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ABSTRACT

This report presents a brief summary of data gathered from the Survey of Earned Doctorates during fiscal year 1971. The data refer to all research doctorates earned during the period July 1, 1970 through June 30, 1971, but they do not include professional degrees such as the M.D., D.D.S., and D.V.M. The document is composed primarily of 4 tables that present the data by number of degrees awarded, field of study, subfield of study, source of financial support, and state. (HS)

ED 062 927

NATIONAL RESEARCH COUNCIL

Summary Report 1971 DOCTORATE RECIPIENTS FROM UNITED STATES UNIVERSITIES

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**Summary
Report
1971
DOCTORATE
RECIPIENTS
FROM
UNITED
STATES
UNIVERSITIES**

Prepared in the
Manpower Studies Branch

Office of Scientific Personnel
National Research Council
Washington, D.C.

OSP-MS-6
APRIL 1972

This report presents a brief summary of data gathered from the Survey of Earned Doctorates during fiscal year 1971. The Survey is conducted annually by the Office of Scientific Personnel (OSP) of the National Research Council. Questionnaire forms, distributed with the cooperation of the Graduate Deans, are filled out by the graduates as they complete all requirements for their doctoral degrees. The data in this report refer to all research doctorates earned during the period July 1, 1970 to June 30, 1971, but they do not include professional degrees such as the MD, DDS, and DVM.

This is the fifth in a series of yearly summaries of data from the Survey of Earned Doctorates. The OSP publishes data gathered during a given fiscal year in the following fiscal year. The statistics thus made available may be used to update some of those in the book, Doctorate Recipients from United States Universities 1958-1966 (NAS publication 1489).

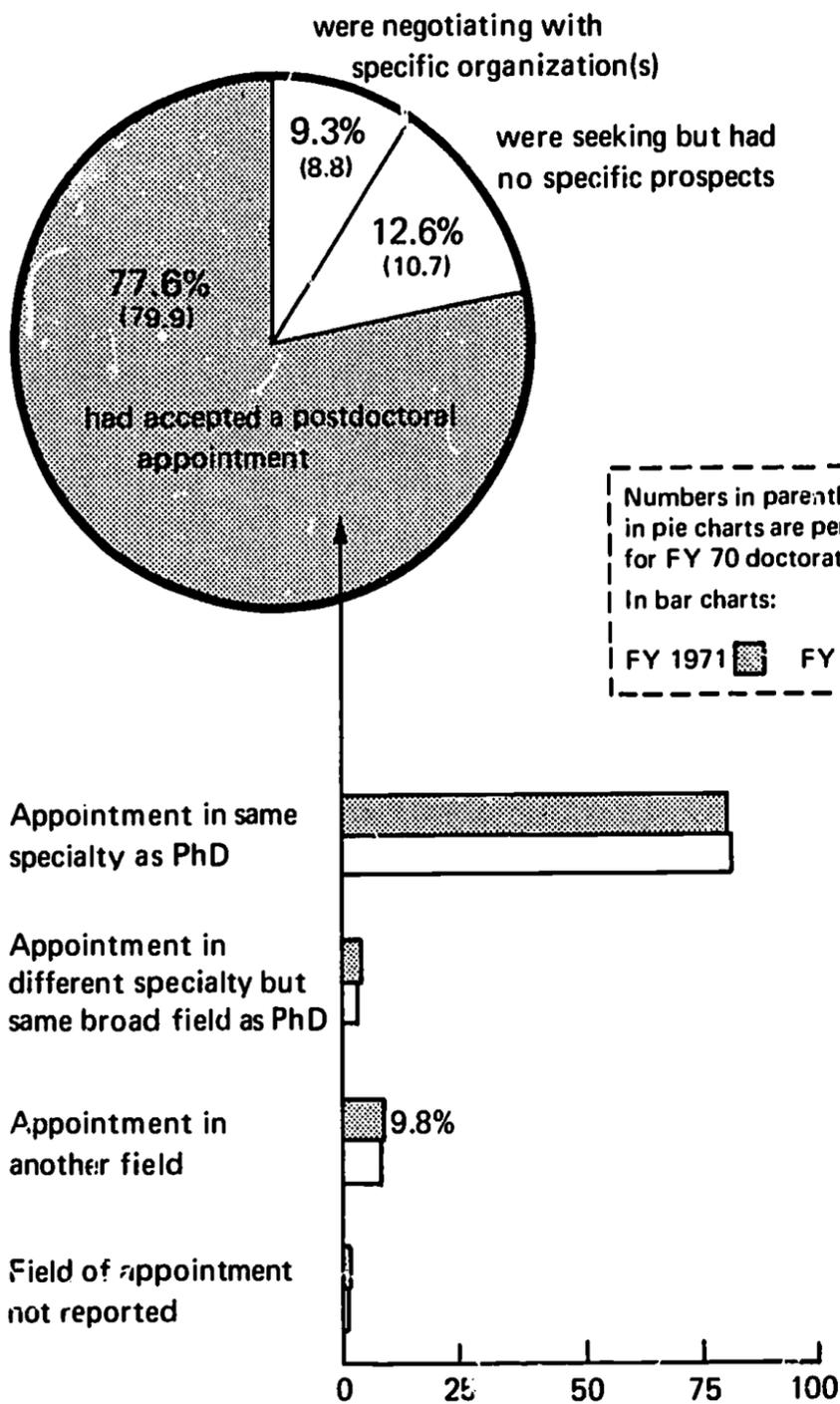
The distribution of the Survey of Earned Doctorates questionnaire, the maintenance of the resulting data file, and the publication of this report are supported jointly by the National Science Foundation, the United States Office of Education, the National Institutes of Health, and the National Endowment for the Humanities. The OSP wishes to express its appreciation to these agencies for their assistance.

The OSP is concerned with programs that strengthen higher education and develop better understanding of the educational process. It is hoped that prompt reporting of these data to educational, governmental, and professional agencies will facilitate planning in higher education. Suggestions for improvement of the content or format of the report will be welcomed. Such communications may be directed to the Office of Scientific Personnel, National Research Council, 2101 Constitution Avenue, Washington, D.C. 20418.

POSTGRADUATION PLANS OF 31,772* DOCTORATE RECIPIENTS OF FY 1971

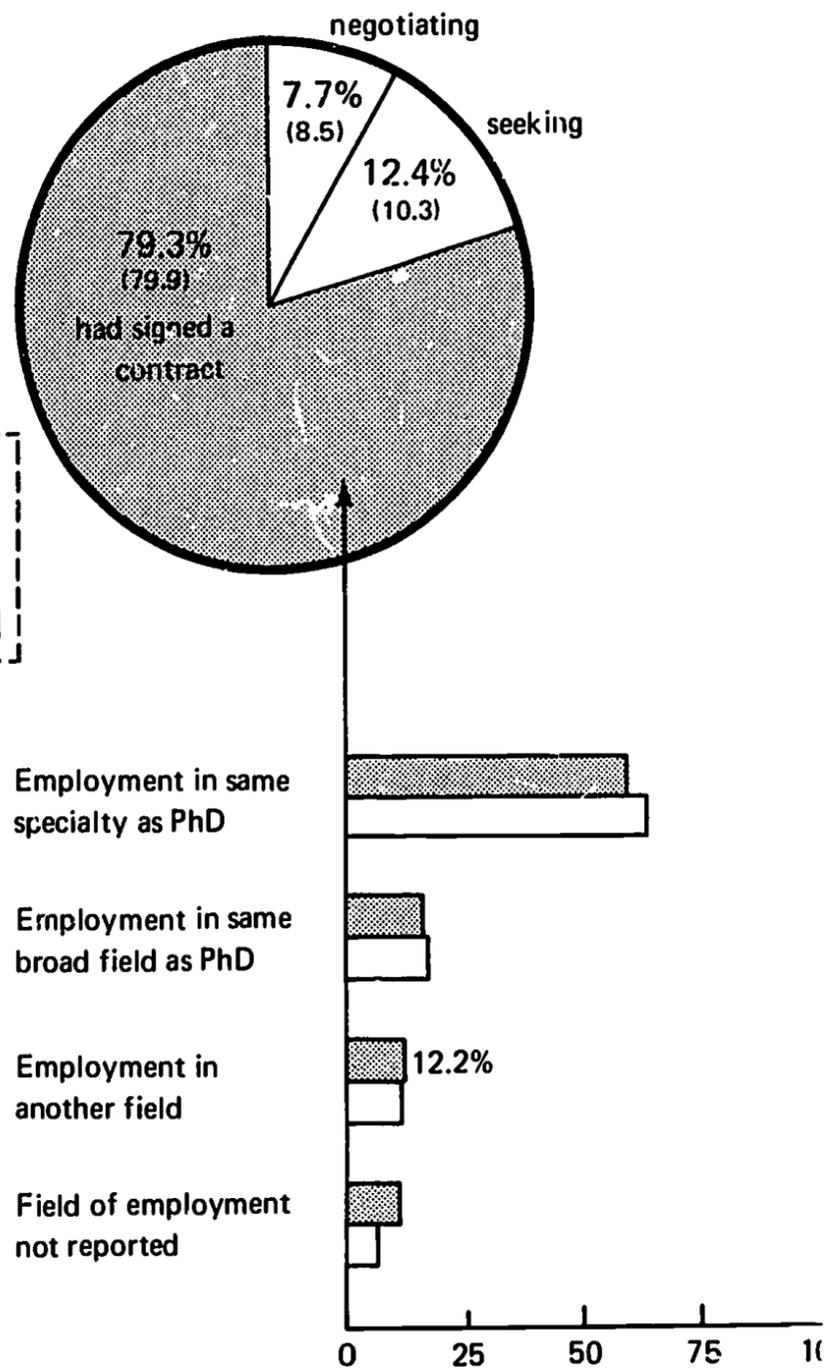
4,791 (15.1%) PLANNED TO TAKE A POSTDOCTORAL STUDY APPOINTMENT

25,019 (78.7%) PLANNED EMPLOYMENT



9.8% of the FY 1971 doctorate recipients who accepted a postdoctoral appointment took it in a field other than that of their doctorate. By field, the percentage of doctorates changing field was:

| | |
|----------------------------|-------|
| Arts and humanities | 20.2% |
| Educators | 19.0 |
| Agricultural scientists | 15.7 |
| Chemists | 13.6 |
| Social scientists | 11.9 |
| Psychologists | 9.9 |
| Engineers | 8.5 |
| Mathematicians | 7.9 |
| Bioscientists | 7.5 |
| Medical scientists | 7.5 |
| Physicists and astronomers | 7.1 |
| Earth scientists | 3.6 |



12.2% of the FY 1971 doctorate recipients who signed a contract with an employer were being employed in a field other than that of their doctorate. By field, the percentage of doctorates changing field was:

| | |
|----------------------------|-------|
| Agricultural scientists | 25.8% |
| Physicists and astronomers | 20.2 |
| Educators | 16.5 |
| Bioscientists | 15.3 |
| Medical scientists | 13.7 |
| Social scientists | 12.6 |
| Earth scientists | 12.5 |
| Professional fields | 10.6 |
| Engineers | 10.3 |
| Chemists | 9.0 |
| Psychologists | 7.1 |
| Mathematicians | 6.4 |
| Arts and humanities | 5.9 |

*1,962 doctorate recipients did not report their plans.

POSTGRADUATION PLANS OF FY 1971 DOCTORATES

The data presented to the left were obtained from the questionnaire (see page 12) filled out by doctorate recipients near the time of the award of their degrees. Over three quarters furnish the information in either the same month or in the three months before or after the month of award. The principal graduation months of the research doctorates of fiscal year 1971 were August-September 1970 (23.8%), December 1970-January 1971 (18.0%) and May-June 1971 (41.7%). The postgraduation plans reported by these doctorates are therefore roughly applicable to the 17-month employment period extending from May 1970 to September 1971.

The graphic presentation divides the FY 1971 doctorates into two groups: the 15.1% who planned a postdoctoral study appointment and the 78.7% who planned employment. The remaining doctorates (6.2%) did not report post-graduation plans.

The percentage of doctorates taking a postdoctoral study appointment (15.1%) was slightly higher than the 14.5% in FY 1970 and the FY 1969 percentage of 13.9%. Whether planning postdoctoral study or employment, the percentage of doctorates who had no specific prospects at the time they reported was about the same, 12.6% and 12.4% respectively. Not shown in the chart were those who did not report the status of their plans--less than 1%.

The field of appointment or employment is shown only for those who had made a definite postgraduation commitment. Those planning postdoctoral study were more likely to accept their appointment in the same specialty as their PhD (81% did) than those planning employment (59.8%). The variation among doctoral fields for those going into a field outside that of their PhD is shown in tabular form. The percentages on the postdoctoral side are not as reliable as those on the employment side because of small numbers. For example, the total number of PhD's in the arts and humanities who had accepted a postdoctoral was 84, in mathematics 63, in the social sciences 67. It was on the basis of these numbers that we found 20.2%, 7.9% and 11.9% had taken their postdoctoral in a field other than the doctorate. The small-number problem does not exist in larger fields or fields in which a postdoctoral is more common; such as, the biosciences, 1289, chemistry 807, and physics and astronomy 522. Small numbers do not appear in any of the fields shown on the employment side.

| | |
|---------|---|
| TABLE 1 | Number of Doctorate Recipients, by Subfield of Doctorate, FY 1971 |
| TABLE 2 | Statistical Profile of Doctorate Recipients, by Field of Doctorate, FY 1971 |
| TABLE 3 | Percentage of Doctorate Recipients, by Sources of Support in Graduate School, by Summary Field of Doctorate, FY 1971 |
| TABLE 4 | Number of Doctorate Recipients by State and Summary Field of Doctorate; Number of Doctorate-Granting Institutions by State, FY 1971 |

Table titles and headings are generally self-explanatory, but a few terms need special definition or explanation.

Table 2:

The fields of doctorate which head Table 2 differ from those in the Summary Reports of previous years. The fields are grouped into broader categories and only the largest fields are shown in detail. Refer to Table 1 for fields and subfields included in the broad categories.

"Age at Doctorate"--Q₁ (first quartile): One quarter received the doctorate at this age or younger; Q₂ (second quartile or median): One half received the doctorate at this age or younger; Q₃ (third quartile): Three fourths received the doctorate at this age or younger.

"Percent with Master's"--This indicates the percentage of doctorate recipients in a field who received a master's degree in any field before taking the doctorate.

"Median Time Lapse"--Total Time refers to total calendar time elapsed between year of baccalaureate and year of doctorate; Registered Time refers to the total time registered in a university between baccalaureate and doctorate.

Postgraduation plans of the doctorate recipients are grouped as: Postdoctoral study (fellowship, traineeship, other), Employment (educational institution, industry, etc.), or Unknown. The sum of the columns of percentages totals 100% with allowance for rounding. For example, 8.7% of the earth scientists accepted postdoctoral fellowships, 0.1% held traineeships, and 11.2% received research associateships or some other form of postdoctoral study grant; 76.2% were employed; and 3.4% did not indicate their postdoctoral activities. The percentages listed by type of employer (educational institution, industry, etc.) total to the 76.2% employed. Percentages showing the distribution of doctorate recipients by work activity and by region of employment are based only on those who were going into employment. They exclude those planning postdoctoral study as described in the categories above.

Table 3:

Data in Table 3 describe sources of financial support during graduate school. The question was answered by 30,203 (95%) of the FY 1971 doctorate recipients. The data in the table would be interpreted as follows: 693 doctorate recipients in the physical sciences reported financial support from NSF fellowships, during graduate school. This number is 12.5% of all the physical science doctorates who answered the question, and it is 38.6% of those in all fields that reported NSF fellowship support. Since students may indicate multiple sources of support, the vertical percentages sum to more than 100%.

Table 4:

Table 4 shows the number of persons receiving a doctorate from universities in each of the 50 states, District of Columbia and Puerto Rico. The last column of the table shows the number of institutions that granted one or more doctorates in any field during FY 1971.

TABLE 1
NUMBER OF DOCTORATE RECIPIENTS, BY SUBFIELDS, FISCAL YEAR 1971

| <u>SUBFIELD OF DOCTORATE</u> | <u>NUMBER OF DOCTORATES</u> | <u>SUBFIELD OF DOCTORATE</u> | <u>NUMBER OF DOCTORATES</u> |
|--------------------------------|-----------------------------|------------------------------|-----------------------------|
| <u>TOTAL ALL FIELDS</u> | <u>31772</u> | | |
| <u>PHYSICAL SCIENCES</u> | <u>5730</u> | | |
| MATHEMATICS | 1236 | BIOMEDICAL ENGINEERING | 71 |
| ALGEBRA | 200 | CIVIL | 379 |
| ANALYSIS | 262 | CHEMICAL | 390 |
| GEOMETRY | 35 | CERAMIC | 43 |
| LOGIC | 31 | ELECTRICAL | 748 |
| NUMBER THEORY | 33 | ELECTRONICS | 116 |
| PROBABILITY, MATH STATISTICS | 33 | INDUSTRIAL | 134 |
| TOPOLOGY | 91 | NUCLEAR ENGINEERING | 119 |
| COMPUTING THEORY AND PRACTICE | 139 | ENGINEERING MECHANICS | 215 |
| APPLIED MATHEMATICS | 122 | ENGINEERING PHYSICS | 38 |
| MATHEMATICS, GENERAL | 108 | MECHANICAL | 398 |
| MATHEMATICS, OTHER | 95 | METALLURGY AND PHYS MET ENG | 210 |
| PHYSICS AND ASTRONOMY | 1740 | SANITARY | 40 |
| ASTRONOMY | 59 | MINING ENGINEERING | 15 |
| ASTROPHYSICS | 54 | MATERIAL SCIENCE ENGINEERING | 52 |
| ATOMIC AND MOLECULAR PHYSICS | 124 | ENGINEERING, GENERAL | 34 |
| ELECTROMAGNETISM | 18 | ENGINEERING, OTHER | 228 |
| MECHANICS | 6 | | |
| ACOUSTICS | 20 | <u>LIFE SCIENCES</u> | <u>5051</u> |
| FLUIDS | 20 | BIOLOGICAL SCIENCES | 3391 |
| PLASMA PHYSICS | 86 | BIOCHEMISTRY | 653 |
| OPTICS | 25 | BIOPHYSICS | 101 |
| THERMAL PHYSICS | 17 | BIOMETRICS, BIOSTATISTICS | 42 |
| ELEMENTARY PARTICLES | 278 | PHYSIOLOGY, ANIMAL | 359 |
| NUCLEAR STRUCTURE | 227 | PHYSIOLOGY, PLANT | 90 |
| SOLID STATE | 442 | MOLECULAR BIOLOGY | 109 |
| PHYSICS, GENERAL | 164 | ANATOMY | 150 |
| PHYSICS, OTHER | 200 | CYTOLOGY | 54 |
| CHEMISTRY | 2204 | ENTOMOLOGY | 218 |
| ANALYTICAL | 173 | MICROBIOLOGY | 407 |
| INORGANIC | 297 | GENETICS | 152 |
| ORGANIC | 808 | EMBRYOLOGY | 37 |
| NUCLEAR | 36 | ECOLOGY | 119 |
| PHYSICAL | 502 | HYDROBIOLOGY | 27 |
| THEORETICAL | 66 | BOTANY | 201 |
| AGRICULTURAL AND FOOD | 58 | ZOOLOGY | 354 |
| PHARMACEUTICAL | 65 | BIOL SCIENCES, GENERAL | 164 |
| CHEMISTRY, GENERAL | 97 | BIOL SCIENCES, OTHER | 154 |
| CHEMISTRY, OTHER | 102 | | |
| EARTH SCIENCES | 550 | AGRICULTURAL SCIENCES | 1069 |
| MINERALOGY, PETROLOGY | 47 | AGRONOMY | 191 |
| GEOCHEMISTRY | 54 | AGRICULTURAL ECONOMICS | 169 |
| STRATIGR, SEDIMENTATION | 66 | ANIMAL HUSBANDRY | 94 |
| PALEONTOLOGY | 31 | FOOD SCIENCE AND TECHNOLOGY | 77 |
| STRUCTURAL GEOLOGY | 28 | FISH AND WILDLIFE | 61 |
| GEOPHYSICS | 64 | FORESTRY | 84 |
| GEOMORPHOL, GLACIAL GEOLOGY | 23 | HORTICULTURE | 75 |
| HYDROLOGY | 28 | SOILS AND SOIL SCIENCE | 56 |
| OCEANOGRAPHY | 53 | PHYTOPATHOLOGY | 108 |
| METEOROLOGY | 60 | AGRICULTURE, GENERAL | 2 |
| APPL GEOL, GEOL ENG, ECON GEOL | 27 | AGRICULTURE, OTHER | 152 |
| FUEL TECHNOL, PETROL ENG | 16 | | |
| EARTH SCIENCES, GENERAL | 28 | MEDICAL SCIENCES | 591 |
| EARTH SCIENCES, OTHER | 25 | MEDICINE AND SURGERY | 12 |
| | | PHARMACY | 64 |
| <u>ENGINEERING</u> | <u>3495</u> | PUBLIC HEALTH | 76 |
| AERONAUTICAL AND ASTRONAUTICAL | 196 | VETERINARY MEDICINE | 39 |
| AGRICULTURAL | 61 | HOSPITAL ADMINISTRATION | 11 |
| | | PHARMACOLOGY | 173 |
| | | PATHOLOGY | 69 |
| | | MEDICAL SCIENCES, GENERAL | 25 |
| | | MEDICAL SCIENCES, OTHER | 122 |

SUBFIELD OF DOCTORATE NUMBER OF DOCTORATES

SOCIAL SCIENCES (INCL PSYCH) 5155

ANTHROPOLOGY 240
 SOCIOLOGY 583
 ECONOMICS 791
 ECONOMETRICS 27
 STATISTICS 133
 POLITICAL SCIENCE,PUBLIC ADMIN 676
 INTERNATIONAL RELATIONS 145
 GEOGRAPHY 158
 AREA STUDIES 77
 URBAN AND REG PLANNING 33
 SOCIAL SCIENCES,GENERAL 22
 SOCIAL SCIENCES,OTHER 154

PSYCHOLOGY 2116

CLINICAL 616
 COUNSELING AND GUIDANCE 144
 DEVELOP AND GERONTOL 113
 EDUCATIONAL 99
 SCHDDL PSYCHOLOGY 70
 EXPERIMENTAL 392
 COMPARATIVE 15
 PHYSIOLOGICAL 130
 INDUSTRIAL AND PERSONNEL 68
 PERSONALITY 46
 PSYCHOMETRICS 36
 SOCIAL 171
 PSYCHOLOGY,GENERAL 127
 PSYCHOLOGY,OTHER 89

ARTS AND HUMANITIES 4366

HISTORY,GENERAL AND OTHER 286
 HISTORY AND PHILOSOPHY OF SCIENCE 35
 HISTORY,AMERICAN 411
 HISTORY,EUROPEAN 332
 AMERICAN LANG AND LIT 211
 ENGLISH LANG AND LIT 1032
 GERMAN LANG AND LIT 160
 FRENCH LANG AND LIT 223
 SPANISH AND PORTUGUESE LANG AND LIT 203
 LINGUISTICS 176
 ITALIAN LANG AND LIT 13
 RUSSIAN LANG AND LIT 44
 ALL OTHER MODERN LANGUAGES 85
 CLASSICAL LANG AND LIT 100
 PHILOSOPHY 366
 SPEECH AS A DRAMATIC ART 257
 ARCHEOLOGY 18
 ART,FINE AND APPLIED 4
 ART,HISTORY AND CRITICISM 107
 MUSIC 189
 ARTS AND HUMANITIES,GENERAL 13
 ARTS AND HUMANITIES,OTHER 101

PROFESSIONAL FIELDS 1402

BUSINESS ADMINISTRATION 670
 RELIGION AND THEOLOGY 253
 HOME ECONOMICS 44
 JOURNALISM 37
 LAW,JURISPRUDENCE 26
 LIBRARY AND ARCHIVAL SCIENCE 40
 SOCIAL WORK 121
 SPEECH AND HEARING SCIENCES 193
 PROFFSSIONAL FIELDS, OTHER 18

SUBFIELD OF DOCTORATE NUMBER OF DOCTORATES

EDUCATION 6403

ELEMENTARY EDUCATION, GENERAL 201
 SECONDARY EDUCATION, GENERAL 219
 HIGHER EDUCATION 180
 ADULT EDUC AND EXTENSION EDUC 83
 FOUNDATIONS,SOCIAL,PHILOS 288
 EDUCATIONAL PSYCHOLOGY 434
 EDUCATIONAL MEAS AND STATISTICS 135
 CURRICULUM AND INSTRUCTION 152
 EDUCATIONAL ADMIN AND SUPERVISION 1534
 GUIDANCE,COUNS,STUDENT PERSONNEL 707
 SPECIAL EDUC,GIFTEO,HANDICAPPEO,ETC 263
 AUDIO-VISUAL MEDIA 111
 AGRICULTURE 47
 ART 62
 BUSINESS 105
 ENGLISH 75
 FOREIGN LANGUAGE 39
 HOME ECONOMICS 46
 INDUSTRIAL ARTS 81
 MATHEMATICS 131
 MUSIC 131
 PHYS ED, HEALTH, AND REC 380
 SCIENCE EDUCATION 188
 SOCIAL SCIENCE EDUCATION 65
 VOCATIONAL EDUCATION 86
 OTHER TEACHING FIELDS 122
 EDUCATION,GENERAL 207
 EDUCATION,OTHER 251

OTHER AND UNSPECIFIED 170

SOURCE: NRC, Office of Scientific Personnel, Doctorate Records File

TABLE 2
STATISTICAL PROFILE OF FY 1971 DOCTORATE RECIPIENTS, BY FIELD OF DOCTORATE

| | FY 1971 TOTAL | PHYSICS AND ASTRONOMY | CHEMISTRY | EARTH SCIENCES | PHYSICAL SCIENCES | MATHEMATICS | ENGINEERING | EMP FIELDS | BIOCHEMISTRY | BIOLOGICAL SCIENCES | AGRICULTURAL SCIENCES | MEDICAL SCIENCES |
|--|------------------|--------------------------|-----------|----------------|----------------------|-------------|-------------|------------|--------------|------------------------|--------------------------|---------------------|
| NUMBER IN FIELD | 31772 | 1740 | 2204 | 550 | 4494 | 1236 | 3495 | 9225 | 653 | 2738 | 1069 | 591 |
| MALE % | 85.5 | 96.7 | 92.1 | 97.4 | 94.5 | 92.2 | 99.5 | 96.1 | 81.6 | 82.4 | 97.1 | 85.9 |
| FEMALE % | 14.4 | 3.2 | 7.8 | 2.5 | 5.4 | 7.7 | .4 | 3.8 | 18.3 | 17.5 | 2.9 | 14.0 |
| U.S. CITIZENS % | 83.7 | 79.0 | 83.3 | 84.1 | 81.7 | 81.4 | 69.1 | 76.9 | 78.4 | 85.1 | 64.6 | 77.3 |
| FOREIGN CITIZENS % | 14.4 | 18.3 | 15.7 | 15.4 | 16.6 | 17.6 | 29.8 | 21.8 | 19.7 | 12.8 | 34.9 | 17.7 |
| UNKNOWN % | 1.8 | 2.6 | 1.0 | .3 | 1.5 | .8 | 1.0 | 1.2 | 1.8 | 2.0 | .3 | 4.9 |
| MARRIED % | 75.4 | 71.7 | 71.8 | 82.0 | 73.0 | 71.8 | 78.0 | 74.7 | 70.6 | 74.9 | 83.2 | 77.5 |
| NOT MARRIED % | 21.0 | 23.9 | 25.2 | 16.5 | 23.7 | 25.9 | 19.2 | 22.3 | 25.4 | 21.6 | 14.1 | 16.2 |
| UNKNOWN % | 3.5 | 4.2 | 2.9 | 1.4 | 3.2 | 2.1 | 2.7 | 2.9 | 3.9 | 3.4 | 2.6 | 6.2 |
| AGE AT DOCTORATE | | | | | | | | | | | | |
| Q1 YRS | 27.8 | 27.3 | 26.8 | 28.2 | 27.1 | 26.8 | 27.8 | 27.2 | 27.0 | 27.6 | 28.4 | 28.3 |
| Q2 YRS | 30.1 | 28.7 | 27.9 | 30.5 | 28.4 | 28.4 | 29.8 | 28.8 | 28.3 | 29.3 | 30.8 | 30.7 |
| Q3 YRS | 34.6 | 30.9 | 29.8 | 34.1 | 30.8 | 31.2 | 33.2 | 31.8 | 30.3 | 32.4 | 35.2 | 35.6 |
| PERCENT WITH BACC IN SAME FIELD AS DOCT | 61.8 | 77.0 | 86.1 | 57.4 | 79.1 | 74.3 | 86.3 | 81.2 | 7.9 | 64.2 | 70.5 | 30.6 |
| PERCENT WITH MASTER'S | 79.3 | 64.4 | 36.6 | 74.3 | 52.0 | 79.2 | 89.3 | 69.8 | 34.1 | 66.6 | 90.7 | 61.5 |
| MEDIAN TIME LAPSE FROM BACC TO DOCT | | | | | | | | | | | | |
| TOTAL TIME YRS | 7.3 | 6.7 | 5.7 | 7.8 | 6.2 | 6.2 | 7.2 | 6.6 | 5.9 | 6.7 | 7.8 | 7.3 |
| REGISTERED TIME YRS | 5.6 | 6.0 | 5.0 | 5.9 | 5.4 | 5.4 | 5.3 | 5.4 | 5.2 | 5.5 | 5.3 | 5.5 |
| POSTDOCTORAL STUDY % | | | | | | | | | | | | |
| FELLOWSHIP | 7.6 | 12.8 | 21.6 | 8.7 | 16.6 | 3.4 | 4.5 | 10.3 | 43.6 | 26.1 | 4.0 | 16.9 |
| TRAINEESHIP | .6 | .2 | .8 | .1 | .5 | .1 | .2 | .3 | 2.9 | 2.1 | .8 | 2.2 |
| OTHER | 6.7 | 25.6 | 20.7 | 11.2 | 21.5 | 3.6 | 6.3 | 13.3 | 22.8 | 12.6 | 8.3 | 7.9 |
| POSTDOCTORAL EMPLOYMENT % | | | | | | | | | | | | |
| EDUC INSTITUTION | 55.7 | 24.2 | 17.4 | 37.8 | 22.5 | 73.1 | 27.6 | 31.2 | 10.4 | 37.6 | 46.9 | 36.7 |
| INDUSTRY/BUSINESS | 9.2 | 12.8 | 24.8 | 16.9 | 19.2 | 7.2 | 37.0 | 24.4 | 5.9 | 3.3 | 10.4 | 10.3 |
| GOVERNMENT | 7.3 | 7.9 | 4.5 | 14.7 | 7.1 | 3.5 | 11.9 | 8.4 | 3.3 | 7.2 | 14.5 | 8.6 |
| NONPROFIT | 2.4 | 1.4 | 1.1 | 1.2 | 1.2 | .8 | 2.0 | 1.5 | 1.3 | 1.2 | 1.2 | 3.0 |
| OTHER & UNKN | 3.9 | 5.1 | 2.7 | 5.6 | 4.0 | 2.1 | 5.7 | 4.4 | 1.8 | 3.3 | 10.0 | 4.5 |
| POSTDOCT STATUS UNKN % | 6.1 | 9.5 | 6.0 | 3.4 | 7.0 | 5.7 | 4.5 | 5.9 | 7.6 | 6.2 | 3.6 | 9.6 |
| POSTDOCT WORK ACTIVITY % | | | | | | | | | | | | |
| R & O | 23.5 | 49.6 | 57.6 | 40.9 | 51.7 | 22.6 | 59.0 | 50.2 | 57.3 | 33.4 | 51.9 | 42.5 |
| TEACHING | 54.0 | 36.7 | 30.8 | 41.9 | 34.8 | 70.7 | 25.8 | 36.7 | 30.0 | 53.2 | 28.4 | 39.3 |
| ADMINISTRATION | 9.4 | 1.7 | 1.6 | 2.8 | 1.9 | .9 | 2.2 | 1.9 | 1.3 | 2.5 | 3.7 | 5.3 |
| PROF. SERVICES | 6.5 | 2.1 | 1.8 | 4.5 | 2.4 | 1.9 | 4.9 | 3.5 | 7.3 | 3.2 | 4.3 | 6.6 |
| OTHER | 1.5 | 1.6 | 2.0 | 5.2 | 2.4 | .7 | 2.2 | 2.0 | .6 | 1.3 | 3.6 | 1.0 |
| ACTIVITY UNKNOWN | 4.9 | 8.1 | 5.9 | 4.5 | 6.5 | 2.9 | 5.6 | 5.5 | 3.3 | 6.0 | 7.8 | 5.0 |
| POSTDOCT REGION OF EMPLOYMENT % | | | | | | | | | | | | |
| NEW ENGLAND | 5.3 | 7.0 | 5.4 | 5.7 | 6.0 | 6.4 | 4.6 | 5.4 | 4.0 | 4.2 | 2.7 | 4.5 |
| MIDDLE ATLANTIC | 13.5 | 14.3 | 19.0 | 10.0 | 15.7 | 13.4 | 14.4 | 14.7 | 22.6 | 9.7 | 3.6 | 12.5 |
| EAST NO CENTRAL | 14.9 | 10.0 | 17.2 | 7.1 | 12.8 | 13.9 | 12.5 | 12.8 | 17.3 | 10.9 | 9.9 | 12.3 |
| WEST NO CENTRAL | 6.1 | 2.5 | 4.0 | 3.3 | 3.3 | 5.6 | 3.5 | 3.8 | 4.6 | 6.2 | 7.5 | 8.5 |
| SOUTH ATLANTIC | 11.9 | 12.9 | 12.2 | 9.5 | 12.0 | 10.8 | 10.2 | 11.0 | 11.3 | 15.0 | 10.6 | 15.5 |
| EAST SO CENTRAL | 4.1 | 3.8 | 4.2 | 2.3 | 3.8 | 4.3 | 3.4 | 3.7 | 1.3 | 4.1 | 4.9 | 2.9 |
| WEST SO CENTRAL | 6.0 | 5.4 | 4.8 | 10.9 | 6.1 | 6.9 | 6.2 | 6.3 | 3.3 | 6.7 | 6.5 | 5.3 |
| MOUNTAIN | 4.6 | 4.5 | 2.2 | 10.7 | 4.5 | 4.4 | 5.0 | 4.7 | 2.6 | 3.5 | 4.2 | 2.4 |
| PACIFIC & INSULAR | 10.3 | 8.6 | 5.9 | 17.6 | 8.9 | 9.2 | 11.4 | 10.1 | 8.0 | 11.0 | 7.7 | 9.0 |
| FOREIGN | 7.7 | 8.7 | 6.1 | 10.0 | 7.7 | 6.4 | 9.1 | 8.2 | 12.6 | 9.3 | 24.1 | 9.3 |
| REGION UNKNOWN | 15.1 | 21.8 | 18.5 | 12.6 | 18.7 | 18.1 | 19.4 | 18.9 | 12.0 | 19.1 | 17.8 | 17.3 |

*Refer to explanatory notes on page 4.

TABLE 2. CONTINUED

| LIFE SCIENCES | PSYCHOLOGY | ECONOMICS | ANTHROPOLOGY & SOCIOLOGY | POLIT SCI, PUBLIC ADMIN | OTHER SOCIAL SCIENCES | SOCIAL SCIENCES | HISTORY | ENG AND AMER LANG & LIT | FOREIGN LANG & LIT | OTHER ARTS & HUMANITIES | ARTS & HUMANITIES | PROFESSIONAL FIELDS | EDUCATION | OTHER OR UNSPECIFIED |
|---------------|------------|-----------|--------------------------|-------------------------|-----------------------|-----------------|---------|-------------------------|--------------------|-------------------------|-------------------|---------------------|-----------|----------------------|
| 5051 | 2116 | 791 | 823 | 676 | 749 | 5155 | 1064 | 1243 | 1004 | 1055 | 4366 | 1402 | 6403 | 170 |
| 85.8 | 75.1 | 93.1 | 78.3 | 87.7 | 89.8 | 82.2 | 87.2 | 69.1 | 65.5 | 81.5 | 75.7 | 87.5 | 79.0 | 87.0 |
| 14.1 | 24.8 | 6.8 | 21.6 | 12.2 | 10.1 | 17.7 | 12.7 | 30.8 | 34.4 | 18.4 | 24.2 | 12.4 | 20.9 | 12.9 |
| 78.9 | 93.1 | 72.5 | 83.9 | 86.3 | 78.9 | 85.5 | 90.7 | 93.4 | 80.6 | 89.6 | 88.9 | 84.2 | 93.7 | 28.2 |
| 18.9 | 5.7 | 25.5 | 13.8 | 10.9 | 19.7 | 12.7 | 7.9 | 5.4 | 17.4 | 7.8 | 9.4 | 13.5 | 5.4 | 2.3 |
| 2.0 | 1.0 | 1.9 | 2.1 | 2.6 | 1.3 | 1.6 | 1.2 | 1.0 | 1.8 | 2.4 | 1.6 | 2.2 | .8 | 39.4 |
| 76.4 | 73.7 | 76.6 | 74.6 | 73.9 | 76.9 | 74.8 | 71.5 | 71.7 | 68.7 | 69.0 | 70.3 | 75.7 | 80.8 | 19.4 |
| 19.9 | 23.1 | 19.3 | 21.0 | 19.8 | 19.8 | 21.3 | 25.0 | 25.3 | 27.8 | 26.0 | 26.0 | 19.7 | 16.9 | 7.0 |
| 3.6 | 3.0 | 4.0 | 4.3 | 6.2 | 3.2 | 3.8 | 3.3 | 2.9 | 3.3 | 4.9 | 3.6 | 4.4 | 2.2 | 73.5 |
| 27.7 | 27.1 | 27.8 | 28.6 | 28.3 | 28.7 | 27.8 | 28.6 | 28.2 | 29.2 | 28.8 | 28.7 | 29.7 | 31.8 | 28.5 |
| 29.6 | 28.8 | 30.1 | 31.4 | 30.9 | 31.9 | 30.1 | 31.2 | 31.3 | 32.5 | 32.4 | 31.8 | 33.9 | 36.8 | 32.2 |
| 32.9 | 32.8 | 34.2 | 36.3 | 35.0 | 36.5 | 34.7 | 35.8 | 36.1 | 38.8 | 37.8 | 37.0 | 40.0 | 42.6 | 37.7 |
| 54.3 | 68.9 | 59.0 | 52.0 | 56.5 | 23.6 | 56.5 | 66.9 | 77.2 | 57.2 | 57.0 | 65.2 | 40.2 | 46.1 | 77.0 |
| 66.9 | 75.7 | 74.4 | 83.9 | 84.6 | 89.4 | 80.0 | 90.8 | 89.3 | 83.0 | 82.3 | 86.6 | 89.8 | 96.5 | 27.0 |
| 6.8 | 6.2 | 7.2 | 8.2 | 8.2 | 8.8 | 7.2 | 8.6 | 8.6 | 9.0 | 9.5 | 9.0 | 10.5 | 12.8 | 8.3 |
| 5.4 | 5.2 | 5.3 | 6.0 | 5.8 | 5.8 | 5.5 | 6.2 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.2 | 6.0 |
| 22.6 | 7.9 | .8 | 2.0 | 1.9 | 1.4 | 4.2 | 1.8 | .6 | 1.5 | 1.7 | 1.4 | .5 | .7 | .0 |
| 1.9 | 2.0 | .1 | .0 | .3 | .4 | .9 | .0 | .3 | .1 | .0 | .1 | .2 | .2 | .5 |
| 12.5 | 4.0 | 1.6 | 1.8 | 1.3 | 1.4 | 2.6 | 1.2 | .8 | 2.3 | 1.7 | 1.4 | 1.2 | 1.0 | 1.1 |
| 35.9 | 50.6 | 68.0 | 79.1 | 75.1 | 69.9 | 63.8 | 82.9 | 86.1 | 81.5 | 80.5 | 82.9 | 72.1 | 79.1 | 16.4 |
| 6.0 | 3.9 | 4.0 | 1.2 | 1.7 | 4.1 | 3.2 | .5 | 1.1 | .9 | 2.2 | 1.2 | 4.9 | 1.2 | 3.5 |
| 8.4 | 15.1 | 11.0 | 3.0 | 4.1 | 9.8 | 10.3 | 2.6 | .3 | 1.3 | .4 | 1.1 | 6.4 | 6.7 | 2.3 |
| 1.4 | 7.5 | 3.1 | 2.5 | 2.5 | 2.5 | 4.6 | 1.7 | .2 | 1.2 | 2.6 | 1.4 | 5.9 | 2.8 | .5 |
| 4.7 | 3.3 | 4.6 | 3.8 | 4.4 | 4.0 | 3.8 | 2.0 | 2.3 | 2.6 | 1.2 | 2.0 | 2.9 | 4.3 | .5 |
| 6.2 | 5.2 | 6.4 | 6.3 | 8.4 | 6.1 | 6.1 | 6.7 | 8.0 | 8.1 | 9.2 | 8.0 | 5.5 | 3.5 | 74.7 |
| 41.7 | 18.2 | 25.5 | 16.6 | 8.4 | 14.1 | 17.2 | 3.9 | .8 | 3.5 | 2.9 | 2.7 | 7.8 | 7.5 | 22.5 |
| 42.4 | 42.0 | 64.5 | 74.5 | 76.9 | 68.1 | 59.7 | 86.0 | 91.6 | 89.4 | 87.9 | 88.8 | 70.1 | 48.1 | 60.0 |
| 3.2 | 3.6 | 3.2 | 2.0 | 6.8 | 6.6 | 4.1 | 3.0 | 1.6 | .7 | 2.9 | 2.0 | 8.8 | 29.0 | 5.0 |
| 4.2 | 31.8 | 1.5 | .9 | 1.3 | 3.5 | 13.3 | .5 | .3 | .4 | 2.1 | .8 | 7.8 | 9.0 | 7.5 |
| 1.9 | 1.1 | 1.1 | .9 | 1.3 | 3.1 | 1.4 | 1.6 | .7 | .9 | 1.7 | 1.2 | 1.9 | .9 | 2.5 |
| 6.3 | 3.0 | 4.0 | 4.8 | 5.0 | 4.4 | 3.9 | 4.0 | 4.8 | 4.8 | 2.2 | 4.2 | 3.4 | 5.3 | 2.5 |
| 3.7 | 6.7 | 5.8 | 6.0 | 5.8 | 4.7 | 6.0 | 7.5 | 8.3 | 7.7 | 8.2 | 7.9 | 4.7 | 3.8 | 10.0 |
| 8.8 | 16.8 | 13.3 | 14.6 | 15.1 | 12.8 | 15.0 | 14.3 | 16.3 | 14.1 | 14.1 | 14.8 | 10.7 | 13.0 | 20.0 |
| 11.1 | 15.3 | 11.8 | 16.6 | 14.7 | 14.6 | 14.8 | 14.6 | 16.7 | 15.6 | 18.8 | 16.4 | 18.1 | 17.3 | 15.0 |
| 6.8 | 5.2 | 5.1 | 7.1 | 6.7 | 4.8 | 5.7 | 6.0 | 5.9 | 5.5 | 6.6 | 6.2 | 6.1 | 8.5 | 7.5 |
| 13.5 | 11.6 | 18.7 | 8.1 | 11.2 | 14.4 | 12.5 | 12.8 | 9.9 | 8.7 | 9.7 | 10.3 | 14.3 | 12.2 | 10.0 |
| 4.0 | 3.0 | 3.4 | 5.2 | 3.8 | 3.1 | 3.6 | 4.4 | 6.0 | 2.6 | 3.4 | 4.2 | 4.7 | 4.9 | 2.5 |
| 6.3 | 5.6 | 5.4 | 4.7 | 6.5 | 4.2 | 5.3 | 6.5 | 4.4 | 4.2 | 5.5 | 5.1 | 7.4 | 6.7 | 7.5 |
| 3.5 | 3.5 | 4.0 | 5.1 | 3.7 | 5.3 | 4.1 | 3.6 | 3.5 | 3.1 | 4.3 | 3.6 | 5.0 | 5.3 | .0 |
| 9.5 | 12.0 | 8.4 | 12.8 | 12.2 | 12.6 | 11.7 | 8.7 | 10.0 | 13.0 | 9.8 | 10.3 | 10.8 | 9.8 | 12.5 |
| 14.1 | 5.1 | 15.8 | 10.4 | 7.5 | 9.7 | 8.7 | 6.8 | 5.8 | 8.4 | 5.5 | 6.6 | 8.8 | 3.8 | 2.5 |
| 18.1 | 14.6 | 7.7 | 8.9 | 12.2 | 13.4 | 12.0 | 14.3 | 12.5 | 15.6 | 13.5 | 13.9 | 8.9 | 14.2 | 12.5 |

SOURCE: NRC, Office of Scientific Personnel, Doctorate Records File

TABLE 3
PERCENTAGE OF FY 1971 DOCTORATE RECIPIENTS BY SOURCES OF SUPPORT IN GRAUATE SCHOOL BY SUMMARY FIELDS

| SOURCES OF SUPPORT IN GRAUATE SCHOOL | | DOCTORATE RECIPIENTS BY FIELD | | | | | | TOTAL | |
|--------------------------------------|----|-------------------------------|--------------|---------------|-----------------|---------------------|--------------|-------|------------|
| | | PHYSICAL SCIENCES | ENGI-NEERING | LIFE SCIENCES | SOCIAL SCIENCES | ARTS AND HUMANITIES | PROF. FIELDS | | EOUCA-TION |
| NSF FELLOWSHIP | N | 693 | 259 | 285 | 231 | 33 | 9 | 284 | 1794 |
| | V% | 12.5 | 7.6 | 5.9 | 4.7 | .8 | .7 | 4.6 | 5.9 |
| | H% | 38.6 | 14.4 | 15.9 | 12.9 | 1.8 | .5 | 15.8 | 99.9 |
| NSF TRAINEESHIP | N | 710 | 437 | 307 | 178 | 10 | 3 | 24 | 1669 |
| | V% | 12.8 | 12.9 | 6.4 | 3.6 | .2 | .2 | .4 | 5.5 |
| | H% | 42.5 | 26.2 | 18.4 | 10.7 | .6 | .2 | 1.4 | 100.0 |
| NIH FELLOWSHIP | N | 220 | 41 | 545 | 464 | 3 | 57 | 34 | 1364 |
| | V% | 4.0 | 1.2 | 11.3 | 9.5 | .1 | 4.3 | .6 | 4.5 |
| | H% | 16.1 | 3.0 | 40.0 | 34.0 | .2 | 4.2 | 2.5 | 100.0 |
| NIH TRAINEESHIP | N | 109 | 63 | 1126 | 425 | 8 | 42 | 28 | 1801 |
| | V% | 2.0 | 1.9 | 23.3 | 8.7 | .2 | 3.2 | .5 | 6.0 |
| | H% | 6.1 | 3.5 | 62.5 | 23.6 | .4 | 2.3 | 1.6 | 100.0 |
| AEC FELLOWSHIP | N | 82 | 64 | 42 | 5 | | | 2 | 195 |
| | V% | 1.5 | 1.9 | .9 | .1 | | .0 | .0 | .6 |
| | H% | 42.1 | 32.8 | 21.5 | 2.6 | .0 | .0 | 1.0 | 100.0 |
| NASA TRAINEESHIP | N | 453 | 299 | 99 | 42 | 3 | 1 | 3 | 900 |
| | V% | 8.2 | 8.8 | 2.0 | .9 | .1 | .1 | .0 | 3.0 |
| | H% | 50.3 | 33.2 | 11.0 | 4.7 | .3 | .1 | .3 | 99.9 |
| NOEA FELLOWSHIP | N | 643 | 307 | 443 | 683 | 836 | 116 | 801 | 3829 |
| | V% | 11.6 | 9.1 | 9.2 | 13.9 | 20.4 | 8.7 | 13.1 | 12.7 |
| | H% | 16.8 | 8.0 | 11.6 | 17.8 | 21.8 | 3.0 | 20.9 | 99.9 |
| GI BILL | N | 238 | 199 | 293 | 432 | 403 | 137 | 996 | 2698 |
| | V% | 4.3 | 5.9 | 6.1 | 8.8 | 9.8 | 10.3 | 16.2 | 8.9 |
| | H% | 8.8 | 7.4 | 10.9 | 16.0 | 14.9 | 5.1 | 36.9 | 100.0 |
| OTHER FEDERAL SUPPORT | N | 367 | 335 | 473 | 723 | 243 | 234 | 713 | 3088 |
| | V% | 6.6 | 9.9 | 9.8 | 14.7 | 5.9 | 17.6 | 11.6 | 10.2 |
| | H% | 11.9 | 10.8 | 15.3 | 23.4 | 7.9 | 7.6 | 23.1 | 100.0 |
| UNIVERSITY FELLOWSHIP | N | 959 | 554 | 574 | 1121 | 1545 | 312 | 683 | 5748 |
| | V% | 17.3 | 16.3 | 11.9 | 22.9 | 37.8 | 23.5 | 11.1 | 19.0 |
| | H% | 16.7 | 9.6 | 10.0 | 19.5 | 26.9 | 5.4 | 11.9 | 100.0 |
| WOODROW WILSON FELLOWSHIP | N | 69 | 2 | 14 | 154 | 360 | 13 | 9 | 621 |
| | V% | 1.2 | .1 | .3 | 3.1 | 8.8 | 1.0 | .1 | 2.1 |
| | H% | 11.1 | .3 | 2.3 | 24.8 | 58.0 | 2.1 | 1.4 | 100.0 |
| OTHER NATIONAL FELLOWSHIP | N | 94 | 66 | 105 | 246 | 261 | 63 | 160 | 995 |
| | V% | 1.7 | 1.9 | 2.2 | 5.0 | 6.4 | 4.7 | 2.6 | 3.3 |
| | H% | 9.4 | 6.6 | 10.6 | 24.7 | 26.2 | 6.3 | 16.1 | 99.9 |
| TEACHING ASSISTANTSHIP | N | 3663 | 1272 | 1788 | 2525 | 2519 | 558 | 2007 | 14332 |
| | V% | 66.3 | 37.5 | 37.0 | 51.5 | 61.6 | 42.0 | 32.7 | 47.5 |
| | H% | 25.6 | 8.9 | 12.5 | 17.6 | 17.6 | 3.9 | 14.0 | 100.1 |
| RESEARCH ASSISTANTSHIP | N | 3123 | 1877 | 2077 | 1872 | 428 | 274 | 1208 | 10859 |
| | V% | 56.5 | 55.4 | 43.0 | 38.2 | 10.5 | 20.6 | 19.7 | 36.0 |
| | H% | 28.8 | 17.3 | 19.1 | 17.2 | 3.9 | 2.5 | 11.1 | 99.9 |
| EOUC. FUNDS OF INDUSTRY | N | 352 | 374 | 93 | 110 | 63 | 85 | 148 | 1225 |
| | V% | 6.4 | 11.0 | 1.9 | 2.2 | 1.5 | 6.4 | 2.4 | 4.1 |
| | H% | 28.7 | 30.5 | 7.6 | 9.0 | 5.1 | 6.9 | 12.1 | 99.9 |
| OTHER INSTITU-TION FUNDS | N | 306 | 239 | 334 | 678 | 553 | 208 | 672 | 2990 |
| | V% | 5.5 | 7.1 | 6.9 | 13.8 | 13.5 | 15.7 | 11.0 | 9.9 |
| | H% | 10.2 | 8.0 | 11.2 | 22.7 | 18.5 | 7.0 | 22.5 | 100.1 |
| OWN EARNINGS | N | 1005 | 888 | 976 | 1928 | 1781 | 667 | 3757 | 11002 |
| | V% | 18.2 | 26.2 | 20.2 | 39.3 | 43.5 | 50.2 | 61.3 | 36.4 |
| | H% | 9.1 | 8.1 | 8.9 | 17.5 | 16.2 | 6.1 | 34.1 | 100.0 |
| SPOUSE'S EARNINGS | N | 696 | 384 | 717 | 1084 | 1089 | 300 | 1545 | 5815 |
| | V% | 12.6 | 11.3 | 14.8 | 22.1 | 26.6 | 22.6 | 25.2 | 19.3 |
| | H% | 12.0 | 6.6 | 12.3 | 18.6 | 18.7 | 5.2 | 26.6 | 100.0 |
| FAMILY CONTRI-BUTIONS | N | 218 | 163 | 213 | 463 | 546 | 109 | 359 | 2071 |
| | V% | 3.9 | 4.8 | 4.4 | 9.4 | 13.3 | 8.2 | 5.9 | 6.9 |
| | H% | 10.5 | 7.9 | 10.3 | 22.4 | 26.4 | 5.3 | 17.3 | 100.1 |
| BORROWINGS | N | 335 | 248 | 337 | 638 | 749 | 230 | 1104 | 3641 |
| | V% | 6.1 | 7.3 | 7.0 | 13.0 | 18.3 | 17.3 | 18.0 | 12.1 |
| | H% | 9.2 | 6.8 | 9.3 | 17.5 | 20.6 | 6.3 | 30.3 | 100.0 |
| OTHER | N | 216 | 193 | 242 | 360 | 293 | 144 | 450 | 1898 |
| | V% | 3.9 | 5.7 | 5.0 | 7.3 | 7.2 | 10.8 | 7.3 | 6.3 |
| | H% | 11.4 | 10.2 | 12.8 | 19.0 | 15.4 | 7.6 | 23.7 | 100.1 |
| UNOPLICATED TOTAL | N | 5528 | 3389 | 4830 | 4904 | 4092 | 1329 | 6131 | 30203 |

Refer to explanatory note on page 5.

SOURCE: NRC, Office of Scientific Personnel, Doctorate Records File

TABLE 4
NUMBER OF FY 1971 DOCTORATE RECIPIENTS BY STATE AND SUMMARY FIELD AND NUMBER OF INSTITUTIONS

| STATE OF DOCTORAL INSTITUTION | NUMBER OF DOCTORATE RECIPIENTS BY FIELD | | | | | | | | TOTAL | NO. OF DOCT. INST. |
|-------------------------------|---|--------------|---------------|-----------------|---------------------|--------------|------------|-----------------|-------|--------------------|
| | PHYSICAL SCIENCES | ENGI-NEERING | LIFE SCIENCES | SOCIAL SCIENCES | ARTS AND HUMANITIES | PROF. FIELDS | EDUCA-TION | OTHER & UNSPEC. | | |
| U.S. TOTAL | 5730 | 3495 | 5051 | 5155 | 4366 | 1402 | 6403 | 170 | 31772 | 234 |
| ALABAMA | 41 | 18 | 43 | 29 | 12 | 18 | 94 | | 255 | 2 |
| ALASKA | 11 | | 1 | | | | | | 12 | 1 |
| ARIZONA | 73 | 58 | 46 | 58 | 20 | 18 | 111 | | 384 | 2 |
| ARKANSAS | 12 | 8 | 16 | 11 | 11 | 13 | 44 | | 115 | 1 |
| CALIFORNIA | 645 | 497 | 519 | 532 | 421 | 144 | 443 | 119 | 3320 | 21 |
| COLORADO | 101 | 71 | 74 | 96 | 69 | 21 | 213 | | 645 | 5 |
| CONNECTICUT | 109 | 42 | 68 | 75 | 151 | 24 | 45 | 1 | 515 | 3 |
| DELAWARE | 24 | 15 | 16 | 8 | 9 | | 3 | | 75 | 1 |
| DIST. OF COL. | 93 | 23 | 50 | 132 | 91 | 72 | 101 | | 562 | 5 |
| FLORIDA | 110 | 44 | 88 | 112 | 61 | 25 | 221 | | 661 | 4 |
| GEORGIA | 62 | 48 | 65 | 71 | 46 | 40 | 113 | 2 | 447 | 6 |
| HAWAII | 16 | 4 | 31 | 20 | 7 | | | | 78 | 1 |
| IDAHO | 11 | 5 | 9 | 5 | 1 | | 26 | | 57 | 1 |
| ILLINOIS | 361 | 234 | 298 | 394 | 298 | 127 | 325 | | 2037 | 9 |
| INDIANA | 187 | 134 | 226 | 166 | 185 | 60 | 366 | 3 | 1327 | 5 |
| IOWA | 137 | 73 | 173 | 75 | 86 | 22 | 133 | 1 | 700 | 2 |
| KANSAS | 68 | 34 | 98 | 55 | 44 | 14 | 56 | | 369 | 2 |
| KENTUCKY | 35 | 10 | 43 | 27 | 20 | 1 | 23 | | 159 | 2 |
| LOUISIANA | 67 | 22 | 82 | 60 | 62 | 24 | 44 | 1 | 362 | 3 |
| MAINE | 3 | | 6 | 3 | 4 | | 9 | | 25 | 1 |
| MARYLAND | 111 | 65 | 108 | 87 | 76 | 3 | 104 | 1 | 555 | 2 |
| MASSACHUSETTS | 416 | 215 | 208 | 326 | 277 | 104 | 253 | | 1799 | 13 |
| MICHIGAN | 247 | 129 | 282 | 307 | 212 | 89 | 493 | 2 | 1761 | 6 |
| MINNESOTA | 61 | 80 | 123 | 141 | 91 | 23 | 92 | | 611 | 1 |
| MISSISSIPPI | 10 | 9 | 53 | 37 | 14 | 9 | 93 | | 225 | 3 |
| MISSOURI | 103 | 73 | 110 | 112 | 90 | 38 | 118 | | 644 | 5 |
| MONTANA | 17 | 11 | 23 | 5 | | | 20 | | 76 | 2 |
| NEBRASKA | 36 | 5 | 26 | 31 | 37 | 7 | 81 | | 223 | 2 |
| NEVADA | 10 | | 1 | 5 | 3 | | | | 19 | 1 |
| NEW HAMPSHIRE | 20 | 6 | 25 | 3 | | | | | 54 | 2 |
| NEW JERSEY | 138 | 94 | 63 | 70 | 111 | 14 | 51 | 1 | 542 | 6 |
| NEW MEXICO | 48 | 29 | 7 | 11 | 33 | | 54 | | 182 | 3 |
| NEW YORK | 641 | 340 | 418 | 641 | 566 | 126 | 617 | 13 | 3362 | 30 |
| NORTH CAROLINA | 76 | 66 | 194 | 154 | 121 | 24 | 88 | | 723 | 5 |
| NORTH DAKOTA | 27 | | 34 | 9 | | | 49 | | 119 | 2 |
| OHIO | 236 | 165 | 157 | 194 | 201 | 76 | 374 | 6 | 1409 | 10 |
| OKLAHOMA | 34 | 76 | 103 | 46 | 27 | 18 | 156 | | 460 | 3 |
| OREGON | 73 | 17 | 123 | 111 | 41 | 26 | 165 | 4 | 560 | 3 |
| PENNSYLVANIA | 341 | 233 | 179 | 244 | 212 | 76 | 347 | 10 | 1642 | 16 |
| RHODE ISLAND | 70 | 25 | 39 | 22 | 50 | 1 | | | 207 | 3 |
| SOUTH CAROLINA | 33 | 19 | 17 | 17 | 18 | 4 | 16 | | 124 | 3 |
| SOUTH DAKOTA | 4 | 1 | 15 | 12 | | | 18 | | 50 | 3 |
| TENNESSEE | 74 | 50 | 80 | 95 | 55 | 11 | 113 | | 478 | 4 |
| TEXAS | 256 | 193 | 220 | 180 | 138 | 56 | 268 | 3 | 1314 | 12 |
| UTAH | 66 | 33 | 69 | 58 | 35 | 5 | 127 | | 393 | 3 |
| VERMONT | 10 | 1 | 9 | 4 | 4 | | | | 28 | 2 |
| VIRGINIA | 72 | 59 | 79 | 40 | 54 | 2 | 61 | | 367 | 4 |
| WASHINGTON | 108 | 72 | 109 | 106 | 93 | 19 | 67 | | 574 | 2 |
| WEST VIRGINIA | 10 | 14 | 30 | 12 | 6 | | 29 | | 101 | 1 |
| WISCONSIN | 188 | 71 | 176 | 140 | 197 | 48 | 147 | 3 | 970 | 3 |
| WYOMING | 27 | 4 | 19 | 6 | 1 | | 32 | | 89 | 1 |
| PUERTO RICO | 1 | | | | 5 | | | | 6 | 1 |

Refer to explanatory note on page 5.

SOURCE: NRC, Office of Scientific Personnel, Doctorate Records File

SURVEY OF EARNED DOCTORATES

Please Do Not Write
in This Space

This form is to be returned
to the GRADUATE DEAN, for forwarding to Manpower Studies Branch, Office of Scientific Personnel,
National Research Council, 2101 Constitution Avenue
Washington, D. C. 20418

Please print or type.

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A. Name in full: (9-30)
(Last Name) (First Name) (Middle Name)
B. U.S. Social Security Number: CR () Cross Reference:
(32-40) Maiden name or former name legally changed
C. Permanent address through which you could always be reached: (Care of, if applicable)
(Number) (Street) (City) (State) (Or Country if not U.S.) (Zip Code)
D. Date of birth: Place of birth: (48)
(41-45) (Month) (Day) (Year) (46-47) (State) (Or Country if not U.S.)
E. Sex: 1 Male 2 Female (49)
F. Marital status: 1 Married 2 Not married (including widowed, divorced)
G. Citizenship: 0 U.S. native (11) U.S. naturalized (50)
1 Non-U.S., Immigrant (Permanent Resident) 3 Non-U.S., Non-immigrant (Temporary Resident)
If Non-U.S., indicate country of present citizenship (51-52)
H. Number of dependents: Do not include yourself. (Dependent = someone related to you and receiving
at least one half of his support from you). (53)

EDUCATION

I. High school last attended: (54-59)
(School Name) (City) (State)
Approximate size of graduating class: (60-63)
Type of school: 0 Public 1 Private, denominational 2 Private, non-denominational (64)
Year of graduation from high school: (65-66)

J. List in the table below all collegiate and graduate institutions you have attended including 2-year colleges. List chronologically, and include your doctoral institution as the last entry.

| Institution Name | Location | Years Attended | | Major Field | | Minor Field | Degree (if any) | | |
|------------------|----------|----------------|----|-------------|--------|-------------|-----------------|-----|-----|
| | | From | To | Name | Number | Number | Type of Degree | Mo. | Yr. |
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K. Enter below the title of your doctoral dissertation and the most appropriate classification number and field, selected from the accompanying Specialties List.
Title: Classify using Specialties List
..... Number Name of field
..... (62-64)

L. Name the department (or interdisciplinary committee, center, institute, etc.) of the university which supervised your doctoral program: (65-70)

M. Name of your thesis adviser: (please print) (12-29)
(Last Name) (First Name) (Middle Initial)

continued on next page

SURVEY OF EARNED DOCTORATES, Cont.

N. In the space in front of each source of support, indicate the approximate number of semesters you were supported by each of the listed sources during graduate school.

- | | | | |
|-----------------------|---|--|---------------------------|
| 30 — NSF Fellowship | 37 — Other Federal support | 42 — Teaching Assistantship | 46 — Own earnings |
| 31 — NSF Traineeship | (specify) | 43 — Research Assistantship | 47 — Spouse's earnings |
| 32 — NIH Fellowship | 38 — Woodrow Wilson Fellowship | 44 — Educational fund of industrial or business firm | 48 — Family contributions |
| 33 — NIH Traineeship | 39 — Other U.S. national fellowship (specify) | 45 — Other institutional funds (specify) | 49 — Loans |
| 34 — AEC Fellowship | 40 — GI Bill | | 50 — Other (specify) |
| 35 — NASA Traineeship | 41 — University fellowship | | |
| 36 — NDEA Fellowship | | | |

| | | |
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| 39 | 40 | 41 |
| _____ () | _____ () | _____ () |
| 42 | 43 | 44 |
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| 45 | 46 | 47 |
| _____ () | _____ () | _____ () |
| 48 | 49 | 50 |

O. Please check the space which most fully describes your status during the year immediately preceding the doctorate.

- | | | |
|--|---|--|
| 0 <input type="checkbox"/> Held fellowship | Full-time Employed in: (Other than 0, 1, 2) | 5 <input type="checkbox"/> College or university, teaching |
| 1 <input type="checkbox"/> Held assistantship | | 6 <input type="checkbox"/> College or university, non-teaching |
| 2 <input type="checkbox"/> Held own research grant | | 7 <input type="checkbox"/> Elem. or sec. school, teaching |
| 3 <input type="checkbox"/> Not employed | | 8 <input type="checkbox"/> Elem. or sec. school, non-teaching |
| 4 <input type="checkbox"/> Part-time employed | | 9 <input type="checkbox"/> Industry or business |
| | | (11) <input type="checkbox"/> Other (specify) |
| | (12) <input type="checkbox"/> Any other (specify) | (51) |

| | | |
|-----------|-----------|-----------|
| _____ () | _____ () | _____ () |
| 51 | 52 | 53 |
| _____ () | | |
| 54 | | |
| _____ () | _____ () | _____ () |
| 55 | 56 | 57 |
| _____ () | _____ () | _____ () |
| 58 | | |

P. How many years (full-time equivalent basis) of professional work experience did you have prior to the doctorate? (include assistantships as professional experience) (52-53)

Q. U.S. draft status:
 Veteran, or in service; dates of active duty from (year) to (year)
 Non-veteran; classification:
 Reserve
 Not applicable (54-58)

POSTGRADUATION PLANS

R. How well defined are your postdoctoral plans?
 Have signed contract or made definite commitment
 Am negotiating with a specific organization, or more than one
 Am seeking appointment but have no specific prospects
 Other (specify) (59)

S. After graduation what are your immediate postdoctoral plans?
 On a postdoctoral fellowship?
 On a postdoctoral research associateship?
 On a traineeship?
 Other study (specify)
If you checked 0, 1, 2, or 8, please answer "T" and omit "U"
 Employed? (other than 0, 1, 2)
 Military service?
 Other (specify) (60)
If you checked 3, 4, or 5, please answer "U" and omit "T"

T. If you plan to be on a postdoctoral fellowship, associate-ship, or traineeship —
 What is the purpose?
 To add experience in your present field (61)
 To change to a field different from that of the doctorate (Please enter number of new field from Specialties List (62-64))
 What is the source of support?
 U.S. Government
 College or university
 Private foundation
 Nonprofit, other than private foundation
 Other (specify) (65)

U. If you plan to be employed, enter military service, or other —
 What will be the type of employer?
 College or university
 Elem. or sec. school
 U.S. government
 State or local government
 Nonprofit organization
 Industry or business (70)
 Self-employed
 National laboratory
 Foreign government
 Other (specify) (71)
 Indicate primary work activity with "1" in appropriate box; secondary work activity (if any) with "2" in appropriate box.
 Research and development
 Teaching
 Administration
 Professional services to individuals
 Other (specify) (71)
 In what field will you be working?
 Please enter number from Specialties List (72-74)

| | | |
|-----------|-----------|-----------|
| _____ () | | |
| 59 | | |
| _____ () | | |
| 60 | | |
| _____ () | | |
| 61 | | |
| _____ () | _____ () | _____ () |
| 62 | 63 | 64 |
| _____ () | | |
| 65 | | |
| _____ () | _____ () | _____ () |
| 66 | 67 | 68 |
| _____ () | | |
| 69 | | |
| _____ () | | |
| 70 | | |
| _____ () | | |
| 71 | | |
| _____ () | _____ () | _____ () |
| 72 | 73 | 74 |
| _____ () | _____ () | |
| 75 | 76 | |

V. What is the name and location of the organization with which you will be associated?

 (Name) (City, State) (Or Country if not U.S.) (66-69)

BACKGROUND INFORMATION

W. Please indicate, by circling the highest grade attained, the education of
 your father: none 1 2 3 4 5 6 7 8 | 9 10 11 12 | 1 2 3 4 | MA, MD PhD | Postdoctoral (77)
 Elementary school High school College Graduate
 your mother: none 1 2 3 4 5 6 7 8 | 9 10 11 12 | 1 2 3 4 | MA, MD PhD | Postdoctoral (78)
 1 2 3 4 5 6 7 8 9 (11)

| |
|-----------|
| _____ () |
| 77 |
| _____ () |
| 78 |
| _____ () |
| 79 |

Signature Date completed



SPECIALTIES LIST

MATHEMATICS

- 000 — Algebra
- 010 — Analysis & Functional Analysis
- 020 — Geometry
- 030 — Logic
- 040 — Number Theory
- 050 — Probability, Math. Statistics
(see also 544, 670, 725, 727, 920)
- 060 — Topology
- 080 — Computing Theory & Practice
- 085 — Applied Mathematics
- 098 — Mathematics, General
- 099 — Mathematics, Other*

ASTRONOMY

- 101 — Astronomy
- 102 — Astrophysics

PHYSICS

(Note: Theoretical scientists mark "T" on questionnaire following code no.)

- 110 — Atomic & Molecular Physics
- 120 — Electromagnetism
- 130 — Mechanics
- 132 — Acoustics
- 134 — Fluids
- 135 — Plasma Physics
- 136 — Optics
- 138 — Thermal Physics
- 140 — Elementary Particles
- 150 — Nuclear Structure
- 160 — Solid State
- 198 — Physics, General
- 199 — Physics, Other*

CHEMISTRY

- 200 — Analytical
- 210 — Inorganic
- 220 — Organic
- 230 — Nuclear
- 240 — Physical
- 250 — Theoretical
- 260 — Agricultural & Food
- 270 — Pharmaceutical
- 298 — Chemistry, General
- 299 — Chemistry, Other*

BIOCHEMISTRY

- 540 — Biochemistry

EARTH SCIENCES

- 301 — Mineralogy, Petrology
- 305 — Geochemistry
- 310 — Stratigraphy, Sedimentation
- 320 — Paleontology
- 330 — Structural Geology
- 340 — Geophysics (Solid Earth & Atmospheric)
- 350 — Geomorph., Glacial Geology
- 360 — Hydrology
- 370 — Oceanography
- 380 — Meteorology
- 391 — Applied Geol., Geol. Engr., Econ. Geol.
- 395 — Fuel Technology, Petrol. Engr.
- 398 — Earth Sciences, General
- 399 — Earth Sciences, Other*

ENGINEERING

- 400 — Aeronautical & Astronautical
- 410 — Agricultural
- 415 — Biomedical Engineering
- 420 — Civil
- 430 — Chemical
- 435 — Ceramic
- 440 — Electrical
- 445 — Electronics
- 450 — Industrial

- 455 — Nuclear Engineering
- 460 — Engineering Mechanics
- 465 — Engineering Physics
- 470 — Mechanical
- 475 — Metallurgy & Phys. Met. Engr.
- 480 — Sanitary
- 486 — Mining
- 497 — Materials Science Engr.
- 498 — Engineering, General
- 499 — Engineering, Other*

AGRICULTURAL SCIENCES

- 500 — Agronomy
- 501 — Agricultural Economics
- 502 — Animal Husbandry
- 503 — Food Science & Technology
- 504 — Fish & Wildlife
- 505 — Forestry
- 506 — Horticulture
- 507 — Soils & Soil Science
- 508 — Agriculture, General
- 509 — Agriculture, Other*

MEDICAL SCIENCES

- 510 — Medicine & Surgery
- 511 — Pharmacy
- 512 — Public Health
- 513 — Veterinary Medicine
- 514 — Hospital Administration
- 518 — Medical Sciences, General
- 519 — Medical Sciences, Other*

BIOLOGICAL SCIENCES

- 520 — Anatomy
- 522 — Cytology
- 524 — Embryology
- 530 — Physiology, Animal
- 532 — Physiology, Plant
- 534 — Pathology
- 536 — Pharmacology
- 542 — Biophysics
- 544 — Biometrics, Biostatistics
(see also 050, 670, 725, 727, 920)
- 550 — Botany
- 552 — Phytopathology
- 560 — Ecology
- 562 — Hydrobiology
- 564 — Microbiology & Bacteriology
- 570 — Genetics
- 580 — Zoology
- 582 — Entomology
- 584 — Molecular Biology
- 598 — Biological Sciences, General
- 599 — Biological Sciences, Other*

PSYCHOLOGY

- 600 — Clinical
- 610 — Counseling & Guidance
- 620 — Developmental & Gerontological
- 630 — Educational
- 635 — School Psychology
- 641 — Experimental
- 642 — Comparative
- 643 — Physiological
- 650 — Industrial & Personnel
- 660 — Personality
- 670 — Psychometrics
(see also 050, 544, 725, 727, 920)
- 680 — Social
- 698 — Psychology, General
- 699 — Psychology, Other*

SOCIAL SCIENCES

- 700 — Anthropology
- 710 — Sociology
- 720 — Economics
- 725 — Econometrics
(see also 050, 544, 670, 727, 920)
- 727 — Statistics

- 740 — Geography
- 745 — Area Studies*
- 750 — Political Science, Public Administration
- 755 — International Relations
- 760 — Social Work
- 770 — Urban & Reg. Planning
- 798 — Social Sciences, General
- 799 — Social Sciences, Other*

ARTS & HUMANITIES

- 801 — Art, Applied
- 802 — Art, History & Criticism
- 815 — Speech as a Dramatic Art
(see also 885)
- 830 — Music
- 705 — Archeology
- 731 — History, American
- 732 — History, European
- 733 — History, Other*
- 734 — History & Philosophy of Science

LANGUAGES & LITERATURE

- 811 — American
- 812 — English
- 821 — German
- 823 — French
- 824 — Spanish & Portuguese
- 826 — Italian
- 827 — Russian
- 822 — Classical*
- 829 — Other Languages*
- 825 — Linguistics
- 840 — Philosophy
- 888 — Arts & Humanities, General
- 889 — Arts & Humanities, Other*

EDUCATION

- 900 — Foundations: Social, Philosoph.
- 910 — Educational Psychology
- 920 — Educ. Meas. & Stat.
- 930 — Educ. Admin. & Superv.
- 940 — Guid., Couns., & Student Pers.
- 950 — Special Education (Speech, Gifted, Handicapped, etc.)
- 960 — Audio-Visual Media

TEACHING FIELDS

- 970 — Agriculture
- 972 — Art
- 974 — Business
- 976 — English
- 978 — Foreign Language
- 980 — Home Economics
- 982 — Industrial Arts
- 984 — Mathematics
- 986 — Music
- 988 — Phys. Ed., Health, & Recreation
- 990 — Science Educ.
- 992 — Social Science Educ.
- 994 — Vocational Educ.
- 996 — Other Fields*
- 908 — Elementary Educ., General
- 909 — Secondary Educ., General
- 998 — Education, General
- 999 — Education, Other*

OTHER PROFESSIONAL FIELDS

- 850 — Business Administration
- 855 — Home Economics
- 860 — Journalism
- 865 — Law, Jurisprudence
- 870 — Library & Archival Science
- 880 — Religion & Theology
- 885 — Speech & Hearing Sciences
- 897 — Professional Field, Other*

- 899 — OTHER FIELDS*

* Identify the specific field in the space provided on the questionnaire.