Doctorate Recipients from United States Universities

Summary Report 2005

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 National Aeronautics and Space Administration

Doctorate Recipients from United States Universities

Summary Report 2005

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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, sex, and citizenship group of Ph.D.s by fine field of doctorate are available for a fee. Customized tables – such as Institution Datasets and Association Profiles compiled for professional societies – 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.uchicago.edu/issues/docdata.htm. The SED 2005 tables are also available as Excel 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.

ACKNOWLEDGMENTS

Academic officers at the nation's doctorate-granting universities distribute, collect, and forward SED questionnaires to NORC. The project gratefully acknowledges the support and assistance of graduate deans and their staff, registrars, dissertation 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 43,354 new research doctorate recipients who took the time to complete and return their copy of the 2005 survey.

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DOCTORATE RECIPIENTS FROM UNITED STATES UNIVERSITIES: SUMMARY REPORT 2005

Introduction

Doctorate Recipients from United States Universities: Summary Report 2005 is the thirty-ninth 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 43,354 research doctorate recipients who earned their degrees between July 1, 2004, and June 30, 2005. Conducted since 1958, 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. The National Opinion Research Center at the University of Chicago (NORC) is the current data collection contractor and has been since 1997. All survey responses become part of the Doctorate Records File (DRF), a cumulative database on research doctorate recipients from 1920 to 2005. For the 2005 survey, 92 percent of the 43,354 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 1,602,923 records on individuals completing doctorates over the last 86 years at U.S. institutions.

Organization

Summary Report 2005 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,

[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.

race/ethnicity, and citizenship. Trends in the average amount of time taken to complete the doctoral degree are reported as well as cross-sectional data for the 2005 cohort on the numbers of doctorate recipients reporting disabilities. Cross-sectional data for the 2005 cohort are also presented on the sources of financial support during graduate school, and the postgraduation status and plans of doctorate recipients. Finally, continuing on work that was done in 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 might be attributable to the events of September 11, 2001 and their aftermath.

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 charts 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 2005 research doctorate recipients are shown in Appendix A, and trend tabulations for the previous ten-year period (1995 to 2005) 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 2005 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). Two noteworthy reports on the doctoral population were produced in 2005. A comprehensive statistical report funded by the SED federal sponsors, *U.S. Doctorates in the 20th Century*, is available on the NSF website above. Another report released in 2005 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.

Copies of the annual *Summary Report* from recent years are available on the NORC Website (http://www.norc.uchicago.edu/issues/docdata.htm). At this same URL, the 2005 tables will be available as Excel files. 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).

The methodology of the SED 2005 survey is described in detail in the annual *Survey of Earned Doctorates Methodology Report,* which is available upon request from:

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

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 working closely with the universities over the course of the SED eligibility year. Every effort is made to locate all new graduates who did not return a questionnaire to their graduate school and to ask them to complete the form. The graduate schools provide basic information on individual nonrespondents at the end of the data collection cycle. A comprehensive and accurate picture of the universe of new doctorates each year results from this process, and the SED data provide a solid basis for charting trends in the numbers and characteristics of this population.

Overall Trends and Rates of Change

During the twelve-month period ending June 30, 2005, U.S. universities awarded 43,354 research doctorate degrees, compared with 42,117 in 2004 and 40,740 in 2003. (See table 1.) The 2005 total was a 2.9 percent increase from 2004, and this is the highest number of doctorates awarded in the history of the SED.

The long-term trend in the number of new research doctorates has been one of considerable growth. Since the SED began in 1958, the number of doctorates granted by U.S. universities has, on average, increased by approximately 3.5 percent per year. The 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

[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., 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. This is the third year that individuals who had also earned research doctorates in previous years are included in the SED. In 2005, a total of 107 individuals earned a second research doctorate, similar to the 110 in 2004.

10,000 for the first time – and 1971, the average annual growth rate was nearly 12 percent, such 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 42,647 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 2003-2005 and the three years of growth has led to an all-time high for number of doctorates earned in 2005. (See figures 1 and 2.)

Figure 1. Doctorates awarded by U.S. colleges and universities, 1957-2005

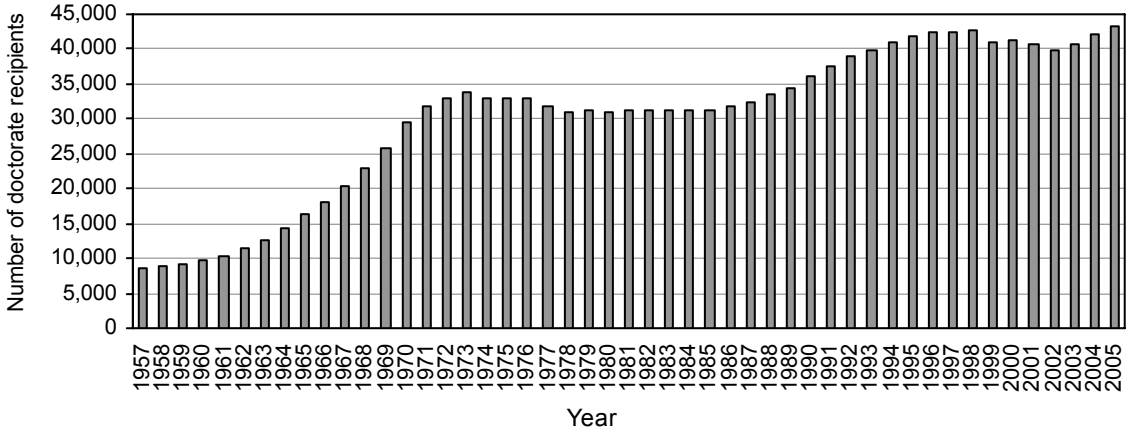
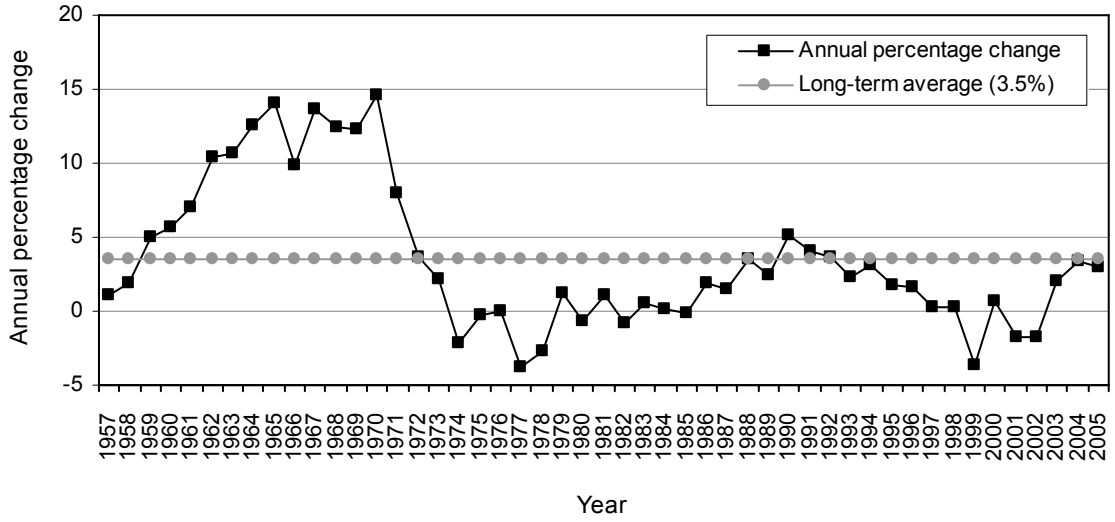


Figure 2. Annual rate of change in doctorates awarded by U.S. colleges and universities, 1957-2005



See Table 1
Source: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates

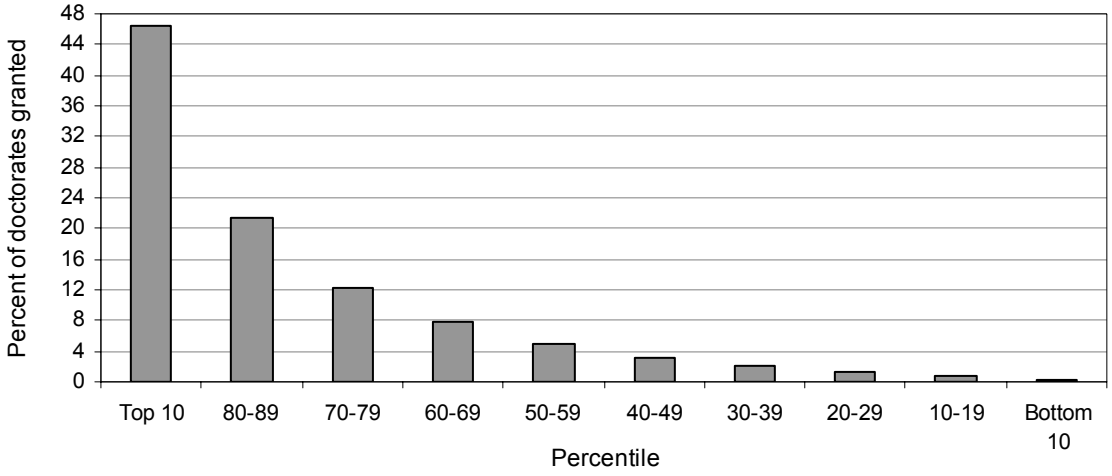
Doctorate-granting Institutions, Doctorate Recipients per Institution, and Geographical Distribution

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 2005 academic year.

During the 2005 academic year, there were 416 universities in the United States and Puerto Rico that awarded at least one research doctorate. (See table 2.) In 2005, the mean number of doctorates awarded per institution was 104, while the median was 42. (See table 2 for the mean and median numbers of doctorates awarded per institution from 1965 to 2005.) 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 (46 percent) of all doctorates in 2005. Institutions in the next decile, 80th to 89th percentile, accounted for more than one fifth (21 percent) of all doctorates; the next decile accounted for 12 percent of all doctorates; institutions below the 70th percentile accounted for the final 20 percent of doctorates in 2005 (See 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, 2005



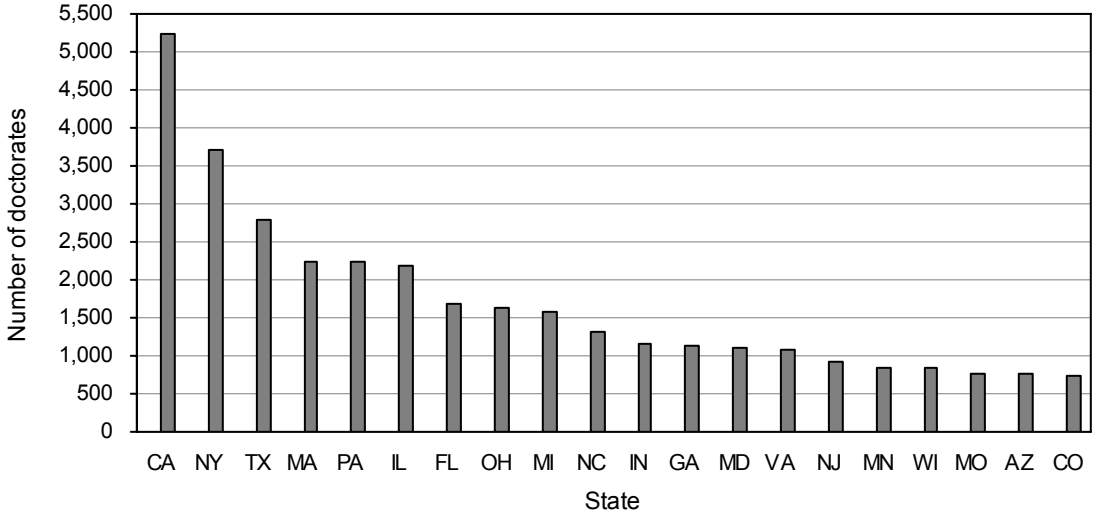
See Appendix Table A8.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates

The trend data in table 2 show that the median number of degrees awarded per institution grew rapidly during the 1960s, from 33 in 1965 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 2005 academic year, the University of California-Berkeley granted the largest number of doctorates, 802, or 1.8 percent of all doctorates awarded in 2005, followed by the University of Texas-Austin (716), the University of Michigan-Ann Arbor (711), the University of Wisconsin-Madison (664), and the University of California-Los Angeles (651). In 2005 (as was also the case in 2004), 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 5,225 doctorates, or 12 percent of all doctorates in 2005. New York institutions granted the next highest number (3,705), followed by institutions in Texas (2,791), Massachusetts (2,236), Pennsylvania (2,232), Illinois (2,172), Florida (1,677), Ohio (1,627), and Michigan (1,574). These nine states accounted for 54 percent of all doctorates awarded in 2005. (See figure 4 and table 4.)

Figure 4. Top 20 doctorate-granting states, 2005



See Table 4.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates

Doctorates by Field of Study

There were 279 fields of specialization into which the SED classified research doctorate degrees in 2005 (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. The SED has been able to collect information on the specialization fields of virtually all the new doctorates each year; coverage in 2005 was attained for all of the 43,354 doctorate recipients.

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

[5] Physical sciences also include mathematics and computer sciences in this report.
[6] Life sciences encompass biological, agricultural, and health sciences in this report.
[7] Social sciences include psychology in this report.

The institutions granting the largest numbers of doctorates in each of the seven broad fields in 2005 are listed in table 3. The Massachusetts Institute of Technology awarded the most doctorates in physical sciences (190), while Georgia Institute of Technology granted the most engineering doctorates (249). The Johns Hopkins University led all universities in life sciences (199) and the University of California – Berkeley granted the most doctorates in the social sciences (108). In the humanities, the University of Texas led all universities in doctorates awarded (138). The University of Southern California had the highest total in education (178), while Nova Southeastern University granted the most doctorates in the diverse "other fields" category (59).

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 2005, the concentration was higher in six of the seven broad fields: 19 percent in physical sciences, 28 percent in engineering, 18 percent in life sciences, 22 percent in humanities, 17 percent in education, and 18 percent in other fields. The concentration was slightly lower than the overall average in social sciences (14 percent). (Derived from table 3.)

The overall increase of 2.9 percent in doctorates awarded between the 2004 and 2005 academic years was a result of increases in four of the seven broad fields. Engineering and physical sciences showed the largest increases (10.9 percent and 10.8 percent respectively). Life sciences and social sciences showed smaller increases (5.6 percent, and 0.7 percent, respectively). The numbers in education, other fields, and humanities dropped since 2004 (6.1 percent, 2.5 percent, and 2.1 percent decreases respectively)[8]. (See appendix table B-1.)

Since 1990, life sciences has been the largest broad field, with 9,306 doctorates awarded in 2005. Over the last five years, the number of doctorates awarded in engineering, other fields, and physical sciences showed the largest increases: 20.3 percent, 12.1 percent, and 12.0 percent higher respectively in 2005 than in 2000. (See table 5.) Life sciences also awarded more doctorates (7.9 percent), while the total number completing doctorates in humanities, social

[8] The decrease in new doctorate recipients in the broad field of education is attributable to some relatively large programs changing from granting research doctorates to granting professional doctorates and thus becoming ineligible for inclusion in the SED. These changes were found during the routine eligibility review (See Appendix C).

sciences and education was slightly lower, with 5.1 percent, 3.8 percent, and 3.2 percent fewer degrees awarded respectively in 2005 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, 1975-2005

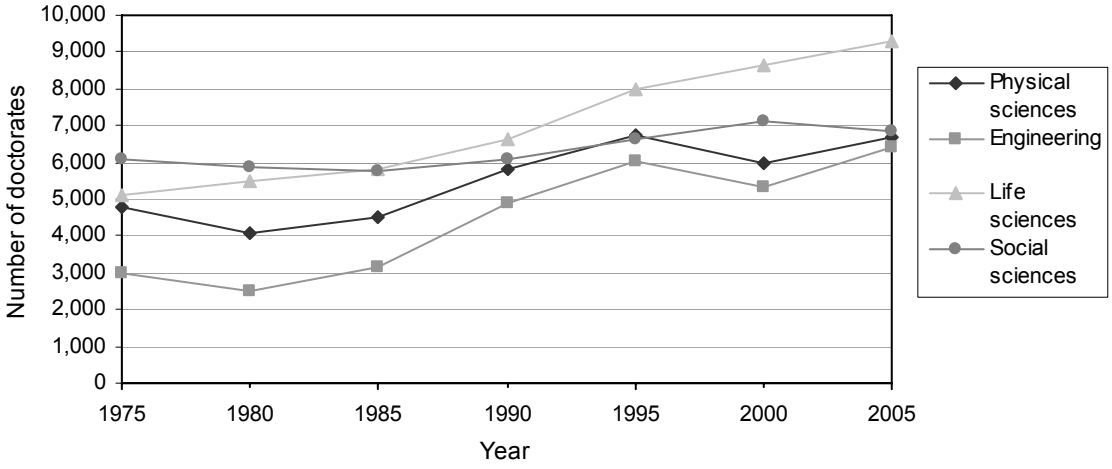
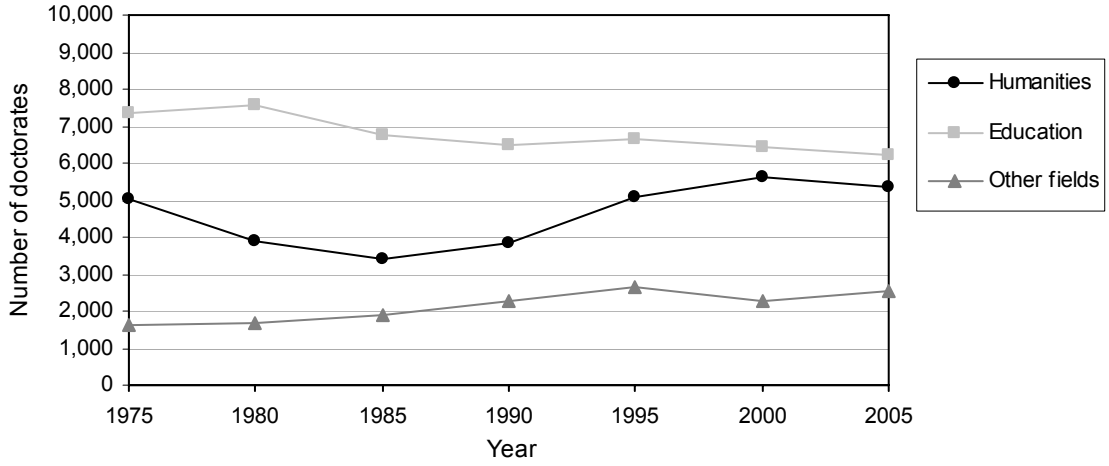


Figure 6. Humanities, education, and other fields doctorates awarded, for selected years, 1975-2005

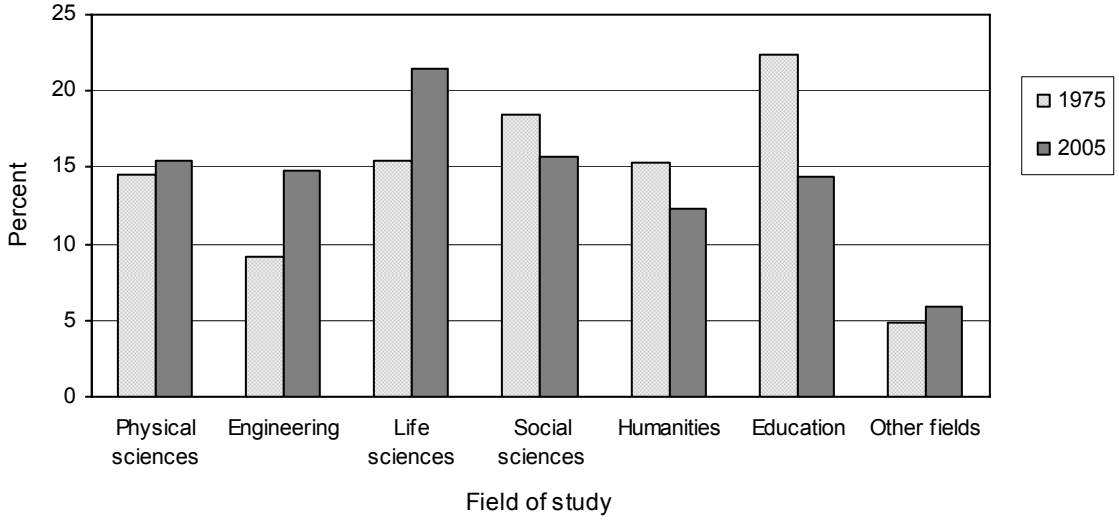


See Table 5.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates

Physical sciences, life sciences, social sciences, and engineering – the four broad fields that together constitute "science and engineering" (S&E) – represented 68 percent of all doctorates awarded in 2005. S&E doctorates accounted for close to the same percentage of all doctorates (66 percent) in 1995, but only 62 percent of the total in 1985 and 58 percent in 1975. (See table 5.)

The 30-year comparisons for all seven broad fields are shown in figure 7. The relative shares of graduates in engineering and life sciences were greater in 2005 than in 1975, while the relative shares in humanities, education, and social sciences were smaller in 2005. The relative shares of graduates in physical sciences and other fields in 1975 and 2005 were about the same. (See figure 7.)

Figure 7. Percentage distribution of doctorate recipients, by broad field of study, 1975 and 2005



See Table 5.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates

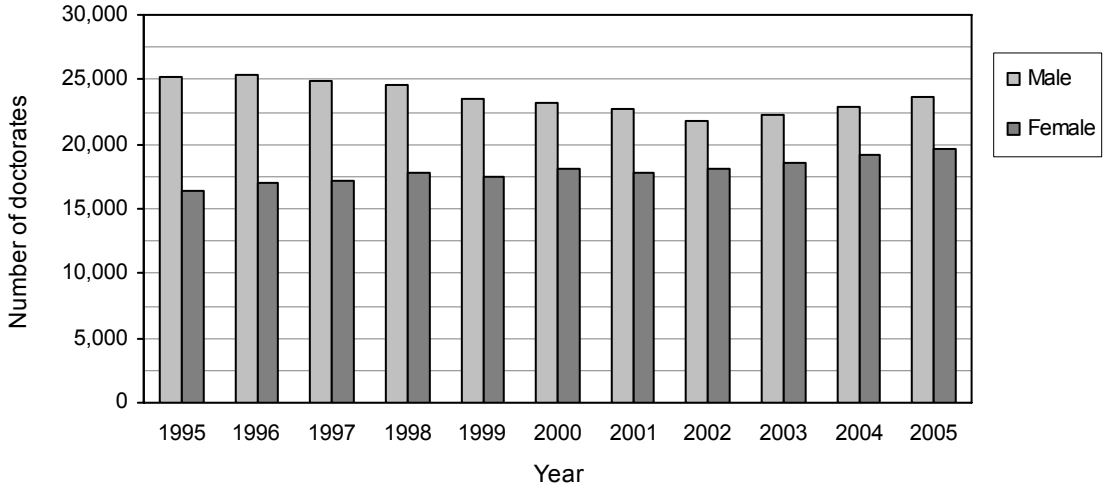
The numbers of doctorate recipients in the largest subfields within the seven broad fields are also shown in table 5. The main field of growth since 1975 within physical sciences was computer sciences, which was not even a defined field of doctoral study in 1975, going from 218 doctorate recipients in 1980 to 1,136 in 2005. In the broad field of life sciences, the numbers of new doctorate recipients in biological sciences and health sciences increased rapidly from 1975 to 2005. In the broad field of social sciences, the subfields of psychology, anthropology, and economics showed growth over the 30 year period, while other subfields showed a decline. In the non-S&E fields, the largest growth in humanities subfields has been in the "other humanities" grouping and thus outside the traditional areas of history, letters, and foreign languages and literature. The detailed field totals in appendix table B-1 indicate that, over the past decade, humanities fields with increasing numbers of doctorate recipients include music,

religion/religious studies, and art history/criticism/conservation. (See table 5 and appendix table B-1.)

Doctorates by Sex

The 2.9 percent increase in total doctorates awarded between 2004 and 2005 reflected increases in the numbers earned by both males and females. The number of doctorates awarded to men rose by 772 and increased for women by 407 in 2005 compared to 2004. The net proportional effect is that for 2005, females received 45.2 percent of all doctorates, which is virtually unchanged from 2004[9] (See figure 8). This number signifies the tenth 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 (2000) females comprised 44 percent of all doctorate recipients; 10 years ago (1995) they comprised 39 percent, and 30 years ago (1975) 22 percent. (See figure 8 and table 7.)

Figure 8. Doctorate recipients, by sex, 1995-2005



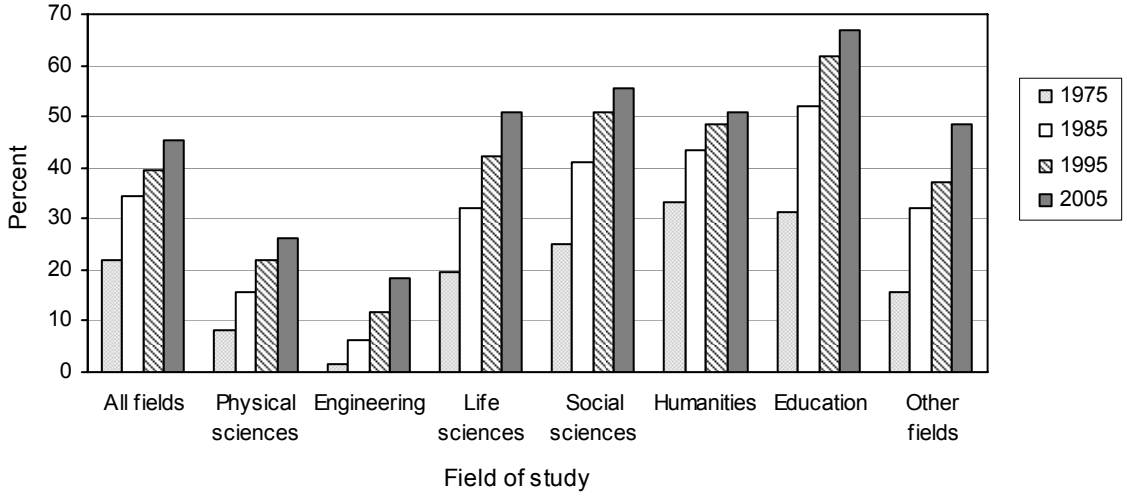
See Appendix Tables B-2b and B-2c.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates

The proportion of doctorates earned by women has also grown steadily within all of the broad fields of study. Women constituted 67 percent of all education doctorate recipients for 2005, the majority in social sciences (56 percent), humanities (51 percent), and for the first time ever, in life sciences (51 percent). In contrast, the representation of females among doctorate

[9] For 2005, sex category could not be determined for 59 doctorate recipients; these 59 are not part of this and other gender percentage calculations.

recipients in physical sciences and engineering for 2005 was 26 percent and 18 percent, respectively (figure 9). However, even these percentages represent significant increases over the last 30 years. In 1975, when only 22 percent of all doctorate recipients were women, just 8 percent and 2 percent of the doctorates in physical sciences and engineering, respectively, were awarded to women. Similar long-term trends are discernible in other broad fields as well: in life sciences, from 20 percent in 1975 to 51 percent in 2005; from 25 percent to 56 percent in social sciences over that same period; and from 33 percent in humanities in 1975 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, 1975-2005



See Table 7.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates

In 2005, females constituted 39 percent of S&E doctorate recipients and 57 percent of those in non-S&E fields in U.S. universities. With regard to finer field distinctions shown in table 6, the representation of women grew the most from 1995 to 2005 in aerospace engineering (137 percent); civil and architectural engineering (99 percent); mechanical engineering (95 percent); and earth, atmospheric, and marine sciences (67 percent). (See table 6.)

Doctorate Recipients by Race/Ethnicity

A total of 5,071 U.S. citizens who were members of racial/ethnic minority groups[10] were awarded doctorates, representing 20 percent of the U.S. citizens earning research doctorates in 2005. (See table 8.) This number is nearly equal to 2004, when 5,082 minority group members earned their doctorate; and the 2005 minority percentage matches the highest percentage recorded in the SED, reached in 2004. (See appendix table B-2a.) Blacks earned the most doctorates (1,688) of the five main U.S. minority populations in 2005, followed by Asians (1,493), Hispanics (1,294), American Indians/Alaska Natives[11] (139), and Hawaiians and other Pacific Islanders (67). (See table 8.) A total of 390 non-Hispanic U.S. citizens reported more than one racial background in the 2005 survey, and are counted here as racial/ethnic minorities, but they and the 67 Hawaiian and other 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.[12]

In 2005, the number of minority doctorate recipients was 14 percent higher than the total in 2000 and 43 percent higher than in 1995. Conversely, there were 9 percent fewer non-Hispanic white doctorate recipients in 2005 compared to 2000, and 13 percent fewer than in 1995. As the numbers in the first panel of table 8 indicate, doctorates awarded to U.S. minority groups generally increased much more in the 1990s than in the 1980s. The twenty-year percentage increases were greater for Asians (189 percent) and Hispanics (130 percent), than for blacks (85 percent) and American Indians (45 percent). (See figures 10 and 11 and table 8.)

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

[11] American Indians/Alaska Natives are referred to as American Indians hereafter in the text of this report.

[12] 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 and other Pacific Islanders, and adding a Cuban response option to the Hispanic ethnicity question. A copy of the 2005 questionnaire is included in appendix D.

Figure 10. Doctorates awarded to racial/ethnic minority U.S. citizens, by race/ethnicity, for selected years, 1985-2005

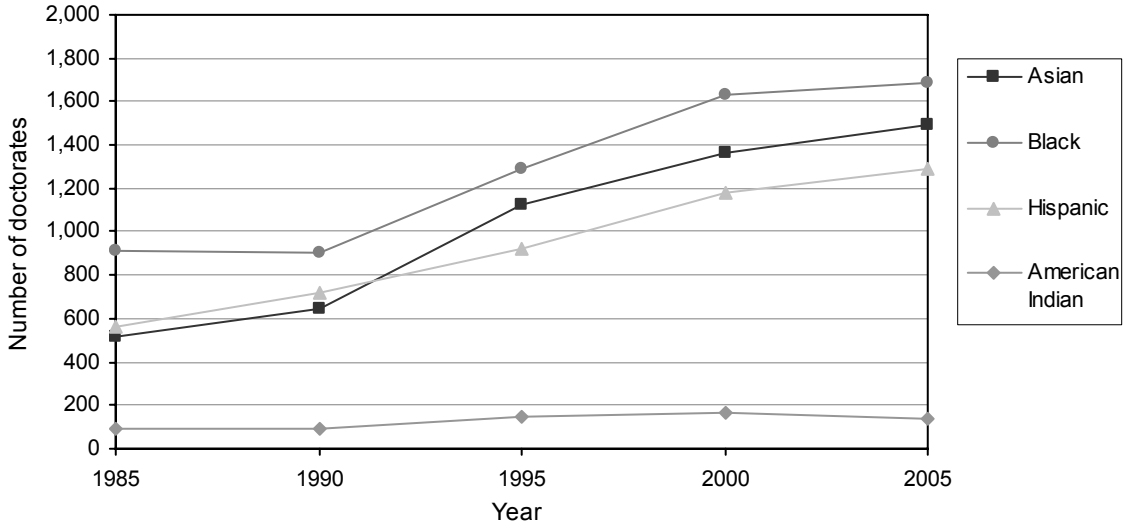
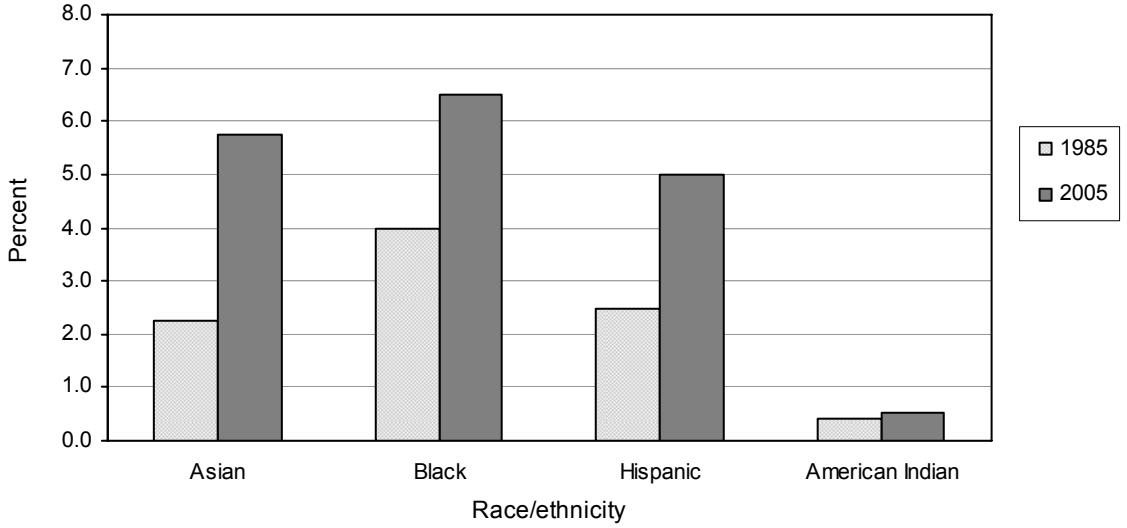


Figure 11. Percentage of doctorates earned by racial/ethnic minority U.S. citizens, 1985 and 2005

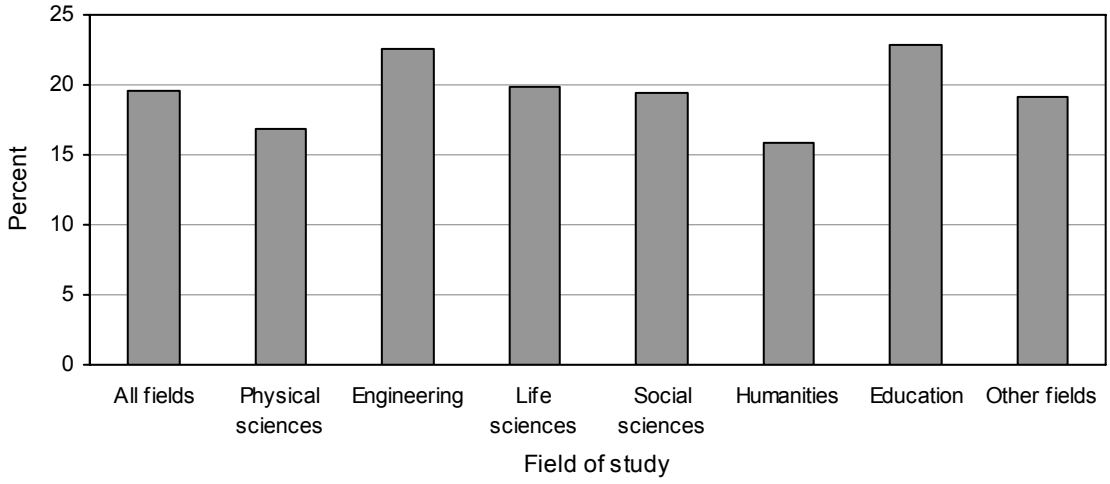


See Table 8.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates

U.S. minority group members had their largest presence in the broad fields of education and engineering (23 percent of U.S. citizens earning doctorates), life sciences (20 percent), and other fields (19 percent), in 2005. The lowest percentage representations were in physical sciences (17 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 55 percent, 48 percent, and 44 percent, respectively, of all minority group members earning doctorates in those broad fields during the 2005 academic year. Blacks were the largest minority population in education, other fields, and social sciences; representing 57 percent, 43 percent, and 32 percent, respectively, of all minority group members earning doctorates in those broad fields during the 2005 academic year. Hispanics were the largest minority population in humanities, representing 32 percent of all minority group members in 2005. This pattern of relative representation is observed for each year shown in table 8, back to 1985. (See table 9 for the numbers of minority doctorate recipients in each of the 25 subfields in 2005.)

Figure 12. Percentage of doctorates earned by racial/ethnic minority U.S. citizens, by broad field of study, 2005



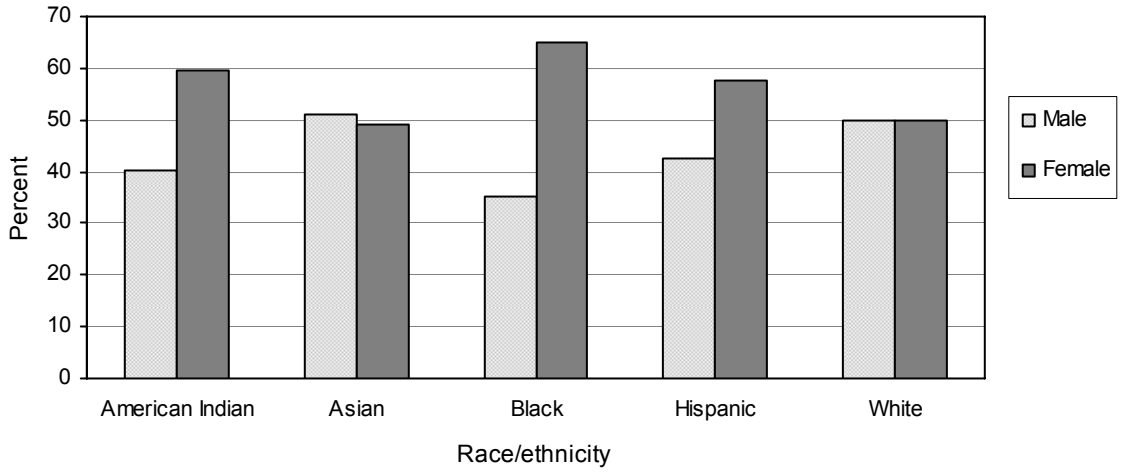
See Table 8.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates

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 1985 to 2005. The general pattern for minority recipients had been one of relatively small increases from 1985 to 1995 followed by moderate increases from 1995 to 2000. In 2005, there were some notable exceptions to the trend of increases. For example, the number of American Indian

doctorate recipients remained stable or fell in almost every broad field category in 2005[13] relative to 2000. The exception was humanities, where the number increased slightly. (See table 8).

The balance of male and female doctorate recipients varies between racial/ethnic groups. Among U.S. citizens, 50 percent of doctorates earned by whites were awarded to women. For blacks, American Indians, and Hispanics, women constituted a majority, earning 65 percent, 60 percent, and 58 percent, respectively, of doctorates received by persons of those races or ethnicities. Among Asians, women were 49 percent of the total. This is a slight decrease from 2004, when for the first time Asian women earned as many doctorates as 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, 2005



See Appendix Tables B-2b and B-2c.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates

Table 10 lists the universities that awarded the largest number of doctorates to members of the four primary U.S. minority groups between 2001 and 2005, 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 – awarded a total of 1,564 doctorates to Asians, or 22 percent of all doctorates awarded by U.S. universities to Asians.

[13] 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 390 non-Hispanic U.S. citizen respondents indicating more than one race, 167 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 (2002-2005) the introduction of the revised item; see appendix table B-2a.

Nova Southeastern University and Howard University awarded, by far, the most doctorates to blacks (396 and 278, respectively), 8 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 (32) to American Indians.

The concentration of U.S. minority doctorate recipients in certain institutions is noticeably greater than for the doctoral population as a whole. Over the 2001 - 2005 period, the ten universities granting the largest numbers of doctorates to all doctorate recipients conferred 15 percent of all doctorates. However, over the 2001-2005 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 19 percent; for Hispanics it was 22 percent, and for American Indians it was 23 percent. (See table 10.)

Doctorates by Citizenship

Each year, the SED gathers information concerning the U.S. citizenship status and country of citizenship of the new doctorate recipients at the time of graduation. Of the 2005 doctorate recipients with known citizenship status (94 percent of the total), 65 percent were U.S. citizens, 4 percent were non-U.S. citizens with permanent resident visas for the United States (i.e., "green cards"), and 31 percent were non-U.S. citizens in the U.S. on temporary visas. (See table 11.)

The trend for non-U.S. citizens earning doctorates from U.S. institutions is generally one of increasing numbers. This is particularly true for individuals in the U.S. on temporary visas. The five-year snapshots shown in table 11 indicate that the percentage of new doctorates awarded to individuals on temporary visas rose from 11 percent of all doctorate recipients who reported citizenship in 1975 to 31 percent in 2005. The growing numbers of doctorates awarded to foreign students on temporary visas has accounted for virtually all of the overall growth in the numbers of doctorate recipients since 1975.

The number of doctorate recipients with permanent residence has shown more fluctuation over time. The 2005 total of 1,600 represents an increase of 4 percent from 2004, and has dropped back near the 1990 (1,695) numbers. The numbers of doctorate recipients with

permanent residence were at historical highs in the mid-1990s (reaching a peak of 4,317 in 1995)[14], and ranged between 1,200 and 1,700 from 1975 until the early 1990s. (See table 11.)

U.S. citizens earned more than three fourths of the doctorates awarded in humanities and education (78 percent and 89 percent of those reporting citizenship status, respectively) in 2005. (See table 11.) In absolute numbers, U.S. citizens earned more doctorates in life sciences than in any of the other broad fields; permanent residents had their highest total in life sciences; engineering and physical sciences were the most popular fields 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 2005, 51 percent of all doctorates awarded to U.S. citizens went to women. This marks the fourth consecutive year in which the majority of U.S. citizens receiving a research doctorate were women. (See appendix table B-2.)

Among permanent residents earning doctorates in 2005, 51 percent were female, and among those doctorate recipients holding temporary visas, 32 percent were female (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 author.)

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 21 percent of all female doctorate recipients in 2005, they earned 25 percent of the doctorates granted to females in life sciences, 39 percent of the doctorates earned by females in physical sciences, and 54 percent of the female-earned doctorates in engineering. (See appendix table A-3c.)

In 2005, 3,827 doctorate recipients were citizens of the People's Republic of China (PRC)[15], comprising 9 percent of the total number of degrees awarded to individuals who reported citizenship. (See table 12 for a listing of the top 30 countries of origin of non-U.S. citizen doctorate recipients.) The top 15 countries in terms of the number of doctorates awarded to its citizens in 2005 were the same as in 2004, though some changes in rankings occurred within the top 15. The leading five countries (PRC, Korea, India, Taiwan, and Canada)

[14] The large increase in doctorate recipients with permanent visas 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 visas dropped in 1996 and 1997 as the number of students eligible for permanent residency under the act declined.

[15] Includes Hong Kong.

accounted for 19 percent of all doctorates awarded by U.S. universities to individuals of known citizenship in 2005. Only 6 percent of the total citizenship-known 2005 doctoral cohort were citizens of the next 10 nations listed in table 12, and just 4 percent were citizens of the next 15 nations. Doctorate recipients who were citizens of one of the 30 nations shown in the table accounted for 30 percent of the doctorates awarded in 2005 with country of citizenship reported, including U.S. citizens.

The twenty institutions awarding the largest numbers of doctorates to non-U.S. citizens in 2005 are listed in table 13. The University of Illinois at Urbana-Champaign awarded the largest number of doctorates to non-U.S. citizens, with 303 doctorates granted to non-U.S. citizens.

Doctorates by Parental Education Background

Since 1963, the SED has asked new doctorate recipients to report their fathers' and mothers' highest level of educational attainment. In 2005, for the first time, 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.[16] Previous versions of the *Summary Report* combined the 'some college' and 'earned baccalaureate' categories into a single category.

The 2005 data shown in table 14 indicate that 28 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 2005 achieved this level of education. About one fourth (25 percent) of doctorate recipients indicated that their fathers earned a baccalaureate degree; the percentage whose mother earned a baccalaureate degree was the same. At the upper end of the parental education range, the father held an advanced degree for 34 percent of the doctorate recipients, compared with the 21 percent whose mothers had an advanced degree.

Parental education backgrounds of male and female 2005 doctorate recipients differed little with respect to both fathers' and mothers' educations. Female doctorate recipients were slightly more likely than their male counterparts to have a father and a mother who attained at

[16] 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.

least a baccalaureate degree. The observed sex differences appear to be driven by mothers' education. That is, the fathers of both male and female doctorate recipients were equally likely to have earned at least a baccalaureate degree (59 percent), but the mothers of female doctorate recipients (48 percent) were more likely than the mothers of male doctorate recipients (45 percent) to have at least a baccalaureate degree.

There is considerable variation in parental education attainment by race/ethnicity, citizenship status, and broad field of study. Among U.S. citizens, Asian doctorate recipients were more likely than members of the other racial/ethnic categories to come from families in which 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 have parents with at least a baccalaureate degree (and much less likely than these two groups to have parents whose formal education did not extend beyond the high school level).

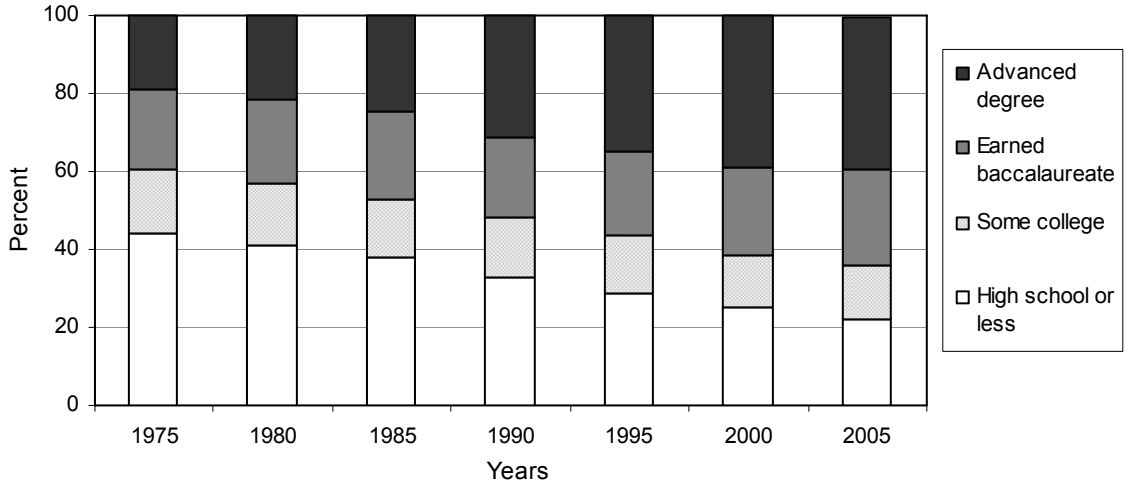
The distributions of parental education by the broad fields in table 14 reflect, in part, the different racial/ethnic and citizenship compositions of the fields. Doctorate recipients in humanities displayed the highest percentages of both fathers (65 percent) and mothers (53 percent) with at least a 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 represents the highest fraction of parents whose formal education ended at high school or before. Conversely, the broad field of humanities has the lowest percentage of parents who never went beyond high school.

There has been an overall trend of parents of doctorate recipients being more highly educated over the past thirty years (See figure 14 and table 15). In 1975, 44 percent of doctorate recipients reported that neither of their parents had attained an education beyond a high school diploma and less than one in five (19 percent) reported that either parent had an advanced degree. By 1990, 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 31 percent,

respectively). By 2005, the proportions in the most and least educated groups had almost completely reversed; with 22 percent of doctorates reporting highest parental education of a high school diploma or less and 39 percent reporting at least one parent with an advanced degree.

The proportions of doctorates reporting highest parental education of 'some college' has shown a gradual decrease over the past thirty years (from 16 percent in 1975 to 13 percent in 2005). At the same time, the proportion indicating an earned baccalaureate degree as either parent's highest education has shown an increase of about the same magnitude (from 21 percent in 1975 to 25 percent in 2005).

Figure 14. Highest parental educational attainment, 1975-2005



See Table 15.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates

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.

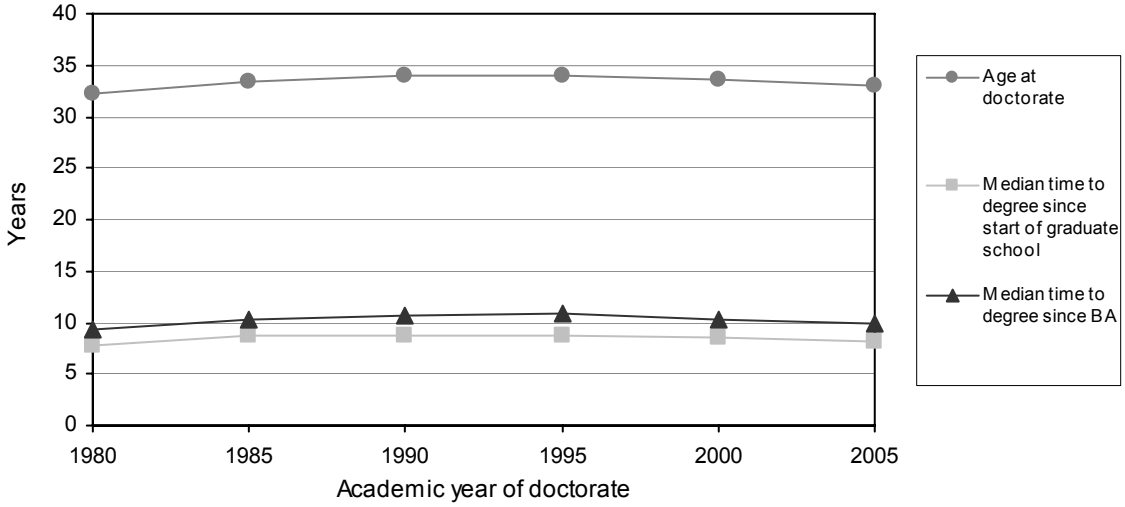
The SED measures time to degree in three different ways: (1) the total time elapsed from completion of the baccalaureate to completion of the doctorate, (2) the total time elapsed from the start of graduate school to completion of the doctorate, and (3) the age of the doctorate

recipient at the time the doctorate is awarded. In this section, the 2005 data and the historical trends for each of these measures are reviewed for the whole population of doctorate recipients and, separately, by broad field and the background variables of sex, race/ethnicity, and citizenship.

For the 2005 doctorate recipients, the median total time span from baccalaureate to doctorate was 9.9 years (table 16). The median total time span was shortest in physical sciences (7.8 years) and longest in education (17.3 years). The broad field of education includes large numbers of individuals who have worked full-time before starting their graduate degree programs, and who even continue to work full-time while earning their doctorates.

The historical data in table 16 show that the 2005 median total time to degree was about four months shorter than in 2000. The long-term trend, however, had been one of increases in length from 1980 to 1995. (See figure 15 and table 16.) From 2000 to 2005, most of the broad fields showed the same or slightly shorter times, except for humanities and social sciences where the time increased slightly.

Figure 15. Median number of years to doctorate from baccalaureate award and from graduate school entry, and age at doctorate, for selected years, 1980-2005



See Table 16.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates

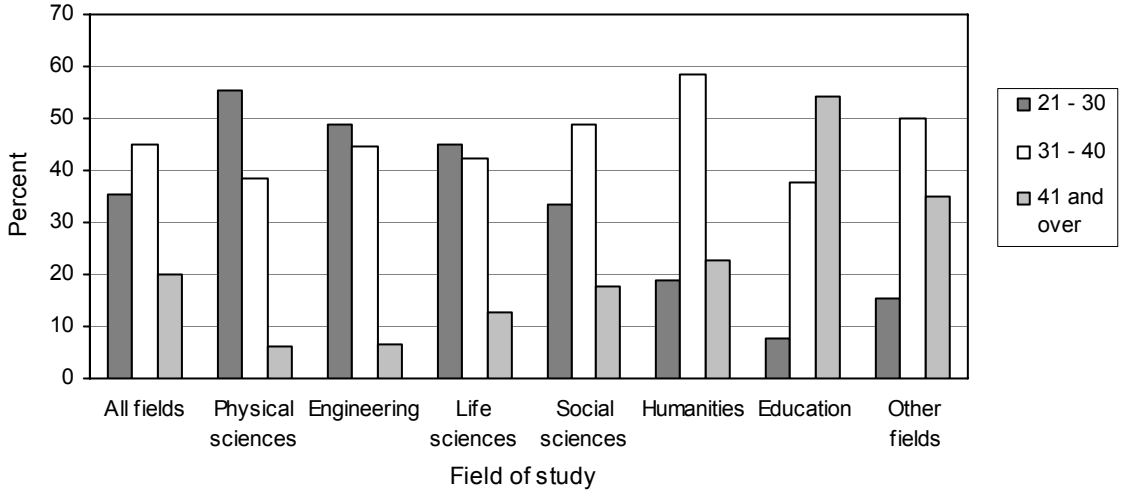
The median duration between starting and completing graduate school was 8.2 years for the 2005 doctorates (table 16). Graduate-school time to degree was shortest in physical sciences (6.7 years) and life sciences (7.1 years), and longest in education (13.0 years) (table 16). The

trend for time spent in graduate school is one of small but continual increases over the span from 1980 to 1995 and then declines in most of the seven broad fields. (See table 16.)

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

A third measure of time to degree gathered in the SED is age at doctorate. The median ages of the 2005 doctorate recipients are tabulated in Appendix tables A-3 by major field of degree and A-4 by citizenship and race/ethnicity. On the whole, the median age at receipt of the doctorate in 2005 was 33.0 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 2004 doctorate recipients in the S&E fields was 31.4 years old. In comparison, age at doctorate was 35.2 years in humanities, 42.5 years in education, and 36.9 years in the other fields category. (See appendix table A-3a and table 18.) The modal age spans evident in figure 16 and table 18 reflect this ordering.

Figure 16. Age distribution at doctorate, by broad field of study, 2005



See Table 18.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2005 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 2005 (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 2005 doctorate recipients, a total of 622 individuals (about 1.4 percent of the doctoral cohort) indicated having one or more disabilities. The most frequently reported disabilities were physical or orthopedic, with 216 doctorate recipients indicating this disability, followed by learning or cognitive disabilities, with 170. 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 (32 percent of all doctorate recipients earned their doctorates in non-S&E fields). (See table 19.)

The demographic breaks shown in table 19 indicate that women reported a disability more often than men, and that the gender difference was particularly large for those with a physical or orthopedic disability. U.S. citizens were more likely to report one or more disability than non-U.S. citizens.

Financial Resources in Support of Doctorate Recipients, Including Indebtedness

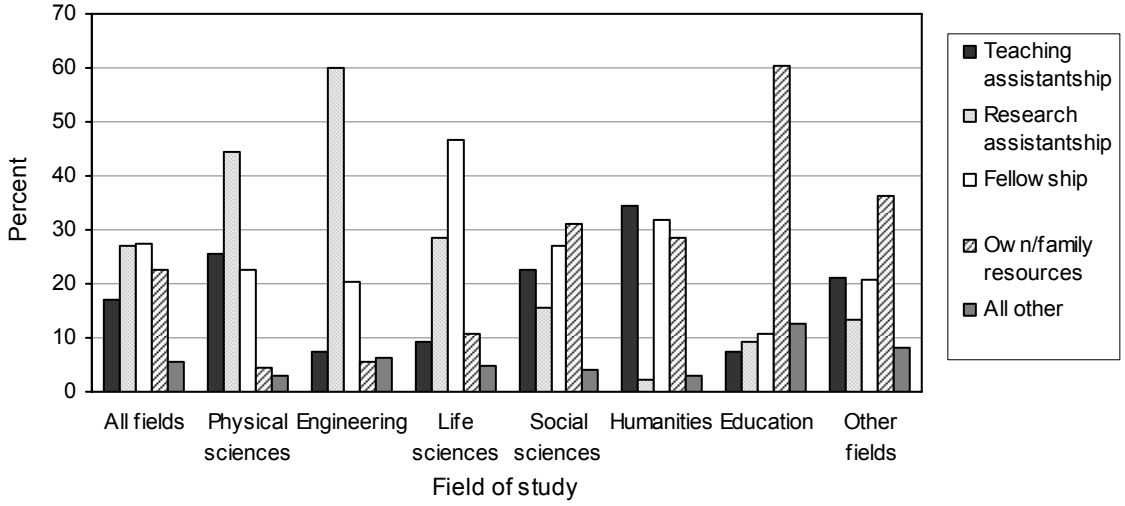
Sources of Financial Support

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 the copy of the questionnaire in 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 second most important. 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 20.

Seven out of ten (71 percent) of the 2005 doctorate recipients reported the primary source of support during graduate school as program- or institution-based sources, such as teaching assistantships, research assistantships/traineeships, and fellowships/dissertation grants.[17] Slightly less than one in four (23 percent) of all 2005 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. Foreign governments, employer contributions, and other sources accounted for the remaining 6 percent of the cases. (See figure 17 and table 20.)

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

Figure 17. Primary sources of financial support for doctorate recipients, by broad field of study, 2005



See Table 20.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates

Sources of support differ substantially by field of study. For example, within physical sciences, a notably higher than average percentage of new doctorate recipients reported teaching/ research assistantships or fellowships as the primary source of support (93 percent). Within engineering, 88 percent of the research doctorate recipients in 2005 listed teaching/research assistantships or fellowships as their principal form of support, as did 84 percent of respondents in life sciences. On the other hand, only 56 percent of doctorate recipients in other fields and 27 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 (30 percent versus 17 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 20).

Non-U.S. citizens tended to be more concentrated in fields where the majority of doctoral students receive institution- and/or program-based support. Mirroring this concentration, foreign citizens on permanent or temporary visas reported lower percentages of reliance on their own resources (16 percent and 6 percent, respectively) than did U.S. citizen respondents (31 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 (table 20).

Differences in the various modes of financial support were found among the main racial/ethnic groups. Black and American Indian doctorate recipients indicated the greatest reliance on their own resources to finance their doctoral program (42 percent and 37 percent, respectively), followed in decreasing order by Hispanics and whites (33 and 32 percent, respectively), and Asians (17 percent). (See table 20.) Racial/ethnic differences in reliance on own resources also diminished within most of the broad fields of study. The exception to this trend was within life sciences, wherein blacks reported relying on their own resources at a rate that was fifty percent higher than the nearest other racial/ethnic group, whites (21 and 14 percent, respectively), 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-based support. In physical sciences and 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 20.)

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 educations. This is defined as debt related to tuition and fees, living expenses and supplies, and transportation to and from school. Just over half (51 percent) of the respondents in 2005 reported having no graduate or undergraduate education-related debt, while another 21 percent reported cumulative debt of $20,000 or less (table 21). However, 12 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 (66 percent and 62 percent, respectively). About half of graduates in life sciences (51 percent), other fields (50 percent), and education (50 percent) had no education-related debt. Graduates in social science (39 percent) and humanities (39 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 (22 percent), humanities (17 percent), and other fields and education (15 percent).

Data separating graduate from undergraduate debt are shown in the lower two panels of table 21. 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 largely arise during graduate education. Overall, 73 percent of the 2005 doctoral cohort reported no remaining undergraduate debt and only 1 percent reported remaining undergraduate debt greater than $50,000. In contrast, 67 percent reported no graduate school debt and 10 percent reported graduate debt greater than $50,000. The difference in levels of existing indebtedness between undergraduate and graduate school was particularly large for doctorate recipients in social sciences, humanities, education, and other broad fields. (See table 21.)

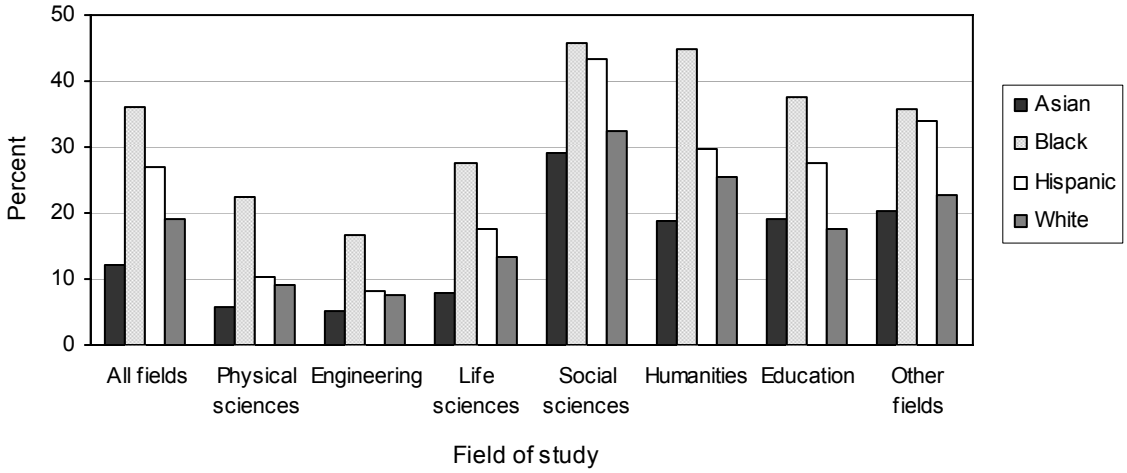
The pattern of debt levels for the study's main demographic groups is shown in table 22. Debt differences between the sexes were not large, with new male doctorates about four percentage points more likely to have no debt than their female counterparts (53.3 percent versus 49.1 percent). U.S. citizen doctorate recipients were less likely to have no higher-education-related debt than graduates with permanent or temporary visas (41 percent, versus 67 percent, and 71 percent, respectively), and more likely to have debts totaling over $50,000 (15 percent, versus 7 percent for permanent visa holders and 6 percent for temporary visa holders). (See table 22.)

Particularly noteworthy in the cumulative debt tabulations (first panel of table 22) is the much higher incidence of blacks, Hispanics, and American Indians sustaining high levels of education-related debt. Nearly three in ten black and American Indian doctorate recipients (29 percent for both), and 22 percent of Hispanic doctorate recipients owed over $50,000; these figures compare to 9 percent of Asians and 14 percent of whites with that level of debt. Similarly, Asians (47 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 doctorate study, which, as seen in table 21, were also associated with indebtedness. A preliminary assessment of this possibility is provided

in table 23 and figure 18, 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. (See figure 18 and table 23.)

Figure 18. 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), 2005



See Table 23.
Source: NSF/NIH/USED/NEH/USDA/NASA, 2005 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.[18] The responses provide a useful overview of the number of doctorate recipients planning to enter academic positions, government and industry, and postdoctoral programs of research and further study. Also, information is collected on the main types of work activities – research, teaching, administration, and professional services to individuals – that the graduates anticipate in their new positions.

There are five aspects of postgraduation plans examined in this report. 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 24 and 25). The second aspect is the distribution of graduates with definite commitments for career employment versus postdoctorate research and study programs. This distribution is also examined separately by broad field of study, sex, citizenship, and race/ethnicity as well as by visa status (tables 26 and 27). The third aspect examined is the distribution of graduates across U.S.-based employment sectors, broken down by broad field of study (table 28), sex, race/ethnicity, and citizenship status (table 29). The final aspects discussed are financial support for postdoctoral study (table 30) and anticipated location of postgraduate commitment (international versus U.S.) for non-U.S. citizens (tables 31 and 32).

Definite versus Indefinite Plans

Slightly more than seven in ten (71 percent) of all doctorate recipients in 2005 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 (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. An indefinite plan is defined as a respondent who (c) was negotiating with one or more specific organizations, (d) was seeking a

[18] 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 2005), minus a low, often negligible, rate of item nonresponse. For the 2005 SED cycle the overall response rate for the first item, asking whether the respondent has definite plans for either career employment or study, was 90 percent.

position but had no specific prospects yet, (e) did not plan to work or study or (f) had some other situation, usually described as "have not made a plan yet." Of the 29 percent with indefinite plans, 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 2005 questionnaire included in appendix D for the item wording.)

The 71 percent with definite plans is similar to 2004, when 70 percent reported having definite commitments. The percentages with definite commitments in 2005 vary little by broad field with the noteworthy exception of humanities and engineering, where about 65 percent have a definite commitment. (See table 24.)

The percentages of graduates from various demographic groups with definite commitments are shown in table 25. About 2 percent fewer women than men (72 percent compared to 70 percent) reported having definite plans. U.S. citizens were more likely to have definite commitments (74 percent) than individuals with permanent (65 percent) or temporary visas (67 percent). Among U.S. citizens, whites were more likely than Hispanics, blacks, Asians, and American Indians to have definite plans.

Career Employment versus Postdoctoral Training or Study

Among the doctoral recipients reporting definite plans, the majority (65 percent) indicated that they planned to enter career employment as opposed to pursuing further study within a postdoctoral research or teaching program (table 26). Nonetheless, the 35 percent planning on a postdoc (a temporary position primarily for gaining additional education and training in research) represents the highest level ever recorded in the SED, edging up two percent from 33 percent in 2003 and up less than one percent from 2004. Plans for postdoctoral study were more common among graduates in life sciences (67 percent) and physical sciences (55 percent) than in the other broad fields. Compared to 1985, the percentages of new doctorate recipients entering postdoctorate study programs have increased in all of the broad fields.

Differences among demographic subgroups are shown in table 27. Men were more likely than women to have definite plans for postdoctoral study (38 versus 33 percent). The percentage of men with definite plans for postdoctoral study remained very near the all-time high level (38 percent) recorded in 2004. The percentage of women with definite plans for postdoctoral study

increased to all-time high in 2005, which exceeded the previous all-time high of 32 percent, recorded in 2004. (See table 26 and table 27 and in the *Summary Report, 2004*).

Students with temporary visas were more likely than permanent residents and U.S. citizens to pursue postdoctoral studies (the student visa allows the student to remain in the U.S. for two years of additional training after completing the doctorate). Among U.S. citizens, Asian doctorate recipients were more likely than other racial/ethnic subgroups to pursue postdoctoral study, followed by Hispanic and non-Hispanic white recipients. Black and American Indian doctorate recipients were least likely to plan postdoctorates. (See table 27.) These differences among citizenship and racial/ethnic subgroups reflect the greater number of postdoctorates 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 2005 doctorate recipients with definite employment commitments within the United States was higher education, identified by over half (55 percent) of the 2005 respondent subpopulation. (See the total column in table 28.) The next largest group had commitments to industry or some form of self-employment (23 percent) while 7 percent planned to work for U.S. federal, state, or local government. Fifteen percent of the 2005 doctorate recipients indicated a type of employment that did not correspond to these main sectors, and are grouped into the "other" category in tables 28 and 29. These included a mix of employment in public and 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 1985 shows reductions in government employment, coupled with small increases in the higher education sector, increasing noticeably between 2000 and 2005 (49 to 55 percent). The turn of the twenty-first century (the 2000 time point in table 28) 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 from 2004 (19 percent) to 2005 (23 percent). The four-percent gain in industry and self-employment in 2005

was accompanied by two percent declines in the academic and the "other" sectors, relative to 2004.

The relative shares of doctorate recipients in the main employment sectors varied by broad field of doctorate (table 28). The proportion employed in academe in 2005 was highest among humanities doctorate recipients (84 percent) and lowest among the engineering doctorate recipients (19 percent). The proportion employed in industry or self-employed in 2005 ranged from highs of 69 percent of the engineering doctorate recipients and 49 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 (2 percent). The percentage of doctorate recipients classified as having "other" work commitments was by far the greatest among education graduates (41 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 29. 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 2005 female doctorate recipients, 14 percent had commitments to industry or some form of self-employment, compared to 31 percent of their male counterparts. Women were more likely than men to have commitments to academe (60 percent versus 50 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 plans to remain in the United States after graduation were less likely than U.S. citizens to have work commitments in academe (46 percent versus 57 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 employment in industry or self-employment (49 versus 16 percent). Permanent residents were somewhat less likely to have definite plans for employment in academe than U.S. citizens (55 percent versus 57 percent, respectively), but, like those on temporary visas, were more likely

than U.S. citizens to take employment in industry or be self-employed (34 percent versus 16 percent). (See table 29.)

Among U.S. citizens, Asians were less likely than others to go into academe (46 percent) and were more likely than all others to go into industry or self-employment (33 percent). Blacks were least likely to have work commitments in industry or self-employment (8 percent) and were more likely than all others to have commitments subsumed in the "other" category (27 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 29.)

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 2005, 49 percent of all postdocs named a college or university as their main source of funding, followed by 31 percent indicating the U.S. government.[19] Private foundations supported another 5 percent, and other types of nonprofit organizations supported 3 percent. (See table 30.) About 8 percent indicated some other kind of support than those listed in the questionnaire; inspection of the descriptions written by these respondents reveals that many were planning on support from a foreign government.

Gender differences in sources of postdoctoral support were very small. (See table 30.) Similarly, the racial/ethnic breakdowns in table 30 show little difference in the funding sources for Asians, blacks, Hispanics, and whites. However, a number of differences in sources of support are apparent among U.S. citizens, permanent-visa holders, and temporary-visa holders. As might be expected, U.S. citizens were the most likely to have the U.S. government as their main source of postdoctoral support. 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 2005 than in the other years shown in table 30. An overall trend of a decreasing share of U.S. government support for postdoctoral study

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

since 1985 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, 95 percent of all new doctorate recipients holding permanent visas and 74 percent of temporary visa holders indicated that they would remain in the United States following graduation (table 31). In 2005, chemistry, biological 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, 89 percent, and 84 percent, respectively). The lowest concentrations were located in the broad fields of education (39 percent), social sciences (55 percent) and humanities (58 percent). (See table 31.)

The number of non-U.S. citizens earning research doctorates in the United States has increased over the past twenty years, as has the tendency for those students to remain in the United States following graduation. Table 32 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 1985, about half (51 percent) of those with temporary visas had firm commitments to positions in the United States. A decade later, 54 percent of them had firm commitments to stay in the United States; in 2005, the number had increased to 74 percent.

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 have 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 may decline.[20] 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 2004 and again in 2005. But since the median time from starting graduate school to completing the doctorate is about eight years,

[20] *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.

declining numbers of non-U.S. citizens earning doctorates may not be apparent until the end of this decade.

With respect to non-U.S. citizens planning to stay in the U.S. after earning the doctorate, table 33 indicates that the percentage of foreign graduates intending to stay from the two academic years prior to 9/11 was almost identical to the percentage intending to stay in the four years since 9/11 (70 percent in both periods). However, when the six years are viewed as a series of individual years, it is apparent that the percentage saying they would stay was higher in 2001 than in 2000. Then in each succeeding year, 2002, 2003, and 2004, the percentage saying they would stay was slightly lower. However, in 2005 the percentage saying they would stay (73 percent) is higher than pre-9/11 levels. Disaggregating the foreign graduates by country of citizenship and geographical region of citizenship, table 33 shows that this general pattern of intentions to stay in the U.S., characterized by slight yearly declines from 2001 to 2004 followed by an increase to pre-9/11 levels in 2005, held in most regions and for most countries within the regions.

MAIN DATA TABLES

TABLE 1. Number of doctorates awarded and annual percentage change in doctorates awarded by U.S. colleges and universities, 1957–2005

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	42,535	0.2
1998	42,637	0.2
1999	41,092	-3.6
2000	41,361	0.7
2001	40,651	-1.7
2002	39,953	-1.7
2003	40,740	2.0
2004	42,117	3.4
2005	43,354	2.9

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 2. Number of U.S. colleges and universities awarding doctorates and average doctorate recipients per institution, 1965-2005

Year	Number of doctorate recipients	Number of institutions	Mean number of doctorate recipients per institution	Median number of doctorate recipients per institution
1965	16,340	204	80	33.0
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	42,535	383	111	45.0
1998	42,637	388	110	43.5
1999	41,092	396	104	41.5
2000	41,361	408	101	40.5
2001	40,651	417	97	36.0
2002	39,953	415	96	38.0
2003	40,740	424	96	36.0
2004	42,117	419	101	38.0
2005	43,354	416	104	42.0

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 3. Top 20 doctorate-granting institutions, by broad field of study, 2005

Institution	Number of doctorate recipients	Institution	Number of doctorate recipients
All Fields	43,354	Physical sciences	6,699
U. CA, Berkeley	802	MA Institute of Technology	190
U. TX-Austin	716	U. CA, Berkeley	184
U. MI	711	Stanford U.	163
U. WI-Madison	664	U. IL-Urbana-Champaign	128
U. CA, Los Angeles	651	U. WI-Madison	112
U. MN	644	U. CA, Los Angeles	109
Stanford U.	642	U. WA	103
U. IL-Urbana-Champaign	637	Cornell U.	100
PA State U., The	606	U. TX-Austin	100
OH State U., The	591	Columbia U.	99
MA Institute of Technology	581	U. MN	98
U. FL	574	U. MD	96
U. Southern CA	554	U. MI	95
Purdue U.	522	CA Institute of Technology	94
TX A&M U.	511	Purdue U.	94
U. WA	511	PA State U., The	92
Harvard U.	510	TX A&M U.	90
U. MD	499	U. CO	90
MI State U.	475	U. FL	90
Columbia U.	472	GA Institute of Technology	83
		Harvard U.	83
Engineering	6,404	Life sciences	9,306
GA Institute of Technology	249	Johns Hopkins U.	199
MA Institute of Technology	222	U. FL	178
Stanford U.	217	U. MN	177
U. MI	205	U. WI-Madison	177
U. CA, Berkeley	170	U. CA, Davis	165
Purdue U.	165	OH State U., The	162
U. IL-Urbana-Champaign	160	U. WA	155
TX A&M U.	145	Harvard U.	152
U. TX-Austin	143	U. NC Chapel Hill	147
U. FL	135	U. MI	145
PA State U., The	127	U. CA, Los Angeles	135
U. CA, Los Angeles	115	U. CA, Berkeley	131
U. MD	109	PA State U., The	127
VA Polytechnic Institute and State U.	101	Cornell U.	125
U. MN	97	MI State U.	125
NC State U.	93	TX A&M U.	121
Carnegie Mellon U.	91	U. IL-Urbana-Champaign	118
OH State U., The	90	Columbia U.	114
U. WI-Madison	81	U. GA	110
Cornell U.	80	U. PA	107

TABLE 3. Top 20 doctorate-granting institutions, by broad field of study, 2005

Institution	Number of doctorate recipients	Institution	Number of doctorate recipients
Social sciences	6,837	Humanities	5,349
U. CA, Berkeley	108	U. TX-Austin	138
U. TX-Austin	102	U. CA, Berkeley	136
Harvard U.	100	IN U.	126
U. CA, Los Angeles	100	NY U.	123
Graduate School & U. Ctr., CUNY	96	Columbia U.	117
U. MI	91	U. CA, Los Angeles	112
U. MN	89	U. MI	108
PA State U., The	87	Harvard U.	103
U. MD	86	U. WI-Madison	98
U. WI-Madison	86	U. Chicago, The	94
MI State U.	84	Graduate School & U. Ctr., CUNY	92
U. Chicago, The	81	OH State U., The	91
OH State U., The	77	U. NC Chapel Hill	88
Columbia U.	75	Yale U.	81
Yale U.	74	Princeton U.	78
U. PA	72	U. IL-Urbana-Champaign	76
U. NC Chapel Hill	68	U. MD	75
NY U.	66	U. MN	70
U. GA	66	U. PA	70
U. IL-Urbana-Champaign	65	U. WA	70
Education	6,229	Other fields	2,530
U. Southern CA	178	Nova Southeastern U.	59
Teachers C., Columbia U.	141	U. TX-Austin	50
U. GA	116	U. GA	47
Loyola U. Chicago	112	NY U.	45
U. TX-Austin	102	U. PA	44
PA State U., The	92	U. MN	43
U. VA	85	U. NC Chapel Hill	41
U. PA	81	U. Southern CA	40
IN U.	77	FL State U.	39
OH State U., The	74	U. WI-Madison	39
U. WI-Madison	71	MI State U.	37
U. MN	70	PA State U., The	36
AZ State U.	66	TX A&M U.	36
TX A&M U.	63	Purdue U.	35
U. IL-Urbana-Champaign	61	Southern Baptist Theological Seminary, The	34
U. MO-Columbia	61	U. FL	34
FL State U.	60	Columbia U.	32
VA Polytechnic Institute and State U.	60	U. MI	32
MI State U.	58	IN U.	31
U. La Verne	58	U. CA, Berkeley	29
		U. IL-Urbana-Champaign	29
		U. Pittsburgh	29

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 4. State of awarding institution, including the District of Columbia and Puerto Rico, ranked by number of doctorate recipients, 2005

Rank	State	Number of doctorate recipients
1	California	5,225
2	New York	3,705
3	Texas	2,791
4	Massachusetts	2,236
5	Pennsylvania	2,232
6	Illinois	2,172
7	Florida	1,677
8	Ohio	1,627
9	Michigan	1,574
10	North Carolina	1,305
11	Indiana	1,152
12	Georgia	1,139
13	Maryland	1,109
14	Virginia	1,066
15	New Jersey	917
16	Minnesota	847
17	Wisconsin	842
18	Missouri	767
19	Arizona	760
20	Colorado	750
21	Washington	728
22	Tennessee	699
23	Connecticut	613
24	Iowa	569
25	Louisiana	566
26	Alabama	525
27	District of Columbia	519
28	Kentucky	462
29	South Carolina	431
30	Kansas	413
31	Oklahoma	386
32	Oregon	375
33	Utah	371
34	Mississippi	367
35	New Mexico	309
36	Nebraska	289
37	Rhode Island	231
38	Delaware	200
39	Arkansas	194
40	West Virginia	163
41	Hawaii	149
42	New Hampshire	141
43	Idaho	126
44	Nevada	125
45	Montana	92
46	North Dakota	91
47	South Dakota	81
48	Puerto Rico	67
49	Vermont	62
50	Wyoming	52
51	Maine	40
52	Alaska	25

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 5. Major field of study of doctorate recipients for selected years, 1975–2005

Field of study [a]	1975		1980		1985		1990		1995		2000		2005	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
All fields	32,952	100.0	31,019	100.0	31,295	100.0	36,065	100.0	41,747	100.0	41,361	100.0	43,354	100.0
Physical sciences [b]	4,780	14.5	4,071	13.1	4,489	14.3	5,809	16.1	6,727	16.1	5,982	14.5	6,699	15.5
Physics & astronomy	1,300	3.9	983	3.2	1,080	3.5	1,393	3.9	1,652	4.0	1,389	3.4	1,520	3.5
Chemistry	1,776	5.4	1,538	5.0	1,836	5.9	2,100	5.8	2,162	5.2	1,989	4.8	2,127	4.9
Earth, atmospheric, & marine sciences	557	1.7	588	1.9	575	1.8	719	2.0	726	1.7	694	1.7	713	1.6
Mathematics	1,147	3.5	744	2.4	688	2.2	892	2.5	1,190	2.9	1,050	2.5	1,203	2.8
Computer sciences [c]	----	----	218	0.7	310	1.0	705	2.0	997	2.4	860	2.1	1,136	2.6
Engineering	3,002	9.1	2,479	8.0	3,166	10.1	4,894	13.6	6,008	14.4	5,323	12.9	6,404	14.8
Aerospace/Aeronautical engineering	141	0.4	81	0.3	124	0.4	192	0.5	252	0.6	214	0.5	219	0.5
Chemical and related engineering	387	1.2	316	1.0	504	1.6	658	1.8	708	1.7	726	1.8	875	2.0
Civil and related engineering	361	1.1	306	1.0	391	1.2	553	1.5	656	1.6	556	1.3	757	1.7
Electrical and related engineering	714	2.2	540	1.7	716	2.3	1,276	3.5	1,731	4.1	1,543	3.7	1,852	4.3
Industrial engineering	92	0.3	77	0.2	92	0.3	151	0.4	284	0.7	176	0.4	222	0.5
Mechanical and related engineering	487	1.5	384	1.2	513	1.6	884	2.5	1,025	2.5	864	2.1	978	2.3
Materials/Metallurgical engineering	272	0.8	273	0.9	303	1.0	440	1.2	588	1.4	451	1.1	540	1.2
Other engineering	548	1.7	502	1.6	523	1.7	740	2.1	764	1.8	793	1.9	961	2.2
Life sciences	5,103	15.5	5,501	17.7	5,822	18.6	6,655	18.5	7,998	19.2	8,624	20.9	9,306	21.5
Biological sciences	3,497	10.6	3,803	12.3	3,793	12.1	4,328	12.0	5,376	12.9	5,853	14.2	6,368	14.7
Health sciences	462	1.4	586	1.9	729	2.3	956	2.7	1,329	3.2	1,591	3.8	1,777	4.1
Agricultural sciences/natural resources	1,144	3.5	1,112	3.6	1,300	4.2	1,371	3.8	1,293	3.1	1,180	2.9	1,161	2.7
Social sciences	6,066	18.4	5,855	18.9	5,764	18.4	6,092	16.9	6,635	15.9	7,109	17.2	6,837	15.8
Psychology	2,751	8.3	3,098	10.0	3,117	10.0	3,281	9.1	3,429	8.2	3,616	8.7	3,327	7.7
Anthropology	386	1.2	370	1.2	353	1.1	324	0.9	375	0.9	446	1.1	455	1.0
Economics	895	2.7	767	2.5	811	2.6	862	2.4	979	2.3	948	2.3	1,061	2.4
Political science/international relations	862	2.6	585	1.9	484	1.5	559	1.5	672	1.6	746	1.8	725	1.7
Sociology	680	2.1	600	1.9	461	1.5	428	1.2	540	1.3	617	1.5	535	1.2
Other social sciences	492	1.5	435	1.4	538	1.7	638	1.8	640	1.5	736	1.8	734	1.7
Humanities	5,046	15.3	3,871	12.5	3,429	11.0	3,822	10.6	5,062	12.1	5,634	13.6	5,349	12.3
History	1,183	3.6	745	2.4	543	1.7	612	1.7	889	2.1	1,061	2.6	924	2.1
American literature	251	0.8	209	0.7	204	0.7	229	0.6	327	0.8	460	1.1	406	0.9
English language & literature	1,039	3.2	743	2.4	525	1.7	567	1.6	752	1.8	610	1.5	554	1.3
Foreign language & literature	826	2.5	535	1.7	435	1.4	512	1.4	639	1.5	642	1.6	609	1.4
Other humanities	1,747	5.3	1,639	5.3	1,722	5.5	1,902	5.3	2,455	5.9	2,861	6.9	2,856	6.6
Education	7,360	22.3	7,586	24.5	6,733	21.5	6,509	18.0	6,648	15.9	6,432	15.6	6,229	14.4
Education administration	1,508	4.6	1,536	5.0	1,625	5.2	1,664	4.6	1,974	4.7	2,030	4.9	2,170	5.0
Education research	3,375	10.2	3,317	10.7	2,925	9.3	2,439	6.8	2,576	6.2	2,665	6.4	2,668	6.2
Teacher education	570	1.7	639	2.1	463	1.5	419	1.2	390	0.9	261	0.6	264	0.6
Teaching fields	1,417	4.3	1,471	4.7	1,118	3.6	922	2.6	924	2.2	823	2.0	664	1.5
Other education	490	1.5	623	2.0	602	1.9	1,065	3.0	784	1.9	653	1.6	463	1.1

TABLE 5. Major field of study of doctorate recipients for selected years, 1975–2005

Field of study [a]	1975		1980		1985		1990		1995		2000		2005	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Other fields	1,595	4.8	1,656	5.3	1,892	6.0	2,284	6.3	2,669	6.4	2,257	5.5	2,530	5.8
Business & management	787	2.4	640	2.1	789	2.5	1,036	2.9	1,330	3.2	1,065	2.6	1,168	2.7
Communications	264	0.8	270	0.9	266	0.8	323	0.9	381	0.9	389	0.9	486	1.1
Fields not elsewhere classified	544	1.7	746	2.4	837	2.7	925	2.6	958	2.3	803	1.9	876	2.0

Dashes (----) indicate that the field was not on the questionnaire's Specialties List that year.

[a] Major field of study definitions are detailed in appendix C in the section on "Derived Variables."

[b] Includes mathematics and computer science

[c] Computer sciences first appeared on the survey form in 1978.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 6. Number of doctorate recipients and percent female, by major field of study, 1995 and 2005

Field of study [a]	1995 [b]		2005 [c]		Percentage change earned by females, 1995- 2005 [d]
	Number of doctorate recipients	Percent of doctorates to females	Number of doctorate recipients	Percent of doctorates to females	
All fields	41,576	39.5	43,295	45.2	14.4
Physical sciences	6,697	22.0	6,692	26.4	20.1
Physics & astronomy	1,646	12.9	1,518	16.4	27.4
Chemistry	2,149	30.8	2,126	34.0	10.6
Earth, atmospheric, & marine sciences	724	20.3	713	34.1	67.9
Mathematics	1,184	22.4	1,201	27.1	21.3
Computer sciences	994	18.7	1,134	19.8	6.0
Engineering	5,966	11.7	6,389	18.4	57.5
Aerospace/Aeronautical engineering	251	5.6	219	13.2	137.4
Chemical and related engineering	706	15.4	872	24.1	56.0
Civil and related engineering	651	11.7	756	23.3	99.4
Electrical and related engineering	1,718	10.1	1,847	13.5	33.9
Industrial engineering	281	17.8	219	18.7	5.2
Mechanical and related engineering	1,018	6.3	978	12.3	95.2
Materials/Metallurgical engineering	584	16.3	539	22.3	36.9
Other engineering	757	15.2	959	23.9	57.2
Life sciences	7,956	42.2	9,294	50.9	20.5
Biological/biomedical sciences	5,349	41.4	6,362	48.8	17.8
Health sciences	1,320	63.9	1,774	68.2	6.7
Agricultural sciences/natural resources	1,287	23.2	1,158	35.7	54.0
Social sciences	6,613	51.0	6,833	55.5	8.8
Psychology	3,426	63.7	3,326	68.1	6.9
Anthropology	374	58.6	454	56.4	-3.7
Economics	972	24.4	1,059	30.0	23.2
Political science/international relations	667	28.0	725	39.3	40.2
Sociology	537	53.6	535	62.4	16.4
Other social sciences	637	40.7	734	45.4	11.6
Humanities	5,054	48.4	5,343	51.0	5.3
History	887	37.4	923	41.6	11.2
American literature	327	56.3	406	57.9	2.9
English language & literature	752	57.8	554	61.6	6.4
Foreign language & literature	637	59.7	608	60.4	1.2
Other humanities	2,451	45.5	2,852	49.0	7.7
Education	6,638	61.6	6,219	66.8	8.4
Education administration	1,973	55.0	2,166	61.0	11.0
Education research	2,574	67.1	2,665	69.6	3.9
Teacher education	390	73.3	263	76.0	3.7
Teaching fields	922	58.0	663	69.1	19.0
Other education	779	59.1	462	68.8	16.6
Other fields	2,652	37.0	2,525	48.7	31.4
Business mgt./Administrative services	1,323	28.6	1,164	40.5	41.9
Communications	380	49.2	485	56.1	14.0
Fields not elsewhere classified	949	43.9	876	55.4	26.0

[a] Major field study definitions are detailed in appendix C in the section on "Derived Variables."

[b] 1995 field total excludes 171 individuals for whom sex was not reported.

[c] 2005 field total excludes 59 individuals for whom sex was not reported.

[d] Change in percent to females computed as (2005 percent - 1995 percent) / 1995 percent.

See Appendix Table A-1.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 7. Number and percent of doctorate recipients, by sex within broad field of study for selected years, 1975–2005

Field of study and sex	1975		1980		1985		1990		1995 [a]		2000 [b]		2005 [c]	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All fields	32,952	100.0	31,019	100.0	31,295	100.0	36,064	100.0	41,576	100.0	41,287	100.0	43,295	100.0
Male	25,751	78.1	21,612	69.7	20,552	65.7	22,960	63.7	25,160	60.5	23,161	56.1	23,731	54.8
Female	7,201	21.9	9,407	30.3	10,743	34.3	13,104	36.3	16,416	39.5	18,126	43.9	19,564	45.2
Physical sciences [d]	4,780	100.0	4,071	100.0	4,489	100.0	5,809	100.0	6,697	100.0	5,971	100.0	6,692	100.0
Male	4,385	91.7	3,575	87.8	3,781	84.2	4,750	81.8	5,226	78.0	4,548	76.2	4,926	73.6
Female	395	8.3	496	12.2	708	15.8	1,059	18.2	1,471	22.0	1,423	23.8	1,766	26.4
Engineering	3,002	100.0	2,479	100.0	3,166	100.0	4,894	100.0	5,966	100.0	5,297	100.0	6,389	100.0
Male	2,950	98.3	2,389	96.4	2,968	93.7	4,479	91.5	5,270	88.3	4,459	84.2	5,215	81.6
Female	52	1.7	90	3.6	198	6.3	415	8.5	696	11.7	838	15.8	1,174	18.4
Life sciences	5,103	100.0	5,501	100.0	5,822	100.0	6,655	100.0	7,956	100.0	8,613	100.0	9,294	100.0
Male	4,100	80.3	4,081	74.2	3,946	67.8	4,163	62.6	4,598	57.8	4,569	53.0	4,567	49.1
Female	1,003	19.7	1,420	25.8	1,876	32.2	2,492	37.4	3,358	42.2	4,044	47.0	4,727	50.9
Social sciences	6,066	100.0	5,855	100.0	5,764	100.0	6,092	100.0	6,613	100.0	7,100	100.0	6,833	100.0
Male	4,544	74.9	3,810	65.1	3,387	58.8	3,266	53.6	3,242	49.0	3,226	45.4	3,043	44.5
Female	1,522	25.1	2,045	34.9	2,377	41.2	2,826	46.4	3,371	51.0	3,874	54.6	3,790	55.5
Humanities	5,046	100.0	3,871	100.0	3,429	100.0	3,822	100.0	5,054	100.0	5,629	100.0	5,343	100.0
Male	3,359	66.6	2,339	60.4	1,940	56.6	2,074	54.3	2,608	51.6	2,797	49.7	2,619	49.0
Female	1,687	33.4	1,532	39.6	1,489	43.4	1,748	45.7	2,446	48.4	2,832	50.3	2,724	51.0
Education	7,360	100.0	7,586	100.0	6,733	100.0	6,509	100.0	6,638	100.0	6,429	100.0	6,219	100.0
Male	5,065	68.8	4,203	55.4	3,242	48.2	2,758	42.4	2,546	38.4	2,255	35.1	2,065	33.2
Female	2,295	31.2	3,383	44.6	3,491	51.8	3,751	57.6	4,092	61.6	4,174	64.9	4,154	66.8
Other fields	1,595	100.0	1,656	100.0	1,892	100.0	2,283	100.0	2,652	100.0	2,248	100.0	2,525	100.0
Male	1,348	84.5	1,215	73.4	1,288	68.1	1,470	64.4	1,670	63.0	1,307	58.1	1,296	51.3
Female	247	15.5	441	26.6	604	31.9	813	35.6	982	37.0	941	41.9	1,229	48.7

[a] Group total for 1995 excludes 171 individuals for whom sex was not reported.

[b] Group total for 2000 excludes 74 individuals for whom sex was not reported.

[c] Group total for 2005 excludes 59 individuals for whom sex was not reported.

[d] Includes mathematics and computer sciences.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 8. Number of U.S. citizen doctorate recipients, by race/ethnicity and broad field of study, for selected years, 1985–2005

Field of study and race/ethnicity	1985	1990	1995	2000	2005
All fields	23,388	24,913	27,740	27,986	26,312
Known race/ethnicity	22,873	24,540	27,444	27,431	25,916
Asian [a]	516	642	1,129	1,365	1,493
Black	911	899	1,293	1,631	1,688
Hispanic	563	723	922	1,182	1,294
American Indian [b]	96	96	148	169	139
White	20,778	22,172	23,888	22,970	20,845
Other [c]	9	8	64	114	457
Physical sciences [d]	3,021	3,369	3,591	3,222	3,074
Known race/ethnicity	2,919	3,288	3,535	3,150	3,014
Asian [a]	99	110	219	194	241
Black	29	27	49	82	84
Hispanic	41	85	84	111	116
American Indian [b]	4	4	10	16	9
White	2,745	3,062	3,167	2,740	2,508
Other [c]	1	0	6	7	56
Engineering	1,279	1,957	2,386	2,223	1,999
Known race/ethnicity	1,224	1,918	2,337	2,169	1,963
Asian [a]	90	157	254	241	242
Black	19	28	53	74	85
Hispanic	16	39	61	69	73
American Indian [b]	1	4	9	8	8
White	1,098	1,690	1,958	1,765	1,521
Other [c]	0	0	2	12	34
Life sciences	4,499	4,654	5,063	5,575	5,911
Known race/ethnicity	4,410	4,587	5,012	5,461	5,842
Asian [a]	129	156	262	391	508
Black	71	74	159	193	269
Hispanic	76	105	147	212	266
American Indian [b]	19	9	27	27	19
White	4,114	4,243	4,404	4,610	4,679
Other [c]	1	0	13	28	101
Social sciences	4,581	4,665	5,052	5,446	4,807
Known race/ethnicity	4,475	4,594	5,010	5,336	4,720
Asian [a]	62	86	165	213	198
Black	173	181	236	336	296
Hispanic	121	171	216	277	289
American Indian [b]	18	24	30	40	32
White	4,100	4,127	4,345	4,445	3,806
Other [c]	1	5	18	25	99
Humanities	2,864	3,093	3,982	4,434	3,895
Known race/ethnicity	2,799	3,047	3,929	4,336	3,822
Asian [a]	44	35	90	132	140
Black	67	72	106	157	172
Hispanic	97	112	131	188	194
American Indian [b]	8	8	19	21	22
White	2,580	2,820	3,571	3,818	3,217
Other [c]	3	0	12	20	77
Education	5,781	5,637	5,775	5,559	5,136
Known race/ethnicity	5,705	5,585	5,743	5,474	5,088
Asian [a]	69	67	84	125	112

TABLE 8. Number of U.S. citizen doctorate recipients, by race/ethnicity and broad field of study, for selected years, 1985–2005

Field of study and race/ethnicity	1985	1990	1995	2000	2005
Black	477	455	579	676	661
Hispanic	182	180	235	275	277
American Indian [b]	40	37	41	51	43
White	4,934	4,843	4,794	4,329	3,928
Other [c]	3	3	10	18	67
Other fields	1,363	1,538	1,891	1,527	1,490
Known race/ethnicity	1,341	1,521	1,878	1,505	1,467
Asian [a]	23	31	55	69	52
Black	75	62	111	113	121
Hispanic	30	31	48	50	79
American Indian [b]	6	10	12	6	6
White	1,207	1,387	1,649	1,263	1,186
Other [c]	0	0	3	4	23

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

[b] Includes Alaska Natives.

[c] Includes 67 Native Hawaiians and other Pacific Islanders and 390 respondents choosing multiple races (excluding those selecting an Hispanic ethnicity) in 2005; prior to 2001, this category included only non-Hispanic respondents choosing multiple races.

[d] Includes mathematics and computer sciences.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

Table 9. Major field of study for U.S. citizen doctorate recipients, by race/ethnicity, 2005

Field of study [a]	Total U.S. citizen doctorate recipients	Number with known race/etnicity	U.S. citizens					
			Asian [b]	Black	Hispanic	American Indian [c]	White	Other [d]
All fields	26,312	25,916	1,493	1,688	1,294	139	20,845	457
Physical sciences	3,074	3,014	241	84	116	9	2,508	56
Physics & astronomy	637	615	55	12	17	2	517	12
Chemistry	1,131	1,121	85	35	52	2	925	22
Earth, atmospheric, & marine sciences	421	415	11	6	15	4	374	5
Mathematics	480	469	38	16	23	0	387	5
Computer sciences	405	394	52	15	9	1	305	12
Engineering	1,999	1,963	242	85	73	8	1,521	34
Aerospace/Aeronautical engineering	93	89	7	2	6	1	71	2
Chemical and related engineering	294	289	33	11	15	0	223	7
Civil and related engineering	211	207	13	7	10	0	174	3
Electrical and related engineering	466	459	77	28	11	2	332	9
Industrial engineering	59	58	3	7	1	0	46	1
Mechanical and related engineering	292	287	32	8	12	4	228	3
Materials/Metallurgical engineering	177	176	15	4	10	0	145	2
Other engineering	407	398	62	18	8	1	302	7
Life sciences	5,911	5,842	508	269	266	19	4,679	101
Biological sciences	4,141	4,089	409	142	207	12	3,248	71
Health sciences	1,206	1,194	84	114	41	4	929	22
Agricultural sciences/natural resources	564	559	15	13	18	3	502	8
Social sciences	4,807	4,720	198	296	289	32	3,806	99
Psychology	2,811	2,762	110	159	178	15	2,243	57
Anthropology	345	338	15	21	17	3	273	9
Economics	294	289	24	7	15	1	238	4
Political science/international relations	502	495	18	34	26	3	404	10
Sociology	391	387	14	38	32	4	289	10
Other social sciences	464	449	17	37	21	6	359	9
Humanities	3,895	3,822	140	172	194	22	3,217	77
History	762	747	22	41	32	6	633	13
American literature	372	369	15	34	18	6	277	19
English language & literature	448	437	17	17	9	0	383	11
Foreign language & literature	336	327	12	7	60	0	243	5
Other humanities	1,977	1,942	74	73	75	10	1,681	29
Education	5,136	5,088	112	661	277	43	3,928	67
Education administration	1,926	1,912	28	312	101	18	1,430	23
Education research	2,206	2,191	56	243	120	17	1,722	33
Teacher education	206	204	4	26	7	4	160	3
Teaching fields	495	487	12	29	26	1	414	5
Other education	303	294	12	51	23	3	202	3
Other fields	1,490	1,467	52	121	79	6	1,186	23
Business & management	578	569	25	51	30	1	456	6
Communications	314	311	12	18	16	0	260	5
Fields not elsewhere classified	598	587	15	52	33	5	470	12

[a] Major field of study definitions are detailed in appendix C in the section on "Derived Variables."

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

[c] Includes Alaska Natives.

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 10. Doctorate-granting institutions having the largest number of U.S. citizen minority doctorate recipients, by race/ethnicity, 2001-2005

Institution	Number of doctorate recipients
Asian [a]	
U. CA, Los Angeles	379
U. CA, Berkeley	376
Stanford U.	255
Harvard U.	215
MA Institute of Technology	172
U. Southern CA	167
U. MI	145
Columbia U.	144
U. PA	135
U. CA, Davis	133
Johns Hopkins U.	116
U. IL-Urbana-Champaign	116
U. CA, San Diego	115
U. WA	112
U. CA, Irvine	105
U. TX-Austin	91
NY U.	89
Northwestern U.	88
U. WI-Madison	83
Cornell U.	79
Top 20 Institutions	*3,115*
Total institutions reported (334)	*7,091*
Hispanic	
U. PR-Rio Piedras	193
U. CA, Berkeley	179
U. TX-Austin	155
U. CA, Los Angeles	148
U. AZ	115
Nova Southeastern U.	109
Stanford U.	109
TX A&M U.	109
Harvard U.	106
U. Southern CA	101
U. MI	97
AZ State U.	93
U. CA, Davis	84
U. FL	84
U. WI-Madison	84
U. NM	83
Graduate School & U. Ctr., CUNY	82
U. CA, San Diego	80
U. IL-Urbana-Champaign	74
U. CA, Santa Barbara	70
Top 20 Institutions	*2,155*
Total institutions reported (331)	*6,111*

Institution	Number of doctorate recipients
Black	
Nova Southeastern U.	396
Howard U.	278
U. MI	141
U. MD	120
Walden U.	120
U. NC Chapel Hill	119
Loyola U. Chicago	115
OH State U., The	107
Temple U.	106
U. Sarasota	105
Wayne State U.	103
U. TX-Austin	97
Jackson State U.	95
Harvard U.	94
George Washington U.	93
NC State U.	93
U. PA	91
Teachers C., Columbia U.	89
MI State U.	88
U. CA, Berkeley	87
Top 20 Institutions	*2,537*
Total institutions reported (350)	*8,553*
American Indian [b]	
OK State U.	32
U. OK	19
AZ State U.	16
Nova Southeastern U.	15
U. NM	14
Fielding Graduate Institute	13
U. CA, Berkeley	13
U. ND	12
U. TX-Austin	12
U. AZ	11
Stanford U.	10
TX A&M U.	10
U. CA, Santa Barbara	10
U. KS	10
U. MI	9
U. FL	8
U. MO-Columbia	8
U. North TX	8
U. Southern CA	8
U. WI-Madison	8
Top 20 Institutions	*246*
Total institutions reported (204)	*696*

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

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

[b] Includes Alaska Natives.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

Table 11. Citizenship status of doctorate recipients, by broad field of study for selected years, 1975-2005

Field/citizenship	1975	1980	1985	1990	1995	2000	2005
All fields							
Total	32,952	31,019	31,295	36,065	41,747	41,361	43,354
U.S. citizen	27,162	25,239	23,388	24,913	27,740	27,986	26,312
Non-U.S., permanent resident	1,708	1,289	1,319	1,695	4,317	1,950	1,600
Non-U.S., temporary visa holder	3,559	3,677	5,247	8,138	8,831	9,660	12,824
Unknown	523	814	1,341	1,319	859	1,765	2,618
Physical sciences [a]							
Total	4,780	4,071	4,489	5,809	6,727	5,982	6,699
U.S. citizen	3,602	3,039	3,021	3,369	3,591	3,222	3,074
Non-U.S., permanent resident	344	249	229	291	1,163	356	282
Non-U.S., temporary visa holder	746	691	1,063	1,939	1,840	2,136	2,984
Unknown	88	92	176	210	133	268	359
Engineering							
Total	3,002	2,479	3,166	4,894	6,008	5,323	6,404
U.S. citizen	1,719	1,256	1,279	1,957	2,386	2,223	1,999
Non-U.S., permanent resident	418	298	315	389	956	350	285
Non-U.S., temporary visa holder	819	857	1,423	2,286	2,527	2,451	3,754
Unknown	46	68	149	262	139	299	366
Life sciences							
Total	5,103	5,501	5,822	6,655	7,998	8,624	9,306
U.S. citizen	3,996	4,454	4,499	4,654	5,063	5,575	5,911
Non-U.S., permanent resident	316	232	193	287	1,066	508	367
Non-U.S., temporary visa holder	700	722	933	1,539	1,741	2,212	2,550
Unknown	91	93	197	175	128	329	478
Social sciences							
Total	6,066	5,855	5,764	6,092	6,635	7,109	6,837
U.S. citizen	5,202	4,996	4,581	4,665	5,052	5,446	4,807
Non-U.S., permanent resident	212	195	209	245	400	250	227
Non-U.S., temporary visa holder	547	488	668	920	1,027	1,043	1,377
Unknown	105	176	306	262	156	370	426
Humanities							
Total	5,046	3,871	3,429	3,822	5,062	5,634	5,349
U.S. citizen	4,507	3,396	2,864	3,093	3,982	4,434	3,895
Non-U.S., permanent resident	221	136	149	196	336	251	241
Non-U.S., temporary visa holder	231	210	265	426	649	743	878
Unknown	87	129	151	107	95	206	335
Education							
Total	7,360	7,586	6,733	6,509	6,648	6,432	6,229
U.S. citizen	6,817	6,752	5,781	5,637	5,775	5,559	5,136
Non-U.S., permanent resident	117	112	128	152	218	126	109
Non-U.S., temporary visa holder	352	514	577	506	506	539	536
Unknown	74	208	247	214	149	208	448
Other fields							
Total	1,595	1,656	1,892	2,284	2,669	2,257	2,530
U.S. citizen	1,319	1,346	1,363	1,538	1,891	1,527	1,490
Non-U.S., permanent resident	80	67	96	135	178	109	89
Non-U.S., temporary visa holder	164	195	318	522	541	536	745
Unknown	32	48	115	89	59	85	206

[a] Includes mathematics and computer sciences

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 12. Top 30 countries of origin of non-U.S. citizens earning doctorates at U.S. colleges and universities (ranked by number of doctorate recipients), 2005

Rank	Country/ economy	Number of doctorate recipients
1	China, People's Republic of [a]	3,827
2	South Korea	1,530
3	India	1,274
4	China, Republic of (Taiwan)	726
5	Canada	556
6	Turkey	419
7	Thailand	328
8	Japan	310
9	Russia	255
10	Mexico	254
11	Germany	249
12	Romania	211
13	Brazil	206
14	Italy	182
15	Great Britain, UK	168
16	Egypt	164
17	France	150
18	Iran	141
19	Colombia	137
20	Spain	121
21	Saudi Arabia	111
22	Israel	109
23	Greece	107
24	Argentina	106
25	Jordan	98
26	Bulgaria	92
27	Kenya	79
28	Singapore	78
29	Bangladesh	77
30	Australia	76
	Top 30 countries of origin	*12,141*
	*Total non-U.S. citizens (165 countries)**	*14,225*

[a] Includes Hong Kong.

* Excludes cases with unknown country of origin.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 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), 2005

Institution	Number of doctorate recipients	Institution	Number of doctorate recipients
U. IL-Urbana-Champaign	303	U. MN	237
Purdue U.	279	U. TX-Austin	233
OH State U., The	278	U. CA, Berkeley	227
TX A&M U.	275	Cornell U.	218
PA State U., The	259	U. WI-Madison	215
U. CA, Los Angeles	256	GA Institute of Technology	208
U. FL	245	U. MD	208
MA Institute of Technology	243	U. Southern CA	202
Stanford U.	242	Columbia U.	194
U. MI	237	MI State U.	168
		Top 20 institutions	*4,727*
		Total institutions reported (415)	*14,424*

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

Table 14. Parental education attainment of doctorate recipients, by selected demographic characteristics, 2005

Demographic characteristics	Total percent	Parental education: High school or less	Parental education: Some college [a]	Parental education: Baccalaureate degree	Parental education: Advanced degree	Total number
Total						
Father's education [b]	100.0	28.2	13.2	24.7	33.9	38,445
Mother's education [c]	100.0	36.1	17.4	25.2	21.3	38,517
Sex						
Male						
Father's education	100.0	29.4	12.1	25.3	33.2	21,066
Mother's education	100.0	38.5	16.1	24.9	20.5	21,069
Female						
Father's education	100.0	26.8	14.5	24.0	34.7	17,377
Mother's education	100.0	33.3	18.9	25.7	22.2	17,446
Race/ethnicity (U.S. citizens only)						
Asian [d]						
Father's education	100.0	17.8	9.5	25.0	47.8	1,430
Mother's education	100.0	29.3	12.0	31.4	27.3	1,429
Black						
Father's education	100.0	49.1	18.6	11.7	20.5	1,486
Mother's education	100.0	41.5	20.9	16.3	21.3	1,523
Hispanic						
Father's education	100.0	39.4	15.4	16.8	28.3	1,211
Mother's education	100.0	45.5	18.6	18.6	17.3	1,220
American Indian [e]						
Father's education	100.0	45.4	20.0	13.8	20.8	130
Mother's education	100.0	50.0	25.0	14.4	10.6	132
White						
Father's education	100.0	23.8	14.8	21.8	39.7	19,908
Mother's education	100.0	28.1	20.5	25.9	25.5	19,971
Citizenship						
U.S. Citizen						
Father's education	100.0	25.8	14.8	21.0	38.4	24,895
Mother's education	100.0	29.9	20.0	25.1	25.0	25,010
Non-U.S. citizen, permanent visa						
Father's education	100.0	30.8	9.7	28.0	31.5	1,492
Mother's education	100.0	43.7	12.6	26.0	17.7	1,486
Non-U.S. citizen, temporary visa						
Father's education	100.0	33.1	10.3	31.9	24.8	12,032
Mother's education	100.0	48.1	12.6	25.3	14.0	11,994
Broad field of study						
Physical sciences [f]						
Father's education	100.0	25.9	12.1	28.3	33.7	6,018
Mother's education	100.0	35.1	16.1	26.5	22.4	6,021
Engineering						
Father's education	100.0	27.3	11.4	32.1	29.2	5,720
Mother's education	100.0	39.9	14.9	28.0	17.1	5,715
Life sciences						
Father's education	100.0	25.2	13.7	24.7	36.3	8,382
Mother's education	100.0	32.4	17.7	27.5	22.4	8,396
Social sciences						
Father's education	100.0	25.1	13.8	22.6	38.5	6,026
Mother's education	100.0	31.5	18.2	25.1	25.2	6,039
Humanities						
Father's education	100.0	24.7	10.8	22.1	42.4	4,728
Mother's education	100.0	29.9	17.0	25.5	27.5	4,742

Table 14. Parental education attainment of doctorate recipients, by selected demographic characteristics, 2005

Demographic characteristics	Total percent	Parental education				Total number
		High school or less	Some college [a]	Baccalaureate degree	Advanced degree	
Education						
Father's education	100.0	41.7	16.8	17.7	23.8	5,398
Mother's education	100.0	47.1	20.4	17.8	14.7	5,429
Other fields						
Father's education	100.0	32.0	12.9	24.3	30.8	2,173
Mother's education	100.0	42.2	16.9	24.0	16.9	2,175

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

[b] Total count excludes 287 (0.7%) cases who reported 'not applicable' for father's education.

[c] Total count exlcudes 253 (0.7%) cases who reported 'not applicable' for mothers education.

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

[e] Includes Alaska Natives.

[f] Includes mathematics and computer sciences.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 15. Highest parental education for selected years, 1975-2005

Year	High school or less	Some college [a]	Earned baccalaureate	Advanced degree
1975	44.2	16.1	20.7	18.9
1980	40.8	16.0	21.7	21.5
1985	37.9	14.7	22.6	24.8
1990	32.9	15.2	20.9	31.0
1995	28.7	15.1	21.6	34.7
2000	25.2	13.3	22.4	39.2
2005 [b]	22.2	13.5	24.7	39.2

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

[b] In 2005 0.5 percent (n=175) doctorate recipients chose 'Not Applicable' for both father's and mother's education.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 16. Median number of years from baccalaureate to doctorate award, by broad field of study for selected years, 1980–2005

Field of study and time to degree	1980	1985	1990	1995	2000	2005
All fields						
Since baccalaureate	9.3	10.3	10.6	10.8	10.3	9.9
Since starting graduate school	7.7	8.7	8.7	8.7	8.5	8.2
Physical sciences [a]						
Since baccalaureate	7.0	7.3	7.7	8.4	7.9	7.8
Since starting graduate school	6.0	6.2	6.7	7.2	6.7	6.7
Engineering						
Since baccalaureate	7.7	8.2	8.3	9.2	8.7	8.2
Since starting graduate school	6.4	6.7	6.7	7.3	7.2	7.2
Life sciences						
Since baccalaureate	7.5	8.5	9.2	9.5	9.0	8.7
Since starting graduate school	6.3	7.2	7.7	7.7	7.7	7.1
Social sciences						
Since baccalaureate	8.7	10.0	10.6	10.5	9.8	9.9
Since starting graduate school	7.3	8.7	8.9	8.7	7.9	8.0
Humanities						
Since baccalaureate	10.7	11.9	12.2	12.0	11.4	11.8
Since starting graduate school	9.7	10.2	10.3	9.9	9.7	9.7
Education						
Since baccalaureate	13.2	15.2	18.0	19.9	19.4	17.3
Since starting graduate school	10.7	12.7	14.7	15.7	14.2	13.0
Other fields						
Since baccalaureate	11.1	13.0	13.3	13.5	14.0	13.3
Since starting graduate school	9.4	10.7	10.7	10.7	10.7	10.6

[a] Includes mathematics and computer sciences.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 17. Median number of years from baccalaureate to doctorate award, by selected demographic group and broad field of study, 2005

Time to degree and demographic characteristics	All fields		Physical sciences [a]		Engineering		Life sciences		Social sciences		Humanities		Education		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	9.9	38,223	7.8	5,881	8.2	5,665	8.7	8,275	9.9	6,090	11.8	4,735	17.3	5,410	13.3	2,167
Sex																
Male	9.4	20,928	7.8	4,327	8.3	4,616	8.6	4,059	10.0	2,689	11.7	2,337	17.0	1,798	13.0	1,102
Female	10.5	17,291	7.5	1,554	8.0	1,047	8.7	4,215	9.6	3,401	11.8	2,397	17.8	3,612	13.5	1,065
Citizenship																
U.S. citizen	10.4	25,179	7.0	2,955	7.6	1,945	8.2	5,669	10.0	4,611	12.0	3,746	18.2	4,836	15.3	1,417
Non-U.S., permanent resident	10.5	1,442	9.4	254	9.9	262	10.0	324	10.6	205	11.4	221	14.2	95	12.1	81
Non-U.S., temporary visa holder	9.1	11,533	8.4	2,664	8.4	3,442	9.4	2,271	9.5	1,255	10.7	762	12.5	473	10.8	666
Race/ethnicity (U.S. citizens only)																
Asian [b]	8.8	1,401	7.5	219	7.6	227	8.0	480	9.2	190	11.1	132	16.6	104	12.3	49
Black	12.7	1,570	8.0	79	8.3	81	8.6	255	10.9	281	13.0	164	17.6	599	15.5	111
Hispanic	10.3	1,213	7.4	110	7.4	71	7.8	249	9.7	270	11.3	179	15.8	256	13.7	78
American Indian [c]	12.0	134	8.4	9	8.9	8	9.0	19	11.9	29	11.3	21	20.2	42	20.8	6
White	10.4	20,111	7.0	2,437	7.4	1,496	8.3	4,515	10.0	3,683	12.0	3,110	18.6	3,737	15.6	1,133
Years in graduate school																
All doctorate recipients	8.2	38,669	6.7	6,048	7.2	5,743	7.1	8,359	8.0	6,080	9.7	4,771	13.0	5,462	10.6	2,206
Sex																
Male	7.8	21,223	6.9	4,454	7.2	4,681	7.0	4,080	8.2	2,706	9.7	2,358	12.7	1,817	10.2	1,127
Female	8.7	17,442	6.5	1,594	7.2	1,061	7.1	4,277	7.9	3,374	9.7	2,412	13.2	3,645	10.7	1,079
Citizenship																
U.S. citizen	8.4	25,163	6.2	2,970	6.7	1,939	6.7	5,655	8.0	4,559	10.0	3,746	13.7	4,863	12.0	1,431
Non-U.S., permanent resident	8.7	1,488	7.8	266	8.2	265	8.0	333	9.2	214	9.7	226	10.7	101	9.4	83
Non-U.S., temporary visa holder	7.7	11,998	7.3	2,809	7.4	3,538	7.7	2,369	8.0	1,297	9.0	797	9.2	496	8.7	692
Race/ethnicity (U.S. citizens only)																
Asian [b]	7.3	1,418	6.7	233	6.7	230	6.7	481	8.0	188	9.7	130	12.6	106	11.0	50
Black	10.5	1,560	7.3	78	7.6	80	7.3	254	9.1	281	10.7	162	13.3	590	12.7	115
Hispanic	8.7	1,223	6.5	107	7.0	73	6.8	250	8.2	269	9.7	183	12.5	264	10.5	77
American Indian [c]	10.0	134	7.2	9	8.7	7	7.7	18	9.4	32	9.9	22	14.7	40	16.5	6
White	8.3	20,088	6.2	2,440	6.7	1,484	6.7	4,508	8.0	3,640	10.0	3,114	14.0	3,761	12.2	1,141

[a] Includes mathematics and computer sciences.

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

[c] Includes Alaska Natives.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 18. Median age and number of doctorate recipients at different age levels, by field of study and demographic characteristics, 2005

Field of study and demographic characteristics	Median age at doctorate	Age grouping					
		21–25	26–30	31–35	36–40	41–45	Over 45
All fields	33.0	306	13,959	12,493	5,670	2,960	5,101
Broad field of study							
Physical sciences [a]	30.4	112	3,388	1,880	538	215	170
Engineering	31.1	92	2,829	2,028	654	213	175
Life sciences	31.5	42	3,914	2,768	941	494	616
Social sciences	33.1	30	2,121	2,148	972	461	669
Humanities	35.2	16	925	1,828	1,089	481	648
Education	42.5	10	436	1,142	1,027	824	2,293
Other fields	36.9	4	346	699	449	272	530
Sex							
Male	32.6	177	8,039	7,334	3,220	1,531	1,900
Female	33.6	129	5,918	5,157	2,450	1,428	3,201
Citizenship							
U.S. citizen	33.8	182	8,747	6,756	3,534	2,245	4,671
Permanent resident	34.1	----	365	624	321	152	100
Temporary visa holder	32.0	118	4,773	5,065	1,787	554	322
Race/ethnicity (U.S. citizens only)							
Asian [b]	31.3	14	665	438	157	93	107
Black	36.7	11	369	394	255	175	469
Hispanic	34.3	6	388	356	211	133	194
American Indian [c]	39.1	----	29	28	16	22	44
White	33.7	145	7,024	5,305	2,785	1,762	3,731

---- = Cell value suppressed to protect confidentiality of doctorate recipients.

[a] Includes mathematics and computer sciences.

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

[c] Includes Alaska Natives.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 19. Percentage of doctorate recipients indicating one or more disabilities, by selected demographic characteristics, 2005

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
Total	622	1.4	60	0.1	216	0.5	85	0.2	170	0.4	17	0.0	130	0.3
Field of study														
Physical sciences[a]	57	0.9	8	0.1	15	0.2	8	0.1	19	0.3	----	----	----	----
Engineering	35	0.5	----	----	11	0.2	----	----	9	0.1	----	----	----	----
Life sciences	107	1.1	8	0.1	33	0.4	14	0.2	35	0.4	7	0.1	14	0.2
Social sciences	130	1.9	12	0.2	48	0.7	17	0.2	38	0.6	----	----	27	0.4
Humanities	98	1.8	10	0.2	33	0.6	13	0.2	21	0.4	0	0.0	31	0.6
Education	157	2.5	12	0.2	58	0.9	25	0.4	42	0.7	----	----	38	0.6
Other fields	38	1.5	----	----	18	0.7	----	----	----	----	0	0.0	9	0.4
Sex														
Male	290	1.2	31	0.1	97	0.4	44	0.2	85	0.4	12	0.1	48	0.2
Female	332	1.7	29	0.1	119	0.6	41	0.2	85	0.4	5	0.0	82	0.4
Citizenship														
U.S. citizens	567	2.2	53	0.2	194	0.7	77	0.3	166	0.6	12	0.0	121	0.5
Non-U.S. citizens	55	0.4	7	0.0	22	0.2	8	0.1	----	----	5	0.0	9	0.1

---- = Cell value suppressed to protect confidentiality of doctorate recipients.

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

[a] Includes mathematics and computer sciences.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 20. Primary source of financial support for doctorate recipients, by broad field of study and demographic group, 2005[a]

Primary source of support and broad field of study	Total[b]	Sex		Citizenship			U.S citizens				
		Male	Female	U.S. citizen	Permanent resident	Temporary visa holder	Asian[c]	Black	Hispanic	American Indian[d]	White
All fields	38,531	21,164	17,361	24,900	1,488	11,987	1,433	1,524	1,206	131	19,862
Teaching assistantships	17.1	17.7	16.3	15.3	21.9	20.3	11.2	7.5	12.8	13.7	16.2
Research assistantships/traineeships	26.9	32.7	19.9	16.9	31.3	47.2	24.4	7.3	11.3	8.4	17.5
Fellowships/dissertation grants	27.5	26.7	28.6	30.7	26.3	21.1	43.5	37.2	39.0	33.6	28.6
Own resources	22.7	16.9	29.8	31.4	16.1	5.5	17.2	41.5	32.7	37.4	31.7
Foreign government	1.7	2.0	1.3	0.0	----	5.2	----	0.0	----	----	0.0
Employer	3.8	3.8	3.9	5.4	2.6	0.7	3.6	6.0	----	6.1	5.7
Other	0.2	0.2	0.2	0.2	----	0.0	----	0.5	----	----	0.2
Physical sciences[e]	6,068	4,476	1,591	2,964	260	2,818	231	79	106	9	2,436
Teaching assistantships	25.6	25.7	25.5	20.5	31.2	30.6	19.9	16.5	23.6	----	20.6
Research assistantships/traineeships	44.5	45.6	41.5	38.0	41.9	51.5	42.0	16.5	17.9	----	39.1
Fellowships/dissertation grants	22.5	21.3	25.6	30.6	18.8	14.3	27.7	48.1	49.1	----	29.6
Own resources	4.3	4.2	4.7	7.2	5.4	1.1	5.6	12.7	----	0.0	7.3
Foreign government	1.2	1.2	1.1	----	----	2.3	----	0.0	0.0	0.0	0.0
Employer	1.9	2.1	1.4	3.6	----	----	4.3	----	----	----	3.4
Other	0.0	0.0	0.0	----	0.0	----	----	----	0.0	0.0	0.0
Engineering	5,743	4,674	1,067	1,921	267	3,531	233	80	70	6	1,468
Teaching assistantships	7.4	7.6	6.8	4.6	8.6	8.9	5.2	6.3	----	----	4.4
Research assistantships/traineeships	60.1	60.9	56.8	37.7	62.5	72.2	48.1	11.3	30.0	0.0	38.2
Fellowships/dissertation grants	20.4	18.8	27.6	37.5	14.2	11.6	32.6	62.5	51.4	----	36.0
Own resources	5.6	6.0	3.8	10.3	7.5	2.8	6.9	8.8	8.6	----	11.0
Foreign government	2.5	----	2.6	----	----	3.9	0.0	0.0	0.0	0.0	----
Employer	3.9	4.3	2.2	9.7	6.4	0.6	7.3	11.3	----	----	10.2
Other	0.1	----	0.0	----	----	0.0	0.0	0.0	0.0	0.0	----
Life sciences	8,406	4,115	4,289	5,655	345	2,375	495	252	255	19	4,486
Teaching assistantships	9.1	9.7	8.6	8.5	9.9	10.7	4.8	4.0	5.9	----	9.2
Research assistantships/traineeships	28.6	31.2	26.1	20.8	32.8	46.7	17.6	9.9	16.9	----	22.0
Fellowships/dissertation grants	46.5	46.4	46.6	52.8	43.5	32.1	65.9	61.1	66.3	52.6	50.0
Own resources	10.8	7.9	13.7	14.1	11.0	3.1	9.9	21.4	10.2	----	14.4
Foreign government	1.9	2.1	----	0.0	----	6.6	0.0	----	0.0	0.0	----
Employer	2.9	2.6	3.2	3.8	2.3	0.9	1.8	3.2	----	----	4.3
Other	0.1	0.0	----	0.1	----	0.0	0.0	----	----	0.0	----
Social sciences	6,026	2,684	3,342	4,496	211	1,293	183	270	266	30	3,600
Teaching assistantships	22.5	25.3	20.2	19.2	25.6	33.3	16.4	10.0	12.0	----	20.4
Research assistantships/traineeships	15.5	14.5	16.2	14.4	15.6	18.6	18.0	9.6	10.5	----	14.9
Fellowships/dissertation grants	26.9	27.5	26.5	25.6	28.9	31.1	36.1	41.1	37.6	46.7	22.8
Own resources	31.2	27.7	34.1	38.1	25.6	8.7	29.0	34.8	37.6	30.0	39.2
Foreign government	1.8	2.8	1.1	0.0	3.3	8.0	0.0	----	----	0.0	0.0

TABLE 20. Primary source of financial support for doctorate recipients, by broad field of study and demographic group, 2005[a]

Primary source of support and broad field of study	Total[b]	Sex		Citizenship			U.S citizens				
		Male	Female	U.S. citizen	Permanent resident	Temporary visa holder	Asian[c]	Black	Hispanic	American Indian[d]	White
Employer	1.8	1.9	1.7	2.3	----	0.5	----	3.7	----	0.0	2.4
Other	0.2	0.3	0.2	0.3	----	0.0	----	----	----	0.0	0.2
Humanities	4,742	2,328	2,413	3,703	223	798	133	157	181	22	3,076
Teaching assistantships	34.3	35.2	33.4	33.0	44.8	37.5	27.8	19.1	34.3	27.3	33.9
Research assistantships/traineeships	2.1	1.7	2.4	1.8	2.7	3.0	----	----	----	0.0	1.9
Fellowships/dissertation grants	31.9	31.9	32.0	30.9	27.8	38.2	43.6	45.2	33.7	27.3	29.1
Own resources	28.6	27.6	29.5	32.2	20.6	13.7	26.3	30.6	27.6	45.5	33.0
Foreign government	1.3	1.5	----	0.0	3.1	7.0	0.0	0.0	0.0	0.0	0.0
Employer	1.5	1.7	1.3	1.8	----	----	----	3.2	3.3	0.0	1.7
Other	0.3	0.5	----	0.3	----	----	0.0	----	----	0.0	0.4
Education	5,385	1,778	3,607	4,773	98	491	108	572	257	39	3,691
Teaching assistantships	7.2	6.6	7.5	6.1	16.3	16.3	----	2.8	2.3	7.7	6.9
Research assistantships/traineeships	9.2	9.6	9.0	7.2	22.4	25.1	11.1	5.1	7.0	----	7.5
Fellowships/dissertation grants	10.7	9.6	11.3	10.2	9.2	16.7	15.7	18.7	15.2	15.4	8.2
Own resources	60.3	58.5	61.1	64.2	42.9	26.7	58.3	64.3	66.5	59.0	64.4
Foreign government	1.3	2.4	0.8	0.0	----	13.2	----	----	----	0.0	0.0
Employer	10.8	13.0	9.8	11.9	5.1	2.0	11.1	8.6	8.6	12.8	12.7
Other	0.4	0.3	0.5	0.5	----	0.0	0.0	----	----	----	0.4
Other fields	2,161	1,109	1,052	1,388	84	681	50	114	71	6	1,105
Teaching assistantships	21.3	20.9	21.7	17.8	21.4	28.2	16.0	11.4	16.9	0.0	18.6
Research assistantships/traineeships	13.5	14.2	12.8	8.4	19.0	23.1	12.0	5.3	7.0	0.0	8.9
Fellowships/dissertation grants	20.9	22.7	19.0	18.7	26.2	25.0	34.0	31.6	18.3	----	16.3
Own resources	36.2	32.9	39.6	46.7	31.0	15.6	36.0	45.6	52.1	----	46.8
Foreign government	2.0	----	----	----	----	6.0	0.0	----	0.0	0.0	----
Employer	5.9	6.6	5.1	8.1	0.0	----	----	5.3	----	0.0	9.1
Other	0.2	----	----	----	----	----	----	----	----	0.0	----

---- = Cell value suppressed to protect confidentiality of doctorate recipients.

[a] Includes only doctorate recipients who reported a primary source of support.

[b] Total includes 6 doctoral recipients for whom sex and source of support are not reported, 156 missing citizenship information, and 744 U.S. citizens with missing race/ethnicity (n=102) or racial/ ethnic identifications other than those listed here (n=642).

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

[d] Includes Alaska Natives.

[e] Includes mathematics and computer sciences.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 21. Education-related debt of doctorate recipients, by broad field of study, 2005

Debt level	Total		Physical sciences [a]		Engineering		Life sciences		Social sciences		Humanities		Education		Other fields	
Cumulative debt																
Mean[b]	$15,181		$9,641		$9,053		$13,742		$22,627		$20,127		$16,766		$16,842	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	19,924	51.4	3,783	62.2	3,816	66.4	4,328	51.3	2,338	38.5	1,843	38.6	2,708	49.7	1,108	50.8
$10,000 or less	4,423	11.4	729	12.0	629	10.9	1,012	12.0	628	10.3	592	12.4	615	11.3	218	10.0
$10,001-$20,000	3,544	9.1	534	8.8	383	6.7	944	11.2	576	9.5	560	11.7	400	7.3	147	6.7
$20,001-$30,000	2,660	6.9	334	5.5	267	4.6	635	7.5	480	7.9	403	8.4	365	6.7	176	8.1
$30,001-$40,000	1,888	4.9	207	3.4	155	2.7	447	5.3	380	6.3	306	6.4	285	5.2	108	4.9
$40,001-$50,000	1,585	4.1	151	2.5	130	2.3	320	3.8	354	5.8	269	5.6	267	4.9	94	4.3
$50,001 and up	4,718	12.2	346	5.7	365	6.4	753	8.9	1,314	21.6	800	16.8	809	14.8	331	15.2
Total	38,742	100.0	6,084	100.0	5,745	100.0	8,439	100.0	6,070	100.0	4,773	100.0	5,449	100.0	2,182	100.0
Graduate debt																
Mean[b]	$10,105		$5,106		$5,581		$7,696		$16,605		$14,178		$12,432		$12,479	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	25,989	67.1	4,801	78.9	4,478	78.0	6,070	71.9	3,246	53.5	2,641	55.3	3,391	62.2	1,362	62.4
$10,000 or less	2,931	7.6	438	7.2	433	7.5	629	7.5	440	7.3	433	9.1	406	7.5	152	7.0
$10,001-$20,000	1,916	4.9	227	3.7	200	3.5	415	4.9	375	6.2	336	7.0	254	4.7	109	5.0
$20,001-$30,000	1,665	4.3	179	2.9	159	2.8	347	4.1	294	4.8	286	6.0	278	5.1	122	5.6
$30,001-$40,000	1,292	3.3	119	2.0	115	2.0	255	3.0	292	4.8	207	4.3	230	4.2	74	3.4
$40,001-$50,000	1,080	2.8	77	1.3	85	1.5	179	2.1	279	4.6	178	3.7	205	3.8	77	3.5
$50,001 and up	3,866	10.0	243	4.0	274	4.8	544	6.4	1,142	18.8	692	14.5	685	12.6	286	13.1
Total	38,739	100.0	6,084	100.0	5,744	100.0	8,439	100.0	6,068	100.0	4,773	100.0	5,449	100.0	2,182	100.0
Undergraduate debt																
Mean[b]	$5,077		$4,535		$3,473		$6,046		$6,027		$5,949		$4,335		$4,363	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	28,129	72.6	4,494	73.9	4,627	80.5	5,688	67.4	4,155	68.5	3,216	67.4	4,243	77.9	1,706	78.2
$10,000 or less	3,542	9.1	564	9.3	416	7.2	830	9.8	615	10.1	543	11.4	422	7.7	152	7.0
$10,001-$20,000	3,120	8.1	498	8.2	304	5.3	908	10.8	538	8.9	460	9.6	290	5.3	122	5.6
$20,001-$30,000	1,951	5.0	280	4.6	207	3.6	517	6.1	379	6.2	259	5.4	220	4.0	89	4.1
$30,001-$40,000	1,043	2.7	136	2.2	95	1.7	275	3.3	197	3.2	156	3.3	125	2.3	59	2.7
$40,001-$50,000	574	1.5	62	1.0	47	0.8	145	1.7	116	1.9	80	1.7	91	1.7	33	1.5
$50,001 and up	383	1.0	50	0.8	49	0.9	76	0.9	70	1.2	59	1.2	58	1.1	21	1.0
Total	38,742	100.0	6,084	100.0	5,745	100.0	8,439	100.0	6,070	100.0	4,773	100.0	5,449	100.0	2,182	100.0

[a] Includes mathematics and computer sciences.

[b] 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, 2005 Survey of Earned Doctorates.

TABLE 22. Education-related debt of doctorate recipients, by demographic group, 2005

Debt level	Sex				Citizenship						Race/ethnicity (U.S. citizens)									
	Male		Female		U.S. citizen		Permanent resident		Temporary visa holder		Asian [a]		Black		Hispanic		American Indian [b]		White	
Cumulative debt																				
Mean [c]	$14,138		$16,452		$19,027		$9,428		$7,910		$13,939		$29,295		$24,819		$26,023		$18,141	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	11,337	53.3	8,584	49.1	10,340	41.3	1,005	66.5	8,513	70.6	680	47.5	403	26.2	350	28.8	45	34.1	8,581	43.0
$10,000 or less	2,511	11.8	1,912	10.9	2,922	11.7	148	9.8	1,336	11.1	209	14.6	171	11.1	157	12.9	20	15.2	2,271	11.4
$10,001-$20,000	1,912	9.0	1,631	9.3	2,838	11.3	87	5.8	598	5.0	183	12.8	148	9.6	154	12.7	8	6.1	2,262	11.3
$20,001-$30,000	1,402	6.6	1,258	7.2	2,174	8.7	89	5.9	385	3.2	98	6.8	132	8.6	118	9.7	8	6.1	1,757	8.8
$30,001-$40,000	994	4.7	894	5.1	1,572	6.3	49	3.2	261	2.2	80	5.6	116	7.5	92	7.6	5	3.8	1,227	6.1
$40,001-$50,000	819	3.9	766	4.4	1,325	5.3	32	2.1	223	1.8	55	3.8	115	7.5	80	6.6	8	6.1	1,025	5.1
$50,001 and up	2,287	10.8	2,430	13.9	3,851	15.4	102	6.7	744	6.2	128	8.9	454	29.5	264	21.7	38	28.8	2,837	14.2
Total	21,262	100.0	17,475	100.0	25,022	100.0	1,512	100.0	12,060	100.0	1,433	100.0	1,539	100.0	1,215	100.0	132	100.0	19,960	100.0
Graduate debt																				
Mean [c]	$9,083		$11,348		$12,447		$6,468		$5,673		$7,844		$20,903		$16,593		$18,295		$11,804	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	14,673	69.0	11,313	64.7	15,489	61.9	1,142	75.5	9,269	76.9	1,037	72.4	675	43.9	639	52.6	69	52.3	12,618	63.2
$10,000 or less	1,672	7.9	1,259	7.2	1,807	7.2	95	6.3	1,018	8.4	100	7.0	122	7.9	84	6.9	10	7.6	1,441	7.2
$10,001-$20,000	1,007	4.7	908	5.2	1,385	5.5	65	4.3	453	3.8	73	5.1	96	6.2	83	6.8	7	5.3	1,088	5.5
$20,001-$30,000	893	4.2	772	4.4	1,272	5.1	74	4.9	313	2.6	50	3.5	89	5.8	81	6.7	----	----	1,008	5.1
$30,001-$40,000	659	3.1	633	3.6	1,009	4.0	40	2.6	239	2.0	40	2.8	91	5.9	56	4.6	----	----	782	3.9
$40,001-$50,000	533	2.5	547	3.1	864	3.5	20	1.3	190	1.6	32	2.2	92	6.0	45	3.7	5	3.8	667	3.3
$50,001 and up	1,823	8.6	2,042	11.7	3,193	12.8	76	5.0	578	4.8	101	7.0	374	24.3	227	18.7	32	24.2	2,354	11.8
Total	21,260	100.0	17,474	100.0	25,019	100.0	1,512	100.0	12,060	100.0	1,433	100.0	1,539	100.0	1,215	100.0	132	100.0	19,958	100.0
Undergraduate debt																				
Mean [c]	$5,055		$5,104		$6,581		$2,960		$2,238		$6,096		$8,392		$8,226		$7,727		$6,338	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	15,440	72.6	12,684	72.6	16,262	65.0	1,279	84.6	10,475	86.9	924	64.5	912	59.3	676	55.6	82	62.1	13,220	66.2
$10,000 or less	1,960	9.2	1,582	9.1	2,721	10.9	87	5.8	721	6.0	179	12.5	192	12.5	180	14.8	19	14.4	2,056	10.3
$10,001-$20,000	1,722	8.1	1,398	8.0	2,696	10.8	56	3.7	355	2.9	168	11.7	156	10.1	164	13.5	9	6.8	2,114	10.6
$20,001-$30,000	1,034	4.9	917	5.2	1,688	6.7	42	2.8	216	1.8	83	5.8	129	8.4	91	7.5	10	7.6	1,319	6.6
$30,001-$40,000	588	2.8	455	2.6	884	3.5	18	1.2	139	1.2	45	3.1	73	4.7	53	4.4	----	----	672	3.4
$40,001-$50,000	306	1.4	268	1.5	491	2.0	13	0.9	68	0.6	20	1.4	40	2.6	30	2.5	----	----	382	1.9
$50,001 and up	212	1.0	171	1.0	280	1.1	17	1.1	86	0.7	14	1.0	37	2.4	21	1.7	----	----	197	1.0
Total	21,262	100.0	17,475	100.0	25,022	100.0	1,512	100.0	12,060	100.0	1,433	100.0	1,539	100.0	1,215	100.0	132	100.0	19,960	100.0

---- = Cell value suppressed to protect confidentiality of doctorate recipients.

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

[b] Includes Alaska Natives.

[c] 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, 2005 Survey of Earned Doctorates.

TABLE 23. Number and percentage of U.S. citizen doctorate recipients with levels of graduate school debt greater than $30,000, by broad field of study and race/ethnicity, 2005

Broad field of study	Total		Asian [a]		Black		Hispanic		American Indian [b]		White		Other [c]	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All fields	25,019	20.2	1,433	12.1	1,539	36.2	1,215	27.0	132	31.8	19,958	19.1	438	23.1
Physical sciences [d]	2,963	9.1	231	5.6	80	22.5	106	10.4	9	11.1	2,437	9.0	54	5.6
Engineering	1,916	7.7	233	5.2	78	16.7	72	8.3	6	0.0	1,464	7.6	33	9.1
Life sciences	5,677	13.7	491	7.7	254	27.6	256	17.6	19	21.1	4,509	13.4	96	16.7
Social sciences	4,513	33.8	185	29.2	276	45.7	267	43.4	30	46.7	3,611	32.5	92	33.7
Humanities	3,726	26.4	134	18.7	158	44.9	181	29.8	22	45.5	3,093	25.4	74	25.7
Education	4,827	21.0	110	19.1	578	37.7	262	27.5	40	27.5	3,731	17.7	66	28.8
Other fields	1,397	24.6	49	20.4	115	35.7	71	33.8	6	33.3	1,113	22.6	23	43.5

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

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

[b] Includes Alaska Natives.

[c] Includes Native Hawaiians and other Pacific Islanders and respondents choosing multiple races (excluding those selecting an Hispanic ethnicity) in 2005.

[d] Includes mathematics and computer sciences.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 24. Postgraduation status of doctorate recipients, by broad field of study for selected years, 1985–2005

Year and commitments	All fields	Physical sciences [a]	Engineering	Life sciences	Social sciences	Humanities	Education	Other fields
Total								
1985	31,295	4,489	3,166	5,822	5,764	3,429	6,733	1,892
1990	36,065	5,809	4,894	6,655	6,092	3,822	6,509	2,284
1995	41,747	6,727	6,008	7,998	6,635	5,062	6,648	2,669
2000	41,361	5,982	5,323	8,624	7,109	5,634	6,432	2,257
2005	43,354	6,699	6,404	9,306	6,837	5,349	6,229	2,530
Total responses to postgraduation status [b]								
1985	28,383	4,057	2,741	5,355	5,180	3,140	6,210	1,700
1990	32,708	5,229	4,304	6,122	5,496	3,488	5,993	2,076
1995	37,977	6,155	5,385	7,314	6,026	4,679	5,998	2,420
2000	37,733	5,476	4,828	8,009	6,400	5,182	5,794	2,044
2005	38,538	6,055	5,734	8,434	6,016	4,737	5,389	2,173
	Percent							
Definite commitments for employment or study [c]								
1985	73.8	78.0	72.3	75.5	70.6	64.7	75.1	82.6
1990	71.6	72.9	65.9	74.6	69.1	66.0	74.6	78.3
1995	65.8	64.4	57.0	70.3	65.3	58.2	72.9	73.3
2000	71.2	74.4	69.8	72.4	70.0	61.5	75.1	78.1
2005	71.1	73.2	65.0	71.1	74.0	65.3	74.9	76.0
Seeking employment or study [b, c]								
1985	26.2	22.0	27.7	24.5	29.4	35.3	24.9	17.4
1990	28.4	27.1	34.1	25.4	30.9	34.0	25.4	21.7
1995	34.2	35.6	43.0	29.7	34.7	41.8	27.1	26.7
2000	28.8	25.6	30.2	27.6	30.0	38.5	24.9	21.9
2005	28.9	26.8	35.0	28.9	26.0	34.7	25.1	24.0

[a] Includes mathematics and computer sciences.

[b] Does not include respondents who indicated 'do not plan to work or study' in 2005.

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 25. Postgraduation status of doctorate recipients, by selected demographic groups for selected years, 1985–2005

Year and status	Total	Sex		Citizenship			U.S. citizens				
		Men	Women	U.S. citizen	Permanent resident	Temporary visa holder	Asian [a]	Black	Hispanic	American Indian [b]	White
Total											
1985	31,295	20,552	10,743	23,388	1,319	5,247	516	911	563	96	20,778
1990 [c]	36,065	22,960	13,104	24,913	1,695	8,138	642	899	723	96	22,172
1995 [d]	41,747	25,160	16,416	27,740	4,317	8,831	1,129	1,293	922	148	23,888
2000 [e]	41,361	23,161	18,126	27,986	1,950	9,660	1,365	1,631	1,182	169	22,970
2005 [f]	43,354	23,731	19,564	26,312	1,600	12,824	1,493	1,688	1,294	139	20,845
Total responses to postgraduation status [g]											
1985	28,383	18,552	9,831	22,450	1,240	4,683	484	851	537	93	20,159
1990	32,708	20,690	12,017	23,819	1,545	7,329	602	813	677	90	21,358
1995	37,977	22,959	15,013	26,076	3,887	8,005	1,058	1,148	851	139	22,628
2000	37,733	21,170	16,563	26,753	1,841	9,095	1,300	1,519	1,111	162	22,172
2005	38,538	21,194	17,340	24,899	1,499	12,075	1,420	1,534	1,212	131	19,855
	Percent										
Definite commitments for employment or study [h]											
1985	73.8	75.7	70.3	75.2	61.3	70.4	70.7	71.7	70.2	76.3	75.8
1990	71.6	72.0	70.8	74.7	59.2	64.1	68.3	74.5	68.8	65.6	75.1
1995	65.8	65.2	66.7	69.7	53.6	58.9	66.9	71.3	67.3	68.3	69.9
2000	71.2	72.5	69.5	73.0	62.3	67.7	69.5	68.8	72.0	72.8	73.7
2005	71.1	71.7	70.3	73.5	65.3	66.7	67.7	67.7	71.4	67.9	74.8
Seeking employment or study [g, h, i]											
1985	26.2	24.3	29.7	24.8	38.7	29.6	29.3	28.3	29.8	23.7	24.2
1990	28.4	28.0	29.2	25.3	40.8	35.9	31.7	25.5	31.2	34.4	24.9
1995	34.2	34.8	33.3	30.3	46.4	41.1	33.1	28.7	32.7	31.7	30.1
2000	28.8	27.5	30.5	27.0	37.7	32.3	30.5	31.2	28.0	27.2	26.3
2005	28.9	28.3	29.7	26.5	34.7	33.3	32.3	32.3	28.6	32.1	25.2

[a] Includes Native Hawaiians/other Pacific Islanders through 2000, but excludes them in 2005.

[b] Includes Alaska Natives.

[c] Group total for 1990 includes 1 doctoral recipient for whom sex was not reported.

[d] Group total for 1995 includes 171 doctoral recipients for whom sex was not reported.

[e] Group total for 2000 includes 74 doctoral recipients for whom sex was not reported.

[f] Group total for 2005 includes 59 doctoral recipients for whom sex was not reported.

[g] Does not include respondents who indicated 'do not plan to work or study' in 2004 or 2005.

[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, 2005 Survey of Earned Doctorates.

TABLE 26. Postgraduation plans of doctorate recipients with definite commitments, by broad field of study for selected years, 1985–2005

Year and commitments	All fields	Physical sciences [a]	Engineering	Life sciences	Social sciences	Humanities	Education	Other fields
All definite commitments								
1985	20,951	3,165	1,983	4,043	3,659	2,031	4,665	1,405
1990	23,412	3,814	2,835	4,566	3,799	2,303	4,470	1,625
1995	24,977	3,961	3,068	5,141	3,937	2,721	4,374	1,775
2000	26,860	4,073	3,372	5,797	4,480	3,188	4,354	1,596
2005	27,383	4,433	3,728	5,993	4,451	3,091	4,036	1,651
Definite commitments with responses to type of plans								
1985	20,867	3,155	1,977	4,037	3,643	2,022	4,639	1,394
1990	23,298	3,810	2,822	4,557	3,779	2,281	4,428	1,621
1995	24,821	3,942	3,060	5,126	3,907	2,692	4,328	1,766
2000	26,736	4,056	3,356	5,765	4,464	3,177	4,328	1,590
2005	27,051	4,408	3,698	5,900	4,400	3,052	3,965	1,628
	Percent							
Employment [b]								
1985	77.7	59.0	85.1	44.8	85.2	94.1	96.9	97.6
1990	73.6	52.9	80.7	37.5	84.2	93.6	96.0	96.6
1995	70.3	48.2	75.1	35.6	78.6	91.9	96.1	96.7
2000	71.4	54.7	78.8	39.8	75.7	91.5	95.2	95.2
2005	64.5	44.7	67.2	33.1	70.1	88.4	93.8	94.5
Study [b]								
1985	22.3	41.0	14.9	55.2	14.8	5.9	3.1	2.4
1990	26.4	47.1	19.3	62.5	15.8	6.4	4.0	3.4
1995	29.7	51.8	24.9	64.4	21.4	8.1	3.9	3.3
2000	28.6	45.3	21.2	60.2	24.3	8.5	4.8	4.8
2005	35.5	55.3	32.8	66.9	29.9	11.6	6.2	5.5

[a] Includes mathematics and computer sciences.

[b] 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, 2005 Survey of Earned Doctorates.

TABLE 27. Postgraduation plans of doctorate recipients with definite commitments, by demographic group for selected years, 1985–2005

Year and commitment	Total	Sex		Citizenship			U.S. citizens				
		Male	Female	U.S. citizen	Permanent resident	Temporary visa holder	Asian [a]	Black	Hispanic	American Indian [b]	White
All definite commitments											
1985	20,951	14,041	6,910	16,888	760	3,295	342	610	377	71	15,273
1990	23,412	14,898	8,513	17,787	915	4,699	411	606	466	59	16,050
1995	24,977	14,964	10,011	18,169	2,082	4,718	708	819	573	95	15,811
2000	26,860	15,356	11,504	19,528	1,147	6,161	903	1,045	800	118	16,337
2005	27,383	15,186	12,194	18,304	979	8,057	961	1,039	865	89	14,843
Definite commitments with responses to type of plans											
1985	20,867	13,984	6,883	16,832	754	3,273	339	602	374	70	15,234
1990	23,298	14,823	8,474	17,708	910	4,669	411	600	464	59	15,979
1995	24,821	14,881	9,938	18,059	2,068	4,686	703	806	565	94	15,731
2000	26,736	15,280	11,456	19,460	1,137	6,118	897	1,039	794	116	16,291
2005	27,051	15,012	12,036	18,078	962	7,969	950	1,023	855	87	14,665
	Percent										
Employment [c]											
1985	77.7	76.2	80.9	78.6	79.2	72.9	68.7	91.2	84.5	81.4	78.2
1990	73.6	71.4	77.4	76.5	69.3	63.4	63.5	88.8	78.2	88.1	76.3
1995	70.3	67.5	74.5	74.2	52.3	62.9	58.0	83.0	75.4	73.4	74.5
2000	71.4	69.7	73.6	74.0	69.0	63.5	60.2	81.8	70.8	79.3	74.5
2005	64.5	62.2	67.4	68.2	65.8	56.0	51.2	75.6	65.0	78.2	68.9
Study [c]											
1985	22.3	23.8	19.1	21.4	20.8	27.1	31.3	8.8	15.5	18.6	21.8
1990	26.4	28.6	22.6	23.5	30.7	36.6	36.5	11.2	21.8	11.9	23.7
1995	29.7	32.5	25.5	25.8	47.7	37.1	42.0	17.0	24.6	26.6	25.5
2000	28.6	30.3	26.4	26.0	31.0	36.5	39.8	18.2	29.2	20.7	25.5
2005	35.5	37.8	32.6	31.8	34.2	44.0	48.8	24.4	35.0	21.8	31.1

[a] Includes Native Hawaiians/other Pacific Islanders through 2000, but excludes them in 2005.

[b] Includes Alaska Natives.

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 28. Employment sector of doctorate recipients with definite postgraduation employment commitments in the U.S., by broad field of study for selected years, 1985–2005

Year and commitment	Total	Physical sciences [a]	Engineering	Life sciences	Social sciences	Humanities	Education	Other fields
All employment commitments								
1985	14,559	1,700	1,413	1,456	2,828	1,766	4,176	1,220
1990	15,239	1,780	1,872	1,325	2,877	1,980	4,020	1,385
1995	15,303	1,666	1,890	1,456	2,681	2,233	3,913	1,464
2000	17,242	2,033	2,334	1,948	3,030	2,660	3,906	1,331
2005	15,611	1,785	2,124	1,708	2,644	2,468	3,537	1,345
Employment commitments with responses to sector								
1985	14,371	1,690	1,400	1,448	2,780	1,741	4,097	1,215
1990	15,066	1,771	1,863	1,310	2,826	1,965	3,960	1,371
1995	15,043	1,645	1,863	1,430	2,621	2,210	3,826	1,448
2000	17,010	1,996	2,313	1,907	2,991	2,631	3,862	1,310
2005	15,508	1,776	2,103	1,698	2,633	2,450	3,513	1,335
	Percent							
Academe [b]								
1985	49.5	36.8	30.2	54.0	47.5	78.3	42.0	72.9
1990	52.1	38.9	26.5	49.0	50.4	84.1	47.1	78.6
1995	53.3	42.3	19.4	52.4	53.9	83.7	49.4	73.4
2000	49.3	34.4	14.9	47.0	51.6	80.1	48.4	71.8
2005	54.7	40.8	18.7	53.2	61.1	83.8	50.6	76.0
Industry/self-employed [b]								
1985	21.1	51.1	55.9	26.1	17.0	6.2	7.8	9.1
1990	22.2	50.9	59.4	26.7	19.1	4.7	6.3	7.4
1995	22.1	45.9	67.1	24.9	17.0	5.2	6.2	11.4
2000	26.4	55.7	73.6	29.5	18.1	6.8	5.8	13.4
2005	22.9	48.9	69.4	25.6	14.6	4.3	4.1	12.1
Government [b]								
1985	11.3	10.3	11.9	14.4	15.6	3.2	12.3	6.4
1990	8.9	8.3	11.9	16.5	13.3	2.2	7.3	3.9
1995	8.2	8.7	11.1	14.4	13.1	1.8	6.1	4.8
2000	7.5	6.9	9.1	13.9	11.9	2.1	4.7	5.0
2005	7.0	6.6	9.5	12.8	10.5	2.4	4.1	5.2
Other [b, c]								
1985	18.1	1.8	2.0	5.5	19.8	12.3	38.0	11.5
1990	16.8	1.9	2.3	7.8	17.2	9.0	39.3	10.2
1995	16.3	3.1	2.5	8.3	16.0	9.3	38.3	10.4
2000	16.8	3.0	2.4	9.5	18.5	11.0	41.1	9.8
2005	15.4	3.6	2.4	8.3	13.8	9.5	41.2	6.7

[a] Includes mathematics and computer sciences.

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

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 29. Employment sector of doctorate recipients with definite postgraduation employment commitments in the U.S., by selected demographic groups for selected years, 1985–2005

Commitments	Total	Sex		Citizenship			U.S. citizens				
		Male	Female	U.S. citizen	Permanent resident	Temporary visa holder	Asian [b]	Black	Hispanic	American Indian [c]	White
All employment commitments											
1985	14,559	9,295	5,264	13,061	533	959	223	548	310	57	11,768
1990	15,239	9,042	6,197	13,298	549	1,383	249	532	355	52	11,984
1995 [a]	15,303	8,420	6,882	13,084	965	1,249	381	665	418	67	11,443
2000	17,242	9,358	7,884	14,134	710	2,386	520	845	547	87	11,917
2005	15,611	8,122	7,489	12,094	596	2,895	468	769	551	66	9,923
Employment commitments with responses to sector											
1985	14,371	9,197	5,174	12,925	524	917	220	528	303	57	11,667
1990	15,066	8,965	6,101	13,155	542	1,360	248	523	351	51	11,857
1995 [a]	15,043	8,292	6,750	12,870	941	1,227	376	641	410	66	11,269
2000	17,010	9,233	7,777	13,957	699	2,345	506	834	535	85	11,781
2005	15,508	8,067	7,441	12,023	585	2,875	464	767	547	66	9,868
	Percent										
Academe [d]											
1985	49.5	47.0	54.0	48.7	52.5	59.8	40.9	51.5	58.4	52.6	48.4
1990	52.1	48.5	57.4	51.6	56.1	55.0	37.5	55.3	57.8	64.7	51.5
1995	53.3	47.9	60.1	54.8	41.9	46.6	44.1	60.4	59.8	63.6	54.6
2000	49.3	44.5	55.1	52.1	44.8	34.2	39.5	52.8	56.8	63.5	52.3
2005	54.7	49.9	59.9	56.7	54.9	46.0	46.1	56.7	62.7	53.0	57.0
Industry/self-employed [d]											
1985	21.1	25.7	13.0	19.6	40.1	31.0	37.7	6.1	11.2	14.0	20.1
1990	22.2	27.9	13.7	20.0	32.8	38.7	41.9	5.0	11.4	13.7	20.4
1995	22.1	29.5	12.9	17.9	47.8	46.5	36.7	6.1	15.4	15.2	18.0
2000	26.4	35.0	16.2	19.9	46.1	59.4	41.9	11.3	16.8	8.2	19.6
2005	22.9	30.8	14.4	16.2	33.7	48.8	32.5	7.7	11.2	15.2	16.4
Government [d]											
1985	11.3	11.4	11.0	12.1	2.9	4.3	11.8	14.8	11.6	10.5	12.0
1990	8.9	9.8	7.7	9.8	3.9	2.6	11.7	10.7	12.0	3.9	9.7
1995	8.2	9.0	7.4	9.2	3.2	1.9	10.1	7.0	10.0	6.1	9.3
2000	7.5	8.2	6.6	8.6	3.7	1.9	7.3	9.2	9.7	11.8	8.5
2005	7.0	7.6	6.3	8.5	3.8	1.5	10.6	9.0	6.9	10.6	8.3
Other [d, e]											
1985	18.1	15.9	22.0	19.6	4.6	5.0	9.5	27.7	18.8	22.8	19.5
1990	16.8	13.8	21.3	18.6	7.2	3.8	8.9	29.1	18.8	17.6	18.4
1995	16.3	13.7	19.6	18.1	7.1	5.1	9.0	26.5	14.9	15.2	18.1
2000	16.8	12.3	22.2	19.4	5.4	4.5	11.3	26.7	16.6	16.5	19.5
2005	15.4	11.7	19.4	18.6	7.7	3.7	10.8	26.6	19.2	21.2	18.4

---- = Cell value suppressed to protect confidentiality of doctorate recipients.

[a] Total for 1995 includes 1 respondent not reporting sex.

[b] Includes Native Hawaiians/other Pacific Islanders through 2000, but excludes them in 2005.

[c] Includes Alaska Natives.

[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, 2005 Survey of Earned Doctorates.

TABLE 30. Sources of support for doctorate recipients with postgraduation commitments for postdoctoral study, by selected demographic groups for selected years, 1985–2005

Commitments	Total	Sex		Citizenship			U.S. citizens				
		Male	Female	U.S. citizen	Permanent resident	Temporary visa holder	Asian [d]	Black	Hispanic	American Indian [e]	White
All postgraduate study commitments											
1985	4,257	3,060	1,197	3,350	135	770	99	39	47	9	3,104
1990 [a]	5,321	3,698	1,622	3,710	220	1,389	132	47	78	5	3,392
1995 [b]	6,321	4,173	2,147	4,088	840	1,391	262	102	112	22	3,550
2000	6,494	3,939	2,555	4,389	274	1,824	306	144	191	20	3,645
2005 [c]	7,789	4,611	3,176	4,836	252	2,691	384	199	244	12	3,854
Postgraduate study commitments with responses to source of support											
1985	4,017	2,891	1,126	3,155	128	732	91	36	45	8	2,929
1990 [a]	4,978	3,464	1,513	3,446	206	1,324	123	41	71	5	3,152
1995 [b]	5,975	3,955	2,019	3,866	792	1,315	241	93	105	19	3,371
2000	6,337	3,847	2,490	4,287	263	1,782	293	139	186	19	3,571
2005 [c]	7,607	4,496	3,109	4,714	248	2,636	372	187	236	11	3,769
	Percent										
U.S. government [f]											
1985	47.8	47.0	49.7	53.8	49.2	22.0	54.9	36.1	42.2	----	54.4
1990	40.0	38.6	43.1	48.1	34.5	19.7	47.2	31.7	45.1	----	48.4
1995	41.1	40.2	42.8	48.8	39.3	19.6	44.8	43.0	48.6	57.9	48.9
2000	38.5	38.2	39.0	45.5	43.0	21.1	47.1	46.0	47.8	47.4	45.3
2005	30.5	30.1	31.2	38.0	27.8	17.6	34.1	36.9	41.1	----	38.6
College or university [f]											
1985	20.9	22.4	17.1	15.9	23.4	41.9	12.1	30.6	20.0	----	15.7
1990	28.1	30.5	22.7	20.4	33.0	47.5	21.1	39.0	26.8	0.0	20.0
1995	30.0	32.5	25.0	23.3	32.3	48.3	22.0	26.9	25.7	26.3	23.4
2000	33.6	35.5	30.7	28.1	35.0	46.7	27.6	36.0	29.0	26.3	27.9
2005	48.5	50.0	46.4	41.4	54.4	60.7	46.0	46.0	37.7	----	40.8
Private foundation [f]											
1985	12.0	11.5	13.3	11.9	12.5	12.3	17.6	----	17.8	----	11.6
1990	12.3	11.2	14.7	12.7	12.6	11.1	13.8	----	14.1	----	12.6
1995	9.6	8.9	11.1	9.7	9.0	9.9	7.1	11.8	7.6	0.0	10.0
2000	8.5	8.2	8.9	7.8	8.0	10.3	7.2	6.5	6.5	----	7.9
2005	5.3	4.6	6.2	6.2	2.4	3.8	5.4	6.4	8.9	----	5.9
Nonprofit, other than private foundation [f]											
1985	3.1	3.1	3.1	3.0	----	3.4	6.6	----	----	0.0	3.0
1990	2.7	2.6	3.0	2.3	3.9	3.6	----	----	----	0.0	2.3
1995	2.7	2.4	3.3	2.4	2.9	3.5	3.7	5.4	----	----	2.1
2000	3.4	3.4	3.5	2.9	2.7	4.8	2.7	----	3.8	0.0	2.9
2005	3.0	2.6	3.5	3.0	4.0	2.8	2.2	4.3	2.1	0.0	3.0

TABLE 30. Sources of support for doctorate recipients with postgraduation commitments for postdoctoral study, by selected demographic groups for selected years, 1985–2005

Commitments	Total	Sex		Citizenship			U.S. citizens				
		Male	Female	U.S. citizen	Permanent resident	Temporary visa holder	Asian [d]	Black	Hispanic	American Indian [e]	White
Other [f]											
1985	8.5	8.8	7.8	7.9	7.0	11.6	----	----	----	0.0	7.9
1990	10.1	10.7	8.6	9.5	10.2	11.4	8.9	----	----	0.0	9.8
1995	10.0	10.0	10.1	9.3	8.5	12.9	14.1	5.4	8.6	----	9.1
2000	8.2	7.8	8.8	8.0	6.1	8.8	7.8	----	7.5	----	8.1
2005	7.9	8.2	7.5	6.7	7.3	10.2	7.8	3.7	6.4	0.0	6.7
Unknown [f]											
1985	7.6	7.1	9.0	7.5	----	8.7	----	16.7	----	----	7.4
1990	6.9	6.4	7.9	7.0	5.8	6.6	----	----	7.0	----	6.9
1995	6.6	6.1	7.8	6.6	8.1	5.9	8.3	7.5	----	----	6.5
2000	7.8	6.9	9.2	7.8	5.3	8.3	7.5	5.0	5.4	----	7.9
2005	4.8	4.6	5.2	4.8	4.0	5.0	4.6	2.7	3.8	0.0	5.0

---- = Cell value suppressed to protect confidentiality of doctorate recipients.

[a] Total for 1990 includes 1 respondent not reporting sex.

[b] Total for 1995 includes 1 respondent not reporting sex.

[c] Total for 2005 includes 2 respondents not reporting sex.

[d] Includes Native Hawaiians/other Pacific Islanders through 2000, but excludes them in 2005.

[e] Includes Alaska Natives.

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 31. Postgraduation location and type of plan [a] of non-U.S. citizen doctorate recipients with definite postgraduation commitments, by major field of study and visa residency status, 2005

Field of study [b]	Permanent residents [c]					Temporary visa holders [c]				
		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	962	62.0	32.6	3.8	1.6	7,961	36.4	37.5	19.6	6.5
Physical sciences	189	51.9	46.0	0.0	2.1	1,983	31.0	51.7	8.2	9.1
Physics & astronomy	35	25.7	71.4	0.0	2.9	479	14.2	68.3	5.6	11.9
Chemistry	55	40.0	60.0	0.0	0.0	527	19.4	70.6	3.0	7.0
Earth, atmospheric, & marine sciences	13	53.8	46.2	0.0	0.0	156	14.7	61.5	11.5	12.2
Mathematics	44	63.6	31.8	0.0	4.5	428	41.4	35.7	9.8	13.1
Computer sciences	42	76.2	21.4	0.0	2.4	393	62.3	19.6	15.3	2.8
Engineering	169	76.9	19.5	3.0	0.6	2,146	48.4	32.1	15.8	3.8
Aerospace engineering	1	----	----	----	----	64	34.4	43.8	12.5	9.4
Chemical engineering	23	73.9	21.7	4.3	0.0	281	46.6	34.2	15.3	3.9
Civil and architectural engineering	27	59.3	25.9	14.8	0.0	266	38.3	32.7	24.8	4.1
Electrical & related engineering	61	91.8	8.2	0.0	0.0	735	63.1	21.0	13.3	2.6
Industrial engineering	8	87.5	----	----	----	71	52.1	15.5	25.4	7.0
Mechanical engineering	14	85.7	14.3	0.0	0.0	304	40.1	41.8	14.8	3.3
Materials engineering	9	----	55.6	----	----	171	38.6	45.0	11.1	5.3
Other engineering	26	65.4	34.6	0.0	0.0	254	37.0	42.5	16.1	4.3
Life sciences	202	28.7	67.8	1.5	2.0	1,609	14.2	65.1	13.5	7.1
Biological sciences	144	17.4	81.3	0.0	1.4	1,101	9.2	79.3	6.4	5.2
Health sciences	41	56.1	36.6	4.9	2.4	239	33.1	30.1	29.7	7.1
Agricultural sciences/natural resources	17	58.8	29.4	5.9	5.9	269	17.8	38.3	28.6	15.2
Social sciences	136	65.4	26.5	7.4	0.7	951	41.1	14.3	38.5	6.1
Psychology	43	46.5	53.5	0.0	0.0	131	28.2	42.0	18.3	11.5
Anthropology	9	55.6	----	----	----	35	----	----	45.7	28.6
Economics	31	90.3	0.0	9.7	0.0	519	48.2	6.6	41.8	3.5
Political science/international relations	17	58.8	23.5	11.8	5.9	97	33.0	12.4	46.4	8.2
Sociology	18	77.8	----	----	0.0	53	47.2	----	34.0	----
Other social sciences	18	66.7	----	----	----	116	39.7	17.2	39.7	3.4
Humanities	146	83.6	9.6	3.4	3.4	469	46.9	10.7	35.0	7.5
History	10	90.0	----	----	----	69	40.6	15.9	33.3	10.1
American literature	5	100.0	0.0	0.0	0.0	11	36.4	----	----	----
English language & literature	14	78.6	----	----	----	28	39.3	----	50.0	----
Foreign language & literature	49	85.7	12.2	2.0	0.0	103	69.9	6.8	16.5	6.8
Other humanities	68	80.9	8.8	4.4	5.9	258	40.7	10.5	41.5	7.4
Education	59	79.7	3.4	16.9	0.0	287	31.4	8.0	49.8	10.8
Education administration	14	78.6	----	----	----	33	15.2	12.1	54.5	18.2
Education research	29	82.8	----	----	----	158	38.0	6.3	44.3	11.4
Teacher education	2	----	----	----	----	16	----	----	50.0	----
Teaching fields	8	75.0	----	----	----	60	26.7	----	61.7	----
Other education	6	83.3	----	----	----	20	25.0	----	50.0	----
Other fields	61	85.2	8.2	6.6	0.0	516	60.7	3.7	33.1	2.5
Business & management	38	86.8	----	----	----	348	67.8	1.4	28.4	2.3
Communications	14	78.6	----	----	----	75	58.7	----	29.3	----
Fields not elsewhere classified	0	0.0	0.0	0.0	0.0	2	----	----	----	----

---- = Cell value suppressed to protect confidentiality of doctorate recipients

[a] Postdoctoral plans are categorized as either employment or study plans.

[b] Major field of study definitions are detailed in appendix C in the section on "Derived Variables."

[c] 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, 2005 Survey of Earned Doctorates.

TABLE 32. Postdoctoral location of non-U.S. citizen doctorate recipients with definite postgraduation commitments, by visa residency status for selected years, 1985–2005

Year and location	All non-U.S. citizens	Permanent resident	Temporary visa holder
		Number	
All definite commitments			
1985	4,055	760	3,295
1990	5,614	915	4,699
1995	6,800	2,082	4,718
2000	7,308	1,147	6,161
2005	9,036	979	8,057
Definite commitments with response to location			
1985	4,055	760	3,295
1990	5,614	915	4,699
1995	6,800	2,082	4,718
2000	7,270	1,141	6,129
2005	9,028	979	8,049
		Percent	
U.S. location [a]			
1985	58.4	90.5	51.0
1990	62.3	87.7	57.3
1995	65.3	91.6	53.6
2000	73.3	91.9	69.8
2005	76.0	94.7	73.8
Foreign location [a]			
1985	41.6	9.5	49.0
1990	37.7	12.3	42.7
1995	34.7	8.4	46.4
2000	26.7	8.1	30.2
2005	24.0	5.3	26.2

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

TABLE 33. Percentage of non-U.S. citizen doctorate recipients intending to stay in the United States after doctorate receipt, by country of citizenship, 2000-2005

Place of origin	Total, 2000-2001		Total, 2002-2005		2000		2001		2002		2003		2004		2005	
	Number non-U.S. citizens	Percent staying in U.S.	Number non-U.S. citizens	Percent staying in U.S.	Number non-U.S. citizens	Percent staying in U.S.	Number non-U.S. citizens	Percent staying in U.S.	Number non-U.S. citizens	Percent staying in U.S.	Number non-U.S. citizens	Percent staying in U.S.	Number non-U.S. citizens	Percent staying in U.S.	Number non-U.S. citizens	Percent staying in U.S.
All non-U.S. citizens	23,235	69.7	51,181	70.3	11,610	67.6	11,625	71.7	11,383	70.6	12,219	69.0	13,155	68.5	14,424	72.7
East/South Asia	12,563	75.2	28,082	75.4	6,300	73.7	6,263	76.7	6,129	76.4	6,567	73.3	7,194	74.5	8,192	77.2
China[a]	5,286	91.4	12,477	90.4	2,618	90.5	2,668	92.3	2,652	92.5	2,778	90.8	3,220	89.2	3,827	89.8
Taiwan	1,724	58.6	2,829	54.6	950	56.1	774	61.8	675	60.3	724	51.1	704	49.0	726	58.3
Japan	536	52.2	1,119	55.6	302	49.7	234	55.6	236	56.4	295	57.3	278	53.6	310	55.2
South Korea	2,247	60.8	5,476	64.7	1,063	58.4	1,184	62.9	1,190	66.2	1,304	62.2	1,452	65.2	1,530	65.2
India	1,956	88.4	4,034	87.3	1,000	87.2	956	89.7	839	90.6	908	86.0	1,013	86.9	1,274	86.3
Other	814	28.0	2,147	30.8	367	27.0	447	28.9	537	25.9	558	28.1	527	32.3	525	37.1
West Asia	2,028	58.1	4,593	57.3	975	54.2	1,053	61.8	1,026	58.7	1,127	56.3	1,213	52.2	1,227	62.3
Iran	196	89.3	341	88.9	88	89.8	108	88.9	66	87.9	70	85.7	64	92.2	141	89.4
Israel	139	59.0	390	65.1	67	49.3	72	68.1	75	66.7	92	68.5	114	62.3	109	64.2
Jordan	170	57.6	376	49.7	83	57.8	87	57.5	67	62.7	96	52.1	115	44.3	98	44.9
Saudi Arabia	178	10.1	464	8.0	90	8.9	88	11.4	104	4.8	115	7.8	134	9.7	111	9.0
Turkey	687	55.7	1,695	58.5	331	49.2	356	61.8	398	58.3	446	57.2	432	52.3	419	66.3
Other	658	64.3	1,327	65.0	316	62.3	342	66.1	316	68.0	308	64.0	354	60.2	349	67.9
Pacifica/Australasia	468	53.6	934	60.8	249	52.6	219	54.8	236	58.5	224	57.6	227	63.4	247	63.6
Australia	140	57.9	272	65.1	72	48.6	68	67.6	64	65.6	69	66.7	63	71.4	76	57.9
Indonesia	133	41.4	284	52.1	76	40.8	57	42.1	76	51.3	56	50.0	77	51.9	75	54.7
New Zealand	77	59.7	150	56.7	34	64.7	43	55.8	36	58.3	40	47.5	39	61.5	35	60.0
Other	118	58.5	228	69.3	67	64.2	51	51.0	60	60.0	59	61.0	48	72.9	61	83.6
Africa	1,023	63.8	2,092	63.7	537	56.8	486	71.6	448	63.6	481	64.2	568	61.3	595	65.7
Egypt	184	60.9	556	59.9	92	56.5	92	65.2	113	58.4	129	62.8	150	63.3	164	55.5
Nigeria	84	77.4	131	80.2	45	73.3	39	82.1	27	96.3	31	71.0	35	71.4	38	84.2
South Africa	140	59.3	183	49.2	62	51.6	78	65.4	43	53.5	40	52.5	48	41.7	52	50.0
Other	615	63.9	1,222	65.9	338	55.6	277	74.0	265	64.2	281	65.8	335	62.1	341	71.0
Europe	4,038	72.8	8,550	73.7	1,937	71.2	2,101	74.3	2,020	74.8	2,079	74.0	2,197	70.7	2,254	75.4
Bulgaria	117	88.9	290	86.6	59	91.5	58	86.2	54	92.6	61	82.0	83	84.3	92	88.0
Greece	216	67.6	423	66.2	101	69.3	115	66.1	98	64.3	99	66.7	119	64.7	107	69.2
Romania	246	89.4	693	87.2	119	84.0	127	94.5	151	84.8	145	88.3	186	86.6	211	88.6
United Kingdom	392	76.5	747	76.8	184	69.6	208	82.7	223	81.2	171	75.4	185	72.4	168	77.4
Germany	600	66.8	1,024	67.6	291	65.3	309	68.3	255	65.5	270	69.6	250	67.2	249	67.9
Italy	259	61.4	687	66.5	112	63.4	147	59.9	153	67.3	159	56.6	193	71.0	182	69.8
France	243	75.7	514	70.0	122	73.8	121	77.7	122	64.8	113	70.8	129	69.8	150	74.0
Spain	227	64.3	487	66.1	108	62.0	119	66.4	113	66.4	138	68.8	115	58.3	121	70.2
Russia	486	85.0	960	84.4	234	83.8	252	86.1	229	88.2	255	85.1	221	77.8	255	85.9
Other	1,252	69.2	2,725	71.7	607	68.0	645	70.2	622	74.4	668	74.3	716	66.6	719	71.9

TABLE 33. Percentage of non-U.S. citizen doctorate recipients intending to stay in the United States after doctorate receipt, by country of citizenship, 2000-2005

Place of origin	Total, 2000-2001		Total, 2002-2005		2000		2001		2002		2003		2004		2005	
	Number non-U.S. citizens	Percent staying in U.S.	Number non-U.S. citizens	Percent staying in U.S.	Number non-U.S. citizens	Percent staying in U.S.	Number non-U.S. citizens	Percent staying in U.S.	Number non-U.S. citizens	Percent staying in U.S.	Number non-U.S. citizens	Percent staying in U.S.	Number non-U.S. citizens	Percent staying in U.S.	Number non-U.S. citizens	Percent staying in U.S.
North/South America	2,925	56.8	6,311	57.4	1,533	54.5	1,392	59.3	1,391	56.6	1,562	57.2	1,649	56.7	1,709	58.9
Canada	1,021	64.9	2,193	62.3	525	63.6	496	66.3	496	65.1	538	62.5	603	60.9	556	61.3
Mexico	490	42.9	964	48.9	247	37.2	243	48.6	221	45.7	257	50.2	232	47.8	254	51.2
Argentina	180	63.9	414	68.8	99	63.6	81	64.2	93	72.0	99	71.7	116	64.7	106	67.9
Brazil	348	38.2	729	43.2	178	38.2	170	38.2	171	40.4	162	40.1	190	43.2	206	48.1
Chile	85	51.8	257	41.2	48	52.1	37	51.4	53	28.3	80	47.5	59	40.7	65	44.6
Colombia	148	61.5	400	56.3	74	52.7	74	70.3	67	62.7	107	52.3	89	59.6	137	54.0
Peru	71	67.6	174	71.8	35	60.0	36	75.0	47	72.3	43	74.4	36	72.2	48	68.8
Other	582	61.2	1,180	61.7	327	59.0	255	63.9	243	56.0	276	60.1	324	60.8	337	68.0
Country unknown	190	29.5	619	51.9	79	30.4	111	28.8	133	27.1	179	63.1	107	30.8	200	69.5

NOTES: 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.

[a] Includes Hong Kong.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

APPENDICES

APPENDIX A: The Nine Basic Tables, 2005

Appendix A includes the following nine tables:

- A-1 Number of doctorate recipients, by sex and subfield of study, 2005
- A-2 Number of doctorate recipients, by citizenship, race/ethnicity, and subfield of study, 2005
- A-3 Statistical profile of doctorate recipients, by major field of study, 2005
- A-4 Statistical profile of doctorate recipients, by race/ethnicity and citizenship, 2005
- A-5 Doctorate recipients' financial resources in support of doctoral programs, by broad field of study and sex, 2005
- A-6 Distribution of doctorate recipients' financial resources in support of doctoral programs, by sex and broad field of study, 2005
- A-7 State of doctoral institution of doctorate recipients, by broad field and sex, 2005
- A-8 Institutions granting research doctorates, by major field of study, 2005
- A-9 Top 50 doctorate-granting institutions, 2005

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 on next page).

— *Median Time Lapse*: "Total Time" refers to the total calendar time elapsed between the month/year of baccalaureate and the month/year of doctorate. "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 employment survey of a sample of doctorate recipients in science, engineering, and, until 1995, humanities fields.)

In Table A-3 the postgraduation plans of doctorate recipients are grouped as follows: "Definite postdoctoral study", "Definite employment", "Seeking employment or study", and "Other/Unknown." "Definite postdoctoral study" includes recipients who indicated that they had definite plans 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 did not plan 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 plans and responded to the nature of those plans (i.e., postdoctoral study or employment).

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 commitments for postdoctoral study (as described above) and recipients who were still *seeking* employment or study 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 many of those in Appendix Table A-3. The reader is referred to the explanatory note on Table A-3 for additional information.

TABLE A-5: Table A-5 displays data reported in item 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 of the Summary Report for a description of field groupings as reported in this table; see the questionnaire's Specialties List in Appendix D of the Summary Report for the names and codes of the subfields included.

TABLE A-8: Table A-8 displays data by doctorate-granting institution and major field. It includes all institutions in the United States (the 50 states, the District of Columbia, and Puerto Rico) that awarded research doctoral degrees in the most recent year. Field groupings may differ from those in reports published by federal sponsors of the SED and from departmental designations at institutions.

TABLE A-9: Table A-9 presents the 50 doctorate granting institutions which conferred the greatest number of doctorates in AY 2005. The number of doctorate degrees granted is also shown for each ranked institution.

APPENDIX TABLE A-1. Number of doctorate recipients, by sex and subfield of study, 2005

Field of study	Number of doctorates		
	Total [a]	Male	Female
TOTAL ALL FIELDS	43,354	23,731	19,564
PHYSICAL SCIENCES	6,699	4,926	1,766
MATHEMATICS	1,203	875	326
Applied mathematics	291	206	84
Mathematics, algebra	97	72	25
Mathematics, analysis & functional analysis	111	86	25
Mathematics, geometry	96	83	13
Mathematics, logic	26	22	4
Mathematics, number theory	62	53	9
Mathematics, statistics	267	158	108
Mathematics, topology	51	36	15
Mathematics, computing theory & practice	16	13	3
Mathematics, operations research	23	19	4
Mathematics, general	104	84	20
Mathematics, other	59	43	16
COMPUTER & INFORMATION SCIENCES	1,136	909	225
Computer science	955	796	157
Information science & systems	85	48	37
Computer & information science, other	96	65	31
ASTRONOMY	186	137	49
Astronomy	72	46	26
Astrophysics	114	91	23
ATMOSPHERIC SCI. & METEOROLOGY	144	93	51
Atmospheric chemistry & climatology	42	23	19
Atmospheric physics & dynamics	28	20	8
Meteorology	20	15	5
Atmospheric science/meteorology, general	29	18	11
Atmospheric science/meteorology, other	25	17	8
CHEMISTRY	2,127	1,403	723
Chemistry, analytical	364	185	179
Chemistry, inorganic	255	172	83
Chemistry, organic	600	447	153
Chemistry, medicinal/pharmaceutical	110	61	49
Chemistry, physical	298	211	87
Chemistry, polymer	119	89	30
Chemistry, theoretical	57	45	12
Chemistry, general	195	125	69
Chemistry, other	129	68	61
GEOLOGICAL & EARTH SCIENCES	379	259	120
Geology	107	74	33
Geochemistry	55	33	22
Geophysics & seismology	92	66	26
Paleontology	29	22	7
Mineralogy & petrology	8	6	2
Stratigraphy & sedimentation	15	9	6
Geomorphology & glacial geology	12	9	3
Geological & earth sciences, general	24	18	6
Geological & earth sciences, other	37	22	15
PHYSICS	1,334	1,132	200
Physics, acoustics	25	17	8
Physics, atomic/molecular/chemical	87	69	18
Physics, elementary particle	188	167	21
Biophysyics	72	54	18
Physics, nuclear	70	66	4
Physics, optics/phototonics	145	121	24

APPENDIX TABLE A-1. Number of doctorate recipients, by sex and subfield of study, 2005

Field of study	Number of doctorates		
	Total [a]	Male	Female
Physics, plasma/fusion	54	44	10
Physics, polymer	29	26	3
Physics, condensed matter/low temp	314	273	41
Applied physics	101	84	16
Physics, general	129	111	17
Physics, other	120	100	20
OCEAN/MARINE SCIENCES	190	118	72
Hydrology & water resources	41	34	7
Oceanography	74	42	32
Marine sciences	61	36	25
Ocean/marine sciences, other	14	6	8
ENGINEERING	6,404	5,215	1,174
AEROSPACE/AERONAUTICAL ENGINEERING	219	190	29
CHEMICAL AND RELATED ENGINEERING	875	662	210
Chemical engineering	774	589	183
Petroleum engineering	50	35	14
Polymer & plastics engineering	51	38	13
CIVIL AND RELATED ENGINEERING	757	580	176
Civil engineering	621	502	118
Environmental health engineering	136	78	58
ELECTRICAL AND RELATED ENGINEERING	1,852	1,598	249
Communications engineering	27	24	3
Computer engineering	277	235	41
Electrical & electronics engineering	1,548	1,339	205
INDUSTRIAL ENGINEERING	222	178	41
MECHANICAL AND RELATED ENGINEERING	978	858	120
Engineering mechanics	86	80	6
Mechanical engineering	892	778	114
MATERIALS/METALLURGICAL ENGINEERING	540	419	120
Ceramic sciences engineering	14	9	5
Materials science engineering	493	380	112
Metallurgical engineering	33	30	3
OTHER ENGINEERING	961	730	229
Agricultural engineering	47	38	9
Bioengineering & biomedical engineering	417	307	110
Engineering physics	27	20	7
Engineering science	42	30	11
Mining & mineral engineering	12	12	0
Nuclear engineering	71	62	8
Ocean engineering	18	11	7
Operations research engineering	87	67	20
Systems engineering	56	47	9
Engineering, general	53	41	12
Engineering, other	131	95	36
LIFE SCIENCES	9,306	4,567	4,727
AGRICULTURAL SCIENCES/NATURAL RESOURCES	1,161	745	413
Agricultural economics	123	86	37
Agricultural animal breeding	14	11	3
Animal nutrition	51	39	12
Poultry science	14	6	8
Animal sciences, other	71	41	30
Agronomy & crop science	79	65	14

APPENDIX TABLE A-1. Number of doctorate recipients, by sex and subfield of study, 2005

Field of study	Number of doctorates		
	Total [a]	Male	Female
Agricultural & horticultural plant breeding	35	28	7
Plant pathology/phytopathology	71	37	33
Plant sciences, other	31	15	16
Food science	93	49	43
Food science & technology, other	48	24	24
Soil chemistry/microbiology	24	11	13
Soil sciences, other	52	36	16
Horticulture science	49	32	17
Fishing & fisheries science & management	34	25	9
Forest sciences & biology	29	21	8
Forest/resources management	40	31	9
Wood science & pulp/paper technology	15	13	2
Natural resources/conservation	64	39	25
Forestry & related science, other	24	14	10
Wildlife/range management	44	31	13
Environmental science	129	76	52
Agriculture, general	10	5	5
Agricultural Science, other	17	10	7
BIOLOGICAL/BIOMEDICAL SCIENCES	6,368	3,257	3,105
Biochemistry	692	416	276
Biomedical sciences	248	110	137
Biophysics	144	85	59
Biotechnology	23	14	9
Bacteriology	13	6	7
Plant genetics	50	27	23
Plant pathology (Biological)	31	18	13
Plant physiology	38	19	19
Botany/plant biology	87	45	42
Anatomy	23	15	8
Biometrics & biostatistics	130	67	63
Cellular biology & histology	316	164	151
Ecology	412	219	193
Developmental biology/embryology	162	76	86
Endocrinology	29	10	19
Entomology	103	63	40
Immunology	343	173	170
Molecular biology	726	362	362
Microbiology	430	206	224
Neuroscience	689	368	321
Nutritional sciences	163	37	126
Parasitology	21	11	10
Toxicology	102	48	54
Genetics, human & animal	287	143	143
Pathology, human & animal	93	51	42
Pharmacology, human & animal	315	142	173
Physiology, human & animal	208	109	99
Zoology, other	103	53	50
Biology/biomedical sciences, general	189	94	95
Biology/biomedical sciences, other	198	106	91
HEALTH SCIENCES	1,777	565	1,209
Speech-language pathology & audiology	97	23	74
Environmental health	42	17	25
Environmental toxicology	42	20	22
Health systems/service administration	70	30	39
Public health	279	80	199
Epidemiology	229	78	151
Kinesiology/exercise science	153	89	64

APPENDIX TABLE A-1. Number of doctorate recipients, by sex and subfield of study, 2005

Field of study	Number of doctorates		
	Total [a]	Male	Female
Nursing science	418	35	383
Pharmacy	168	80	86
Rehabilitation/therapeutic services	66	27	39
Veterinary medicine	47	24	23
Health sciences, general	46	16	30
Health sciences, other	120	46	74
SOCIAL SCIENCES AND PSYCHOLOGY	6,837	3,043	3,790
PSYCHOLOGY	3,327	1,062	2,264
Psychology, clinical	1,158	317	841
Psychology, cognitive & psycholinguistics	147	77	70
Psychology, comparative	5	2	3
Psychology, counseling	469	150	319
Psychology, developmental & child	223	35	188
Psychology, human development & family studies	172	44	128
Psychology, experimental	120	51	69
Psychology, educational	81	25	56
Psychology, family	25	12	13
Psychology, industrial & organizational	184	73	111
Psychology, personality	14	5	9
Psychology, physiological/psychobiology	85	42	43
Psychology, psychometrics & quantitative	23	18	5
Psychology, school	108	27	81
Psychology, social	183	68	115
Psychology, general	187	67	119
Psychology, other	143	49	94
SOCIAL SCIENCES	3,510	1,981	1,526
Anthropology	455	198	256
Area studies	6	4	2
Criminology	96	51	45
Demography/population studies	20	10	10
Economics	1,031	720	309
Econometrics	30	21	9
Geography	196	128	68
International relations/affairs	106	66	40
Political science & government	619	374	245
Public policy analysis	162	84	78
Sociology	535	201	334
Statistics (Social Sciences)	22	10	12
Urban affairs/studies	81	51	30
Social sciences, general	32	12	20
Social sciences, other	119	51	68
HUMANITIES	5,349	2,619	2,724
HISTORY	924	539	384
History, American	372	215	157
History, Asian	64	38	26
History, European	211	123	88
History, African	18	13	5
History, Latin American	45	25	20
History/philosophy of science & technology	43	27	16
History, general	77	50	26
History, other	94	48	46
LETTERS	1,601	631	969
Classics	61	30	31
Comparative literature	180	65	115
Folklore	18	10	8

APPENDIX TABLE A-1. Number of doctorate recipients, by sex and subfield of study, 2005

Field of study	Number of doctorates		
	Total [a]	Male	Female
Linguistics	211	73	137
Literature, American	406	171	235
Literature, English	417	158	259
English language	137	55	82
Speech & rhetorical studies	98	44	54
Letters, general	19	9	10
Letters, other	54	16	38
FOREIGN LANGUAGES & LITERATURE	609	241	367
French	113	37	76
German	76	34	42
Italian	19	6	13
Spanish	241	87	154
Russian	21	8	13
Slavic (other than Russian)	13	3	10
Chinese	22	16	6
Japanese	23	15	7
Arabic	6	5	1
Other languages & literature	75	30	45
other HUMANITIES	2,215	1,208	1,004
American studies	104	47	57
Archeology	44	15	29
Art history/criticism/conservation	211	55	156
Music	904	483	419
Philosophy	354	265	89
Religion	369	246	123
Drama/theater arts	88	38	49
Humanities, general	25	14	11
Humanities, other	116	45	71
EDUCATION	6,229	2,065	4,154
EDUCATION ADMINISTRATION	2,170	844	1,322
Educational administration & supervision	731	312	419
Educational leadership	1,439	532	903
EDUCATION RESEARCH	2,668	809	1,856
Curriculum & instruction	984	272	710
Educational/instructional media design	124	56	68
Educational statistics/research methods	59	19	40
Educational assessment/testing/measure	56	23	33
Educational psychology	249	72	177
School psychology	111	26	85
Social/philosophical foundations of education	154	55	98
Special education	240	42	198
Counseling education/counseling & guidance	177	48	129
Higher education/evaluation & research	514	196	318
TEACHER EDUCATION	264	63	200
Education, pre-elementary/early childhood	36	4	32
Education, elementary	56	6	50
Education, secondary	22	5	17
Education, adult & continuing	150	48	101
TEACHING FIELDS	664	205	458
Teaching, agricultural education	25	20	5
Teaching, art education	34	5	29
Teaching, business education	7	1	6
Teaching, english education	55	13	42
Teaching, foreign languages education	80	25	54
Teaching, health education	44	6	38

APPENDIX TABLE A-1. Number of doctorate recipients, by sex and subfield of study, 2005

Field of study	Number of doctorates		
	Total [a]	Male	Female
Teaching, family & consumer sci./home economics education	11	1	10
Teaching, mathematics education	89	33	56
Teaching, music education	61	19	42
Teaching, nursing education	10	0	10
Teaching, physical education & coaching	49	27	22
Teaching, reading education	74	9	65
Teaching, science education	67	28	39
Teaching, social science education	15	6	9
Teaching, trade & industrial education	6	5	1
Teacher education & prof. dev.	37	7	30
OTHER EDUCATION	463	144	318
Education, general	220	71	148
Education, other	243	73	170
OTHER FIELDS	2,530	1,296	1,229
BUSINESS MGMT./ADMINISTRATIVE SERVICES	1,168	692	472
Accounting	129	76	53
Banking/financial support services	83	58	25
Business administration & management	300	197	99
Business/managerial economics	55	40	15
International business/trade/commerce	28	12	16
Management information systems/business data	94	64	30
Marketing management & research	142	79	63
Human resources development	101	33	68
Operations research	48	40	8
Organizational behavior	120	55	65
Business management/administration serv., general	28	15	13
Business management/administration serv., other	40	23	17
COMMUNICATIONS	486	213	272
Communications research	63	29	34
Mass communications	214	102	112
Communication theory	54	23	31
Communications, general	76	28	47
Communications, other	79	31	48
FIELDS NOT ELSEWHERE CLASSIFIED	846	379	467
Architectural environmental design	76	52	24
Family/consumer sci./human sci., general	51	11	40
Law	40	26	14
Library science	30	5	25
Parks/sports/recreation/leisure/fitness	72	42	30
Public administration	103	57	46
Social work	325	88	237
Theology/religious education	149	98	51
FIELDS NOT LISTED ABOVE	30	12	18

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

[a] Totals include doctorate recipients whose sex was unknown (total is 59).

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

APPENDIX TABLE A-2. Number of doctorate recipients, by citizenship, race/ethnicity, and subfield of study, 2005

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]
TOTAL ALL FIELDS	43,354	14,424	26,312	139	1,493	1,688	20,845	264	497	533	853
PHYSICAL SCIENCES	6,699	3,266	3,074	9	241	84	2,508	27	31	58	116
MATHEMATICS	1,203	663	480	0	38	16	387	5	7	11	16
Applied athematics	291	168	119	0	10	7	91	2	5	2	2
Mathematics, algebra	97	44	52	0	3	2	41	1	0	2	3
Mathematics, analysis & functional analysis	111	62	49	0	5	1	39	1	0	1	2
Mathematics, geometry	96	53	43	0	5	0	34	0	0	2	2
Mathematics, logic	26	12	14	0	1	1	12	0	0	0	0
Mathematics, number theory	62	25	36	0	3	1	28	0	1	1	2
Mathematics, statistics	267	184	73	0	7	1	61	0	0	1	3
Mathematics, topology	51	27	24	0	1	1	20	1	1	0	0
Mathematics, computing theory & practice	16	8	8	0	1	0	7	0	0	0	0
Mathematics, operations research	23	14	9	0	2	1	6	0	0	0	0
Mathematics, general	104	41	25	0	0	0	22	0	0	1	2
Mathematics, other	59	25	28	0	0	1	26	0	0	1	0
COMPUTER & INFORMATION SCIENCES	1,136	667	405	1	52	15	305	0	2	7	23
Computer science	955	582	325	1	41	11	248	0	1	6	17
Information science & systems	85	38	38	0	3	3	29	0	1	0	2
Computer & information science, other	96	47	42	0	8	1	28	0	0	1	4
ASTRONOMY	186	63	120	0	7	2	100	0	2	1	8
Astronomy	72	20	52	0	2	0	44	0	0	1	5
Astrophysics	114	43	68	0	5	2	56	0	2	0	3
ATMOSPHERIC SCI. & METEOROLOGY	144	56	82	1	2	3	73	1	1	1	0
Atmospheric chemistry & climatology	42	19	23	1	2	1	19	0	0	0	0
Atmospheric physics & dynamics	28	7	20	0	0	1	19	0	0	0	0
Meteorology	20	8	11	0	0	0	11	0	0	0	0
Atmospheric science/meteorology, general	29	13	14	0	0	1	13	0	0	0	0
Atmospheric science/meteorology, other	25	9	14	0	0	0	11	1	1	1	0
CHEMISTRY	2,127	879	1,131	2	85	35	925	16	10	26	32
Chemistry, analytical	364	153	206	0	10	8	173	3	1	7	4
Chemistry, inorganic	255	96	155	0	12	1	136	1	1	1	3
Chemistry, organic	600	256	333	1	27	14	264	7	2	8	10
Chemistry, medicinal/pharmaceutical	110	54	55	0	10	2	39	1	1	1	1
Chemistry, physical	298	127	165	0	10	4	139	2	4	1	5
Chemistry, polymer	119	63	56	0	3	2	50	0	0	0	1
Chemistry, theoretical	57	32	25	0	2	0	21	1	1	0	0
Chemistry, general	195	42	64	1	9	1	45	0	0	5	3
Chemistry, other	129	56	72	0	2	3	58	1	0	3	5

APPENDIX TABLE A-2. Number of doctorate recipients, by citizenship, race/ethnicity, and subfield of study, 2005

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]
GEOLOGICAL & EARTH SCIENCES	379	131	225	3	6	2	200	2	0	4	8
Geology	107	29	71	1	4	1	61	1	0	0	3
Geochemistry	55	17	38	1	0	0	34	1	0	1	1
Geophysics & seismology	92	50	39	1	2	0	34	0	0	1	1
Paleontology	29	5	24	0	0	0	22	0	0	1	1
Mineralogy & petrology	8	4	3	0	0	0	3	0	0	0	0
Stratigraphy & sedimentation	15	4	11	0	0	0	11	0	0	0	0
Geomorphology & glacial geology	12	2	10	0	0	0	10	0	0	0	0
Geological & earth sciences, general	24	8	7	0	0	0	6	0	0	1	0
Geological & earth sciences, other	37	12	22	0	0	1	19	0	0	0	2
PHYSICS	1,334	740	517	2	48	10	417	1	7	6	26
Physics, acoustics	25	9	15	0	0	0	15	0	0	0	0
Physics, atomic/molecular/chemical	87	39	47	0	1	2	39	0	0	1	4
Physics, elementary particle	188	120	68	0	7	0	52	0	4	2	3
Biophysyics	72	40	29	0	3	0	26	0	0	0	0
Physics, nuclear	70	42	28	0	3	0	25	0	0	0	0
Physics, optics/phototonics	145	91	49	0	5	4	39	0	0	0	1
Physics, plasma/fusion	54	29	20	0	3	0	17	0	0	0	0
Physics, polymer	29	16	11	0	4	0	6	0	1	0	0
Physics, condensed matter/low temp	314	206	104	0	11	2	80	1	1	2	7
Applied physics	101	49	40	1	4	2	30	0	0	0	3
Physics, general	129	41	48	1	3	0	37	0	0	1	6
Physics, other	120	58	58	0	4	0	51	0	1	0	2
OCEAN/MARINE SCIENCES	190	67	114	0	3	1	101	2	2	2	3
Hydrology & water resources	41	20	17	0	0	0	15	0	1	0	1
Oceanography	74	33	40	0	1	0	37	0	1	0	1
Marine sciences	61	10	49	0	2	1	41	2	0	2	1
Ocean/marine sciences, other	14	4	8	0	0	0	8	0	0	0	0
ENGINEERING	6,404	4,039	1,999	8	242	85	1,521	16	24	33	70
AEROSPACE/AERONAUTICAL ENGINEERING	219	120	93	1	7	2	71	1	3	2	6
CHEMICAL AND RELATED ENGINEERING	875	511	294	0	33	11	223	5	6	4	12
Chemical engineering	774	436	276	0	31	11	208	5	6	4	11
Petroleum engineering	50	39	4	0	1	0	3	0	0	0	0
Polymer & plastics engineering	51	36	14	0	1	0	12	0	0	0	1
CIVIL AND RELATED ENGINEERING	757	516	211	0	13	7	174	2	1	7	7
Civil engineering	621	435	158	0	9	4	130	2	1	6	6
Environmental health engineering	136	81	53	0	4	3	44	0	0	1	1

APPENDIX TABLE A-2. Number of doctorate recipients, by citizenship, race/ethnicity, and subfield of study, 2005

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]
ELECTRICAL AND RELATED ENGINEERING	1,852	1,289	466	2	77	28	332	2	3	6	16
Communications engineering	27	24	3	0	2	0	1	0	0	0	0
Computer engineering	277	203	63	0	12	6	38	0	1	1	5
Electrical & electronics engineering	1,548	1,062	400	2	63	22	293	2	2	5	11
INDUSTRIAL ENGINEERING	222	145	59	0	3	7	46	1	0	0	2
MECHANICAL AND RELATED ENGINEERING	978	637	292	4	32	8	228	1	6	5	8
Engineering mechanics	86	66	20	0	4	0	16	0	0	0	0
Mechanical engineering	892	571	272	4	28	8	212	1	6	5	8
MATERIALS/METALLURGICAL ENGINEERING	540	334	177	0	15	4	145	2	3	5	3
Ceramic sciences engineering	14	8	6	0	0	0	6	0	0	0	0
Materials science engineering	493	303	163	0	15	4	131	2	3	5	3
Metallurgical engineering	33	23	8	0	0	0	8	0	0	0	0
OTHER ENGINEERING	961	487	407	1	62	18	302	2	2	4	16
Agricultural engineering	47	26	21	0	0	0	20	1	0	0	0
Bioengineering & biomedical engineering	417	185	211	0	47	7	143	1	0	4	9
Engineering physics	27	15	12	0	2	0	10	0	0	0	0
Engineering science	42	25	10	0	0	2	8	0	0	0	0
Mining & mineral engineering	12	7	5	1	0	0	4	0	0	0	0
Nuclear engineering	71	38	29	0	4	1	22	0	0	0	2
Ocean engineering	18	9	8	0	0	0	7	0	0	0	1
Operations research engineering	87	60	26	0	3	1	20	0	1	0	1
Systems engineering	56	27	27	0	1	1	23	0	1	0	1
Engineering, general	53	26	13	0	2	3	8	0	0	0	0
Engineering, other	131	69	45	0	3	3	37	0	0	0	2
LIFE SCIENCES	9,306	2,917	5,911	19	508	269	4,679	64	92	110	170
AGRICULTURAL SCIENCES/NATURAL RESOURCES	1,161	520	564	3	15	13	502	5	4	9	13
Agricultural economics	123	75	37	0	2	0	29	0	1	3	2
Agricultural animal breeding	14	6	7	0	0	0	7	0	0	0	0
Animal nutrition	51	21	29	0	0	0	26	1	0	0	2
Poultry science	14	6	6	0	0	1	4	1	0	0	0
Animal sciences, other	71	20	41	1	1	1	36	0	0	1	1
Agronomy & crop science	79	31	43	1	1	1	40	0	0	0	0
Agricultural & horticultural plant breeding	35	19	15	0	0	0	12	1	1	1	0
Plant pathology/phytopathology	71	40	29	1	0	0	28	0	0	0	0
Plant sciences, other	31	13	16	0	1	0	14	0	0	0	1
Food science	93	59	28	0	4	1	20	0	1	0	2
Food science & technology, other	48	29	18	0	2	3	11	1	0	1	0

APPENDIX TABLE A-2. Number of doctorate recipients, by citizenship, race/ethnicity, and subfield of study, 2005

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]
Soil chemistry/microbiology	24	15	9	0	0	1	7	0	0	0	1
Soil sciences, other	52	28	22	0	0	0	21	0	0	1	0
Horticulture science	49	31	16	0	0	0	15	0	0	1	0
Fishing & fisheries sciences & management	34	7	27	0	1	0	26	0	0	0	0
Forest sciences & biology	29	14	15	0	0	0	15	0	0	0	0
Forest/resources management	40	14	24	0	0	0	24	0	0	0	0
Wood science & pulp/paper technology	15	6	7	0	0	1	6	0	0	0	0
Natural resources/conservation	64	18	42	0	0	1	41	0	0	0	0
Forestry & related science, other	24	9	14	0	0	0	14	0	0	0	0
Wildlife/range management	44	11	30	0	0	0	29	0	0	0	1
Environmental science	129	39	78	0	2	3	67	1	1	1	3
Agriculture, general	10	2	5	0	0	0	5	0	0	0	0
Agricultural science, other	17	7	6	0	1	0	5	0	0	0	0
BIOLOGICAL/BIOMEDICAL SCIENCES	6,368	1,932	4,141	12	409	142	3,248	53	68	86	123
Biochemistry	692	262	410	0	42	14	322	5	4	12	11
Biomedical sciences	248	84	151	1	22	12	106	3	3	2	2
Biophysics	144	56	87	0	9	5	69	0	0	2	2
Biotechnology	23	12	11	0	2	0	9	0	0	0	0
Bacteriology	13	5	8	0	0	0	6	1	1	0	0
Plant genetics	50	14	35	0	3	0	26	0	3	2	1
Plant pathology (Biological)	31	16	10	0	1	0	9	0	0	0	0
Plant physiology	38	18	20	0	1	0	18	0	0	1	0
Botany/plant biology	87	27	53	0	4	0	42	0	0	1	6
Anatomy	23	7	15	0	1	0	13	1	0	0	0
Biometrics & biostatistics	130	74	54	0	10	2	39	0	1	0	2
Cellular biology & histology	316	99	203	0	21	10	158	0	4	7	3
Ecology	412	63	334	2	7	2	308	4	3	3	5
Developmental biology/embryology	162	57	103	1	14	1	81	0	1	2	3
Endocrinology	29	12	17	0	3	1	13	0	0	0	0
Entomology	103	28	64	0	4	0	55	1	0	1	3
Immunology	343	106	233	2	33	9	170	3	8	4	4
Molecular biology	726	244	460	1	66	15	338	5	9	8	18
Microbiology	430	103	307	2	20	12	244	6	6	8	9
Neuroscience	689	191	480	0	53	9	372	5	5	16	20
Nutritional sciences	163	54	100	1	5	6	84	1	1	1	1
Parasitology	21	8	13	0	0	1	9	1	0	1	1
Toxicology	102	23	75	1	5	3	60	2	2	1	1
Genetics, human & animal	287	71	206	0	20	7	167	0	1	4	7
Pathology, human & animal	93	30	57	0	7	5	41	0	3	0	1
Pharmacology, human & animal	315	102	203	0	27	15	147	3	5	3	3

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			Total	American Indian [c]	Asian [d]	Black	White	Puerto Rican	Mexican	Other Hispanic	Other/ unknown race [e]
Physiology, human & animal	208	71	135	1	9	6	105	1	3	3	7
Zoology, other	103	16	78	0	6	0	68	2	1	0	1
Biology/biomedical sciences, general	189	39	118	0	8	4	91	8	1	2	4
Biology/biomedical sciences, other	198	40	101	0	6	3	78	1	3	2	8
HEALTH SCIENCES	1,777	465	1,206	4	84	114	929	6	20	15	34
Speech-language pathology & audiology	97	19	77	0	2	6	62	0	1	4	2
Environmental health	42	15	25	0	1	0	21	0	0	1	2
Environmental toxicology	42	10	22	0	1	1	19	0	1	0	0
Health systems/service administration	70	23	46	0	4	5	35	0	1	0	1
Public health	279	57	212	1	27	33	133	2	3	4	9
Epidemiology	229	61	162	0	22	7	123	1	1	3	5
Kinesiology/exercise science	153	26	122	1	0	7	110	0	4	0	0
Nursing science	418	74	317	1	10	23	269	1	4	1	8
Pharmacy	168	99	49	0	6	8	34	0	0	1	0
Rehabilitation/therapeutic services	66	15	51	1	4	6	37	0	1	1	1
Veterinary medicine	47	26	14	0	0	0	13	0	0	0	1
Health sciences, general	46	11	34	0	1	6	23	1	1	0	2
Health sciences, other	120	29	75	0	6	12	50	1	3	0	3
SOCIAL SCIENCES AND PSYCHOLOGY	6,837	1,604	4,807	32	198	296	3,806	53	103	133	186
PSYCHOLOGY	3,327	290	2,811	15	110	159	2,243	37	58	83	106
Psychology, clinical	1,158	60	1,035	7	46	55	809	14	16	40	48
Psychology, cognitive & psycholinguistics	147	19	122	1	2	1	106	0	1	1	10
Psychology, comparative	5	0	5	0	0	0	5	0	0	0	0
Psychology, counseling	469	41	412	3	21	38	310	5	9	17	9
Psychology, developmental & child	223	27	191	1	6	9	156	4	3	8	4
Psychology, human development & family studies	172	24	145	0	7	15	110	0	8	1	4
Psychology, experimental	120	25	93	1	2	1	83	1	3	1	1
Psychology, educational	81	6	58	0	1	4	46	1	1	1	4
Psychology, family	25	0	20	0	0	0	20	0	0	0	0
Psychology, industrial & organizational	184	14	167	0	6	7	145	1	3	1	4
Psychology, personality	14	3	11	0	1	1	9	0	0	0	0
Psychology, physiological/psychobiology	85	10	72	0	4	3	58	0	4	2	1
Psychology, psychometrics & quantitative	23	8	15	0	0	0	14	0	0	0	1
Psychology, school	108	1	97	0	3	3	82	1	4	4	0
Psychology, social	183	21	155	1	8	12	116	1	4	4	9
Psychology, general	187	14	97	1	1	5	72	8	1	1	8
Psychology, other	143	17	116	0	2	5	102	1	1	2	3

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SOCIAL SCIENCES	3,510	1,314	1,996	17	88	137	1,563	16	45	50	80
Anthropology	455	79	345	3	15	21	273	3	8	6	16
Area studies	6	2	4	0	0	0	3	0	0	0	1
Criminology	96	9	85	1	1	8	71	1	0	1	2
Demography/population studies	20	13	7	0	2	0	4	1	0	0	0
Economics	1,031	698	284	1	24	6	231	2	2	9	9
Econometrics	30	19	10	0	0	1	7	0	1	1	0
Geography	196	63	125	0	1	1	112	2	0	1	8
International relations/affairs	106	38	67	0	1	4	52	1	3	3	3
Political science & government	619	154	435	3	17	30	352	1	9	9	14
Public policy analysis	162	45	104	1	4	11	80	0	2	2	4
Sociology	535	109	391	4	14	38	289	5	15	12	14
Statistics (Social Sciences)	22	14	4	0	1	0	2	0	0	0	1
Urban affairs/studies	81	40	37	2	3	4	23	0	2	0	3
Social sciences, general	32	8	21	0	0	4	14	0	1	1	1
Social sciences, other	119	23	77	2	5	9	50	0	2	5	4
HUMANITIES	5,349	1,119	3,895	22	140	172	3,217	41	77	76	150
HISTORY	924	118	762	6	22	41	633	6	13	13	28
History, American	372	23	345	3	6	21	293	1	5	4	12
History, Asian	64	24	40	0	5	1	31	0	2	0	1
History, European	211	21	187	0	2	2	172	1	0	2	8
History, African	18	4	13	0	0	5	7	0	0	0	1
History, Latin American	45	11	33	0	0	2	20	0	6	4	1
History/philosophy of science & technology	43	9	32	0	2	1	25	1	0	1	2
History, general	77	7	43	0	3	4	31	2	0	1	2
History, other	94	19	69	3	4	5	54	1	0	1	1
LETTERS	1,601	292	1,236	9	50	62	1,009	10	25	11	60
Classics	61	15	45	1	1	0	41	0	0	0	2
Comparative literature	180	55	115	0	15	3	81	0	7	3	6
Folklore	18	3	12	0	0	0	10	0	0	1	1
Linguistics	211	99	98	0	2	1	85	1	1	2	6
Literature, American	406	29	372	6	15	34	277	4	11	3	22
Literature, English	417	50	346	0	14	10	301	2	4	0	15
English language	137	26	102	0	3	7	82	2	0	1	7
Speech & rhetorical studies	98	7	88	1	0	5	79	1	1	0	1
Letters, general	19	2	15	0	0	2	13	0	0	0	0
Letters, other	54	6	43	1	0	0	40	0	1	1	0

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FOREIGN LANGUAGES & LITERATURE	609	239	336	0	12	7	243	13	20	27	14
French	113	40	70	0	3	1	64	0	0	0	2
German	76	32	40	0	2	0	35	0	0	0	3
Italian	19	9	10	0	0	0	8	1	1	0	0
Spanish	241	101	128	0	3	2	60	12	18	25	8
Russian	21	7	14	0	1	0	13	0	0	0	0
Slavic (other than Russian)	13	1	9	0	0	0	9	0	0	0	0
Chinese	22	12	10	0	1	0	9	0	0	0	0
Japanese	23	10	12	0	1	0	10	0	0	1	0
Arabic	6	2	3	0	0	0	3	0	0	0	0
Other languages & literature	75	25	40	0	1	4	32	0	1	1	1
OTHER HUMANITIES	2,215	470	1,561	7	56	62	1,332	12	19	25	48
American studies	104	8	92	2	4	11	60	3	5	3	4
Archeology	44	12	30	0	1	1	27	0	0	0	1
Art history/criticism/conservation	211	40	160	2	2	2	143	2	2	2	5
Music	904	208	587	2	30	17	505	4	6	6	17
Philosophy	354	88	249	0	5	4	223	0	2	6	9
Religion	369	71	283	0	9	16	248	1	1	3	5
Drama/theater arts	88	16	68	1	0	2	56	2	2	3	2
Humanities, general	25	3	18	0	0	1	17	0	0	0	0
Humanities, other	116	24	74	0	5	8	53	0	1	2	5
EDUCATION	6,229	645	5,136	43	112	661	3,928	42	143	92	115
EDUCATION ADMINISTRATION	2,170	98	1,926	18	28	312	1,430	10	61	30	37
Educational administration & supervision	731	33	662	4	10	122	490	5	16	7	8
Educational leadership	1,439	65	1,264	14	18	190	940	5	45	23	29
EDUCATION RESEARCH	2,668	333	2,206	17	56	243	1,722	20	55	45	48
Curriculum & instruction	984	138	784	4	14	92	609	7	23	18	17
Educational/instructional media design	124	40	84	0	3	8	61	2	1	3	6
Educational statistics/research methods	59	13	45	1	1	4	36	0	1	1	1
Educational assessment/testing/measure	56	15	36	0	1	4	31	0	0	0	0
Educational psychology	249	32	209	2	11	16	160	3	7	1	9
School psychology	111	5	104	1	5	7	85	0	0	4	2
Social/philosophical foundations of education	154	15	137	2	7	18	97	0	4	7	2
Special education	240	23	196	2	3	16	163	3	3	4	2
Counseling education/counseling & guidance	177	8	159	1	1	26	118	4	2	3	4
Higher education/evaluation & research	514	44	452	4	10	52	362	1	14	4	5
TEACHER EDUCATION	264	34	206	4	4	26	160	0	3	4	5
Education, pre-elementary/early childhood	36	8	22	0	0	2	20	0	0	0	0

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Education, elementary	56	8	43	1	1	8	31	0	1	1	0
Education, secondary	22	3	17	0	0	3	13	0	1	0	0
Education, adult & continuing	150	15	124	3	3	13	96	0	1	3	5
TEACHING FIELDS	664	131	495	1	12	29	414	5	12	9	13
Teaching, agricultural education	25	2	22	0	0	0	19	0	1	0	2
Teaching, art education	34	9	25	0	0	0	23	0	1	1	0
Teaching, business education	7	0	6	0	0	0	6	0	0	0	0
Teaching, English education	55	14	40	0	0	3	35	0	1	1	0
Teaching, foreign languages education	80	37	32	0	3	0	24	1	2	1	1
Teaching, health education	44	1	42	0	0	4	34	1	2	1	0
Teaching, family & consumer sci./home economics education	11	2	4	0	0	1	2	0	0	0	1
Teaching, mathematics education	89	16	70	0	3	4	57	0	1	3	2
Teaching, music education	61	12	49	0	1	1	47	0	0	0	0
Teaching, nursing education	10	0	10	0	1	0	7	0	0	0	2
Teaching, physical education & coaching	49	9	36	0	0	3	29	1	2	0	1
Teaching, reading education	74	6	63	0	1	4	54	0	1	1	2
Teaching, science education	67	17	48	0	1	3	39	2	1	1	1
Teaching, social science education	15	2	12	0	1	1	10	0	0	0	0
Teaching, trade & industrial education	6	2	4	1	0	0	3	0	0	0	0
Teacher education & prof. dev.	37	2	32	0	1	5	25	0	0	0	1
OTHER EDUCATION	463	49	303	3	12	51	202	7	12	4	12
Education, general	220	11	144	1	6	34	85	5	6	0	7
Education, other	243	38	159	2	6	17	117	2	6	4	5
OTHER FIELDS	2,530	834	1,490	6	52	121	1,186	21	27	31	46
BUSINESS MGMT./ADMINISTRATIVE SERVICES	1,168	501	578	1	25	51	456	9	10	11	15
Accounting	129	50	79	0	8	5	60	2	1	1	2
Banking/financial support services	83	66	16	0	1	2	12	0	0	0	1
Business administration & management	300	105	140	1	2	15	111	3	2	0	6
Business/managerial economics	55	28	27	0	1	1	24	1	0	0	0
International business/trade/commerce	28	13	12	0	0	0	7	1	2	1	1
Management information systems/business data	94	52	42	0	2	3	35	0	0	2	0
Marketing management & research	142	85	52	0	3	9	35	0	2	1	2
Human resources development	101	28	60	0	1	7	47	2	0	2	1
Operations research	48	33	14	0	0	0	13	0	1	0	0
Organizational behavior	120	20	99	0	6	4	85	0	1	1	2
Business management/administration serv., general	28	7	15	0	1	2	10	0	0	2	0
Business management/administration serv., other	40	14	22	0	0	3	17	0	1	1	0

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COMMUNICATIONS	486	147	314	0	12	18	260	2	7	7	8
Communications research	63	20	41	0	3	2	34	0	1	0	1
Mass communications	214	73	133	0	7	7	110	0	2	2	5
Communication theory	54	14	39	0	1	3	29	2	2	1	1
Communications, general	76	9	61	0	0	2	55	0	1	3	0
Communications, other	79	31	40	0	1	4	32	0	1	1	1
FIELDS NOT ELSEWHERE CLASSIFIED	846	179	583	5	14	51	462	10	9	12	20
Architectural environmental design	76	39	34	0	3	0	26	1	0	0	4
Family/consumer sci./human sci., general	51	12	31	0	0	2	29	0	0	0	0
Law	40	22	10	0	1	0	9	0	0	0	0
Library science	30	12	17	0	0	1	16	0	0	0	0
Parks/sports/recreation/leisure/fitness	72	17	47	0	2	1	41	0	1	1	1
Public administration	103	27	75	0	0	6	66	0	1	1	1
Social work	325	29	270	4	2	35	201	5	5	9	9
Theology/religious education	149	21	99	1	6	6	74	4	2	1	5
FIELDS NOT LISTED ABOVE	30	7	15	0	1	1	8	0	1	1	3

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

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

[b] Includes 2,620 individuals who did not report their citizenship at time of doctorate. See the "Important Notice" for discussion of item response rate issues.

[c] Includes Alaska Natives.

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

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

APPENDIX TABLE A-3a. Statistical profile of doctorate recipients, by major field of study, 2005 - Total all doctorates

Characteristics		2005 Total	TOTAL SCIENCES & ENGINEERING	PHYSICAL SCIENCES [a]	Physics & astronomy	Chemistry	Earth, atmos., & marine sci.	Mathematics	Computer sciences	ENGINEERING	LIFE SCIENCES	Biochemistry	Other biological sciences	Health sciences	Agricultural sciences/ natural resources	SOCIAL SCI. AND PSYCHOLOGY
Number in field		43,354	29,246	6,699	1,520	2,127	713	1,203	1,136	6,404	9,306	692	5,676	1,777	1,161	6,837
Sex	%															
Male		54.7	60.7	73.5	83.5	66.0	65.9	72.7	80.0	81.4	49.1	60.1	50.1	31.8	64.2	44.5
Female		45.1	39.2	26.4	16.4	34.0	34.1	27.1	19.8	18.3	50.8	39.9	49.8	68.0	35.6	55.4
Unknown [b]		0.1	0.1	0.1	0.1	0.0	0.0	0.2	0.2	0.2	0.1	0.0	0.1	0.2	0.3	0.1
Citizenship	%															
U.S. citizenship		60.7	54.0	45.9	41.9	53.2	59.0	39.9	35.7	31.2	63.5	59.2	65.7	67.9	48.6	70.3
Non-U.S., permanent resident		3.7	4.0	4.2	3.3	3.9	2.9	5.1	6.0	4.5	3.9	5.8	3.8	4.3	3.0	3.3
Non-U.S., temporary visa holder		29.6	36.5	44.5	49.5	37.5	32.7	50.0	52.7	58.6	27.4	32.1	25.6	21.8	41.8	20.1
Unknown		6.0	5.6	5.4	5.3	5.5	5.3	5.0	5.6	5.7	5.1	2.9	4.8	6.0	6.6	6.2
Marital status	%															
Never married		26.5	30.1	34.9	38.5	34.2	27.6	38.5	32.1	31.8	28.5	32.8	31.5	20.9	22.7	26.0
Married		51.9	50.5	47.2	43.2	48.8	53.3	43.6	49.3	53.4	51.8	52.9	49.2	56.8	56.4	49.4
Separated		0.5	0.5	0.6	0.5	0.5	----	----	----	0.3	0.5	----	0.4	0.7	0.4	0.7
Divorced		4.2	3.0	2.3	2.5	1.9	----	2.0	2.8	1.5	3.2	----	2.8	4.8	3.6	4.6
Marriage-like relationship		6.0	6.0	6.0	6.6	5.9	7.0	6.1	4.6	3.2	6.7	7.1	7.5	5.1	4.8	7.6
Widowed		0.3	0.2	0.0	0.0	0.0	0.0	----	----	0.0	0.3	0.0	0.1	0.6	0.4	0.3
Unknown		10.6	9.8	9.0	8.6	8.6	8.7	9.0	10.6	9.8	9.1	5.3	8.5	11.0	11.6	11.3
Median age at doctorate		33.0	31.4	30.4	30.3	29.5	32.0	30.3	31.7	31.1	31.5	29.8	30.7	36.2	33.2	33.1
Bachelor's in same field as doctorate		52.7	59.5	65.0	72.9	74.1	49.1	66.6	45.4	74.8	48.4	30.5	52.7	43.7	45.4	54.7
Percent with master's		74.8	68.6	64.5	70.0	43.4	71.4	75.1	81.2	80.5	52.9	34.4	40.6	81.1	80.5	82.8
Median time lapse from baccalaureate to doctorate	Yrs															
Since baccalaureate		9.9	8.6	7.8	7.6	6.8	9.0	7.8	8.9	8.2	8.7	7.3	8.0	12.5	9.9	9.9
Since starting graduate school		8.2	7.2	6.7	6.7	5.9	7.8	6.8	7.7	7.2	7.1	6.5	6.7	9.7	7.9	8.0
Postdoctoral plans	%															
Definite postdoctoral study		24.7	33.7	40.0	49.5	47.0	45.5	34.5	15.9	21.0	46.5	63.4	56.5	19.8	26.0	21.7
Definite employment		44.9	35.9	32.3	18.6	25.6	29.0	41.1	56.7	43.1	23.0	8.4	13.6	51.2	36.8	50.7
Seeking employment or study		27.9	28.3	26.3	30.3	26.3	24.0	23.2	25.5	34.1	28.2	26.9	27.6	27.0	34.5	24.8
Other/unknown [c]		2.5	2.1	1.4	1.5	1.1	1.5	1.2	1.8	1.8	2.3	1.4	2.4	2.1	2.7	2.8
Definite postdoctoral study [d]		35.5	48.4	55.3	72.7	64.8	61.1	45.6	21.9	32.8	66.9	88.3	80.7	27.9	41.4	29.9
Fellowship		19.3	26.3	26.2	29.7	30.9	30.9	27.0	8.4	11.4	39.4	53.2	48.8	17.8	14.0	21.2
Research associateship		12.6	17.7	27.4	41.2	31.9	28.9	16.9	12.0	19.8	18.4	27.2	20.0	5.9	24.8	5.4
Traineeship		0.5	0.5	0.3	----	0.0	----	0.7	----	0.2	0.9	----	0.8	1.2	----	0.6
Intern, clinical residency		1.1	1.6	0.2	----	----	0.0	0.0	----	0.4	3.1	----	4.3	1.1	----	2.0
Other study		2.0	2.3	1.2	1.0	----	----	1.0	1.1	1.0	5.1	4.7	6.8	1.9	1.6	0.7
Definite employment after doctorate [e]		64.5	51.6	44.7	27.3	35.2	38.9	54.4	78.1	67.2	33.1	11.7	19.3	72.1	58.6	70.1
Educational institution [f]		41.4	24.2	19.3	8.3	7.7	16.4	36.4	38.1	15.1	18.2	4.5	9.8	47.5	24.6	44.7
Industry/business		14.2	18.4	20.8	14.3	25.0	12.3	13.8	35.0	43.3	7.7	5.5	5.5	10.6	16.4	9.5
Government		4.9	5.6	3.2	3.7	1.5	7.8	2.9	3.3	6.6	4.5	----	2.6	7.4	12.8	8.5
Nonprofit		3.3	2.7	1.1	----	0.7	----	----	1.2	1.4	2.3	0.0	1.2	6.1	3.6	6.0
Other & unknown		0.7	0.7	0.3	----	0.4	----	----	0.4	0.7	0.4	----	0.2	0.5	1.2	1.5

APPENDIX TABLE A-3a. Statistical profile of doctorate recipients, by major field of study, 2005 - Total all doctorates

Characteristics		Psychology	Economics	Anthropology & sociology	Political sci./ Internatn'l Rel.	Other social sciences	TOTAL NONSCIENCES	HUMANITIES	History	American literature	English lang. & literature	Foreign lang. & literature	Other humanities	EDUCATION	OTHER FIELDS	Business & management	Fields not elsewhere classified
Number in field		3,327	1,061	990	725	734	14,108	5,349	924	406	554	609	2,856	6,229	2,530	1,168	1,360
Sex	%																
Male		31.9	69.8	40.3	60.7	54.6	42.4	49.0	58.3	42.1	38.4	39.6	50.9	33.2	51.2	59.2	44.3
Female		68.0	30.0	59.6	39.3	45.4	57.5	50.9	41.6	57.9	61.6	60.3	48.9	66.7	48.6	40.4	55.7
Unknown [b]		0.0	0.2	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.2	0.1	0.2	0.2	0.3	0.1
Citizenship	%																
U.S. citizenship		84.5	27.7	74.3	69.2	63.2	74.6	72.8	82.5	91.6	80.9	55.2	69.2	82.5	58.9	49.5	67.0
Non-U.S., permanent resident		2.4	4.6	3.7	4.4	4.0	3.1	4.5	1.7	1.5	3.8	10.8	4.6	1.7	3.5	4.5	2.7
Non-U.S., temporary visa holder		6.3	63.0	15.3	22.1	25.6	15.3	16.4	11.0	5.7	9.9	28.4	18.4	8.6	29.4	38.4	21.8
Unknown		6.8	4.7	6.7	4.3	7.2	7.0	6.3	4.8	1.2	5.4	5.6	7.8	7.2	8.1	7.6	8.5
Marital status	%																
Never married		25.4	31.7	24.9	25.5	22.6	19.1	25.2	24.2	26.8	23.6	26.4	25.4	13.6	20.0	18.8	21.0
Married		47.4	53.1	46.2	52.4	54.4	54.7	48.2	52.3	48.8	43.9	47.5	47.8	59.8	55.8	58.0	54.0
Separated		0.5	0.5	1.3	1.4	0.8	0.6	0.7	----	----	----	----	0.7	0.7	0.5	----	0.7
Divorced		4.6	2.0	7.1	4.6	5.2	6.8	5.4	5.3	6.9	6.0	4.9	5.1	8.6	5.3	5.5	5.1
Marriage-like relationship		8.1	5.6	10.0	7.6	5.7	6.0	9.3	8.8	15.0	10.3	10.7	8.3	3.9	4.3	3.3	5.3
Widowed		0.3	0.0	0.5	0.0	0.7	0.6	0.3	----	0.0	----	----	0.4	0.8	0.4	----	0.6
Unknown		13.8	7.3	10.0	8.6	10.6	12.2	10.9	8.5	----	15.2	9.7	12.3	12.7	13.7	14.1	13.3
Median age at doctorate		32.1	31.6	35.1	34.7	36.3	37.7	35.2	35.3	34.9	35.2	35.1	35.2	42.5	36.9	35.6	37.8
Bachelor's in same field as doctorate		63.3	58.6	45.5	57.2	20.2	38.8	52.4	55.4	39.9	62.8	43.3	53.0	30.1	31.5	33.0	30.2
Percent with master's		81.7	78.9	85.8	85.5	87.2	87.6	85.8	86.7	90.9	84.8	87.0	84.8	89.3	87.1	82.7	90.9
Median time lapse from baccalaureate to doctorate	Yrs																
Since baccalaureate		9.0	8.8	11.4	11.4	12.3	13.9	11.8	11.7	11.6	12.0	11.0	12.0	17.3	13.3	12.3	14.0
Since starting graduate school		7.3	7.2	9.7	9.7	10.2	11.0	9.7	10.0	9.7	9.7	9.2	9.9	13.0	10.6	9.7	11.3
Postdoctoral plans	%																
Definite postdoctoral study		34.4	6.9	14.9	9.7	9.7	5.5	7.4	10.4	7.5	8.6	5.8	6.5	4.5	4.1	3.0	5.0
Definite employment		38.0	74.3	49.6	62.0	61.1	64.0	56.4	56.7	59.5	55.9	61.0	54.9	68.1	70.2	77.7	63.9
Seeking employment or study		24.7	16.5	32.5	26.1	25.5	27.1	33.2	30.1	31.3	32.5	29.1	35.6	23.5	22.8	16.6	28.1
Other/unknown [c]		2.9	2.3	2.9	2.2	3.6	3.4	3.0	2.8	1.8	3.0	4.2	3.0	3.9	2.9	2.7	3.0
Definite postdoctoral study [d]		47.5	8.5	23.1	13.5	13.7	8.0	11.6	15.5	11.2	13.4	8.6	10.6	6.2	5.5	3.7	7.2
Fellowship		35.0	5.3	14.4	8.7	8.4	4.4	8.1	11.2	8.2	11.4	5.4	6.8	2.3	2.4	1.5	3.3
Research associateship		6.7	2.8	7.0	2.9	4.9	1.7	1.2	1.1	0.0	----	1.9	1.4	2.1	2.0	1.7	2.2
Traineeship		1.0	----	----	0.0	----	0.3	0.4	----	----	0.0	----	----	0.3	----	0.0	----
Intern, clinical residency		4.1	0.0	----	0.0	0.0	0.2	0.1	----	0.0	0.0	0.0	----	0.3	0.0	0.0	0.0
Other study		0.6	----	1.0	1.9	----	1.4	1.9	2.3	----	----	----	2.0	1.3	----	0.5	----
Definite employment after doctorate [e]		52.5	91.5	76.9	86.5	86.3	92.0	88.4	84.5	88.8	86.6	91.4	89.4	93.8	94.5	96.3	92.8
Educational institution [f]		29.3	54.9	59.0	65.5	56.4	78.1	76.7	71.7	81.0	80.4	85.7	74.9	81.3	73.2	76.5	69.8
Industry/business		10.7	11.3	6.3	5.4	9.0	5.1	3.8	4.2	3.4	3.6	2.7	4.1	3.8	10.7	13.0	8.4
Government		5.2	16.1	5.6	9.4	12.2	3.5	2.0	3.9	----	1.3	1.4	1.8	4.0	5.0	3.8	6.2
Nonprofit		6.8	4.0	5.0	5.6	7.5	4.5	5.1	4.2	3.0	----	----	7.8	3.9	4.7	1.9	7.5
Other & unknown		0.5	5.1	1.0	0.6	1.1	0.8	0.8	0.5	----	----	----	0.9	0.8	1.0	1.1	0.9

APPENDIX TABLE A-3a. Statistical profile of doctorate recipients, by major field of study, 2005 - Total all doctorates

Characteristics		2005 Total	TOTAL SCIENCES & ENGINEERING	PHYSICAL SCIENCES [a]	Physics & astronomy	Chemistry	Earth, atmos., & marine sci.	Mathematics	Computer sciences	ENGINEERING	LIFE SCIENCES	Biochemistry	Other biological sciences	Health sciences	Agricultural sciences/ natural resources	SOCIAL SCI. AND PSYCHOLOGY
Employment commitments after doctorate [g]																
Primary activity [h]	%															
R & D		34.0	51.0	59.9	64.1	70.4	53.8	43.0	64.3	71.4	41.7	44.4	43.9	35.0	52.1	34.7
Teaching		39.0	27.8	29.0	24.7	17.4	26.9	48.0	26.5	11.5	32.3	29.6	30.9	39.6	19.2	37.3
Administration		15.1	7.2	3.8	3.6	4.1	3.8	2.2	5.0	5.3	10.7	7.4	8.0	13.0	11.2	8.8
Professional services		10.2	12.3	5.6	4.4	6.2	14.5	4.9	3.2	10.0	13.0	14.8	14.6	11.1	13.7	18.0
Other		1.6	1.7	1.7	3.2	1.9	1.1	1.8	1.1	1.8	2.4	3.7	2.6	1.4	3.8	1.2
Secondary activity [h]	%															
R & D		33.2	29.0	28.2	24.7	14.9	28.0	45.1	27.9	16.9	32.8	16.7	29.9	38.2	28.8	37.0
Teaching		18.8	17.4	13.2	5.2	3.1	15.1	19.1	20.2	12.1	17.5	7.4	14.3	20.8	17.5	24.3
Administration		12.3	15.1	13.4	19.5	22.8	18.3	----	8.0	20.8	16.4	25.9	15.2	14.7	20.8	10.8
Professional services		7.8	7.3	6.1	6.8	5.2	9.1	7.8	4.1	7.5	8.6	9.3	7.0	9.4	10.1	7.1
Other		1.3	1.0	0.7	0.8	1.4	1.1	----	0.4	1.0	1.0	0.0	1.0	0.9	1.4	1.0
No secondary activity		26.5	30.2	38.4	43.0	52.6	28.5	23.3	39.4	41.7	23.7	40.7	32.6	16.0	21.4	19.8
Activity(ies) unknown		2.2	2.1	2.1	3.1	2.8	2.1	1.1	1.7	2.1	2.2	1.8	2.5	1.6	2.9	2.1
Region of employment after doctorate	%															
New England		6.0	6.4	7.1	8.1	10.9	6.8	7.3	3.3	5.4	7.1	5.5	10.7	5.8	3.2	6.2
Middle Atlantic		13.8	14.4	16.2	12.4	20.3	5.8	18.6	15.9	13.7	12.0	16.4	12.4	14.4	5.3	15.2
East North Central		13.0	11.3	10.8	9.3	12.3	5.3	12.9	10.5	10.7	10.9	18.2	10.3	10.9	10.9	12.4
West North Central		6.3	4.9	3.0	4.2	2.6	3.2	3.3	2.6	3.5	7.2	3.6	5.8	7.1	10.6	5.6
South Atlantic		17.3	16.6	15.6	14.3	15.9	17.9	17.1	14.0	11.8	18.3	10.9	18.1	20.0	16.0	19.9
East South Central		4.3	3.3	3.2	3.5	2.6	1.6	4.4	3.3	2.1	4.7	0.0	3.0	6.6	4.3	3.4
West South Central		8.3	7.6	7.4	5.8	5.6	18.4	7.8	5.6	8.3	7.9	7.3	8.3	8.0	7.2	7.0
Mountain		5.6	5.7	5.2	7.3	3.6	11.6	5.5	3.1	6.2	6.8	0.0	5.6	7.0	9.3	5.1
Pacific & insular		15.1	17.0	22.4	24.3	22.7	17.9	13.7	29.5	23.9	12.6	21.8	15.7	10.0	11.4	10.9
Foreign		10.4	12.8	9.1	10.8	3.4	11.6	9.3	12.2	14.3	12.5	16.4	10.0	10.2	21.8	14.0
Region unknown		0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1

APPENDIX TABLE A-3a. Statistical profile of doctorate recipients, by major field of study, 2005 - Total all doctorates

Characteristics		Psychology	Economics	Anthropology & sociology	Political sci./ Internatn'l Rel.	Other social sciences	TOTAL NONSCIENCES	HUMANITIES	History	American literature	English lang. & literature	Foreign lang. & literature	Other humanities	EDUCATION	OTHER FIELDS	Business & management	Fields not elsewhere classified
Employment commitments after doctorate [g]																	
Primary activity [h]	%																
R & D		22.3	60.5	34.3	25.7	31.5	13.8	12.0	14.2	7.7	10.9	11.1	12.3	8.3	30.3	41.8	18.6
Teaching		27.4	26.8	53.1	56.8	45.9	52.5	74.3	72.7	79.0	78.7	81.3	71.4	38.3	48.3	41.6	55.2
Administration		9.0	5.6	7.5	10.0	14.2	24.4	6.4	7.6	9.0	5.4	3.3	6.5	42.2	13.0	11.1	15.1
Professional services		40.2	6.1	4.2	5.1	7.6	7.8	4.5	3.8	1.7	----	2.4	5.7	10.3	7.6	----	10.0
Other		1.1	1.0	0.9	2.4	0.8	1.6	2.8	1.7	2.6	----	1.8	3.9	1.0	0.7	----	1.2
Secondary activity [h]	%																
R & D		29.8	28.7	46.2	52.7	45.4	38.1	51.4	57.6	52.8	52.3	64.2	45.6	26.4	43.2	40.0	46.3
Teaching		19.9	36.3	23.2	20.4	19.8	20.5	13.8	13.6	12.0	12.8	11.1	15.1	20.8	31.4	40.4	22.2
Administration		15.0	8.9	9.2	6.8	8.6	9.0	7.9	5.3	4.7	7.8	5.4	10.0	10.4	7.6	5.9	9.3
Professional services		10.0	4.3	5.6	4.6	8.1	8.5	4.1	----	3.4	1.6	----	5.5	12.5	6.4	4.9	8.1
Other		1.2	0.6	0.9	1.2	1.3	1.8	3.2	----	3.0	3.1	----	4.9	1.2	0.7	0.5	0.8
No secondary activity		24.2	21.2	14.8	14.3	16.8	22.1	19.6	20.3	24.0	22.5	16.0	19.0	28.7	10.8	8.3	13.3
Activity(ies) unknown		2.2	1.9	3.6	1.0	2.0	2.3	2.1	1.9	2.1	2.6	1.8	2.3	2.3	2.3	2.6	2.0
Region of employment after doctorate	%																
New England		5.4	7.1	8.4	5.3	5.5	5.5	7.2	8.5	6.7	9.1	9.2	6.0	4.1	5.7	6.2	5.1
Middle Atlantic		19.5	11.8	14.9	12.5	12.9	13.1	15.5	16.6	17.6	14.3	10.9	16.0	11.6	12.8	12.4	13.2
East North Central		13.3	8.2	13.3	16.6	12.4	15.0	15.0	14.6	14.7	17.7	17.2	14.2	15.1	14.7	14.2	15.2
West North Central		7.6	2.9	6.1	3.8	6.5	8.1	7.0	6.9	7.1	6.8	6.5	7.3	9.2	7.2	6.9	7.5
South Atlantic		19.0	20.2	16.5	22.8	22.9	18.2	16.9	19.3	18.5	14.7	19.2	15.6	19.2	17.9	17.7	18.1
East South Central		4.9	2.3	2.7	2.2	3.7	5.4	4.0	3.1	5.5	4.9	2.1	4.3	6.3	5.7	4.2	7.1
West South Central		8.9	4.1	7.5	7.2	6.5	9.1	8.0	8.1	6.3	6.0	8.0	8.6	9.9	9.2	9.4	9.0
Mountain		6.7	3.3	5.2	3.8	5.5	5.4	4.9	5.8	6.3	2.6	5.0	4.7	6.3	4.1	3.6	4.6
Pacific & insular		11.2	7.3	16.1	12.0	10.0	12.7	13.2	10.0	15.1	16.2	14.2	13.1	13.3	10.3	11.2	9.4
Foreign		3.5	32.8	9.0	13.7	14.2	7.5	8.4	7.1	2.1	7.5	7.7	10.2	4.8	12.5	14.2	10.8
Region unknown		0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0

---- = Cell value suppressed to protect confidentiality of doctorate recipients.

[a] Physical sciences includes mathematics and computer sciences.

[b] Includes 59 respondents not reporting sex.

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

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

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

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

[g] Includes only recipients with definite employment plans.

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

APPENDIX TABLE A-3b. Statistical profile of doctorate recipients, by major field of study, 2005 - Total all males

Characteristics		2005 Total	TOTAL SCIENCES & ENGINEERING	PHYSICAL SCIENCES [a]	Physics & astronomy	Chemistry	Earth, atmos., & marine sci.	Mathematics	Computer sciences	ENGINEERING	LIFE SCIENCES	Biochemistry	Other biological sciences	Health sciences	Agricultural sciences/ natural resources	SOCIAL SCI. AND PSYCHOLOGY
Number in field		23,731	17,751	4,926	1,269	1,403	470	875	909	5,215	4,567	416	2,841	565	745	3,043
Males as percent of total doctorates	%	54.7	60.7	73.5	83.5	66.0	65.9	72.7	80.0	81.4	49.1	60.1	50.1	31.8	64.2	44.5
Citizenship	%															
U.S. citizenship		53.9	47.8	44.6	42.0	51.2	56.8	41.1	34.8	30.7	61.3	60.3	65.6	59.8	46.2	62.0
Non-U.S., permanent resident		3.3	3.5	3.6	3.0	3.4	2.3	3.4	5.7	3.9	3.4	3.8	3.3	4.6	2.3	2.6
Non-U.S., temporary visa holder		36.9	43.2	46.5	50.0	39.5	35.3	50.6	54.1	59.7	30.1	32.5	26.2	28.7	45.1	29.1
Unknown		5.9	5.6	5.3	5.0	5.8	5.5	4.8	5.4	5.7	5.2	3.4	4.9	6.9	6.4	6.3
Marital status	%															
Never married		27.4	30.4	35.1	38.1	32.9	25.7	41.4	33.1	31.6	27.4	31.3	30.2	20.2	20.0	25.1
Married		53.9	52.2	47.8	43.9	50.6	55.3	42.4	50.3	53.8	54.4	54.6	52.1	58.8	59.9	53.0
Separated		0.4	0.4	----	0.5	----	----	----	----	----	0.3	----	----	----	----	----
Divorced		2.7	2.2	1.9	2.5	1.4	----	1.1	----	1.5	2.5	----	2.4	----	----	3.6
Marriage-like relationship		5.3	5.1	5.8	6.5	5.8	6.8	5.5	4.4	3.0	5.9	6.5	6.6	4.8	3.9	6.6
Widowed		0.1	0.1	----	0.0	----	0.0	----	0.0	----	0.1	0.0	----	----	----	----
Unknown		10.2	9.7	8.9	8.5	8.8	8.5	8.9	9.7	9.8	9.4	5.8	8.4	12.9	12.8	10.9
Median age at doctorate	Yrs	32.6	31.5	30.6	30.5	29.7	32.5	30.3	31.5	31.3	31.7	30.0	31.1	34.2	33.5	33.7
Bachelor's in same field as doctorate	%	56.1	61.8	65.5	72.9	74.7	52.3	67.2	46.1	75.8	47.9	33.2	51.8	36.6	49.7	52.7
Percent with master's	%	74.0	69.4	65.8	69.8	45.1	75.3	72.9	80.3	81.0	51.8	31.7	41.6	77.5	82.1	81.7
Median time lapse from baccalaureate to doctorate	Yrs															
Since baccalaureate		9.4	8.5	7.8	7.7	7.0	9.2	7.7	8.8	8.3	8.6	7.3	8.2	10.9	10.1	10.0
Since starting graduate school		7.8	7.2	6.9	6.7	6.2	8.0	6.7	7.7	7.2	7.0	6.5	6.7	8.3	7.9	8.2
Postdoctoral plans	%															
Definite postdoctoral study		26.6	33.5	41.3	49.2	51.3	43.3	37.6	17.0	20.6	50.3	66.6	59.5	20.9	25.9	17.3
Definite employment		43.8	36.9	31.5	19.3	22.8	31.0	38.1	56.4	43.9	21.1	6.1	13.0	52.3	39.0	58.0
Seeking employment or study		27.6	27.8	25.9	30.4	24.9	24.1	23.1	25.0	33.7	26.4	26.5	25.1	24.3	33.0	22.8
Other/unknown [b]		2.0	1.8	1.3	1.1	1.1	1.6	1.3	1.6	1.8	2.2	0.8	2.4	2.4	2.0	1.9
Definite postdoctoral study [c]	%	37.8	47.6	56.7	71.9	69.3	58.3	49.7	23.2	31.9	70.4	91.6	82.1	28.6	39.9	22.9
Fellowship		19.2	24.1	27.0	30.8	33.7	27.1	29.5	8.8	11.0	40.3	56.1	48.0	19.0	12.8	15.6
Research associateship		15.0	19.3	27.8	39.1	33.3	29.9	18.4	12.8	19.3	19.4	25.6	20.3	4.7	24.2	5.2
Traineeship		0.4	0.5	0.3	----	0.0	----	0.7	----	0.2	1.0	----	1.1	1.1	----	0.3
Intern, clinical residency		1.1	1.4	0.2	----	----	0.0	0.0	----	0.4	3.8	----	5.2	1.1	----	1.2
Other study		2.1	2.3	1.4	1.1	----	----	1.2	1.0	1.0	5.9	5.6	7.5	2.7	1.4	0.6
Definite employment after doctorate [d]	%	62.2	52.4	43.3	28.1	30.7	41.7	50.3	76.8	68.1	29.6	8.4	17.9	71.4	60.1	77.1
Educational institution [e]		35.3	21.6	17.7	7.7	6.4	16.2	32.1	34.8	14.5	14.7	2.8	8.8	42.6	25.2	48.7
Industry/business		18.1	22.0	21.1	15.5	22.8	14.0	13.7	37.3	44.6	7.9	3.9	5.3	12.4	18.1	10.6
Government		5.3	5.9	3.3	3.8	0.8	9.0	3.3	3.7	6.8	4.8	----	2.5	11.3	12.1	10.2
Nonprofit		2.8	2.2	0.9	----	----	----	1.2	----	1.4	1.9	0.0	1.2	5.2	3.3	5.8
Other & unknown		0.7	0.7	0.2	----	----	----	0.0	----	0.8	0.3	----	0.1	0.0	1.4	1.7

Characteristics		Psychology	Economics	Anthropology & sociology	Political sci./ Internatn'l Rel.	Other social sciences	TOTAL NONSCIENCES	HUMANITIES	History	American literature	English lang. & literature	Foreign lang. & literature	Other humanities	EDUCATION	OTHER FIELDS	Business & management	Fields not elsewhere classified
Number in field		1,062	741	399	440	401	5,980	2,619	539	171	213	241	1,455	2,065	1,296	692	602
Males as percent of total doctorates	%	31.9	69.8	40.3	60.7	54.6	42.4	49.0	58.3	42.1	38.4	39.6	50.9	33.2	51.2	59.2	44.3
Citizenship	%																
U.S. citizenship		83.1	26.5	69.2	67.5	58.4	72.1	74.5	82.0	91.8	78.9	55.2	72.2	79.9	54.8	48.7	61.8
Non-U.S., permanent resident		1.7	3.0	3.3	3.0	3.5	2.8	3.7	1.9	1.2	3.8	10.0	3.7	1.7	2.5	3.0	2.0
Non-U.S., temporary visa holder		7.6	66.0	20.8	24.5	30.9	18.1	16.0	11.9	6.4	10.8	31.5	16.9	10.5	34.3	42.6	24.9
Unknown		7.5	4.6	6.8	5.0	7.2	7.1	5.8	4.3	0.6	6.6	3.3	7.2	7.9	8.3	5.6	11.3
Marital status	%																
Never married		23.6	30.8	26.8	23.2	19.0	18.5	24.1	22.3	26.3	19.7	30.7	24.1	12.1	17.6	17.8	17.4
Married		50.6	54.7	46.1	56.8	59.1	58.9	51.9	57.3	53.2	46.9	46.5	51.4	66.6	60.6	61.3	60.0
Separated		----	----	----	1.1	----	0.4	----	----	----	----	----	----	0.3	----	----	----
Divorced		3.7	----	6.3	3.6	----	4.2	4.0	----	4.1	----	----	3.8	4.6	4.1	5.3	----
Marriage-like relationship		7.2	5.3	8.8	6.8	5.2	5.8	8.6	7.2	13.5	10.3	10.4	8.0	3.3	3.9	----	4.3
Widowed		----	0.0	----	0.0	----	0.2	----	0.0	0.0	0.0	0.0	----	0.3	----	----	----
Unknown		14.4	7.0	10.5	8.4	11.7	12.0	10.6	8.7	----	16.4	7.5	12.0	12.8	13.5	11.8	15.3
Median age at doctorate	Yrs	32.5	32.0	35.2	35.1	36.5	37.1	35.3	35.5	34.5	35.1	36.0	35.2	41.4	36.7	35.8	37.5
Bachelor's in same field as doctorate	%	61.8	57.9	49.1	56.4	18.7	39.1	54.0	56.4	46.8	63.4	38.2	55.3	24.6	32.3	34.0	30.4
Percent with master's	%	80.9	76.9	85.0	84.5	86.3	87.5	86.5	88.7	91.8	85.4	90.0	84.6	89.1	87.2	84.1	90.9
Median time lapse from baccalaureate to doctorate	Yrs																
Since baccalaureate		9.0	8.8	11.4	11.6	12.6	13.1	11.7	11.7	11.2	12.1	11.3	11.9	17.0	13.0	12.3	13.8
Since starting graduate school		7.3	7.2	9.7	9.7	10.2	10.7	9.7	10.1	9.7	10.1	9.1	9.7	12.7	10.2	9.7	11.2
Postdoctoral plans	%																
Definite postdoctoral study		32.7	6.4	13.5	11.4	9.3	5.7	7.2	10.0	7.7	7.3	4.9	6.5	4.5	4.5	3.6	5.5
Definite employment		43.4	75.8	52.8	60.6	63.1	64.8	56.8	56.8	59.8	55.9	59.6	56.1	70.7	72.0	77.4	65.4
Seeking employment or study		22.2	15.4	31.7	26.2	25.6	27.0	33.9	32.2	32.0	35.2	32.4	34.9	21.6	21.3	16.4	27.1
Other/unknown [b]		1.7	2.3	2.0	1.7	2.0	2.5	2.1	1.0	0.6	1.7	3.1	2.6	3.3	2.3	2.6	2.0
Definite postdoctoral study [c]	%	43.0	7.8	20.3	15.8	12.8	8.1	11.3	14.9	11.4	11.5	7.6	10.3	6.0	5.8	4.5	7.8
Fellowship		30.2	5.3	12.7	9.6	8.2	4.4	7.7	11.6	7.0	9.7	6.2	6.2	2.1	2.1	1.4	3.0
Research associateship		8.1	1.8	6.8	4.5	4.7	1.9	1.3	0.9	0.0	----	----	----	2.2	2.7	2.4	3.0
Traineeship		0.7	----	----	0.0	0.0	0.3	----	----	----	0.0	0.0	----	----	----	----	----
Intern, clinical residency		3.3	0.0	----	0.0	0.0	0.1	----	----	0.0	----	----	0.0	----	0.0	0.0	0.0
Other study		0.6	----	----	1.7	0.0	1.3	1.7	1.5	----	----	----	2.1	1.2	----	----	----
Definite employment after doctorate [d]	%	57.0	92.2	79.7	84.2	87.2	91.9	88.7	85.1	88.6	88.5	92.4	89.7	94.0	94.2	95.5	92.2
Educational institution [e]		30.0	56.1	60.2	62.2	56.8	77.0	76.0	68.9	83.3	84.1	87.6	74.6	80.6	73.4	78.1	66.8
Industry/business		12.7	11.2	8.9	6.5	10.1	6.0	3.7	5.2	----	----	----	3.9	4.6	12.0	12.6	11.4
Government		----	16.6	5.1	9.6	13.6	3.6	2.4	5.5	----	----	----	1.9	4.7	3.9	2.4	5.8
Nonprofit		8.1	3.7	4.7	----	5.8	4.5	5.7	----	----	----	----	8.2	3.7	3.9	1.0	7.8
Other & unknown		----	4.6	0.8	----	0.8	0.8	1.0	----	0.0	----	2.1	1.1	0.4	1.1	1.4	0.6

APPENDIX TABLE A-3b. Statistical profile of doctorate recipients, by major field of study, 2005 - Total all males

Characteristics		2005 Total	TOTAL SCIENCES & ENGINEERING	PHYSICAL SCIENCES [a]	Physics & astronomy	Chemistry	Earth, atmos., & marine sci.	Mathematics	Computer sciences	ENGINEERING	LIFE SCIENCES	Biochemistry	Other biological sciences	Health sciences	Agricultural sciences/ natural resources	SOCIAL SCI. AND PSYCHOLOGY
Employment commitments after doctorate [f]																
Primary activity [g]	%															
R & D		42.5	58.0	63.3	65.3	73.9	60.6	44.7	68.9	72.3	48.2	43.5	48.3	42.5	54.5	39.8
Teaching		33.5	23.2	25.9	22.2	16.3	20.5	45.0	22.7	10.6	25.7	30.4	28.7	29.9	16.8	36.0
Administration		13.2	6.6	3.6	3.7	3.9	----	2.0	4.6	5.5	10.7	13.0	8.5	13.4	10.7	8.4
Professional services		9.2	10.6	5.5	5.1	4.9	15.2	6.3	2.6	9.8	13.4	13.0	13.3	12.6	14.3	14.9
Other		1.5	1.6	1.7	3.7	1.1	----	2.0	1.1	1.8	2.0	0.0	1.2	1.6	3.7	0.9
Secondary activity [g]	%															
R & D		30.9	26.0	26.1	22.2	14.1	24.2	43.7	24.3	16.0	29.7	17.4	28.4	33.1	29.1	36.8
Teaching		19.2	17.2	13.8	4.6	2.5	15.2	20.0	20.8	11.9	17.8	13.0	14.2	22.4	18.4	27.0
Administration		13.9	16.9	14.7	21.8	26.9	21.2	----	9.1	22.3	19.2	39.1	16.9	18.1	21.7	10.6
Professional services		7.3	7.0	6.3	6.9	5.7	9.8	7.7	4.4	7.1	9.0	13.0	7.6	----	8.2	6.5
Other		0.9	0.7	0.3	0.5	0.7	0.0	----	0.0	0.9	1.2	0.0	1.2	----	1.6	0.6
No secondary activity		27.7	32.1	38.8	44.0	50.2	29.5	24.3	41.5	41.7	23.0	17.4	31.7	14.2	20.9	18.5
Activity(ies) unknown		2.1	2.1	2.1	3.6	2.7	1.5	1.3	1.7	2.0	2.9	4.2	2.6	2.3	3.6	1.9
Region of employment after doctorate	%															
New England		5.6	5.7	6.6	7.6	10.3	6.0	7.6	3.3	4.8	6.7	8.3	10.3	5.0	3.6	5.6
Middle Atlantic		13.6	13.8	15.7	12.5	20.6	5.2	19.7	14.5	13.8	12.5	16.7	14.1	18.1	4.3	12.8
East North Central		12.3	11.0	10.1	10.3	10.0	4.5	11.5	10.8	11.1	10.1	12.5	10.6	11.5	7.9	12.3
West North Central		5.9	4.4	3.0	2.7	3.8	3.7	3.0	2.4	3.2	6.7	0.0	5.6	5.4	10.3	6.0
South Atlantic		16.2	15.3	14.7	13.4	15.5	18.7	15.5	13.2	11.4	18.4	12.5	17.4	20.8	17.8	19.0
East South Central		3.9	3.0	3.2	4.0	2.7	1.5	4.3	2.8	2.3	3.6	0.0	2.9	5.8	2.8	3.2
West South Central		7.8	7.1	6.7	5.8	5.2	18.7	6.9	4.6	8.0	8.0	12.5	8.2	6.5	8.7	5.9
Mountain		5.5	5.9	5.7	7.6	5.2	11.9	5.6	3.3	6.3	7.2	0.0	6.2	6.9	9.5	4.8
Pacific & insular		16.3	18.7	24.2	26.3	22.7	19.4	13.5	32.5	24.1	12.1	16.7	14.1	10.0	11.1	10.3
Foreign		12.8	15.0	10.2	9.8	4.1	10.4	12.5	12.6	14.9	14.6	20.8	10.6	10.0	24.1	19.8
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	0.0	0.1

Characteristics		Psychology	Economics	Anthropology & sociology	Political sci./ Internatn'l Rel.	Other social sciences	TOTAL NONSCIENCES	HUMANITIES	History	American literature	English lang. & literature	Foreign lang. & literature	Other humanities	EDUCATION	OTHER FIELDS	Business & management	Fields not elsewhere classified
Employment commitments after doctorate [f]																	
Primary activity [g]	%																
R & D		26.2	61.5	33.0	27.3	32.6	15.7	13.4	14.6	10.1	11.2	19.2	12.5	7.6	32.6	42.7	18.5
Teaching		24.9	25.5	52.5	54.7	45.9	51.3	72.2	69.7	81.8	82.7	75.4	69.8	31.4	48.3	43.1	55.4
Administration		8.3	----	7.3	11.0	12.8	24.6	6.6	8.8	----	4.1	----	6.7	51.1	12.3	9.6	16.0
Professional services		39.9	6.6	----	4.9	----	6.9	5.1	5.1	----	----	----	6.7	9.0	6.3	4.6	8.6
Other		0.8	----	----	2.0	----	1.5	2.7	1.8	0.0	----	0.0	4.3	0.9	0.6	0.0	1.5
Secondary activity [g]	%																
R & D		30.3	27.2	48.6	50.2	45.9	39.6	51.7	55.5	56.6	56.1	59.2	47.4	23.9	44.6	42.7	47.1
Teaching		21.0	37.7	23.5	20.4	22.5	22.6	15.7	13.9	13.1	14.3	16.9	16.7	24.4	31.3	40.0	19.1
Administration		14.8	9.7	10.1	8.2	8.3	8.8	8.2	6.6	4.0	9.2	6.9	9.5	9.3	8.9	6.3	12.6
Professional services		9.8	----	7.3	----	7.8	7.6	4.0	1.8	----	----	3.1	5.4	12.5	----	----	----
Other		0.5	----	0.0	----	1.4	1.2	2.1	0.0	----	----	0.0	3.4	0.9	----	----	----
No secondary activity		23.6	20.6	10.6	15.9	14.2	20.2	18.3	22.3	21.2	16.3	13.8	17.5	29.2	8.9	6.3	12.6
Activity(ies) unknown		2.0	1.3	4.8	0.0	2.7	2.1	2.3	1.8	2.0	2.0	3.0	2.4	1.6	2.9	3.2	2.4
Region of employment after doctorate	%																
New England		3.6	7.1	9.0	3.3	5.4	5.4	6.4	7.9	5.9	9.0	9.7	4.9	3.9	6.2	7.4	4.5
Middle Atlantic		18.0	9.8	10.6	13.1	12.5	13.1	15.5	14.3	16.8	15.0	10.4	16.7	12.1	10.8	11.9	9.3
East North Central		15.2	8.1	13.3	16.7	11.6	14.5	14.2	12.9	9.9	19.0	16.4	14.2	15.3	13.9	13.8	14.1
West North Central		9.9	2.9	7.4	4.9	6.3	8.6	8.0	8.6	10.9	6.0	7.5	7.8	9.8	7.4	6.8	8.4
South Atlantic		18.0	17.3	14.9	24.9	21.9	17.7	17.9	21.5	21.8	14.0	20.9	16.0	17.8	17.4	16.9	17.7
East South Central		5.8	2.5	1.6	1.2	4.0	5.5	4.7	3.9	5.0	7.0	1.5	5.1	6.1	5.8	4.2	8.1
West South Central		7.4	4.0	8.0	7.3	4.5	9.0	8.8	7.5	7.9	6.0	9.0	9.7	9.4	8.9	9.5	8.1
Mountain		7.9	2.3	5.3	4.1	5.8	4.8	4.4	5.0	8.9	----	4.5	3.9	5.7	4.0	4.0	3.9
Pacific & insular		9.4	7.5	17.6	11.4	11.2	12.3	11.4	10.4	10.9	11.0	12.7	11.7	14.1	10.9	10.0	12.3
Foreign		4.6	38.6	11.7	13.1	17.0	9.0	8.8	7.9	----	11.0	7.5	10.0	5.7	14.6	15.5	13.5
Region unknown		0.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	----	----	0.0	0.0	0.0	0.0	0.0	0.0

---- = Cell value suppressed to protect confidentiality of doctorate recipients.

[a] Physical sciences includes mathematics and computer sciences.

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

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

[d] Percentages are based upon only those doctorate recipients who indicated definite postdoctoral 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 recipients 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, 2005 Survey of Earned Doctorates.

APPENDIX TABLE A-3c. Statistical profile of doctorate recipients, by major field of study, 2005 - Total all females

Characteristics		2005 Total	TOTAL SCIENCES & ENGINEERING	PHYSICAL SCIENCES [a]	Physics & astronomy	Chemistry	Earth, atmos., & marine sci.	Mathematics	Computer sciences	ENGINEERING	LIFE SCIENCES	Biochemistry	Other biological sciences	Health sciences	Agricultural sciences/ natural resources	SOCIAL SCI. AND PSYCHOLOGY
Number in field		19,564	11,457	1,766	249	723	243	326	225	1,174	4,727	276	2,829	1,209	413	3,790
Females as percent of total doctorates	%	45.1	39.2	26.4	16.4	34.0	34.1	27.1	19.8	18.3	50.8	39.9	49.8	68.0	35.6	55.4
Citizenship	%															
U.S. citizenship		69.1	63.8	49.8	41.8	57.0	63.4	36.8	39.6	33.7	65.8	57.6	65.9	71.8	53.3	77.1
Non-U.S., permanent resident		4.2	4.8	5.8	4.8	4.7	4.1	9.5	7.1	7.0	4.5	8.7	4.2	4.2	4.4	3.9
Non-U.S., temporary visa holder		20.8	26.1	39.2	47.4	33.6	27.6	48.8	47.1	54.3	24.8	31.5	25.1	18.7	36.1	13.0
Unknown		5.9	5.3	5.2	6.0	4.7	4.9	4.9	6.2	4.9	4.8	2.2	4.7	5.3	6.3	6.1
Marital status	%															
Never married		25.5	29.7	34.4	40.6	36.8	31.3	31.0	28.4	32.9	29.6	35.1	32.8	21.3	27.6	26.8
Married		49.6	48.2	45.6	40.2	45.4	49.4	47.2	45.8	52.2	49.5	50.4	46.4	56.1	50.6	46.5
Separated		0.7	0.7	----	----	0.8	----	----	----	----	0.6	0.0	0.6	0.8	----	0.8
Divorced		6.0	4.1	3.4	2.4	2.9	----	4.3	5.8	1.4	3.9	1.8	3.2	5.9	4.8	5.4
Marriage-like relationship		6.9	7.3	6.7	7.6	6.1	7.4	7.7	5.3	4.1	7.4	8.0	8.4	5.2	6.5	8.5
Widowed		0.5	0.3	----	----	0.0	0.0	----	----	----	0.4	0.0	0.2	0.8	----	0.4
Unknown		10.7	9.7	9.0	8.4	8.0	9.1	8.6	13.3	8.8	8.6	4.7	8.4	9.8	9.0	11.6
Median age at doctorate	Yrs	33.6	31.4	30.0	29.7	29.1	31.0	30.5	32.1	30.3	31.4	29.5	30.3	37.3	32.3	32.7
Bachelor's in same field as doctorate	%	48.8	56.0	63.7	73.5	73.2	42.8	65.3	42.7	71.3	49.0	26.4	53.6	47.1	38.0	56.4
Percent with master's	%	75.9	67.6	61.2	71.5	40.2	63.8	81.6	84.9	79.0	54.1	38.4	39.7	83.0	78.2	83.8
Median time lapse from baccalaureate to doctorate	Yrs															
Since baccalaureate		10.5	8.8	7.5	7.3	6.6	8.5	8.0	10.0	8.0	8.7	7.3	7.8	13.3	9.6	9.6
Since starting graduate school		8.7	7.2	6.5	6.7	5.7	7.3	6.9	8.3	7.2	7.1	6.6	6.7	10.1	7.8	7.9
Postdoctoral plans	%															
Definite postdoctoral study		22.4	34.1	36.4	51.1	38.7	49.8	26.2	11.4	23.1	42.8	58.6	53.5	19.3	26.1	25.2
Definite employment		46.2	34.3	34.6	15.4	31.0	25.1	49.3	58.0	39.3	24.8	11.8	14.1	50.6	32.8	44.9
Seeking employment or study		28.3	29.0	27.3	30.0	29.1	23.8	23.5	28.0	35.7	30.0	27.4	30.1	28.2	37.1	26.4
Other/unknown [b]		3.2	2.6	1.7	3.5	1.2	1.3	1.0	2.6	2.0	2.4	2.3	2.3	1.9	4.0	3.5
Definite postdoctoral study [c]	%	32.6	49.8	51.2	76.8	55.5	66.5	34.7	16.4	37.0	63.3	83.2	79.1	27.6	44.3	36.0
Fellowship		19.3	29.7	23.9	23.8	25.3	38.3	20.4	6.7	13.1	38.6	48.6	49.7	17.3	16.3	26.1
Research associateship		9.7	15.3	26.2	52.3	29.2	26.9	12.9	8.2	22.2	17.3	29.7	19.6	6.5	25.8	5.6
Traineeship		0.5	0.6	----	0.7	0.0	----	----	----	----	0.7	----	0.6	1.2	----	0.8
Intern, clinical residency		1.2	1.9	----	0.0	----	----	----	----	----	2.3	----	3.3	1.0	0.0	2.6
Other study		2.0	2.3	0.8	0.0	----	----	----	----	0.9	4.3	3.2	6.0	1.6	----	0.8
Definite employment after doctorate [d]	%	67.4	50.2	48.8	23.2	44.5	33.5	65.3	83.6	63.0	36.7	16.8	20.9	72.4	55.7	64.0
Educational institution [e]		49.0	28.2	23.9	11.9	10.2	16.8	48.0	53.0	17.9	21.8	7.0	10.9	49.8	23.5	41.2
Industry/business		9.3	12.7	20.0	7.9	29.6	9.0	13.8	24.6	37.8	7.5	8.1	5.7	9.8	13.1	8.4
Government		4.4	5.0	2.9	3.3	2.8	5.4	1.8	----	5.5	4.3	----	2.8	5.5	14.0	6.9
Nonprofit		3.9	3.5	1.5	0.0	----	----	----	3.7	1.3	2.7	0.0	1.1	6.5	----	6.2
Other & unknown		0.8	0.8	0.5	0.0	----	----	----	----	0.4	0.5	----	0.3	0.8	----	1.3

APPENDIX TABLE A-3c. Statistical profile of doctorate recipients, by major field of study, 2005 - Total all females

Characteristics		Psychology	Economics	Anthropology & sociology	Political sci./ Internatn'l Rel.	Other social sciences	TOTAL NONSCIENCES	HUMANITIES	History	American literature	English lang. & literature	Foreign lang. & literature	Other humanities	EDUCATION	OTHER FIELDS	Business & management	Fields not elsewhere classified
Number in field		2,264	318	590	285	333	8,107	2,724	384	235	341	367	1,397	4,154	1,229	472	757
Females as percent of total doctorates	%	68.0	30.0	59.6	39.3	45.4	57.5	50.9	41.6	57.9	61.6	60.3	48.9	66.7	48.6	40.4	55.7
Citizenship	%																
U.S. citizenship		85.2	30.8	78.0	71.9	69.1	76.6	71.4	83.3	91.5	82.1	55.3	66.4	83.9	63.5	51.1	71.2
Non-U.S., permanent resident		2.7	8.5	4.1	6.7	4.5	3.4	5.2	1.6	1.7	3.8	11.4	5.6	1.8	4.6	6.6	3.3
Non-U.S., temporary visa holder		5.7	56.3	11.5	18.2	19.2	13.3	16.8	9.9	5.1	9.4	26.2	20.0	7.7	24.4	32.6	19.3
Unknown		6.4	4.4	6.4	3.2	7.2	6.7	6.6	5.2	1.7	4.7	7.1	8.1	6.6	7.6	9.7	6.2
Marital status	%																
Never married		26.2	34.0	23.7	29.1	27.0	19.6	26.4	27.1	27.2	26.1	23.7	26.8	14.3	22.5	20.3	23.9
Married		45.9	49.7	46.3	45.6	48.6	51.7	44.7	45.3	45.5	41.9	48.2	44.2	56.5	50.9	53.6	49.3
Separated		0.5	----	----	1.8	----	0.8	0.7	----	0.0	----	----	0.9	0.9	0.8	----	1.2
Divorced		5.0	----	7.6	6.0	6.6	8.7	6.7	7.3	8.9	5.9	----	6.6	10.7	6.5	5.7	7.0
Marriage-like relationship		8.5	6.3	10.8	8.8	6.3	6.3	10.1	10.9	16.2	10.3	10.9	8.5	4.2	4.9	3.0	6.1
Widowed		0.4	0.0	----	0.0	----	0.8	0.5	----	0.0	----	----	0.6	1.1	0.7	----	0.9
Unknown		13.4	7.2	9.5	8.8	9.3	12.1	11.0	8.1	2.1	14.4	10.9	12.5	12.4	13.6	16.7	11.6
Median age at doctorate	Yrs	31.8	30.9	34.8	33.9	36.0	38.3	35.1	35.1	35.5	35.2	34.3	35.2	43.1	37.1	35.2	38.2
Bachelor's in same field as doctorate	%	64.0	60.7	43.1	58.6	21.9	38.6	50.8	54.2	34.9	62.5	46.6	50.9	32.8	30.8	32.0	30.1
Percent with master's	%	82.1	83.6	86.4	87.0	88.3	87.8	85.4	84.1	90.2	84.5	85.0	85.3	89.5	87.3	81.4	91.0
Median time lapse from baccalaureate to doctorate	Yrs																
Since baccalaureate		9.0	8.6	11.5	11.1	11.8	14.3	11.8	11.6	12.0	11.6	10.9	12.0	17.8	13.5	12.4	14.6
Since starting graduate school		7.2	7.3	9.7	9.4	10.2	11.3	9.8	9.7	9.7	9.7	9.3	10.2	13.2	10.7	9.8	11.3
Postdoctoral plans	%																
Definite postdoctoral study		35.1	8.1	15.9	7.1	10.2	5.4	7.6	10.9	7.4	9.5	6.4	6.5	4.5	3.6	2.0	4.6
Definite employment		35.5	70.7	47.5	64.0	58.7	63.4	56.0	56.6	59.3	55.9	62.2	53.6	66.8	68.4	78.2	62.8
Seeking employment or study		25.9	18.9	33.1	25.8	25.4	27.2	32.5	27.2	30.7	30.8	26.5	36.4	24.5	24.5	17.0	28.8
Other/unknown [b]		3.5	2.4	3.6	3.0	5.6	4.0	3.9	5.3	2.6	3.7	4.9	3.5	4.2	3.5	2.8	3.8
Definite postdoctoral study [c]	%	49.7	10.3	25.1	10.0	14.8	7.9	11.9	16.2	11.0	14.5	9.3	10.9	6.4	5.1	2.5	6.8
Fellowship		37.4	5.1	15.6	7.4	8.6	4.4	8.4	10.8	9.1	12.4	4.9	7.5	2.5	2.7	1.6	3.5
Research associateship		6.1	5.1	7.1	----	5.3	1.6	1.2	----	0.0	----	2.7	1.1	2.0	1.2	----	1.5
Traineeship		1.2	0.0	----	----	----	0.3	----	----	----	0.0	----	----	0.3	----	0.0	----
Intern, clinical residency		4.5	0.0	0.0	----	----	0.2	----	----	0.0	0.0	0.0	----	0.3	0.0	0.0	0.0
Other study		0.6	0.0	----	2.1	----	1.5	2.0	3.3	----	----	----	1.9	1.3	----	----	----
Definite employment after doctorate [d]	%	50.3	89.7	74.9	90.0	85.2	92.1	88.1	83.8	89.0	85.5	90.7	89.1	93.6	94.9	97.5	93.2
Educational institution [e]		29.0	52.1	58.1	70.5	56.0	79.0	77.4	75.5	79.2	78.2	84.4	75.2	81.7	72.9	74.1	72.1
Industry/business		9.7	11.5	4.4	3.7	----	4.5	3.9	2.9	3.2	4.7	3.6	4.3	3.4	9.2	13.6	6.1
Government		5.0	15.0	5.9	8.9	10.5	3.4	1.6	----	----	----	----	1.6	3.6	6.3	6.0	6.6
Nonprofit		6.2	4.7	5.3	----	9.6	4.4	4.6	3.3	4.5	----	----	7.3	4.0	5.6	----	7.2
Other & unknown		0.5	6.4	1.2	----	----	0.8	0.6	----	----	----	----	0.7	0.9	0.9	----	1.1

APPENDIX TABLE A-3c. Statistical profile of doctorate recipients, by major field of study, 2005 - Total all females

Characteristics		2005 Total	TOTAL SCIENCES & ENGINEERING	PHYSICAL SCIENCES [a]	Physics & astronomy	Chemistry	Earth, atmos., & marine sci.	Mathematics	Computer sciences	ENGINEERING	LIFE SCIENCES	Biochemistry	Other biological sciences	Health sciences	Agricultural sciences/ natural resources	SOCIAL SCI. AND PSYCHOLOGY
Employment commitments after doctorate [f]																
Primary activity [g]	%															
R & D		24.2	39.4	51.2	57.1	65.5	37.0	39.7	45.5	66.9	36.5	45.2	39.8	31.4	47.1	29.4
Teaching		45.4	35.3	36.7	40.0	19.0	42.6	54.1	41.8	15.8	37.5	29.0	32.9	44.1	24.0	38.7
Administration		17.2	8.3	4.4	2.9	4.5	----	2.7	6.4	4.4	10.7	3.2	7.5	12.8	12.4	9.2
Professional services		11.4	15.0	5.9	0.0	8.0	13.0	----	----	11.2	12.7	16.1	15.9	10.4	12.4	21.2
Other		1.8	1.9	1.8	0.0	3.0	----	----	----	1.7	2.6	6.5	3.9	1.3	4.1	1.5
Secondary activity [g]	%															
R & D		35.8	34.2	33.6	40.0	16.0	37.0	47.9	42.7	20.9	35.3	16.1	31.2	40.6	28.1	37.3
Teaching		18.3	17.6	11.7	8.6	4.0	14.8	17.1	18.2	12.7	17.2	3.2	14.5	20.1	15.7	21.5
Administration		10.5	12.1	9.9	5.7	17.0	11.1	5.5	3.6	13.6	14.1	16.1	13.6	13.2	19.0	11.0
Professional services		8.5	7.7	5.5	5.7	4.5	7.4	8.2	----	9.5	8.3	6.5	6.4	8.4	----	7.7
Other		1.8	1.3	1.8	2.9	2.5	3.7	0.0	----	1.5	0.9	0.0	0.8	0.9	----	1.4
No secondary activity		25.1	27.1	37.4	37.1	56.0	25.9	21.2	30.9	41.8	24.3	58.1	33.4	16.8	22.3	21.2
Activity(ies) unknown		2.2	2.1	2.0	0.0	2.9	3.6	0.7	1.8	2.6	1.7	0.0	2.4	1.3	1.6	2.4
Region of employment after doctorate	%															
New England		6.4	7.4	8.5	11.4	11.7	8.9	6.8	3.6	8.3	7.3	3.2	11.1	6.1	2.4	6.9
Middle Atlantic		14.1	15.3	17.4	11.4	19.9	7.1	16.3	21.4	13.3	11.5	16.1	10.9	12.6	7.3	17.7
East North Central		13.8	11.8	12.6	2.9	15.5	7.1	15.6	8.9	9.0	11.5	22.6	10.1	10.6	17.1	12.5
West North Central		6.8	5.6	3.2	14.3	1.0	----	4.1	3.6	5.0	7.6	6.5	6.0	7.9	11.4	5.2
South Atlantic		18.6	18.7	17.8	20.0	16.5	16.1	20.4	17.0	13.5	18.2	9.7	18.8	19.7	12.2	20.9
East South Central		4.7	3.9	3.4	0.0	2.4	----	4.8	5.4	1.4	5.5	0.0	3.0	7.0	7.3	3.6
West South Central		8.8	8.4	9.0	5.7	6.3	17.9	9.5	9.8	9.5	7.9	3.2	8.4	8.7	4.1	8.1
Mountain		5.7	5.5	4.0	5.7	1.5	10.7	5.4	2.7	5.5	6.4	0.0	5.2	7.0	8.9	5.4
Pacific & insular		13.6	14.3	17.8	11.4	22.8	14.3	14.3	17.0	23.0	13.1	25.8	17.1	9.9	12.2	11.5
Foreign		7.5	9.0	6.3	17.1	2.4	14.3	2.7	10.7	11.1	10.9	12.9	9.5	10.3	17.1	8.0
Region unknown		0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.1

APPENDIX TABLE A-3c. Statistical profile of doctorate recipients, by major field of study, 2005 - Total all females

Characteristics		Psychology	Economics	Anthropology & sociology	Political sci./ Internatn'l Rel.	Other social sciences	TOTAL NONSCIENCES	HUMANITIES	History	American literature	English lang. & literature	Foreign lang. & literature	Other humanities	EDUCATION	OTHER FIELDS	Business & management	Fields not elsewhere classified
Employment commitments after doctorate [f]																	
Primary activity [g]	%																
R & D		20.1	58.1	35.2	23.4	30.1	12.3	10.6	13.6	6.0	10.6	5.9	12.1	8.6	27.9	40.6	18.7
Teaching		28.9	30.0	53.4	59.9	46.0	53.3	76.3	76.8	76.9	76.3	85.1	73.3	41.9	48.4	39.3	55.0
Administration		9.4	4.9	7.7	8.4	15.9	24.2	6.3	6.1	11.2	6.3	3.0	6.4	37.4	13.9	13.2	14.4
Professional services		40.3	4.9	2.8	5.4	----	8.5	3.8	2.0	----	----	3.0	4.7	10.9	9.0	----	11.0
Other		1.3	2.0	0.8	3.0	----	1.6	3.0	1.5	----	----	3.0	3.6	1.1	0.8	----	1.0
Secondary activity [g]	%																
R & D		29.5	32.5	44.5	56.3	44.9	37.0	51.1	60.6	50.0	50.0	67.3	43.5	27.7	41.6	36.0	45.7
Teaching		19.2	32.5	23.1	20.4	16.5	18.9	12.0	13.1	11.2	11.9	7.4	13.4	18.9	31.5	40.9	24.6
Administration		15.1	6.9	8.5	4.8	9.1	9.2	7.6	----	5.2	6.9	4.5	10.4	11.1	6.1	5.3	6.7
Professional services		10.1	----	4.5	4.8	----	9.1	4.2	4.0	4.5	----	----	5.6	12.5	6.9	5.6	7.9
Other		1.6	----	1.6	1.8	----	2.2	4.3	----	3.0	----	----	6.5	1.3	1.1	1.0	1.2
No secondary activity		24.5	22.7	17.8	12.0	19.9	23.6	20.9	17.7	26.1	26.3	17.3	20.5	28.4	12.8	11.2	13.9
Activity(ies) unknown		2.3	3.3	2.8	2.3	1.1	2.3	2.1	2.0	2.2	3.0	1.0	2.1	2.7	1.6	1.6	1.6
Region of employment after doctorate	%																
New England		6.4	7.1	7.9	8.2	5.6	5.5	8.0	9.4	7.3	9.1	8.8	7.2	4.3	5.0	4.2	5.6
Middle Atlantic		20.3	16.7	18.1	11.7	13.5	13.2	15.5	19.8	18.2	13.9	11.3	15.2	11.4	15.0	13.3	16.2
East North Central		12.2	8.6	13.4	16.4	13.5	15.4	15.9	16.8	18.2	17.0	17.6	14.3	15.0	15.6	14.9	16.0
West North Central		6.3	2.9	5.1	2.3	6.7	7.7	6.1	4.5	4.4	7.3	5.9	6.7	8.9	7.0	7.1	6.8
South Atlantic		19.5	27.6	17.7	19.9	24.2	18.5	15.9	16.3	16.1	15.2	18.1	15.2	20.0	18.6	18.8	18.4
East South Central		4.3	1.9	3.5	3.5	3.4	5.3	3.3	2.0	5.8	3.6	2.5	3.3	6.4	5.5	4.2	6.4
West South Central		9.7	4.3	7.1	7.0	9.0	9.1	7.2	8.9	5.1	6.1	7.4	7.3	10.1	9.4	9.1	9.6
Mountain		6.0	5.7	5.1	3.5	5.1	5.8	5.3	6.9	4.4	3.0	5.4	5.5	6.6	4.2	2.9	5.2
Pacific & insular		12.2	6.7	15.0	12.9	8.4	13.0	14.9	9.4	18.2	19.4	15.2	14.6	13.0	9.5	13.0	7.1
Foreign		2.9	18.6	7.1	14.6	10.7	6.4	8.0	5.9	2.2	5.5	7.8	10.5	4.3	10.2	12.3	8.7
Region unknown		0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0

---- = Cell value suppressed to protect confidentiality of doctorate recipients.

[a] Physical sciences includes mathematics and computer sciences.

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

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

[d] Percentages are based upon only those doctorate recipients who indicated definite postdoctoral 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 recipients 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, 2005 Survey of Earned Doctorates.

APPENDIX TABLE A-4. Statistical profile of doctorate recipients, by race/ethnicity and citizenship, 2005

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.
Total number		43,354	26,312	1,600	12,824	142	139	1	2	10,222	1,493	688	8,003	2,178	1,688	107	380
Male	%	54.8	48.6	48.9	68.2	41.5	40.3	----	----	64.1	51.0	45.3	68.3	41.6	35.1	61.7	64.7
Female		45.2	51.4	51.1	31.8	58.5	59.7	----	----	35.9	49.0	54.7	31.7	58.4	64.9	38.3	35.3
Field of study																	
Physical sciences [e]	%	15.5	11.7	17.6	23.3	7.0	6.5	----	----	21.3	16.1	19.0	22.5	7.2	5.0	13.1	15.5
Engineering		14.8	7.6	17.8	29.3	7.0	5.8	----	----	31.4	16.2	23.7	34.9	6.7	5.0	14.0	12.1
Life sciences		21.5	22.5	22.9	19.9	13.4	13.7	----	----	22.5	34.0	24.1	20.2	18.0	15.9	26.2	25.3
Social sciences		15.8	18.3	14.2	10.7	22.5	23.0	----	----	9.2	13.3	11.0	8.3	16.7	17.5	15.0	13.4
Humanities		12.3	14.8	15.1	6.8	15.5	15.8	----	----	5.3	9.4	9.6	4.2	10.3	10.2	9.3	11.3
Education		14.4	19.5	6.8	4.2	30.3	30.9	----	----	4.6	7.5	6.1	3.9	34.1	39.2	18.7	16.1
Other fields		5.8	5.7	5.6	5.8	4.2	4.3	----	----	5.5	3.5	6.4	5.9	6.9	7.2	3.7	6.3
Median age at doctorate	Yrs	33.0	33.8	34.1	32.0	38.7	39.1	----	----	32.0	31.3	34.0	31.9	36.8	36.7	36.4	37.3
Median time lapse from baccalaureate to doctorate																	
Since baccalaureate	Yrs	9.9	10.4	10.5	9.1	12.0	12.0	----	----	9.3	8.8	11.1	9.2	12.5	12.7	11.8	11.8
Since starting graduate school		8.2	8.4	8.7	7.7	9.9	10.0	----	----	7.9	7.3	9.1	7.9	10.0	10.5	9.1	8.7
Graduate school primary source of support [f]																	
Teaching assistantships	%	17.1	15.3	21.9	20.3	13.4	13.7	----	----	17.3	11.2	19.5	18.3	11.9	7.5	18.6	29.7
Research and other non-teaching assistantships/traineeships		26.9	16.9	31.3	47.2	9.7	8.4	----	----	49.4	24.4	38.2	55.1	11.6	7.3	21.6	27.4
Fellowships/dissertation grants		27.5	30.7	26.3	21.1	33.6	33.6	----	----	21.4	43.5	23.4	17.1	35.6	37.2	29.9	30.0
Own resources		22.7	31.4	16.1	5.5	36.6	37.4	----	----	8.1	17.2	13.7	5.9	35.0	41.5	21.6	10.1
Foreign government		1.7	0.0	----	5.2	0.0	0.0	----	----	2.6	----	1.9	3.1	0.4	0.0	----	----
Employer		3.8	5.4	2.6	0.7	6.0	6.1	----	----	1.2	----	3.3	0.5	5.1	6.0	5.2	----
Other		0.2	0.2	----	0.0	0.7	0.8	----	----	0.0	0.0	0.0	0.0	0.5	0.5	----	0.0
Postdoctoral plans																	
Definite postdoctoral study	%	24.7	22.9	21.7	28.9	14.8	14.4	----	----	28.3	32.3	20.2	28.2	17.3	16.2	23.8	19.8
Definite employment		44.9	49.1	41.7	36.7	51.9	51.5	----	----	35.4	33.8	42.7	35.0	46.2	50.1	31.7	33.3
Seeking employment or study		27.9	25.4	33.7	32.4	28.1	28.8	----	----	34.1	31.0	34.5	34.7	33.5	30.5	43.6	43.5
Other/unknown [g]		2.5	2.7	3.0	2.1	5.2	5.3	----	----	2.3	2.9	2.6	2.1	3.2	3.2	1.0	3.4
Postdoc study plans	%	35.5	31.8	34.2	44.0	22.2	21.8	----	----	44.4	48.8	32.1	44.6	27.2	24.4	42.9	37.2
Postdoc employment plans	%	64.5	68.2	65.8	56.0	77.8	78.2	----	----	55.6	51.2	67.9	55.4	72.8	75.6	57.1	62.8
Educational institution [h]		41.4	46.7	37.8	29.8	50.0	51.7	----	----	25.4	24.6	33.8	24.9	55.4	58.7	30.4	45.2
Industry/business		14.2	11.0	20.8	20.5	12.2	11.5	----	----	24.0	16.8	27.0	25.1	6.5	6.0	10.7	8.0
Government		4.9	5.8	2.6	3.3	8.9	8.0	----	----	3.5	5.3	3.9	3.2	6.3	6.7	3.6	4.8
Nonprofit		3.3	4.1	3.0	1.4	6.7	6.9	----	----	1.6	3.9	1.5	1.2	4.0	3.9	7.1	3.7
Other/unknown		0.7	0.5	1.6	1.0	0.0	0.0	----	----	1.0	0.5	1.7	1.0	0.6	0.3	5.4	1.1

APPENDIX TABLE A-4. Statistical profile of doctorate recipients, by race/ethnicity and citizenship, 2005

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.
Total number		24,704	20,845	627	3,166	264	732	497	22	213	1,276	533	110	629	3,836	853	45	431
		0.0	0.0	0.8	0.2	1.9	0.7	1.0	22.7	2.3	0.4	0.9	4.5	0.8	0.1	0.6	11.1	1.2
Male	%	52.3	50.0	51.5	68.0	37.5	54.6	45.5	50.0	76.5	54.2	41.8	42.7	67.1	55.3	49.3	48.9	69.9
Female		47.7	50.0	48.5	32.0	62.5	45.4	54.5	50.0	23.5	45.8	58.2	57.3	32.9	44.7	50.7	51.1	30.1
Field of study																		
Physical sciences [e]	%	14.3	12.0	18.7	28.2	10.2	8.5	6.2	13.6	13.1	13.5	10.9	8.2	16.7	14.7	13.6	17.8	21.8
Engineering		9.1	7.3	13.2	20.2	6.1	11.5	4.8	0.0	28.2	12.5	6.2	14.5	17.6	13.6	8.2	15.6	24.6
Life sciences		21.7	22.4	21.9	17.2	24.2	21.0	18.5	13.6	27.7	23.5	20.6	20.9	26.4	18.4	19.9	22.2	15.1
Social sciences		17.8	18.3	16.9	14.5	20.1	19.4	20.7	22.7	16.0	20.2	25.0	18.2	16.5	17.1	21.8	8.9	15.1
Humanities		15.0	15.4	20.1	11.3	15.5	12.7	15.5	27.3	4.7	14.2	14.3	23.6	12.6	13.9	17.6	15.6	11.6
Education		16.4	18.8	4.3	2.7	15.9	21.9	28.8	13.6	6.6	10.7	17.3	10.0	5.1	15.1	13.5	13.3	6.3
Other fields		5.7	5.7	4.9	5.9	8.0	5.1	5.4	9.1	3.8	5.3	5.8	4.5	5.1	7.2	5.4	6.7	5.6
Median age at doctorate	Yrs	33.2	33.7	33.5	31.3	34.7	34.9	35.0	36.7	34.7	33.8	33.6	35.3	33.8	33.1	33.7	34.2	32.6
Median time lapse from baccalaureate to doctorate																		
Since baccalaureate	Yrs	10.0	10.4	9.8	8.2	11.0	10.6	10.6	11.4	10.2	9.9	10.0	10.4	9.6	9.8	10.0	11.0	9.4
Since starting graduate school		8.2	8.3	8.3	7.2	8.9	8.7	8.7	9.3	8.5	7.9	8.7	7.7	7.3	7.9	8.0	8.7	7.6
Graduate school primary source of support [f]																		
Teaching assistantships	%	17.5	16.2	24.4	24.7	13.3	13.0	13.5	----	11.1	17.8	11.8	28.6	21.0	18.4	18.5	15.2	19.1
Research and other non-teaching assistantships/traineeships		20.0	17.5	28.1	35.3	11.6	13.4	10.3	----	20.3	23.5	12.0	21.9	33.2	22.4	16.5	21.2	34.2
Fellowships/dissertation grants		28.5	28.6	27.4	27.6	42.1	32.5	34.4	----	29.5	34.4	41.9	31.4	28.5	32.3	34.7	39.4	28.3
Own resources		27.9	31.7	16.9	4.9	27.5	28.0	38.0	35.0	4.3	14.9	30.1	15.2	2.3	20.6	26.2	24.2	----
Foreign government		0.9	0.0	1.4	6.9	----	9.4	0.0	----	30.9	6.6	----	----	12.7	3.2	0.0	0.0	13.2
Employer		4.9	5.7	1.9	0.5	4.7	----	----	0.0	3.9	2.8	4.0	----	2.2	2.7	----	0.0	----
Other		0.2	0.2	0.0	0.0	----	----	----	0.0	0.0	0.0	0.0	----	0.0	0.2	----	0.0	0.0
Postdoctoral plans																		
Definite postdoctoral study	%	24.0	22.7	24.0	32.2	----	24.5	24.4	----	----	25.2	26.1	18.9	25.6	23.8	22.0	16.2	31.3
Definite employment		48.7	50.5	41.8	38.5	44.6	45.8	45.7	42.9	46.4	44.9	45.7	42.5	44.5	43.5	44.1	45.9	41.8
Seeking employment or study		24.8	24.2	30.8	27.7	33.0	27.3	27.1	42.9	26.3	27.8	26.1	34.9	28.1	28.7	30.4	29.7	22.0
Other/unknown [g]		2.5	2.6	3.3	1.6	----	2.4	2.9	----	----	2.0	2.0	3.8	1.8	4.1	3.5	8.1	4.9
Postdoc study plans	%	33.0	31.1	36.5	45.5	32.0	34.9	34.8	25.0	35.8	36.0	36.4	30.8	36.5	35.3	33.3	26.1	42.9
Postdoc employment plans	%	67.0	68.9	63.5	54.5	68.0	65.1	65.2	75.0	64.2	64.0	63.6	69.2	63.5	64.7	66.7	73.9	57.1
Educational institution [h]		45.7	47.3	41.6	35.5	47.7	48.8	51.9	50.0	41.7	45.3	45.5	47.7	44.7	40.1	43.4	30.4	33.2
Industry/business		11.8	11.2	16.9	14.4	5.9	7.4	5.6	25.0	9.9	10.3	9.6	12.3	10.5	11.7	9.6	21.7	14.3
Government		5.2	5.7	1.3	2.5	5.2	5.6	4.4	0.0	8.6	4.3	4.4	----	4.4	7.3	8.0	0.0	6.6
Nonprofit		3.8	4.1	3.0	1.3	8.5	2.2	----	0.0	----	3.0	----	4.6	2.6	3.9	4.0	----	----
Other/unknown		0.6	0.5	0.8	0.8	0.7	1.2	----	0.0	----	1.1	----	----	1.2	1.7	1.6	----	----

APPENDIX TABLE A-4. Statistical profile of doctorate recipients, by race/ethnicity and citizenship, 2005

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 [i]																	
U.S.	%	89.6	98.2	94.3	65.1	98.6	98.5	----	----	76.0	96.5	94.2	70.5	94.3	99.5	93.8	60.2
Foreign		10.4	1.7	5.7	34.9	1.4	1.5	----	----	23.9	3.5	5.8	29.5	5.7	0.5	6.3	39.8
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	0.0

APPENDIX TABLE A-4. Statistical profile of doctorate recipients, by race/ethnicity and citizenship, 2005

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 [i]																		
U.S.	%	94.4	98.3	94.8	61.3	100.0	80.4	100.0	100.0	34.0	72.6	97.8	93.3	47.6	84.0	95.8	88.2	48.2
Foreign		5.6	1.7	5.2	38.7	0.0	19.6	0.0	0.0	66.0	27.4	2.2	6.7	52.4	15.0	3.6	11.8	51.8
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	1.0	0.6	0.0	0.0

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

---- = Cell value suppressed to protect confidentiality of doctorate recipients.

[a] Totals include 59 individuals who did not report their sex and 2,618 individuals who did not report their citizenship at time of doctorate.

[b] Includes Alaska Native.

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

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

[e] Includes mathematics and computer sciences.

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

[g] Includes recipients who indicated that they did not plan to work or study and recipients who did not indicate their postdoctoral plans.

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

[i] Includes only recipients with definite employment plans.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

APPENDIX TABLE A-5. Doctorate recipients' financial resources in support of doctoral programs, by broad field of study and sex, 2005

Financial resource	Total		Physical sciences [a]		Engineering		Life sciences		Social sciences		Humanities		Education		Other fields	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Unduplicated total [b]	21,446	17,588	4,537	1,612	4,745	1,081	4,155	4,345	2,719	3,381	2,359	2,443	1,804	3,654	1,127	1,072
	Percent															
Fellowship, scholarship	48.6	50.9	48.2	53.0	40.3	51.0	51.6	54.2	57.6	56.0	69.2	70.4	24.7	29.2	47.6	47.5
Grant, stipend	32.0	35.6	28.1	32.8	20.3	27.2	51.2	52.0	36.8	39.0	41.3	41.4	13.2	16.1	25.7	24.5
Teaching assistantship	56.8	53.7	77.4	78.8	46.4	50.9	39.8	40.6	70.4	69.7	79.9	81.4	19.2	24.5	60.1	57.3
Research assistantship	59.1	46.4	78.1	77.9	82.4	81.6	54.1	49.2	55.0	56.4	25.3	28.5	19.3	21.9	47.5	45.5
Other assistantship	3.5	5.4	2.1	2.0	1.3	2.0	1.9	2.0	6.9	9.3	6.5	7.5	6.5	6.7	4.7	5.1
Traineeship	1.9	3.0	1.0	1.4	0.8	1.1	5.4	7.5	2.9	4.4	0.3	0.5	0.1	0.3	0.3	0.5
Internship, clinical residency	3.6	5.1	3.8	3.3	4.6	5.0	1.3	0.8	10.1	18.8	0.9	1.4	1.7	1.9	0.8	1.5
Loans (from any source)	24.5	32.8	14.4	16.1	9.4	8.2	21.3	21.5	41.4	48.9	46.6	45.8	38.9	37.0	29.9	33.7
Personal savings	29.7	33.2	17.8	17.1	21.6	16.5	23.6	23.6	40.6	37.2	41.8	38.3	52.1	47.0	45.9	41.7
Other personal earnings during graduate school	22.4	33.1	9.5	8.3	9.3	7.1	13.2	17.1	36.3	40.0	48.8	49.1	49.6	52.1	31.7	38.3
Family earnings or savings [c]	22.1	33.8	12.7	16.3	14.8	17.0	20.7	26.1	32.0	44.2	38.2	42.8	28.4	38.0	28.1	40.2
Employer reimbursement/assistance	7.9	9.4	4.2	3.5	7.4	4.7	5.0	7.0	6.0	5.3	5.5	4.7	29.0	23.0	12.2	10.5
Foreign (non-U.S.) support	5.6	3.7	3.9	2.7	6.5	5.1	4.5	3.8	8.2	3.5	6.7	5.5	3.8	2.3	6.6	4.4
Other	0.2	0.4	0.0	0.2	0.2	0.2	0.1	0.1	0.3	0.7	0.5	0.6	0.4	0.7	0.7	0.1

NOTE: 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 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 59 individuals for whom sex was not reported.

[a] Includes mathematics and computer sciences.

[b] The 4,325 doctorate recipients who did not report sources of support are omitted from this total. Percentages are based only on known responses.

[c] This category includes spouses and significant others.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

APPENDIX TABLE A-6. Distribution of doctorate recipients' financial resources in support of doctoral programs, by sex and broad field of study, 2005

Financial resource	All fields	Physical sciences [a]	Engineering	Life sciences	Social sciences	Humanities	Education	Other fields
					Percent			
Male								
Unduplicated count [b]	21,446	21.2	22.1	19.4	12.7	11.0	8.4	5.3
Fellowship, scholarship	10,421	21.0	18.4	20.6	15.0	15.7	4.3	5.1
Grant, stipend	6,872	18.6	14.0	31.0	14.6	14.2	3.5	4.2
Teaching assistantship	12,190	28.8	18.1	13.6	15.7	15.5	2.8	5.6
Research assistantship	12,676	28.0	30.8	17.7	11.8	4.7	2.7	4.2
Other assistantship	745	12.6	8.1	10.6	25.2	20.5	15.8	7.1
Traineeship	397	11.8	9.1	56.4	19.9	1.5	0.5	0.8
Internship, clinical residency	779	22.1	28.2	6.7	35.2	2.8	3.9	1.2
Loans (from any source)	5,244	12.5	8.5	16.8	21.5	21.0	13.4	6.4
Personal savings	6,362	12.7	16.1	15.4	17.3	15.5	14.8	8.1
Other personal earnings during graduate school	4,811	9.0	9.2	11.4	20.5	23.9	18.6	7.4
Family earnings or savings [c]	4,735	12.1	14.8	18.1	18.4	19.0	10.8	6.7
Employer reimbursement/assistance	1,702	11.2	20.6	12.2	9.6	7.6	30.8	8.0
Foreign (non-U.S.) support	1,198	14.7	25.9	15.7	18.7	13.2	5.7	6.2
Other	53	3.8	15.1	11.3	17.0	22.6	15.1	15.1
Female								
Unduplicated count [d]	17,588	9.2	6.1	24.7	19.2	13.9	20.8	6.1
Fellowship, scholarship	8,949	9.6	6.2	26.3	21.2	19.2	11.9	5.7
Grant, stipend	6,262	8.4	4.7	36.1	21.0	16.1	9.4	4.2
Teaching assistantship	9,440	13.5	5.8	18.7	25.0	21.1	9.5	6.5
Research assistantship	8,165	15.4	10.8	26.2	23.4	8.5	9.8	6.0
Other assistantship	941	3.5	2.3	9.4	33.4	19.4	26.1	5.8
Traineeship	535	4.3	2.2	60.6	28.0	2.1	1.9	0.9
Internship, clinical residency	895	5.9	6.0	3.8	71.1	3.7	7.7	1.8
Loans (from any source)	5,768	4.5	1.5	16.2	28.6	19.4	23.5	6.3
Personal savings	5,836	4.7	3.1	17.6	21.6	16.0	29.4	7.7
Other personal earnings during graduate school	5,819	2.3	1.3	12.8	23.2	20.6	32.7	7.1
Family earnings or savings [c]	5,946	4.4	3.1	19.1	25.2	17.6	23.4	7.2
Employer reimbursement/assistance	1,658	3.4	3.1	18.3	10.7	6.9	50.7	6.8
Foreign (non-U.S.) support	646	6.8	8.5	25.4	18.3	20.9	12.8	7.3
Other	73	4.1	2.7	6.8	31.5	19.2	34.2	1.4

NOTE: 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.

[a] Includes mathematics and computer sciences.

[b] The 2,289 male doctorate recipients who did not report sources of support are omitted from this count.

[c] This category includes spouses and significant others.

[d] The 1,977 female doctorate recipients who did not report sources of support are omitted from this count.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

APPENDIX TABLE A-7. State of doctoral institution of doctorate recipients, by broad field of study and sex, 2005

	Total [a]		Physical sciences [b]		Engineering		Life sciences		Social sciences		Humanities		Education		Other fields	
State	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
U.S. total [c]	23,731	19,564	4,926	1,766	5,215	1,174	4,567	4,727	3,043	3,790	2,619	2,724	2,065	4,154	1,296	1,229
Alabama	299	226	60	26	61	18	91	70	22	27	17	11	31	53	17	21
Alaska	16	9	5	4	2	0	7	5	1	0	1	0	0	0	0	0
Arizona	412	348	80	27	99	22	78	64	45	70	43	56	41	88	26	21
Arkansas	108	86	21	6	18	3	41	19	2	12	3	5	20	39	3	2
California	2,912	2,312	736	225	717	169	446	487	383	519	304	378	217	419	109	115
Colorado	425	323	110	41	92	29	93	71	50	62	32	36	29	70	19	14
Connecticut	302	311	54	20	38	19	75	109	54	66	53	56	12	32	16	9
Delaware	112	88	24	7	40	14	11	6	10	13	6	9	20	38	1	1
District of Columbia	224	295	23	18	13	5	31	54	67	90	46	45	21	48	23	35
Florida	922	751	199	78	208	30	148	139	102	131	56	73	106	230	103	70
Georgia	621	513	110	41	203	50	98	119	62	84	51	56	63	125	34	38
Hawaii	74	75	11	9	5	1	10	12	19	18	21	23	5	11	3	1
Idaho	60	66	8	6	8	2	11	9	5	9	2	1	22	34	4	5
Illinois	1,171	1,001	234	90	267	53	191	212	163	174	154	149	95	241	67	82
Indiana	663	488	127	49	167	30	92	79	72	85	106	95	62	110	37	40
Iowa	334	235	65	25	78	16	85	60	31	26	30	38	26	54	19	16
Kansas	231	182	43	19	33	6	40	42	40	35	31	21	30	42	14	17
Kentucky	263	196	25	18	32	10	60	50	34	32	31	15	37	41	44	30
Louisiana	288	276	42	29	49	19	88	80	26	40	35	34	22	55	26	19
Maine	21	19	7	2	0	0	8	5	1	2	2	4	3	6	0	0
Maryland	575	533	120	45	138	41	161	215	64	84	56	72	26	60	10	16
Massachusetts	1,243	991	335	111	268	64	235	276	174	210	133	154	47	119	51	57
Michigan	872	695	154	69	270	42	140	176	122	146	84	95	62	122	40	45
Minnesota	455	391	70	28	87	19	99	111	73	71	37	37	49	86	40	39
Mississippi	185	182	24	5	14	4	37	29	27	34	15	14	44	80	24	16
Missouri	455	312	72	19	85	19	102	82	59	63	55	26	56	82	26	21
Montana	47	45	10	3	2	0	25	14	2	4	0	2	8	22	0	0
Nebraska	145	143	27	4	12	5	36	42	21	32	17	23	23	27	9	10
Nevada	68	57	20	9	17	1	3	14	13	14	8	4	6	11	1	4
New Hampshire	81	60	30	8	15	3	21	30	8	9	1	4	4	6	2	0
New Jersey	540	376	131	50	121	29	62	69	72	90	105	86	25	30	24	22
New Mexico	167	142	46	11	36	8	20	21	15	15	10	17	32	57	8	13
New York	1,933	1,768	419	135	330	69	367	382	316	449	330	354	83	265	88	114
North Carolina	681	624	155	64	122	43	164	218	79	80	79	81	47	106	35	32
North Dakota	37	54	8	0	2	0	13	7	5	12	0	1	9	33	0	1
Ohio	894	732	165	54	250	51	179	173	88	138	95	85	67	173	50	58
Oklahoma	223	161	29	12	44	6	55	28	26	37	10	18	36	51	23	9
Oregon	193	178	45	17	31	6	58	52	23	42	16	18	12	34	8	9
Pennsylvania	1,271	958	263	85	322	61	196	207	156	187	126	144	126	213	82	61
Puerto Rico	24	43	6	5	0	1	3	10	4	15	5	3	6	8	0	1
Rhode Island	119	112	47	20	15	7	19	28	13	26	23	27	0	3	2	1
South Carolina	238	190	45	10	49	9	58	59	21	18	20	8	34	71	11	15

APPENDIX TABLE A-7. State of doctoral institution of doctorate recipients, by broad field of study and sex, 2005

	Total [a]		Physical sciences [b]		Engineering		Life sciences		Social sciences		Humanities		Education		Other fields	
State	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
South Dakota	37	44	4	4	3	0	10	7	5	5	2	0	13	28	0	0
Tennessee	344	355	34	19	61	14	83	83	50	63	38	32	61	121	17	23
Texas	1,582	1,202	291	98	401	84	339	316	155	192	163	149	139	296	94	67
Utah	230	141	50	22	64	15	41	32	44	36	10	9	10	14	11	13
Vermont	26	35	5	1	3	1	7	7	3	10	2	1	6	14	0	1
Virginia	632	433	133	37	148	28	112	96	76	85	42	43	88	124	33	20
Washington	378	348	81	39	80	20	89	122	51	48	35	55	32	55	10	9
West Virginia	94	69	10	6	19	1	21	21	26	11	6	1	12	28	0	1
Wisconsin	474	368	100	35	69	26	105	104	60	65	72	56	36	67	32	15
Wyoming	30	22	13	1	7	1	3	4	3	4	0	0	4	12	0	0

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

[a] Totals exclude doctorate recipients whose gender was unknown (n=59).

[b] Includes mathematics and computer sciences.

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

APPENDIX TABLE A-8. Institutions granting research doctorates, by major field of study, 2005

Institution	2005 Total	Physics & astronomy	Chemistry	Earth, atmos., & marine sciences	Mathematics	Computer sciences	Engineering	Biological/biomedical sciences	Health sciences	Agricultural sciences/ natural resources	Psychology	Other social sciences	History	American literature	English language & literature	Other humanities	Education	Other fields
All U.S. Institutions	43,354	1,520	2,127	713	1,203	1,136	6,404	6,368	1,777	1,161	3,327	3,510	924	406	554	3,465	6,229	2,530
ALABAMA	525	24	25	10	14	13	79	96	47	18	34	15	9	5	6	8	84	38
AL A&M U.	8	6	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
Auburn U.	174	2	13	1	3	1	30	20	5	16	20	6	3	0	2	1	36	15
U. AL Birmingham	139	5	2	0	2	1	6	68	36	0	8	4	0	0	0	0	7	0
U. AL in Huntsville	39	6	0	1	1	5	25	0	0	0	1	0	0	0	0	0	0	0
U. AL, The	154	5	10	6	8	6	18	4	5	0	5	5	6	5	4	7	37	23
U. South AL	11	0	0	2	0	0	0	4	1	0	0	0	0	0	0	0	4	0
ALASKA	25	1	1	7	0	0	2	8	0	4	0	1	0	0	0	1	0	0
U. AK	25	1	1	7	0	0	2	8	0	4	0	1	0	0	0	1	0	0
ARIZONA	760	35	27	19	17	9	121	92	28	22	47	68	20	3	6	70	129	47
AZ State U.	321	7	11	4	6	7	62	24	11	2	25	29	7	1	4	28	66	27
Northern AZ U.	52	0	0	0	0	0	0	11	0	1	3	6	3	0	0	2	25	1
U. AZ	387	28	16	15	11	2	59	57	17	19	19	33	10	2	2	40	38	19
ARKANSAS	194	12	8	0	3	4	21	26	7	27	8	6	4	1	1	2	59	5
AR State U.	13	0	0	0	0	0	0	1	0	2	0	0	0	0	0	2	8	0
U. AR	145	10	5	0	3	4	17	15	4	25	8	6	4	1	1	0	37	5
U. AR Little Rock	23	2	3	0	0	0	4	0	0	0	0	0	0	0	0	0	14	0
U. AR for Medical Sciences	13	0	0	0	0	0	0	10	3	0	0	0	0	0	0	0	0	0
CALIFORNIA	5,225	213	292	132	153	171	886	741	145	47	455	447	127	52	52	452	636	224
Azusa Pacific U.	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0
Biola U.	13	0	0	0	0	0	0	0	0	0	7	1	0	0	0	0	3	2
CA Institute Integral Studies	25	0	0	0	0	0	0	0	0	0	2	2	0	0	0	16	3	2
CA Institute of Technology	182	32	33	9	12	8	58	27	0	0	1	2	0	0	0	0	0	0
CA School of Professional Psychology/Alameda	28	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	2
CA School of Professional Psychology/Alhambra	33	0	0	0	0	0	0	0	0	0	33	0	0	0	0	0	0	0
CA School of Professional Psychology/Fresno	22	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0
CA School of Professional Psychology/San Diego	45	0	0	0	0	0	0	0	0	0	41	0	0	0	0	0	0	4
Claremont Graduate U.	92	0	0	0	2	2	0	4	0	0	3	21	5	5	2	22	17	9
Claremont School of Theology	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Fielding Graduate Institute	107	0	0	0	0	0	0	0	0	0	46	4	0	0	0	1	29	27
Fuller Theological Seminary	67	0	0	0	0	0	0	0	0	0	28	5	1	0	0	18	0	15
Graduate Theological Union	25	0	0	0	0	0	0	0	0	0	0	0	1	0	0	20	0	4
La Sierra U.	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
Loma Linda U.	45	0	0	1	0	0	0	12	15	0	10	0	0	0	0	0	5	2
Naval Postgraduate School	7	0	0	0	1	1	5	0	0	0	0	0	0	0	0	0	0	0
Pacific Graduate School of Psychology	27	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0

APPENDIX TABLE A-8. Institutions granting research doctorates, by major field of study, 2005

Institution	2005 Total	Physics & astronomy	Chemistry	Earth, atmos., & marine sciences	Mathematics	Computer sciences	Engineering	Biological/biomedical sciences	Health sciences	Agricultural sciences/ natural resources	Psychology	Other social sciences	History	American literature	English language & literature	Other humanities	Education	Other fields
Pardee RAND Graduate School	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0
Pepperdine U.	67	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	53	11
San Diego State U.	14	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	11	0
Santa Clara U.	5	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
Saybrook Graduate School	35	0	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	3
Scripps Research Institute, The	21	0	7	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0
Stanford U.	642	38	40	30	26	29	217	72	6	2	13	45	19	3	8	38	29	27
U. CA, Berkeley	802	44	53	17	37	33	170	90	20	21	25	83	32	11	9	84	44	29
U. CA, Davis	389	13	22	11	12	12	57	140	9	16	9	34	8	5	8	13	20	0
U. CA, Irvine	211	9	20	2	8	12	34	41	3	0	13	22	5	4	5	21	7	5
U. CA, Los Angeles	651	19	31	14	23	22	115	102	33	0	26	74	20	5	6	81	57	23
U. CA, Riverside	159	5	11	0	10	7	15	28	3	6	7	23	9	8	2	13	11	1
U. CA, San Diego	301	13	31	19	9	9	56	82	3	0	14	26	6	5	1	20	2	5
U. CA, San Francisco	86	0	9	0	0	1	6	46	19	0	0	5	0	0	0	0	0	0
U. CA, Santa Barbara	287	26	9	12	5	14	64	15	0	1	22	35	13	2	4	38	24	3
U. CA, Santa Cruz	99	7	7	7	4	4	10	13	2	1	10	15	5	1	2	10	0	1
U. La Verne	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	1
U. San Diego	20	0	0	0	0	0	0	0	5	0	1	0	0	0	0	0	14	0
U. San Francisco	42	0	0	0	0	0	0	0	0	0	0	5	0	0	0	1	33	3
U. Southern CA	554	7	16	10	3	17	73	54	25	0	26	38	3	3	5	56	178	40
U. the Pacific	26	0	3	0	0	0	0	0	1	0	2	0	0	0	0	0	19	1
Wright Institute, The	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0
COLORADO	750	44	34	31	26	16	122	111	33	21	50	62	5	5	6	52	99	33
CO School of Mines	51	8	2	5	2	1	29	0	0	1	0	3	0	0	0	0	0	0
CO State U.	187	4	8	11	4	1	25	43	2	20	13	16	0	0	0	0	34	6
U. CO	267	31	20	15	14	10	59	27	1	0	6	29	5	2	1	32	9	6
U. CO Health Sciences Ctr.	54	1	1	0	0	0	0	35	17	0	0	0	0	0	0	0	0	0
U. CO-Colorado Springs	7	0	0	0	0	2	5	0	0	0	0	0	0	0	0	0	0	0
U. CO-Denver	21	0	0	0	3	0	2	0	5	0	0	3	0	0	0	0	5	3
U. Denver	94	0	2	0	0	2	2	5	0	0	17	11	0	3	5	5	29	13
U. Northern CO	69	0	1	0	3	0	0	1	8	0	14	0	0	0	0	15	22	5
CONNECTICUT	613	13	35	3	19	4	57	162	16	6	38	82	17	10	10	72	44	25
U. CT	261	3	15	2	7	0	40	66	8	3	23	23	5	7	4	9	34	12
U. Hartford	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0
U. New Haven	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Wesleyan U.	14	0	1	0	5	0	0	5	0	0	0	0	0	0	0	3	0	0
Yale U.	327	10	19	1	7	4	17	91	8	3	15	59	12	3	6	60	0	12

Institution	2005 Total	Physics & astronomy	Chemistry	Earth, atmos., & marine sciences	Mathematics	Computer sciences	Engineering	Biological/biomedical sciences	Health sciences	Agricultural sciences/ natural resources	Psychology	Other social sciences	History	American literature	English language & literature	Other humanities	Education	Other fields
DELAWARE	200	3	9	11	5	3	54	12	2	3	9	14	2	1	3	9	58	2
U. DE	156	3	9	11	4	3	54	12	2	3	8	14	2	1	3	9	16	2
Wilmington C.	44	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	42	0
DISTRICT OF COLUMBIA	519	6	18	0	7	10	18	69	16	0	60	97	24	14	5	48	69	58
American U.	72	2	2	0	2	0	0	1	0	0	16	32	3	0	0	0	11	3
Catholic U. America	72	1	0	0	0	0	4	0	8	0	11	3	3	4	4	17	4	13
Gallaudet U.	13	0	0	0	0	0	0	0	0	0	9	0	0	0	0	1	3	0
George Washington U.	183	2	4	0	2	10	13	25	5	0	9	22	7	8	0	6	42	28
Georgetown U.	80	0	10	0	0	0	0	19	1	0	1	21	5	0	0	21	0	2
Howard U.	99	1	2	0	3	0	1	24	2	0	14	19	6	2	1	3	9	12
FLORIDA	1,677	64	80	32	25	76	238	152	76	59	147	86	14	10	13	92	336	177
Barry U.	35	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	24	7
FL A&M U.	22	0	0	0	0	0	5	0	7	2	0	0	0	0	0	0	8	0
FL Atlantic U.	55	5	2	0	0	2	7	0	2	0	8	1	0	0	0	1	19	8
FL Institute of Technology	18	3	1	1	1	2	7	1	0	0	1	0	0	0	0	0	1	0
FL International U.	80	4	2	0	0	5	5	7	0	0	12	8	2	1	0	2	26	6
FL State U.	278	10	17	10	3	8	14	11	5	2	18	23	10	0	3	45	60	39
Lynn U.	16	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	10	3
Nova Southeastern U.	121	0	0	1	0	33	1	0	4	0	15	7	0	0	0	0	1	59
U. Central FL	151	17	1	0	4	16	31	2	3	0	12	2	0	0	0	0	56	7
U. FL	574	20	43	8	13	6	135	92	31	55	38	23	2	3	4	12	55	34
U. Miami	110	2	7	6	0	0	9	19	7	0	18	11	0	1	4	21	5	0
U. South FL	188	3	7	6	4	3	24	20	17	0	21	10	0	5	2	10	42	14
U. West FL	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0
GEORGIA	1,139	20	66	14	23	28	253	147	40	32	74	72	16	8	16	67	191	72
Clark Atlanta U.	24	0	0	0	0	0	0	2	0	0	0	7	0	0	0	0	14	1
Emory U.	161	0	13	0	4	0	1	43	11	0	9	22	3	2	8	37	6	2
GA Institute of Technology	364	13	30	9	6	25	249	9	1	4	5	6	3	0	0	0	0	4
GA Southern U.	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0
GA State U.	121	4	2	1	0	1	1	14	5	0	21	10	3	2	4	4	31	18
Medical C. GA	14	0	0	0	0	0	0	12	2	0	0	0	0	0	0	0	0	0
Mercer U. Southern School of Pharmacy	4	0	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0
Morehouse School of Medicine	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
U. GA	424	3	20	4	13	2	2	63	19	28	39	27	7	4	4	26	116	47
Valdosta State U.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
HAWAII	149	7	2	7	2	2	6	16	3	3	8	29	5	1	7	31	16	4
U. HI Manoa	149	7	2	7	2	2	6	16	3	3	8	29	5	1	7	31	16	4

APPENDIX TABLE A-8. Institutions granting research doctorates, by major field of study, 2005

Institution	2005 Total	Physics & astronomy	Chemistry	Earth, atmos., & marine sciences	Mathematics	Computer sciences	Engineering	Biological/biomedical sciences	Health sciences	Agricultural sciences/ natural resources	Psychology	Other social sciences	History	American literature	English language & literature	Other humanities	Education	Other fields
IDAHO	126	3	4	1	3	3	10	9	2	9	10	4	1	1	0	1	56	9
Boise State U.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ID State U.	27	0	0	0	1	0	1	4	1	0	7	0	0	1	0	1	8	3
U. ID	98	3	4	1	2	3	9	5	1	9	3	4	1	0	0	0	47	6
ILLINOIS	2,172	70	128	18	59	49	320	290	72	41	160	177	55	20	31	197	336	149
Benedictine U.	23	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	22
Chicago Theological Seminary	6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4	0	1
DePaul U.	26	0	0	0	0	2	0	0	0	0	19	0	0	0	0	0	5	0
Rosalind Franklin U. of Med & Sci.	21	0	0	0	0	0	0	9	0	0	12	0	0	0	0	0	0	0
Garrett Evangelical Theological Seminary	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1
IL Institute of Technology	62	2	1	0	0	7	35	1	0	0	10	0	0	0	0	0	1	5
IL State U.	49	0	0	0	0	0	0	5	0	0	2	0	0	1	2	5	34	0
Institute for Clinical Social Work	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Loyola U. Chicago	200	0	3	0	0	0	0	21	10	0	22	6	5	0	3	9	112	9
Lutheran School of Theology Chicago	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1
National-Louis U.	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0
Northern IL U.	80	1	2	2	2	0	0	1	0	0	8	7	2	3	2	1	49	0
Northwestern U.	295	8	37	1	10	3	79	39	6	0	12	25	8	3	4	29	8	23
Roosevelt U.	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0
Rush U.	10	0	0	0	0	0	0	6	4	0	0	0	0	0	0	0	0	0
Southern IL U.	145	0	3	1	0	0	11	12	4	3	16	19	2	0	5	9	32	28
U. Chicago, The	327	22	26	1	17	5	0	62	0	0	14	67	20	4	6	64	2	17
U. IL-Chicago	261	4	20	2	9	5	35	65	36	1	11	20	8	3	6	12	17	7
U. IL-Springfield	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
U. IL-Urbana-Champaign	637	33	36	11	21	27	160	69	12	37	33	32	10	6	3	57	61	29
INDIANA	1,152	42	56	12	41	26	197	103	31	37	71	86	35	8	23	135	172	77
Ball State U.	44	0	0	0	0	0	0	0	0	0	12	0	0	1	2	7	22	0
IN State U.	49	0	0	0	0	0	1	2	0	0	10	3	0	0	0	0	32	1
IN U.	409	15	10	5	13	6	1	48	14	5	14	44	21	4	10	91	77	31
Purdue U.	522	14	37	4	22	17	165	43	17	32	27	26	5	3	6	28	41	35
U. Notre Dame	128	13	9	3	6	3	30	10	0	0	8	13	9	0	5	9	0	10
IOWA	569	13	43	4	25	5	94	83	33	29	36	21	8	2	10	48	80	35
Drake U.	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0
IA State U.	246	7	25	1	13	4	57	42	6	29	18	11	1	0	2	2	21	7
Maharishi U. Management	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
St. Ambrose U.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
U. IA	306	6	18	3	12	1	36	41	26	0	18	10	7	2	8	45	48	25
U. Northern IA	9	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	8	0

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Institution	2005 Total	Physics & astronomy	Chemistry	Earth, atmos., & marine sciences	Mathematics	Computer sciences	Engineering	Biological/biomedical sciences	Health sciences	Agricultural sciences/ natural resources	Psychology	Other social sciences	History	American literature	English language & literature	Other humanities	Education	Other fields
KANSAS	413	10	38	2	7	5	39	39	15	28	45	30	16	1	3	32	72	31
KS State U.	138	7	5	0	3	3	17	21	1	28	9	9	2	0	0	0	23	10
U. KS	239	3	28	2	2	2	9	18	12	0	26	21	14	1	3	32	45	21
Wichita State U.	36	0	5	0	2	0	13	0	2	0	10	0	0	0	0	0	4	0
KENTUCKY	462	3	12	4	17	7	42	71	22	17	30	36	6	5	4	31	81	74
Asbury Theological Seminary	5	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	2
Southern Baptist Theological Seminary, The	56	0	0	0	1	0	0	0	0	0	0	0	0	0	0	13	8	34
Spalding U.	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	1
U. KY	275	3	7	4	14	3	33	46	21	17	17	28	6	5	3	13	29	26
U. Louisville	104	0	5	0	2	4	9	25	1	0	13	6	0	0	1	4	23	11
LOUISIANA	566	5	27	8	21	10	69	104	41	24	41	25	4	12	7	46	77	45
Grambling State U.	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
LA State U. & A&M C.	222	1	14	7	7	3	25	32	4	24	11	9	3	8	4	31	22	17
LA State U. Health Sciences Ctr. Shreveport	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0
LA State U. School of Medicine	25	0	0	0	0	0	0	15	10	0	0	0	0	0	0	0	0	0
LA Tech U.	34	1	0	0	5	2	13	1	0	0	3	0	0	0	0	0	8	1
New Orleans Baptist Theological Seminary	14	0	0	0	0	0	0	0	0	0	5	0	0	0	0	3	0	6
Southern U. and A&M C.	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
Tulane U.	139	2	6	1	1	3	22	36	19	0	9	11	1	1	1	7	2	17
U. LA Lafayette	34	0	0	0	8	2	4	7	3	0	0	0	0	3	2	5	0	0
U. LA Monroe	21	0	0	0	0	0	0	4	5	0	10	0	0	0	0	0	2	0
U. New Orleans	60	1	7	0	0	0	5	0	0	0	3	5	0	0	0	0	35	4
MAINE	40	1	2	3	0	3	0	7	1	5	3	0	5	0	0	1	9	0
U. ME	40	1	2	3	0	3	0	7	1	5	3	0	5	0	0	1	9	0
MARYLAND	1,109	46	25	20	36	38	180	217	140	19	47	101	21	11	11	85	86	26
Baltimore Hebrew U.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Bowie State U.	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
Johns Hopkins U.	386	8	10	6	7	6	56	108	91	0	0	36	15	3	2	30	8	0
Loyola C. in MD	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0
Morgan State U.	25	0	0	0	0	0	5	0	5	0	0	0	1	0	0	0	14	0
Uniformed Services U. the Health Sciences	12	0	0	0	0	0	0	6	4	0	2	0	0	0	0	0	0	0
U. MD	499	33	11	14	21	17	109	44	12	17	31	55	5	8	9	53	39	21
U. MD Baltimore	77	5	4	0	8	15	9	10	0	1	8	10	0	0	0	1	5	1
U. MD Eastern Shore	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4	0
U. MD School of Medicine	82	0	0	0	0	0	1	49	28	0	0	0	0	0	0	0	0	4
MASSACHUSETTS	2,236	130	132	43	68	73	333	419	74	19	121	263	67	14	20	186	166	108
American International C.	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0

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Boston C.	137	0	9	0	0	0	0	3	16	0	16	14	6	0	4	18	37	14
Boston U.	281	15	16	6	9	3	23	68	10	2	15	30	6	6	1	46	16	9
Brandeis U.	79	5	3	0	3	3	0	21	1	0	7	17	7	1	3	8	0	0
Clark U.	32	4	0	0	0	0	0	1	0	0	10	14	1	0	0	1	1	0
Harvard U.	510	27	26	12	14	4	10	136	16	0	26	74	29	1	2	71	36	26
MA C. Pharmacy & Health Sciences	3	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
MA Institute of Technology	581	49	40	21	32	48	222	65	4	1	2	58	5	0	0	11	0	23
New England Conservatory of Music	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
Northeastern U.	72	9	3	0	1	1	21	7	2	0	8	13	5	1	0	0	0	1
Simmons C.	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	6
Smith C.	10	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	9
Springfield C.	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0
Suffolk U.	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0
Tufts U.	90	3	4	0	2	2	5	46	0	0	7	9	1	1	2	3	0	5
U. MA Amherst	267	9	22	3	7	8	28	29	11	14	12	27	7	4	7	23	43	13
U. MA Dartmouth	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
U. MA Harbor campus	48	0	1	1	0	0	0	7	6	2	10	6	0	0	0	0	15	0
U. MA Lowell	49	5	4	0	0	2	9	3	7	0	0	0	0	0	1	1	15	2
U. MA Worcester	32	0	0	0	0	0	1	31	0	0	0	0	0	0	0	0	0	0
Worcester Polytechnic Institute	21	4	2	0	0	2	12	1	0	0	0	0	0	0	0	0	0	0
MICHIGAN	1,574	41	88	18	41	37	314	183	70	63	131	138	38	10	17	115	185	85
Andrews U.	18	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	11	3
Calvin Theological Seminary	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
Central MI U.	18	0	0	0	1	0	0	0	0	0	13	0	0	0	0	0	4	0
Eastern MI U.	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	1
MI State U.	475	13	34	2	13	16	48	62	14	49	35	49	7	3	4	31	58	37
MI Technological U.	44	2	2	3	6	1	26	2	0	0	0	0	0	0	0	2	0	0
Oakland U.	20	1	0	0	1	2	4	1	0	0	1	0	0	0	0	0	10	0
U. Detroit Mercy	10	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0
U. MI	711	22	34	11	13	15	205	82	51	12	33	58	27	2	8	71	35	32
Wayne State U.	165	1	16	0	3	3	28	30	5	0	17	21	0	2	4	5	27	3
Western MI U.	93	2	2	2	4	0	3	6	0	2	21	10	3	3	1	2	25	7
MINNESOTA	847	17	36	9	20	16	106	111	66	34	89	55	10	5	4	55	135	79
Hamline U.	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	1
Luther Seminary	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0
Mayo Graduate School	24	0	0	0	0	0	7	17	0	0	0	0	0	0	0	0	0	0
St. Marys U. MN	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	3
U. MN	644	17	36	9	20	16	97	93	50	34	41	48	10	5	4	51	70	43

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U. St. Thomas	21	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	16	4
Walden U.	123	0	0	0	0	0	2	1	16	0	47	7	0	0	0	0	22	28
MISSISSIPPI	367	1	15	3	4	6	18	36	7	23	41	20	10	5	4	10	124	40
Delta State U.	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	4
Jackson State U.	32	0	3	0	0	0	0	0	0	2	4	4	0	0	0	0	14	5
MS State U.	111	0	3	0	0	3	11	11	0	21	4	7	5	0	0	0	39	7
U. MS	64	0	1	0	4	1	3	4	6	0	9	2	4	1	2	1	15	11
U. MS Medical Ctr.	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0
U. Southern MS	137	1	8	3	0	2	4	10	1	0	24	7	1	4	2	9	48	13
MISSOURI	767	17	34	11	16	13	104	141	18	25	63	59	16	4	8	53	138	47
Concordia Seminary	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	4
St. Louis U.	120	0	0	3	1	0	0	18	9	0	13	3	4	1	2	15	50	1
U. MO-Columbia	275	4	9	2	11	6	21	33	2	24	22	24	7	1	5	16	61	27
U. MO-Kansas City	48	0	7	1	1	0	2	1	5	1	6	6	1	0	0	9	5	3
U. MO-Rolla	66	2	6	1	1	2	54	0	0	0	0	0	0	0	0	0	0	0
U. MO-St. Louis	51	1	3	0	0	0	0	6	0	0	14	6	0	0	0	0	21	0
Washington U.	201	10	9	4	2	5	27	83	2	0	8	20	4	2	1	11	1	12
MONTANA	92	3	4	0	4	2	2	26	1	12	4	2	1	0	0	1	30	0
MT State U.	32	3	1	0	2	2	2	10	0	2	0	1	0	0	0	0	9	0
U. MT	60	0	3	0	2	0	0	16	1	10	4	1	1	0	0	1	21	0
NEBRASKA	289	3	13	1	4	10	17	45	15	19	30	23	4	9	10	17	50	19
Creighton U.	13	0	1	0	0	0	0	11	0	0	0	0	0	0	0	1	0	0
U. NE Medical Ctr.	28	0	5	0	0	0	0	14	8	0	0	0	0	0	0	1	0	0
U. NE-Lincoln	229	3	7	1	4	10	17	20	7	19	30	15	4	9	10	15	40	18
U. NE-Omaha	19	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	10	1
NEVADA	125	7	4	17	0	1	18	13	2	2	20	7	0	1	6	5	17	5
U. NV, Las Vegas	37	2	0	2	0	0	5	1	0	1	0	5	0	0	4	3	10	4
U. NV, Reno	88	5	4	15	0	1	13	12	2	1	20	2	0	1	2	2	7	1
NEW HAMPSHIRE	141	9	7	6	6	10	18	37	2	12	11	6	3	0	1	1	10	2
Antioch New England Graduate School	5	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
Dartmouth C.	70	5	4	0	3	9	13	31	2	0	3	0	0	0	0	0	0	0
Southern NH U.	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
U. NH	63	4	3	6	3	1	5	6	0	7	8	5	3	0	1	1	10	0
NEW JERSEY	917	52	44	9	41	36	150	99	11	21	65	97	40	7	17	127	55	46
Drew U.	29	0	0	0	0	0	0	0	0	0	0	0	1	0	4	23	0	1
Fairleigh Dickinson U.	23	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0

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Montclair State U.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
NJ Institute Technology	70	4	2	0	7	13	40	1	1	2	0	0	0	0	0	0	0	0
Princeton Theological Seminary	20	0	0	0	0	0	0	0	0	0	0	0	2	0	0	14	0	4
Princeton U.	277	25	23	3	11	12	57	18	0	0	5	44	23	3	6	46	0	1
Rutgers U.	306	16	4	4	22	8	42	35	7	19	19	34	14	4	7	44	11	16
Rutgers State U.-Newark	63	2	9	1	0	3	0	4	3	0	4	19	0	0	0	0	0	18
Seton Hall U.	63	0	5	0	0	0	0	0	0	0	14	0	0	0	0	0	42	2
Stevens Institute of Technology	23	5	1	1	1	0	11	0	0	0	0	0	0	0	0	0	0	4
U. Medicine & Dentistry of NJ	41	0	0	0	0	0	0	41	0	0	0	0	0	0	0	0	0	0
NEW MEXICO	309	18	9	8	12	10	44	30	4	7	13	17	5	4	4	14	89	21
NM Institute of Mining & Technology	12	2	1	4	0	2	3	0	0	0	0	0	0	0	0	0	0	0
NM State U.	96	7	2	0	3	2	10	6	0	7	6	0	0	0	0	0	46	7
U. NM	201	9	6	4	9	6	31	24	4	0	7	17	5	4	4	14	43	14
NEW YORK	3,705	172	140	43	107	93	399	604	100	47	363	403	111	64	70	439	348	202
Adelphi U.	42	0	0	0	0	0	0	0	0	0	39	0	0	0	0	0	1	2
Albany Medical C.	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0
Alfred U.	5	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
Clarkson U.	17	1	2	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0
Columbia U.	472	29	26	17	15	12	32	82	31	1	8	67	36	10	9	62	3	32
Cornell U.	452	34	22	3	26	15	80	83	4	38	14	47	7	5	8	36	5	25
Cornell U. Weill Med. College	42	0	0	0	0	0	0	42	0	0	0	0	0	0	0	0	0	0
Fordham U.	100	0	0	0	0	0	0	2	0	0	42	8	0	1	3	8	20	16
Graduate School & U. Ctr., CUNY	296	11	10	2	6	11	21	28	3	1	49	47	11	12	16	53	7	8
Hofstra U.	24	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	8	0
Jewish Theological Seminary of America	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	0
Juilliard School, The	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0
Long Island U.-Brooklyn campus	13	0	0	0	0	0	0	1	0	0	12	0	0	0	0	0	0	0
Mt. Sinai School of Medicine	21	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0
New School, The	80	0	0	0	0	0	0	0	0	0	20	37	0	0	0	23	0	0
NY Medical C.	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0
NY U.	387	11	10	0	15	8	0	53	17	0	24	42	19	13	11	80	39	45
Pace U.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Polytechnic U.	27	0	6	0	1	2	18	0	0	0	0	0	0	0	0	0	0	0
Rensselaer Polytechnic Institute	135	7	11	4	6	5	76	6	0	0	1	5	1	0	0	4	1	8
Rochester Institute of Technology	4	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
Rockefeller U., The	22	2	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0
SUNY Binghamton U.	102	0	11	1	4	3	15	4	4	0	12	16	7	5	2	12	5	1
SUNY C. of Environmental Science and Forestry	18	0	3	2	0	0	2	5	0	5	0	1	0	0	0	0	0	0

APPENDIX TABLE A-8. Institutions granting research doctorates, by major field of study, 2005

Institution	2005 Total	Physics & astronomy	Chemistry	Earth, atmos., & marine sciences	Mathematics	Computer sciences	Engineering	Biological/biomedical sciences	Health sciences	Agricultural sciences/ natural resources	Psychology	Other social sciences	History	American literature	English language & literature	Other humanities	Education	Other fields
SUNY Health Science Ctr. Brooklyn	13	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0
SUNY State C. of Optometry	2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
SUNY Stony Brook U.	251	21	11	6	20	11	34	55	0	0	15	17	6	0	7	45	0	3
SUNY U. Albany	135	5	2	4	2	3	2	12	5	1	19	30	5	2	4	9	18	12
SUNY U. Buffalo	331	9	17	1	9	11	50	48	12	0	14	31	4	15	7	35	51	17
SUNY Upstate Medical U.	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0
St. Johns U.-Queens	47	0	0	0	0	0	0	5	1	0	13	1	4	0	0	2	21	0
Syracuse U.	115	8	5	2	0	3	26	4	3	1	8	24	3	0	1	6	12	9
Teachers C., Columbia U.	210	0	0	0	1	0	0	4	10	0	37	8	2	0	0	5	141	2
Union Theological Seminary	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
U. Rochester	219	34	3	1	2	9	21	48	7	0	8	21	6	1	2	41	11	4
Yeshiva U.	67	0	0	0	0	0	0	41	2	0	11	1	0	0	0	0	2	10
NORTH CAROLINA	1,305	35	80	11	51	42	165	269	71	42	52	107	20	15	21	104	153	67
Appalachian State U.	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
Duke U.	287	7	17	7	13	11	37	75	2	0	7	50	6	3	6	37	1	8
East Carolina U. School of Medicine	25	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	14	0
NC A&T State U.	6	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
NC State U.	343	14	22	4	26	10	93	51	3	41	7	12	0	0	0	0	46	14
Southeastern Baptist Theological Seminary	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1
U. NC Chapel Hill	458	8	37	0	5	17	15	89	58	0	23	45	14	11	14	49	32	41
U. NC Charlotte	41	0	0	0	7	4	12	4	0	0	2	0	0	0	0	0	12	0
U. NC Greensboro	90	0	0	0	0	0	0	4	8	0	13	0	0	1	1	16	44	3
Wake Forest U.	48	6	4	0	0	0	2	35	0	1	0	0	0	0	0	0	0	0
NORTH DAKOTA	91	2	0	0	1	5	2	13	2	5	17	0	0	0	1	0	42	1
ND State U.	27	2	0	0	1	5	1	9	1	5	2	0	0	0	0	0	0	1
U. ND	64	0	0	0	0	0	1	4	1	0	15	0	0	0	1	0	42	0
OHIO	1,627	56	106	6	31	20	301	232	79	41	136	90	37	13	18	113	240	108
Air Force Institute of Technology	21	2	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0
Bowling Green State U.	90	0	4	0	6	0	0	9	2	0	17	6	2	0	1	13	16	14
Case Western Reserve U.	189	7	13	0	3	1	60	53	18	0	6	6	2	1	2	3	0	14
Cleveland State U.	34	0	2	0	0	0	10	5	0	0	2	4	0	0	0	0	7	4
Hebrew Union C.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
Kent State U.	125	6	3	0	2	7	0	5	4	0	19	8	3	4	4	3	38	19
Medical C. OH	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0
Miami U.	44	0	7	1	0	0	1	13	0	0	7	3	2	1	1	3	5	0
OH State U., The	591	18	30	2	13	7	90	84	38	40	32	45	20	3	6	62	74	27
OH U.	115	8	9	0	4	0	10	11	0	0	11	0	4	1	2	7	31	17
U. Akron	114	5	21	0	0	0	36	0	0	0	20	4	0	0	0	0	25	3

APPENDIX TABLE A-8. Institutions granting research doctorates, by major field of study, 2005

Institution	2005 Total	Physics & astronomy	Chemistry	Earth, atmos., & marine sciences	Mathematics	Computer sciences	Engineering	Biological/biomedical sciences	Health sciences	Agricultural sciences/ natural resources	Psychology	Other social sciences	History	American literature	English language & literature	Other humanities	Education	Other fields
U. Cincinnati	186	7	13	3	3	3	33	31	12	1	13	14	1	2	2	19	24	5
U. Dayton	16	2	0	0	0	0	9	0	0	0	0	0	0	0	0	1	4	0
U. Toledo	68	1	4	0	0	0	21	7	5	0	8	0	3	1	0	0	13	5
Wright State U.	19	0	0	0	0	2	12	4	0	0	1	0	0	0	0	0	0	0
Youngstown State U.	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
OKLAHOMA	386	13	7	9	5	7	50	50	11	23	41	23	9	4	3	12	87	32
OK State U.	175	6	4	0	2	1	20	21	4	22	12	10	3	0	0	2	54	14
U. OK	181	7	3	8	3	2	21	28	7	1	19	13	6	2	0	10	33	18
U. Tulsa	30	0	0	1	0	4	9	1	0	0	10	0	0	2	3	0	0	0
OREGON	375	15	16	14	11	7	38	59	20	33	32	33	1	5	5	23	46	17
OR Health & Science U.	34	0	0	0	0	4	7	20	0	0	3	0	0	0	0	0	0	0
OR State U.	159	9	10	12	3	2	22	29	19	32	7	2	0	0	0	0	10	2
Portland State U.	56	3	1	0	2	0	9	3	0	0	7	13	0	0	0	0	12	6
U. OR	126	3	5	2	6	1	0	7	1	1	15	18	1	5	5	23	24	9
PENNSYLVANIA	2,232	75	111	15	70	77	384	275	106	22	158	185	31	18	47	175	340	143
Bryn Mawr C.	16	0	1	0	0	0	0	0	0	0	6	0	0	0	0	6	0	3
Carnegie Mellon U.	197	9	8	1	13	40	91	6	1	0	2	10	3	0	1	2	0	10
Drexel U.	94	4	2	0	0	2	41	11	1	0	22	0	0	0	0	0	10	1
Duquesne U.	45	0	10	0	0	0	0	2	1	0	10	0	0	1	1	17	0	3
Gannon U.	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0
Indiana U. PA	71	0	0	0	0	0	0	0	0	0	5	10	0	5	21	12	18	0
Lehigh U.	101	7	3	1	2	1	50	3	0	0	13	2	3	2	2	0	12	0
Marywood U.	12	0	0	0	0	0	0	0	3	0	2	0	0	0	0	0	6	1
PA State U., The	606	27	30	10	18	7	127	86	19	22	38	49	3	4	7	31	92	36
Temple U.	219	4	8	0	9	2	1	18	10	0	33	26	9	4	4	31	44	16
Thomas Jefferson U.	12	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0
U. PA	464	13	20	2	14	10	31	95	12	0	6	66	11	2	8	49	81	44
U. Pittsburgh	329	11	23	1	14	15	43	41	51	0	12	22	2	0	3	18	44	29
U. the Sciences in Philadelphia	9	0	6	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0
Villanova U.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Westminster Theological Seminary	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0
Widener U.	41	0	0	0	0	0	0	0	6	0	2	0	0	0	0	0	33	0
PUERTO RICO	67	1	5	3	0	2	1	13	0	0	19	0	4	0	0	4	14	1
U. PR-Mayaguez	7	0	0	3	0	2	1	1	0	0	0	0	0	0	0	0	0	0
U. PR-Rio Piedras	60	1	5	0	0	0	0	12	0	0	19	0	4	0	0	4	14	1
RHODE ISLAND	231	15	11	15	17	9	22	34	6	7	16	23	10	4	7	29	3	3
Brown U.	151	12	6	7	14	9	11	23	1	0	3	21	10	3	5	25	0	1

APPENDIX TABLE A-8. Institutions granting research doctorates, by major field of study, 2005

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Salve Regina U.	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0
U. RI	76	3	5	8	3	0	11	11	5	7	13	2	0	1	2	0	3	2
SOUTH CAROLINA	431	10	23	7	10	6	60	64	45	8	20	19	6	6	4	12	105	26
Clemson U.	115	7	11	0	3	3	34	7	4	7	1	6	0	0	0	0	26	6
Medical U. SC	35	0	1	0	1	0	0	30	3	0	0	0	0	0	0	0	0	0
SC State U.	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	0
U. SC	243	3	11	7	6	3	26	27	38	1	19	13	6	6	4	12	41	20
SOUTH DAKOTA	81	0	3	5	0	0	3	12	0	5	6	4	0	1	0	1	41	0
SD School of Mines & Technology	9	0	0	5	0	0	3	1	0	0	0	0	0	0	0	0	0	0
SD State U.	18	0	3	0	0	0	0	6	0	5	0	4	0	0	0	0	0	0
U. SD	54	0	0	0	0	0	0	5	0	0	6	0	0	1	0	1	41	0
TENNESSEE	699	7	32	0	8	6	75	118	32	16	65	48	7	4	6	53	182	40
East TN State U.	34	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	29	0
Meharry Medical C.	18	0	0	0	0	0	0	17	1	0	0	0	0	0	0	0	0	0
Mid-America Baptist Theological Seminary	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1
Middle TN State U.	14	0	1	0	0	0	0	0	1	0	0	4	1	1	2	2	2	0
TN State U.	46	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	40	0
TN Technological U.	14	0	0	0	0	0	8	0	0	3	0	0	0	0	0	0	3	0
U. Memphis	103	0	5	0	3	2	4	1	2	0	23	3	3	0	0	10	35	12
U. TN Health Science Ctr.	38	0	1	0	0	0	3	17	17	0	0	0	0	0	0	0	0	0
U. TN, Chattanooga	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
U. TN, Knoxville	214	4	8	0	3	2	38	22	9	12	24	22	2	1	1	4	43	19
Vanderbilt U.	214	3	17	0	2	2	21	54	1	1	15	19	1	2	3	35	30	8
TEXAS	2,791	81	110	56	80	62	488	454	124	77	192	156	37	16	26	235	436	161
Baylor C. of Medicine	60	0	0	0	0	0	0	60	0	0	0	0	0	0	0	0	0	0
Baylor U.	51	2	2	0	3	0	0	5	0	0	1	2	1	0	1	8	26	0
Dallas Theological Seminary	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	2
Lamar U.	9	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	3	0
Prarie View A&M	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
Rice U.	137	11	14	6	12	2	48	17	0	0	6	7	0	1	0	13	0	0
St. Marys U.	14	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	4	0
Sam Houston State U.	13	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0
Southern Methodist U.	40	0	0	2	6	2	15	2	0	0	1	7	1	0	0	4	0	0
Southwestern Baptist Theological Seminary	20	0	0	0	0	0	0	0	0	0	4	0	0	0	0	6	1	9
Stephen F. Austin State U.	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
TX A&M U.	511	6	33	19	22	10	145	59	8	54	24	24	2	2	2	2	63	36
TX A&M U. System-Health Science Ctr.	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0

Institution	2005 Total	Physics & astronomy	Chemistry	Earth, atmos., & marine sciences	Mathematics	Computer sciences	Engineering	Biological/biomedical sciences	Health sciences	Agricultural sciences/ natural resources	Psychology	Other social sciences	History	American literature	English language & literature	Other humanities	Education	Other fields
TX A&M U.-Commerce	32	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	29	0
TX A&M U.-Corpus Christi	6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5	0
TX A&M U.-Kingsville	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	31	0
TX Christian U.	16	1	3	0	0	0	0	0	0	0	6	0	3	0	0	3	0	0
TX Southern U.	11	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	9	0
TX State U.-San Marcos Southwest TX State U.	8	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	4	0
TX Tech U.	176	3	8	2	5	1	30	11	5	14	15	7	4	0	3	26	26	16
TX Tech U. Health Sciences Ctr.	10	0	0	0	0	0	0	7	3	0	0	0	0	0	0	0	0	0
TX Womans U.	67	0	0	0	0	0	0	6	28	0	12	0	0	0	0	5	13	3
U. Dallas	3	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0
U. Houston	213	11	7	6	5	2	39	18	7	0	21	9	7	2	8	14	45	12
U. North TX	146	2	5	0	2	8	4	9	1	2	31	6	2	3	0	11	53	7
U. North TX, Health Science Ctr. Ft. Worth	9	0	0	0	0	0	0	8	0	0	1	0	0	0	0	0	0	0
U. St. Thomas	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
U. TX Medical Branch-Galveston	37	0	0	0	0	0	1	23	8	0	0	2	0	0	0	3	0	0
U. TX-Arlington	90	2	3	0	4	8	28	8	0	0	6	4	2	0	1	7	0	17
U. TX-Austin	716	29	28	13	16	14	143	61	20	0	38	64	14	3	8	113	102	50
U. TX-Dallas	93	6	5	1	5	13	21	10	1	0	1	7	1	4	2	10	0	6
U. TX-El Paso	32	0	1	4	0	1	7	3	0	6	1	0	0	0	0	0	9	0
U. TX-Health Science Ctr.-Houston	100	3	0	0	0	0	0	60	35	0	2	0	0	0	0	0	0	0
U. TX-Health Science Ctr.-San Antonio	28	4	0	0	0	0	0	18	6	0	0	0	0	0	0	0	0	0
U. TX-Pan American	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	3
U. TX-San Antonio	12	0	0	0	0	1	1	3	0	0	0	0	0	0	0	0	7	0
U. TX-Southwestern Medical Ctr.-Dallas	68	1	1	0	0	0	0	57	0	0	9	0	0	0	0	0	0	0
UTAH	371	11	37	7	9	8	79	50	15	8	55	25	5	1	5	8	24	24
Brigham Young U.	73	2	9	0	1	1	13	5	6	0	29	1	0	0	0	0	6	0
U. UT	231	7	26	7	6	7	50	34	9	0	18	16	5	1	5	8	12	20
UT State U.	67	2	2	0	2	0	16	11	0	8	8	8	0	0	0	0	6	4
VERMONT	62	0	3	0	3	0	4	13	0	1	13	0	0	0	0	3	21	1
Middlebury C.	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
U. VT	59	0	3	0	3	0	4	13	0	1	13	0	0	0	0	0	21	1
VIRGINIA	1,066	32	38	18	27	55	177	124	40	44	86	75	20	6	8	51	212	53
C. of William and Mary	50	9	1	4	0	8	1	2	0	0	0	0	2	1	0	8	14	0
George Mason U.	158	3	1	2	6	23	4	7	12	9	21	35	1	0	0	3	30	1
Hampton U.	2	1	0	0	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	0	0	0	0	0	0	0	2
Old Dominion U.	62	0	0	8	2	5	14	5	1	0	6	6	0	0	0	0	9	6
Regent U.	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	9

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Union Theological Seminary-PSCE	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
U. VA	341	11	17	3	5	6	47	49	9	1	26	18	17	5	7	31	85	4
VA Commonwealth U.	107	0	5	0	0	0	10	32	14	0	15	2	0	0	1	5	14	9
VA Polytechnic Institute and State U.	330	8	14	1	14	13	101	29	3	34	18	14	0	0	0	1	60	20
WASHINGTON	728	24	29	27	21	19	101	127	45	39	32	67	17	9	11	53	87	20
Gonzaga U.	7	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	5	0
Seattle Pacific U.	9	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	6	0
Seattle U.	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0
U. WA	511	22	22	25	16	18	74	99	42	14	14	45	7	8	8	47	38	12
WA State U.	180	2	7	2	5	1	27	28	3	25	14	21	10	1	3	6	17	8
WEST VIRGINIA	163	3	6	0	2	5	20	26	7	9	17	20	3	0	0	4	40	1
Marshall U.	10	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5	0
WV U.	153	3	6	0	2	5	20	21	7	9	17	20	3	0	0	4	35	1
WISCONSIN	842	34	45	11	29	16	95	133	34	42	41	84	18	11	17	82	103	47
Cardinal Stritch U.	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
Marquette U.	58	0	9	0	1	0	6	3	1	0	10	1	1	1	3	16	5	1
Medical C. WI	17	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0
U. WI-Madison	664	30	30	11	26	15	81	109	27	41	23	63	17	8	9	64	71	39
U. WI-Milwaukee	88	4	6	0	2	1	8	4	6	1	8	20	0	2	5	2	12	7
WYOMING	52	1	7	3	2	1	8	3	0	4	5	2	0	0	0	0	16	0
U. WY	52	1	7	3	2	1	8	3	0	4	5	2	0	0	0	0	16	0

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

APPENDIX TABLE A-9. Top 50 doctorate-granting institutions, 2005

Rank	Institution	Number
1.	U. CA, Berkeley	802
2.	U. TX-Austin	716
3.	U. MI	711
4.	U. WI-Madison	664
5.	U. CA, Los Angeles	651
6.	U. MN	644
7.	Stanford U.	642
8.	U. IL-Urbana-Champaign	637
9.	PA State U., The	606
10.	OH State U., The	591
11.	MA Institute of Technology	581
12.	U. FL	574
13.	U. Southern CA	554
14.	Purdue U.	522
[15.	TX A&M U.	511
15.	U. WA	511
17.	Harvard U.	510
18.	U. MD	499
19.	MI State U.	475
20.	Columbia U.	472
21.	U. PA	464
22.	U. NC Chapel Hill	458
23.	Cornell U.	452
24.	U. GA	424
25.	IN U.	409
26.	U. CA, Davis	389
[27.	U. AZ	387
27.	NY U.	387
29.	Johns Hopkins U.	386
30.	GA Institute of Technology	364
31.	NC State U.	343
32.	U. VA	341
33.	SUNY U. Buffalo	331
34.	VA Polytechnic Institute and State U.	330
35.	U. Pittsburgh	329
[36.	Yale U.	327
36.	U. Chicago, The	327
38.	AZ State U.	321
[39.	U. IA	306
39.	Rutgers U.	306
41.	U. CA, San Diego	301
42.	Graduate School & U. Ctr., CUNY	296
43.	Northwestern U.	295
[44.	U. CA, Santa Barbara	287
44.	Duke U.	287
46.	Boston U.	281
47.	FL State U.	278
48.	Princeton U.	277
[49.	U. KY	275
49.	U. MO-Columbia	275

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

APPENDIX B: Trend Tables, 1995-2005

Appendix B includes the following two tables:

B-1: Number of doctorate recipients, by subfield of study, 1995-2005

B-2: Number of doctorate recipients, by sex, race/ethnicity, and citizenship, 1995-2005

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

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

TABLE B-2: Table B-2 displays, by sex and citizenship, data on the race/ethnicity of doctorate recipients for 1995-2005. 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,1995-2005

Subfield of study	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
TOTAL ALL FIELDS [a]	41,747	42,437	42,535	42,637	41,092	41,361	40,651	39,953	40,740	42,117	43,354
PHYSICAL SCIENCES	6,727	6,592	6,582	6,669	6,224	5,982	5,856	5,600	5,831	6,048	6,699
MATHEMATICS	1,190	1,122	1,123	1,177	1,083	1,050	1,007	919	993	1,076	1,203
Applied mathematics	211	230	242	265	252	238	214	226	223	264	291
Mathematics, algebra	82	78	78	75	84	82	68	65	69	97	97
Mathematics, analysis & functional analysis	99	100	103	130	86	81	91	74	85	99	111
Mathematics, geometry	45	72	70	54	65	59	40	52	48	95	96
Mathematics, logic	35	16	23	16	23	19	24	14	17	15	26
Mathematics, number theory	35	42	46	46	50	40	35	26	46	39	62
Mathematics, statistics	205	178	181	204	174	195	198	167	191	226	267
Mathematics, topology	51	55	62	65	65	50	54	40	49	52	51
Mathematics, computing theory & practice	14	18	14	19	14	17	11	11	8	10	16
Mathematics, operations research	36	21	20	17	21	19	14	19	19	25	23
Mathematics, general	305	233	153	162	116	151	155	133	150	81	104
Mathematics, other	72	79	131	124	133	99	103	92	88	73	59
COMPUTER & INFORMATION SCIENCES	997	920	909	927	856	860	825	807	866	948	1,136
Computer science	913	836	828	821	741	723	687	672	699	767	955
Information science & systems	84	84	81	106	115	137	81	80	65	106	85
Computer & information science, other	----	----	----	----	----	----	57	55	102	75	96
ASTRONOMY	173	192	198	206	159	185	186	141	167	165	186
Astronomy	89	84	71	91	59	78	89	52	69	68	72
Astrophysics	84	108	127	115	100	107	97	89	98	97	114
ATMOSPHERIC SCI. & METEOROLOGY	130	125	149	125	124	143	116	117	139	126	144
Atmospheric chemistry and climatology	27	22	45	38	43	39	33	39	39	29	42
Atmospheric physics and dynamics	16	21	25	24	17	17	17	13	21	33	28
Meteorology	25	35	28	25	22	34	20	15	25	22	20
Atmospheric science/meteorology, general	44	33	36	22	32	36	34	27	33	24	29
Atmospheric science/meteorology, other	18	14	15	16	10	17	12	23	21	18	25
CHEMISTRY	2,162	2,149	2,147	2,216	2,132	1,989	1,981	1,921	2,041	1,987	2,127
Chemistry, analytical	317	346	350	383	333	326	334	302	338	323	364
Chemistry, inorganic	258	249	279	287	279	221	279	248	264	240	255
Chemistry, nuclear	5	5	8	6	10	9	4	9	4	----	----
Chemistry, organic	483	507	567	598	563	525	523	523	556	542	600
Chemistry, medicinal/pharmaceutical	96	96	105	114	131	107	115	99	110	113	110
Chemistry, physical	338	300	334	279	310	271	285	302	321	264	298
Chemistry, polymer	116	121	110	122	95	107	107	102	110	116	119
Chemistry, theoretical	40	57	48	41	56	52	40	48	49	54	57
Chemistry, general	458	396	260	285	196	261	202	203	186	198	195
Chemistry, other	51	72	86	101	159	110	92	85	103	137	129
GEOLOGICAL & EARTH SCIENCES	430	421	446	469	420	344	348	391	348	371	379
Geology	186	162	165	171	157	123	115	132	119	98	107

APPENDIX TABLE B-1. Number of doctorate recipients, by subfield of study,1995-2005

Subfield of study	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Geochemistry	42	49	49	58	55	50	41	70	53	38	55
Geophysics & seismology	93	101	108	106	100	70	88	91	75	87	92
Paleontology	20	14	23	23	15	31	16	21	18	25	29
Mineralogy & petrology	19	23	19	14	14	5	15	13	8	17	8
Stratigraphy & sedimentation	16	12	23	24	17	13	13	7	16	19	15
Geomorphology & glacial geology	11	11	26	20	18	14	10	15	20	22	12
Geological & earth sciences, general	21	27	16	13	9	20	16	12	9	23	24
Geological & earth sciences, other	22	22	17	40	35	18	34	30	30	42	37
PHYSICS	1,479	1,485	1,401	1,378	1,271	1,204	1,197	1,123	1,081	1,186	1,334
Physics, acoustics	18	19	19	18	16	10	10	18	24	17	25
Physics, atomic/molecular/chemical	110	129	106	100	100	110	81	82	74	82	87
Physics, elementary particle	183	176	170	173	169	147	121	154	134	163	188
Biophysyics	----	----	----	----	----	----	----	----	----	55	72
Physics, fluids	18	21	24	26	23	10	8	15	9	----	----
Physics, nuclear	91	87	106	92	77	74	80	76	67	74	70
Physics, optics/phototonics	98	129	123	105	98	117	107	107	95	120	145
Physics, plasma/fusion	46	48	39	55	49	38	39	29	32	37	54
Physics, polymer	23	33	19	24	28	21	18	22	13	18	29
Physics, condensed matter/low temp	371	364	328	314	307	279	295	298	273	277	314
Applied physics	----	----	----	----	----	----	----	----	----	71	101
Physics, general	355	323	255	190	202	224	206	171	170	141	129
Physics, other	166	156	212	281	202	174	232	151	190	131	120
OCEAN/MARINE SCIENCES	166	178	209	171	179	207	196	181	196	189	190
Hydrology & water resources	24	31	43	35	32	43	45	35	26	49	41
Oceanography	83	107	114	94	100	99	85	86	98	66	74
Marine sciences	32	27	30	18	30	36	36	42	36	59	61
Ocean/marine sciences, other	27	13	22	24	17	29	30	18	36	15	14
ENGINEERING	6,008	6,309	6,114	5,921	5,330	5,323	5,508	5,077	5,279	5,775	6,404
AEROSPACE/AERONAUTICAL ENGINEERING	252	287	273	241	206	214	203	209	200	201	219
CHEMICAL AND RELATED ENGINEERING	708	798	767	776	674	726	730	705	648	725	875
Chemical engineering	602	681	662	669	576	619	636	607	567	637	774
Petroleum engineering	48	52	51	48	45	45	37	45	36	34	50
Polymer & plastics engineering	58	65	54	59	53	62	57	53	45	54	51
CIVIL AND RELATED ENGINEERING	656	698	655	650	584	556	595	627	673	673	757
Civil engineering	572	600	592	587	506	480	501	539	551	547	621
Environmental health engineering	84	98	63	63	78	76	94	88	122	126	136
ELECTRICAL AND RELATED ENGINEERING	1,731	1,741	1,720	1,595	1,478	1,543	1,577	1,393	1,465	1,650	1,852
Communications engineering	29	32	33	40	39	42	47	22	36	34	27
Computer engineering	189	208	227	210	203	172	186	161	191	228	277
Electrical & electronics engineering	1,513	1,501	1,460	1,345	1,236	1,329	1,344	1,210	1,238	1,388	1,548
INDUSTRIAL ENGINEERING	284	259	246	229	211	176	206	230	214	217	222

APPENDIX TABLE B-1. Number of doctorate recipients, by subfield of study,1995-2005

Subfield of study	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MECHANICAL AND RELATED ENGINEERING	1,025	1,052	1,022	1,022	855	864	953	827	814	852	978
Engineering mechanics	108	105	93	86	69	57	75	56	62	98	86
Mechanical engineering	917	947	929	936	786	807	878	771	752	754	892
MATERIALS/METALLURGICAL ENGINEERING	588	574	582	565	469	451	497	396	474	511	540
Ceramic sciences engineering	39	41	39	24	33	22	17	13	18	14	14
Materials science engineering	476	472	483	482	393	404	448	364	437	475	493
Metallurgical engineering	73	61	60	59	43	25	32	19	19	22	33
OTHER ENGINEERING	764	900	849	843	853	793	747	690	791	946	961
Agricultural engineering	73	104	79	74	59	60	52	49	54	60	47
Bioengineering & biomedical engineering	189	220	211	208	245	252	232	246	281	369	417
Engineering physics	17	37	24	15	28	26	22	16	28	28	27
Engineering science	56	52	45	49	49	34	53	31	39	58	42
Mining & mineral engineering	19	31	33	21	18	11	10	8	14	9	12
Nuclear engineering	105	113	102	94	76	98	75	64	75	59	71
Ocean engineering	21	26	34	29	16	18	28	23	12	21	18
Operations Research engineering	48	74	74	62	67	51	55	66	81	72	87
Systems engineering	47	47	49	68	42	34	47	45	45	58	56
Engineering, general	60	60	51	29	40	43	25	20	19	29	53
Engineering, other	129	136	147	194	213	166	148	122	143	183	131
LIFE SCIENCES	7,998	8,337	8,421	8,612	8,204	8,624	8,366	8,472	8,505	8,813	9,306
AGRICULTURAL SCIENCES/NATURAL RESOURCES	1,293	1,289	1,212	1,267	1,216	1,180	1,132	1,129	1,179	1,155	1,161
Agricultural economics	173	169	133	156	149	138	154	119	118	110	123
Agricultural business & management	3	2	1	2	2	5	3	1	1	----	----
Animal animal breeding	19	12	24	18	21	22	16	14	21	13	14
Animal nutrition	50	54	55	45	47	45	45	49	41	47	51
Dairy science	14	9	14	10	12	9	2	7	18	----	----
Poultry science	11	11	9	11	8	9	11	10	18	21	14
Animal sciences, other	85	90	62	60	70	73	71	70	88	75	71
Agronomy & crop science	114	110	77	97	106	69	75	74	55	63	79
Agricultural & horticultural plant breeding	72	63	67	69	44	68	37	59	50	36	35
Plant pathology (Agricultural)	52	90	65	66	66	63	52	53	48	56	71
Plant sciences, other	30	21	20	37	38	29	26	27	29	34	31
Food science	7	7	11	13	7	10	14	7	11	94	93
Food science and technology, other	135	142	175	153	137	142	130	129	157	74	48
Soil chemistry/microbiology	27	29	32	27	29	26	23	29	24	21	24
Soil sciences, other	72	78	56	74	67	64	56	55	50	52	52
Horticulture science	67	73	44	60	66	55	37	46	54	46	49
Fishing and fisheries science & management	49	46	45	30	38	43	44	53	47	38	34
Forest sciences and biology	24	19	22	20	14	22	27	19	16	36	29
Forest engineering	4	0	13	2	1	3	0	3	3	----	----
Forest/resources management	20	22	21	27	17	13	13	15	18	26	40
Wood science & pulp/paper technology	26	18	25	25	21	11	20	29	19	19	15
Natural resources/conservation	24	13	17	25	25	19	32	27	47	45	64

APPENDIX TABLE B-1. Number of doctorate recipients, by subfield of study,1995-2005

Subfield of study	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Forestry & related science, other	71	55	50	69	50	54	48	57	47	34	24
Wildlife/range management	50	64	50	56	44	56	41	37	46	42	44
Environmental science	81	83	96	72	99	95	119	113	136	130	129
Agriculture, general	6	5	10	8	8	10	2	4	2	6	10
Agricultural science, other	7	4	18	35	30	27	34	23	15	37	17
BIOLOGICAL/BIOMEDICAL SCIENCES	5,376	5,724	5,788	5,846	5,581	5,853	5,693	5,690	5,693	5,939	6,368
Biochemistry	824	794	831	800	759	776	728	782	772	703	692
Biomedical sciences	93	141	158	182	176	155	155	220	181	182	248
Biophysics	155	142	147	166	173	164	162	151	161	130	144
Biotechnology	4	6	11	12	19	14	9	13	24	26	23
Bacteriology	13	16	13	13	13	15	17	12	6	15	13
Plant genetics	35	41	30	40	31	35	31	57	38	54	50
Plant pathology (Biological)	32	38	33	18	36	25	31	24	27	25	31
Plant physiology	55	73	47	61	54	39	45	43	32	24	38
Botany/plant biology	102	105	91	113	67	92	75	84	80	135	87
Anatomy	64	47	50	35	33	39	29	20	33	13	23
Biometrics & biostatistics	67	80	84	75	76	92	90	81	84	100	130
Cellular biology and histology	236	233	251	300	281	337	315	302	301	292	316
Ecology	203	245	255	293	273	296	338	311	347	366	412
Developmental biology/embryology	64	96	115	127	108	112	107	93	126	141	162
Endocrinology	20	24	17	30	19	20	18	14	21	22	29
Entomology	121	136	123	138	114	137	90	113	111	108	103
Immunology	190	238	214	246	223	239	265	278	261	347	343
Molecular biology	617	651	775	736	716	706	711	621	614	726	726
Microbiology	426	444	410	383	383	382	396	383	363	393	430
Neuroscience	308	404	437	413	431	495	485	490	472	584	689
Nutritional sciences	136	142	124	139	102	150	135	141	127	131	163
Parasitology	14	22	17	15	13	19	22	17	15	20	21
Toxicology	126	138	180	155	114	123	133	122	122	105	102
Genetics, human & animal	202	212	217	197	216	227	199	225	226	257	287
Pathology, human & animal	109	135	106	90	120	106	116	115	101	98	93
Pharmacology, human & animal	278	316	300	255	254	267	257	268	275	287	315
Physiology, human & animal	262	275	227	258	244	241	217	208	215	207	208
Zoology, other	145	100	97	111	126	133	103	122	127	94	103
Biology/biomedical sciences, general	348	292	209	217	182	200	193	184	194	188	189
Biology/biomedical sciences, other	127	138	219	228	225	217	221	196	237	166	198
HEALTH SCIENCES	1,329	1,324	1,421	1,499	1,407	1,591	1,541	1,653	1,633	1,719	1,777
Speech-Language pathology & audiology	106	94	88	95	86	106	92	100	94	95	97
Environmental health	51	58	67	54	69	52	56	49	53	56	42
Environmental toxicology	----	----	----	----	----	----	----	----	----	28	42
Health systems/service administration	62	60	66	62	62	59	51	54	57	66	70
Public health	152	156	138	154	173	207	216	219	205	260	279
Epidemiology	153	149	151	165	179	191	168	198	231	217	229
Kinesiology/exercise science	118	105	105	130	104	129	151	149	145	164	153

APPENDIX TABLE B-1. Number of doctorate recipients, by subfield of study,1995-2005

Subfield of study	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Nursing science	354	354	420	399	353	415	365	435	413	394	418
Pharmacy	144	145	142	156	137	164	148	160	118	161	168
Rehabilitation/therapeutic services	20	26	34	35	26	40	37	70	69	67	66
Veterinary medicine	55	65	47	49	49	50	60	56	48	54	47
Health sciences, general	35	22	45	17	32	49	35	39	40	33	46
Health sciences, other	79	90	118	183	137	129	162	124	160	124	120
SOCIAL SCIENCES AND PSYCHOLOGY	6,635	6,822	7,041	7,070	7,040	7,109	6,778	6,621	6,776	6,788	6,837
PSYCHOLOGY	3,429	3,494	3,557	3,673	3,668	3,616	3,385	3,197	3,273	3,327	3,327
Psychology, clinical	1,290	1,326	1,255	1,344	1,441	1,352	1,226	1,216	1,189	1,216	1,158
Psychology, cognitive & psycholinguistics	104	128	166	113	143	141	141	121	132	145	147
Psychology, comparative	4	3	6	6	11	7	5	2	4	6	5
Psychology, counseling	471	465	487	448	460	475	474	469	435	512	469
Psychology, developmental & child	152	188	215	266	193	203	193	173	178	186	223
Psychology, human development and family studies	150	151	126	119	135	147	137	139	149	144	172
Psychology, experimental	151	128	146	149	139	133	134	112	119	88	120
Psychology, educational	74	92	61	61	64	97	48	54	52	75	81
Psychology, family	57	51	63	51	56	54	45	67	62	32	25
Psychology, industrial & organizational	155	162	187	189	158	188	173	154	157	157	184
Psychology, personality	16	24	26	25	16	23	11	17	17	18	14
Psychology, physiological/psychobiology	92	80	77	92	87	89	92	88	86	84	85
Psychology, psychometrics	10	11	11	9	15	13	2	9	7	----	----
Psychology, psychometrics and quantitative	13	19	17	15	14	8	10	13	11	29	23
Psychology, school	91	82	84	106	121	99	101	88	102	87	108
Psychology, social	155	170	181	186	176	207	198	179	202	163	183
Psychology, general	306	281	319	300	235	238	223	145	224	221	187
Psychology, other	138	133	130	194	204	142	172	151	147	164	143
SOCIAL SCIENCES	3,206	3,328	3,484	3,397	3,372	3,493	3,393	3,424	3,503	3,461	3,510
Anthropology	375	397	434	425	462	446	411	495	472	531	455
Area studies	27	28	10	14	11	14	19	25	12	18	6
Criminology	44	60	49	55	51	66	62	56	77	69	96
Demography/population studies	15	11	24	30	28	20	12	20	15	19	20
Economics	952	979	999	976	911	933	914	893	909	941	1,031
Econometrics	27	29	31	25	15	15	13	14	23	18	30
Geography	150	165	149	154	144	197	186	197	167	190	196
International relations/affairs	73	99	88	96	119	77	91	83	98	99	106
Political science & government	599	622	665	662	655	669	658	605	660	586	619
Public policy analysis	94	104	127	96	125	137	139	147	146	145	162
Sociology	540	517	577	549	544	617	565	546	597	580	535
Statistics (Social Sciences)	48	48	56	61	72	60	49	54	48	31	22
Urban affairs/studies	103	108	92	77	57	79	80	92	78	85	81
Social sciences, general	35	26	26	30	25	37	26	33	28	32	32
Social sciences, other	124	135	157	147	153	126	168	164	173	117	119

APPENDIX TABLE B-1. Number of doctorate recipients, by subfield of study,1995-2005

Subfield of study	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
HUMANITIES	5,062	5,114	5,433	5,515	5,460	5,634	5,596	5,392	5,415	5,464	5,349
HISTORY	889	857	965	990	1,010	1,061	1,028	1,030	941	976	924
History, American	344	355	373	408	418	443	425	422	416	402	372
History, Asian	43	54	54	70	68	51	51	66	66	66	64
History, European	185	187	245	230	235	243	246	232	190	222	211
History, African	----	----	----	----	----	----	----	----	----	21	18
History, Latin American	----	----	----	----	----	----	----	----	----	47	45
History/philosophy of science & technology	41	37	35	44	50	42	40	47	46	48	43
History, general	148	101	82	86	75	102	75	81	72	56	77
History, other	128	123	176	152	164	180	191	182	151	114	94
LETTERS	1,749	1,723	1,793	1,820	1,767	1,842	1,720	1,647	1,640	1,662	1,601
Classics	62	72	53	85	77	64	55	57	75	70	61
Comparative literature	191	164	181	164	166	187	203	174	165	175	180
Folklore	----	----	----	----	----	----	----	----	----	22	18
Linguistics	201	230	244	220	251	230	230	193	224	254	211
Literature, American	327	314	408	389	372	460	385	369	362	351	406
Literature, English	706	621	534	543	517	544	469	520	436	426	417
English language	46	78	152	146	133	66	124	86	132	157	137
Speech & rhetorical studies	139	155	138	169	150	143	126	137	151	128	98
Letters, general	43	28	23	22	19	55	34	31	27	16	19
Letters, other	34	61	60	82	82	93	94	80	68	63	54
FOREIGN LANGUAGES & LITERATURE	639	605	652	643	626	642	620	625	622	587	609
French	151	142	150	137	148	143	141	121	102	124	113
German	93	88	82	106	90	84	84	68	100	56	76
Italian	35	24	23	33	20	16	16	23	33	39	19
Spanish	209	196	249	207	201	218	233	244	239	241	241
Russian	28	37	39	43	25	29	27	26	28	25	21
Slavic (other than Russian)	16	11	9	15	17	14	12	19	11	8	13
Chinese	20	29	23	19	27	21	16	22	24	15	22
Japanese	7	10	19	11	10	18	17	15	20	14	23
Hebrew	11	12	7	8	4	11	6	8	5	----	----
Arabic	8	6	4	9	12	15	6	5	4	7	6
Other languages & literature	61	50	47	55	72	73	62	74	56	58	75
OTHER HUMANITIES	1,785	1,929	2,023	2,062	2,057	2,089	2,228	2,090	2,212	2,239	2,215
American studies	94	115	84	100	98	113	127	97	94	115	104
Archeology	35	21	35	34	26	36	39	26	33	34	44
Art history/criticism/conservation	181	177	188	221	188	228	223	217	254	248	211
Music	713	696	727	696	768	746	788	760	873	848	904
Philosophy	298	369	444	410	389	364	412	359	392	365	354
Religion	248	317	304	327	334	348	339	348	303	387	369
Drama/theater arts	80	103	116	92	99	82	104	93	86	93	88
Humanities, general	25	39	25	23	24	40	29	19	27	17	25
Humanities, other	111	92	100	159	131	132	167	171	150	132	116

APPENDIX TABLE B-1. Number of doctorate recipients, by subfield of study,1995-2005

Subfield of study	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EDUCATION	6,648	6,785	6,573	6,569	6,546	6,432	6,332	6,491	6,638	6,633	6,229
EDUCATION ADMINISTRATION	1,974	2,165	2,050	2,066	2,044	2,030	2,066	2,343	2,355	2,340	2,170
Educational administration & supervision	1,086	1,172	1,020	950	895	813	839	791	773	742	731
Educational leadership	888	993	1,030	1,116	1,149	1,217	1,227	1,552	1,582	1,598	1,439
EDUCATION RESEARCH	2,576	2,699	2,692	2,584	2,730	2,665	2,630	2,769	2,717	2,802	2,668
Curriculum & instruction	896	899	917	884	993	966	885	990	1,000	971	984
Educational/instructional media design	121	107	92	91	123	137	140	171	128	193	124
Educational statistics/research methods	63	76	58	56	57	56	65	67	62	64	59
Educational assessment/testing/measure	19	32	30	35	39	44	44	31	47	57	56
Educational psychology	297	309	359	327	298	278	282	301	285	261	249
School psychology	71	114	118	112	108	137	119	169	124	113	111
Social/philosophical foundations of education	130	125	138	129	125	135	141	127	146	135	154
Special education	254	278	270	247	262	260	229	213	215	288	240
Counseling education/counseling & guidance	268	278	207	271	260	214	210	257	220	182	177
Higher education/evaluation & research	457	481	503	432	465	438	515	443	490	538	514
TEACHER EDUCATION	390	371	291	342	292	261	294	262	240	271	264
Education, pre-elementary/early childhood	70	81	43	54	49	34	49	51	70	38	36
Education, elementary	61	46	56	62	59	53	55	52	34	64	56
Education, secondary	24	34	27	54	31	23	22	21	19	26	22
Education, adult & continuing	235	210	165	172	153	151	168	138	117	143	150
TEACHING FIELDS	924	864	919	954	892	823	721	685	714	759	664
Teaching, agricultural education	35	32	38	25	38	22	22	28	25	18	25
Teaching, art education	39	41	30	46	47	31	31	30	34	38	34
Teaching, business education	21	20	26	31	45	37	19	14	6	7	7
Teaching, English education	60	57	62	53	64	44	56	53	47	45	55
Teaching, foreign languages education	60	45	47	73	62	43	47	41	46	62	80
Teaching, health education	99	90	58	70	58	71	64	39	54	43	44
Teaching, family & consumer sci./home economics education	15	13	13	8	10	14	8	9	4	15	11
Teaching, technology & industrial arts ed	15	11	19	30	21	21	16	7	13	----	----
Teaching, mathematics education	92	100	93	115	101	90	80	88	80	91	89
Teaching, music education	96	91	101	93	79	79	63	80	74	94	61
Teaching, nursing education	18	23	21	14	22	11	5	7	8	10	10
Teaching, physical education & coaching	104	101	109	109	115	83	81	72	75	68	49
Teaching, reading education	85	66	70	76	68	89	72	66	60	86	74
Teaching, science education	73	96	77	110	58	60	72	60	69	86	67
Teaching, social science education	14	12	26	15	9	35	12	10	10	21	15
Teaching, technical education	20	24	32	17	27	20	10	23	24	----	----
Teaching, trade & industrial education	13	12	16	14	14	12	7	5	5	18	6
Teacher education & prof. dev.	65	30	81	55	54	61	56	53	80	57	37
OTHER EDUCATION	784	686	621	623	588	653	621	432	612	461	463
Education, general	429	353	336	232	196	251	255	154	312	188	220
Education, other	355	333	285	391	392	402	366	278	300	273	243

APPENDIX TABLE B-1. Number of doctorate recipients, by subfield of study,1995-2005

Subfield of study	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
OTHER FIELDS	2,669	2,478	2,371	2,281	2,288	2,257	2,215	2,300	2,296	2,596	2,530
BUSINESS MGMT./ADMINISTRATIVE SERVICES	1,330	1,279	1,245	1,175	1,108	1,065	1,053	1,103	1,034	1,253	1,168
Accounting	168	156	150	154	154	111	115	111	106	130	129
Banking/financial support services	163	114	69	83	74	72	66	76	79	106	83
Business administration & management	341	393	426	348	315	321	347	342	338	369	300
Business/managerial economics	37	38	48	57	42	52	50	39	44	60	55
International business/trade/commerce	23	36	39	33	34	32	29	24	44	31	28
Management information systems/business data	111	95	100	87	83	85	98	90	86	94	94
Marketing management & research	153	153	153	142	127	141	113	132	111	134	142
Human resources development	----	----	----	----	----	----	----	----	----	86	101
Operations research	60	64	45	57	52	61	40	36	26	52	48
Organizational behavior	101	110	123	105	101	99	118	173	113	124	120
Business management/administration serv., general	92	67	28	38	49	36	20	34	18	24	28
Business management/administration serv., other	81	53	64	71	77	55	57	46	69	43	40
COMMUNICATIONS	381	389	332	373	379	389	389	397	415	450	486
Communications research	40	60	51	52	50	53	60	63	63	60	63
Mass communications	121	137	117	142	153	154	153	156	161	187	214
Communication theory	53	37	40	48	47	39	40	43	42	49	54
Communications, general	78	81	74	62	69	77	78	70	89	75	76
Communications, other	89	74	50	69	60	66	58	65	60	79	79
FIELDS NOT ELSEWHERE CLASSIFIED	929	763	714	669	697	746	722	737	788	842	846
Architectural environmental design	55	61	66	52	65	61	66	67	69	66	76
Family/consumer sci./human sci., general	31	28	36	18	23	23	19	24	21	44	51
Law	38	24	27	31	37	41	34	50	52	56	40
Library science	47	49	40	34	39	45	40	32	42	23	30
Parks/sports/rec./leisure/fitness	54	29	24	37	29	45	41	52	38	82	72
Public administration	128	103	95	104	117	103	96	103	120	116	103
Social work	303	256	247	235	225	257	258	237	273	305	325
Theology/religious education	273	213	179	158	162	171	168	172	173	150	149
FIELDS NOT LISTED ABOVE	29	47	80	64	104	57	51	63	59	51	30

NOTE: Dashes (----) indicate that the field was not on the questionnaire's Specialties list that year. Field groupings may differ from those in reports published by federal sponsors of the Survey of Earned Doctorates.

[a] Includes respondents missing data for doctoral field: 1 in 1997; 4 in 1998; 1 in 1999; 4 in 2000; 3 in 2001; 3 in 2003.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

APPENDIX TABLE B-2a. Number of doctorate recipients, by sex, race/ethnicity, and citizenship, 1995-2005 - Total all doctorates

Citizenship status by race/ethnicity	Year of doctorate										
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total all doctorates [a]	41,747	42,437	42,535	42,637	41,092	41,361	40,651	39,953	40,740	42,117	43,354
U.S. citizens	27,740	27,777	28,151	28,533	27,992	27,986	26,975	25,998	26,499	26,466	26,312
Permanent residents	4,317	3,765	2,932	2,662	2,310	1,950	1,825	1,652	1,630	1,538	1,600
Temporary visa holders	8,831	9,733	9,191	9,458	9,057	9,660	9,800	9,731	10,589	11,617	12,824
Unknown citizenship	859	1,162	2,261	1,984	1,733	1,765	2,051	2,572	2,022	2,496	2,618
Total known race/ethnicity	40,344	40,705	38,910	39,392	38,694	38,805	37,961	36,763	37,686	38,719	40,054
U.S. citizens	27,444	27,444	27,075	27,614	27,533	27,431	26,500	25,512	25,791	25,844	25,916
Permanent residents	4,275	3,732	2,869	2,576	2,271	1,898	1,791	1,605	1,588	1,496	1,568
Temporary visa holders	8,565	9,421	8,850	9,054	8,802	9,368	9,473	9,371	10,139	11,130	12,452
Unknown citizenship	60	108	116	148	88	108	197	275	168	249	118
American Indian [b]	148	188	167	190	214	169	163	154	142	135	142
U.S. citizens	148	185	167	189	214	169	148	146	134	129	139
Permanent residents [c]	0	1	0	0	0	0	2	3	3	2	1
Temporary visa holders [c]	0	2	0	0	0	0	12	5	5	4	2
Unknown citizenship	0	0	0	1	0	0	1	0	0	0	0
Asian [d]	9,693	9,803	9,006	8,564	7,996	8,060	8,092	7,877	8,281	9,063	10,222
U.S. citizens	1,129	1,066	1,295	1,185	1,305	1,365	1,411	1,364	1,372	1,451	1,493
Permanent residents	3,168	2,608	1,814	1,543	1,192	909	769	746	671	608	688
Temporary visa holders	5,384	6,115	5,865	5,806	5,470	5,763	5,890	5,736	6,214	6,961	8,003
Unknown citizenship	12	14	32	30	29	23	22	31	24	43	38
Black/African-American	1,807	1,825	1,761	1,912	2,052	2,096	2,006	2,028	2,095	2,382	2,178
U.S. citizens	1,293	1,305	1,336	1,485	1,630	1,631	1,611	1,665	1,708	1,881	1,688
Permanent residents	168	141	139	118	133	119	117	87	88	103	107
Temporary visa holders	336	367	276	297	281	334	264	255	265	357	380
Unknown citizenship	10	12	10	12	8	12	14	21	34	41	3
Hispanic [e]	1,544	1,632	1,695	1,880	1,899	1,963	1,899	2,024	2,217	2,023	2,272
U.S. citizens	922	957	1,064	1,209	1,184	1,182	1,122	1,237	1,280	1,178	1,294
Permanent residents	142	156	135	121	140	128	143	131	149	121	132
Temporary visa holders	475	516	484	541	561	647	619	646	781	710	842
Unknown citizenship	5	3	12	9	14	6	15	10	7	14	4
White	27,078	27,156	26,247	26,786	26,419	26,389	25,390	24,279	24,454	24,607	24,704
U.S. citizens	23,888	23,846	23,181	23,494	23,098	22,970	21,869	20,757	20,872	20,762	20,845
Permanent residents	795	823	781	792	802	741	749	630	664	657	627
Temporary visa holders	2,362	2,409	2,223	2,404	2,482	2,611	2,646	2,679	2,816	3,042	3,166
Unknown citizenship	33	78	62	96	37	67	126	213	102	146	66
Other/unknown race/ethnicity [f]	1,477	1,833	3,659	3,305	2,512	2,684	3,101	3,591	3,551	3,907	3,836
U.S. citizens	360	418	1,108	971	561	669	814	829	1,133	1,065	853
Permanent residents	44	36	63	88	43	53	45	55	55	47	45
Temporary visa holders	274	324	343	410	263	305	369	410	508	543	431
Unknown citizenship	799	1,055	2,145	1,836	1,645	1,657	1,873	2,297	1,855	2,252	2,507

[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/other Pacific islanders through 2000, but excludes them in 2001–2005.

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

APPENDIX TABLE B-2b. Number of doctorate recipients, by sex, race/ethnicity, and citizenship, 1995-2005 - Total males

Citizenship status by race/ethnicity	Year of doctorate										
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total all doctorates	25,160	25,285	24,937	24,628	23,434	23,161	22,719	21,750	22,244	22,959	23,731
U.S. citizens	14,964	14,721	15,044	14,918	14,518	14,157	13,630	12,845	13,085	12,993	12,791
Permanent residents	2,907	2,483	1,835	1,644	1,380	1,135	996	871	813	752	782
Temporary visa holders	6,855	7,473	6,973	6,983	6,631	6,851	7,001	6,753	7,253	7,905	8,747
Unknown citizenship	434	608	1,085	1,083	905	1,018	1,092	1,281	1,093	1,309	1,411
Total known race/ethnicity	24,307	24,274	23,014	22,728	22,075	21,632	21,208	20,061	20,504	21,004	21,880
U.S. citizens	14,758	14,498	14,437	14,374	14,226	13,828	13,343	12,556	12,671	12,617	12,557
Permanent residents	2,881	2,461	1,796	1,586	1,353	1,102	975	845	792	727	766
Temporary visa holders	6,642	7,241	6,716	6,691	6,447	6,648	6,772	6,502	6,968	7,555	8,491
Unknown citizenship	26	74	65	77	49	54	118	158	73	105	66
American Indian [a]	80	102	79	104	96	76	77	71	56	61	59
U.S. citizens	80	101	79	104	96	76	66	66	52	56	56
Permanent residents [b]	0	0	0	0	0	0	2	2	1	2	1
Temporary visa holders [b]	0	1	0	0	0	0	8	3	3	3	2
Unknown citizenship	0	0	0	0	0	0	1	0	0	0	0
Asian [c]	7,095	7,198	6,425	6,029	5,529	5,350	5,420	5,144	5,444	5,819	6,556
U.S. citizens	662	603	741	661	766	740	760	746	744	728	761
Permanent residents	2,197	1,787	1,143	979	711	501	421	375	332	276	312
Temporary visa holders	4,227	4,798	4,522	4,373	4,031	4,093	4,222	4,004	4,354	4,788	5,462
Unknown citizenship	9	10	19	16	21	16	17	19	14	27	21
Black/African-American	877	929	857	819	909	881	865	853	837	973	907
U.S. citizens	487	531	528	524	609	561	591	612	597	645	593
Permanent residents	125	107	108	85	91	82	84	61	55	71	66
Temporary visa holders	261	287	212	203	204	233	185	176	177	240	246
Unknown citizenship	4	4	9	7	5	5	5	4	8	17	2
Hispanic [d]	914	935	980	1,061	991	1,069	1,016	1,039	1,169	1,087	1,191
U.S. citizens	463	480	544	613	510	546	497	538	595	542	548
Permanent residents	79	87	81	72	69	63	71	61	71	54	58
Temporary visa holders	370	366	349	373	405	458	443	435	500	486	585
Unknown citizenship	2	2	6	3	7	2	5	5	3	5	0
White	15,306	15,062	14,657	14,682	14,500	14,198	13,625	12,768	12,758	12,822	12,929
U.S. citizens	13,036	12,744	12,530	12,443	12,202	11,854	11,268	10,446	10,489	10,448	10,413
Permanent residents	479	480	464	449	479	455	393	343	325	322	323
Temporary visa holders	1,780	1,781	1,632	1,739	1,803	1,858	1,885	1,849	1,897	1,997	2,153
Unknown citizenship	11	57	31	51	16	31	79	130	47	55	40
Other/unknown race/ethnicity [e]	888	1,059	1,939	1,933	1,409	1,587	1,716	1,875	1,980	2,197	2,089
U.S. citizens	236	262	622	573	335	380	448	437	608	574	420
Permanent residents	27	22	39	59	30	34	25	29	29	27	22
Temporary visa holders	217	240	258	295	188	209	258	286	322	391	299
Unknown citizenship	408	535	1,020	1,006	856	964	985	1,123	1,021	1,205	1,348

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

APPENDIX TABLE B-2c. Number of doctorate recipients, by sex, race/ethnicity, and citizenship, 1995-2005 - Total females

Citizenship status by race/ethnicity	Year of doctorate										
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total all doctorates	16,416	16,955	17,241	17,848	17,481	18,126	17,855	18,117	18,496	19,157	19,564
U.S. citizens	12,774	13,056	13,075	13,603	13,474	13,826	13,345	13,152	13,414	13,473	13,519
Permanent residents	1,409	1,282	1,096	1,002	930	813	829	781	817	786	818
Temporary visa holders	1,959	2,247	2,203	2,455	2,422	2,808	2,798	2,973	3,336	3,712	4,073
Unknown citizenship	274	370	867	788	655	679	883	1,211	929	1,186	1,154
Total known race/ethnicity	16,029	16,426	15,883	16,639	16,618	17,171	16,753	16,701	17,182	17,715	18,171
U.S. citizens	12,686	12,946	12,635	13,237	13,307	13,602	13,157	12,955	13,120	13,227	13,357
Permanent residents	1,393	1,271	1,072	982	918	796	816	760	796	769	802
Temporary visa holders	1,917	2,176	2,125	2,350	2,354	2,720	2,701	2,869	3,171	3,575	3,960
Unknown citizenship	33	33	51	70	39	53	79	117	95	144	52
American Indian [a]	68	86	88	86	118	93	86	83	86	74	83
U.S. citizens	68	84	88	85	118	93	82	80	82	73	83
Permanent residents [b]	0	1	0	0	0	0	0	1	2	0	0
Temporary visa holders [b]	0	1	0	0	0	0	4	2	2	1	0
Unknown citizenship	0	0	0	1	0	0	0	0	0	0	0
Asian [c]	2,591	2,600	2,574	2,519	2,466	2,710	2,672	2,733	2,837	3,244	3,664
U.S. citizens	467	463	553	523	539	625	651	618	628	723	731
Permanent residents	970	821	671	557	481	408	348	371	339	332	376
Temporary visa holders	1,151	1,313	1,337	1,426	1,438	1,670	1,668	1,732	1,860	2,173	2,540
Unknown citizenship	3	3	13	13	8	7	5	12	10	16	17
Black/African-American	930	896	904	1,091	1,143	1,215	1,141	1,175	1,258	1,409	1,271
U.S. citizens	806	774	808	961	1,021	1,070	1,020	1,053	1,111	1,236	1,095
Permanent residents	43	34	31	32	42	37	33	26	33	32	41
Temporary visa holders	75	80	64	93	77	101	79	79	88	117	134
Unknown citizenship	6	8	1	5	3	7	9	17	26	24	1
Hispanic [d]	630	697	715	817	908	893	883	985	1,048	936	1,081
U.S. citizens	459	477	520	595	674	635	625	699	685	636	746
Permanent residents	63	69	54	49	71	65	72	70	78	67	74
Temporary visa holders	105	150	135	167	156	189	176	211	281	224	257
Unknown citizenship	3	1	6	6	7	4	10	5	4	9	4
White	11,771	12,094	11,584	12,099	11,919	12,190	11,765	11,510	11,696	11,785	11,775
U.S. citizens	10,852	11,102	10,649	11,050	10,896	11,116	10,601	10,310	10,383	10,314	10,432
Permanent residents	316	343	316	343	323	286	356	287	339	335	304
Temporary visa holders	582	628	588	661	679	753	761	830	919	1,045	1,013
Unknown citizenship	21	21	31	45	21	35	47	83	55	91	26
Other/unknown race/ethnicity [e]	426	582	1,376	1,236	927	1,025	1,308	1,631	1,571	1,709	1,690
U.S. citizens	122	156	457	389	226	287	366	392	525	491	432
Permanent residents	17	14	24	21	13	17	20	26	26	20	23
Temporary visa holders	46	75	79	108	72	95	110	119	186	152	129
Unknown citizenship	241	337	816	718	616	626	812	1,094	834	1,046	1,106

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

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

Appendix C: Technical Notes

Appendix C includes the following three tables:

C-1. Survey response rates, 1970-2005

C-2. Profiles of respondents versus nonrespondents for critical item data, by source of response, 2005

C-3. Item response rates, 1995-2005

Survey Overview

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

Key variables of the survey include:

Academic institution attended

Citizenship status at graduation

Country of birth

Country of citizenship

Date of birth

Disability status

Educational attainment of parents

Educational history after high school

Field of degree specialty (N= 279 in 2005)

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. While typically a Ph.D., the research doctorate is a doctoral degree that (1) requires an original contribution of knowledge to the field (typically, though not always, in the form of a written dissertation) and (2) is not primarily intended for the practice of a profession. (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 this round, 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[1].

[1] Among the programs that were excluded from the SED this round because they were found to have changed focus to a professional doctoral program were two programs that granted a large number of doctorates in the past. A particularly noteworthy fact about these programs is that they granted doctorates to a large number of blacks in the past (a total of 166 between both programs in 2004). Excluding these programs resulted in a decrease in the number of black research doctorate recipients in 2005 relative to previous years.

The population eligible for the 2005 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, 2005. The total universe consisted of 43,354 persons in more than 400 institutions that conferred research doctorate awards in 2005.

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. Follow-up of missing critical items and forms is also conducted.

Because the survey collects a complete college education history, coding of institutions is very important. Because about 30 percent of doctorate recipients from U.S. universities are from foreign countries, a coding manual for foreign institutions of higher education was developed by the U.S. Department of Education, entitled "*Mapping the World of Education: The Comparative Database System*" (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 (Chicago, Illinois) currently conducts the survey under contract.

Survey Response Rates

Of the 43,354 new research doctorates granted in 2005, 92 percent of research doctorate recipients returned their completed survey instruments. Limited records (containing field of study, doctorate institution and sex) for nonrespondents are constructed based on information collected from administrative lists of the university -- commencement programs, graduation lists, and other similar public records. Nonresponse was concentrated in certain institutions; one percent of the 416 doctorate-granting institutions accounted for 13 percent of the total nonrespondents and the ten percent of institutions with the highest nonresponse accounted for 60 percent of the total nonrespondents.

APPENDIX TABLE C-1. Survey response rates, 1970-2005 [a]

Year	Self-report rate	Year	Self-report rate
1970	93.6	1988	92.9
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	91.6
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

[a] The rates for 1970–2004 reflect late responses. The rate for 2005 may increase slightly in the next year if additional questionnaires are received after survey closure.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

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

Wherever possible this report includes data from all doctorate records whether complete or skeletal; thus the reported total number of doctorate recipients for 2005 (43,354) includes both respondents and non-respondents. It should also be noted that, in keeping with the practice of earlier data collection cycles, counts for previous years were corrected by the addition of data from surveys received after the close of data collection for a given year.

A Comparison of Self-Reported and Institution-Supplied Data

TABLE C-2: Table C-2 presents the results of a chi-square test comparing respondent-completed cases and nonresponding cases where institutions supplied data on critical items. The profile of nonrespondents is significantly different from the profile of respondents in eight 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 and more likely to remain in the U.S. after graduation than nonrespondents. 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 item data, by source of response, 2005

Critical item variable	Respondents (percent self-reported)	Nonrespondents (percent institution-provided)	Percent difference
Year of birth *			
Missing data	1.2	8.8	
Before 1972 [a]	49.7	51.9	-2.2
1972 and later	50.3	48.1	2.2
Sex			
Missing data	0.0	0.2	
Male	54.9	54.6	0.2
Female	45.1	45.4	-0.2
Citizenship status *			
Missing data	0.5	17.7	
U.S. citizen	64.8	57.3	7.5
Permanent resident	3.9	3.5	0.5
Temporary visa holder	31.3	39.3	-8.0
Country of citizenship (for non-U.S. citizens only) *			
Country reported	97.5	62.1	35.4
Country not reported	2.5	37.9	-35.4
Race/ethnicity * (U.S. citizens only)			
Missing data	0.6	7.5	
American Indian [b]	0.5	0.4	0.2
Asian	5.7	4.7	1.0
Black	6.3	15.2	-8.9
Hispanic [c]	4.9	8.4	-3.6
White	80.0	68.1	11.9
Other [d]	2.5	3.2	-0.6
Broad field of doctorate *			
Physical sciences [e]	15.6	13.4	2.2
Engineering	14.8	16.1	-1.3
Life sciences	21.7	19.1	2.5
Social sciences	15.6	20.7	-5.1
Humanities	12.3	11.8	0.5
Education	14.2	13.7	0.4
Professional/other fields	5.7	5.1	0.7
Bachelor's institution *			
Missing data	3.0	28.1	
U.S.	67.1	61.8	5.3
Non-U.S.	32.9	38.2	-5.3
Year of bachelor's degree *			
Missing data	5.3	34.6	
Before 1995 [f]	48.2	46.6	1.7
1995-after	51.8	53.4	-1.7
Postgraduation location *			
Missing data	0.9	54.3	
U.S.	89.3	81.4	7.9
Non-U.S.	10.7	18.6	-7.9

* Significant at .05 level, chi-square test performed on non-missing data.

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

[a] 1972 is the median year of birth of 2005 doctorate recipients. [b] Includes Alaska Natives.

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

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

[e] Includes computer science and mathematics. [f] 1995 is the median year of baccalureate of 2005 doctorate recipients.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

Item Response Rates

Item nonresponse rates in 2005 for the main SED demographic variables ranged from 0.1 percent for sex to 7.4 percent for postgraduation location. No imputation was performed for missing data items.

Key variable	Item response rate
Sex	99.9
Citizenship	94.0
Race/ethnicity	93.5
Country of citizenship	93.5
Postgraduation location	92.6

TABLE C-3: Table C-3 on the following pages shows the response rates for each item in the Survey of Earned Doctorates for 1995 through 2005. The numbers and percentages shown in the tables and figures in the body of the Summary Report are based only on the number of research doctorate recipients who responded to the applicable survey items. For cross-tabulations, the response rate for a given tabulation will be no greater than the lowest response rate for the items involved in the tabulation.

APPENDIX TABLE C-3. Item response rates, 1995-2005

Variable Name	Variable description	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
AMERIND	American Indian/Alaska Native race indicator	95.6	94.8	90.2	90.8	92.4	92.4	93.8	91.9	92.8	91.9	92.4
ASIAN	Asian race indicator	95.6	94.8	90.2	90.8	92.4	92.4	93.8	91.9	92.8	91.9	92.4
BAFIELD	B.A. field	92.5	90.9	83.3	84.8	85.1	86.9	87.5	86.6	86.6	87.6	87.0
BAINST	B.A. institution	97.4	96.5	89.6	91.2	92.5	91.2	93.0	91.9	92.5	91.9	93.1
BAMONTH	Month of B.A.	90.0	88.6	82.3	83.0	83.7	85.1	85.3	84.4	84.0	84.0	84.0
BANONE	No B.A./no M.A. indicator	9.7	11.4	6.9	8.1	8.0	2.7	9.5	10.1	9.5	12.2	11.6
BAPLACE	Place of baccalaureate	97.4	96.5	89.6	91.2	92.5	91.2	93.0	91.9	92.5	91.9	93.2
BAYEAR	Year of B.A.	97.1	96.4	88.7	90.7	92.3	90.5	92.5	91.3	92.0	89.5	90.5
BIRTHMO	Month of birth	97.5	96.7	92.7	92.9	95.0	95.2	94.5	93.1	93.9	92.4	93.1
BIRTHPL	Place of birth	96.8	95.8	93.8	93.8	94.3	94.3	93.7	92.4	93.5	92.5	93.4
BIRTHYR	Year of birth	97.5	96.8	92.9	92.8	95.1	95.3	94.6	93.3	94.3	92.7	93.5
BLACK	Black race indicator	95.6	94.8	90.2	90.8	92.4	92.4	93.8	91.9	92.8	91.9	92.4
CEPLACE	Place of college entry	92.2	90.6	82.6	90.4	90.6	89.9	92.0	92.3	93.7	---	---
CEYEAR	Year of college entry	91.3	89.2	82.7	88.8	89.1	87.3	89.5	87.8	87.5	85.8	84.6
CITIZ	Type of citizenship	97.9	97.3	94.7	95.3	95.8	95.7	95.0	93.6	95.0	94.1	94.0
CNTRYCIT	Country of citizenship	97.9	97.1	94.3	95.0	95.5	95.5	94.7	93.2	94.6	93.8	93.5
DEBTIND	Debt level indicator	92.3	91.3	89.3	89.7	90.6	91.1	---	---	---	---	---
DEPENDS	Number of dependents	89.4	89.5	88.3	88.8	89.1	89.4	---	---	---	---	---
DEPEND5	Number of dependents - ages 5 or younger	---	---	---	---	---	---	---	89.1	89.2	88.4	87.7
DEPEND18	Number of dependents - ages 6-18	---	---	---	---	---	---	---	89.1	89.2	88.4	87.7
DEPEND19	Number of dependents - ages 19 and older	---	---	---	---	---	---	---	89.1	89.2	88.4	87.7
DOCCODE	Type of doctorate	---	---	---	---	---	---	100.0	100.0	100.0	100.0	100.0
EDFATHER	Fathers education	92.3	91.5	89.5	89.8	90.5	90.9	90.9	89.8	90.0	89.9	89.3
EDMOTHER	Mothers education	92.2	91.7	89.8	90.0	90.8	91.1	91.1	90.0	90.2	90.0	89.4
GDEBTLVL	Graduate debt level	---	---	---	---	---	---	---	89.4	89.8	89.6	89.4
GEYEAR	Year of graduate entry	87.4	85.7	77.4	81.4	84.8	83.6	84.3	83.3	82.0	88.3	90.1
HANDICAP	Handicapped status	93.3	91.8	90.1	90.1	90.4	90.9	91.0	89.9	90.1	90.0	89.5
HAWAIIAN	Native Hawaiian/Pacific Islander race indicator	---	---	---	---	---	---	---	91.3	92.7	91.9	92.4
HISPANIC	Hispanic origin indicator	97.1	96.4	93.1	93.7	95.1	94.8	92.2	91.4	92.0	91.3	92.1
HISPORIG	Hispanic origin specified	96.4	95.6	92.3	92.6	94.1	93.7	91.0	90.3	90.1	89.8	90.4
HSPLACE	Place of high school	93.5	92.2	90.3	90.9	91.4	91.9	91.0	90.2	90.5	89.7	90.3
JRCOLL	Junior college indicator	92.4	90.6	91.5	91.9	91.8	92.3	92.1	90.9	91.0	90.0	89.7
MAFIELD	Masters field	83.6	84.6	75.4	78.1	78.3	73.8	80.5	80.2	80.1	83.9	82.7
MAINST	Masters institution	86.3	87.3	79.1	80.7	80.6	76.0	82.5	82.3	82.0	85.4	85.4
MAMONTH	Month of masters	79.8	81.0	73.4	75.3	75.8	71.3	77.5	77.6	77.5	80.0	79.5
MARITAL	Marital status	91.0	91.7	89.3	90.3	90.8	91.2	91.1	90.0	90.3	90.0	89.4
MAYEAR	Year of masters	84.7	85.6	77.8	80.4	79.6	75.0	81.3	81.3	81.2	83.1	82.6
MEDDENT	Earn(ing) professional medical or dental degree	---	---	---	---	---	---	---	---	---	---	89.7
MSPREREQ	Master's degree prerequisite for doctorate	---	---	---	---	---	---	---	---	---	---	88.3
PDEMPLOY	Postdoctoral employer type	85.6	85.8	82.7	84.8	84.2	86.0	87.1	87.1	87.4	88.5	88.7
PDLOC	Post-graduation location	94.2	92.7	83.7	89.6	92.1	92.3	92.5	91.3	92.8	91.7	92.6
PDOCPLAN	Post-graduation plans	69.0	69.6	66.3	68.4	70.0	71.4	72.9	72.7	72.9	88.5	88.9
PDOCSTAT	Post-graduation status	91.0	91.0	89.0	89.7	90.5	91.2	91.1	90.0	90.4	89.7	89.7
PDSTDSUP	Postdoctoral study support	91.8	91.6	88.6	88.8	90.3	91.1	91.1	90.0	90.4	88.3	88.6
PDUSFOR	Post-graduation location: U.S. or foreign	100.0	100.0	100.0	89.6	92.1	92.3	92.5	91.3	92.8	91.7	92.6
PDWK1ED	Edited primary work activity	81.1	84.9	83.0	84.0	83.9	85.6	85.3	85.0	85.4	87.9	87.9
PDWK2ED	Edited secondary work activity	62.9	72.6	74.2	75.2	73.6	74.9	73.0	74.3	76.0	77.5	76.9
PDWKPRIM	Primary work activity	81.1	84.9	83.0	84.0	83.9	85.6	85.3	85.0	85.4	87.9	87.9
PDWKSEC	Secondary work activity	62.9	72.6	74.2	75.2	73.6	74.9	73.0	74.3	76.0	77.5	76.8
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	92.4	92.2	89.2	90.2	91.0	91.5	91.5	90.5	90.9	90.7	90.3
PHDENTRY	First year entry PHDINST after B.A.	86.5	85.6	79.1	83.7	86.0	85.3	85.3	83.8	83.7	88.9	89.1
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	100.0	100.0	100.0	100.0	100.0	100.0
PHDTYPE2	Applied research doctorate type	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

APPENDIX TABLE C-3. Item response rates, 1995-2005

Variable Name	Variable description	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
POSTDOC	Intention to take postdoc position	---	---	---	---	---	---	---	---	---	---	88.5
PROFDEG	Type of professional doctorate	1.8	1.9	1.9	1.2	2.0	2.2	1.8	2.1	1.9	1.3	1.2
PROFYEAR	Year of professional doctorate	1.8	1.9	1.8	2.8	2.8	2.2	1.8	2.1	1.9	1.3	1.2
QUESTYR	Year questionnaire filled out	94.1	92.9	91.5	91.9	91.9	92.3	92.3	91.2	91.5	83.1	82.2
RACE	Edited race/ethnic code	97.1	96.4	93.1	93.7	95.1	94.9	94.2	93.0	93.6	93.3	93.5
RACEOTH	Other/multiple race indicator	95.6	94.8	90.2	90.8	92.4	92.0	---	---	---	---	---
REGTTD	Registered time to degree	88.8	87.1	77.1	81.0	84.8	83.3	85.4	84.9	84.3	70.1	83.2
SEX	Sex of student	99.6	99.5	99.2	99.6	99.6	99.8	99.8	99.8	100.0	100.0	99.9
SRCE1ED	Edited primary source of support	74.9	88.0	87.9	88.6	89.9	90.2	90.2	88.7	87.4	89.2	88.9
SRCEPRIM	Primary source support	74.9	88.0	87.9	88.7	89.9	90.2	90.2	88.7	88.9	89.2	88.9
TOTTTD	Total time-to-degree	96.0	94.9	86.5	87.9	91.0	89.4	91.1	89.7	90.3	87.9	88.8
TTDGETOT	Graduate shool time-to-degree	87.2	85.5	76.6	80.4	84.3	83.0	83.6	82.6	81.2	87.0	89.2
TUITREMS	Tuition remission - full or partial	---	---	---	---	---	---	---	87.3	88.3	87.0	88.2
UDEBTLVL	Undergraduate debt level	---	---	---	---	---	---	---	89.4	89.9	89.7	89.4
WHITE	White race indicator	95.6	94.8	90.2	90.8	92.4	92.4	93.8	91.9	92.8	91.9	92.4
YRSCOURS	Years of coursework	---	---	---	---	---	---	---	90.0	90.2	88.6	88.0
YRSDISST	Years preparing dissertation	---	---	---	---	---	---	---	90.2	90.4	88.8	88.1
YRSGRAD	Years from graduate entry to doctorate	---	---	---	---	---	---	---	89.8	89.7	---	---

NOTE: --- = data not available.

1. 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. Similarly, 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.

2. Particular variables (including BANONE, REGNURSE, PROFDEG, PROFYEAR, PHDDISS2) 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. For instance, the data response rate to REGNURSE represents only the small number of doctorate recipients who report having received a registered nurse degree. In some ways, it is more appropriate to consider the figures for these variables to be measurements of the percentage of the SED universe to which these items apply, rather than a "response rate" as it is defined above.

3. The time-to-degree measures (REGTTD and TOTTTD) result from the Doctorate Data Project'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.

4. 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.

5. It is common for each AY's data to include data gathered on that year's survey forms and data gathered on earlier survey forms. Therefore, in the first year in which a variable appears on the new survey form, only the respondents using that form will have the opportunity to provide data on that item. To address cases like these, response rates are calculated on a base of respondents who used the new survey form.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

Derived Variables

The following derived variables deserve further explanation.

Major field of study

Major field of doctoral study is used in tables 5, 6, 9, and 31. The levels of this variable were derived by grouping related fine fields of study from the field of study taxonomy used in the SED. The following aggregation was used to determine major field of study, where PHDFIELD is the doctorate field of study variable with values corresponding to the field codes used in the field of study list included in the annual questionnaire:

Field of study	Field codes
Physical sciences *	GE 400 and LE 599
Physics & astronomy	(GE 500 and LE 506) or (GE 560 and LE 579)
Chemistry	GE 520 and LE 539
Earth, atmospheric and marine sciences	(GE 510 and LE 519) or (GE 540 and LE 559) or (GE 580 and LE 599)
Mathematics	GE 420 and LE 499
Computer science	GE 400 and LE 419
Engineering*	GE 300 and LE 399
Aerospace/Aeronautical engineering	300
Chemical and related engineering	312, 366, 369
Civil and related engineering	315,336
Electrical and related engineering	318, 321, 324
Industrial engineering	339
Mechanical and related engineering	327, 345
Materials/Metallurgical engineering	309, 342, 348
Other engineering	All fields GE 300 and LE 399 not listed above
Life sciences*	GE 000 and LE 299
Biological sciences	GE 100 and LE 199
Health sciences	GE 200 and LE 299
Agricultural sciences/natural resources	GE 000 and LE 099
Social sciences*	GE 600 and LE 699
Psychology	GE 600 and LE 649
Anthropology	650
Economics	GE 666 and LE 668
Political science/international relations	GE 674 and LE 679
Sociology	686
Other social sciences	All fields GE 600 and LE 699 not listed above
Humanities*	GE 700 and LE 799
History	GE 700 and LE 719
American literature	732
English language & literature	725,726,733,734
Foreign language & literature	GE 740 and LE 769
Other humanities	All fields GE 700 and LE 799 not listed above
Education*	GE 800 and LE 899
Education administration	805, 807
Education research	800 or (GE 810 and LE 845)
Teacher education	GE 850 and LE 858
Teaching fields	GE 860 and LE 889
Other education	All fields GE 800 and LE 899 not listed above
Other fields*	(GE 900 and LE 999) or missing field
Business & management	GE 900 and LE 939
Communications	GE 940 and LE 959
Fields not elsewhere classified	GE 960 and LE 989
Fields not listed above	999

* Denotes broad 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. A value of '-1' on PDLOC indicates a respondent refusal to provide data.

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 of PDOCSTAT, which indicate whether the doctorate recipient's postdoctoral plans were definite at the time the survey was completed. That is, codes 0, 1, or A on PDOCSTAT indicate that the respondent had definite postdoctoral plans; whereas codes 2 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.

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

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

Definite Plans to Stay in the United States

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

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

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

Time to Doctorate

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

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

Beginning in 2001, a new set of questionnaire items was used to collect information about citizenship. Just as in the past, respondents have been asked to first indicate whether or not they are Hispanic, and then check one or more of the various racial group categories (e.g., American Indian, indicating Tribal Affiliation, Asian (including Native Hawaiians and Pacific Islanders through the year 2000), black, or white). *Doctorate recipients who reported Hispanic heritage, regardless of racial designation, are counted as Hispanic in this report*. The remaining survey respondents are then counted in their respective racial groups or as "Other/Unknown" (which includes only those who did not indicate a specific race/ethnicity through 2000, and also includes those choosing more than one race, Native Hawaiian and other Pacific Islander in 2001 to the present). (Note: Doctorate recipients who checked the category "American Indian or Alaskan Native" are identified as American Indian in this report.)

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 doctorates, 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.

To match the numbers in this report, use the following code before analyzing citizenship:

```
/*RECODE CITIZ 4 */
IF (CITIZ eq '4') THEN CITIZ='3';
```

Debt

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 21 and 22), 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 2005). The report as well as the *Summary Reports* for 1997-2004 is available on the Web at: http://www.norc.uchicago.edu/issues/docdata.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 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 grouped for this report is shown at the end of the Technical Notes.) Companion data from this survey for earlier years (1960-1991) were published in Detailed Statistical Tables in the report *Science and Engineering Doctorates: 1960-91* (NSF 93-301). This report is out of print, but tables from it are available on request.

Information from the survey is also included in the 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 can be arranged through a licensing agreement with NSF-SRS.

A complete methodology report for the 2005 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:

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Director, Doctorate Data Project
Division of Science Resources Statistics
National Science Foundation
4201 Wilson Boulevard, Room 965
Arlington, VA 22230

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

Or

Tom Hoffer
Doctorate Data Project
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.uchicago.edu

Appendix D: Survey of Earned Doctorates Questionnaire, Academic Year 2004-2005

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, 2004, to June 30, 2005

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 04/30/2006

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	0	☐ None
1	☐ $10,000 or less	1	☐ $10,000 or less
2	☐ $10,001 - $20,000	2	☐ $10,001 - $20,000
3	☐ $20,001 - $30,000	3	☐ $20,001 - $30,000
4	☐ $30,001 - $40,000	4	☐ $30,001 - $40,000
5	☐ $40,001 - $50,000	5	☐ $40,001 - $50,000
6	☐ $50,001 or more	6	☐ $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@norcmail.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@norcmail.uchicago.edu or phone at 1-800-248-8649.

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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 Specialties List. Appendix Tables A-4, A-5, and A-6 show data by seven broad fields only. Appendix Tables A-3 and A-8 include the additional field groupings indicated below.

SCIENCES

Physical Sciences (400-599)
- Physics and Astronomy (500-506, 560-579)**
- Astronomy (500-506)*
- Atmospheric Sciences and Meteorology (510-519)*
- Chemistry (520-539)
- Earth, Atmospheric, and Marine Sciences (510-519, 540-559, 580-599)**
- Geological and Earth Sciences (540-559)*
- Physics (560-579)*
- Mathematics (420-499)
- Computer Sciences (400-419)

Engineering (300-399)
- Aerospace/Aeronautical engineering (300)*
- Chemical and related engineering (312, 366, 369)*
- Civil and related engineering (315,336)*
- Electrical and related engineering (318, 321, 324)*
- Industrial engineering (339)*
- Mechanical and related engineering (327, 345)*
- Materials/Metallurgical engineering (309, 342, 348)*
- Other engineering (303, 306, 330, 333, 351-363, 372-399)*

Life Sciences (000-299)
- Biological/Biomedical Sciences (100-199)
  - Biochemistry (100)**
  - Other Biological Sciences (103-199)**
- Health Sciences (200-299)
- Agricultural Sciences/Natural Resources (000-099)

Social Sciences (600-699)
- Psychology (600-649)
- Economics and Econometrics (666, 668)**
- Anthropology and Sociology (650, 686)**
- Political Science and International Relations (674-679)
- Other Social Sciences (652-662, 670, 672, 682)

} Combined in Table A-8**

NONSCIENCES

Humanities (700-799)
- History (700-719)
- Letters (720-739)*
- English and American Language and Literature (732-734)**
- Foreign Languages and Literature (740-769)
- Other Humanities (720-729, 736-739, 770-799)

} Combined in Table A -8**

Education (800-899)
- Research and Administration (800-845)*
- Teacher Education (850-858)*
- Teaching Fields (860-889)*
- Other Education (898,899)*

Other Fields (900-999)
- Business and Management (900-939)
- Communications (940-959)*
- Fields not elsewhere classified (960-989)
- Fields not listed above (999)*

NOTE: *Doctorate recipients indicate their fields of specialty. Thei choices may differ from departmental names.*
** - Grouping appears in Appendix tables A-1, A-2, and B-1 only.*
*** - Grouping appears in Appendix tables A-3 and A-8 only*

Types of Research Doctoral Degrees

The vast majority of research doctoral degrees are doctors of philosophy, Ph.D.s; of the 43,354 new research doctorates granted in 2005 over 90 percent were Ph.D.s. The next most frequently occurring type of research doctorate was the doctor of education, Ed.D., which accounted for seven percent. Doctors of musical arts accounted for one percent of the 2005 doctorate cohort.

No other type of doctorate accounted for as much as one half of one percent of the new research doctorates in 2005. (See table E-1.)

APPENDIX TABLE E-1. Research degrees included in the Survey of Earned Doctorates, 2005 [a]

Research degree	Degree title	Count	Percent
All research doctorates		43,354	100.0
PhD	Doctor of Philosophy	39,129	90.3
EdD	Doctor of Education	3,033	7.0
DMA	Doctor of Musical Arts	612	1.4
DSc/ScD	Doctor of Science	116	0.3
DPH	Doctor of Public Health	97	0.2
DBA	Doctor of Business Administration	86	0.2
DNSC	Doctor of Nursing Science	65	0.1
DA	Doctor of Arts	55	0.1
DM	Doctor of Music	53	0.1
Deng/DESc/DES	Doctor of Engineering/Doctor of Engineering Science	36	0.1
JSD/SJD	Doctor of Juridical Science	21	< 0.1
DPA	Doctor of Public Administration	16	< 0.1
	All other research doctorates	35	0.1

[a] Only research doctorate types with ten or more doctorate recipients in 2005 are included in this table.

SOURCE: NSF/NIH/USED/NEH/USDA/NASA, 2005 Survey of Earned Doctorates.

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 24 distinct types of research doctoral degrees (listed below).

TITLES OF RESEARCH DEGREES INCLUDED IN THE SURVEY OF EARNED DOCTORATES

PhD Doctor of Philosophy

OTHER DEGREES, IF RESEARCH DOCTORATE, AS RELEVANT:

DA	Doctor of Arts	DML	Doctor of Modern Languages
DBA	Doctor of Business Administration	DNSc	Doctor of Nursing Science
DCM	Doctor of Church Music	DPA	Doctor of Public Administration
DDes	Doctor of Design	DPE	Doctor of Physical Education
DEng/DESc/DES	Doctor of Engineering/ Doctor of Engineering Science	DPH	Doctor of Public Health
		DSc/ScD	Doctor of Science
DFA	Doctor of Fine Arts	DSW	Doctor of Social Work
DHL	Doctor of Hebrew Letters	EdD	Doctor of Education
DIT	Doctor of Industrial Technology	JCD	Doctor of Cannon Law
DM	Doctor of Music	JSD/SJD	Doctor of Juridical Science
DMA	Doctor of Musical Arts	STD	Doctor of Sacred Theology
DME	Doctor of Music Education	ThD	Doctor of Theology

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