

percent of the doctorates awarded. By 1980, these numbers had risen to 49.2, 49.5, and 30.3 percent respectively.

Minorities have increased their share of freshman enrollment from 7.9 percent of men and 9.4 percent of women in 1971 to 10.5 percent of men and 12.4 percent of women in 1981. By 1979, their representation among new graduates reached 10.5 percent of men and 13.5 percent of women at the bachelor's level, 10.2 and 12.8 percent at the master's level, and 8.7 and 10.3 percent at the doctoral level. Minority women, particularly black women, have higher representation in higher education relative to black men than do white women relative to white men.

In most of the professions, both women and minorities have made large strides. This is particularly true in medicine, dentistry, and the law. While both groups have increased their proportion of doctoral engineering degrees (women now receive 3.2 percent, minorities 6.6 percent), these numbers are still not high enough to fill the nation's demand for qualified engineers.

Particularly at the graduate level, the proportions of graduates who are foreign nationals on temporary visas has grown significantly over the decade. In engineering, for example, foreign students earned 12.1 percent of the Ph.D.'s awarded by U.S. schools in 1969. By 1981, their share of Ph.D.'s had risen to 37.1 percent. Science, engineering, and mathematics areas also include significant numbers of foreign-born students, in addition to foreign students on temporary visas. Among the engineering doctoral graduates in 1980, only 50.6 percent were U.S. citizens.

Professional Women & Minorities—a Manpower Data Resource Service provides a comprehensive statistical picture of the professional workforce in the United States, detailing the participation of women and minorities in the natural and social sciences, engineering, arts, humanities, education, and all of the professions.

The book includes basic information on affirmative action; manpower data in all fields from more than 200 sources; annotated recruitment resources, both for specialized fields and for general recruitment of professional women and minorities; a detailed bibliography; and a comprehensive cross-index of the 350 tables which provide breakouts by sex and/or minority status. Both historical and current data on enrollments, degrees, and on general, academic, and federal workforce participation of wom-

For more information about the activities and publications described in "AAAS News," write to the appropriate office, AAAS, 1776 Massachusetts Avenue, NW, Washington, D.C. 20036, unless otherwise indicated.

en and minorities are presented by field and subfield.

Professional Women & Minorities—a Manpower Data Resource Service, third edition (300 pages) by Betty M. Vetter, Eleanor L. Babco, and Susan Jensen-Fisher, is available for \$60 from the Scientific Manpower Commission, 1776 Massachusetts Avenue, NW, Washington, D.C. 20036.

BETTY M. VETTER
ELEANOR L. BABCO
Scientific Manpower Commission

AAAS Travelers

AAAS has been invited to send a representative to the 38th Annual Session of the Sri Lanka Association for the Advancement of Science to be held in Colombo, 17–22 December 1982. The theme of the Session will be "Science and the Quality of Life." The AAAS delegate has been invited to deliver both a specialized and a popular lecture.

AAAS members who plan to be in the area at that time and/or who know of colleagues on sabbatical in the region who might be able to attend should contact Denise Weiner, Office of International Science, at the AAAS address. Please include a curriculum vitae. No travel funds are available; however, partial support (per diem only) will be provided.

Meeting to Assess Use of Genetics in Management of Wild Populations

The U.S. Man and the Biosphere Program will hold an international symposium and workshop on the Application of Genetics to the Management of Wild Plant and Animal Populations, 9–13 August 1982 in Washington, D.C. AAAS is one of the sponsoring organizations for the meeting.

The meeting will focus on how genetic concepts and techniques relevant to the conservation of plants and animals can best be used by persons with management responsibilities for these resources.

In addition to keynote lectures, the program will feature five symposia sections: (i) the isolation of populations, (ii) the extinction of populations, (iii) the founding of new populations, (iv) the merging of naturally disconnected populations, and (v) preserving the natural diversity of populations and taxonomic units.

Workshop sessions each afternoon will include both general and specific discussions of concepts and methods as well as demonstrations of laboratory equipment and procedures. Participants are invited to submit specific resource problems and data for discussion.

For further information contact Christine Schonewald-Cox, Division of Natural Sciences, National Park Service-494, U.S. Department of the Interior, Washington, D.C. 20240, telephone 202-523-5139.

Pacific Division Program Features Creationism, Medfly, and Risk Analysis

The AAAS Pacific Division meeting will be held 20–24 June on the Santa Barbara campus of the University of California.

Symposia will focus on scientific topics as well as issues of current controversy. A special 2-day session on "Evolutionists Confront Creationists" has among its speakers Duane T. Gish, Institute for Creation Research; Russell Doolittle, University of California, San Diego; G. Brent Dalrymple, U.S. Geological Survey; Robert Root-Bernstein, Salk Institute; John Patterson, Iowa State University; Vincent M. Sarich, University of California, Berkeley; and Frank T. Awbrey and William M. Thwaites, San Diego State University.

The symposium on "Quantification of Risk: Reducing the Uncertainties" will present a wide range of viewpoints with speakers from the private sector, academia, and the government. This is the first program sponsored by the newly organized Section P (Industrial Sciences) of the Division, coordinated by Paul Brubaker of Exxon. Section K (Social, Economic, and Political Sciences) is cosponsoring the risk analysis symposium.

"The Medfly in California: The Threat, Defense Strategies, and Public Policy" is sponsored by the western section of the American Society for Horticultural Science. Participants represent the major protagonists in the dispute, notably the state and federal departments of agriculture. Speakers will review the problem and attempted solutions, and will assess effects of the medfly extermination campaign on public health, horticultural crops, and the environment.

The AAAS national office is conducting two symposia at the meeting. "Computers and Science Teaching: Perspectives in the Life Sciences" will report on the use of videodiscs in teaching biology, on testing learning by use of computers, and on personal computers as aids in learning science. A session on "Access to Science for Women and Minorities" will highlight successful programs which have prospered in the Pacific region, such as MESA, EQUALS, the Bay Area

Math/Science Network, Math Science Interchange, the Math Without Fear Program at San Francisco State University, and the Minority Women in Science Network.

"Science, Deviance, and Society" will examine areas of aberrant behavior in the science professions. Speakers will look at scientific frauds; science misrepresentations, or "white coat" crime; compliance and noncompliance with rules regarding research on human subjects; policing scientific research; and the sociological and ideological bases of deviant behavior in science.

Other symposia topics include the Biogeography and Evolution of Oaks, Amphibian Physiology, Factors in Biotic Diversity: A Paleontologic Perspective, and Health and Social Sciences: Implications for Public Policy. Contributed paper sessions are scheduled in meteorology, ecology, botany, horticultural sciences, psychology, plant physiology, biology, and geology.

Field trips are planned to Santa Cruz Island, local orchid nurseries, Ransom Seed Laboratory, Santa Barbara wineries, and sites of interest to horticultural science. Social events include a welcoming party, wine and cheese tasting, and the Division banquet, with a presidential address by Robert I. Bowman, San Francisco State University, on a centennial view of Darwin's finches.

Short courses on several scientific topics will be offered during the meeting, with an option for continuing education credit through San Francisco State University. Topics include industrial organic chemistry, personal computers in learning science, origin and early evolution of life, plate tectonics, and ecology of terrestrial microcommunities.

For further information on the short courses, contact Joseph Dasbach at the AAAS headquarters; on other aspects of the meeting, contact Alan Leviton, California Academy of Sciences, San Francisco, California 94118.

AAAS Annual Elections: Preliminary Announcement

The Association's 1982 elections will be held in September. All members will receive ballots in the general election for president-elect, members of the Board of Directors, and members of the Committee on Nominations. Each member who is enrolled in one of the 21 electorates corresponding to the AAAS sections will receive an electorate ballot for section chairperson-elect, member-at-large of the section committee, and members of the electorate nominating committee. In addition, seven electorates will elect Council delegates this year. Members

who have not yet enrolled in an electorate are invited to inform the Association now of the electorate (section) of their choice.

Candidates for all positions are listed below. Additional names may be placed in nomination for any position by petition submitted to the Executive Officer not later than 19 July. Petitions nominating candidates for president-elect, members of the Board, or members of the Committee on Nominations must bear the signatures of at least 100 members of the Association. Petitions nominating

candidates for any electorate or section position must bear the signatures of at least 50 members of the electorate. A petition to place an additional name in nomination for any position must be accompanied by the nominee's curriculum vitae and statement of acceptance of nomination.

Biographical information about the following candidates will be enclosed with the ballots mailed to members in early September. The practice of publishing such information in *Science* in late August has been discontinued.

General Election

President-Elect

David A. Hamburg, Harvard University
Herbert F. York, University of California, San Diego

Board of Directors

Robert W. Berliner, Yale University
Donald N. Duvick, Pioneer Hi-Bred International, Inc.
Dorothy Nelkin, Cornell University
George E. Pake, Xerox Corporation

Committee on Nominations

Eugene H. Cota-Robles, University of California, Santa Cruz
James D. Ebert, Carnegie Institution of Washington
George Field, Harvard University
James H. M. Henderson, Tuskegee Institute
Wilmot N. Hess, National Center for Atmospheric Research
Irene C. Peden, University of Washington
Betty H. Pickett, National Institute of Child Health and Human Development
Harry Woolf, Institute for Advanced Study

Electorate Elections

Section A—Mathematics

Council Delegate
Lenore Blum, Mills College
Leon Henkin, University of California, Berkeley
Chairperson-Elect
Gerard Debreu, University of California, Berkeley
Gail S. Young, University of Wyoming
Member-at-Large of the Section Committee
Emil Grosswald, Temple University
Alice T. Schafer, Wellesley College