GEORGE M. REED, Pittsburgh, Pa.; 78; curator emeritus of the Brooklyn Botanic Garden; 30 June.

GEORGE I. SWETLOW, Brooklyn, N.Y.; 57; professor of medical jurisprudence at the Brooklyn Law School; lecturer on neuroanatomy at the Long Island College Hospital; 20 Aug.

Education

■ New York University has commissioned a 65-foot schooner, the *Action,* for oceanographic research. The following studies are among those planned for the *Action*:

1) Air-sea boundary processes, including the exchange of energy between the atmosphere and the oceans and oceanic effects on long-range weather forecasting.

2) Solar radiation, including the question of how much of the sun's energy penetrates the sea and how much is reflected. Knowledge of the water-air "heat exchange" is expected to help improve weather forecasting.

3) Evaporation from water surfaces under different weather and sea conditions.

4) Exchange of water masses between the open sea and Long Island Sound and other landlocked water bodies in the New York area. This study would give—besides the basic hydrographic information—clues to the solution of such problems as water pollution and the washing away of certain mainland and island coasts by tides and other currents.

5) Offshore land-sea breezes. These occur, for example, in the summer when warm air rising off the land brings in cool breezes in the afternoon. At shore areas, offshore breezes cause an upwelling of cold water from lower layers of the ocean. More information about this would aid water-temperature forecasting for bathing and fishing purposes.

■ The National Science Foundation has granted $545,000 to the University of Michigan for studies leading to the establishment of an observatory. The studies, under the direction of Robert R. McMath, director of McMath-Hulbert Observatory, are a continuation of work undertaken last year by the university with previous grants from the foundation.

■ American Cyanamid Company's Lederle Laboratories and Research Divisions held "An Evening of Science" at Pearl River (N.Y.) High School recently to stimulate scientific interest in students of 27 high schools. An elaborate display included such diverse exhibits as microscopes and specially prepared slides, live mice, chick embryos, and petri dishes showing the growth of antibiotic-producing molds.

■ The U.S. Navy has established a work-study scholarship plan for high-school graduates in an effort to relieve the shortage of engineers and scientists. Under the plan, students will combine work at naval installations with scientific study at colleges. The Navy will provide partial scholarships for the study phase, as well as a government salary during both the work and study periods. In return students agree to continue after graduation as naval civilian employees for a minimum of 1 year for each year of training received. For information, write to the Office of Industrial Relations, Navy Department, Washington 25, D.C.

■ St. John's College, Annapolis, Md., is to have a new science building that will house ten laboratories, 20 special-project rooms, and a planetarium. Construction is being financed with the aid of grants totaling $1.25 million from the Old Dominion Foundation of New York.

Grants, Fellowships, and Awards

■ The U.S. Public Health Service has organized a program to provide specialized training in steroid investigation. The National Cancer Institute has established grants for a joint training program in steroid biochemistry to be conducted at Worcester, Mass., and at Salt Lake City, Utah, through the cooperative effort of the Worcester Foundation for Experimental Biology, Shrewsbury, Mass., with the department of chemistry at Clark University, Worcester, and the department of biochemistry at the University of Utah College of Medicine. Two types of fellowships are planned: a 1-year program, carrying a stipend of $5000, for candidates who hold an M.D. or a Ph.D. degree; and a 6-month, $1500 program for candidates having a B.S. or M.S. degree in chemistry, or in medical technology or an equivalent.

The postdoctoral fellowship is intended for scientists who contemplate research involving steroid techniques and who wish to obtain a broad experience. During a portion of the year such fellows may initiate work on their particular problems under the guidance of established investigators.

The predoctoral program is primarily for training in the analytic determination of various steroids. Trainees completing the 6-month program will be able to carry out such determinations competently, either in connection with a research program or for diagnostic purposes. Both training programs will include theoretical and practical considerations as well as experience in specialized techniques.

The first groups will begin on 1 Jan. 1957 at Salt Lake City, and 1 Feb. 1957 at Worcester. In both cases the closing date for application is *1 Nov. 1956.* For more information about the program, communicate with Dr. Kris Eik-Nes, Department of Biochemistry, College of Medicine, University of Utah, Salt Lake City, or Dr. Frank Ungar, Worcester Foundation for Experimental Biology, Shrewsbury, Mass.

■ The North Atlantic Council has approved for the second year a NATO-sponsored fellowship and scholarship program designed to encourage study and research in subjects of mutual interest to NATO members. Areas of study include social, cultural, and scientific fields. The application deadline is *1 Nov.* for the two categories of awards specified:

1) Research fellowships, for 2- to 4-month periods, to candidates of recognized stature. Submit applications to the Conference Board of Associated Research Councils, 2101 Constitution Ave., NW, Washington 25, D.C.

2) Scholarships to younger scholars for the 1957–58 academic year. Apply to the Institute of International Education, 1 E. 67 St., New York 21, N.Y.

■ The National Institute of Neurological Diseases and Blindness has announced that funds are being made available to medical schools to strengthen existing clinical programs in advanced training in the neurological diseases. The purpose is to stimulate the interest of more young physicians and scientists in careers as teachers and investigators.

Training grants also are available to basic science departments to expand postdoctoral training programs in the neurological sciences. Further information, together with application forms, may be obtained from the Chief, Extramural Programs, National Institute of Neurological Diseases and Blindness, National Institutes of Health, Bethesda 14, Md.

■ The Division of Medical Sciences of the National Academy of Sciences–National Research Council will accept applications for postdoctoral research fellowships for 1957–58 *until 1 Dec.* The fellowships are awarded in the early spring. Complete details and application blanks may be obtained from the Division of Medical Sciences, National Academy of Sciences–National Research Council, 2101 Constitution Ave. NW, Washington 25, D.C.

The following groups of fellowships are awarded and administered by the division's Medical Fellowship Board: (i) *National Research fellowships in the medical sciences,* supported since 1922 by the Rockefeller Foundation; (ii) *Donner fellowships for medical research,*

made possible by a new grant from the Donner Foundation; and (iii) *Markle fellowships in the medical sciences,* provided through a new appropriation of the John and Mary R. Markle Foundation.

The purposes and conditions governing these three programs are identical. They are designed to offer research experience in the basic medical sciences for persons who look forward to careers in academic medicine and investigation. Fellows are therefore expected to devote essentially their entire time to research at the fundamental level. Funds are not available for support of those who are seeking practical experience in the clinical field.

Awards are open to citizens of the United States and Canada who hold the M.D. or Ph.D. degree, or the equivalent. Ordinarily fellowships are not granted to persons over 35 years of age.

One other group of awards is administered for the James Picker Foundation by the division's Committee on Radiology. In line with the interests of the Picker Foundation, the program is oriented toward, but not necessarily limited to, the diagnostic aspects of radiology. Applications in the field of veterinary radiology will be accepted and considered on their merits. Support is not restricted to citizens of the United States or to laboratories within this country. The three types of awards in radiological research are as follows.

1) *Grants-in-aid.* These are designed to encourage research offering promise of improvement in radiological methods of diagnosis or treatment of disease.

2) *Grants for scholars.* These are a transitional form of support, designed to bridge the gap between the completion of fellowship training and the period when the young scientist has thoroughly demonstrated his competence as an independent investigator. A grant of $6000 per year will be made directly to the scholar's institution as a contribution toward his support, or his research, or both. Initial grants are limited to 1 year, but renewal may be recommended. Applications should be submitted by the institution on behalf of the candidate.

3) *Fellowships in radiological research.* These are open to candidates seeking to gain research skills leading to investigative careers in the field of radiology. While persons from closely related disciplines are eligible to apply, candidates whose training has been directly in the field of radiology will receive preference under this program. Candidates must hold the M.D., Ph.D. or ScD. degree or the equivalent, and should ordinarily be not more than 35 years of age.

■ The National Science Foundation has announced that 289 grants totaling $3,504,227 were awarded during the quarter ending 30 June for the support of basic research in the sciences, for conferences in support of science, for exchange of scientific information, for training of science teachers, and for support for the attendance of scientists at scientific meetings abroad. This is the fourth and final group of awards to be made during fiscal year 1956. Since the beginning of the program in 1951, 2495 such awards have been made totaling almost $30 million.

In the Laboratories

■ A contract for construction of the new Convair-Astronautics facility, home of the Atlas intercontinental ballistic missile, has been awarded by the Convair Division of General Dynamics Corporation. The entire astronautics project will cost approximately $40 million, with construction costs amounting to roughly half that figure. The other half will be for special equipment.

The new plant will be built on the northeastern outskirts of San Diego, Calif. It will consist of a one-story high-bay manufacturing building, two connected six-story office buildings, one for administration and the other for engineering, an engineering laboratory, a cafeteria-auditorium, an instrument and computer center, and other special-purpose test and utility buildings. In all, the plant will have nearly 1 million square feet of floor space. It will be completed in the fall of 1957.

■ The Du Pont Company has announced plans to construct a $2-million radiation physics laboratory at the Experimental Station in Wilmington, Del. The laboratory, which will be operated by the company's engineering department, will provide additional facilities for long-range research on the measurement of radiation and its absorption in various materials. The new unit is expected to supply fundamental data for radiation studies now being conducted in various departments of the company. Construction is scheduled for completion in January 1958.

■ Weather conditions ranging from subfreezing to extreme heat will be simulated in a new, advanced environmental testing chamber soon to be completed at the Westinghouse Electric Corporation plant in Baltimore, Md. The $275,000 facility will be used by the electrical test department to evaluate the effect of various weather conditions on airborne electronic systems being built for the Navy and the Air Force. The chamber, which is 10 by 18 by 16 feet, consists of two sections: in one section electronic equipment will be subjected to rain, humidity, and salt-spray tests; in the other, altitude and temperature tests will be conducted.

Miscellaneous

■ This fall the R. R. Bowker Company will publish the third volume in the ninth edition of *American Men of Science,* covering the social and behavioral sciences. Edited by Jaques Cattell and published with the cooperation of the Social Science Research Council and its affiliated organizations, this volume provides detailed biographical information on more than 15,000 United States and Canadian leaders in sociology, anthropology, statistics, political science, psychology, economics, and geography.

With the publication of Volume 3, the ninth edition of *American Men of Science* will be complete. Volume 1 on the physical sciences and Volume 2 on the biological sciences were published in 1955 and, like Volume 3, they are available at $20 apiece.

■ An examination will be held on 3 Nov. for the position of senior scientist, geology, in the New York State Education Department. The starting salary is $6550; five annual increases would raise this to $7980. Applicants, who must be United States citizens, should submit completed forms by *5 Oct.*

The successful candidate will direct a program of research in pre-Cambrian and metalliferous economic geology. His duties will include coordinating research with that of other governmental and private agencies, editing technical manuscripts, and corresponding on geological matters. For full information write to the Recruitment Unit, State Department of Civil Service, Albany, N.Y.

■ CIBA, Summit, New Jersey, has given its available supply of a racemic mixture of aldosterone to the Endocrinology Study Section, National Institutes of Health, Bethesda 14, Md., to facilitate this country's research on that steroid. This synthetic material may be obtained by qualified investigators in quantities sufficient only for comparative paper chromatography. The racemic mixture has one-half the biological activity of the natural *d* form and is prepared in ethanol solution in 10-microgram ampules. Requests should be made to the Endocrinology Study Section by letter, briefly stating the nature of the investigation.

Erratum: In an appreciative note of the life and work of Harry J. Deuel, Jr. [*Science* 124, 209 (3 Aug. 1956)], J. Murray Luck wrote that Deuel "was struggling to finish the third and final volume [of *The Lipides*] at the time of his death." Grace C. Deuel informs us that Deuel did in fact complete the third volume of *The Lipides* before his last illness and that the volume is scheduled for publication early in 1957.