# Affirmative Action Report: New Hires at Assistant Professor Level, Fall 1990 

For the past several years we have reviewed faculty hiring patterns to gain a better understanding of some of the opportunities for, and obstacles to, achieving good representation of women and minorities on the Penn faculty. The resultant tables contain information about Penn, information about the pool of available Ph.D.s, and the first estimate of possible faculty composition by race and sex had our new hires strictly reflected the available pool.

As in earlier years, the full report consists of three tables for each department. "Table A-Current Standing Faculty 1990"-shows the distribution of standing faculty by rank, race, and sex as of Fall 1990. And "Table CAll New Hires by Rank: 1982-1990"-shows actual new faculty by race and sex, both junior and senior level, hired during the period in question.

The presentation that follows is summarized from "Table B-Hiring Practices: Assistant Professor"-which consists of several parts. First, we obtained counts, by race and sex, of all assistant professors hired during the period from Fall 1982 to Fall 1990. These were derived from the official records in the Deputy Provost's Office, with verification of the most recent year by each individual school. Next, we obtained the best information we could about U.S. production of advanced degrees, usually Ph.D.s, in the disciplines most closely associated with each department. Using the "availability" data and the number of new hires during the period, we calculated the hypothetical distribution of the newly-hired faculty by race and sex and compared that with the actual distribution of new assistant professors.

Assume, for example, that there were 1,000 doctorates awarded in a given discipline from 1981 to 1989, of which 300 were earned by women and 700 by men; if Penn's department associated with that discipline hired 20 assistant professors during the period July 1982 to July 1991, our calculations would have expected 6 women ( 30 percent) and 14 men ( 70 percent).

While we put a great deal of effort into obtaining, validating, and tabulating the data for these reports, we recognize some inherent shortcomings in our approach. For this reason, we call our estimates "first approximations." We wish to outline some of the strengths and weaknesses of the report below, so that you can keep them in mind as you use the tables.

- Penn faculty data include both U.S. and non-U.S. citizens. In fact, a number of minority faculty, particularly those classified as Asian, are not citizens. The availability data provide racial breakdowns only for U.S. citizens.
- Clearly, Penn does not hire its young faculty from the entire pool of new Ph.D.s in the U.S. Because it is impossible to obtain data on an institution-by-institution basis, we cannot focus our analysis on those schools, here or abroad, where we tend to recruit faculty in various fields.
- Departments often recruit new faculty in particular sub-specialities in order to strengthen or round out their existing faculties. The availability data are general, and we cannot assume that the racial and gender distributions of Ph.D.s in sub-specialities are necessarily proportional to the discipline as a whole.
- Our payroll/personnel records include only those who actually accept appointments at Penn. We have no information about affirmative action efforts in terms of applicants or rejected offers.
- For some Penn departments we had disciplinary data that are only approximate matches; for example, we used anthropology as a surrogate for Folklore and Folklife.
- For some Penn departments, we are unable even to provide an appropriate substitute; these departments are included without "proportional" hiring patterns.
- In the clinical area of Medicine, our data source provides a distribution of actual M.D.s employed in U.S. medical school faculties in 1991. Even these data are sparse, and hence some clinical areas are omitted from our reports. In addition, some availability data in certain areas have been included at the end of the report in order to detail trends and proportions (Fine Arts M.A.s and Ph.D.s, students enrolled in Clinical Dentistry departments, and Medical School and Veterinary School graduates).
Despite these caveats and exceptions, many of the availability data we provide are useful for understanding the volume of advanced degrees awarded to women and minorities in various fields during the last few years. These should provide an approximate basis for assessing the recent affirmative action efforts of Penn departments.

The full Affirmative Action Report is available for each school in the office of its dean. Copies are also available from the Office of the Provost.

## University of Pennsylvania Standing Faculty <br> New Hires at Assistant Professor Rank, 1982-91 National PhD Pool 1981-89: Proportional Representation by Gender and Race

| Department | New Hires 1982-1991 |  | Proportional Representation |  | New Hires 1982-91 |  |  |  | Proportional Representation |  |  |  | Pool 1981-89 <br> Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Men | Women | White | Hispan | Asian | Black | White | Hispanic | Asian | Black |  |
| Arts \& Sciences: Humanities |  |  |  |  |  |  |  |  |  |  |  |  |  |
| American Civilization | 1 | 1 | 1.3 | 0.7 | 1 | 0 | 0 | 1 | 1.8 | 0.0 | 0.0 | 0.1 | 2645 |
| Art History | 1 | 3 | 1.2 | 2.8 | 4 | 0 | 0 | 0 | 3.8 | 0.1 | 0.1 | 0.0 | 1269 |
| Classical Studies | 2 | 0 | 1.3 | 0.8 | 2 | 0 | 0 | 0 | 2.0 | 0.0 | 0.0 | 0.0 | 480 |
| English | 15 | 8 | 10.3 | 12.7 | 21 | 0 | 0 | 2 | 21.9 | 0.3 | 0.3 | 0.5 | 6183 |
| Folkiore \& Folklife | 2 | 1 | 1.6 | 1.4 | 2 | 0 | 0 | 1 | 2.8 | 0.1 | 0.1 | 0.1 | 3145 |
| German | 0 | 1 | 0.4 | 0.6 | 1 | 0 | 0 | 0 | 1.0 | 0.0 | 0.0 | 0.0 | 687 |
| History | 4 | 2 | 4.1 | 1.9 | 4 | 1 | 0 | 1 | 5.6 | 0.1 | 0.1 | 0.2 | 5241 |
| Linguistics | 5 | 1 | 2.9 | 3.1 | 5 | 0 | 1 | 0 | 5.5 | 0.2 | 0.2 | 0.1 | 1610 |
| Music | 4 | 1 | 3.4 | 1.6 | 4 | 0 | 1 | 0 | 4.8 | 0.1 | 0.1 | 0.1 | 4059 |
| Oriental Studies | 5 | 3 | 4.9 | 3.1 | 8 | 0 | 0 | 0 | 6.8 | 0.1 | 1.1 | 0.0 | 294 |
| Philosophy | 4 | 1 | 3.9 | 1.1 | 5 | 0 | 0 | 0 | 4.8 | 0.1 | 0.1 | 0.1 | 2198 |
| Religious Studies | 1 | 0 | 0.8 | 0.2 | 1 | 0 | 0 | 0 | 0.9 | 0.0 | 0.0 | 0.0 | 1635 |
| Romance Languages | 2 | 4 | 2.2 | 3.8 | 5 | 1 | 0 | 0 | 4.6 | 1.2 | 0.0 | 0.1 | 2719 |
| Slavic Languages | 0 | 1 | 0.5 | 0.5 | 1 | 0 | 0 | 0 | 1.0 | 0.0 | 0.0 | 0.0 | 219 |
| South Asia Studies | 0 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 157 |
| Arts \& Sciences: Social Sciences |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Anthropology | 6 | 3 | 4.7 | 4.3 | 9 | 0 | 0 | 0 | 8.4 | 0.3 | 0.2 | 0.2 | 3145 |
| Economics | 29 | 1 | 25.0 | 5.0 | 24 | 1 | 5 | 0 | 27.7 | 0.4 | 1.3 | 0.6 | 7218 |
| History \& Sociology of Scienc | e | 1 | 0.6 | 0.4 | 1 | 0 | 0 | 0 | 1.0 | 0.0 | 0.0 | 0.0 | 205 |
| Political Science | 10 | 1 | 8.3 | 2.7 | 10 | 0 | 0 | 1 | 10.0 | 0.2 | 0.3 | 0.5 | 3769 |
| Regional Science | 0 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 8254 |
| Sociology | 5 | 5 | 5.6 | 4.4 | 8 | 0 | 0 | 2 | 8.9 | 0.3 | 0.3 | 0.5 | 4471 |
| Arts \& Sciences: Natural Sciences |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Astronomy | 0 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 450 |
| Biology | 7 | 1 | 5.5 | 2.5 | 8 | 0 | 0 | 0 | 7.5 | 0.1 | 0.3 | 0.1 | 9598 |
| Chemistry | 7 | 1 | 6.5 | 1.5 | 7 | 0 | 1 | 0 | 7.4 | 0.1 | 0.4 | 0.1 | 11768 |
| Geology | 3 | 0 | 2.4 | 0.6 | 3 | 0 | 0 | 0 | 2.9 | 0.0 | 0.0 | 0.0 | 1122 |
| Mathematics | 15 | 0 | 12.8 | 2.2 | 10 | 1 | 4 | 0 | 14.1 | 0.2 | 0.6 | 0.1 | 3898 |
| Physics | 14 | 1 | 13.8 | 1.2 | 12 | 0 | 2 | 1 | 14.1 | 0.1 | 0.6 | 0.1 | 6935 |
| Psychology | 7 | 4 | 5.7 | 5.3 | 11 | 0 | 0 | 0 | 10.2 | 0.3 | 0.1 | 0.4 | 20713 |
| Wharton |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Accounting | 13 | 2 | 11.0 | 4.0 | 12 | 0 | 3 | 0 | 13.9 | 0.1 | 0.7 | 0.4 | 1150 |
| Decision Science | 10 | 2 | 9.9 | 2.1 | 10 | 0 | 2 | 0 | 10.7 | 0.1 | 1.0 | 0.1 | 1246 |
| Finance | 19 | 1 | 17.4 | 2.6 | 17 | 0 | 3 | 0 | 17.7 | 0.2 | 1.9 | 0.2 | 902 |
| Health Care Systems | 1 | 0 | NA | NA | 1 | 0 | 0 | 0 | NA | NA | NA | NA | 1788 |
| Insurance | 3 | 2 | NA | NA | 5 | 0 | 0 | 0 | NA | NA | NA | NA | 0 |
| Legal Studies | 11 | 0 | 9.8 | 1.2 | 10 | 0 | 0 | 1 | 10.5 | 0.1 | 0.3 | 0.1 | 234 |
| Management | 14 | 6 | 16.4 | 3.6 | 15 | 0 | 4 | 1 | 18.6 | 0.3 | 0.9 | 0.2 | 1258 |
| Marketing | 6 | 2 | 5.8 | 2.2 | 6 | 0 | 2 | 0 | 7.4 | 0.1 | 0.4 | 0.1 | 773 |
| Public Policy \& Management | 4 | 0 | 2.5 | 1.5 | 2 | 0 | 2 | 0 | 3.6 | 0.1 | 0.1 | 0.2 | 503 |
| Statistics | 5 | 0 | 4.0 | 1.0 | 2 | 0 | 3 | 0 | 4.5 | 0.1 | 0.3 | 0.1 | 1117 |
| Engineering |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bioengineering | 3 | 0 | 2.5 | 0.5 | 2 | 0 | 1 | 0 | 2.7 | 0.1 | 0.2 | 0.0 | 706 |
| Chemical Engineering | 2 | 1 | 2.7 | 0.3 | 3 | 0 | 0 | 0 | 2.6 | 0.0 | 0.3 | 0.0 | 4005 |
| Computer \& Info. Science | 13 | 1 | 12.8 | 1.2 | 6 | 0 | 7 | 1 | 12.3 | 0.0 | 1.7 | 0.1 | 697 |
| Systems | 3 | 1 | 3.8 | 0.2 | 2 | 0 | 2 | 0 | 3.6 | 0.1 | 0.3 | 0.0 | 3909 |
| Electrical Engineering | 4 | 2 | 5.8 | 0.2 | 3 | 1 | 2 | 0 | 5.3 | 0.1 | 0.6 | 0.0 | 5898 |
| Materials Science | 3 | 1 | 3.5 | 0.5 | 4 | 0 | 0 | 0 | 3.6 | 0.0 | 0.4 | 0.0 | 1707 |
| Mechanical Engineering | 5 | 0 | 4.8 | 0.2 | 3 | 1 | 1 | 0 | 4.5 | 0.0 | 0.5 | 0.0 | 3931 |
| Nursing School | 0 | 35 | 1.3 | 33.7 | 34 | 0 | 0 | 1 | 32.9 | 0.3 | 0.4 | 1.3 | 1645 |

University of Pennsylvania Standing Faculty
New Hires at Assistant Professor Rank, 1982-91
National PhD Pool 1981-89: Proportional Representation by Gender and Race

| Department | New Hires 1982-1991 |  | Proportional Representation |  | New Hires 1982-91 |  |  |  | Proportional Representation |  |  |  | Pool <br> 1981-89 <br> Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Men | Women | White | Hispani | Asian | Black | White H | Hispanic | Asian | Black |  |
| Grad. Sch. of Education | 3 | 11 | 6.7 | 7.3 | 9 | 0 | 1 | 4 | 12.4 | 0.4 | 0.2 | 1.0 | 61022 |
| School of Social Work | 2 | 2 | 1.6 | 2.4 | 3 | 1 | 0 | 0 | 3.4 | 0.1 | 0.1 | 0.4 | 1949 |
| Annenberg School | 1 | 2 | 1.7 | 1.3 | 2 | 0 | 1 | 0 | 2.7 | 0.1 | 0.1 | 0.1 | 1891 |
| Graduate School of Fine Ar Architecture | ts 3 | - 2 |  | - | 5 | 0 | 0 | 0 | * | * | * | * |  |
| City Planning | 2 | 0 |  |  | 2 | 0 | 0 | 0 | * | * | * | - |  |
| Fine Arts | 0 | 0 |  |  | 0 | 0 | 0 | 0 |  |  |  | * |  |
| Landscape Architecture | 3 | 1 | - |  | 4 | 0 | 0 | 0 | - |  | - | * |  |
| Law School | 11 | 7 | 12.9 | 5.1 | 18 | 0 | 0 | 0 | 16.1 | 0.4 | 0.2 | 1.4 | 810 |
| Medical School: Basic Sciences |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Anatomy | 2 | 1 | 1.9 | 1.1 | 3 | 0 | 0 | 0 | 2.9 | 0.0 | 0.1 | 0.0 | 999 |
| Biochem. \& Biophysics | 5 | 1 | 4.2 | 1.8 | 4 | 0 | 2 | 0 | 5.5 | 0.1 | 0.3 | 0.1 | 6330 |
| Human Genetics | 4 | 2 | 3.3 | 2.7 | 6 | 0 | 0 | 0 | 5.6 | 0.1 | 0.3 | 0.1 | 1050 |
| Microbiology | 5 | 0 | 3.2 | 1.8 | 5 | 0 | 0 | 0 | 4.6 | 0.1 | 0.2 | 0.1 | 2242 |
| Pharmacology | 9 | 0 | 6.1 | 2.9 | 9 | 0 | 0 | 0 | 8.3 | 0.1 | 0.5 | 0.1 | 2199 |
| Physiology | 2 | 0 | 1.4 | 0.6 | 1 | 1 | 0 | 0 | 1.9 | 0.0 | 0.1 | 0.0 | 2334 |
| Medical School: Clinical Sciences |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Anesthesia | 45 | 17 | 47.7 | 14.3 | 58 | 1 | 2 | 1 | 50.4 | 1.7 | 8.8 | 1.2 | 2706 |
| Dermatology | 4 | 4 | 6.1 | 1.9 | 8 | 0 | 0 | 0 | 6.9 | 0.3 | 0.5 | 0.2 | 371 |
| Medicine | 97 | 35 | 109.8 | 22.2 | 123 | 2 | 4 | 3 | 115.8 | 3.2 | 10.5 | 2.6 | 13712 |
| Neurology | 25 | 2 | 22.3 | 4.7 | 24 | 1 | 2 | 0 | 23.9 | 0.7 | 2.2 | 0.2 | 1672 |
| Obstetrics \& Gynecology | 30 | 21 | 37.9 | 13.1 | 47 | 0 | 1 | 3 | 42.7 | 1.8 | 4.2 | 2.4 | 2383 |
| Ophthalmology | 10 | 4 | 12.0 | 2.0 | 14 | 0 | 0 | 0 | 12.4 | 0.3 | 1.1 | 0.2 | 1062 |
| Orthopedic Surgery | 23 | 0 | 21.0 | 2.0 | 21 | 0 | 2 | 0 | 21.2 | 0.4 | 1.1 | 0.3 | 775 |
| Otorhinolaryngology | 8 | 0 | 6.5 | 1.5 | 7 | 0 | 1 | 0 | 7.4 | 0.1 | 0.5 | 0.0 | 575 |
| Pathology | 33 | 12 | 35.1 | 9.9 | 44 | 1 | 0 | 0 | 38.6 | 1.0 | 4.8 | 0.6 | 1172 |
| Pediatrics | 57 | 32 | 59.1 | 29.9 | 84 | 0 | 2 | 3 | 76.9 | 2.9 | 7.2 | 2.2 | 5889 |
| Physical Medicine | 4 | 4 | 5.3 | 2.7 | 5 | 0 | 3 | 0 | 6.5 | 0.1 | 1.0 | 0.3 | 557 |
| Psychiatry | 37 | 11 | 36.0 | 12.0 | 42 | 0 | 5 | 1 | 42.5 | 1.5 | 2.6 | 1.4 | 5098 |
| Radiology | 36 | 17 | 43.9 | 9.1 | 47 | 2 | 2 | 2 | 44.1 | 1.7 | 6.3 | 0.9 | 3876 |
| Radiation Oncology | 25 | 8 | 27.3 | 5.7 | 29 | 0 | 2 | 2 | 27.4 | 1.0 | 3.9 | 0.6 | 3876 |
| Surgery | 33 | 6 | 35.7 | 3.3 | 36 | 0 | 2 | 1 | 34.7 | 1.1 | 2.4 | 0.8 | 5137 |
| Dental School: Basic Sciences |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Biochemistry | 0 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 5551 |
| Histology, Embriol., Anatomy | 0 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 1575 |
| Microbiology | 0 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 2915 |
| Pathology | 2 | 0 | 1.4 | 0.6 | 2 | 0 | 0 | 0 | 1.8 | 0.0 | 0.1 | 0.0 | 924 |
| Dental School: Clinical Scie Clinical Departments | $\begin{gathered} \text { ences } \\ 19 \end{gathered}$ | 7 | * | * | 22 | 1 | 1 | 2 | * | * | * | * | * |
| Veterinary School: Basic Sciences |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Animal Biology | 3 | 0 | 2.6 | 0.4 | 3 | 0 | 0 | 0 | 2.9 | 0.0 | 0.0 | 0.0 | 220 |
| Pathobiology | 6 | 3 | 6.1 | 2.9 | 7 | 0 | 1 | 1 | 8.3 | 0.1 | 0.5 | 0.2 | 924 |
| Veterinary School: Clinical Studies |  |  |  |  |  |  |  |  |  |  |  |  |  |
| New Bolton Center Philadelphia | 14 13 | $\begin{array}{r} 6 \\ 14 \end{array}$ | * | * | 18 27 | 0 | 2 0 | 0 0 | * | * | * | * | * |

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## National Pool Sources and Substitutions

Because the disciplines represented in some Penn departments are omitted from the National Research Council Reports, we have substituted data for related disciplines. We understand that these substitutions may not fully capture the academic direction of departments at Penn. Schools and departments listed below include only those for which substitutions have been made. Unless otherwise indicated, the availability data source for all departments is: Summary Report, National Research Council (1982-87).

## School of Arts \& Sciences

Penn Department
American Civilization
Classical Studies
Folklore \& Folklife
History and Soc. of Science
History
Oriental Studies
Regional Science
Romance Languages
South Asia Studies

## Wharton School

Penn Department
Decision Sciences
Finance
Health Care Systems
Legal Studies
Management

## School of Engineering

Penn Department Systems

## Department Used from Availability Data

American Studies, History (American)
Classics
Anthropology
History of Science
History: American, European, General, Other
Chinese, Japanese, Hebrew, Arabic
Economics, Gcography
French, German, Italian, Spanish
Chinese, Japanese

## Department Used from Availability Data

Information Science and Systems, Operations Research
Banking and Finance
Public Health, Public Policy
Law, Jurisprudence( $82-89$ )
Business and Management, General \& Other

## Department Used from Availability Data

Systems Engineering, Civil Engineering

## Dental School

Availability Data Source for Clinical Departments (used in appendix to the full report): Supplement 2 to the Annual Report 88/89, American Dental Association. Figures reflect enrollees in Advanced Dental Education Programs, 1983 to 1988

## Penn Department

Departments Used from Availability Data
Clinical Departments include:

## Dental Care

Endodontics
Oral Medicine
Oral Surgery and Pharmacology
Orthodontics
Dental Public Health, Endodontics,
Oral and Maxillary Surgery, Oral Pathology,
Periodontics
Restorative Dentistry

## Law School

Availability Data Source: Association of American Law Schools Teaching Registry. The figures reflect students who register with this Association and thereby express an interest in the teaching of law.

## Medical School

## Penn Department

Human Genetics
Medicine Department
Microbiology
Otorhinolaryngology
Pathology
Pharmacology
Physiology
Radiation Oncology

## Department Used from Availability Data

Human and Animal Genetics
Internal Medicine
Epidemiology, Parisitology, Bacteriology (1983-1987)
Microbiology/Bacteriology \& Parasitology (1981-1982, after 1987)
Otolaryngology
Human and Animal Pathology
Human and Animal Pharmacology
Human and Animal Physiology
Radiology

## Veterinary School

Availability Data Source for Clinical Departments (used in appendix to the full report): Comparative Data Summary Reports, 1981-88, American Veterinary Medical Association. Figures reflect graduates from veterinary medical school programs.

Penn Department
Animal Biology
Pathobiology

## Department Used from Availability Data

Animal Breeding and Genetics (Animal Husbandry, 1981 and 1982)
Human and Animal Pathology


[^0]:    * Because the figures in these areas are both limited and inconsistent with those which comprise the national pools reflected in the bulk of this report, we have not made similar calculations for proportional representation. See notes, page IV.

