■ R. B. Woodward of Harvard University has reported the total synthesis of reserpine, a tranquilizing agent used in the treatment of hypertensive, nervous, and mental disorders. The synthesis, which is described in a recent issue of the *Journal of the American Chemical Society,* follows less than a year after the chemical structure of the alkaloid was determined in laboratory studies by other chemists. Research associates in the work were three Swiss chemists, F. E. Bader, H. Bickel, and A. J. Frey, and a Canadian, R. W. Kierstead.

In the same issue of the ACS journal Frank L. Weisenborn and Patrick A. Diassi of the Squibb Institute for Medical Research report that working independently they, too, have achieved the synthesis of reserpine. A somewhat similar step has been described by Ciba chemists in the Swiss journal *Experencia.*

Scientists in the News

EDWARD U. CONDON, visiting professor of physics at the University of Pennsylvania, and a former president of the AAAS and of the American Physical Society, has accepted the post of professor of physics and chairman of that department at Washington University (St. Louis), effective 1 Sept. He succeeds GEORGE E. PAKE, who will become professor of physics at Stanford University next fall. Pake will in turn succeed W. E. LAMB, JR., 1955 Nobel prize winner in physics, who has accepted the chair of theoretical physics at Oxford University in England.

Another physics appointment at Washington is that of MICHAEL W. FRIEDLANDER of the University of Bristol, England. He will become a research associate with the task of establishing a nuclear emulsion group to study high-energy nuclear processes.

MELVIN CALVIN, professor of chemistry and director of the bio-organic division of the University of California Radiation Laboratory, has been awarded the 1956 Theodore William Richards medal of the Americal Chemical Society's Northeastern Section. The award is given biennially for outstanding achievements in research.

PAUL J. BRANDLY has been selected to head the newly formed biological control section in the Meat Inspection Branch of the U.S. Department of Agriculture, with headquarters at the Agricultural Research Center, Beltsville, Md. Almost his entire career has been spent in USDA poultry- and meat-inspection activities, and since 1952 he has served as food bacteriologist in the Meat Inspection Branch.

STANLEY S. BALLARD, research physicist at the Scripps Institution of Oceanography of the University of California, has been elected president of the International Commission of Optics for a 3-year term. The ICO is affiliated with the International Union of Pure and Applied Physics but in a semi-independent category. Its objective is to contribute, on an international basis, to the advancement of theoretical and applied optics, including the optics of the human eye. The commission now has 14 member countries: Belgium, Canada, Czechoslovakia, France, Germany, Great Britain, Italy, Japan, Netherlands, Poland, Spain, Sweden, Switzerland, and the United States.

JEAN OLIVER, emeritus distinguished service professor of pathology, State University of New York, College of Medicine, Renal Research Unit, Overlook Hospital, Summit, N.J., has been awarded the second Addis memorial medal of the Los Angeles chapter of the National Nephrosis Foundation. Oliver was recognized for his years of work on the anatomy of the kidney and for his pioneer ideas in correlating structure and function in that organ.

BERT E. CHRISTENSEN, a member of the faculty of Oregon State College for 25 years, has been named chairman of the department of chemistry at the college. At the close of the academic year he will succeed E. C. GILBERT, chairman since 1940, who will continue in the department in full-time teaching and research.

SAUL B. SELLS, head of the department of clinical psychology at the U.S. Air Force School of Aviation Medicine, Randolph Air Force Base, Tex., has received the Raymond F. Longacre award of the Aero Medical Association. Sells was honored for his work in developing a group of psychiatric tests that will reveal the future reactions of Air Force flyers to the stresses of combat missions.

LESLIE B. AREY, chairman of the department of anatomy and Robert L. Rea professor of anatomy at Northwestern University, will retire at the close of the current academic year. He will be succeeded in these posts by BARRY J. ANSON, a faculty member for 30 years. Arey will continue at Northwestern in a teaching and research capacity.

More than 600 colleagues and former students met this month at a faculty-alumni reunion dinner to honor Arey for his 41 years of service and for his contributions to anatomy. Best known as an expert on embryology, Arey wrote *Developmental Anatomy,* a textbook that is widely used in undergraduate and medical-school courses.

ERNEST KENNAWAY, English cancer specialist, arrived in this country on 7 May to lecture at the Sloan-Kettering Institute and at Harvard and Yale universities.

WILLIAM I. THOMPSON, chemical engineering consultant, has been named chief of process engineering for the General Dynamics Corporation's General Atomic Division, San Diego, Calif. His group will work on the design and evaluation of reactor systems and components.

ROBERT G. STONE, chief of the technical information and publications division at Air Weather Service headquarters, has received the American Meteorological Society award "for his many years of faithful editorship of the *Bulletin of the American Meteorological Society* and his active participation in committee council work."

The society's Meisinger award was presented jointly to ERNEST J. FAWBUSH, commander of the 29th Weather Squadron, and ROBERT C. MILLER, officer in charge, Severe Weather Warning Center, Kansas City, Mo. They were honored "for their pioneering studies of the genesis and the practical prognosis of tornadoes and other destructive local storms."

WARREN O. NELSON and ROBERT C. COOK have received the $500 Lasker awards of the Planned Parenthood Federation of America. Nelson is on leave of absence from his post as professor of anatomy at the State University of Iowa to serve as medical director of the Population Council. His citation pointed out that "his studies of the biology of spermatogenesis have made a fundamental contribution to the field of human reproduction. . . . In the past two years . . . he has concentrated his strong talents on the physiologic control of conception. Touring the world as a veritable ambassador of science, he has inspired, advised, and guided investigators all over the globe on the problems of reproductive physiology allied to population control." Nelson's research has included a series of studies that produced the classification scheme now used for diagnosis and treatment of various types of male infertility.

Cook, author of *Human Fertility: the Modern Dilemma,* and for 35 years editor of the *Journal of Heredity,* now makes his headquarters in Washington, D.C., where he directs the Population Reference Bureau, edits its publication, *The Population Bulletin,* and serves as a member of the biology department of George Washington University. He was cited for "his outstanding contribution to wider understanding of the world population problem."

JOSEPH A. GALLAGHER, clinical director at the U.S. Public Health Service Hospital at Staten Island, N.Y., has been appointed medical officer in charge of the Indian Health Sub-area Office in Anchorage, Alaska. He will be responsible primarily for the Anchorage hospital, a 400-bed medical center for native Alaskans. In addition he will serve as sub-area director for the Alaska Native Health Service in western Alaska and will be responsible for hospitals at Barrow, Bethel, Kanakanak, Kotzebue, and Tanana.

A. P. BLACK will retire as head of the chemistry department at the University of Florida on 30 June. He will be succeeded by HARRY H. SISLER, professor of chemistry at Ohio State University.

ISRAEL WECHSLER, clinical professor of neurology at Columbia University College of Physicans and Surgeons, delivered the annual Hughlings Jackson memorial lecture of the Montreal Neurological Institute.

DONALD W. LATHROP of the archeology department at Harvard University has left Lima, Peru, on an expedition to the forest region east of the Peruvian Andes. The expedition is being sponsored by the American Museum of Natural History of New York. Lathrop will carry out his anthropological and archeological studies entirely in the department of Loreto. At present he is in the Ucayali River region near Pucallpa, where he plans to spend from 6 to 8 months.

BERNARD L. HORECKER, chief of the section on enzymes and cellular biochemistry, National Institute of Arthritis and Metabolic Diseases, has been appointed visiting lecturer in biochemistry at the University of Illinois, Urbana, for the summer session.

ROBERT S. BRAY, who has served as deputy chief of the technical information division in the Library of Congress since July 1950, has been named chief of that division, which performs specialized reference services connected with technical and scientific literature, under contract to the Department of Defense.

HUGH R. WOOD, who has been dean of the medical school at Emory University for almost 10 years, has resigned that post to devote full time to his responsibilities as director of the Emory University Clinic, which he has headed since its establishment 3 years ago.

ARTHUR P. RICHARDSON, director of the university's Division of Basic Health Sciences, succeeds Wood in the deanship. CARL C. PFEIFFER, chairman of the department of pharmacology, has been named acting director of the health sciences division in Richardson's place.

Recent Deaths

C. BREWSTER BRAINARD, West Hartford, Conn.; 82; gastroenterologist; former assistant in the stomach clinic at Cornell Medical School; 7 May.

WILLIAM C. DUFFY, Hamden, Conn.; 57; professor of clinical surgery at Yale University; 4 May.

SAMUEL W. FERNBERGER, Philadelphia, Pa.; 68; professor of psychology at the University of Pennsylvania; 2 May.

LIVINGSTON E. OSBORNE, Chicago, Ill.; 71; former Illinois state director of conservation; 8 May.

HENRY SANGMEISTER, Penn Valley, Pa.; 66; obstetrician and gynecologist; former member of the faculty at the University of Pennsylvania and Hahnemann Medical College; 5 May.

MORRIS M. SLOTNICK, White Plains, N.Y.; 54; research mathematician and geophysical interpreter for the Standard Vacuum Oil Company of New York; 9 May.

Education

■ The Medical College of Virginia has opened a new isotope farm, which was sponsored by the American Tobacco Company at a cost of $120,000. Willard F. Libby, commissioner, U.S. Atomic Energy Commission, spoke at the dedication.

"Medicine today stands at the threshold of a major advance. . . . In the language of Physicists, [it] is just about ready for a 'quantum jump,' and it is my feeling that this will come about through the increased use of isotopically labelled drugs and medicinals.

"Isotope farming is the culture of biochemicals by raising plants and animals in an isotopically enriched environment such as an atmosphere of radioactive carbon dioxide. . . . In especially designed chambers such as those you have here in this farm we dedicate today, plants such as alfalfa, soybean, buckwheat, rye, tobacco, foxglove, poppy, etc., have been cultured in a radioactive carbon dioxide atmosphere so that all of their substance has been labelled with radiocarbon atoms in proportions of a few atoms of carbon-14 for every million ordinary carbon atoms. These plants have served to produce a number of useful radiochemicals. . . .

"It has been well demonstrated already that the isotope farm products are of great value in biochemical and medical research. There is another possibility, however . . . namely, that doctors may come to you for radioactive-labelled medicines in normal medical practice for diagnostic purposes. . . .

"With the exception of oxygen and nitrogen, radioisotopes of most of the physiologically important elements can be introduced into living organisms by the farming technique. . . . With . . . five or six isotopes, plants and animals can be labelled for half of their elements and so serve as sources for all of the biochemicals. . . . Certainly there seems to be no doubt that one of the great benefits of the atom will be not only the use of isotopes in medical research, but their use in routine diagnostic practice."

■ To stimulate interest in industrial chemistry, the chemistry department at St. Olaf College is distributing 50 scholarships to high-school students throughout the Midwest so that they may attend the 4-day High-School Chemistry Institute that will begin at St. Olaf's on 11 June. The awards will defray the costs of room, board, and registration for the sessions. Scholarship winners for the institute are being selected by faculty committees from the participating high schools.

The institute, which is planned as the first in an annual series, will introduce the students to the growing opportunities in chemistry. While at St. Olaf, the group will have discussion sessions with instructors at the college, watch experiments, and tour the laboratory facilities. A field trip is planned that will permit the students to visit industrial chemistry departments in the Ford Motor Company, the Minnesota Mining and Manufacturing Company, and the General Mills Research Laboratories.

■ A schedule is available of the laboratory refresher training courses that will be offered between July 1956 and June 1957 by the laboratory branch of the U.S. Public Health Service Communicable Disease Center, Chamblee, Ga. The courses, which range from 1 to 4 weeks in length, deal with the laboratory methods in the diagnosis of bacterial diseases, parasitic diseases, viral and rickettsial diseases, and so forth.

■ The Government of Pakistan has opened a school for physiotherapists at the Jinnah Central Hospital in Karachi. The World Health Organization of the United Nations is helping the school with supplies, equipment, books, and other teaching aids. It also has helped to staff the school.

■ The Radio Electronic Television Schools, Montreal, Canada, has announced that it has been commissioned