

not only in our own nation but around the world. Your contributions to this cause have been invaluable."

Dr. Eliot's service with the bureau had one break. From April 1949 to April 1951 she served as assistant director general of the World Health Organization, Geneva, Switzerland. For years she has been an internationally recognized leader in the health field. She is the United States representative on the board of the United Nation's Children's Fund.

Dr. Eliot received her A.B. degree at Radcliffe College in 1913 and her medical degree at Johns Hopkins in 1918. She served as a pediatrician in several hospitals before joining the Children's Bureau in 1924 to direct one of its first researches—on the prevention and control of rickets in children. These researches were done at Yale University.

A later and more spectacular program of the bureau further helped to make Dr. Eliot widely known. She was in charge of the Emergency Maternity and Infant Care Program of World War II. Under this program the wives and babies of 1.5 million servicemen received medical care through a subsidy provided by the Federal Government. Dr. Eliot's work in making this program a success has been credited with modernizing cost accounting in hospitals.

In 1947 Dr. Eliot was the first woman to be elected president of the Public Health Association. The organization then had been in existence 72 years. When she resigned her post, Dr. Eliot left as her last major pamphlet a 40-year history of the bureau.

R. H. DE MEIO, associate professor of biochemistry at the Jefferson Medical College of Philadelphia, has been invited to organize the teaching and research in biochemistry for the Faculty of Medicine of the University of Litoral, Rosario, Argentina.

Lt. Col. HERBERT B. NICHOLS, information officer for the U.S. Geological Survey, has been recalled to active military duty and assigned to the staff of Rear Adm. Richard E. Byrd, officer in charge of United States Antarctic programs (Operation Deepfreeze). Nichols is accompanying the naval support group that is establishing the Weddell Sea station.

CHANDLER McC. BROOKS, chairman of the department of physiology at the College of Medicine at New York of the State University of New York, recently delivered the annual Margaret Barclay Wilson memorial lecture, which is sponsored by the department of physiology, health, and hygiene of Hunter College in honor of its founder and first chairman.

## Recent Deaths

HARRY A. BRAY, Saranac Lake, N.Y.; 76; retired medical director of the Ray Brook State Tuberculosis Hospital who formerly had taught at the Cornell and Albany medical schools; 15 Nov.

JOHN EVERSLED, London, England; 92; former director of the Kodai-kanal and Madras Observatories in India; 17 Nov.

MARTIN HENZE, Pasadena, Calif.; 83; retired professor of biochemistry at the University of Innsbruck; former member of the staff at the Zoological Station, Naples, Italy; 6 Oct.

JOSEPH A. LE CLERC, Jacksonville, Fla.; 83; retired senior chemist with the U.S. Department of Agriculture; 16 Nov.

GUSTAV S. NORDBERG, Oneonta, N.Y.; 74; professor emeritus of psychology and philosophy and former dean at Hartwick College; 15 Nov.

ROBIN PEARSE, Toronto, Canada; former professor of urology at the University of Toronto; 19 Nov.

ROBERT WARTENBERG, San Francisco, Calif.; 69; clinical professor emeritus of neurology at the University of California Medical School; 16 Nov.

## Education

■ The astronomy department of Mount Holyoke College celebrated the 75th anniversary of the John Payson Williston Observatory on 7 Nov. Highlight of the celebration was a lecture by Bart Bok of the Harvard Observatory, who discussed "Radio signals from the Milky Way." The lecture was preceded by a banquet, at which the history of astronomy at the college was reviewed by four speakers: Alice H. Farnsworth, director of the observatory, Helen Sawyer Hogg of the University of Toronto; Dirk Brouwer of Yale University, and Harlow Shapley, William Alan Neilson professor at Smith.

The observatory and the 8-inch Clark refractor and other equipment were presented to Mount Holyoke Seminary in 1881 by Mrs. and Mrs. A. Lyman Williston as a memorial to their 14-year old son. From 1853 to 1881 the seminary employed a 6-inch refractor on the campus. This refractor was then removed to Huguenot College in South Africa, daughter college of Mount Holyoke, and the transit of Venus in 1882 was successfully observed with the new 8-inch in South Hadley and the 6-inch in South Africa.

■ The Special Training Division of the Oak Ridge Institute of Nuclear Studies has announced that its 1957 course schedule will include a special 2-week course in radiation chemistry for scientists who are interested and active in the field and

for teachers of college and university graduate courses. The radiation-chemistry course will be held from 25 Mar. to 6 Apr. It will cover the principal phases of radiation chemistry and physics, with emphasis on basic principles rather than detailed applications. The course will be limited to 90 participants, to be selected primarily on the basis of training and experience. Application blanks must be received by 1 Feb. 1957.

The Special Training Division's regular 4-week basic courses in 1957 are scheduled to open on 7 Jan., 4 Feb., 29 Apr., 27 May, 24 June, and 9 Sept. The first four of these courses are already filled. Prospective applicants for the remaining two should submit applications immediately to insure consideration.

Two-week courses in veterinary-radiological health for members of the Armed Forces Veterinary Corps will begin on 4 and 18 Mar. These courses provide indoctrination in radiological health and instruction in the evaluation of problems of radiation phenomena, particularly in relation to their biological effects and the possible or potential factors involved in the radiocontamination of food-producing animals or animal food products. Further information and application blanks for all of these courses may be obtained by writing to Dr. Ralph T. Overman, Chairman, Special Training Division, Oak Ridge Institute of Nuclear Studies, P.O. Box 117, Oak Ridge, Tenn.

■ The Marine Biological Laboratory at Woods Hole, Mass., is offering a training program in nerve-muscle physiology. The program will be under the direction of S. W. Kuffler, C. L. Prosser, and G. B. Koelle. Opportunities to discuss problems in nerve-muscle physiology and to use experimental electrophysiological and histochemical techniques will be available during June, July, and August 1957.

Financial aid will be provided to nine pre- and postdoctoral fellows. Applications should be made to the Director, Marine Biological Laboratory, not later than 1 Jan. 1957. This program is being supported in part by a training grant of the National Heart Institute.

■ The California Institute of Technology has dedicated its new Norman W. Church Laboratory for Chemical Biology. The building, put up at a cost of more than \$1,500,000, now houses a staff of 70 researchers and technicians and is equipped for the most advanced techniques in modern chemistry and biology.

At a dedication dinner, guests heard an address by Warren Weaver, vice president for natural and medical science of the Rockefeller Foundation. In the past 7 years the Rockefeller Foundation has given the institute \$700,000 in support of

its research in chemical biology, and has recently given another \$800,000 for the future of the program. Additional supporting funds for the new building and equipment have been given by the National Foundation for Infantile Paralysis, the Carl F. Braun Trust Estate, the Ford Foundation, and a number of anonymous donors. Research work in the new Church Laboratory will be directed by AAAS retiring president George W. Beadle, chairman of the division of biology, and Linus Pauling, chairman of the division of chemistry and chemical engineering.

### Grants, Fellowships, and Awards

■ The U.S. Atomic Energy Commission has announced the award of 26 unclassified physical research contracts with universities and private research institutions. Three are new contracts, and the remainder are renewals of contracts that have been in force.

■ The National Science Foundation is accepting applications for a new program of science faculty fellowship awards. The primary purpose of these awards is to provide an opportunity for college and university science teachers to enhance their effectiveness as teachers. Fellowships are offered for study in the mathematical, physical, medical, biological, engineering, and other sciences, including anthropology, psychology, geography, and certain interdisciplinary fields. Approximately 100 awards will be announced on 20 Mar. 1957.

Science Faculty fellowships are available to any citizen of the United States who holds a baccalaureate degree or its equivalent, has demonstrated ability and special aptitude for science teaching and advanced training, has taught at the collegiate level as a full-time faculty member for not less than 3 years, and intends to continue teaching.

Stipends will be individually computed in such a way as to match as closely as possible the regular salary of recipients. In the event that a recipient has supplemental support during his tenure, the amount of his award will be reduced accordingly. The foundation's award will be adjusted so that in no case will the combined support—from the foundation and other sources—exceed \$10,000 per year. Additionally, allowances will usually be made to assist in defraying costs of travel and certain other expenses associated with the fellowship study.

Fellows may study at any accredited nonprofit institution of higher education in the United States or similar institution abroad approved by the foundation. Tenures of from 3 to 15 months are available.

Application materials may be obtained from the Division of Scientific Personnel and Education, National Science Foundation, Washington 25, D.C. Completed materials must be received not later than 14 Jan. 1957.

### In the Laboratories

■ At the recent dedication of Consolidated Electrodynamics Corporation's new Engineering and Research Center, Alan T. Waterman, director of the National Science Foundation, said that U.S. industry is spending only 4 percent of its research and development funds on pure research. The remainder, or 96 percent, is earmarked for applied research.

Because of this disparity, Waterman commented: "We must look to the universities for these fundamental studies that are basic to scientific and technological progress. But unfortunately, the schools are faced with mounting costs, teacher shortages, and lack of funds and cannot carry out a complete program in these basic sciences." Waterman also pointed out that "The responsibility for correcting the present lack of emphasis on basic research, however, is one which all of us—the Government, private industry, and the community at large—must share."

■ A 50-kilowatt nuclear research reactor to be located at the University of Frankfurt in West Germany will be built by Atomics International, a division of North American Aviation, Inc. To be built under a contract with the German firm of Farbwerke Hoechst, the reactor will be used for radiochemistry, materials and medical research, general research in the nuclear field, and the production of radioisotopes at the university. It is scheduled for completion in the summer of 1957.

■ A new research laboratory building for the J. T. Baker Chemical Company, Phillipsburg, N.J., was dedicated on 26 Oct. Arthur C. Cope, chairman of the department of chemistry at Massachusetts Institute of Technology, gave the dedicatory address.

The new structure has 15 separate laboratories, each approximately 450 feet square. Several individual laboratories are equipped for organic exploratory work and are provided with distillation assemblies for purification of organic intermediates. Another laboratory has extensive equipment designed for polymerization studies. The antibiotic laboratories include special equipment for purification and isolation studies.

Five of the laboratories are especially

fitted for various inorganic research projects. A special equipment laboratory provides space for assemblies that are too large or heavy for the usual laboratory. The instrumental laboratories are well equipped for physico-chemical studies, and with associated laboratories can carry out analyses of a nonroutine nature, including both microorganic and inorganic determinations.

Facilities are provided for a research staff of 60, including a 10,000-volume library. The company's research program is headed up by George E. Ham, director of research. E. C. Larsen is vice president and technical director.

### Miscellaneous

■ The October 1956 issue of *Scientific Film Review*, published by the Scientific Film Association, 164 Shaftesbury Ave., London, W.C.2, England, contains details of 145 films on atomic energy and related subjects. This is the first comprehensive list of its kind. The information is arranged alphabetically by film title and there is a subject index covering the following categories: application of radioactive isotopes in agriculture, biology, chemistry, general surveys, handling, industry, metallurgy, and meteorology; atomic bomb and civil defense; equipment and apparatus; general surveys; moral, political, and religious problems; natural resources; nuclear reactors; occupational safety; progress reports; research centres and atomic energy plants; and theoretical aspects. Single copies of this issue are available direct from the Scientific Film Association at 3/6d each.

■ The proceedings are available for the International Symposium on High Energy Physics that took place last June at the European Organization for Nuclear Research (CERN) headquarters in Geneva. Some 300 nuclear physicists from 20 countries attended the sessions. These physicists included, in addition to the approximately 160 representatives from CERN's 12 member states, about 60 participants from the United States and 60 from the U.S.S.R. The two volumes of proceedings may be obtained from CERN, Service d'Information, Case postale 25, Geneva 15, Switzerland.

**Erratum:** In the article "How shall we pay for research and education?" by Paul E. Klopsteg [*Science* 124, 965 (16 Nov. 1956)], the first sentence under the subhead "Income taxes and individual giving" on page 966 should read: "Notwithstanding the apparent unqualified approval by government of the taxpayer's charitable inclinations, expressed by its permission to him to deduct up to 30 percent of his adjusted gross income for legal charities, he failed in 1954 by about \$20 billion to take advantage of this exemption." The printed version "\$20 million" was a typographical error.