## New Faculty Hires 1982-87: An Affirmative Action Study

Last year I asked the University Planning Office to undertake a study of faculty affirmative action, one that would focus on the departmental level rather than on the school level, and that would compare our faculty numbers, particularly our new hires, with the Ph.D.s available in particular fields.

The tables that follow are derived from this larger study, which is available for each school in the office of its dean. The tables present in summary form the number of assistant professors, by gender and race, hired by each department between fall 1982 and fall 1987; the number of assistant professors in each discipline, by gender and race, that we would have employed had we hired people in direct proportion to their numbers in a national pool; and the total number of people by discipline in the national pool.

The Ph.D. production data come from a series of detailed reports entitled Doctorate Recipients from United States Universities, based upon surveys of the National Research Council. (The National Research Council includes the National Science Foundation, the U.S. Department of Education, the National Institute of Health, and the National Endowment for the Humanities.) These are supplemented in some cases by data included from reports from such groups as the American Dental Association and the American Bar Association and from the Digest of Education Statistics issued by the U.S. Department of Education. The hiring data come from our personnel data base system and was reviewed and corrected by each of the twelve schools.

In most cases, the national pool is represented by the number of Ph.D.s granted between 1981 and 1986. Where Ph.D.s are not the appropriate group, we have substituted other sets. Thus, for certain fine arts disciplines we use data about masters and doctoral recipients. In the professional areas of law, dentistry, and veterinary medicine, we used the best available data about degrees granted in those fields or numbers of people involved in advanced special training programs.

The national pool data are meant to be a first approximation of the group from which Penn does its hiring. Thus the data must be reviewed with some caution. One obvious point, for example, is that Penn does not hire its young faculty from the entire pool of new Ph.D.s in the United States. While it would have been helpful to be able to show information for a subset of institutions from which given disciplines are most likely to recruit, detailed data permitting such a procedure were not available to us. We hope that the proportion of women and minorities in the national pool is not widely different from the proportion of women and minorities at select schools. Next fall we plan to choose several disciplines for an in-depth study to verify this assumption.

There are other caveats as well:

1. Departments often recruit new faculty in particular sub-specialties in order to strengthen or round out their existing faculties. The availability data are general, and we cannot assume that the gender and racial distributions of Ph.D.s in sub-specialties closely mirror the discipline as a whole; we do assume that they may represent a good estimate, however.
2. For some departments there were no comparable disciplines listed in the national reports. We selected fields we assumed would closely approximate the disciplines that constitute Penn's departments (e.g., we used Anthropology as a surrogate for Folklore and Folklife.) In these cases, we have tried to use the disciplines suggested by the schools. The substitutions used are on the back page of this insert.
3. In the fields where faculty hold degrees other than Ph.D.s we consulted a wide variety of reports to develop pool data. In many cases the sources for degrees or enrollments by gender were different from sources by race. (Commonly, the data were available for different time periods.) Wherever two different reports were used, we have included the data from each of them.
4. We have chosen to report the "proportional representation" data to the nearest tenth of a person. This is particularly necessary in order to show the small representation of minority candidates in certain fields.

Despite the caveats offered above, we believe the tables included in this report will be helpful in guiding us in our planning for affirmative action. We shall be adding hiring data for fall 1988 as soon as the lists of faculty have been verified and intend to issue an updated report each year.

Finally, I would note that these data represent the outcomes of hiring efforts in the schools and departments; they do not reflect the efforts themselves. It is impossible to capture in this report the good faith efforts of departments that have tried and failed to hire women and minorities. The data provided here are intended to serve as guideposts to help departments examine both their effort and success in recruiting and retaining women and minorities.

# University of Pennsylvania Standing Faculty <br> New Hires at Assistant Professor Rank, 1982-1987 National PhD Pool 1981-1986: Proportional Representation by Gender and Race 

|  | New Hires 1982-1987 |  | Proportional Representation |  | $\begin{aligned} & \text { New Hires } \\ & \text { 1982-1987 } \end{aligned}$ |  |  |  | Proportional Representation |  |  |  | U.S. PhD Poo 1981-1986 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Department |  | omen | Men | Women | White | Hispanic | Asian | Black | White | Hispanic | Asian | Black | Total |
| Arts \& Sciences: Humanities |  |  |  |  |  |  |  |  |  |  |  |  |  |
| American Civilization | 1 | 1 | 1.3 | 0.7 | 1 | 0 | 0 | 1 | 1.9 | 0 | 0 | 0.1 | 1812 |
| Art History | 1 | 3 | 1.2 | 2.8 | 4 | 0 | 0 | 0 | 3.8 | 0.1 | 0.1 | 0 | 849 |
| Classical Studies | 2 | 0 | 1.3 | 0.7 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 318 |
| English | 6 | 4 | 4.6 | 5.4 | 9 | 0 | 0 | 1 | 9.6 | 0.1 | 0.1 | 0.2 | 4646 |
| Folklore-Folklife | 1 | 1 | 1.1 | 0.9 | 1 | 0 | 0 | 1 | 1.9 | 0.1 | 0 | 0 | 2144 |
| German | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 461 |
| History | 2 | 2 | 2.8 | 1.2 | 2 | 1 | 0 | 1 | 3.7 | 0.1 | 0.1 | 0.1 | 3582 |
| Linguistics | 3 | 0 | 1.5 | 1.5 | 3 | 0 | 0 | 0 | 2.7 | 0.1 | 0.1 | 0.1 | 1056 |
| Music | 3 | 0 | 2 | 1 | 2 | 0 | 1 | 0 | 2.9 | 0 | 0 | 0.1 | 2526 |
| Oriental Studies | 4 | 0 | 2.4 | 1.6 | 4 | 0 | 0 | 0 | 3.3 | 0 | 0.7 | 0 | 169 |
| Philosophy | 2 | 0 | 1.6 | 0.4 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1470 |
| Religious Studies | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1023 |
| Romance Languages | 0 | 2 | 0.8 | 1.2 | 2 | 0 | 0 | 0 | 1.6 | 0.4 | 0 | 0 | 1727 |
| Slavic Languages | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 203 |
| South Asia Studies | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 95 |
| Arts \& Sciences: Social Sciences |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Anthropology | 2 | 3 | 2.6 | 2.4 | 5 | 0 | 0 | 0 | 4.7 | 0.1 | 0.1 | 0.1 | 2144 |
| Economics | 18 | 0 | 15.2 | 2.8 | 15 | 1 | 2 | 0 | 16.7 | 0.2 | 0.7 | 0.4 | 4723 |
| Hist. \& Sociol. of Sci. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 139 |
| Political Science | 8 | 1 | 6.9 | 2.1 | 8 | 0 | 0 | 1 | 8.2 | 0.2 | 0.2 | 0.4 | 2541 |
| Regional Science | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 |
| Sociology | 3 | 2 | 2.9 | 2.1 | 5 | . 0 | 0 | 0 | 4.5 | 0.1 | 0.1 | 0.3 | 3164 |
| Arts \& Sciences: Natural Sciences |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Astronomy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 289 |
| Biology | 3 | 1 | 2.8 | 1.2 | 4 | 0 | 0 | 0 | 3.7 | 0.1 | 0.1 | 0.1 | 8474 |
| Chemistry | 3 | 1 | 3.3 | 0.7 | 3 | 0 | 1 | 0 | 3.7 | 0.1 | 0.2 | 0 | 10552 |
| Geology | 2 | 0 | 1.7 | 0.3 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 700 |
| Mathematics | 10 | 0 | 8.5 | 1.5 | 8 | 1 | 1 | 0 | 9.4 | 0.1 | 0.4 | 0.1 | 3315 |
| Physics | 8 | 0 | 7.4 | 0.6 | 7 | 0 | 1 | 0 | 7.4 | 0.1 | 0.4 | 0.1 | 5782 |
| Psychology | 5 | 2 | 3.7 | 3.3 | 7 | 0 | 0 | 0 | 6.5 | 0.2 | 0.1 | 0.2 | 19187 |
| Wharton* |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Accounting | 9 | 0 | 6.8 | 2.2 | 7 | 0 | 2 | 0 | 8.3 | 0 | 0.4 | 0.3 | 631 |
| Decision Science | 8 | 1 | 7.7 | 1.3 | 7 | 0 | 2 | 0 | 8 | 0.1 | 0.8 | 0.1 | 849 |
| Finance | 13 | 0 | 11.7 | 1.3 | 12 | 0 | 1 | 0 | 11.5 | 0.1 | 1.3 | 0.1 | 447 |
| Health Care Sys. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1213 |
| Insurance | 2 | 1 |  |  | 3 | 0 | 0 | 0 |  |  |  |  |  |
| Legal Studies | 6 | 0 | 5.6 | 0.4 | 5 | 0 | 0 | 1 | 5.8 | 0 | 0.2 | 0 | 148 |
| Management | 9 | 4 | 10.9 | 2.1 | 10 | 0 | 2 | 1 | 12.2 | 0.2 | 0.5 | 0.1 | 759 |
| Marketing | 5 | 0 | 3.7 | 1.3 | 3 | 0 | 2 | 0 | 4.6 | 0 | 0.3 | 0.1 | 402 |
| Public Policy \& Mgnt. | 3 | 0 | 1.9 | 1.1 | 1 | 0 | 2 | 0 | 2.7 | 0.1 | 0.1 | 0.1 | 272 |
| Social Systems Sciences | 3 | 0 | 2 | 1 | 3 | 0 | 0 | 0 | 2.7 | 0.1 | 0.1 | 0.1 | 143 |
| Statistics | 3 | 0 | 2.4 | 0.6 | 1 | 0 | 2 | 0 | 2.8 | 0 | 0.2 | 0 | 952 |
| * Includes some ABDs hired as lecturers. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Engineering |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bioengineering | 2 | 0 | 1.8 | 0.2 | 1 | 0 | 1 | 0 | 1.9 | 0 | 0.1 | 0 | 402 |
| Chemical Engr. | 1 | 0 | 0.9 | 0.1 | 1 | 0 | 0 | 0 | 0.9 | 0 | 0.1 | 0 | 2228 |
| Computer \& Info. | 9 | 1 | 9.3 | 0.7 | 5 | 0 | 5 | 0 | 8.6 | 0 | 1.4 | 0 | 415 |
| Dept. of Systems | 3 | 1 | 3.8 | 0.2 | 2 | 0 | 2 | 0 | 3.6 | 0.1 | 0.3 | 0 | 2360 |
| Electrical Engr. | 2 | 1 | 2.9 | 0.1 | 1 | 1 | 1 | 0 | 2.7 | 0 | 0.3 | 0 | 3328 |
| Materials Science | 2 | 0 | 1.8 | 0.2 | 2 | 0 | 0 | 0 | 1.8 | 0 | 0.2 | 0 | 960 |
| Mechanical Engr. | 4 | 0 | 3.9 | 0.1 | 3 | 0 | 1 | 0 | 3.6 | 0 | 0.4 | 0 | 2128 |

## University of Pennsylvania Standing Faculty

New Hires at Assistant Professor Rank, 1982-1987 National PhD Pool 1981-1986: Proportional Representation by Gender and Race

|  | $\begin{aligned} & \text { New Hires } \\ & \text { 1982-1987 } \end{aligned}$ |  | Proportional Representation |  | New Hires 1982-1987 |  |  |  | Proportional Representation |  |  |  | $\begin{aligned} & \text { U.S. PhD Pool } \\ & \text { 1981-1986 } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Department |  | Women | Men | Women | White | Hispanic | Asian | Black | White | Hispanic | Asian | Black | Total |
| Grad. Sch. of Education | 3 | 8 | 5.4 | 5.6 | 7 | 0 | 1 | 3 | 9.7 | 0.3 | 0.2 | 0.8 | 41961 |
| Nursing School | 0 | 28 | 1 | 27 | 27 | 0 | 0 | 1 | 26.4 | 0.3 | 0.4 | 0.9 | 871 |
| Social Work | 1 | 2 | 1.2 | 1.8 | 2 | 1 | 0 | 0 | 2.5 | 0.1 | 0.1 | 0.3 | 1290 |
| Annenberg School | 0 | 1 | 0.6 | 0.4 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1031 |
| School of Fine Arts |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Architecture | 3 | 1 |  |  | 4 | 0 | 0 | 0 |  |  |  |  |  |
| Master's Degrees |  |  | 2.9 | 1.1 |  |  |  |  | 3.6 | 0.1 | 0.1 | 0.2 | (Gender) (Race) <br> 6674 6386 |
| Doctoral Degrees |  |  | 3 | 1 |  |  |  |  | 3.5 | 0.1 | 0.2 | 0.2 | 89182 |
| City Planning | 1 | 0 |  |  | 1 | 0 | 0 | 0 |  |  |  |  |  |
| Master's Degrees |  |  | 0.6 | 0.4 |  |  |  |  |  |  |  |  | 3702 |
| Doctoral Degrees |  |  | 0.8 | 0.2 |  |  |  |  |  |  |  |  | 234 |
| Fine Arts Dept. | 0 | 0 |  |  | 0 | 0 | 0 | 0 |  |  |  |  |  |
| Master's Degrees |  |  | 0 | 0 |  |  |  |  |  |  |  |  | 9422 |
| Doctoral Degrees |  |  | 0 | 0 |  |  |  |  |  |  |  |  | 192 |
| Landscape Arch. | 1 | 0 |  |  | 1 | 0 | 0 | 0 |  |  |  |  |  |
| Master's Degrees |  |  | 0.5 | 0.5 |  |  |  |  |  |  |  |  | 1211 |
| Doctoral Degrees |  |  | 0.5 | 0.5 |  |  |  |  |  |  |  |  | 2 |
| Law School | 7 | 3 | 6.2 | 3.8 | 10 | 0 | 0 | 0 | 9 | 0.3 | 0.2 | 0.5 | (Gender) (Race) 3814240356 |
| Medical School: Basic Sciences |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Anatomy | 2 | 0 | 1.3 | 0.7 | 2 | 0 | 0 | 0 | 1.9 | 0 | 0.1 | 0 | 742 |
| Biochem. \& Biophysics | 2 | 1 | 2.1 | 0.9 | 2 | 0 | 1 | 0 | 2.8 | 0 | 0.2 | 0 | 4205 |
| Human Genetics | 3 | 2 | 2.9 | 2.1 | 5 | 0 | 0 | 0 | 4.7 | 0.1 | 0.2 | 0 | 706 |
| Microbiology | 2 | 0 | 1.3 | 0.7 | 2 | 0 | 0 | 0 | 1.9 | 0 | 0.1 | 0 | 1183 |
| Pharmacology | 8 | 0 | 5.7 | 2.3 | 8 | 0 | 0 | 0 | 7.4 | 0.1 | 0.4 | 0.1 | 1479 |
| Physiology | 1 | 0 | 0.7 | 0.3 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1593 |
| Dental School: Basic Sciences |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Biochemistry | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3696 |
| Hist. Embryology, Anat |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Anat. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1295 |
| Microbiology | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1943 |
| Pathology | 1 | 0 | 0.7 | 0.3 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 585 |
| Physiology/ Pharmacology | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1593 |
| Dental School: Clinical Sciences |  |  |  |  |  |  |  |  |  |  |  |  | National Pool |
| Clinical Departments | 8 | 4 | 9.9 | 2.1 | 11 | 1 | 0 | 0 | 9.9 | 0.8 | 1 | 0.3 | 8523 |
| Veterinary School: Basic Sciences |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Animal Biology | 2 | 0 | 1.7 | 0.3 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 147 |
| Pathobiology | 4 | 2 | 4.3 | 1.7 | 4 | 0 | 1 | 1 | 5.5 | 0.1 | 0.3 | 0.1 | 585 |
| Veterinary School: Clinical Sciences |  |  |  |  |  |  |  |  | White |  | Minority |  | National Pool |
| Clinical Studies (NBC AND PHILA) | 17 | 12 | 16.6 | 12.4 | 27 | 0 | 2 | 0 | 27.8 |  | 1.2 |  | 13161 |

## 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. 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 (1981-1986).

## School of Arts and Sciences

Penn Department
Folklore and Folklife
Oriental Studies
Regional Science
South Asia Studies

## Wharton School:

Penn Department
Decision Sciences
Health Care Systems Legal Studies Social Systems

Department Used From Availability Data
Anthropology
Chinese, Japanese, Hebrew, Arabic
Demography
Chinese, Japanese (1983-1986 only)

Department Used From Availability Data
Information Science and Systems, Operations Research
Health Care, Health Care \& Epidemiology, Public Policy Studies
Law, Jurisprudence
Social Sciences, general

## School of Engineering:

## Penn Department

Department Used From Availability Data
Systems Engineering, Civil Engineering

## Graduate School of Fine Arts:

Availability Data Source: Digest of Education Statistics: 1987, 1988; U.S. Department of Education. Figures reflect both master's as well as doctoral degree recipients to account for the variations in departmental hiring requirements.

Penn Department
Architecture
City Planning
Fine Arts Grad. Studies

## Dental School:

Availability Data Source for Clinical Departments: Supplement 2 to the Annual Report 88/89, American Dental Association. Figures reflect enrollees in Advanced Dental Education Programs, 1984 to 1986.

## Penn Department

## Department Used From Availability Data

Architecture, for degrees by gender (1983-1986)
Architecture and Environmental Design for degrees by race $(1981,1985)$
City, Community, and Regional Planning
Fine Arts, including Fine Arts General, Fine Arts Other \& Painting

Clinical Departments include:
Dental Auxiliary Dental Public Health
Dental Care
Endodontics
Endodontics
Oral Pathology
Oral Medicine
Oral and Max. Surgery
Oral Surgery
Orthodontics
Orthodontics
Pedodontics
Periodontics
Periodontics
Restorative Dentistry

## Law School:

Availability Data Source for the Law School: American Bar Association, A Review of Legal Education in the United States, 1986. The National Pool figure for the Race category reflects third and fourth year enrollees for 1986 at ABA approved schools. The National Pool figure for the Gender category reflects professional degrees conferred in 1986 at ABA approved schools. These figures were not broken down by race.

## Medical School:

Penn Department
Human Genetics
Microbiology
Pharmacology
Physiology

## Department Used From Availability Data

Human and Animal Genetics
Epidemiology, Parasitology, Bacteriology (1983-1986)
Microbiology/Bacteriology \& Parasitology (1981-1982)
Human and Animal Pharmacology
Human and Animal Physiology

## Veterinary School:

Availability Data Source for Clinical Departments: Comparative Data Summary Reports, 1981-1986, American Veterinary Medical Association. Figures reflect graduates from veterinary medical school programs, 1981 to 1986.

Penn Department
Animal Biology
Pathobiology

## Department Used From Availability Data

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

