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 postdoctoral 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-

tory of fellowships offered by government, foundations, industry, and other sources outside of universities. Copies of the book may be obtained at $3.75 from the Publications Division of the American Council on Education, 1785 Massachusetts Ave., NW, Washington 6, D.C.

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A set of final examinations given at the Russian 10-year school was included in testimony on Soviet education presented by Vice Admiral Hyman Rickover to the House Appropriations Committee at hearings last August. Recently the printed transcript containing the examinations was made available. Normal circulation for such a record is 1000 copies; however, within 10 days the committee had received requests for more than 5000 copies.

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An exchange program between the Czechoslovak Academy of Sciences and the Waldemar Medical Research Foundation is now in progress. Three scientists from the Czechoslovak Academy will pursue their researches at the foundation's Port Washington, N.Y., laboratories during the 1959–60 period, and in 1960–61 representatives of the Waldemar laboratory will conduct studies in Czechoslovakia. These studies are concerned with problems of tumor immunity, immunotherapy, and the pathophysiology of the host-tumor relationship.

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Funds for the performance of research and development in private industrial firms totaled $7.2 billion in 1957, according to a National Science Foundation report, *Funds for Research and Development Performance in American Industry, 1957.* Of this amount, more than half was accounted for by two industries: the aircraft industry and the electrical equipment industry. Total performance of research and development in private firms increased about one-fifth between the 2 years covered, 1956 and 1957, from $6 billion to $7.2 billion. The survey also showed that during 1957 $3.7 billion, or slightly more than one-half of the total research and development performed by private industrial firms, was financed by the Federal Government.

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Massachusetts General Hospital, Boston, has received a gift of $1 million from the Joseph P. Kennedy, Jr. Memorial Foundation for the establishment of the Joseph P. Kennedy, Jr. Laboratories for Research on Mental Retardation. Half of the amount will be spent for the construction of the laboratories and the other half will serve as an endowment to provide continuing operating funds. The new research unit will be concerned with the causes, treatment, and prevention of diseases of the brain occurring during infancy and childhood. The work will be directed by Raymond D. Adams, the hospital's chief of neurology and Bullard professor of neuropathology, Harvard Medical School.

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A monograph entitled "The Analysis of Fatty Acid Mixtures by Gas-Liquid Chromatography: Construction and Operation of an Ionization Chamber Instrument," by John W. Farquhar *et al.* of the Rockefeller Institute, was published as a separate supplement to the August issue of *Nutrition Reviews.* Reprints of this 30-page, illustrated pamphlet are available, free, from the publisher of *Nutrition Reviews,* the Nutrition Foundation, Inc., 99 Park Ave., New York 16, N.Y.

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A United States exhibit describing the historical development and use of high-speed computers in information processing has begun a tour of French universities and other European educational centers. The exhibit, "Progress in Information Processing," was prepared by the National Science Foundation in cooperation with other government agencies and with industrial groups. The tour is sponsored by the U.S. Information Services. Showings also have been arranged at meetings and institutions in the United States.

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A "Summary-Analysis" of hearings on industrial radioactive waste disposal was released recently by the Joint Congressional Committee on Atomic Energy. The publication reviews the major points developed during hearings held during January, February, and July 1959, by the Special Subcommittee on Radiation, under the Chairmanship of Representative Chet Holifield (D-Calif.).

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According to Peking radio, scientists in mainland China have discovered a well-preserved lower jaw of a Peking woman, a human being who lived half a million years ago. The jaw was excavated by a team from the Institute of Vertebrate Paleontology of the Chinese Academy of Sciences in a cave at Choukowtien, outside of Peiping, where the first fossils of Peking man were found in 1929.

Scientists in the News

Hans A. Bethe, theoretical physicist, who in 1938 developed the theory that the carbon-nitrogen cycle is instrumental in the sun's energy production, has been named recipient of the Franklin Medal, highest award of the Franklin Institute. Bethe, who is the John Wendell Anderson Professor of Physics at Cornell University, received the medal at formal institute ceremonies on 21 October.

Wallace R. Brode, science adviser to the Department of State, was named president-elect of the Optical Society of America at its 44th annual meeting. He will succeed **James G. Baker,** consultant to the Harvard University Observatory, who is president of the society for 1960.

Armin C. J. Braun has been appointed a member and professor of the Rockefeller Institute. Braun, a plant physiologist, has been at the Institute since 1938. Among other honors, he has received the Newcomb Cleveland prize of the AAAS, which was presented at the 1949 Annual Meeting.

John P. Conrad, professor of agronomy at the University of California, Davis, retired 1 October after 38 years of service. In 1947, Conrad was chosen Faculty Research Lecturer at Davis in honor of his work on soils and crop-yield relationships. His studies have included effects of crop residues on yields of following crops and basic work on soil enzymes.

Conrad expects to leave this month for a 2-year assignment in Panama City, where he will be curriculum adviser to a new College of Agriculture at the University of Panama.

The following individuals have received the Special 1959 Albert Lasker Awards for Extraordinary Public Service to the nation's health: **Senator Lister Hill** (Alabama), chairman of the Senate Committee on Labor–Health, Education, and Welfare Appropriations; **Representative John E. Fogarty** (Rhode Island), chairman of the House Sub-Committee on Labor–Health, Education, and Welfare Appropriations; **Maurice Pate,** executive director, United Nations Children's Fund, New York; **John Holmes Dingle,** Western Reserve University Medical School, Cleveland; **Albert Coons,** Harvard University Medical School, Cambridge;