	2	17	0	31	3	0	0	0	0	3
Duquesne U.	37	0	2	0	2	0	0	0	0	10	0	0	0	1	4	0	14	4
Gannon U.	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Indiana U. PA	79	0	0	0	0	0	0	0	0	0	9	0	28	6	26	0	10	0
Lehigh U.	74	0	2	0	3	3	4	4	6	4	1	33	8	3	0	3	0	0
Marywood U.	17	0	0	1	0	0	0	0	0	1	0	0	13	0	0	0	0	2
PA State U., The	674	17	91	18	39	20	16	17	25	46	33	170	98	4	3	8	33	36
Temple U.	205	0	29	19	3	2	0	7	1	26	19	1	42	6	1	9	21	19
Thomas Jefferson U.	19	0	16	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0
U. PA	495	0	99	13	29	12	3	12	12	11	63	33	81	5	10	17	54	41
U. Pittsburgh	361	0	60	47	27	11	0	5	6	16	22	47	40	3	0	12	33	32
U. the Sciences in Philadelphia	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Villanova U.	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0

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Westminster Theological Seminary	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1
Widener U.	32	0	0	5	0	0	0	0	0	1	0	0	25	0	0	0	0	1
Puerto Rico	118	0	12	0	11	0	3	0	1	40	2	8	25	0	3	4	6	3
Carlos Albizu U.: San Juan campus	13	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0
Ponce School of Medicine	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. PR-Mayaguez	11	0	0	0	0	0	3	0	0	0	0	8	0	0	0	0	0	0
U. PR-Medical Sciences campus	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. PR-Rio Piedras	91	0	9	0	11	0	0	0	1	27	2	0	25	0	3	4	6	3
Rhode Island	288	5	54	7	11	6	12	24	16	25	37	24	3	6	8	4	43	3
Brown U.	209	1	41	3	8	6	7	23	16	6	33	15	0	4	6	4	36	0
Salve Regina U.	7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	6	0
U. RI	72	4	13	4	3	0	5	1	0	19	4	9	2	2	2	0	1	3
South Carolina	414	14	47	37	26	8	9	12	6	17	25	74	76	3	6	10	24	20
Clemson U.	136	14	11	4	12	3	0	5	4	2	13	39	18	0	0	0	0	11
Medical U. SC	26	0	18	4	1	1	0	1	0	0	0	0	1	0	0	0	0	0
SC State U.	18	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0
U. SC	234	0	18	29	13	4	9	6	2	15	12	35	39	3	6	10	24	9
South Dakota	73	6	11	1	1	1	4	0	0	9	3	1	33	2	0	0	1	0
SD School of Mines & Technology	7	0	1	0	0	1	4	0	0	0	0	1	0	0	0	0	0	0
SD State U.	14	6	3	1	1	0	0	0	0	0	3	0	0	0	0	0	0	0
U. SD	52	0	7	0	0	0	0	0	0	9	0	0	33	2	0	0	1	0
Tennessee	710	9	114	50	37	9	6	14	13	71	34	85	164	7	12	10	40	35
East TN State U.	41	0	3	2	0	0	0	0	0	0	0	0	36	0	0	0	0	0
Meharry Medical C.	9	0	8	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Mid-America Baptist Theological Seminary	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
Middle TN State U.	18	0	0	7	1	0	0	0	0	0	3	0	0	2	2	2	0	1
TN State U.	48	0	3	0	0	0	0	0	0	7	0	0	37	0	0	0	0	1
TN Technological U.	13	0	0	0	0	0	0	0	0	0	0	7	6	0	0	0	0	0
U. Memphis	81	0	4	3	3	2	0	5	0	19	1	4	19	0	0	1	12	8
U. TN Health Science Ctr.	45	0	22	14	8	0	0	0	0	0	0	1	0	0	0	0	0	0
U. TN, Chattanooga	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
U. TN, Knoxville	232	7	17	20	14	3	6	6	10	29	17	41	30	2	3	4	3	20
Vanderbilt U.	218	2	57	4	11	4	0	3	3	16	13	30	36	3	7	2	24	3
Texas	3,066	85	424	132	140	96	49	86	98	195	195	540	494	20	37	34	252	189
Baylor C. of Medicine	38	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Baylor U.	76	0	9	0	5	0	1	5	3	2	1	0	33	0	4	1	12	0
Dallas Theological Seminary	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1
Lamar U.	4	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0
Prarie View A&M	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Rice U.	147	0	12	0	14	5	4	19	11	4	13	47	0	1	2	2	13	0
St. Mary's U.	9	0	0	0	0	0	0	0	0	7	0	0	2	0	0	0	0	0
Sam Houston State U.	14	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	1
Southern Methodist U.	40	0	2	0	0	3	1	3	1	1	8	13	0	0	0	3	5	0
Southwestern Baptist Theological Seminary	20	0	0	0	0	0	0	0	0	4	0	0	0	0	0	1	9	6
Stephen F. Austin State U.	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TX A&M U.	548	54	66	6	31	22	17	21	11	28	43	135	74	2	2	3	3	30
TX A&M U. System-Health Science Ctr.	9	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TX A&M U.-Commerce	45	0	0	0	0	0	0	0	0	2	0	0	40	0	1	0	2	0
TX A&M U.-Corpus Christi	13	0	0	0	0	0	0	0	1	0	0	0	12	0	0	0	0	0
TX A&M U.-Kingsville	32	5	0	0	0	0	0	0	0	0	0	0	26	0	0	0	1	0
TX Christian U.	11	0	0	0	1	0	0	0	0	3	0	0	0	1	2	4	0	0
TX Southern U.	20	0	0	1	0	0	0	0	0	0	0	0	19	0	0	0	0	0
TX State U.-San Marcos Southwest TX State U.	14	0	0	0	0	0	0	0	0	0	7	0	7	0	0	0	0	0
TX Tech U.	203	18	13	9	9	4	1	7	0	21	5	33	38	1	7	2	16	19
TX Tech U. Health Sciences Ctr.	11	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TX Womans U.	80	0	5	26	0	0	0	0	0	23	1	0	13	0	0	0	4	8
U. Dallas	8	0	0	0	0	0	0	0	0	0	2	0	0	1	1	0	4	0
U. Houston	236	0	17	5	13	6	4	7	18	23	11	46	35	5	7	4	19	16
U. North TX	157	3	7	1	7	12	0	2	5	15	11	2	59	0	1	2	23	7
U. North TX, Health Science Ctr. Ft. Worth	9	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. TX Medical Branch-Galveston	33	0	24	7	0	0	0	0	0	0	0	0	0	0	0	0	2	0
U. TX-Arlington	87	0	2	0	6	8	0	4	2	5	1	34	0	1	0	1	2	21
U. TX-Austin	796	0	60	24	38	18	12	15	31	42	69	190	103	6	10	9	123	46
U. TX-Dallas	118	0	6	4	10	16	6	3	9	1	9	26	0	2	0	0	7	19
U. TX-El Paso	33	4	2	0	3	2	3	0	0	2	0	8	7	0	0	2	0	0
U. TX-Health Science Ctr.-Houston	104	0	62	37	1	0	0	0	1	1	0	1	0	0	0	0	0	1
U. TX-Health Science Ctr.-San Antonio	30	0	18	7	0	0	0	0	5	0	0	0	0	0	0	0	0	0
U. TX-Pan American	4	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
U. TX-San Antonio	21	0	7	0	0	0	0	0	0	0	0	0	9	0	0	0	0	5
U. TX-Southwestern Medical Ctr.-Dallas	64	0	50	0	2	0	0	0	0	10	0	2	0	0	0	0	0	0
U. the Incarnate Word	24	0	0	0	0	0	0	0	0	1	0	0	14	0	0	0	2	7
Utah	352	2	44	18	22	9	8	8	9	43	14	77	47	4	7	1	13	26
Brigham Young U.	75	0	6	1	7	4	0	1	0	25	0	15	15	0	0	1	0	0

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U. UT	235	0	30	17	14	4	8	6	7	13	11	50	27	4	7	0	13	24
UT State U.	42	2	8	0	1	1	0	1	2	5	3	12	5	0	0	0	0	2
Vermont	64	7	20	0	5	1	0	1	0	12	1	2	12	0	0	0	3	0
Middlebury C.	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
U. VT	61	7	20	0	5	1	0	1	0	12	1	2	12	0	0	0	0	0
Virginia	1,111	32	132	59	51	39	26	28	27	74	94	205	197	2	12	29	36	68
C. of William and Mary	61	4	1	1	1	1	7	0	12	0	0	0	24	0	0	6	4	0
George Mason U.	159	6	13	6	1	18	7	7	2	22	34	5	30	0	0	4	3	1
Hampton U.	2	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Norfolk State U.	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Old Dominion U.	54	0	6	2	1	2	1	4	3	0	5	15	8	0	0	0	0	7
Regent U.	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Union Theological Seminary-PSCE	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	2
U. VA	325	3	52	15	14	4	2	4	8	23	34	46	63	2	12	13	24	6
VA Commonwealth U.	125	0	37	32	6	2	0	1	0	11	5	3	9	0	0	0	2	17
VA Polytechnic Institute and State U.	365	19	23	2	28	12	9	12	1	18	15	136	63	0	0	5	0	22
Washington	796	34	134	47	47	22	37	19	31	36	69	112	93	6	20	8	43	38
Gonzaga U.	18	0	0	0	0	0	0	0	0	1	1	0	9	0	0	0	0	7
Seattle Pacific U.	14	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0
Seattle U.	16	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	1	1
U. WA	578	18	103	44	43	19	31	17	30	14	48	86	42	6	13	7	38	19
WA State U.	170	16	31	3	4	3	6	2	1	14	20	26	21	0	7	1	4	11
West Virginia	183	8	19	9	6	4	2	5	5	17	22	28	39	1	2	8	8	0
Marshall U.	11	0	2	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0
WV U.	172	8	17	9	6	4	2	5	5	17	22	28	30	1	2	8	8	0
Wisconsin	846	31	160	24	53	13	14	31	43	50	66	108	88	10	13	30	66	46
Cardinal Stritch U.	13	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0
Marquette U.	59	0	3	2	5	0	0	1	0	10	0	8	6	2	3	5	11	3
Medical C. WI	28	0	24	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
U. WI-Madison	649	31	128	18	45	10	13	27	39	26	47	91	58	4	7	24	51	30
U. WI-Milwaukee	97	0	5	4	2	3	1	2	4	14	19	9	11	4	3	1	4	11
Wyoming	59	4	7	1	7	0	5	2	0	5	1	7	20	0	0	0	0	0
U. WY	59	4	7	1	7	0	5	2	0	5	1	7	20	0	0	0	0	0

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

APPENDIX TABLE A-9. Top 50 doctorate-granting institutions, 2006

Rank	Institution	Number
1.	U. TX-Austin	796
2.	U. MI	754
3.	U. CA, Berkeley	747
4.	U. MN	720
5.	U. CA, Los Angeles	702
6.	U. IL-Urbana-Champaign	690
7.	PA State U., The	674
8.	OH State U., The	664
9.	U. WI-Madison	649
10.	Stanford U.	644
11.	Harvard U.	637
12.	MA Institute of Technology	602
13.	U. FL	599
14.	U. WA	578
15.	U. MD	567
16.	Purdue U.	561
16.	U. Southern CA	561
18.	TX A&M U.	548
19.	U. PA	495
20.	Columbia U.	488
21.	U. NC Chapel Hill	478
22.	Cornell U.	477
23.	MI State U.	452
24.	U. CA, Davis	413
25.	IN U.	408
26.	Johns Hopkins U.	404
27.	U. Chicago, The	397
28.	GA Institute of Technology	395
29.	U. AZ	392
30.	AZ State U.	379
31.	U. GA	374
32.	NC State U.	369
33.	Rutgers U.	365
33.	VA Polytechnic Institute and State U.	365
35.	U. CA, San Diego	362
36.	U. Pittsburgh	361
37.	NY U.	360
38.	Northwestern U.	339
39.	U. CA, Santa Barbara	338
40.	Graduate School & U. Ctr., CUNY	331
41.	U. IA	328
42.	U. VA	325
43.	FL State U.	324
44.	Yale U.	312
45.	SUNY U. Buffalo	310
46.	U. CT	304
47.	U. CO	296
48.	U. KS	295
49.	Duke U.	293
50.	Princeton U.	288

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

APPENDIX B: Trend Tables, 1996-2006

Appendix B includes the following two tables:

B-1: Number of doctorate recipients, by subfield of study, 1996-2006

B-2: (Revised June 2008). Number of doctorate recipients, by sex, race/ethnicity, and citizenship, 1996-2006

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 Appendix D 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. An "na" 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 Appendix E for a description of field classifications 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.

TABLE B-2: Table B-2 displays, by sex and citizenship, data on the race/ethnicity of doctorate recipients for 1996-2006. 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 or Alaska Native (indicating tribal affiliation since 2001), Asian, Native Hawaiians and other 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 racial categories or "Native Hawaiians and other Pacific Islanders" since 2001).

APPENDIX TABLE B-1. Number of doctorate recipients, by subfield of study,1996-2006

Subfield of study	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
All Fields [a]	42,437	42,539	42,637	41,097	41,365	40,737	40,025	40,757	42,123	43,385	45,596
Life sciences	8,337	8,421	8,612	8,204	8,624	8,370	8,477	8,507	8,815	9,313	9,683
Agricultural sciences/natural resources	1,289	1,212	1,267	1,216	1,180	1,132	1,129	1,179	1,155	1,160	1,146
Agricultural & horticultural plant breeding	63	67	69	44	68	37	59	50	36	35	41
Agricultural animal breeding	12	24	18	21	22	16	14	21	13	14	12
Agricultural business & management	2	1	2	2	5	3	1	1	na	na	na
Agricultural economics	169	133	156	149	138	154	119	118	110	122	113
Agronomy & crop science	110	77	97	106	69	75	74	55	63	79	56
Animal nutrition	54	55	45	47	45	45	49	41	47	51	46
Animal sciences, other	90	62	60	70	73	71	70	88	75	71	72
Dairy science	9	14	10	12	9	2	7	18	na	na	na
Environmental science	83	96	72	99	95	119	113	136	130	129	131
Fishing & fisheries sciences & management	46	45	30	38	43	44	53	47	38	34	53
Food science	7	11	13	7	10	14	7	11	94	93	97
Food science & technology, other	142	175	153	137	142	130	129	157	74	48	45
Forest engineering	0	13	2	1	3	0	3	3	na	na	na
Forest sciences & biology	19	22	20	14	22	27	19	16	36	29	32
Forest/resources management	22	21	27	17	13	13	15	18	26	40	38
Forestry & related science, other	55	50	69	50	54	48	57	47	34	24	28
Horticulture science	73	44	60	66	55	37	46	54	46	49	54
Natural resources/conservation	13	17	25	25	19	32	27	47	45	64	60
Plant pathology/phytopathology	90	65	66	66	63	52	53	48	56	71	62
Poultry science	11	9	11	8	9	11	10	18	21	14	15
Plant sciences, other	21	20	37	38	29	26	27	29	34	31	43
Soil chemistry/microbiology	29	32	27	29	26	23	29	24	21	24	20
Soil sciences, other	78	56	74	67	64	56	55	50	52	52	48
Wildlife/range management	64	50	56	44	56	41	37	46	42	44	51
Wood science & pulp/paper technology	18	25	25	21	11	20	29	19	19	15	12
Agriculture, general	5	10	8	8	10	2	4	2	6	10	6
Agricultural sciences, other	4	18	35	30	27	34	23	15	37	17	11
Biological/biomedical sciences	5,724	5,788	5,846	5,581	5,853	5,697	5,694	5,695	5,940	6,368	6,631
Anatomy	47	50	35	33	39	29	20	33	13	23	20
Bacteriology	16	13	13	13	15	17	12	6	15	13	10
Biochemistry	794	831	800	759	776	729	782	772	703	693	783
Biomedical sciences	141	158	182	176	155	155	220	181	183	249	278
Biometrics & biostatistics	80	84	75	76	92	90	81	84	100	129	106
Biophysics	142	147	166	173	164	162	151	161	130	144	183
Biotechnology	6	11	12	19	14	9	13	24	26	23	32
Botany/plant biology	105	91	113	67	92	75	84	80	135	87	93
Cell/cellular biology & histology	233	251	300	281	337	315	302	301	292	316	335
Developmental biology/embryology	96	115	127	108	112	107	93	126	141	162	148

Subfield of study	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Ecology	245	255	293	273	296	339	311	347	366	412	388
Endocrinology	24	17	30	19	20	18	14	21	22	29	18
Entomology	136	123	138	114	137	90	113	111	108	103	117
Human & animal genetics	212	217	197	216	227	199	226	226	257	286	282
Human & animal pathology	135	106	90	120	106	117	115	101	98	93	79
Human & animal pharmacology	316	300	255	254	267	257	268	275	288	315	327
Human & animal physiology	275	227	258	244	241	217	208	215	207	208	220
Immunology	238	214	246	223	239	265	278	261	347	342	391
Microbiology	444	410	383	383	382	396	383	363	393	432	492
Molecular biology	651	775	736	716	706	711	622	615	726	724	778
Neuroscience	404	437	413	431	495	486	491	473	584	690	737
Nutrition sciences	142	124	139	102	150	135	142	127	131	163	148
Parasitology	22	17	15	13	19	22	17	15	20	21	27
Plant genetics	41	30	40	31	35	31	57	38	54	50	62
Plant pathology/phytopathology	38	33	18	36	25	31	24	27	25	31	26
Plant physiology	73	47	61	54	39	45	43	32	24	38	40
Toxicology	138	180	155	114	123	133	122	122	105	102	100
Zoology, other	100	97	111	126	133	103	122	127	94	103	102
Biology/biological sciences, general	292	209	217	182	200	193	184	194	188	189	189
Biology/biomedical sciences, other	138	219	228	225	217	221	196	237	165	198	120
Health sciences	1,324	1,421	1,499	1,407	1,591	1,541	1,654	1,633	1,720	1,785	1,906
Environmental health	58	67	54	69	52	56	49	53	56	42	75
Environmental toxicology	na	na	na	na	na	na	na	na	28	42	43
Epidemiology	149	151	165	179	191	168	198	231	217	229	229
Health systems/services administration	60	66	62	62	59	51	55	57	66	70	71
Kinesiology/exercise science	105	105	130	104	129	151	149	145	164	153	189
Nursing science	354	420	399	353	415	365	435	413	394	421	415
Pharmacy	145	142	156	137	164	148	160	118	161	168	155
Public health	156	138	154	173	207	216	219	205	260	279	295
Rehabilitation/therapeutic services	26	34	35	26	40	37	70	69	67	66	74
Speech-language pathology & audiology	94	88	95	86	106	92	100	94	95	97	119
Veterinary medicine	65	47	49	49	50	60	56	48	54	47	38
Health sciences, general	22	45	17	32	49	35	39	40	33	49	44
Health sciences, other	90	118	183	137	129	162	124	160	125	122	159
Physical sciences	6,592	6,582	6,669	6,224	5,982	5,864	5,605	5,831	6,048	6,694	7,461
Astronomy	192	198	206	159	185	186	141	167	165	186	197
Astronomy	84	71	91	59	78	89	52	69	68	72	64
Astrophysics	108	127	115	100	107	97	89	98	97	114	133
Atmospheric sci. & meteorology	125	149	125	124	143	116	117	139	126	145	147
Atmospheric chemistry & climatology	22	45	38	43	39	33	39	39	29	42	30
Atmospheric physics & dynamics	21	25	24	17	17	17	13	21	33	28	30

Subfield of study	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Meteorology	35	28	25	22	34	20	15	25	22	20	18
Atmospheric science/meteorology, general	33	36	22	32	36	34	27	33	24	30	40
Atmospheric science/meteorology, other	14	15	16	10	17	12	23	21	18	25	29
Chemistry	2,149	2,147	2,216	2,132	1,989	1,981	1,922	2,041	1,987	2,126	2,363
Analytical chemistry	346	350	383	333	326	334	302	338	323	363	367
Inorganic chemistry	249	279	287	279	221	279	248	264	240	255	267
Medicinal/pharmaceutical chemistry	96	105	114	131	107	115	99	110	113	110	150
Nuclear chemistry	5	8	6	10	9	4	9	4	na	na	na
Organic chemistry	507	567	598	563	525	523	523	556	542	601	624
Physical chemistry	300	334	279	310	271	285	303	321	264	298	376
Polymer chemistry	121	110	122	95	107	107	102	110	116	119	134
Theoretical chemistry	57	48	41	56	52	40	48	49	54	57	85
Chemistry, general	396	260	285	196	261	202	203	186	198	194	213
Chemistry, other	72	86	101	159	110	92	85	103	137	129	147
Computer & information sciences	920	909	927	856	860	830	810	866	948	1,130	1,452
Computer science	836	828	821	741	723	692	675	699	767	953	1,215
Information science & systems	84	81	106	115	137	81	80	65	106	84	135
Computer & information science, other	na	na	na	na	na	57	55	102	75	93	102
Geological & earth sciences	421	446	469	420	344	348	391	348	371	379	432
Geochemistry	49	49	58	55	50	41	70	53	38	55	53
Geology	162	165	171	157	123	115	132	119	98	107	126
Geomorphology & glacial geology	11	26	20	18	14	10	15	20	22	12	24
Geophysics & seismology	101	108	106	100	70	88	91	75	87	92	81
Mineralogy & petrology	23	19	14	14	5	15	13	8	17	8	17
Paleontology	14	23	23	15	31	16	21	18	25	29	30
Stratigraphy & sedimentation	12	23	24	17	13	13	7	16	19	15	19
Geological & earth sciences, general	27	16	13	9	20	16	12	9	23	24	30
Geological & earth sciences, other	22	17	40	35	18	34	30	30	42	37	52
Mathematics	1,122	1,123	1,177	1,083	1,050	1,010	920	993	1,076	1,205	1,327
Algebra	78	78	75	84	82	68	65	69	97	97	124
Analysis & functional analysis	100	103	130	86	81	91	74	85	99	111	98
Applied mathematics	230	242	265	252	238	214	226	223	264	292	348
Computing theory & practice	18	14	19	14	17	11	11	8	10	16	15
Geometry/geometric analysis	72	70	54	65	59	41	52	48	95	96	89
Logic	16	23	16	23	19	24	14	17	15	26	20
Number theory	42	46	46	50	40	35	26	46	39	62	60
Operations research	21	20	17	21	19	14	19	19	25	23	32
Statistics	178	181	204	174	195	200	167	191	226	267	301
Topology/foundations	55	62	65	65	50	54	40	49	52	51	72
Mathematics/statistics, general	233	153	162	116	151	155	133	150	81	104	107
Mathematics/statistics, other	79	131	124	133	99	103	93	88	73	60	61

Subfield of study	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Ocean/marine sciences	178	209	171	179	207	196	181	196	189	190	178
Hydrology & water resources	31	43	35	32	43	45	35	26	49	41	37
Marine sciences	27	30	18	30	36	36	42	36	59	61	61
Oceanography, chemical & physical	107	114	94	100	99	85	86	98	66	74	60
Ocean/marine sciences, other	13	22	24	17	29	30	18	36	15	14	20
Physics	1,485	1,401	1,378	1,271	1,204	1,197	1,123	1,081	1,186	1,333	1,365
Acoustics	19	19	18	16	10	10	18	24	17	25	15
Applied physics	na	na	na	na	na	na	na	na	71	102	98
Atomic/molecular/chemical physics	129	106	100	100	110	81	82	74	82	87	90
Biophysics	na	na	na	na	na	na	na	na	55	72	96
Condensed matter/low temp physics	364	328	314	307	279	295	298	273	277	314	335
Elementary particle physics	176	170	173	169	147	121	154	134	163	188	200
Fluids physics	21	24	26	23	10	8	15	9	na	na	na
Nuclear physics	87	106	92	77	74	80	76	67	74	69	85
Optics/phototonics	129	123	105	98	117	107	107	95	120	145	144
Plasma/fusion physics	48	39	55	49	38	39	29	32	37	54	43
Polymer physics	33	19	24	28	21	18	22	13	18	29	24
Physics, general	323	255	190	202	224	206	171	170	141	128	144
Physics, other	156	212	281	202	174	232	151	190	131	120	91
Social sciences & psychology	6,822	7,041	7,070	7,040	7,109	6,794	6,635	6,780	6,788	6,835	6,873
Psychology	3,494	3,557	3,673	3,668	3,616	3,399	3,207	3,276	3,327	3,323	3,263
Clinical psychology	1,326	1,255	1,344	1,441	1,353	1,233	1,220	1,189	1,216	1,156	1,118
Cognitive psychology & psycholinguistics	128	166	113	143	141	141	121	132	145	147	181
Comparative psychology	3	6	6	11	7	5	2	4	6	5	5
Counseling	465	487	448	460	475	476	472	435	512	467	411
Developmental & child psychology	188	215	266	193	203	194	174	178	186	223	202
Educational psychology	92	61	61	64	97	48	54	52	75	81	60
Experimental psychology	128	146	149	139	133	134	112	119	88	121	126
Family psychology	51	63	51	56	54	45	67	63	32	25	22
Human development & family studies	151	126	119	135	147	137	139	149	144	172	182
Industrial & organizational psychology	162	187	189	158	188	174	154	159	157	184	173
Personality	24	26	25	16	23	11	17	17	18	14	30
Physiological/psychobiology	80	77	92	87	89	92	88	86	84	85	94
Psychometrics & quantitative psychology	19	17	15	14	8	10	13	11	29	22	20
Psychometrics	11	11	9	15	13	2	9	7	na	na	na
School psychology	82	84	106	121	99	101	88	102	87	109	123
Social psychology	170	181	186	176	207	198	180	203	163	183	172
Psychology, general	281	319	300	235	237	224	145	223	221	186	211
Psychology, other	133	130	194	204	142	174	152	147	164	143	133
Social sciences	3,328	3,484	3,397	3,372	3,493	3,395	3,428	3,504	3,461	3,512	3,610

APPENDIX TABLE B-1. Number of doctorate recipients, by subfield of study,1996-2006

Subfield of study	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Anthropology	397	434	425	462	446	411	496	472	531	455	472
Area studies	28	10	14	11	14	19	25	12	18	6	23
Criminology	60	49	55	51	66	62	56	77	69	97	100
Demography/population studies	11	24	30	28	20	12	20	15	19	20	24
Econometrics	29	31	25	15	15	13	14	23	18	30	33
Economics	979	999	976	911	933	914	894	909	941	1,031	996
Geography	165	149	154	144	197	186	197	167	190	196	206
International relations/affairs	99	88	96	119	77	91	83	98	99	106	115
Political science & government	622	665	662	655	669	658	606	661	586	619	614
Public policy analysis	104	127	96	125	137	139	147	146	145	161	171
Sociology	517	577	549	544	617	567	547	597	580	536	578
Statistics	48	56	61	72	60	49	54	48	31	22	22
Urban affairs/studies	108	92	77	57	79	80	92	78	85	81	85
Social sciences, general	26	26	30	25	37	26	33	28	32	33	45
Social sciences, other	135	157	147	153	126	168	164	173	117	119	126
Engineering	6,309	6,114	5,921	5,330	5,323	5,511	5,079	5,280	5,777	6,425	7,191
Aerospace/aeronautical engineering	287	273	241	206	214	203	209	200	201	219	238
Chemical & related engineering	798	767	776	674	726	730	705	649	726	875	893
Chemical engineering	681	662	669	576	619	636	607	568	638	774	800
Petroleum engineering	52	51	48	45	45	37	45	36	34	50	48
Polymer & plastics engineering	65	54	59	53	62	57	53	45	54	51	45
Civil & related engineering	698	655	650	584	556	595	627	673	673	758	803
Civil engineering	600	592	587	506	480	501	539	551	547	622	654
Environmental health engineering	98	63	63	78	76	94	88	122	126	136	149
Electrical & related engineering	1,741	1,720	1,595	1,478	1,543	1,579	1,394	1,465	1,651	1,851	2,133
Communications engineering	32	33	40	39	42	47	22	36	34	27	26
Computer engineering	208	227	210	203	172	186	161	191	228	277	323
Electrical & electronics engineering	1,501	1,460	1,345	1,236	1,329	1,346	1,211	1,238	1,389	1,547	1,784
Industrial engineering	259	246	229	211	176	206	230	214	217	221	235
Materials/metallurgical engineering	574	582	565	469	451	497	396	474	511	540	624
Ceramic sciences engineering	41	39	24	33	22	17	13	18	14	14	8
Materials science engineering	472	483	482	393	404	448	364	437	475	493	582
Metallurgical engineering	61	60	59	43	25	32	19	19	22	33	34
Mechanical & related engineering	1,052	1,022	1,022	855	864	953	827	814	852	978	1,148
Engineering mechanics	105	93	86	69	57	75	56	62	98	86	102
Mechanical engineering	947	929	936	786	807	878	771	752	754	892	1,046
Other engineering	900	849	843	853	793	748	691	791	946	983	1,117
Agricultural engineering	104	79	74	59	60	52	50	54	60	47	53

Subfield of study	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Bioengineering & biomedical engineering	220	211	208	245	252	232	246	281	369	416	525
Engineering physics	37	24	15	28	26	22	16	28	28	27	35
Engineering science	52	45	49	49	34	53	31	39	58	43	44
Mining & mineral engineering	31	33	21	18	11	10	8	14	9	12	16
Nuclear engineering	113	102	94	76	98	76	64	75	59	71	68
Ocean engineering	26	34	29	16	18	28	23	12	21	18	15
Operations research	74	74	62	67	51	55	66	81	72	87	89
Systems engineering	47	49	68	42	34	47	45	45	58	58	79
Engineering, general	60	51	29	40	43	25	20	19	29	53	60
Engineering, other	136	147	194	213	166	148	122	143	183	151	133
Education	6,785	6,577	6,569	6,551	6,436	6,349	6,503	6,643	6,635	6,226	6,123
Education administration	2,165	2,050	2,066	2,044	2,031	2,070	2,346	2,356	2,340	2,168	2,052
Educational administration & supervision	1,172	1,020	950	895	814	840	791	774	741	729	629
Educational leadership	993	1,030	1,116	1,149	1,217	1,230	1,555	1,582	1,599	1,439	1,423
Education research	2,699	2,695	2,584	2,732	2,667	2,637	2,776	2,718	2,804	2,670	2,750
Counseling education/counseling & guidance	278	207	271	260	214	211	258	219	182	178	201
Curriculum & instruction	899	920	884	994	968	888	991	1,001	973	983	1,005
Educational assessment/testing/measure	32	30	35	39	44	44	31	47	57	56	58
Educational psychology	309	359	327	299	278	283	302	285	261	249	254
Educational statistics/research methods	76	58	56	57	56	65	67	62	64	59	72
Educational/instructional media design	107	92	91	123	137	141	172	128	193	124	155
Higher education/evaluation & research	481	503	432	465	438	516	446	490	538	514	493
School psychology	114	118	112	108	137	119	169	124	113	112	115
Social/philosophical foundations of education	125	138	129	125	135	141	127	146	135	154	160
Special education	278	270	247	262	260	229	213	216	288	241	237
Teacher education	371	291	342	293	261	296	262	242	271	263	252
Adult & continuing education	210	165	172	153	151	169	138	119	143	151	116
Elementary education	46	56	62	60	53	55	52	34	64	54	38
Pre-elementary/early childhood education	81	43	54	49	34	50	51	70	38	36	57
Secondary education	34	27	54	31	23	22	21	19	26	22	41
Teaching fields	864	919	954	893	824	723	686	714	759	664	707
Agricultural education	32	38	25	38	22	22	28	25	18	25	21
Art education	41	30	46	47	31	31	30	34	38	34	35
Business education	20	26	31	45	37	19	14	6	7	7	9
English education	57	62	53	65	44	56	53	47	45	55	48
Family & consumer sci./home economics	13	13	8	10	14	8	9	4	15	11	13
Foreign languages education	45	47	73	62	43	47	41	46	62	80	60
Health education	90	58	70	58	71	64	39	54	43	44	43
Mathematics education	100	93	115	101	91	81	89	80	91	89	98
Music education	91	101	93	79	79	63	80	74	94	61	83

Subfield of study	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Nursing education	23	21	14	22	11	5	7	8	10	10	7
Physical education & coaching	101	109	109	115	83	81	72	75	68	49	49
Reading education	66	70	76	68	89	72	66	60	86	74	68
Science education	96	77	110	58	60	72	60	69	86	67	81
Social science education	12	26	15	9	35	12	10	10	21	15	20
Technical education	24	32	17	27	20	10	23	24	na	na	na
Technology & industrial arts education	11	19	30	21	21	16	7	13	na	na	na
Trade & industrial education	12	16	14	14	12	7	5	5	18	6	14
Teacher education & prof. dev. other	30	81	55	54	61	57	53	80	57	37	58
Other education	686	622	623	589	653	623	433	613	461	461	362
Education, general	353	336	232	196	251	255	155	312	188	219	133
Education, other	333	286	391	393	402	368	278	301	273	242	229
Humanities	5,114	5,433	5,515	5,460	5,634	5,615	5,415	5,417	5,464	5,352	5,576
Foreign languages & literature	605	652	643	626	642	620	627	623	587	607	614
Arabic	6	4	9	12	15	6	5	4	7	5	10
Chinese	29	23	19	27	21	16	22	24	15	22	19
French	142	150	137	148	143	141	121	102	124	113	111
German	88	82	106	90	84	84	69	100	56	76	75
Hebrew	12	7	8	4	11	6	8	5	na	na	na
Italian	24	23	33	20	16	16	23	34	39	19	29
Japanese	10	19	11	10	18	17	15	20	14	23	26
Russian	37	39	43	25	29	27	26	28	25	21	28
Slavic (other than Russian)	11	9	15	17	14	12	19	11	8	13	11
Spanish	196	249	207	201	218	233	245	239	241	240	232
Other languages & literature	50	47	55	72	73	62	74	56	58	75	73
History	857	965	990	1,010	1,061	1,031	1,032	941	976	924	973
African history	na	na	na	na	na	na	na	na	21	18	27
American history	355	373	408	418	443	427	423	416	402	372	391
Asian history	54	54	70	68	51	51	66	66	66	64	80
European history	187	245	230	235	243	247	232	190	222	211	216
History/philosophy of science & technology	37	35	44	50	42	40	48	46	48	43	56
Latin American history	na	na	na	na	na	na	na	na	47	45	49
History, general	101	82	86	75	102	75	81	72	56	77	59
History, other	123	176	152	164	180	191	182	151	114	94	95
Letters	1,723	1,793	1,820	1,767	1,842	1,723	1,648	1,640	1,662	1,602	1,709
American literature	314	408	389	372	460	385	369	362	351	406	382
Classics	72	53	85	77	64	56	57	75	70	61	78
Comparative literature	164	181	164	166	187	204	175	165	175	180	165
English language	78	152	146	133	66	124	86	132	157	137	136
English literature	621	534	543	517	544	469	520	436	426	417	436

Subfield of study	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Folklore	na	na	na	na	na	na	na	na	22	18	14
Linguistics	230	244	220	251	230	230	193	224	254	212	252
Speech & rhetorical studies	155	138	169	150	143	127	137	151	128	98	142
Letters, general	28	23	22	19	55	34	31	27	16	19	21
Letters, other	61	60	82	82	93	94	80	68	63	54	83
Other humanities	1,929	2,023	2,062	2,057	2,089	2,241	2,108	2,213	2,239	2,219	2,280
American/U.S. studies	115	84	100	98	113	127	97	94	115	104	107
Archeology	21	35	34	26	36	40	26	33	34	44	39
Art history/criticism/conservation	177	188	221	188	228	225	218	254	248	211	246
Drama/theater arts	103	116	92	99	82	104	93	86	93	88	85
Music	696	727	696	768	746	793	766	873	848	906	919
Philosophy	369	444	410	389	364	415	363	392	365	355	370
Religion/religious studies	317	304	327	334	348	340	354	304	387	370	381
Humanities, general	39	25	23	24	40	30	19	27	17	25	24
Humanities, other	92	100	159	131	132	167	172	150	132	116	109
Other fields	2,478	2,371	2,281	2,288	2,257	2,234	2,311	2,299	2,596	2,540	2,689
Business mgmt./administrative services	1,279	1,245	1,175	1,108	1,065	1,064	1,113	1,036	1,253	1,171	1,312
Accounting	156	150	154	154	111	115	113	106	130	130	138
Banking/financial support services	114	69	83	74	72	71	76	80	106	83	104
Business administration & management	393	426	348	315	321	349	346	339	369	298	354
Business/managerial economics	38	48	57	42	52	50	39	44	60	55	45
Human resources development	na	na	na	na	na	na	na	na	86	100	94
International business/trade/commerce	36	39	33	34	32	29	25	44	31	28	33
Management information systems/business data	95	100	87	83	85	99	91	86	94	95	137
Marketing management & research	153	153	142	127	141	115	132	111	134	143	162
Operations research	64	45	57	52	61	41	36	26	52	50	65
Organizational behavior	110	123	105	101	99	118	173	113	124	120	112
Business management/administration serv., general	67	28	38	49	36	20	34	18	24	28	27
Business management/administration serv., other	53	64	71	77	55	57	48	69	43	41	41
Communications	389	332	373	379	389	390	397	415	450	486	507
Communication theory	37	40	48	47	39	40	43	42	49	54	47
Communications research	60	51	52	50	53	60	63	63	60	63	80
Mass communications/media studies	137	117	142	153	154	154	156	161	187	214	228
Communications, general	81	74	62	69	77	78	70	89	75	76	100
Communications, other	74	50	69	60	66	58	65	60	79	79	52
Fields not elsewhere classified	763	714	669	697	746	729	739	789	842	847	828
Architectural environmental design	61	66	52	65	61	66	67	69	66	76	92
Family/consumer sci./human sci., general	28	36	18	23	23	19	24	21	44	51	52
Law	24	27	31	37	41	35	50	52	56	40	76
Library science	49	40	34	39	45	41	32	42	23	30	30

Subfield of study	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Parks/sports/rec./leisure/fitness	29	24	37	29	45	41	52	38	82	72	59
Public administration	103	95	104	117	103	96	103	120	116	104	98
Social work	256	247	235	225	257	259	238	273	305	324	308
Theology/religious education	213	179	158	162	171	172	173	174	150	150	113
Fields not listed above	47	80	64	104	57	51	62	59	51	36	42

na = Not applicable (i.e., the field was not on the questionnaire's Specialties list for that year).

[a] Includes respondents who did not report doctoral field in 1999 (n=1) and 2000 (n=4).

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

APPENDIX TABLE B-2a (Revised June 2008). Number of doctorate recipients, by sex, race/ethnicity, and citizenship, 1996-2006 - Total all doctorates

Citizenship status by race/ethnicity	Year of doctorate										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
All doctorates [a]	42,437	42,539	42,637	41,097	41,365	40,737	40,025	40,757	42,123	43,385	45,596
U.S. citizens	27,777	28,154	28,533	27,994	27,988	27,042	26,049	26,513	26,472	26,325	26,917
Permanent residents	3,765	2,932	2,662	2,310	1,950	1,832	1,662	1,632	1,538	1,600	1,829
Temporary visa holders	9,735	9,191	9,461	9,060	9,664	9,810	9,743	10,592	11,622	12,826	14,118
Unknown citizenship	1,160	2,262	1,981	1,733	1,763	2,053	2,570	2,020	2,491	2,634	2,732
Known race/ethnicity	40,705	38,913	39,392	38,696	38,808	38,037	36,837	37,704	38,730	40,066	42,364
U.S. citizens	27,444	27,078	27,614	27,535	27,433	26,560	25,563	25,805	25,850	25,929	26,491
Permanent residents	3,732	2,869	2,576	2,271	1,898	1,798	1,615	1,590	1,496	1,568	1,781
Temporary visa holders	9,422	8,850	9,057	8,805	9,371	9,482	9,383	10,141	11,135	12,452	13,793
Unknown citizenship	107	116	145	85	106	197	275	168	249	117	299
American Indian [b]	188	167	190	214	169	164	155	142	135	142	131
U.S. citizens	185	167	189	214	169	149	147	134	129	139	118
Permanent residents [c]	1	0	0	0	0	2	3	3	2	1	1
Temporary visa holders [c]	2	0	0	0	0	12	5	5	4	2	11
Unknown citizenship	0	0	1	0	0	1	0	0	0	0	1
Asian [d]	9,803	9,006	8,564	7,996	8,060	8,105	7,889	8,285	9,066	10,221	11,706
U.S. citizens	1,066	1,295	1,185	1,305	1,365	1,413	1,369	1,372	1,451	1,494	1,560
Permanent residents	2,608	1,814	1,543	1,192	909	775	749	673	608	689	824
Temporary visa holders	6,116	5,865	5,808	5,472	5,765	5,894	5,740	6,216	6,964	8,001	9,247
Unknown citizenship	13	32	28	27	21	23	31	24	43	37	75
Black	1,825	1,761	1,912	2,053	2,096	2,009	2,032	2,098	2,382	2,182	2,206
U.S. citizens	1,305	1,336	1,485	1,631	1,631	1,614	1,667	1,711	1,881	1,690	1,659
Permanent residents	141	139	118	133	119	117	89	88	103	108	130
Temporary visa holders	367	276	297	281	334	264	255	265	357	381	385
Unknown citizenship	12	10	12	8	12	14	21	34	41	3	32
Hispanic [e]	1,632	1,695	1,880	1,899	1,963	1,901	2,027	2,217	2,025	2,275	2,304
U.S. citizens	957	1,064	1,209	1,184	1,182	1,123	1,239	1,280	1,180	1,296	1,370
Permanent residents	156	135	121	140	128	143	131	149	121	132	140
Temporary visa holders	516	484	542	561	647	620	647	781	710	843	779
Unknown citizenship	3	12	8	14	6	15	10	7	14	4	15
White	27,156	26,250	26,786	26,420	26,392	25,446	24,333	24,465	24,613	24,710	25,399
U.S. citizens	23,846	23,184	23,494	23,099	22,972	21,921	20,798	20,883	20,766	20,854	21,280
Permanent residents	823	781	792	802	741	750	635	664	657	625	669
Temporary visa holders	2,409	2,223	2,404	2,483	2,612	2,650	2,686	2,816	3,044	3,165	3,279
Unknown citizenship	78	62	96	36	67	125	213	102	146	66	171
Other/unknown race/ethnicity [f]	1,833	3,660	3,305	2,515	2,685	3,112	3,589	3,550	3,902	3,855	3,850
U.S. citizens	418	1,108	971	561	669	822	829	1,133	1,065	852	930
Permanent residents	36	63	88	43	53	45	55	55	47	45	65
Temporary visa holders	325	343	410	263	306	370	410	509	543	434	417
Unknown citizenship	1,054	2,146	1,836	1,648	1,657	1,875	2,295	1,853	2,247	2,524	2,438

[a] Total includes doctorate recipients for whom sex was not reported.

[b] Includes Alaska Natives.

[c] In most cases, non-U.S. American Indians are citizens of Canada or of a Latin American country.

[d] Includes Native Hawaiians or other Pacific Islanders through 2000, but excludes them in 2001–2006.

[e] Persons reporting an Hispanic ethnicity, whether singly or in combination with another race/ethnicity, are included in the respondent-selected Hispanic ethnicity category.

[f] Includes only those with unknown race/ethnicity through 2000. In 2001, this category was expanded to include Native Hawaiians or other Pacific Islanders and respondents choosing multiple races (excluding those selecting an Hispanic ethnicity).

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

APPENDIX TABLE B-2b (Revised June 2008). Number of doctorate recipients, by sex, race/ethnicity, and citizenship, 1996-2006 - Total all males

Citizenship status by race/ethnicity	Year of doctorate										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total all doctorates	25,285	24,939	24,628	23,436	23,163	22,775	21,805	22,257	22,963	23,738	24,986
U.S. citizens	14,721	15,046	14,918	14,519	14,158	13,673	12,883	13,096	12,996	12,792	13,273
Permanent residents	2,483	1,835	1,644	1,380	1,135	1,000	878	815	752	783	863
Temporary visa holders	7,475	6,973	6,985	6,633	6,854	7,009	6,763	7,254	7,909	8,747	9,348
Unknown citizenship	606	1,085	1,081	904	1,016	1,093	1,280	1,092	1,306	1,416	1,502
Total known race/ethnicity	24,274	23,016	22,728	22,076	21,634	21,258	20,117	20,518	21,011	21,879	23,154
U.S. citizens	14,498	14,439	14,374	14,227	13,829	13,382	12,594	12,682	12,620	12,558	13,028
Permanent residents	2,461	1,796	1,586	1,353	1,102	979	852	794	727	767	839
Temporary visa holders	7,242	6,716	6,693	6,449	6,650	6,779	6,512	6,969	7,559	8,489	9,143
Unknown citizenship	73	65	75	47	53	118	158	73	105	65	144
American Indian [a]	102	79	104	96	76	77	72	56	61	60	62
U.S. citizens	101	79	104	96	76	66	67	52	56	57	54
Permanent residents [b]	0	0	0	0	0	2	2	1	2	1	1
Temporary visa holders [b]	1	0	0	0	0	8	3	3	3	2	7
Unknown citizenship	0	0	0	0	0	1	0	0	0	0	0
Asian [c]	7,198	6,425	6,029	5,529	5,350	5,429	5,153	5,447	5,822	6,552	7,359
U.S. citizens	603	741	661	766	740	762	750	744	728	761	770
Permanent residents	1,787	1,143	979	711	501	424	377	334	276	312	372
Temporary visa holders	4,799	4,522	4,375	4,032	4,094	4,225	4,007	4,355	4,791	5,459	6,172
Unknown citizenship	9	19	14	20	15	18	19	14	27	20	45
Black	929	857	819	909	881	866	856	838	973	910	929
U.S. citizens	531	528	524	609	561	592	613	598	645	594	580
Permanent residents	107	108	85	91	82	84	63	55	71	67	78
Temporary visa holders	287	212	203	204	233	185	176	177	240	247	259
Unknown citizenship	4	9	7	5	5	5	4	8	17	2	12
Hispanic [d]	935	980	1,061	991	1,069	1,016	1,040	1,169	1,087	1,191	1,202
U.S. citizens	480	544	613	510	546	497	539	595	542	548	615
Permanent residents	87	81	72	69	63	71	61	71	54	58	72
Temporary visa holders	366	349	373	405	458	443	435	500	486	585	509
Unknown citizenship	2	6	3	7	2	5	5	3	5	0	6
White	15,062	14,659	14,682	14,501	14,200	13,664	12,810	12,768	12,826	12,927	13,301
U.S. citizens	12,744	12,532	12,443	12,203	11,855	11,303	10,477	10,499	10,451	10,411	10,776
Permanent residents	480	464	449	479	455	394	346	325	322	323	311
Temporary visa holders	1,781	1,632	1,739	1,804	1,859	1,889	1,856	1,897	1,998	2,153	2,135
Unknown citizenship	57	31	51	15	31	78	130	47	55	40	79
Other/unknown race/ethnicity [e]	1,059	1,939	1,933	1,410	1,587	1,723	1,874	1,979	2,194	2,098	2,133
U.S. citizens	262	622	573	335	380	453	437	608	574	421	478
Permanent residents	22	39	59	30	34	25	29	29	27	22	29
Temporary visa holders	241	258	295	188	210	259	286	322	391	301	266
Unknown citizenship	534	1,020	1,006	857	963	986	1,122	1,020	1,202	1,354	1,360

[a] Includes Alaska Natives.

[b] In most cases, non-U.S. American Indians are citizens of Canada or of a Latin American country.

[c] Includes Native Hawaiians or other Pacific Islanders through 2000, but excludes them in 2001–2006.

[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).

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

APPENDIX TABLE B-2c (Revised June 2008). Number of doctorate recipients, by sex, race/ethnicity, and citizenship, 1996-2006 - Total all females

Citizenship status by race/ethnicity	Year of doctorate										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total all doctorates	16,955	17,243	17,848	17,484	18,129	17,885	18,135	18,500	19,158	19,579	20,539
U.S. citizens	13,056	13,076	13,603	13,475	13,827	13,369	13,165	13,417	13,476	13,531	13,644
Permanent residents	1,282	1,096	1,002	930	813	832	784	817	786	817	966
Temporary visa holders	2,247	2,203	2,456	2,423	2,809	2,800	2,975	3,338	3,713	4,075	4,769
Unknown citizenship	370	868	787	656	680	884	1,211	928	1,183	1,156	1,160
Total known race/ethnicity	16,426	15,884	16,639	16,619	17,172	16,779	16,719	17,186	17,719	18,184	19,207
U.S. citizens	12,946	12,636	13,237	13,308	13,603	13,178	12,968	13,123	13,230	13,369	13,463
Permanent residents	1,271	1,072	982	918	796	819	763	796	769	801	942
Temporary visa holders	2,176	2,125	2,351	2,355	2,721	2,703	2,871	3,172	3,576	3,962	4,649
Unknown citizenship	33	51	69	38	52	79	117	95	144	52	153
American Indian [a]	86	88	86	118	93	87	83	86	74	82	69
U.S. citizens	84	88	85	118	93	83	80	82	73	82	64
Permanent residents [b]	1	0	0	0	0	0	1	2	0	0	0
Temporary visa holders [b]	1	0	0	0	0	4	2	2	1	0	4
Unknown citizenship	0	0	1	0	0	0	0	0	0	0	1
Asian [c]	2,600	2,574	2,519	2,466	2,710	2,676	2,736	2,838	3,244	3,667	4,345
U.S. citizens	463	553	523	539	625	651	619	628	723	732	790
Permanent residents	821	671	557	481	408	351	372	339	332	377	452
Temporary visa holders	1,313	1,337	1,426	1,439	1,671	1,669	1,733	1,861	2,173	2,541	3,075
Unknown citizenship	3	13	13	7	6	5	12	10	16	17	28
Black	896	904	1,091	1,144	1,215	1,143	1,176	1,260	1,409	1,272	1,277
U.S. citizens	774	808	961	1,022	1,070	1,022	1,054	1,113	1,236	1,096	1,079
Permanent residents	34	31	32	42	37	33	26	33	32	41	52
Temporary visa holders	80	64	93	77	101	79	79	88	117	134	126
Unknown citizenship	8	1	5	3	7	9	17	26	24	1	20
Hispanic [d]	697	715	817	908	893	885	987	1,048	938	1,084	1,102
U.S. citizens	477	520	595	674	635	626	700	685	638	748	755
Permanent residents	69	54	49	71	65	72	70	78	67	74	68
Temporary visa holders	150	135	168	156	189	177	212	281	224	258	270
Unknown citizenship	1	6	5	7	4	10	5	4	9	4	9
White	12,094	11,585	12,099	11,919	12,191	11,782	11,522	11,697	11,787	11,783	12,097
U.S. citizens	11,102	10,650	11,050	10,896	11,117	10,618	10,320	10,384	10,315	10,443	10,504
Permanent residents	343	316	343	323	286	356	289	339	335	302	358
Temporary visa holders	628	588	661	679	753	761	830	919	1,046	1,012	1,143
Unknown citizenship	21	31	45	21	35	47	83	55	91	26	92
Other/unknown race/ethnicity [e]	582	1,377	1,236	929	1,027	1,312	1,631	1,571	1,706	1,691	1,649
U.S. citizens	156	457	389	226	287	369	392	525	491	430	452
Permanent residents	14	24	21	13	17	20	26	26	20	23	36
Temporary visa holders	75	79	108	72	95	110	119	187	152	130	151
Unknown citizenship	337	817	718	618	628	813	1,094	833	1,043	1,108	1,010

[a] Includes Alaska Natives.

[b] In most cases, non-U.S. American Indians are citizens of Canada or of a Latin American country.

[c] Includes Native Hawaiians or other Pacific Islanders through 2000, but excludes them in 2001–2005.

[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 or other Pacific Islanders and respondents choosing multiple races (excluding those selecting an Hispanic ethnicity).

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

Appendix C: Technical Notes

Appendix C includes the following three tables:

C-1. Survey response rates, 1971-2006

C-2. Profiles of respondents versus nonrespondents for critical items, by source of response, 2006

C-3. Item response rates, 1996-2006

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 1957.

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 (N= 279 in 2006)

Field of employment

Field of science and engineering

Type of doctoral 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.

Survey Eligibility

The Survey of Earned Doctorates collects information on *research* doctorate recipients only. Research doctoral programs are oriented toward preparing students to make original contributions to knowledge in a field and typically entail writing a dissertation. 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., D.V.M., J.D., Psy.D., and D.Min.) are not. (See Appendix E for a full listing of eligible research doctorate degree types.) Doctoral programs are not static entities and changes in the focus of programs over time may make the designation as a research doctoral program more or less appropriate. That is, as doctoral programs evolve to meet the needs of students, the orientation of some may change from research to professional and vice versa. Survey staff review individual doctoral programs to ensure that designation as a research doctoral program and inclusion in the SED is still appropriate. During program review in the past two rounds, survey staff identified several programs that shifted from research-oriented programs to professionally-oriented programs and graduates from these programs were not included in the survey.

The population eligible for the 2006 survey consisted of all individuals who received a research doctorate from a U.S. academic institution in the 12-month period

ending on June 30, 2006. The total universe consisted of 45,596 persons in more than 400 institutions that conferred research doctorate awards in 2006.

Data Collection

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 survey contractor for editing/processing. Additional modes of data collection include a Web and telephone version of the survey and mail follow-up of missing critical items.

Because the survey collects a complete college education history, coding of institutions is very important. About 30 percent of doctorate recipients from U.S. universities are from foreign countries; therefore, 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*" (three volumes). Survey staff have augmented the Mapping the World list of non-U.S. institutions of higher education with over three thousand additional institutions from the *Europa World of Learning*, published by Routledge - Taylor & Francis group.

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

Survey Response Rates

Of the 45,596 new research doctorates granted in 2006, 92 percent of research doctorate recipients 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; one percent of the 417 doctorate-granting institutions accounted for 17 percent of the total nonrespondents and the ten percent of institutions with the highest nonresponse accounted for 67 percent of the total nonrespondents.

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 doctorate records whether complete or skeletal; thus the reported total number of doctorate recipients for 2006 (45,596) 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.

TABLE C-1: Table C-1 presents the survey response rates for the Survey of Earned Doctorates from 1971 through 2006.

APPENDIX TABLE C-1. Survey response rates, 1971-2006

Year	Self-report rate	Year	Self-report rate
1971	92.3	1989	92.3
1972	90.2	1990	93.6
1973	88.5	1991	94.6
1974	83.9	1992	95.1
1975	90.7	1993	94.7
1976	91.2	1994	94.6
1977	91.4	1995	94.2
1978	91.0	1996	92.9
1979	91.0	1997	91.5
1980	96.2	1998	91.9
1981	95.7	1999	91.9
1982	95.3	2000	92.4
1983	95.5	2001	92.7
1984	95.1	2002	91.3
1985	94.8	2003	91.5
1986	93.5	2004	91.2
1987	93.1	2005	92.1
1988	92.9	2006	92.1

NOTE: The rates for 1971–2005 include late responses. The rate for 2006 may increase slightly in the next year if additional questionnaires are received after survey closure.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

A Comparison of Self-Reported and Institution-Supplied Data

TABLE C-2: Table C-2 presents a comparison of respondent-completed cases and nonresponding cases where institutions supplied data on critical items. The profile of nonrespondents differs from the profile of respondents in seven of the nine critical item variables. Nonrespondents appear to be slightly older than respondents. Among U.S. citizens, nonrespondents are more likely to be non-white. Nonrespondents appear to be less likely to be U.S. citizens than respondents. Related to the observed citizenship status differences between respondents and nonrespondents, respondents appear more likely to have attended a U.S. baccalaureate institution. These findings should be considered suggestive only, as there is a high proportion of missing data from institutions on citizenship status, bachelor's institution, year of bachelor's degree and postgraduation location.

APPENDIX TABLE C-2. Profiles of respondents versus nonrespondents for critical items, by source of response, 2006

Critical item variable	Respondents (self-reported) percent	Nonrespondents (institution-provided) percent	Percentage point difference
Year of birth			
Missing data	1.9	14.1	
Before 1973 [a]	47.6	53.4	-5.8
1973 and later	52.4	46.6	5.8
Sex			
Missing data	0.0	0.2	
Male	54.8	52.3	2.6
Female	45.2	47.7	-2.6
Citizenship status			
Missing data	0.5	30.9	
U.S. citizen	63.0	56.5	6.5
Permanent resident	4.3	4.1	0.2
Temporary visa holder	32.8	39.4	-6.7
Country of citizenship (for non-U.S. citizens only)			
Country reported	98.6	47.5	51.1
Country not reported	1.4	52.5	-51.1
Race/ethnicity (U.S. citizens only)			
Missing data	0.8	11.8	
American Indian [b]	0.4	1.5	-1.1
Asian [c]	5.9	5.0	0.9
Black	6.1	10.2	-4.1
Hispanic [d]	5.0	13.2	-8.2
White	80.2	68.2	11.9
Other [e]	2.4	1.9	0.6
Broad field of doctorate			
Life sciences	21.4	18.2	3.2
Physical sciences [f]	16.6	11.3	5.3
Social sciences [g]	14.9	20.6	-5.7
Engineering	15.8	16.6	-0.8
Education	13.3	15.7	-2.4
Humanities	12.2	10.5	1.7
Other fields	5.7	7.0	-1.3
Bachelor's institution			
Missing data	3.2	27.8	
U.S.	65.2	61.2	4.0
Non-U.S.	34.8	38.8	-4.0

Critical item variable	Respondents (self-reported) percent	Nonrespondents (institution-provided) percent	Percentage point difference
Year of bachelor's degree			
Missing data	4.7	36.1	
Before 1996 [h]	45.8	47.5	-1.7
1996 and later	54.2	52.5	1.7
Postgraduation location			
Missing data	0.9	67.3	
U.S.	89.7	89.2	0.5
Non-U.S.	10.3	10.8	-0.5

[a] 1973 is the median year of birth of 2006 doctorate recipients.

[b] Includes Alaska Natives.

[c] Does not include Native Hawaiians or other Pacific Islanders.

[d] Persons reporting Hispanic ethnicity, whether singly or in combination with another race/ethnicity, are included in the respondent-selected Hispanic ethnicity category.

[e] Includes Native Hawaiians or other Pacific Islanders, respondents choosing multiple races (excluding those selecting an Hispanic ethnicity), and respondents with unknown race/ethnicity.

[f] Includes mathematics and computer & information sciences.

[g] Includes psychology.

[h] 1996 is the median year of baccalaureate of 2006 doctorate recipients.

NOTES: Missing data percentages calculated from all data, missing and non-missing. All other percentages calculated on non-missing data.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

Item Response Rates

Item nonresponse rates in 2006 for the main SED demographic variables ranged from 0.2 percent for sex to 7.6 percent for postgraduation location. No imputation was performed for missing data items.

Key variable	Item response rate
Sex	99.8
Citizenship	94.0
Race/ethnicity	93.4
Country of citizenship	93.9
Postgraduation location	92.4

TABLE C-3: Table C-3 on the following pages shows the response rates for each item in the Survey of Earned Doctorates for 1996 through 2006. For the purposes of this analysis, "response rate" is the percent of cases providing data on the item divided by the universe of doctorate recipients eligible to answer that item. On most items, the full universe of doctorate recipients establishes the universe of eligible respondents. However, on a number of items, only a subset of the full universe is eligible to answer the item (see clarifying notes in table). 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.

Variable Name	Variable description	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AMERIND	American Indian/Alaska Native race indicator	94.8	90.2	90.8	92.4	92.4	93.7	91.9	92.8	92.0	92.4	93.2
ASIAN	Asian race indicator	94.8	90.2	90.8	92.4	92.4	93.7	91.9	92.8	92.0	92.4	93.2
BAFIELD	B.A. field	90.9	83.3	84.8	85.1	86.9	87.5	86.6	86.6	87.6	86.9	88.5
BAINST	B.A. institution	96.5	89.6	91.2	92.4	91.2	93.0	91.9	92.5	91.9	93.1	92.9
BAMONTH	Month of B.A.	88.6	82.3	83.0	83.7	85.1	85.3	84.4	84.0	84.0	84.0	85.4
BANONE	No B.A./no M.A. indicator	11.4	6.9	8.1	8.0	2.7	9.5	10.1	9.5	12.2	11.6	11.6
BAPLACE	Place of baccalaureate	96.5	89.6	91.2	92.4	91.2	93.0	91.9	92.5	91.9	93.2	93.1
BAYEAR	Year of B.A.	96.4	88.7	90.7	92.3	90.5	92.5	91.3	92.0	89.5	90.5	91.1
BIRTHMO	Month of birth	96.7	92.7	92.9	95.0	95.2	94.5	93.1	93.9	92.4	92.9	93.1
BIRTHPL	Place of birth	95.8	93.8	93.8	94.3	94.3	93.7	92.4	93.5	92.6	94.8	95.3
BIRTHYR	Year of birth	96.8	92.9	92.8	95.1	95.3	94.6	93.3	94.3	92.8	93.5	93.3
BLACK	Black race indicator	94.8	90.2	90.8	92.4	92.4	93.7	91.9	92.8	92.0	92.4	93.2
CEPLACE	Place of college entry	90.6	82.6	90.5	90.7	90.0	92.0	92.3	94.1	na	na	na
CEYEAR	Year of college entry	89.2	82.7	88.8	89.1	87.3	89.5	87.8	87.5	85.8	85.8	85.8
CITIZ	Type of citizenship	97.3	94.7	95.4	95.8	95.7	95.0	93.6	95.0	94.1	93.9	94.0
CNTRYCIT	Country of citizenship	97.1	94.3	95.0	95.5	95.5	94.7	93.3	94.7	93.8	93.7	93.9
DEBTLVL	Debt level indicator	91.3	89.3	89.8	90.6	91.2	na	na	na	na	na	na
DEPENDS	Number of dependents	89.5	88.4	88.8	89.1	89.5	na	na	na	na	na	na
DEPEND5	Number of dependents - ages 5 or younger	na	na	na	na	na	na	89.1	89.2	88.4	89.0	89.9
DEPEND18	Number of dependents - ages 6-18	na	na	na	na	na	na	89.1	89.2	88.4	89.0	89.9
DEPEND19	Number of dependents - ages 19 and older	na	na	na	na	na	na	89.1	89.2	88.4	89.0	89.9
DOCCODE	Type of doctorate	na	na	na	na	na	100.0	100.0	100.0	100.0	100.0	100.0
EDFATHER	Fathers education	91.5	89.5	89.8	90.5	90.9	90.9	89.8	90.1	89.9	90.6	90.6
EDMOTHER	Mothers education	91.7	89.8	90.0	90.8	91.1	91.1	90.1	90.3	90.1	90.7	90.8
GDEBTLVL	Graduate debt level	na	na	na	na	na	na	89.4	89.8	89.6	90.7	90.6
GEYEAR	Year of graduate entry	na	na	na	na	na	na	83.2	82.0	88.3	91.4	91.5
HANDICAP	Handicapped status	91.8	90.1	90.1	90.4	90.9	91.0	89.9	90.2	90.0	90.8	90.8
HAWAIIAN	Native Hawaiian/Pacific Islander race indicator	na	na	na	na	na	na	91.3	92.7	92.0	92.4	93.2
HISPANIC	Hispanic origin indicator	96.4	93.1	93.7	95.1	94.8	92.2	91.4	92.0	91.3	92.1	92.4
HISPORIG	Hispanic origin specified	95.6	92.3	92.6	94.1	93.7	91.1	90.3	90.1	89.8	90.4	90.8
HSPLACE	Place of high school	92.2	90.2	90.9	91.4	91.9	91.0	90.2	90.5	89.7	91.6	90.4
JRCOLL	Junior college indicator	90.6	91.5	91.9	91.8	92.3	92.1	90.9	91.0	90.0	91.0	90.9
MAFIELD	Masters field	84.6	75.4	78.1	78.3	73.8	80.5	80.2	80.1	83.9	82.7	83.8
MAINST	Masters institution	87.3	79.1	80.7	80.6	76.0	82.5	82.3	82.0	85.4	85.4	85.1
MAMONTH	Month of masters	81.1	73.4	75.3	75.8	71.3	77.5	77.6	77.5	80.0	79.5	80.5
MARITAL	Marital status	91.7	89.3	90.3	90.8	91.2	91.1	90.0	90.3	90.0	90.8	90.8
MAYEAR	Year of masters	85.6	77.8	80.4	79.5	75.0	81.3	81.3	81.2	83.1	82.5	82.6
MEDDENT	Earn(ing) professional medical or dental degree	na	na	na	na	na	na	na	na	na	91.0	91.0
MSPREREQ	Master's degree prerequisite for doctorate	na	na	na	na	na	na	na	na	na	89.6	90.3
PDEMPLOY	Postdoctoral employer type	85.7	82.6	84.8	83.9	85.9	86.7	86.5	86.8	88.5	90.0	89.9
PDLOC	Post-graduation location	92.7	83.8	89.7	92.1	92.3	92.5	91.3	92.8	91.7	92.5	92.4
PDOCPLAN	Post-graduation plans	91.3	87.2	88.0	89.3	90.8	90.2	89.5	90.0	88.5	90.2	91.5
PDOCSTAT	Post-graduation status	91.0	89.0	89.7	90.5	91.2	91.1	90.0	90.4	89.7	91.0	91.2
PDSTDSUP	Postdoctoral study support	91.6	88.6	88.8	90.3	91.1	91.0	89.9	90.4	88.4	89.9	91.4
PDUSFOR	Post-graduation location: U.S. or foreign	100.0	100.0	89.7	92.1	92.3	92.5	91.3	92.9	91.7	92.5	92.4
PDWK1ED	Edited primary work activity	84.8	82.8	84.0	83.6	85.6	84.9	84.4	84.8	87.9	89.1	89.2
PDWK2ED	Edited secondary work activity	72.5	74.1	75.2	73.3	74.8	72.7	73.8	75.4	77.5	78.0	77.1
PDWKPRIM	Primary work activity	84.8	82.8	84.0	83.6	85.6	84.9	84.4	84.8	87.9	89.1	89.2
PDWKSEC	Secondary work activity	72.5	74.1	75.2	73.3	74.8	72.7	73.8	75.4	77.5	77.9	77.1
PHDCY	Calendar year of Ph.D.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDDISS	Dissertation field	92.2	89.2	90.2	91.0	91.5	91.6	90.6	90.9	90.7	91.6	91.7

Variable Name	Variable description	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PHDENTRY	First year entry PHDINST after B.A.	85.6	79.1	83.7	86.0	85.3	85.3	83.8	83.7	88.9	90.4	90.4
PHDFIELD	Ph.D. field	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 Ph.D.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDINST	Doctoral institution	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
PHDTYPE1	Type of doctorate	100.0	100.0	100.0	100.0	100.0	na	na	na	na	na	na
PHDTYPE2	Applied research doctorate type	100.0	100.0	100.0	100.0	100.0	na	na	na	na	na	na
POSTDOC	Intention to take postdoc position	na	na	na	na	na	na	na	na	na	89.8	90.4
PROFDEG	Type of professional doctorate	1.9	1.9	1.2	2.0	2.2	1.8	2.1	1.9	1.3	1.2	1.0
PROFYEAR	Year of professional doctorate	1.9	1.8	2.8	2.8	2.2	1.8	2.1	1.9	1.3	1.2	1.0
QUESTYR	Year questionnaire filled out	92.9	91.5	91.9	91.9	92.3	92.3	91.3	91.5	91.2	92.0	92.1
RACE	Edited race/ethnic code	96.4	93.1	93.7	95.1	94.9	94.2	93.1	93.6	93.4	93.4	93.4
RACEOTH	Other/multiple race indicator	94.8	90.2	90.8	92.4	92.1	na	na	na	na	na	na
REGTTD	Registered time to degree	87.1	77.1	81.0	84.9	83.3	85.4	84.9	84.7	na	na	na
SEX	Sex of student	99.5	99.2	99.6	99.6	99.8	99.8	99.8	100.0	100.0	99.8	99.8
SRCE1ED	Edited primary source of support	88.0	87.9	88.6	89.9	90.3	90.2	88.7	87.4	89.2	90.2	89.9
SRCEPRIM	Primary source support	88.0	87.9	88.7	89.9	90.3	90.2	88.7	88.9	89.2	90.2	89.9
TOTTTD	Total time-to-degree	94.9	86.5	87.9	91.0	89.4	91.0	89.7	90.3	87.9	88.8	89.3
TTDGETOT	Graduate school time-to-degree	na	na	na	na	na	na	na	na	na	89.2	88.6
TUITREMS	Tuition remission - full or partial	na	na	na	na	na	na	87.3	88.3	87.0	89.4	89.5
UDEBTLVL	Undergraduate debt level	na	na	na	na	na	na	89.5	89.9	89.7	90.7	90.5
WHITE	White race indicator	94.8	90.2	90.8	92.4	92.4	93.7	91.9	92.8	92.0	92.4	93.2
YRSCOURS	Years of coursework	na	na	na	na	na	na	90.0	90.2	88.6	89.3	90.2
YRSDISST	Years preparing dissertation	na	na	na	na	na	na	90.2	90.4	88.9	89.4	90.4
YRSGRAD	Years from graduate entry to doctorate	na	na	na	na	na	na	89.9	90.1	na	na	na

na = Not applicable; data were not collected.

NOTES: For the purposes of this analysis, "response rate" is the percent of cases providing data on the item divided by the universe of doctorate recipients eligible to answer that item. On most items, the full universe of doctorate recipients establishes the universe of eligible respondents. However, on a number of items, only a subset of the full universe is eligible to answer the item. Variables DEPEND5, DEPEND18, DEPEND19, GDEBTLVL, PHDDISS2, UDEBTLVL, YRSCOURS, YRSDISST and YRSGRAD appeared for the first time on the 2001 survey form. Because about 25 percent of AY 2001 respondents submitted data on earlier versions of the survey form, AY 2001 response rates for these variables are not reported. Response rates for these variables are reported in 2002 and later because the entire universe had the opportunity to provide data for these questions. The variable HAIWAIIAN was added to the DRF in 2001 and the variable DOCCODE was introduced in 2004 and retroactively coded back to 2001; response rates for these variables are presented from 2001. Variables MEDDENT, MSPREREQ, and POSTDOC appeared for the first time on the 2004 survey form and response rates for these variables are first reported in 2005.

Particular variables (including BANONE, PROFDEG, PROFYEAR) have low response rates because of the nature of the data collected. Although all respondents are considered eligible to provide data for these items, only some will be able to do so.

The time-to-degree measures (REGTTD and TOTTTD) result from the SED's calculation of these figures from six variables measuring durations spent inside and outside of educational institutions between bachelor's degree receipt and doctorate receipt. The time-to-degree measures are presented here because they are more meaningful summaries of valid data than the response rates of the individual component variables used to calculate them. Effective AY 2004, the SED questionnaire no longer captured durations spent outside of educational institutions between bachelor's degree receipt and doctorate receipt. As a result, REGTTD can no longer be calculated. TOTTTD is calculated as the total amount of time between bachelor's degree receipt and doctorate receipt.

The items DEPENDS and DEBTLEVL are not collected on current SED survey forms. They are calculated from other current variables and presented here so as to illustrate trends with earlier years in which these items were asked. The response rate for the variable CNTRYCIT counts as respondents all doctorate recipients who reported being U.S. citizens and non-citizens who also provided their country of citizenship.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

Derived Variables

The following derived variables deserve further explanation. In the text below, variable names are shown in all capital letters. Refer to Appendix Table C-3 for item response rates for each variable.

Major field of study

Major field of doctoral study is used in tables 5, 6, 9, and 33 and provides finer field classifications than the broad fields alone. The levels of this variable were derived by grouping related fine fields of study from the field of study taxonomy used in the SED. See Appendix D for a full listing of the fine fields of study in 2006. Refer to Appendix E for the aggregations used to determine major field of study.

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 Federal Information Processing Standards (FIPS) codes for U.S. states and territories and countries. Values of PDLOC of less than '100' indicate a postdoctoral location in the United States. Values between '100' and '555' indicate a non-U.S. location.

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, with 1 = U.S. and 2 = Non-U.S. Data in PDUSFOR and PDLOC can be slightly different because PDUSFOR will capture a respondent's report of postgraduation location (in the U.S. or outside the U.S.) even if the respondent does not indicate a specific state or country.

Definite Postdoctoral Plans

Postdoctoral plans are coded using the values from item B3 of the survey (variable PDOCSTAT), which indicate whether the doctorate recipient's postdoctoral plans were definite at the time the survey was completed. That is, codes 0 or 1 on PDOCSTAT indicate that the respondent had a definite postdoctoral commitment; whereas codes 2 and 3 indicate that the

respondent was still seeking to determine postdoctoral placement; codes 4 and 5 are considered 'other' codes and fall outside of the definite versus seeking structure.

Definite Plans to Stay in the United States

This variable is derived from PDUSFOR and PDOCSTAT. 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.”

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).*

Graduate school time to degree (GTD): GTD gauges the elapsed time from the initiation of graduate study in any program or capacity at any university and the doctorate. GTD can only be computed for individuals who provided the year they started graduate school. *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 in the calculation of TTD, month values are assigned to the mid-point of the range of days, with a leap year factor included (i.e. assignment to a value of 181.25). If months are missing in the calculation of GTD, month values are assigned to the modal value for doctorate recipients who provided month of graduate entry (i.e., assignment to a value of 243.25 which corresponds to the month of September). (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.

Race and Hispanic Ethnicity

Since 2001, respondents have been asked to first indicate if they are Hispanic or not, and then check one or more of the various racial group categories (i.e., American Indian or Alaska Native, indicating tribal affiliation, Asian, Native Hawaiian or other Pacific Islander, Black or African American, or White). Prior to 2001, the format of the race/ethnicity item differed. In those years, respondents were also asked to indicate their Hispanic ethnicity before indicating their racial category, however the racial categories and instructions to respondents differed. Respondents were instructed to mark *one* racial category, rather than 'mark one *or more*'. The categories consisted of American Indian or Alaska Native, Asian or Pacific Islander, Black, and White. **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 those choosing more than one race, Native Hawaiian and other Pacific Islanders, and those that failed to indicate a racial group). (Note: Doctorate recipients who checked the category “American Indian or Alaskan Native” are identified as American Indian in this report. Doctorate recipients who checked the category "Asian or Pacific Islander" are included with Asians where trend data dating before 2001 are reported.)

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 Category
0	U.S. Native
1	U.S. Naturalized Citizen
2	Non-U.S. Immigrant (Permanent Resident)
3	Non-U.S. Non-immigrant (Temporary U.S. Visa)
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 1997-2003 records if three out of four variables – BIRTHPL, HSPLACE, CEPLACE, PDLOC – were non-U.S. locations. Due to changes in the survey form beginning in 2004, CEPLACE was no longer available for respondents who used forms from 2004 and later. For those doctorate recipients, BAPLACE was used instead of CEPLACE for assigning the citizenship status. 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.

Debt

The item indexing debt was changed in AY 2001 to allow the identification of debt due to undergraduate education separately from that due to graduate education (see item A7 on the questionnaire). The resulting variables identify seven ranges of debt for each referent (undergraduate or graduate). To estimate overall debt, the midpoint of the chosen range for undergraduate and for graduate debt was selected and summed to yield a total debt amount. Where mean debt levels are presented in this report (i.e., tables 23 and 24), the individual values for debt are assigned as the midpoint of the chosen range for graduate and undergraduate debt. Doctorate recipients who chose the lowest debt category (No debt) were assigned a value of $0 for the computation of mean debt levels. Doctorate recipients who chose the uppermost category ($50,001 and up) were assigned a value of $55,000 for the computation of mean debt levels. All valid responses, including 'No debt' were included in the computation of all average debt figures in this report. See item A-7 in Appendix D for a complete listing of the ranges on which the midpoint figures were based.

Availability of Data

The Survey of Earned Doctorates has collected information on doctoral recipients annually since 1957. More limited information is contained in the cumulative Doctorate Records

File maintained for NSF by the SED data collection contractor for research doctorate recipients from 1920-1956. This annual *Summary Report* is an interagency report sponsored by the federal agencies that support the SED (six in 2006). This report is available on the Web at: http://www.norc.org/sed.htm.

The data from this survey are also published annually in Detailed Statistical Tables in the series *Science and Engineering Doctorate Awards*, available on the NSF-SRS Web site at: http://www.nsf.gov/statistics/doctorates/. These reports focus on science and engineering fields of study. (The list of how fields of study are classified for this report is shown in Appendix E.) Companion data from this survey for earlier years (1960-1991) were published in Detailed Statistical Tables in the report *Science and Engineering Doctorates: 1960-91* (NSF 93-301). This report is out of print, but tables from it are available on request of NSF.

Information from the survey is also included in the NSF-SRS report series *Science and Engineering Degrees*; in *Science and Engineering Indicators*; in *Women, Minorities, and Persons With Disabilities in Science and Engineering*; and in special occasional publications.

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

A complete methodology report for the 2006 SED is available upon request from NSF-SRS. 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:

Jaqui C. Falkenheim
Project Manager, Survey of Earned Doctorates
Division of Science Resources Statistics
National Science Foundation
4201 Wilson Blvd., Room 965
Arlington, VA 22230
Phone: (703) 292-7798
E-mail: jfalkenh@nsf.gov

Or

Tom Hoffer
Survey of Earned Doctorates
National Opinion Research Center
at the University of Chicago
1155 E. 60th Street
Chicago, IL 60637
Phone: (773) 256-6097
E-mail: hoffer-tom@norc.org

Appendix D: Survey of Earned Doctorates Questionnaire, Academic Year 2005-2006

Please print your name in full:

First Name	Middle Name	Last Name	Suffix (e.g., Jr.)

Cross reference: Birth name or former name legally changed

Name of Doctoral Institution	City or Branch

Type of Doctoral Degree (e.g., Ph.D., Ed.D., D.B.A.)	Date Degree Granted (mm/yyyy)

Survey of Earned Doctorates

July 1, 2005, to June 30, 2006

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

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. Your Social Security Number is also solicited under the NSF Act of 1950, as amended; provision of it is voluntary. It will be kept confidential. It is used for quality control, to assure that we identify the correct persons, especially when data are used for statistical purposes in Federal program evaluation. 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.

The time needed to complete this form varies according to individual circumstances, but the average time is estimated to be 19 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. A Federal agency may not conduct or sponsor a collection of information unless it displays a currently valid OMB control number.

OMB No.: 3145-0019
Approval Expires 07/31/06

INSTRUCTIONS

Thank you for taking the time to complete this questionnaire. Directions are provided for each question.

- **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."**

PART A - Education

A1. What is the title of your dissertation?

☐ *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 _____

A2. Please write the name of the primary field of your dissertation research.

Name of Field _____

Using the list on page 7, choose the code that best describes the primary field of your dissertation research.

Number of Field ☐☐☐

If your dissertation research was interdisciplinary, list the name and number of your secondary field.

Name of Field _____

Number of Field ☐☐☐

If there were more than two fields, please continue on the back cover of the questionnaire (p. 8).

A3. Please name the department (or interdisciplinary committee, center, institute, etc.) of the university that supervised your doctoral studies.

_____

Department/Committee/Center/Institute/Program

A4. If you received full or partial tuition remission (waiver) for your doctoral studies, was it:

0 ☐ I did not receive any tuition remission
1 ☐ for less than 1/3 of tuition
2 ☐ between 1/3 and 2/3 of tuition
3 ☐ more than 2/3 of tuition but less than full
4 ☐ full tuition remission

A5. Which of the following were sources of financial support during graduate school?

Mark ALL that apply

a. ☐ Fellowship, scholarship
b. ☐ Grant, stipend
c. ☐ Teaching assistantship
d. ☐ Research assistantship
e. ☐ Other assistantship
f. ☐ Traineeship
g. ☐ Internship, clinical residency
h. ☐ Loans (from any source)
i. ☐ Personal savings
j. ☐ Personal earnings during graduate school (other than sources listed above)
k. ☐ Spouse's, partner's, or family earnings or savings
l. ☐ Employer reimbursement/assistance
m. ☐ Foreign (non-U.S.) support
n. ☐ Other - Specify

_____

A6. Which TWO sources listed in A5 provided the most support?

Enter letters of primary and secondary sources

1 ☐ Primary source of support
2 ☐ Secondary source of support
☐ *Mark (X) if no secondary source*

A7. 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	☐ $10,000 or less	☐ $10,000 or less
2	☐ $10,001 - $20,000	☐ $10,001 - $20,000
3	☐ $20,001 - $30,000	☐ $20,001 - $30,000
4	☐ $30,001 - $40,000	☐ $30,001 - $40,000
5	☐ $40,001 - $50,000	☐ $40,001 - $50,000
6	☐ $50,001 or more	☐ $50,001 or more

A8. The next few questions ask about the degrees you have received. Starting with this doctorate degree, please provide the following information for the most recent master's degree and your first bachelor's degree.

	This research doctorate degree	Most recent master's degree (e.g. MS, MA, MBA) or equivalent	First bachelor's degree (e.g. BA, BS, AB) or equivalent
a. Have you received a degree of this type?	Yes [X] No [ ]	Yes [ ] No [ ]	Yes [ ] No [ ]
b. Month/year that you started your degree	Month [ ][ ] Year [ ][ ][ ][ ]	Month [ ][ ] Year [ ][ ][ ][ ]	Month [ ][ ] Year [ ][ ][ ][ ]
c. Month/year of degree award	Month [ ][ ] Year [ ][ ][ ][ ]	Month [ ][ ] Year [ ][ ][ ][ ]	Month [ ][ ] Year [ ][ ][ ][ ]
d. Primary field of study			
e. Field number from list on p. 7	[ ][ ][ ]	[ ][ ][ ]	[ ][ ][ ]
f. Institution name			
g. Branch or city			
h. State or province			
i. Country	USA		

A9. Excluding those above, have you attained any additional postsecondary degrees? Yes [ ] No [ ]

A10. Was a master's degree a prerequisite for admission to your doctoral program? Yes [ ] No [ ]

A11. In what year did you first enter graduate school in any program or capacity, in any university? Year [ ][ ][ ][ ]

A12. How many years were you taking courses or preparing for exams for this doctoral degree (including a master's degree, if that was a part of your doctoral program)? Years [ ][ ]

Round to whole years

A13. After coursework and exams, how many years did you work on your dissertation (non-course related preparation or research, writing, and defense)? Years [ ][ ]

Round to whole years

If yes, please list the additional degree(s), granting institution(s), and years.

Degree Type _____
Degree Field _____
Year Granted _____
Institution _____
Branch or City _____
State or Country _____

Degree Type _____
Degree Field _____
Year Granted _____
Institution _____
Branch or City _____
State or Country _____

If necessary, please continue this list on the back cover (p.8).

A14. Did you earn college credit from a community or two-year college?

1 ☐ Yes
2 ☐ No

A15. Are you earning, or have you earned, a professional medical or dental degree (e.g. MD, DDS), in addition to the doctorate?

1 ☐ Yes
2 ☐ No

PART B - Postgraduation Plans

B1. In what country or state do you intend to live after graduation (within the next year)?

0 ☐ in U.S. → State

1 ☐ not in U.S. → Country

B2. Do you intend to take a "postdoc" position?
(A "postdoc" is a temporary position primarily for gaining additional education and training in research, usually awarded in academe, industry, or government.)

1 ☐ Yes
2 ☐ No

B3. What is the status of your postgraduate plans (in the next year)?
Mark (X) one

0 ☐ Returning to, or continuing in, predoctoral employment
1 ☐ Have signed contract or made definite commitment for other work or study
→ **GO TO B4**

2 ☐ Negotiating with one or more specific organizations
3 ☐ Seeking position but have no specific prospects
4 ☐ Do not plan to work or study
5 ☐ Other - Specify
→ **SKIP TO C1**

B4. What best describes your (within the next year) postgraduate plans?
Mark (X) one

FURTHER TRAINING OR STUDY

0 ☐ Postdoctoral fellowship
1 ☐ Postdoctoral research associateship
2 ☐ Traineeship
3 ☐ Intern, clinical residency
4 ☐ Other - Specify
→ **GO TO B5**

EMPLOYMENT

5 ☐ Employment (other than 0, 1, 2, 3, 4)
6 ☐ Military service
7 ☐ Other - Specify
→ **SKIP TO B6**

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

0 ☐ U.S. Government
1 ☐ Industry/Business
2 ☐ College or university
3 ☐ Private foundation
4 ☐ Nonprofit, other than private foundation or college
5 ☐ Other - Specify
6 ☐ Unknown

B6. For what type of employer will you be working or in training 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. university-affiliated research institute
d. ☐ U.S. community college or technical institute
e. ☐ U.S. preschool, elementary, middle, secondary school or school system
f. ☐ Foreign educational institution

GOVERNMENT (other than education institution)

g. ☐ Foreign government
h. ☐ U.S. federal government
i. ☐ U.S. state government
j. ☐ U.S. local government

PRIVATE SECTOR (other than education institution)

k. ☐ Not for profit organization
l. ☐ Industry or business (for profit)

OTHER

m. ☐ Self-employed
n. ☐ Other - Specify

B7. Please name the organization and geographic location where you will work or study.

Name

State (if U.S.)

OR

Country (if not U.S.)

B8. What will be your primary and secondary work activities?

Mark (X) one in each column

	a. Primary	b. Secondary
Research and development	1 ☐	1 ☐
Teaching	2 ☐	2 ☐
Management or administration	3 ☐	3 ☐
Professional services to individuals	4 ☐	4 ☐
Other - Specify	5 ☐	5 ☐

☐ *Mark (X) if no secondary work activities.*

PART C - Background Information

C1. Are you -

1 ☐ Male
2 ☐ Female

C2. What is your marital status?

Mark (X) one

1 ☐ Married
2 ☐ Living in a marriage-like relationship
3 ☐ Widowed
4 ☐ Separated
5 ☐ Divorced
6 ☐ Never 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 financial 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 (or guardians)?

Mark (X) one for each parent

	a. Mother	b. Father
Less than high/secondary school graduate	1 ☐	1 ☐
High/secondary school graduate	2 ☐	2 ☐
Some college	3 ☐	3 ☐
Bachelor's degree	4 ☐	4 ☐
Master's degree (e.g., MA, MS, MBA, MSW, etc.)	5 ☐	5 ☐
Professional degree (e.g., JD, LLB, D.Min, MD, DDS, etc.)	6 ☐	6 ☐
Doctoral degree	7 ☐	7 ☐
Not applicable	8 ☐	8 ☐

C5. What is your place of birth?

State (if U.S.)

OR

Country (if not U.S.)

C6. What is your date of birth?

Month ☐☐ Day ☐☐ Year 1 9 ☐☐

C7. What is your citizenship status?

Mark (X) one

U.S. CITIZEN

0 ☐ Since birth
1 ☐ Naturalized

→ **SKIP TO C9**

NON-U.S. CITIZEN

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

→ **GO TO C8**

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

(Specify country of present citizenship)

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?

1 ☐ Yes → **GO TO C11**

2 ☐ No → **SKIP TO C12**

C11. Which of the following categories describes your disability(ies)?

Mark (X) one or more

a. ☐ 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)?

1 ☐ Yes → **GO TO C13**

2 ☐ No → **SKIP TO C14**

C13. Which of the following best describes your Hispanic origin or descent?

Mark (X) one

1 ☐ Mexican or Chicano

2 ☐ 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. ☐ Asian

d. ☐ Black or African-American

e. ☐ 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 (if applicable), and telephone number where you can be reached.

E-mail address

Daytime telephone

C17. Please provide your address and the name and address of a person who is likely to know where you can be reached.

Current Address

Street Address

City State Country Zip or Postal Code

Contact Person

First Name Last Name

Street Address

City State Country Zip or Postal Code

Phone Number (including area or country code)

E-mail Address

C18. Please sign and date.

Signature Date

The results of this survey will be published in a Summary Report; the Summary Reports on earlier surveys are available at http://www.norc.uchicago.edu/issues/docdata.htm

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

Thank you for completing the questionnaire. Please return this questionnaire to your GRADUATE SCHOOL for forwarding to Survey of Earned Doctorates, NORC at the University of Chicago, 1 N. State Street, Floor 16, Chicago, IL 60602. If you have questions or concerns about the survey, you may contact us by e-mail at 4800-sed@norc.uchicago.edu or phone at 1-800-248-8649.

FIELD OF STUDY

INSTRUCTIONS: The following field listing is to be used in responding to items A2 and A8. Please choose the code that best describes the name of your field.

AGRICULTURAL SCIENCES/NATURAL RESOURCES
000 Agri. Economics
005 Agricultural Animal Breeding
010 Animal Nutrition
014 Poultry Science
019 Animal Sci., Other
020 Agronomy & Crop Science
025 Agric. & Hort. Plant Breeding
030 Plant Pathology/ Phytopathology
039 Plant Sciences, Other
043 Food Science
044 Food Science and Technology, Other
046 Soil Chemistry/ Microbiology
049 Soil Sciences, Other
050 Horticulture Science
055 Fishing and Fisheries Sciences/Mgt.
066 Forest Sciences and Biology
070 Forest/Resources Mgt.
072 Wood Science & Pulp/Paper Tech.
074 Natural Resources/ Conservation
079 Forestry & Related Science, Other
080 Wildlife/Range Management
081 Environmental Science
098 Agriculture, General
099 Agricultural Sci., Other

BIOLOGICAL/ BIOMEDICAL SCIENCES
100 Biochemistry (see 539)
103 Biomedical Sciences
105 Biophysics (see 565)
107 Biotechnology
110 Bacteriology
115 Plant Genetics
120 Plant Pathology/ Phytopathology
125 Plant Physiology
129 Botany/Plant Biology
130 Anatomy
133 Biometrics & Biostatistics
136 Cell/Cellular Biology and Histology
139 Ecology
142 Developmental Biology/Embryology
145 Endocrinology
148 Entomology
151 Immunology
154 Molecular Biology
157 Microbiology
160 Neuroscience
163 Nutrition Sciences
166 Parasitology
169 Toxicology
170 Genetics, Human & Animal
175 Pathology, Human & Animal
180 Pharmacology, Human & Animal
185 Physiology, Human & Animal
189 Zoology, Other
198 Biology/Biological Sciences, General
199 Biology/Biomed Sci, Other

HEALTH SCIENCES
200 Speech-Lang. Pathology & Audiology
210 Environmental Health
211 Environmental Toxicology
212 Health Systems/ Service Administration
215 Public Health
220 Epidemiology
222 Kinesiology/Exercise Sci
230 Nursing Science
240 Pharmacy
245 Rehabilitation/ Therapeutic Services
250 Veterinary Medicine
298 Health Sciences, General
299 Health Sciences, Other

ENGINEERING
300 Aerospace, Aeronautical & Astronautical
303 Agricultural
306 Bioengineering & Biomedical
309 Ceramic Sciences
312 Chemical
315 Civil
318 Communications
321 Computer
324 Electrical, Electronics and Communications
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 & INFORMATION SCIENCES
400 Computer Science
410 Information Science & Systems
419 Computer & Information Science, Other

MATHEMATICS
420 Applied Mathematics
425 Algebra
430 Analysis & Functional Analysis
435 Geometry/Geom. Anal.
440 Logic
445 Number Theory
450 Statistics (See also 690)
455 Topology/Found.
460 Computing Theory & Practice
465 Operations Research (See also 363, 930)
498 Math/Stat, General
499 Math/Stat, Other

PHYSICAL SCIENCES
Astronomy
500 Astronomy
505 Astrophysics

Atmospheric Sci. & Meteorology
510 Atmospheric Chemistry and Climatology
512 Atmospheric Physics and Dynamics
514 Meteorology
518 Atmospheric Science/ Meteorology, General
519 Atmospheric Science/ Meteorology, Other

Chemistry
520 Analytical
522 Inorganic
526 Organic
528 Medicinal/ Pharmaceutical
530 Physical
532 Polymer
534 Theoretical
538 Chemistry, General
539 Chemistry, Other (See also 100)

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

Physics
560 Acoustics
561 Atomic/Molec/Chem
564 Particle (Elem)
565 Biophysics (see 105)
568 Nuclear Physics
569 Optics/Phototonics
570 Plasma/Fusion
572 Polymer
574 Condensed Matter/Low Temp
576 Applied Physics
578 Physics, General
579 Physics, Other

Ocean/Marine Sciences
585 Hydrology & Water Resources
590 Oceanography, Chemical and Physical
595 Marine Sciences
599 Ocean/Marine, Other

PSYCHOLOGY
600 Clinical
603 Cognitive & Psycholinguistics
606 Comparative
609 Counseling
612 Developmental & Child
613 Human Devlpmt. & Family Studies
615 Experimental
618 Educational (See also 822)
620 Family Psychology
621 Industrial & Organizational (See also 935)
624 Personality
627 Physiological/ Psychobiology
633 Psychometrics and Quantitative Psychology
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 Science & 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
706 History, African
707 History, Latin American
710 History/Philosophy of Science & Technolog
718 History, General
719 History, Other

Letters
720 Classics
723 Comparative Literature
724 Folklore
729 Linguistics
732 Literature, American
733 Literature, English
734 English Language
736 Speech & Rhetorical Studies
738 Letters, General
739 Letters, Other

Foreign Languages & Literature
740 French
743 German
746 Italian
749 Spanish
752 Russian
755 Slavic (other than Russian)
758 Chinese
762 Japanese
768 Arabic
769 Other Languages & Literature

Other Humanities
770 American/U.S. Studies
773 Archeology
776 Art History/Criticism/ Conservation
780 Music
785 Philosophy
790 Religion/Religious Studies (See also 984)
795 Drama/Theater Arts
798 Humanities, General
799 Humanities, Other

EDUCATION
800 Curriculum & Instruction
805 Educ. Administration & Supervision
807 Educ. Leadership
810 Educ./Instructional Media Design
815 Educ. Statistics/ Research Methods
820 Educ. Assessment/ Testing/Measure
822 Educ. Psychology (See also 618)
825 School Psychology (See also 636)
830 Social/Philosophical Foundations of Educ.
835 Special Educ.
840 Counseling Educ./ Counseling & Guidanc
845 Higher Educ./ Evaluation & 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
868 Health Education
870 Family & Consumer Sci./Home Economics
874 Math. Education
876 Music Education
878 Nursing Education
880 Physical Education & Coaching
882 Reading Education
884 Science Education
885 Social Science Education
887 Trade & Ind. Educ.
889 Teach Educ. & Prof Dev.

Other Education
898 Education, General
899 Education, Other

PROFESSIONAL FIELDS
Business Mgmt./Administrative Services
900 Accounting
905 Banking/Financial Support Services
910 Business Admin. & Management
915 Business/Managerial Economics
916 International Business/Trade/ Commerce
917 Mgmt. Information Systems/Business Data
920 Marketing Management & Research
921 Human Resources Development
930 Operations Research (See also 363, 465)
935 Organiz. Behavior (See also 621)
938 Business Mgmt./ Administration Serv., General
939 Business Mgmt./ Administration Serv., Other

Communications
940 Communications Research
947 Mass Communication/ Media Studies
957 Communication Theory
958 Communications, General
959 Communications, Other

Other Professional Fields
960 Architec. Environ. Design
964 Family/Consumer Sci./Human Sci., General
968 Law
972 Library Science
974 Parks/Sports/Rec./ Leisure/Fitness
976 Public Administration
980 Social Work
984 Theo./Religious Education (See also 790)
989 Prof. Fields, Other

Other Fields
999 Other Fields

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 T. Carlson
National Science Foundation

Additions to Questions

A2 (continued)

Name of Field

Number of Field

Name of Field

Number of Field

A9 (continued)

Degree Type		Degree Type	
Degree Field		Degree Field	
Year Granted		Year Granted	
Institution		Institution	
Branch or City		Branch or City	
State or Country		State or Country	

Comments about the Survey

Please return this questionnaire to your GRADUATE SCHOOL for forwarding to Survey of Earned Doctorates, NORC at the University of Chicago, 1 N. State Street, Floor 16, Chicago, IL 60602. If you have questions or concerns about the survey, you may contact us by e-mail at 4800-sed@norc.uchicago.edu or phone at 1-800-248-8649.

OFFICE USE ONLY			
Case ID	Instit. Code:	Grad Date:	Main Disp.:

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Receipt		Editing		CADE	
Initials	Date	Initials	Date	Initials	Date
Ver. Adjust		**Retrieval**		**Updates**	
Initials	Date	Initials	Date	Initials	Date

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's Field of Study list. Appendix tables A-4, A-5, and A-6 show data by seven broad fields only. Major field of doctoral study is used in tables 5, 6, 9, and 33. The following aggregation was used to determine major field of study (major fields of study appear indented beneath each broad field of study, and the corresponding field codes which are found on the survey's Field of Study list are found to the right of the field):

Field of study	SED field codes
Life sciences	000–299
Agricultural sciences/natural resources	000–099
Biological/biomedical sciences	100–199
Health sciences	200–299
Social sciences	600–699
Anthropology	650
Economics	666, 668
Political science/international relations	674–679
Psychology	600–649
Sociology	686
Other social sciences	All fields 600–699 not listed above
Physical sciences	400–599
Physics & astronomy	500–505, 560–579
Chemistry	520–539
Earth, atmospheric & marine sciences	510–519, 540–559, 580–599
Mathematics	420–499
Computer & information sciences	400–419
Engineering	300–399
Aerospace/aeronautical engineering	300
Chemical & related engineering	312, 366, 369
Civil & related engineering	315, 336
Electrical & related engineering	318, 321, 324
Industrial engineering	339
Materials/metallurgical engineering	309, 342, 348
Mechanical engineering	327, 345
Other engineering	All fields 300–399 not listed above
Education	800–899
Education administration	805, 807
Education research	800 or 810–845
Teacher education	850–858
Teaching fields	860–889
Other education	All fields 800–899 not listed above
Humanities	700–799
American literature	732
English language & literature	725, 726, 733, 734
Foreign language & literature	740–769
History	700–719

Field of study	SED field codes
Other humanities	All fields 700–799 not listed above
Other fields	900–999 or missing field
Business & management	900–939
Communications	940–959
Fields not elsewhere classified	960–989
Fields not listed above	999

Appendix Table A-3 includes major and broad fields of study with a few exceptions noted below:

- Biochemistry (103) is listed separately and other biological/biomedical sciences is aggregated differently (i.e., it contains field codes 103-199) than shown above within life sciences
- Anthropology (650) and sociology (686) are combined within social sciences and psychology
- English language (734) and English literature (733) are combined within humanities
- Communications (field codes 940-959) are included in fields not elsewhere classified within other fields

Appendix Table A-8 also includes major and broad fields of study with the following exceptions:

- Other social sciences includes all social science field codes excluding psychology (field codes 600-649)
- Other humanities includes foreign languages and literature (field codes 740-769)

Note: Doctorate recipients indicate their fields of specialty. The choices may differ from departmental names.

Types of Research Doctoral Degrees

The Survey of Earned Doctorates collects information on research doctorate recipients only. Research doctoral degrees are distinguished from professional doctoral degrees in that research doctoral degrees are oriented toward preparing students to make original contributions to knowledge in a field and typically entail writing a dissertation.

The Survey of Earned Doctorates recognizes 18 distinct types of research doctoral degrees, listed below:

Ph.D. ..... Doctor of Philosophy

Other degrees, if research doctorate, as relevant:

D.A. ..... Doctor of Arts
D.B.A. ..... Doctor of Business Administration
D.Eng./D.E.Sc./D.E.S. ..... Doctor of Engineering/Engineering Science
D.H.L. ..... Doctor of Hebrew Letters
D.I.T. ..... Doctor of Industrial Technology
D.M. ..... Doctor of Music
D.M.A. ..... Doctor of Musical Arts
D.M.E. ..... Doctor of Physical Education
D.M.L. ..... Doctor of Modern Languages
D.N.Sc. ..... Doctor of Nursing Science
D.P.H. ..... Doctor of Public Health
D.Sc./Sc.D. ..... Doctor of Science
Ed.D. ..... Doctor of Education
J.C.D. ..... Doctor of Canon Law
J.S.D./S.J.D. ..... Doctor of Juridical Science
S.T.D. ..... Doctor of Sacred Theology
Th.D. ..... Doctor of Theology

The vast majority of research doctoral degrees are doctors of philosophy, Ph.D.s; of the 45,596 new research doctorates granted in 2006, 91 percent were Ph.D.s. The next most frequently occurring type of research doctorate was the doctor of education, Ed.D., which accounted for six percent. Doctors of Musical Arts accounted for one percent of the 2006 doctorate cohort. No other type of doctoral degree accounted for as much as one half of one percent of the new research doctorates in 2006. (See table E-1.)

APPENDIX TABLE E-1. Research degrees included in the Survey of Earned Doctorates, 2006

Research degree	Degree title	Count	Percent
All Research Doctorates		45,596	100.0
Ph.D.	Doctor of Philosophy	41,508	91.0
Ed.D.	Doctor of Education	2,807	6.2
D.M.A.	Doctor of Musical Arts	632	1.4
D.Sc./Sc.D.	Doctor of Science	168	0.4
D.B.A.	Doctor of Business Administration	93	0.2
D.P.H.	Doctor of Public Health	90	0.2
D.A.	Doctor of Arts	59	0.1
D.M.	Doctor of Music	54	0.1
J.S.D./S.J.D.	Doctor of Juridical Science	51	0.1
D.N.Sc.	Doctor of Nursing Science	48	0.1
D.Eng./D.E.Sc./D.E.S.	Doctor of Engineering/Doctor of Engineering Science	26	0.1
Th.D.	Doctor of Theology	16	< 0.1
D.Des.	Doctor of Design	12	< 0.1
	All other research doctorates	32	0.1

NOTE: Only research doctorate types with ten or more doctorate recipients in 2006 are included in this table.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2006 Survey of Earned Doctorates.

Related Publications from the NSF

InfoBriefs

- S&E Doctorates Hit All-time High in 2005
- Time to Degree of U.S. Research Doctorate Recipients
- 2004 Doctorate Awards Increase in S&E Fields for the Second Year in a Row
- Employment Sector, Salaries, Publishing, and Patenting Activities of S&E Doctorate Holders
- Emigration of U.S.-Born S&E Doctorate Recipients
- Plans for Postdoctoral Research Appointments Among Recent U.S. Doctorate Recipients
- How Large is the U.S. S&E Workforce?
- Declines in U.S. Doctorate Awards in Physics and Engineering
- Interstate Migration Patterns of Recent Science and Engineering Doctorate Recipients
- Employment Preferences and Outcomes of Recent Science and Engineering Doctorate Holders in the Labor Market
- Academic Employment of Recent Science and Engineering Doctorate Holders
- Psychology Doctorate Recipients: How Much Financial Debt at Graduation?
- Does the Educational Debt Burden of Science and Engineering Doctorates Differ by Race/Ethnicity and Sex?
- Doctorate Awards Declining in Some Science and Engineering Fields
- Healthy Economy Yields Even Lower Unemployment Rate for Doctoral Scientists and Engineers
- How Much Does the U.S. Rely on Immigrant Engineers?
- Despite Increases, Women and Minorities Still Underrepresented in Undergraduate Science and Engineering Education

Reports

- U.S. Doctorates in the 20th Century
- Science and Engineering Indicators: 2006
- Women, Minorities, and Persons with Disabilities in Science and Engineering
- Gender Differences in the Careers of Academic Scientists and Engineers
- Science and Engineering Doctorate Awards: 2005
- Characteristics of Doctoral Scientists and Engineers in the U.S.: 2003
- Doctoral Scientists and Engineers in the U.S.: 2001 Profile Tables
- Science and Engineering Degrees, by Race/Ethnicity of Recipients: 1995-2004
- Science and Engineering Degrees: 1966-2004
- Older Doctoral Scientists and Engineers: Selected Labor Force Characteristics
- Modes of Financial Support in the Graduate Education of S&E Doctorate Recipients

For further information about the reports above
or the Survey of Earned Doctorates, see the NSF website:

http://www.nsf.gov/statistics/

or contact

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