house vice president in charge of research and engineering. R. O. McIntosh has been appointed section manager in charge of tube laboratory operations. R. W. Decker and M. M. Wachtel are project supervisors. The Westinghouse Research Laboratories' present electron tube laboratory will be incorporated into the new organization.

Rehabilitation Institute

Washington University is planning to build a $675,000 rehabilitation institute to serve disabled persons in the St. Louis metropolitan area. The new facility will be named for the late Mrs. Irene Johnson, one of the principal donors of funds. In addition to work with patients, the institute will train personnel in rehabilitation procedures and develop new methods of treatment. An active research program relating to chronic disabilities will also be carried on.

The new building will house the departments of physical and occupational therapy now located in other buildings in the Washington University Medical Center. Robert E. Shank, professor of preventive medicine in the School of Medicine since 1948, will be director of the institute.

U.S. Population

A United States population of 178½ million by the time of the 1960 census is predicted by the statisticians of the Metropolitan Life Insurance Company. In that event, the 1950's will show a population increase of about 27⅓ million, or two-fifths more than the 1940's, which up to that time had the greatest gain for any 10-year period.

In the 11⅓ years since World War II, almost 29½ million people have been added to our population, which is more than the gain during the 23 years between World War I and World War II.

During the year just ended, the population, excluding the Armed Forces overseas, increased by 1.8 percent. Every geographic area shared in this growth, but the Far West showed the highest rate of increase—almost double the national rate.

Since the 1950 census, California has gained more than any other state—about 3.1 million inhabitants. California's population has now reached approximately 13.7 million, which is exceeded only by New York State. Nevada, Arizona, and Florida have experienced rapid population growth, and increases well above the average rate for the country have occurred in Delaware, Maryland, and Michigan. Losses in population have been sustained since the 1950 census in five states: Arkansas, Mississippi, West Virginia, Vermont, and Maine.

Metropolitan Life also reports that the average length of life among its industrial policyholders rose to a new high of 70.2 years in 1956. This is slightly above the figure for 1955 and represents an increase of 24 years since 1909.

For nearly two generations, the average length of life has been increasing more rapidly among American wage earners and their families than for the general population of the United States. In 1909, the average lifetime of Metropolitan's industrial policyholders was about 6 years less than that for the population as a whole. Since then, the disparity has been narrowing; at present the two groups are on a par.

Scientists in the News

ROBERT B. WOODWARD of Harvard University, who has been a leader in the synthesis of quinine, cortisone, lysergic acid, strychnine, and reserpine, and C. GARDNER SWAIN of the Massachusetts Institute of Technology, well-known investigator in theoretical organic chemistry, were given $1000 prizes in chemistry during the recent national meeting of the American Chemical Society in Miami, Fla. Woodward was the first recipient of a new honor, the ACS award for creative work in synthetic organic chemistry, sponsored by the Synthetic Organic Chemical Manufacturers Association. Swain, who has carried out original laboratory research and mathematical correlations that make it possible to predict the speed of many chemical processes, received the Precision Scientific Company award in petroleum chemistry. Among other awards presented during the ACS meeting are the following:

The first James T. Grady medal, given by the society for distinguished reporting of chemical progress, was presented to D. H. KILLEFFER of Crestwood, N.Y. A chemical engineer and writer, Killeffer has been, for more than 30 years, a leader in the interpretation of chemical advances to the layman. He has written many magazine articles on chemical subjects and also several books.

HAROLD A. SCHERAGO, associate professor of chemistry at Cornell University and specialist in blood clotting, received the $1000 Eli Lilly and Company award in biological chemistry. Scherago, whose work on protein chemistry is gaining wide recognition, was awarded a Fulbright grant and a Guggenheim fellowship last year to permit him to do advanced research in Copenhagen, Denmark. He is spending the current academic year there.

GILBERT J. STORK, professor of chemistry at Columbia University, received the $1000 ACS award in pure chemistry for his extensive research on the synthesis of such natural products as compounds of the morphine family and the steroids, a group of substances that includes cortisone and the sex hormones.

D. H. R. BARTON of the University of Glasgow (Scotland), specialist in the structure of natural products, received the $1000 Fritzsche award for his investigations of complex terpenes, chemical substances derived from trees and plants and used in the manufacture of camphor, perfumes, and medicines. His work in this field has elucidated many problems in the chemistry of essential oils.

LUCY W. PICKETT, head of the chemistry department of Mount Holyoke College, received the $1000 Garvan medal, presented each year to an outstanding woman chemist.

CHARLES R. HAUSER, professor of chemistry at Duke University, won the 1957 ACS Florida Section award for his contributions to modern theories of organic chemistry and for his demonstrated ability as an educator during a 29-year teaching career at Lehigh University and Duke.

CARL O. SAUER, professor of geography on the Berkeley campus of the University of California, has recently been selected to receive the Vega medal in gold, the most highly regarded honor in the sciences of the earth and sea. The medal is an award of the Swedish Society for Anthropology and Geography and is traditionally presented by the King of Sweden on Vega Day, 24 Apr., in Stockholm. Sauer is being honored for his "investigations into man's utilization of the surrounding geographical milieu during various cultural epochs." He is the fourth American who has received this medal since its inception in 1880.

GEORGE R. COWGILL, professor of nutrition at Yale University, has received the $1000 Osborne and Mendel award for 1957, which is administered by the American Institute of Nutrition. He was honored for "his many pioneer and subsequent fundamental research contributions to our knowledge of the B-vitamins and of protein nutrition; and for his numerous other broad contributions to the science of nutrition as a teacher, as editor of *The Journal of Nutrition,* and as an expert advisor in this field."

JOHN C. CLARK, who has helped direct most of the nation's atomic weapons tests since 1946, has been appointed staff assistant to J. R. Dempsey, manager of Convair-Astronautics. Clark has resigned as associate leader of the Test Di-

vision at Los Alamos Scientific Laboratory to accept the Convair post. He will be concerned with research and development testing of the Atlas intercontinental ballistic missile. The Atlas ICBM is under development at San Diego, Calif., by the Convair Division of the General Dynamics Corporation.

Clark played a major role in establishing the Pacific Proving Ground at Eniwetok and the atomic proving ground at Frenchman's Flat, Nev. He was in direct charge of many of the weapons tests conducted at both sites. The task of disarming a nuclear device that failed to explode fell to him during one of the Nevada tests, an event that was widely publicized.

RAYMOND EWELL, former assistant director of the National Science Foundation, has been named vice chancellor for research and professor of chemistry at the University of Buffalo, effective next September. Last July the Ford Foundation made Ewell's services available as a consultant to the Indian Ministry of Commerce and Industry in New Delhi. In this capacity he holds a post as development officer of economic surveys. He served in a similar capacity in the Philippines during 1955.

E. E. SNELL, professor of chemistry and associate director of the Biochemical Institute of the University of Texas, has been named professor and head of the biochemistry department at the University of California, Berkeley.

REBECCA H. SPARLING, who is in the engineering department of Convair, a division of General Dynamics, at Pomona, Calif., has received the annual award of the Society of Women Engineers. At Convair she is concerned with new developments in materials and processes for the design and manufacture of guided missiles and other special ordnance weapons for the Navy.

HILARY KOPROWSKI, since 1946 assistant director of viral and rickettsial research for the Research Division of the American Cyanamid Company, Lederle Laboratories, Pearl River, N.Y., has been appointed director of the Wistar Institute of Anatomy and Biology, Philadelphia, Pa. He will take up his new duties on 1 May, when he will head an accelerated program of research devoted to study of the single cell.

Koprowski, whose appointment fills a post that has been vacant since the retirement of MILTON J. GREENMAN, has made noteworthy contributions to research on rabies and poliomyelitis. He has developed a living virus chick-embryo vaccine for preventing rabies, and his polio studies stimulated research in the use of the living virus as an immunizing agent. Koprowski is expected to expand the institute's studies in the fields of geriatrics and cancer.

CHARLES SHEARD of the Mayo Clinic in Rochester, Minn., will receive the Edgar D. Tillyer medal of the Optical Society of America during its meeting in Columbus, Ohio, next October. The medal, which is granted every 2 years, is being given to Sheard for his research in physiological optics.

W. M. BEVER has been named head of the department of plant pathology at the University of Illinois, effective 1 Sept. Bever has been at Urbana since 1940 working for the U.S. Department of Agriculture on cereal diseases. He was appointed to the university faculty in 1949.

WILLIAM M. GROSVENOR, JR., chemical engineering consultant, has been appointed director of research and development for the American Sugar Refining Company, 120 Wall St., New York.

CHARLES J. STRICKLER has been appointed section head of organic chemistry in the chemistry department of Horizons Incorporated, Cleveland, Ohio. Strickler obtained his industrial experience at the Abbott Laboratories of Chicago, Ill., the Michigan Chemical Corporation of St. Louis, Mo., and the Diamond Alkali Corporation of Cleveland, where he gained broad experience in the field of pharmaceuticals, barbiturates, anesthetics, and fine and heavy organic chemicals.

H. RUSH SPEDDEN has been appointed director of research for the Union Carbide Ore Company, a division of the Union Carbide and Carbon Corporation. He will be responsible for the company's operations in the corporation's Nuclear Research Center in Sterling Forest, N.Y. There he will direct investigations that will cover the entire range of activities from mineralogy and geology to new mineral prospecting methods, including work in geophysics and geochemistry. Other work will be concerned with research on extracting metals from ore bodies. Since 1952, Spedden has been in charge of the minerals research department of the corporation's Research Laboratories at Niagara Falls, N.Y.

EARL D. BOND of Philadelphia has been appointed by the Menninger Foundation, Topeka, Kan., as its first Alfred P. Sloan visiting professor in psychiatry. Bond is a former president of the American Psychiatric Association.

Col. FRANCIS E. COUNCIL, Medical Corps, U.S. Army, retired on 1 Apr. after having completed more than 30 years on active duty. He served as deputy director (Army) of the Armed Forces Institute of Pathology and as chief pathology and allied sciences consultant to the Surgeon General of the Army from December 1955 until his retirement. Council has gone to Fort Worth, Tex., where, as a pathologist, he will be associated with John J. Andujar of the Fort Worth Medical Laboratories. Col. JOE M. BLUMBERG, MC, USA, has succeeded Council as deputy director of the AFIP.

Council received his B.S. degree in 1921 from Texas Christian University and instructed in biology at that institution from 1921 to 1922. After receiving his M.D. degree in 1926 from Vanderbilt University, he began his long career in the Army Medical Service. Following graduation from the Army Medical School and the Medical Field Service School in 1929, he was chief of the Division of Biological Products and instructor in immunology at the Army Medical School from 1933 to 1937. He graduated from the advanced graduate course of the Army Medical School in 1937, and was awarded a doctorate in public health by the Johns Hopkins University in 1938.

His duties as a medical officer in the Army Medical Corps prepared him for a series of assignments as commanding officer of various Army laboratories.

ALBERT R. MEAD, professor of zoology at the University of Arizona, has been appointed acting head of the department of zoology. He succeeds the late GEORGE T. CALDWELL, department head since 1936, who retired on 1 July 1956.

ALAN BELCHER, former deputy commissioner of the Royal Canadian Mounted Police, has accepted the post of executive director of the Arctic Institute of North America. He assumed his new duties on 1 Apr. at the headquarters of the institute in Montreal.

ROBERT R. SEHNERT, a physicist, has been appointed eastern representative for Atomics International, a division of North American Aviation, Inc. His office will be in Washington, D.C. Formerly applications engineer at Atomics International's headquarters in Canoga Park, Calif., Sehnert was primarily engaged in programs related to the sodium reactor experiment, sodium graphite atomic power plants, and research reactors being built by the company for the Danish Atomic Energy Commission and the Japan Atomic Energy Research Institute.