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

We have spent the last several months updating last year's analysis of faculty hiring patterns. Our purpose, once again, is 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.

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 C—All New Hires by Rank: 1982-1990—is provided to show 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 this "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 1988, 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 1990, 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 were only approximate matches; for example, we used anthropology as a surrogate for Folklore and Folklife.
- For some Penn departments, we were unable even to provide an appropriate substitute; these departments are included without "proportional" hiring patterns.
- In the clinical area of Medicine, our data source provided a distribution of actual M.D.s employed in U.S. medical school faculties in 1990. Even these data were 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, much 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.

— Michael Aiken, Provost

University of Pennsylvania Standing Faculty
New Hires at Assistant Professor Rank, 1982-90
National Ph.D. Pool 1981-88: Proportional Representation by Gender and Race

Department	New Hires 1982-1990		Proportional Representation		New Hires 1982-90				Proportional Representation				US Ph.D Pool 1981-88
	Men	Women	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	1.8	0.0	0.0	0.1	2363
Art History	1	3	1.2	2.8	4	0	0	0	3.8	0.1	0.1	0.0	1124
Classical Studies	2	0	1.2	0.8	2	0	0	0	2.0	0.0	0.0	0.0	429
English	12	7	8.6	10.4	17	0	0	2	18.1	0.2	0.2	0.5	5655
Folklore & Folklife	2	1	1.5	1.5	2	0	0	1	2.8	0.1	0.1	0.1	2821
German	0	1	0.4	0.6	1	0	0	0	1.0	0.0	0.0	0.0	614
History	3	2	3.4	1.6	3	1	0	1	4.6	0.1	0.1	0.2	4248
Linguistics	5	0	2.5	2.5	4	0	1	0	4.6	0.1	0.2	0.1	1422
Music	4	1	3.4	1.6	4	0	1	0	4.8	0.1	0.1	0.1	3531
Oriental Studies	5	3	5.0	3.0	8	0	0	0	6.8	0.0	1.2	0.0	255
Philosophy	4	1	3.9	1.1	5	0	0	0	4.8	0.1	0.1	0.1	1927
Religious Studies	1	0	0.8	0.2	1	0	0	0	0.9	0.0	0.0	0.0	1420
Romance Languages	2	4	2.2	3.8	5	1	0	0	4.6	1.3	0.0	0.1	2388
Slavic Languages	0	1	0.5	0.5	1	0	0	0	1.0	0.0	0.0	0.0	212
South Asia Studies	0	0	0.0	0.0	0	0	0	0	0.0	0.0	0.0	0.0	135
Arts & Sciences: Social Sciences													
Anthropology	5	3	4.1	3.9	8	0	0	0	7.4	0.2	0.1	0.2	2821
Economics	26	1	22.6	4.4	22	1	4	0	24.9	0.4	1.2	0.5	6346
History & Sociology of Science	0	1	0.7	0.3	1	0	0	0	1.0	0.0	0.0	0.0	186
Political Science	9	1	7.6	2.4	9	0	0	1	9.1	0.2	0.2	0.5	3337
Regional Science	0	0	0.0	0.0	0	0	0	0	0.0	0.0	0.0	0.0	7277
Sociology	5	5	5.7	4.3	8	0	0	2	9.0	0.3	0.3	0.5	4036
Arts & Sciences: Natural Sciences													
Astronomy	0	0	0.0	0.0	0	0	0	0	0.0	0.0	0.0	0.0	401
Biology	7	1	5.5	2.5	8	0	0	0	7.5	0.1	0.3	0.1	9248
Chemistry	6	1	5.7	1.3	6	0	1	0	6.5	0.1	0.4	0.1	11351
Geology	3	0	2.4	0.6	3	0	0	0	2.9	0.0	0.0	0.0	957
Mathematics	13	0	11.1	1.9	9	1	3	0	12.2	0.2	0.5	0.1	3666
Physics	13	1	12.9	1.1	11	0	2	1	13.1	0.1	0.6	0.1	6536
Psychology	5	4	4.7	4.3	9	0	0	0	8.4	0.2	0.1	0.3	20164
Wharton													
Accounting	10	0	7.4	2.6	7	0	3	0	9.2	0.0	0.5	0.3	966
Decision Science	9	1	8.4	1.6	8	0	2	0	9.0	0.1	0.8	0.1	1101
Finance	18	0	15.7	2.3	15	0	3	0	16.0	0.1	1.7	0.2	750
Health Care Systems	1	0	NA	NA	1	0	0	0	NA	NA	NA	NA	NA
Insurance	3	2	NA	NA	5	0	0	0	NA	NA	NA	NA	NA
Legal Studies	9	0	8.1	0.9	8	0	0	1	8.6	0.0	0.3	0.1	208
Management	12	5	14.1	2.9	13	0	3	1	15.8	0.2	0.8	0.2	1089
Marketing	5	1	4.4	1.6	4	0	2	0	5.6	0.0	0.3	0.1	641
Public Policy & Management	3	0	1.9	1.1	1	0	2	0	2.7	0.1	0.0	0.1	426
Social Systems Sciences	3	0	2.0	1.0	3	0	0	0	2.7	0.1	0.1	0.1	202
Statistics	4	0	3.2	0.8	1	0	3	0	3.6	0.0	0.3	0.0	1048
Engineering													
Bioengineering	3	0	2.6	0.4	2	0	1	0	2.7	0.1	0.2	0.0	591
Chemical Engineering	2	1	2.8	0.2	3	0	0	0	2.6	0.0	0.3	0.0	3381
Computer & Info. Science	13	1	12.8	1.2	6	0	7	1	12.1	0.0	1.8	0.1	580
Systems	3	1	3.8	0.2	2	0	2	0	3.6	0.1	0.3	0.0	3380
Electrical Engineering	4	2	5.8	0.2	3	1	2	0	5.3	0.1	0.6	0.0	4905
Materials Science	3	1	3.5	0.5	4	0	0	0	3.5	0.0	0.4	0.0	1450
Mechanical Engineering	5	0	4.8	0.2	3	1	1	0	4.5	0.0	0.5	0.0	3283
Nursing School	0	32	1.3	30.7	31	0	0	1	29.9	0.4	0.4	1.3	1331

University of Pennsylvania Standing Faculty
New Hires at Assistant Professor Rank, 1982-90
National PhD Pool 1981-88: Proportional Representation by Gender and Race

Department	New Hires 1982-1990		Proportional Representation		New Hires 1982-90				Proportional Representation				US Ph.D Pool 1981-88
	Men	Women	Men	Women	White	Hispanic	Asian	Black	White	Hispanic	Asian	Black	Total
Grad. Sch. of Education	3	11	6.8	7.2	9	0	1	4	12.4	0.4	0.2	1.0	54757
School of Social Work	1	2	1.3	1.8	2	1	0	0	2.6	0.1	0.1	0.3	1740
Annenberg School	0	1	0.6	0.4	1	0	0	0	0.9	0.0	0.0	0.0	1587
School of Fine Arts													
Architecture	3	1	*	*	4	0	0	0	*	*	*	*	*
City Planning	2	0	*	*	2	0	0	0	*	*	*	*	*
Fine Arts	0	0	*	*	0	0	0	0	*	*	*	*	*
Landscape Architecture	2	1	*	*	3	0	0	0	*	*	*	*	*
Law School	9	7	11.5	4.5	16	0	0	0	14.3	0.3	0.1	1.2	810
Medical School: Basic Sciences													
Anatomy	2	0	1.3	0.7	2	0	0	0	1.9	0.0	0.1	0.0	920
Biochem. & Biophysics	5	1	4.2	1.8	4	0	2	0	5.5	0.1	0.3	0.1	5573
Human Genetics	4	2	3.4	2.6	6	0	0	0	5.6	0.1	0.3	0.1	938
Microbiology	4	0	2.6	1.4	4	0	0	0	3.7	0.1	0.2	0.1	1870
Pharmacology	9	0	6.2	2.8	9	0	0	0	8.2	0.1	0.5	0.1	1961
Physiology	2	0	1.4	0.6	1	1	0	0	1.9	0.0	0.1	0.0	2063
Medical School: Clinical Sciences													
Anesthesia	42	17	46.0	13.0	55	1	1	2	49.0	1.3	7.8	0.9	2307
Dermatology	4	4	6.3	1.7	8	0	0	0	7.0	0.3	0.5	0.2	355
Medicine	83	29	96.3	15.7	102	2	4	4	100.2	2.3	7.8	1.7	12271
Neurology	22	1	19.7	3.3	20	1	2	0	20.7	0.4	1.7	0.2	1573
Obstetrics & Gynecology	29	20	39.5	9.5	45	0	1	3	41.7	1.7	3.6	1.9	2041
Ophthalmology	9	3	10.5	1.5	12	0	0	0	10.8	0.2	0.8	0.1	949
Orthopedic Surgery	19	0	17.8	1.2	17	0	2	0	17.7	0.2	0.9	0.2	670
Otorhinolaryngology	7	0	6.0	1.0	6	0	1	0	6.6	0.1	0.4	0.0	509
Pathology	30	10	31.5	8.5	39	1	0	0	34.0	1.4	4.1	0.5	3651
Pediatrics	47	27	52.0	22.0	69	0	2	3	64.9	2.2	5.4	1.5	5201
Physical Medicine	4	2	4.2	1.8	3	0	3	0	5.0	0.1	0.7	0.2	425
Psychiatry	30	8	29.9	8.1	33	0	4	1	34.2	1.1	1.7	1.0	4650
Radiology	26	13	32.9	6.1	35	2	0	2	32.9	1.1	4.3	0.6	3564
Radiation Oncology	24	7	26.1	4.9	27	0	2	2	26.2	0.9	3.4	0.5	3564
Surgery	26	6	29.7	2.3	29	0	2	1	29.0	0.8	1.8	0.5	4779
Dental School: Basic Sciences													
Biochemistry	0	0	0.0	0.0	0	0	0	0	0.0	0.0	0.0	0.0	4881
Histology, Embriol., Anatomy	0	0	0.0	0.0	0	0	0	0	0.0	0.0	0.0	0.0	1486
Microbiology	0	0	0.0	0.0	0	0	0	0	0.0	0.0	0.0	0.0	2575
Pathology	1	0	0.7	0.3	1	0	0	0	0.9	0.0	0.1	0.0	821
Physiology/Pharmacology	0	0	0.0	0.0	0	0	0	0	0.0	0.0	0.0	0.0	4024
Dental School: Clinical Sciences													
Clinical Departments	17	5	*	*	19	1	0	2	*	*	*	*	*
Veterinary School: Basic Sciences													
Animal Biology	3	0	2.6	0.4	3	0	0	0	2.9	0.0	0.1	0.0	197
Pathobiology	5	2	4.8	2.2	5	0	1	1	6.4	0.1	0.4	0.1	821
Veterinary School: Clinical Studies													
New Bolton Center	13	4	*	*	15	0	2	0	*	*	*	*	*
Philadelphia	10	10	*	*	20	0	0	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.

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	Department Used from Availability Data
American Civilization	American Studies, History (American)
Classical Studies	Classics
Folklore & Folklife	Anthropology
History and Soc. of Science	History of Science
Oriental Studies	Chinese, Japanese, Hebrew, Arabic
Regional Science	Economics, Geography
Romance Languages	French, German, Italian, Spanish
South Asia Studies	Chinese, Japanese

Wharton School

Penn Department	Department Used from Availability Data
Decision Sciences	Information Science and Systems, Operations Research
Finance	Banking and Finance
Legal Studies	Law, Jurisprudence(82-89)
Management	Business and Management, General & Other
Social Systems	Social Sciences, general

School of Engineering

Penn Department	Department Used from Availability Data
Systems	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	Department Used from Availability Data
Clinical Departments include:	
Dental Care	Dental Public Health
Endodontics	Endodontics
FFMS	Oral Pathology
Oral Medicine	Oral and Max. Surgery
Oral Surgery	Orthodontics
Pediatric Dentistry	Pedodontics
Periodontics	Periodontics
Restorative Dentistry	Prosthodontics

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	Department Used from Availability Data
Human Genetics	Human and Animal Genetics
Medicine Department	Internal Medicine
Microbiology	Epidemiology, Parisitology, Bacteriology (1983-1987) Microbiology/Bacteriology & Parasitology (1981-1982, after 1987)
Otorhinolaryngology	Otolaryngology
Pathology	Human and Animal Pathology
Pharmacology	Human and Animal Pharmacology
Physiology	Human and Animal Physiology
Radiation Oncology	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	Department Used from Availability Data
Animal Biology	Animal Breeding and Genetics (Animal Husbandry, 1981 and 1982)
Pathobiology	Human and Animal Pathology