

The new committee's primary objective will be to make policy recommendations to both universities and the government for more effective participation by American educational institutions in international affairs.

AAAS-Westinghouse Science Writers Contest Draws 166 Entries

Science writers whose work appears in American newspapers and magazines have submitted 166 articles for the AAAS - Westinghouse Science Writing Awards competition. A prize of \$1000 for the best article appearing in each type of publication will be awarded at the annual AAAS meeting in Chicago this December.

Of the entries submitted, 102 were articles that appeared in magazines between 1 October 1958 and 30 September 1959, the time span for the contest, and 64 were newspaper stories. Some participants submitted multiple entries.

A committee composed of Hillier Kriegbaum, department of journalism, New York University; Sidney Negus, department of biochemistry, Medical College of Virginia; and James Stokley, school of journalism, Michigan State University will screen the entries. Seven judges will choose the two prize-winning articles from those selected by the committee. In addition to the \$1000 prizes, citations will be awarded to the newspaper and magazine in which the articles appeared. At the discretion of the judges, special citations also may be awarded for distinguished service in science journalism.

The judges are: Graham DuShane, editor of *Science*; Earl English, dean of the school of journalism at the University of Missouri; Caryl Haskins, president of the Carnegie Institution of Washington; James A. Linen, publisher of *Time*; Morris Meister, president of Bronx Community College; Alan T. Waterman, director of the National Science Foundation; and J. Russell Wiggins, vice president and executive editor, *Washington Post and Times Herald*, and president of the American Society of Newspaper Editors.

"Century 21" Postponed until 1962

The international Century 21 Exposition, originally scheduled to open in Seattle, Wash., in May 1961, will open instead in April 1962. This world fair

will emphasize science and its relationship to the development of man. On 9 September Congress allocated \$9 million for federal participation, the largest amount ever appropriated for an international exposition in the United States. On the following day Century 21 launched a study to examine the exposition's time schedule as it related to building and exhibit design and construction, and to the equally important matter of obtaining significant participation from U.S. industry, foreign governments, and other potential exhibitors.

The 3-week study was completed by 1 October, after correspondence and conferences with representatives of foreign governments, U.S. industry, the National Science Planning Board, the U.S. Department of Commerce, the General Services Administration, and others who have a role in organizing the exposition. On the basis of the report of the study, the exposition officers and steering committee have recommended the later opening date. Concurrence in this action has been obtained from the U.S. Department of Commerce; Frölich Rainey and members of the National Science Planning Board; the General Services Administration; Allen Beach, deputy director of the exposition; and various interested U.S. industries.

The Department of Commerce has appointed an architect to plan the federal science pavilion and is beginning work on the comprehensive exhibit-design program made possible by the Congressional appropriation.

The General Services Administration will direct the design and construction of the federal science pavilion.

Beach met recently in Washington with representatives of foreign embassies. In July these embassies received their first formal invitations from the U.S. State Department. Beach's report showed that most foreign governments that are now expressing interest in becoming exhibitors are convinced they will need additional time to obtain exhibit funds from their legislative bodies.

Various U.S. industries have been awaiting federal action which would determine whether Century 21 is to be an international exposition or merely a regional fair. Representatives of these industries point out that their 1960 budgets are now being completed. If their exhibits are to be of international-exposition caliber, special appropriations from their boards will be necessary.

Physician-Population Ratio Declining

The Public Health Service reports that the ratio of physicians to population in the United States, which has ranged between 131 and 135 per 100,000 persons for 20 years, will drop to 126 per 100,000 by 1975 unless the rate of graduating students increases substantially. The number of dentists per 100,000 persons in the population will decline even more sharply. These predictions are provided by a recent PHS publication, *Health Manpower Source Book, Section 9: Physicians, Dentists, Nurses*, which describes trends in the education, location, and specialization in the professions named.

In the academic year 1958-59, the 85 medical schools in the United States graduated 6895 physicians. To maintain the present physician-population ratio, U.S. medical schools would need to graduate about 10,360 students by 1975 — nearly 3000 above the 7410 graduates currently predicted for that year.

The 47 dental schools in the United States graduated 3083 dentists in the academic year 1957-58. Despite the addition of eight new dental schools since World War II and large increases in the number of graduates, the ratio of dentists to population remains below pre-World War II levels. This decline is expected to continue. To regain the current dentist-population ratio, about 2700 more dental graduates above the number currently predicted will be needed in 1975. This requires a 75-percent increase in the number of dental students who, according to present estimates, will be graduated during that year.

According to the report, the ratio of dentists was 62 per 100,000 people in 1940, 57 in 1958, and is expected to decline to about 50 per 100,000 in 1975.

Belvedere Fund Established

Belvedere Scientific Fund has been established in San Francisco to support activities and provide grants in the fields of natural science. Present interest is centering upon Baja California, Mexico. Scientific director of the fund is Ira L. Wiggins, who is on leave from Stanford University.

The fund, in cooperation with the California Academy of Sciences, began investigations of the natural history of Baja California in the autumn of 1958. Two extended overland expeditions and

several brief reconnaissance trips have already been completed, and additional exploratory work is under way. The initial project will place primary emphasis on botanical research in that area, but it is expected that future projects will be undertaken in other disciplines and in other areas.

Under a grant from the fund, it is expected that the California Academy of Sciences will substantially expand its present library on all phases of the natural history and resources of Baja California. Donations to, exchanges with, or information about items that might be added to this library will be welcome. Correspondence about such items and inquiries about the research program should be addressed to: Belvedere Scientific Fund, 155 Sansome St., San Francisco 4, Calif.

National Observatory Announces Visiting Scientist Programs

The National Radio Astronomy Observatory was established by the National Science Foundation to make available to scientists from any institution facilities for research in radio astronomy. The observatory now has in operation a radio telescope of 85-foot diameter, together with receivers for work at various wave-lengths in the range 75 to 3.75 cm. The facilities of the observatory are open to any competent scientist with a program of work in radio astronomy, regardless of institutional affiliation.

A scientist who wishes to undertake work at the observatory should apply by letter to the Director, National Radio Astronomy Observatory, P.O. Box 2, Green Bank, W. Va. The letter should contain a description of the program to be carried out, including a statement of the objects to be investigated and their positions, expected flux densities or antenna temperatures, the receivers to be used, any additional or special equipment that will be needed, and the investigator's estimate of the time required for the program.

The observatory also invites inquiries, from any scientist interested in radio astronomy, concerning the opportunities and facilities available. No previous experience in the techniques of radio astronomy is necessary.

The National Radio Astronomy Observatory is operated by the Associated Universities, Inc., under contract with the National Science Foundation.

Grants, Fellowships, and Awards

Fertility. The Lalor Foundation has announced its 1960 program of awards for research in the biological sciences. These awards will be for support of research on the fundamental biochemical and physiological mechanisms concerned with fertility and reproduction in various forms of life. The objectives are to further the knowledge and understanding of the basic phenomena involved and to extend and develop the possibilities for effective regulation and control.

The awards may range up to \$8000 per year, depending upon the scope and duration of the projects approved. Preference will be given to younger members of university and college staffs, with an upper age limit of 45 years. Proposed work may be carried on at the applicant's own institution or elsewhere.

The foundation will also grant post-doctoral summer or short-term research awards at the Marine Biological Laboratory at Woods Hole, Mass., or elsewhere, for appropriate projects in the fields specified. For these awards, the stipends will ordinarily not exceed \$900 for a single man or woman, \$1100 for a married man working at his home institution, and \$1250 for a married man with principal program at another institution.

Requests for information and for application forms should be directed to the Lalor Foundation, 4400 Lancaster Pike, Wilmington 5, Del. The final date for receipt of executed application forms, complete with supporting data, is *15 January 1960*. Notification of appointment will be on or before *15 March*. The 1960 program follows closely the pattern of the current 1959 program, under which 27 awards were granted.

Pharmacognosy. The American Foundation for Pharmaceutical Education has announced the Edwin Leigh Newcomb Memorial Awards in Pharmacognosy. Published papers may be submitted, but they must represent work published not more than 1 year prior to its receipt by the awards committee. For information, write to Dr. H. W. Youngken, Massachusetts College of Pharmacy, 179 Longwood Ave., Boston 15, Mass.

Teaching equipment. The National Science Foundation has announced that *31 December* is the deadline to apply for awards under its program to encourage mathematicians, scientists, and engineers to devise new laboratory

equipment for school and college courses. The objective of the program is to aid competent scientists to develop new equipment of potentially wide usefulness. Grantees are expected to supply teachers with full information about apparatus they devise. Such information is commonly distributed in the form of reports, articles in professional journals, and presentations at professional meetings. Once equipment has been developed, grantees are expected, as well, to permit interested commercial suppliers to enter negotiations for production and marketing. Further information may be obtained from the Course Content Improvement Section, National Science Foundation, Washington 25, D.C.

Women. The American Association of University Women has prepared a list of its graduate fellowships and international grants for 1960-61. This may be obtained from the Committee on Fellowships Awards, American Association of University Women, 1634 I St. NW, Washington 6, D.C. The application deadline for most of the awards is *1 December*.

News Briefs

The reactor for this country's first full-scale, privately financed nuclear power station has sustained its first chain reaction, according to a joint announcement by the General Electric Company and the Commonwealth Edison Company. Criticality was reached at the Commonwealth Edison Dresden nuclear power station 50 miles southwest of Chicago after engineers placed the 28th fuel element in the reactor core. When completely loaded, the core will contain 488 such elements. General Electric designed and built Dresden for the Commonwealth Edison Company and the cosponsoring Nuclear Power Group, Inc., which has seven members in addition to Commonwealth Edison.

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A national tabulation of malformations at birth will be started in 1960 by the Office of Vital Statistics. The program resulted largely from the wide interest in the hereditary effect of radioactivity.

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Fellowships in the Arts and Sciences 1960-61, edited by Virginia B. Potter, was published on 5 October by the Association of American Colleges. This is the third annual edition of this direc-