

INSTRUCTIONS

FOR THE NSF-NIH SURVEY OF GRADUATE STUDENTS AND POSTDOCTORATES IN SCIENCE AND ENGINEERING, FALL 1998

PURPOSE OF THE SURVEY

The survey provides a comprehensive picture of the training of future scientists and engineers in the Nation's graduate schools. Data are used by Congress and the executive branch during budget preparation, and by State government agencies and other analysts to assess the future supply of science and engineering (S&E) personnel.

This information is solicited under the authority of the National Science Foundation Act of 1950, as amended. All information provided will be used for statistical purposes only. Response is entirely voluntary and failure to provide some or all of the information will in no way adversely affect your institution.

The average time required for questionnaire completion is 2 hours. Response burden comments should be directed to Mary Lou Higgs at (703) 306-1125, ext. 2063.

Students Included in This Survey

Count as graduate students persons enrolled **for credit** in any S&E master's or Ph.D. degree program in fall 1998. Report M.D., D.O., D.V.M., or D.D.S. candidates, interns, and residents in items 5 through 7 **only** if they are concurrently working for an S&E master's or Ph.D. degree or are enrolled in a joint medical/Ph.D. program. Individuals who already hold graduate or medical degrees and are working on another master's or Ph.D. degree are considered graduate students (items 5 through 7), not postdoctorates (item 8).

Include S&E students performing thesis or dissertation research away from the campus (for example, at Government- and contractor-owned facilities) in the United States as long as they are enrolled for credit in an advanced-degree program.

All data should be reported in terms of headcounts, not full-time equivalents (FTEs).

Students Excluded From This Survey

Exclude students enrolled in a foreign country (at a branch or extension center), and non-matriculated students.

Students Enrolled in Multiple Departments/Institutions

A student should be reported in only **one** department. Students enrolled in interdisciplinary/interinstitutional programs should be counted only once, by their "home" department and institution.

INCOMPLETE DATA

Please write "unavailable" or "unknown" in data cells as applicable. On this form, "N/A" means "not applicable." Data cells left blank are presumed to be zeroes.

ITEM 5: FULL-TIME STUDENTS

Report the total number of full-time degree-seeking students in line (6), column (L). Then, in lines (1) through (6), count each full-time student **only once** by **largest** source of support so that all columns and rows in item 5 sum to the full-time total in line (6), column (L). In item 5, count only graduate students pursuing an S&E degree according to a full-time schedule; this may include any combination of study, teaching, and research, depending on your institution's policy and definition of full-time status. For example, many institutions base full-time status on the number of credit hours taken; others calculate full-time according to the amount of fees paid by the student.

Mechanisms of Support—Lines (1) Through (5)

A **fellowship**, line (1), is any competitive award (often from a national competition) made to a student that requires no work of the recipient. A **traineeship**, line (2), is an educational award given to a student selected by the institution. An **assistantship** should be classified as **research**, line (3), or **teaching**, line (4), depending on assigned duties; e.g., a student devoting most of his or her time to teaching should be reported on line (4). All other full-time students, including members of the Armed Forces whose tuition is paid by the Department of Defense, and self-supported students, should be reported on line (5).

Federal Sources of Support—Columns (A) Through (G)

Department of Defense (DoD)—Column (A): Sources include the Departments of the Army, Navy, or Air Force, as well as programs within the Office of the Secretary of Defense. Students receiving their main support from the Veterans Administration under the G.I. Bill should be reported under column (F), "Other Federal sources."

Department of Health and Human Services (HHS)—Columns (B) and (C): Report students with support from the institutes or divisions of the National Institutes of Health (NIH) under column (B); report support from all other components of HHS in column (C). Refer to the organizational roster under "Definitions."

National Science Foundation (NSF)—Column (D): Report students receiving NSF graduate fellowships and minority fellowships, as well as those supported under NSF research grants.

U.S. Department of Agriculture (USDA)—Column (E): Include research assistants working on projects financed out of Hatch, McIntyre-Stennis, or Smith-Lever formula funds, competitive research grants, and institution fellowship/training

grants.

National Aeronautics and Space Administration (NASA)—Column (F): Report students with support from this agency.

Other Federal sources—Column (G): Report students receiving support from Federal agencies other than those listed in columns (A) through (F), such as the Fulbright program, the G.I. Bill, and Department of Education and Department of Energy programs. Students primarily supported by Federal loans should be reported in column (K), "Self-supported students."

Non-Federal Sources of Support—Cols. (H) Through (J)

Institutional support—Column (H): Report students supported from YOUR institution, including those receiving tuition waivers. State and local government support should also be reported in this column. Students primarily supported with funds from the Federal Government, such as training grants, however, should be reported under the appropriate Federal agency.

Foreign sources—Column (I): Report students supported from any non-U.S. source, such as foreign governments, industrial firms, or specialized agencies of the United Nations.

Other U.S. sources—Column (J): Report students supported from nonprofit institutions, private industry, and all other non-Federal U.S. sources not included in columns (H) or (I).

Self-supported students—Column (K): Report both foreign and U.S. citizen students whose largest source of support comes from ANY loans (including Federal loans) or from personal or family financial contributions. **These students must be included in the full-time total, line (6), column (L).**

Women—Line (7)

Report all full-time female students by the source of their primary support. The total number of full-time women should be reported in line (7), column (L).

In each column, data on line (7) should not exceed the total on line (6).

First-Time Full-Time Students—Lines (8) and (9)

A first-time student has enrolled in the program in which he or she is pursuing a degree as of the beginning of the fall term in 1998. All other students should be considered to be beyond their first time of enrollment.

ITEM 6: PART-TIME STUDENTS

Report all part-time students in item 6, regardless of their source of support. Part-time students are pursuing an S&E graduate degree but NOT on a full-time schedule. Consider students part-time according to your own institution's definition of part-time status.

ITEM 7: CITIZENSHIP AND RACIAL/ETHNIC BACKGROUND OF U.S. CITIZENS AND PERMANENT RESIDENTS

Report all U.S. citizens and permanent residents in columns (A) through (G), and count each student only once according to his or her racial/ethnic category as defined by the Bureau of the Census, listed under "Definitions."

Count foreign students, i.e., those holding temporary visas, only **once** in column (H), regardless of race/ethnicity. Native residents of a U.S. possession and applicants for U.S. citizenship holding green cards, however, should be reported as U.S. citizens.

Total full-time and part-time enrollments reported in item 7 should match those reported in items 5 and 6, respectively.

ITEM 8: POSTDOCTORATES AND NONFACULTY RESEARCH STAFF WITH DOCTORATES

Postdoctorates—Columns (A) through (F): Include individuals with science and engineering Ph.D.'s, M.D.'s, D.D.S.'s, or D.V.M.'s (including foreign degrees equivalent to U.S. doctorates) who devote their **primary effort to their own research training through research activities or study** in the department under temporary appointments carrying no academic rank. These individuals may contribute to the academic program through seminars, lectures, or working with graduate students. Such postdoctorates may have different titles at different institutions, e.g., "Postdoctoral Scholar," "Research Associate," "Postdoctoral Fellow," or "Postgraduate Researcher." Exclude, however, clinical fellows and those with appointments in residency training programs in medical and health professions, **unless research training under the supervision of a senior mentor is the primary purpose of the appointment.**

Report postdoctorates by source of support in columns (A) through (D), with the total number of postdoctorates reported

If you have any questions about this survey, please contact Ms. Toni Picker or Dr. Atessa Shahmirzadi of Quantum Research Corporation by telephone at (301) 657-3077, exts. 294 or 140 respectively, or by e-mail at gss@qrc.com.

in column (E). Of this total, report the number who are foreign in column (F).

Other non-faculty research staff with doctorates—Column (G): Include all doctoral scientists and engineers who are involved principally in research activities but are not considered either postdoctoral appointees or members of the regular faculty.

On line (2), report the number of women in each category. On line (3), report those postdoctorates and nonfaculty research staff who hold first professional medical degrees (M.D., D.O., D.D.S., D.V.M.). Please note that in each column, data on lines (2) and (3) should not exceed the total on line (1).

DEFINITIONS

(1) NATIONAL INSTITUTES OF HEALTH ORGANIZATIONAL ROSTER
—Item 5, column (B)

Fogarty International Center
National Cancer Institute
National Center for Human Genome Research
National Center for Nursing Research
National Center for Research Resources
National Eye Institute
National Heart, Lung, and Blood Institute
National Institute of Arthritis and Musculoskeletal and Skin Diseases
National Institute of Child Health and Human Development
National Institute of Dental Research
National Institute of Diabetes and Digestive and Kidney Diseases
National Institute of Environmental Health Sciences
National Institute of General Medical Sciences
National Institute of Mental Health
National Institute of Neurological Disorders and Stroke
National Institute on Aging
National Institute on Alcohol Abuse and Alcoholism

National Institute of Allergy and Infectious Diseases
National Institute on Deafness and Other Communication Disorders
National Institute on Drug Abuse
National Library of Medicine

(2) OTHER HHS ADMINISTRATIVE UNITS
—Item 5, column (C)

Substance Abuse and Mental Health Services Administration (Please note that the former Alcohol, Drug Abuse and Mental Health Administration institutes are now part of the National Institutes of Health.)
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health
Food and Drug Administration
Health Resources and Services Administration

(3) RACIAL/ETHNIC CATEGORIES FOR U.S. CITIZENS AND PERMANENT RESIDENTS DEFINED BY THE BUREAU OF THE CENSUS
—Item 7

Black, non-Hispanic: Persons having origins in any of the black racial groups (except those of Hispanic origin).

American Indian or Alaskan native: Persons having origins in any of the original peoples of North America.

Asian or Pacific Islander: Persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. These areas include China, Japan, Korea, the Philippine Islands, and Samoa.

Hispanic: Persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

White, non-Hispanic: Persons having origins in any of the original peoples of Europe, North Africa, or the Middle East, except those of Hispanic origin.

FOR FURTHER INFORMATION . . .

UPON COMPLETING THIS FORM, PLEASE RETURN IT TO YOUR SURVEY COORDINATOR FOR TRANSMITTAL BY JANUARY 31, 1999.

NATIONAL SCIENCE FOUNDATION and NATIONAL INSTITUTES OF HEALTH
Survey of Graduate Students and Postdoctorates in Science and Engineering, Fall 1998

DEPARTMENT OR PROGRAM DATA SHEET

Due date: January 31, 1999

ITEMS 1-4. IDENTIFYING INFORMATION

1. Institution name: _____

2. Name of S&E department or program: _____

If changed since last year, please indicate previous name and whether this represents a merger, split, or expanded program: _____

4. Highest graduate degree available in this department or program (CHECK ONE): (1) Ph.D.¹ (2) Master's (3) No Ph.D.¹ or master's degree offered

3. Person in department or program preparing this form:

Name: _____

Title: _____

Phone: (_____) _____

E-mail address: _____

Institution and department code (LEAVE BLANK)

Report all data on a headcount basis (use whole numbers, *not* fractions, decimals, FTEs, etc.). If your department does not enroll graduate students, please go to item 8.

ITEM 5. NUMBER OF FULL-TIME GRADUATE STUDENTS enrolled for advanced degrees (master's and doctoral) in fall 1998. Report each student only once according to the source and mechanism of the largest amount of support received in fall 1998.

Students receiving equal support from multiple sources or through multiple mechanisms should be reported only once. When determining the largest source of support, consider all graduate school academic expenses including tuition, tuition remission, and stipends.

| MECHANISMS OF SUPPORT | Line | STUDENTS RECEIVING FINANCIAL ASSISTANCE | | | | | | | | | SELF-SUPPORTED STUDENTS (including loans and family sources) (K) | TOTAL FULL-TIME GRADUATE ENROLLMENT (Sum of (A) through (K)) (L) |
|---|---------------|---|-----|--|---------------------------------|-------------------------------|----------|---------------------------|--|---------------------|--|--|
| | | FEDERAL SOURCES (excluding loans) | | | | | | NON-FEDERAL SOURCES | | | | |
| | | Department of Defense (A) | HHS | | National Science Foundation (D) | Department of Agriculture (E) | NASA (F) | Other Federal sources (G) | Institutional support (including State & local government) (H) | Foreign sources (I) | | |
| National Institutes of Health (B) | Other HHS (C) | | | | | | | | | | | |
| Graduate Fellowships | (1) | | | | | | | | | | | |
| Graduate Traineeships | (2) | | | | | | | | | | | |
| Graduate Research Assistantships | (3) | | | | | | | | | | | |
| Graduate Teaching Assistantships | (4) | | | | | | | | | | | |
| Other Types of Support | (5) | | | | | | | | | | | |
| FULL-TIME TOTAL² | (6) | | | | | | | | | | | |
| Of the students in line (6), how many in each data cell are WOMEN? ³ | (7) | | | | | | | | | | | |

| | | | |
|-------------------------------------|-----|---|--|
| First-Time Full-Time Students | (8) | Of the full-time students on line (6), column (L), how many are FIRST-TIME? (Should not exceed total in line (6), column (L)) | |
| First-Time Full-Time Women Students | (9) | Of the first-time students on line (8), how many are WOMEN? | |

¹ Or Ph.D. equivalent such as Sc.D. and D.Eng., but not Ed.D., M.D., or other professional degree
² The total from line (6) should be inserted in item 7, line (3), column (I).
³ The total from line (7) should be inserted in item 7, line (2), column (I).

ITEM 6. NUMBER OF PART-TIME GRADUATE STUDENTS enrolled for advanced degrees (master's and Ph.D.) in fall 1998.

| | | |
|--|-----|--|
| PART-TIME TOTAL (The total from line (1) should be inserted below in item 7, line (6), column (I).) | (1) | |
| Of the part-time students on line (1), how many are WOMEN? (The total from line (2) should be inserted below in item 7, line (5), column (I).) | (2) | |

| ITEM 7. RACE/ETHNICITY of FULL-TIME (Item 5) and PART-TIME (Item 6) graduate students in fall 1998, by sex. | Of the student totals in items 5 and 6, how many belong to the following RACIAL/ETHNIC categories? In each line, count each student only once. | | U.S. CITIZENS AND PERMANENT RESIDENTS | | | | | | FOREIGN: temporary visa holders (H) | TOTAL (Sum of (A) through (H)) (I) |
|---|---|--|---------------------------------------|---|--------------------------------------|-----------------|----------------------------------|--------------|--|---|
| | | | Black non- Hispanic (A) | Amer. Indian/ Alaskan Native (B) | Asian/ Pacific Islander (C) | Hispanic (D) | White non- Hispanic (E) | Other (F) | | |
| MEN ENROLLED FULL TIME | (1) | | | | | | | | | |
| WOMEN ENROLLED FULL TIME (column (I) should equal item 5, line (7), column (L)) | (2) | | | | | | | | | |
| FULL TIME, TOTAL (column (I) should equal item 5, line (6), column (L)) | (3) | | | | | | | | | |
| MEN ENROLLED PART TIME | (4) | | | | | | | | | |
| WOMEN ENROLLED PART TIME (column (I) should equal item 6, line (2)) | (5) | | | | | | | | | |
| PART TIME, TOTAL (column (I) should equal item 6, line (1)) | (6) | | | | | | | | | |

| ITEM 8. NUMBER OF POSTDOCTORATES AND NON-FACULTY RESEARCH STAFF WITH DOCTORATES in fall 1998. | | POSTDOCTORATES | | | | | | OTHER NON- FACULTY RESEARCH STAFF WITH DOCTORATES (G) | |
|---|-----|--------------------|---------------------|------------------------|------------------------|--|---|--|--|
| | | SOURCE OF SUPPORT | | | | | TOTAL for all sources (A) through (D) (E) | | Of the total in (E), how many are FOREIGN? (F) |
| | | FEDERAL | | | NON- FEDERAL (D) | | | | |
| | | Fellowships (A) | Traineeships (B) | Research grants (C) | | | | | |
| TOTAL | (1) | | | | | | | | |
| Of the total in each cell of line (1), how many are WOMEN? | (2) | | | | | | | | |
| Of the total in each cell of line (1), how many hold an M.D., D.O., D.D.S., or D.V.M. degree? | (3) | | | | | | | | |

Approximately how many personhours were required to complete this form?

List other Federal sources (agencies), from item 5, column (G), and number of full-time students supported by each:

Please explain variances from the previous year's data or include other comments:

