

1995 SURVEY OF DOCTORATE RECIPIENTS

**Conducted by the National Research Council for
The National Science Foundation**

We solicit this information under the authority of the National Science Foundation Act of 1950, as amended. Your response is entirely voluntary and failure to provide some or all the requested information will not in any way adversely affect you. Actual time to complete the questionnaire may vary depending on your circumstances. On the average, it will take about 25 minutes to complete the questionnaire. If you have any comments on the time required for this survey, please send them to Herman Fleming, Division of Contracts, Policy and Oversight, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230; or to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project 3145-0020, Washington, DC 20503.

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Note: The format of this title page has been altered to reduced WEB download time.

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INSTRUCTIONS

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

- In order to get comparable data, we will be asking you to refer to the week of April 15, 1995 (e.g., April 9-15, 1995) when answering most questions
- Follow all "SKIP" instructions AFTER marking a box. If no "SKIP" instruction is provided, you should continue to the NEXT question
- Either a pen or pencil may be used
- When answering questions that require marking a box, please use an "X"
- If you need to change an answer, please make sure that your old answer is either completely erased or clearly crossed out

Thanks again for your help, we really appreciate it.

**PART A - Employment Status
During the Week of April 9-15, 1995**

A1. Were you working for pay (or profit) during the week of April 15, 1995? This includes a postdoctoral appointment, being self-employed or temporarily absent from a job (e.g., illness, vacation or parental leave), even if unpaid.

1 Yes ⇒ *SKIP to A7, page 2*

2 No

A2. (IF NO) Did you look for work at any time during the four weeks preceding April 15, 1995 (that is, any time between March 19 and April 15, 1995)?

1 Yes

2 No

A3. What were your reasons for not working during the week of April 15?

Mark (X) all that apply

1 Retired _____ **Year Retired**
▶ 19 ____|____|

2 On layoff from a job

3 Student

4 Family responsibilities

5 Chronic illness or permanent disability

6 Suitable job not available

7 Did not need or want to work

8 Other - *Specify:*

A4. Prior to the week of April 15, 1995, when did you last work for pay (or profit)?

IF NEVER WORKED FOR PAY (OR PROFIT), MARK (X) IN THIS BOX ⇒ 0 AND SKIP TO PART D, PAGE 13

LAST WORKED ____|____| 19 ____|____|
Month Year

A5. What kind of work were you doing on this last job--that is, what was your occupation? Please be as specific as possible, including any area of specialization.

Example: College professor - Electrical engineering

A6. Using the JOB CATEGORIES LIST (pages 16-17), choose the code that BEST describes the work you were doing on this last job.

CODE ____|____| ⇒ *SKIP to A49, page 8*

A7. (IF WORKED DURING WEEK OF APRIL 15TH)
Counting all jobs held during the week of April 15, 1995, did you USUALLY work. . .

- 1 A total of 35 or more hours per week ⇒ *SKIP to A10*
- 2 Fewer than 35 hours per week

A8. (IF FEWER THAN 35 HOURS) **During the week of April 15, did you want to work a full-time work week of 35 or more hours?**

- 1 Yes
- 2 No

A9. **What were your reasons for working a part-time work week (i.e., less than 35 hours) during the week of April 15?**

Mark (X) all that apply

- 1 Retired or semi-retired
 Year
 19
- 2 Student
- 3 Family responsibilities
- 4 Chronic illness or permanent disability → *SKIP to A11*
- 5 Suitable full-time work week job not available
- 6 Did not need or want to work full-time
- 7 Other - *Specify:*

A10. (IF 35 OR MORE HOURS) **Although you were working during the week of April 15, had you previously RETIRED from any position?**

Examples of retirement include mandatory retirement, early retirement, or voluntary retirement

- 1 Yes ⇒ 19 YEAR RETIRED
- 2 No

Please answer the next series of questions for your PRINCIPAL job held during the week of April 15, 1995. A second job, if held, will be covered later.

A11. **Who was your principal employer during the week of April 15, 1995?**

IF MORE THAN ONE JOB: Record employer for whom you worked the most hours that week

IF EMPLOYER HAD MORE THAN ONE LOCATION: Record location where you usually worked

Employer Name: _____

City/Town: _____

State/Foreign Country: _____

ZIP Code: _____

A12. **Counting all locations where this employer operates, how many people work for your principal employer? Your best estimate is fine.**

Mark (X) one

- 1 Under 10 employees
- 2 10-24 employees
- 3 25-99 employees
- 4 100-499 employees
- 5 500-999 employees
- 6 1,000-4,999 employees
- 7 5,000+ employees

A13. Was your principal employer during the week of April 15 . . .

IF EMPLOYER WAS A SCHOOL: Mark (X) the type of organizational charter (e.g., mark "State government" for state schools, most private schools are "private not-for-profit")

Mark (X) one

- 1 A PRIVATE FOR-PROFIT company, business or individual, working for wages, salary or commissions
 - 2 A PRIVATE NOT-FOR-PROFIT, tax exempt, or charitable organization
 - 3 SELF-EMPLOYED in own NOT INCORPORATED business, professional practice, or farm
 - 4 SELF-EMPLOYED in own INCORPORATED business, professional practice, or farm
 - 5 Local GOVERNMENT (city, county, etc.)
 - 6 State GOVERNMENT
 - 7 U.S. military service, active duty or Commissioned Corps (e.g., USPHS, NOAA)
 - 8 U.S. GOVERNMENT (civilian employee)
 - 9 Other - Specify:
-

A14. Was your principal employer an educational institution?

- 1 Yes
- 2 No ⇒ **SKIP to A18**

A15. (IF EDUCATIONAL INSTITUTION) Was this educational institution . . .

Mark (X) one

- 1 A preschool, elementary, or middle school or system
 - 2 A secondary school or system
 - 3 A 2-year college, junior college, or technical institute
 - 4 A 4-year college or university, other than a medical school
 - 5 A medical school (including university-affiliated hospital or medical center)
 - 6 A university-affiliated research institute
 - 7 Other - Specify:
-

A16. What was your faculty rank?

Mark (X) one

- 1 Not applicable at this institution
 - 2 Not applicable for my position
 - 3 Professor
 - 4 Associate Professor
 - 5 Assistant Professor
 - 6 Instructor
 - 7 Lecturer
 - 8 Adjunct Faculty
 - 9 Other - Specify:
-

A17. What was your tenure status?

Mark (X) one

- 1 Not applicable: no tenure system at this institution
- 2 Not applicable: no tenure system for my position
- 3 Tenured
- 4 On tenure track but not tenured
- 5 Not on tenure track

A18. What kind of work were you doing on your principal job held during the week of April 15, 1995--that is, what was your occupation?

Please be as specific as possible, including any area of specialization.

Example: College professor - Electrical engineering

A19. Using the JOB CATEGORIES LIST (pages 16-17), choose the code that BEST describes the work you were doing on your principal job during the week of April 15.

CODE |__|__|__|

NOTE - Job codes go from 010 to 500

A20. Did you record job code "141" (manager, executive, or administrator) in A19?

- 1 Yes
- 2 No ⇒ *SKIP to A22*

A21. (IF YES) Did your duties on this job require the technical expertise of a bachelor's degree or higher in . . .

Mark (X) Yes or No for each

- | | YES
↓ | NO
↓ |
|---|----------------------------|----------------------------|
| 1. Engineering, computer science, math, or the natural sciences | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 2. The social sciences | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 3. Some other field (for example, health or business) - <i>Specify:</i> | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
-

A22. During what month and year did you start this job, (that is, your principal job held during the week of April 15, 1995)?

JOB STARTED |__|__| 19 |__|__|
 Month Year

A23. As of the week of April 15, were you licensed or certified in your occupation?

Do NOT include academic degrees (e.g., BA, MA, PhD)

- 1 Yes
- 2 No

A24. Thinking about the relationship between your work and your education, to what extent was your work on your principal job held during the week of April 15 related to your first doctoral degree awarded in the U.S.? Was it . . .

Mark (X) one

- 1 Closely related
 - 2 Somewhat related
 - 3 Not related
- *SKIP to A27, page 5*

A25. (IF NOT RELATED) Did these factors influence your decision to work in an area OUTSIDE THE FIELD OF YOUR FIRST U.S. DOCTORAL DEGREE?

Mark (X) Yes or No for each

- | | YES
↓ | NO
↓ |
|---|----------------------------|----------------------------|
| 1. Pay, promotion opportunities | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 2. Working conditions (hours, equipment, working environment) | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 3. Job location | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 4. Change in career or professional interests | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 5. Family-related reasons (children, spouse's job moved) | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 6. Job in highest degree field not available | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 7. Other reason - <i>Specify:</i> | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
-

A26. Which TWO factors in A25 represents your MOST important reasons for working in an area outside of your first U.S. doctoral degree? Enter number of appropriate REASON from A25 above.

- 1. _____ MOST important reason
- 2. _____ SECOND MOST important reason (Enter "0" if no second most)

A27. The next question is about your work activities on your principal job. Which of the following work activities occupied 10 percent or more of your time during a TYPICAL work week on this job?

Mark (X) Yes or No for each

- | | YES
↓ | NO
↓ |
|---|----------------------------|----------------------------|
| 1. Accounting, finance, contracts | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 2. Applied research - study directed toward gaining scientific knowledge to meet a recognized need | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 3. Basic research - study directed toward gaining scientific knowledge primarily for its own sake | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 4. Computer applications, programming, systems development | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 5. Development - using knowledge gained from research for the production of materials, devices | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 6. Design of equipment, processes, structures, models | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 7. Employee relations - including recruiting, personnel development, training | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 8. Managing and supervising | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 9. Production, operations, maintenance (e.g., truck driving, machine tooling, auto/machine repairing) | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 10. Professional services (health care, counseling, financial services, legal services, etc.) | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 11. Sales, purchasing, marketing, customer service, public relations | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 12. Quality or productivity management | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 13. Teaching | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 14. Other - <i>Specify</i> : | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |

A28. On which TWO activities in A27, did you work the MOST hours during a typical week on this job?

Enter number of appropriate ACTIVITY from A27 above.

- _____ Activity MOST hours
- _____ Activity SECOND MOST hours (Enter "0" if no second most)

A29. In A28, did you record "2" or "3" or "5" or "6" (applied/basic research or development/design)?

- 1 Yes
 2 No ⇒ *SKIP to A31*

A30. (IF YES) In what field was your research-related work being conducted?

Field: _____

A31. During a typical week on this job, in which, if any, of the following areas or technologies, were you working?

Mark (X) Yes or No for each

- | | YES
↓ | NO
↓ |
|---|----------------------------|----------------------------|
| 1. Flexible manufacturing, robotics | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 2. Advanced materials | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 3. Biotechnology | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 4. Micro or opto-electronics, Semiconductor devices | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 5. High performance computing | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 6. Software producibility | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |
| 7. Sensor and signal processing | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |

A32. Since April 1990, how many . . .

IF NONE, enter "0"

Number

- Papers have you authored or co-authored for presentation at regional, national or international conferences? (Do not count presentations of the same work more than once) _____
- Articles that you have authored or co-authored have been accepted for publication in a refereed professional journal? _____

A33. Since April 1990, have you been named as an inventor on any application for a U.S. patent?

- 1 Yes
- 2 No ⇒ *SKIP to A35*

A34. (IF YES) Since April 1990 . . .

Number

- 1. How many applications for U.S. patents have named you as inventor? _____
- 2. How many U.S. patents have been granted to you as an inventor? _____
- 3. How many of the patents recorded as GRANTED (recorded in category 2 above) have resulted in commercialized products or processes or have been licensed? _____

A35. Did you supervise the work of others as part of your principal job held during the week of April 15, 1995?

Answer "YES" if you assigned duties to workers AND recommended or initiated personnel actions such as hiring, firing, or promoting

TEACHERS: Do NOT count students

- 1 Yes
- 2 No ⇒ *SKIP to A37*

A36. (IF YES) How many people did you typically . . .

IF NONE, enter "0"

Number Supervised

- 1. supervise DIRECTLY? _____
- 2. supervise through subordinate supervisors? _____

A37. Before deductions, what was your basic ANNUAL salary on this job as of the week of April 15, 1995? [Do NOT include bonuses, overtime, or additional compensation for summertime teaching or research]

IF NOT SALARIED: Please estimate your earned income, excluding business expenses

\$ _____ .00
Basic Annual Salary/Earned Income

A38. During a typical week on this job, how many hours did you usually work?

Number of Hours Per Week _____

A39. Including paid vacation and paid sick leave, upon how many weeks per year was your salary based?

Number of Weeks Per Year _____

A40. During the week of April 15, 1995, was any of your work on this job supported by CONTRACTS OR GRANTS from the U.S. government?

FEDERAL EMPLOYEES: Please answer "No"

Mark (X) one

- 1 Yes
- 2 No → *SKIP to A42, page 7*
- 3 Don't Know

A41. (IF YES) Which Federal agencies or departments were supporting your work?

Mark (X) all that apply

- 1 Agency for International Development (AID)
- 2 Agriculture Department
- 3 Commerce Department
- 4 Defense Department (DOD)
- 5 Department of Education (include NCES, OERI, FIPSE, FIRST)
- 6 Energy Department (DOE)
- 7 Environmental Protection Agency (EPA)
- 8 Health and Human Services Department (EXCLUDING NIH)
- 9 Interior Department
- 10 National Aeronautics and Space Administration (NASA)
- 11 National Institutes of Health (NIH)
- 12 National Science Foundation (NSF)
- 13 Transportation Department (DOT)
- 14 Other - Specify: _____
- 15 DON'T KNOW SOURCE AGENCY

The following 3 questions provide information for the U.S. Department of Energy

A42. From the following list of selected areas, indicate the ONE area, if any, to which you devoted the MOST hours during a typical week on this job.

Mark (X) one

- 1 Energy or Fuel
 - 2 Environment
 - 3 Food or Agriculture
 - 4 Health or Safety
 - 5 National Defense
 - 6 Transportation
 - 7 NONE OF THE ABOVE
- } → SKIP to A45

A43. (IF ENERGY OR FUEL) From the following list, indicate the ONE ENERGY SOURCE that involved the largest proportion of your energy-related work during the past year.

Mark (X) one

- 1 Coal
 - 2 Petroleum and natural gas
 - 3 Nuclear fission
 - 4 Nuclear fusion
 - 5 Hydroenergy
 - 6 Other Renewables (such as solar, biomass, wind, geothermal)
 - 7 Other energy source - *Specify:*
-

A44. From the following list, indicate the ONE ENERGY-RELATED ACTIVITY that involved the largest proportion of your energy-related work during the past year.

Mark (X) one

- 1 Exploration and extraction
 - 2 Manufacture of energy-related equipment
 - 3 Fuel processing (include refining and enriching)
 - 4 Electric power generation and transmission
 - 5 Transportation and distribution of fuel
 - 6 Waste management or decommissioning
 - 7 Conservation, utilization, management, or storage of energy or fuel
 - 8 Environment, health, and safety
 - 9 Other energy-related activity - *Specify:*
-

A45. During the week of April 15, 1995, were you working for pay (or profit) at a second job (or business), including part-time, evening, or weekend work?

- 1 Yes
- 2 No → SKIP to A49, page 8

A46. (IF YES) What kind of work were you doing at your second job during the week of April 15-- that is, what was your occupation? Please be as specific as possible, including any area of specialization.

Example: College professor - Electrical engineering

IF YOU HAD MORE THAN TWO JOBS that week answer for the job where you worked the second most hours

A47. Using the JOB CATEGORIES LIST (pages 16-17) choose the code that BEST describes the work you were doing on your second job during the week of April 15.

CODE |__|__|__|

A48. To what extent was your work on this second job related to your first doctoral degree awarded in the U.S.? Was it . . .

Mark (X) one

- 1 Closely related
- 2 Somewhat related
- 3 Not related

Questions A49-51 ask about your work for pay (or profit) in 1994

A49. Turning now to 1994, including paid vacation and paid sick leave, how many weeks did you work in 1994?

IF NONE, MARK (X) THIS BOX ⇒ 0
AND SKIP TO B1

Number of Weeks Worked _____

A50. During the weeks you worked in 1994, how many hours a week did you usually work?

Number of Hours Worked _____

A51. Counting all jobs held, what was your TOTAL EARNED income, BEFORE deductions for 1994?

Include all wages, salaries, bonuses, overtime, commissions, consulting fees, net income from business, summertime teaching or research, post doctoral appointment, or other work associated with scholarships

\$ _____ .00
Total 1994 Earned Income

IF YOU HAD NO EARNED INCOME IN 1994, MARK (X) THIS BOX ⇒ 0

PART B - Past Employment

The next few questions will help us better understand employment changes over time.

B1. Were you working for pay (or profit) during BOTH of these time periods--the week of April 15, 1993, AND the week of April 15, 1995?

If you were a STUDENT: Do NOT count financial aid awards with no work requirement

- 1 Yes
- 2 No ⇒ *SKIP to Part C, page 9*

B2. (IF YES) During these two time periods--the week of April 15, 1993, and the week of April 15, 1995--were you working for . . .

Mark (X) one

- 1 Same employer AND same job ⇒ *SKIP to Part C, page 9*
- 2 Same employer BUT different job
- 3 Different employer BUT same job
- 4 Different employer AND different job

B3. (IF DIFFERENT) Why did you change your employer or your job?

Mark (X) Yes or No for each

	YES ↓	NO ↓
1. Pay, promotion opportunities	1 <input type="checkbox"/>	2 <input type="checkbox"/>
2. Working conditions (hours, equipment, working environment)	1 <input type="checkbox"/>	2 <input type="checkbox"/>
3. Job location	1 <input type="checkbox"/>	2 <input type="checkbox"/>
4. Change in career or professional interests	1 <input type="checkbox"/>	2 <input type="checkbox"/>
5. Family-related reasons (e.g., children, spouse's job moved)	1 <input type="checkbox"/>	2 <input type="checkbox"/>
6. School-related reasons (e.g., returned to school, completed a degree)	1 <input type="checkbox"/>	2 <input type="checkbox"/>
7. Laid off or job terminated (includes company closings, mergers, buyouts)	1 <input type="checkbox"/>	2 <input type="checkbox"/>
8. Retired	1 <input type="checkbox"/>	2 <input type="checkbox"/>
9. Other - <i>Specify:</i>	1 <input type="checkbox"/>	2 <input type="checkbox"/>

PART C - Other Work-Related Information

The next few questions ask about your work experience since completing your (first) doctoral degree.

C1. Please review the **JOB CATEGORIES LIST** on pages 16-17. Using that list, please record codes in **Column 1** for those job categories where you have had **ONE OR MORE YEARS OF WORK EXPERIENCE** since completing your (first) doctoral degree (a single job category code can represent several jobs). Next, complete **Columns 2-5** for each job category recorded in **Column 1**.

Example: Chris was a regional sales director for a computer hardware company between 1980 and 1986. In 1986 she was offered a job teaching marketing at a local college, something she had always wanted to try and that would allow more time with her family. Between 1986 and 1995, she had taught at three different colleges. Chris would enter:

Row	Col 1	Col 2	Col 3	Col 4	Col 5
First	141	<i>Sales Director, computer hardware company</i>	1980 and 1986	6 years	3,4
Second	274	<i>Professor - Marketing</i>	1986 and 1995	9 years	9

WORK EXPERIENCE SINCE (FIRST) DOCTORAL DEGREE				
Col 1 Job Category Codes (pages 16-17) <i>Group jobs by job category codes, only use a job category code ONCE</i> <i>If more than 3 job category codes apply: Pick the 3 where you have worked the longest</i>	Col 2 Brief Description of Work Done	Col 3 Starting and Ending Dates <i>Working continually in the same job category between the two dates is not necessary</i>	Col 4 Total Years of Work Experience <i>Estimate using full-time equivalency (FTE)</i>	Col 5 Two Most Important Reasons for Leaving <i>Write appropriate numbers from the "Reasons for Leaving" box below</i>
1 CODE [][][][]	_____ _____	FROM 19 _ _ _ TO 19 _ _ _	_____ Year(s)	<input type="checkbox"/> Most important <input type="checkbox"/> 2nd most important <i>(Specify for category 10)</i> _____ _____
2 CODE [][][][]	_____ _____	FROM 19 _ _ _ TO 19 _ _ _	_____ Year(s)	<input type="checkbox"/> Most important <input type="checkbox"/> 2nd most important <i>(Specify for category 10)</i> _____ _____
3 CODE [][][][]	_____ _____	FROM 19 _ _ _ TO 19 _ _ _	_____ Year(s)	<input type="checkbox"/> Most important <input type="checkbox"/> 2nd most important <i>(Specify for category 10)</i> _____ _____

REASONS FOR LEAVING (for use in Column 5 above)	
1. Pay, promotion, benefits	6. Did not enjoy the work
2. Working conditions (hours, equipment, working environment)	7. Job ended/suitable job in my field not available
3. Change in career/professional interests	8. Retired
4. Family (children, spouse's job moved)	9. Still working in that field
5. School (completed degree, returned to school, etc.)	10. Other - Specify above

C2. Since completing your (first) doctoral degree, have you had any periods of 6 months or more where you were not working?

- 1 Yes
 2 No ⇒ *SKIP to C4*

C3. (IF YES) Please provide the following information for each period of 6 months or longer. Your best guess is fine.

DATES NOT WORKING				REASONS FOR NOT WORKING - Mark (X) all that apply								
FROM		TO		Retired	Layoff/Job Ended (Company Closed)	Full-Time Student Not Working	Family Responsibilities	Chronic Illness or Permanent Disability	Suitable Job Not Available	Did Not Need or Want to Work	Other	
Month	Year	Month	Year									
1.	___	19 ___	___	19 ___	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	8 <input type="checkbox"/>
2.	___	19 ___	___	19 ___	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	8 <input type="checkbox"/>
3.	___	19 ___	___	19 ___	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	8 <input type="checkbox"/>

C4. How much would your work benefit from each of the following?

Mark (X) one for each

- | | A
Great
Deal
↓ | Some-
what
↓ | Not
at
All
↓ |
|---|----------------------------|----------------------------|----------------------------|
| 1. Long distance communications with colleagues outside the U.S. (e.g., by letter, telephone, e-mail, fax, etc) | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> |
| 2. Short-term visits to non-U.S. locations (days or weeks in 7 duration)7 | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> |
| 3. Long-term visit to non-U.S. locations (6 months to 1 or 2 years in duration) | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> |

C5. Since completing your doctorate, have you ever traveled outside the United States to work or conduct research in your field?

DO NOT include international conferences.

- 1 Yes
 2 No ⇒ *SKIP to C7*

C6. (IF YES) How long was your last trip outside the United States to work or conduct research?

- 1 Less than 7 days
 2 7 to 30 days
 3 1 to 6 months
 4 More than 6 months
- *SKIP to C8, page 11*

C7. (IF NO) Why haven't you worked or conducted research outside the United States?

Mark (X) all that apply

- 1 Not relevant to my career
 2 No interest
 3 No time
 4 Unable to identify host institution
 5 Concerned about losing my place in U.S. job market
 6 Unaware of funding sources
 7 Lack of foreign language skills
 8 Family-related reasons
 9 Other - *Specify:*
-

C8. Since completing your (first) doctoral degree how many "postdocs," if any, have you held? A "postdoc" (postdoctoral appointment) is a temporary position awarded in academe, industry, or government primarily for gaining additional education and training in research.

NUMBER: _____

OR IF NONE, MARK THIS BOX - 0 AND SKIP TO C12

C9. Please provide the following information for each postdoc recorded in C8. Please include any postdoc you might currently hold.

MOST RECENT OR CURRENT POSTDOC	SECOND MOST RECENT POSTDOC	THIRD MOST RECENT POSTDOC
<p>A. Date postdoc started and ended (or you left) IF CURRENTLY IN POSTDOC: Enter "00" for year ended</p> <p style="text-align: center;">Month Year</p> <p>Started: __ __ 19 __ __ </p> <p>Ended: __ __ 19 __ __ </p>	<p>A. Date postdoc started and ended (or you left)</p> <p style="text-align: center;">Month Year</p> <p>Started: __ __ 19 __ __ </p> <p>Ended: __ __ 19 __ __ </p>	<p>A. Date postdoc started and ended (or you left)</p> <p style="text-align: center;">Month Year</p> <p>Started: __ __ 19 __ __ </p> <p>Ended: __ __ 19 __ __ </p>
<p>B. What was your primary reason for taking this postdoc? Mark (X) one</p> <p>1 <input type="checkbox"/> Additional training in PhD field</p> <p>2 <input type="checkbox"/> Training in an area outside of PhD field</p> <p>3 <input type="checkbox"/> Work with a specific person or place</p> <p>4 <input type="checkbox"/> Other employment not available</p> <p>5 <input type="checkbox"/> Other - <i>Specify:</i> _____</p>	<p>B. What was your primary reason for taking this postdoc? Mark (X) one</p> <p>1 <input type="checkbox"/> Additional training in PhD field</p> <p>2 <input type="checkbox"/> Training in an area outside of PhD field</p> <p>3 <input type="checkbox"/> Work with a specific person or place</p> <p>4 <input type="checkbox"/> Other employment not available</p> <p>5 <input type="checkbox"/> Other - <i>Specify:</i> _____</p>	<p>B. What was your primary reason for taking this postdoc? Mark (X) one</p> <p>1 <input type="checkbox"/> Additional training in PhD field</p> <p>2 <input type="checkbox"/> Training in an area outside of PhD field</p> <p>3 <input type="checkbox"/> Work with a specific person or place</p> <p>4 <input type="checkbox"/> Other employment not available</p> <p>5 <input type="checkbox"/> Other - <i>Specify:</i> _____</p>
<p>C. In what field were you working? Please be as specific as possible</p> <p>_____</p> <p>_____</p>	<p>C. In what field were you working? Please be as specific as possible</p> <p>_____</p> <p>_____</p>	<p>C. In what field were you working? Please be as specific as possible</p> <p>_____</p> <p>_____</p>
<p>D. Which sector BEST describes where you worked . . . Mark (X) one</p> <p>1 <input type="checkbox"/> Educational institution?</p> <p>2 <input type="checkbox"/> Business/Industry?</p> <p>3 <input type="checkbox"/> Government (any level)?</p> <p>4 <input type="checkbox"/> Other - <i>Specify:</i> _____?</p>	<p>D. Which sector BEST describes where you worked . . . Mark (X) one</p> <p>1 <input type="checkbox"/> Educational institution?</p> <p>2 <input type="checkbox"/> Business/Industry?</p> <p>3 <input type="checkbox"/> Government (any level)?</p> <p>4 <input type="checkbox"/> Other - <i>Specify:</i> _____?</p>	<p>D. Which sector BEST describes where you worked . . . Mark (X) one</p> <p>1 <input type="checkbox"/> Educational institution?</p> <p>2 <input type="checkbox"/> Business/Industry?</p> <p>3 <input type="checkbox"/> Government (any level)?</p> <p>4 <input type="checkbox"/> Other - <i>Specify:</i> _____?</p>
<p>E. For this postdoc, did you receive . . .</p> <p>Health benefits? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>Pension benefits? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p>	<p>E. For this postdoc, did you receive . . .</p> <p>Health benefits? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>Pension benefits? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p>	<p>E. For this postdoc, did you receive . . .</p> <p>Health benefits? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>Pension benefits? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p>
<p>F. Was this postdoc the result of winning a national competition?</p> <p>1 <input type="checkbox"/> Yes</p> <p>2 <input type="checkbox"/> No</p>	<p>F. Was this postdoc the result of winning a national competition?</p> <p>1 <input type="checkbox"/> Yes</p> <p>2 <input type="checkbox"/> No</p>	<p>F. Was this postdoc the result of winning a national competition?</p> <p>1 <input type="checkbox"/> Yes</p> <p>2 <input type="checkbox"/> No</p>

C10. Was your principal job during the week of April 15 a postdoc position?

- 1 Yes ⇒ *SKIP to C12*
- 2 No

C11. How relevant was your (most recent) postdoc to your work on your principal job held during the week of April 15?

IF NOT WORKING FOR PAY OR PROFIT THE WEEK OF APRIL 15: Use your "last job"

Mark (X) one for each

Postdoc Features	Relevance to Job		
	A Great Deal	Some-what	Not at All
1. Subject matter knowledge or expertise?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
2. Use of specific skills or techniques?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
3. Contacts established with colleagues in your field?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
4. Use of specialized equipment?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
5. General approach or problem solving skills?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
6. Something else? - <i>Specify:</i>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>

C12. During the past year, did you attend any professional society or association meetings or conferences?

Include regional, national, or international meetings

- 1 Yes
- 2 No

C13. To how many national or international professional societies or associations do you currently belong?

Number

OR

NONE

C14. During the past year, did you attend any WORK-RELATED workshops, seminars, or other work-related training activities?

Do NOT include college courses - these will be discussed in PART D

Do NOT include professional meetings unless you attended a special training session conducted at the meeting/conference

- 1 Yes ⇒ *GO to C15*
- 2 No ⇒ *SKIP to part D, page 13*

C15. (IF YES) During the past year, in which of the following areas did you attend work-related workshops, seminars, or other work-related training activities?

Mark (X) Yes or No for each

	YES	NO
1. Management or supervisor training	1 <input type="checkbox"/>	2 <input type="checkbox"/>
2. Training in your occupational field	1 <input type="checkbox"/>	2 <input type="checkbox"/>
3. General professional training (e.g., public speaking, business writing)	1 <input type="checkbox"/>	2 <input type="checkbox"/>
4. Other work-related training - <i>Specify:</i>	1 <input type="checkbox"/>	2 <input type="checkbox"/>

C16. For which of the following reasons did you attend training activities during the past year?

Mark (X) Yes or No for each

	YES	NO
1. To facilitate a change in your occupational field	1 <input type="checkbox"/>	2 <input type="checkbox"/>
2. To gain FURTHER skills or knowledge in your occupational field	1 <input type="checkbox"/>	2 <input type="checkbox"/>
3. For licensure/certification	1 <input type="checkbox"/>	2 <input type="checkbox"/>
4. To increase opportunities for promotion/advancement/higher salary	1 <input type="checkbox"/>	2 <input type="checkbox"/>
5. To learn skills or knowledge needed for a recently acquired position	1 <input type="checkbox"/>	2 <input type="checkbox"/>
6. Required or expected by employer	1 <input type="checkbox"/>	2 <input type="checkbox"/>
7. Other - <i>Specify:</i>	1 <input type="checkbox"/>	2 <input type="checkbox"/>

C17. What was your most important reason for attending training activities? Enter number of appropriate REASON from C16 above

MOST IMPORTANT REASON from C16

PART D - Background Information

D1. Between April 1993 and April 1995, did you take any college or university courses or enroll in a college or university for other reasons, such as completing another Master's or PhD?

- 1 Yes
- 2 No ⇒ *SKIP to D10, page 14*

D2. (IF YES) In which college or university department were you primarily taking classes or doing research, etc. (e.g., English, chemistry)?

DEPARTMENT: _____

D3. Between April 1993 and April 1995, did you complete a degree or certificate?

- 1 Yes
- 2 No ⇒ *SKIP to D7*

D4. (IF YES) In what month and year was this degree or certificate awarded?

IF YOU COMPLETED MORE THAN ONE:
Enter the date for the highest degree or certificate awarded

____ 19 ____
Month Year

D5. What type of degree or certificate did you receive?

IF MORE THAN ONE APPLIES: Mark the highest level

Mark (X) one

- 1 Bachelor's degree
- 2 Post baccalaureate certificate
- 3 Master's degree (including MBA)
- 4 Post master's certificate
- 5 Doctorate
- 6 Other professional degree (e.g., JD, LLB, THD, MD, DDS, etc.)
- 7 Other - *Specify:*

D6. From which academic institution did you receive this degree or certificate?

School name: _____

City/Town: _____

State/Foreign country: _____

D7. What was your primary field of study during that time?

IF NO PRIMARY FIELD OF STUDY, MARK (X) THIS BOX ⇒ 0

Primary Field of Study: _____

D8. For which of the following reasons were you taking classes or enrolled between April 1993 and April 1995?

Mark (X) Yes or No for each

	YES ↓	NO ↓
1. To gain further education before beginning a career	1 <input type="checkbox"/>	2 <input type="checkbox"/>
2. To prepare for graduate school	1 <input type="checkbox"/>	2 <input type="checkbox"/>
3. To change your academic or occupational field	1 <input type="checkbox"/>	2 <input type="checkbox"/>
4. To gain FURTHER skills or knowledge in your academic or occupational field	1 <input type="checkbox"/>	2 <input type="checkbox"/>
5. For licensure/certification	1 <input type="checkbox"/>	2 <input type="checkbox"/>
6. To increase opportunities for promotion/advancement/higher salary	1 <input type="checkbox"/>	2 <input type="checkbox"/>
7. Required or expected by employer	1 <input type="checkbox"/>	2 <input type="checkbox"/>
8. For leisure/personal interest	1 <input type="checkbox"/>	2 <input type="checkbox"/>
9. Other - <i>Specify:</i>	1 <input type="checkbox"/>	2 <input type="checkbox"/>

D9. Were ANY of your school-related costs for taking college or university courses during this time paid for by an employer?

- 1 Yes
- 2 No

D10. As of the week of April 15 were you . . .

Mark (X) one

- 1 Married
 - 2 Widowed
 - 3 Separated
 - 4 Divorced
 - 5 Never Married
- } → **SKIP to D13**

D11. (IF MARRIED) During the week of April 15, was your spouse working for pay (or profit) at a full-time or part-time job?

- 1 Yes, full-time
- 2 Yes, part-time
- 3 No ⇒ **SKIP to D13**

D12. (IF YES) Did your spouse's duties on this job require the technical expertise of a bachelor's degree or higher in . . .

Mark (X) Yes or No for each

	YES	NO
1. Engineering, computer science, math or the natural sciences,	1 <input type="checkbox"/>	2 <input type="checkbox"/>
2. The social sciences,	1 <input type="checkbox"/>	2 <input type="checkbox"/>
3. Some other field (e.g., health or business) - <i>Specify:</i>	1 <input type="checkbox"/>	2 <input type="checkbox"/>

D13. During the week of April 15, did you have any children living with you as part of your family?

Only count children who lived with you at least 50 percent of the time

- 1 Yes ⇒ **GO to D14**
- 2 No ⇒ **SKIP to D15**

D14. (IF YES) How many of these children living with you as part of your family were . . .

IF NO CHILDREN IN A CATEGORY, enter "0"

	Number of Children
1. Under age 2	_ _
2. Aged 2-5	_ _
3. Aged 6-11	_ _
4. Aged 12-17	_ _
5. Aged 18 or older	_ _

D15. During the week of April 15, 1995, were you living in the United States or one of its territories, or were you living in another country?

- 1 United States or one of its territories
- 2 Another country

D16. As of the week of April 15, 1995 were you a . . .

Mark (X) one

U.S. Citizen

- 1 Native Born
 - 2 Naturalized
- } → **SKIP to D18**

Non-U.S. Citizen

- 3 With a Permanent U.S. Resident Visa
- 4 With a Temporary U.S. Resident Visa
- 5 Living outside the United States

D17. (IF NON-U.S. CITIZEN) Of which country are you a citizen?

COUNTRY: _____

D18. What is your birthdate?

|_|_| |_|_| 19|_|_|
Month Day Year

The next question is designed to help us better understand the career paths of individuals with different physical abilities.

D19. What is the USUAL degree of difficulty you have with...

MARK (X) ONE FOR EACH

	None ↓	Slight ↓	Moderate ↓	Severe ↓	Unable to Do ↓
1. SEEING words or letters in ordinary newsprint (with glasses/contact lenses if you usually wear them)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
2. HEARING what is normally said in conversation with another person (with hearing aid, if you usually wear one)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
3. WALKING without human or mechanical assistance or using stairs	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
4. LIFTING or carrying something as heavy as 10 pounds, such as a bag of groceries	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

D20. If you answered "none" TO ALL ACTIVITIES in D19, mark (X) this box ⇒ 0 and SKIP to D22

D21. What is the earliest age at which you FIRST began experiencing ANY difficulties in any of these areas?

AGE: OR 0 SINCE BIRTH

D22. In case we need to clarify some of the information you have provided, please list a phone number where you can be reached.

Daytime:

Area Code Number

- -

Evening:

Area Code Number

- -

D23. Since we are interested in how education and employment change over time, we may be recontacting you in 1997. To help us contact you, please provide the name, address, and telephone number of two people who are likely to know where you can be reached. DO NOT INCLUDE SOMEONE WHO LIVES IN YOUR HOUSEHOLD.

As with all the information provided in this questionnaire, complete confidentiality will be provided. These people will only be contacted if we have trouble contacting you in 1997.

First Name MI Last Name

Number and Street

City/Town State Zip Code

Country (If outside U.S.)

-

Area Code Number

First Name MI Last Name

Number and Street

City/Town State Zip Code

Country (If outside U.S.)

-

Area Code Number

D24. PLEASE TURN TO THE BACK COVER FOR THE LAST QUESTION (D25).

JOB CATEGORIES LIST

This list is ordered ALPHABETICALLY. The titles in bold type are broad job categories. To make sure you have found the BEST code, please review ALL broad categories before making your choice. If you cannot find the code that BEST describes your job, use the "OTHER" code under the most appropriate broad category in bold print. If none of the codes fit your job, use Code 500.

010 **Artists, Broadcasters, Editors, Entertainers, Public Relations Specialists, Writers**

Biological/Life Scientists

- 021 Agricultural and food scientists
- 022 Biochemists and biophysicists
- 023 Biological scientists (e.g., botanists, ecologists, zoologists)
- 024 Forestry and conservation scientists
- 025 Medical scientists (excluding practitioners)
- 026 Technologists & technicians in the biological/life sciences
- 027 OTHER biological/life scientists

Clerical/Administrative Support

- 031 Accounting clerks, bookkeepers
- 032 Secretaries, receptionists, typists
- 033 OTHER administrative (e.g., record clerks, telephone operators)

040 **Clergy & Other Religious Workers**

Computer Occupations (Also see 173)

- *** Computer engineers (See 087, 088 under Engineering)
- 051 Computer programmers (business, scientific, process control)
- 052 Computer system analysts
- 053 Computer scientists, except system analysts
- 054 Information systems scientists or analysts
- 055 OTHER computer, information science occupations

- *** **Consultants** (Select the code that comes closest to your usual area of consulting)

070 **Counselors, Educational & Vocational** (Also see 236)

Engineers, Architects, Surveyors

- 081 Architects
- *** Engineers (Also see 100-103)
- 082 Aeronautical, aerospace, astronautical engineer
- 083 Agricultural engineer
- 084 Bioengineering & biomedical engineer
- 085 Chemical engineer
- 086 Civil, including architectural & sanitary engineer

- *** Engineers (continued)
- 087 Computer engineer - hardware
- 088 Computer engineer - software
- 089 Electrical, electronic engineer
- 090 Environmental engineer
- 091 Industrial engineer
- 092 Marine engineer or naval architect engineer
- 093 Materials or metallurgical engineer
- 094 Mechanical engineer
- 095 Mining or geological engineer
- 096 Nuclear engineer
- 097 Petroleum engineer
- 098 Sales engineer
- 099 Other engineer

- *** Engineering Technologists and Technicians
- 100 Electrical, electronic, industrial, mechanical
- 101 Drafting occupations, including computer drafting
- 102 Surveying and mapping
- 103 OTHER engineering technologists and technicians
- 104 Surveyors

110 **Farmers, Foresters & Fishermen**

Health Occupations

- 111 Diagnosing/Treating Practitioners (e.g., dentists, optometrists, physicians, psychiatrists, podiatrists, surgeons, veterinarians)
- 112 Registered nurses, pharmacists, dieticians, therapists, physician assistants
- 236 Psychologists, including clinical
- 113 Health Technologists & Technicians (e.g., dental hygienists, health record technologist/technicians, licensed practical nurses, medical or laboratory technicians, radiologic technologists/technicians)
- 114 OTHER health occupations

120 **Lawyers, Judges**

130 **Librarians, Archivists, Curators**

Managers, Executives, Administrators

- (Also see 151-153)
- 141 Top and mid-level managers, executives, administrators (people who manage other managers)
- *** All other managers, including the self-employed - *Select the code that comes closest to the field you manage*

JOB CATEGORIES LIST (CONTINUED)

Management-Related Occupations (Also see 141)

- 151 Accountants, auditors, and other financial specialists
- 152 Personnel, training, and labor relations specialists
- 153 OTHER management related occupations

Mathematical Scientists

- 171 Actuaries
- 172 Mathematicians
- 173 Operations research analysts, modelling
- 174 Statisticians
- 175 Technologists and technicians in the mathematical sciences
- 176 OTHER mathematical scientists

Physical Scientists

- 191 Astronomers
- 192 Atmospheric and space scientists
- 193 Chemists, except biochemists
- 194 Geologists, including earth scientists
- 195 Oceanographers
- 196 Physicists
- 197 Technologists and technicians in the physical sciences
- 198 OTHER physical scientists

*** Research Associates/Assistants

(Select the code that comes closest to your field)

Sales and Marketing

- 200 Insurance, securities, real estate, & business services
- 201 Sales Occupations - Commodities Except Retail (e.g., industrial machinery/equipment/supplies, medical and dental equip/supplies)
- 202 Sales Occupations - Retail (e.g., furnishings, clothing, motor vehicles, cosmetics)
- 203 OTHER marketing and sales occupations

Service Occupations, Except Health (Also see 111-114)

- 221 Food Preparation and Service (e.g., cooks, waitresses, bartenders)
- 222 Protective services (e.g., fire fighters, police, guards)
- 223 OTHER service occupations, except health

Social Scientists

- 231 Anthropologists
- 232 Economists
- 233 Historians, science and technology
- 234 Historians, except science and technology
- 235 Political scientists
- 236 Psychologists, including clinical (Also see 070)
- 237 Sociologists
- 238 OTHER social scientist

240 Social Workers

Teachers/Professors

- 251 Pre-Kindergarten and kindergarten
- 252 Elementary
- 253 Secondary - computer, math, or sciences
- 254 Secondary - social sciences
- 255 Secondary - other subjects
- 256 Special education - primary and secondary
- 257 OTHER precollegiate area
- *** Postsecondary
- 271 Agriculture
- 272 Art, Drama, and Music
- 273 Biological Sciences
- 274 Business Commerce and Marketing
- 275 Chemistry
- 276 Computer Science
- 277 Earth, Environmental, and Marine Science
- 278 Economics
- 279 Education
- 280 Engineering
- 281 English
- 282 Foreign Language
- 283 History
- 284 Home Economics
- 285 Law
- 286 Mathematical Sciences
- 287 Medical Science
- 288 Physical Education
- 289 Physics
- 290 Political Science
- 291 Psychology
- 292 Social Work
- 293 Sociology
- 294 Theology
- 295 Trade and Industrial
- 296 OTHER health specialties
- 297 OTHER natural sciences
- 298 OTHER social sciences
- 299 OTHER Postsecondary

Other Professions

- 401 Construction trades, miners & well drillers
- 402 Mechanics and repairers
- 403 Precision/production occupations (e.g., metal workers, woodworkers, butchers, bakers, printing occupations, tailors, shoemakers, photographic process)
- 404 Operators and related occupations (e.g., machine set-up, machine operators and tenders, fabricators, assemblers)
- 405 Transportation/material moving occupations

500 OTHER OCCUPATIONS (Not Listed)

D25. Is the name and address information on the label the best one for us to use for any future mailings?

1 Yes

2 No → Please make name and address changes as needed below. Please print clearly.

|

Title	First name	Middle initial	Last name	
Number and street/Apartment No.		City/town	State	ZIP Code Plus 4

THANK YOU FOR COMPLETING THE QUESTIONNAIRE

Please return the completed form in the envelope provided. If you lose the envelope and want another, call 1-800-248-8649. Our address is:

**National Research Council
TJ 1021
2101 Constitution Avenue, NW
Washington, DC 20418**