

ardous at this stage of knowledge. Steinberg discussed the findings recently in Washington, D.C., during the annual convention of the Association of Military Surgeons of the United States. A report of the research is scheduled for publication in the *Annals of the New York Academy of Sciences*.

New ACE Information and Research Division

The American Council on Education has established a new Office on Statistical Information and Research, with Coleman R. Griffith, former provost of the University of Illinois as director. The office, which will be operated in Washington, D.C., as part of the council's central program, has a 5-year grant of \$375,000 from the Carnegie Corporation of New York.

Among the objectives of the new unit will be the analysis of data relating to higher education, encouragement of existing research agencies to fill gaps in present knowledge, improvement in methods of gathering statistical information, and correlation and interpretation of facts from various sources having special value for educational policy-making. Griffith, who will be on leave from the University of Illinois, will direct the office on a part-time basis until 1 Feb. 1957, when he will assume full-time duties in Washington.

Elmer D. West, educational specialist on the staff of the National Security Agency, has been appointed assistant director of the new office. He recently completed a special 6-month research project for the council which resulted in a book entitled *Background for a National Scholarship Policy*. West is on full-time duty setting up the facilities for the Washington headquarters. The office will operate under a policy committee, of which Frederick L. Hovde of Purdue University is chairman.

News Briefs

■ A set of 32 photographs of Russian doctors and scientists has been received by the National Library of Medicine's art section; in exchange, the library has sent a shipment of duplicate portraits of American physicians and surgeons.

■ To confirm the report about Russian nuclear physicist Peter Kapitsa's refusal to work on the Soviet atomic bomb project for conscientious reasons [*Science* 124, 361 (24 Aug. 1956)], a staff member of the British publication *Peace News* tried the improbable procedure of calling Kapitsa by international telephone. The call went through without difficulty, and

Kapitsa confirmed that he had refused, and still refuses, to participate in the development of nuclear energy for military purposes.

■ The eighth annual report of the Australian Commonwealth Scientific and Industrial Research Organization for the year ending 30 June 1956 has been made available. This report deals with a great variety of research in such diverse fields as entomology, plant industry, animal health, forest products, industrial chemistry, and radiophysics. It may be obtained from CSIRO, 314 Albert St., East Melbourne, Australia.

Scientists in the News

LAWRENCE G. DERTHICK, superintendent of schools in Chattanooga, Tenn., has been named United States Commissioner of Education by President Eisenhower.

Exceptional Service awards have been given by the Air Force to JOHN W. GARDNER, president of the Carnegie Corporation, DONALD W. HASTINGS, professor of psychiatry and neurology at the University of Minnesota, GEORGE E. VALLEY, professor of physics at Massachusetts Institute of Technology, and HARRY WEXLER, chief of the science services division of the U.S. Weather Bureau. The Exceptional Service award consists of a medal and formal citation and is the highest civilian award given by the Air Force. The medals were presented by Donald A. Quarles, Secretary of the Air Force, on 30 Nov. All four of the recipients were honored for their service as members and chairmen of panels of the Air Force Scientific Advisory Board.

The following Russell L. Cecil awards for science writing about the rheumatic diseases were presented by the Arthritis and Rheumatism Foundation during its recent annual meeting in New York: to PETE COUTROS, newspaper article *New York Daily News*; LAWRENCE GALTON, magazine article, *Better Homes and Gardens*; and JAY E. RAEBEN, television script, American Broadcasting Company. The three men were cited for writing "which during 1956 has contributed most to strengthen man's efforts to conquer arthritis and rheumatism, the nation's foremost chronic and crippling diseases."

ROBERT R. MARSHAK of Springfield, Vt., has been appointed professor of veterinary medicine and chairman of the department at the School of Veterinary Medicine, University of Pennsylvania.

ISIDOR I. RABI, Higgins professor of physics at Columbia University and a Nobel prize winner, is visiting institute professor at the Massachusetts Institute of Technology during the current fall term. The institute professorship was established especially to permit men of highest achievement to study and teach at M.I.T. in fields of their own interest, without the restrictions of traditional departmental boundaries.

BERNARD S. SCHWEIGERT has been appointed director of research and education of the American Meat Institute Foundation at the University of Chicago, and DELBERT M. DOTY and CHARLES F. NIVEN, JR., have been named associate directors. The foundation maintains laboratories on the university campus and has a staff of more than 50 scientists engaged in research related to the production of livestock and the processing and utilization of products derived from livestock.

Reorganization of the foundation's administrative staff was made necessary on 30 Sept. by the death of HENRY R. KRAYBILL, scientist and educator who had aided in the creation of the foundation and had served as its director since 1947 when it first began operations. All three of the new administrative officers have held positions of research and administrative responsibility at the foundation for 8 or more years, all served with Kraybill as assistant directors in charge of specific areas of research, and all hold professorial appointments at the University of Chicago.

CHALMER G. KIRKBRIDE, former president and chairman of the board of directors of Houdry Process Corporation, Philadelphia, Pa., joined the Sun Oil Company, Philadelphia, on 1 Dec., as executive director of the research, patent, and engineering departments.

Also at Sun, CHARLES L. THOMAS, formerly associate director of the research and development department, has been named director. He succeeds J. BENNETT HILL, who retired on 30 Nov.

WILFRED BLOOMBERG has been chosen to head the Southern Regional Education Board's program in mental health training and research. Bloomberg is chief of the psychiatry and neurology service, Veterans Administration Hospital, Boston, Mass. He will assume his new post on 1 Jan. The regional health program was initiated at the Southern Governors Conference in 1953, when the governors of 16 southern and border states requested the Regional Education Board to study the South's resources and potentials for training and research on problems of mental health.

GEORGE C. KENNEDY, geophysicist at the University of California, Los Angeles, has received this year's Mineralogical Society of America award. The honor is presented annually to a scientist under the age of 36 for the most outstanding contribution to the mineralogical profession. The citation was based on Kennedy's research in three areas that are related to the way minerals were deposited in the earth's crust: solubility of solids in steam at very high temperatures and pressures; the relation of pressure, temperature, and quantity of gases; and phase changes of minerals under high pressure.

LYTT I. GARDNER, professor of pediatrics at the State University of New York College of Medicine in Syracuse, has been appointed professor of pediatrics at the Yale University School of Medicine.

At the 10th International Congress of Entomology recently concluded in Montreal, professor emeritus J. CHESTER BRADLEY of the State College of Agriculture at Cornell University was elected an honorary life member of the congresses. The only other North American to hold this honor is professor emeritus O. A. JOHANNSEN, of the State College of Agriculture.

Bradley is a member of the permanent committee that serves as a liaison between the congresses, which are held once in 4 years. The Montreal meeting was the second to be held outside Europe, the fourth having been held in Ithaca in 1928.

REINHOLD RUDENBERG, professor emeritus of Harvard University and inventor of the electron microscope, was honored on 19 Nov. when a document and medal conferring the rank of honorary senator of the Berlin University of Technology was presented to him by the German consul in Boston, Mass. His new rank, which makes him an honorary member of the governing body of Berlin University, was conferred in recognition of "outstanding scientific achievements" spanning more than 40 years in the field of electrical power engineering. Berlin University made Rudenberg an honorary professor in 1927.

JAMES H. WIEGAND, former chairman of the department of chemistry and chemical engineering at the Southwest Research Institute, San Antonio, Tex., has been appointed head of the newly formed engine research department of the Solid Rocket Plant, Aerojet-General Corporation, Sacramento, Calif., and will be concerned with expanding research on the interior ballistics of solid propellant rocket engines.

S. K. RUNCORN, director of the physics department at King's College, Newcastle, England, will lecture at the University of Texas, Austin, 10-21 Dec. His ten public lectures on theories of the earth's present and past magnetic behavior will be of interest to geologists as well as physicists.

G. DONALD WHEDON has been appointed assistant director of the National Institute of Arthritis and Metabolic Diseases, National Institutes of Health, Bethesda, Md. In addition to this new assignment, he will continue his research and clinical responsibilities as chief of the metabolic diseases branch in the Clinical Investigations Division of the institute.

JAMES M. HUNDLEY, former chief of laboratory research, as well as chief of the Laboratory of Nutrition and Endocrinology, NIAMD, left the institute on 1 Sept. on a 2-year leave of absence. He is now administering a research program for the United Nations Childrens Emergency Fund and the Food and Agriculture Organization of the United Nations, with headquarters in the U.N. Building, New York.

ALAN H. SHAPLEY, a radio physicist and vice chairman of the U.S. National Committee for the International Geophysical Year, will head a new section of sun-earth relationships at the Boulder Laboratories of the National Bureau of Standards. The section will centralize work that Shapley has been engaged in at Boulder for some time. It will also permit a more closely coordinated program in the study of the sun and its effects on radio communication, the use of solar and geophysical data to forecast short-wave radio communication conditions, and the scientific coordination of the many Bureau field stations that are making radar-type observations of the upper atmosphere.

An important phase of the new section's work will be concerned with the effect on radio communication of the ionosphere, the highly electrified region of the upper atmosphere produced by solar radiation and greatly influenced by high-speed particles discharged from the sun. Systematic measurements of the height and density of the ionospheric layers are made all over the world and used in these analyses.

In addition to research, the section is to be concerned with improving the Bureau's comprehensive 24-hour radio warning service, which is supervised from the NBS Boulder Laboratories. This service uses knowledge of solar effects and other data to issue warnings of impending changes of conditions that may affect short-wave communications over long distances.

FORREST E. LINDER, former chief of the demographic and social statistics branch of the United Nations Statistical Office, has been named director of a new Public Health Service program to survey the nature and extent of illness and disability in the population each year. The year-by-year survey, authorized by the past Congress, also will include data on medical services received by the ill and disabled. The last previous Federal survey of this type was in 1936.

JOHN ROCK of Harvard University has retired from active teaching and become clinical professor of gynecology, emeritus. A specialist in the physiology of human reproduction and a teacher of both predoctoral and graduate students at the Harvard Medical School, Rock has also devoted much time to exploring the mechanical as well as the metabolic disturbances of male and female infertility. In collaboration with Arthur T. Hertig, professor of pathological anatomy, he participated in the collection and description of the early stages in the development of the human ovum. These studies also included observation on abnormal development during gestation.

Rock received an S.B. degree from Harvard in 1915 and an M.D. degree in 1918. A member of the staff of the medical school since his appointment as an assistant in obstetrics in 1922, he became clinical professor of gynecology in 1947. At the Free Hospital for Women, in Brookline, Mass., he established one of the first fertility clinics in this country and served as its director for nearly 30 years. At present he serves as consulting gynecologist and director of the Rock Reproductive Study Center at the Free Hospital for Women and as a member of the board of consultants, Massachusetts General Hospital. His professional affiliations and awards have been numerous and widespread, both in this country and abroad.

DONALD D. VAN SLYKE of Brookhaven National Laboratory has been elected a member of the Royal Academy of Sciences of Denmark.

THEODORE WEAVER, manager of the process development department of the Fluor Corporation, Ltd., Los Angeles, Calif., has received the junior award of the American Institute of Chemical Engineers. The award is given annually to encourage improvement in the quality of papers contributed to the publications of the institute by its younger members.

FRANCIS BITTER, professor of physics at Massachusetts Institute of Technology, has been named associate dean of the institute's School of Science.

HANS T. HESSELBERG recently received the annual prize of the International Meteorological Organization at a ceremony that took place at the Norwegian Meteorological Institute in Oslo. The prize was created by the World Meteorological Organization to perpetuate the memory of the nongovernmental international organization which that specialized agency of the United Nations has succeeded. The award is presented once a year to a personality who has made an important contribution to meteorology and has devoted himself to the cause of international meteorological organizations. Hesselberg was director of the Norwegian Meteorological Institute for 40 years. He also was president of the International Meteorological Organization from 1935 to 1946.

JAMES B. CONANT, United States Ambassador to West Germany, has received an honorary doctorate of natural science from the University of Hamburg.

WILLIAM H. EWING and PHILIP R. EDWARDS of the Public Health Service office in Atlanta, Ga., have received the 1956 Kimble Methodology research award for their work in developing improved methods for identifying bacterial causes of typhoid, infantile diarrhea, food poisoning, and other enteric disorders. The award, sponsored by the Kimble Glass Company, includes \$1000 and an inscribed plaque.

GEORGE E. ARMSTRONG, vice president for medical affairs at New York University, and Surgeon General of the Army from 1951 to 1955, has received the 1956 Founder's medal of the Association of Military Surgeons of the United States.

Recent Deaths

CLARENCE A. CHANT, Toronto, Canada; 91; professor emeritus of astrophysics and director emeritus, David Dunlop Observatory, at the University of Toronto; 18 Nov.

SIEGWART HERMANN, New York, N.Y.; 70; research chemist and consultant; 27 Nov.

ANDREW H. HOLT, Worcester, Mass.; 66; head of the department of civil engineering at Worcester Polytechnic Institute; 22 Nov.

WALDEMAR B. KAEMPFERT, New York, N.Y.; 79; science editor of the *New York Times*; 27 Nov.

FRANK W. REED, Athens, Ohio; 75; former professor of mathematics at Ohio University; 22 Nov.

BERNHARD J. STERN, New York, N.Y.; 62; lecturer in sociology at Columbia University; 22 Nov.

LIONEL WHITBY, London, England; 61; bacteriologist and hematologist; 24 Nov.

DERWENT S. WHITTLESEY, Boston, Mass.; 66; professor of geography at Harvard University; 25 Nov.

Education

■ Wellcome Trustees, London, England, has awarded a \$69,000 grant to the School of Medicine of the University of Pennsylvania. This will support for a period of 5 years a Wellcome associate research professorship in the department of anesthesiology. The first appointee to the new chair is Henry L. Price.

(The Wellcome Foundation was established by the late Sir Henry S. Wellcome who was born in Almond, Wis., 100 years ago and who died in England in 1936. The Wellcome Trust, holder of all the shares of the Wellcome Foundation, is headed by Sir Henry H. Dale, English scientist and Nobel prize winner. The Burroughs Wellcome and Company, Tuckahoe, N. Y., is a part of the Wellcome Foundation.)

■ Federal support for 81 educational programs totaled more than \$1.6 billion during the 1954-55 school year, according to a new biennial report of the Office of Education, Department of Health, Education, and Welfare. Entitled *Federal Funds for Education*, the new publication also lists many statistics for the 1955-56 school year and for several earlier years. Values of commodities and services as well as funds are included in the tabulations.

The new total of \$1,616,654,000 is less than half of the 1948-49 sum, which was \$3,500,817,000. A significant factor in the decrease was veterans' education and training. Federal support of this program was \$2,700,184,000 in 1948-49, or about four times the amount for 1954-55.

A significant increase in Federal assistance for school construction in federally affected areas is shown. Whereas \$122,767,000 was expended for this program in 1954-55, only \$2,956,000 was disbursed 4 years earlier. The affected areas include districts in which Federal ownership of property has reduced taxable valuations appreciably, or Federal activities have caused burdensome school enrollments through the influx of workers and their families.

The 163-page bulletin, the 13th biennial issue on Federal support of education, was prepared by Clayton D. Hutchins, Albert R. Munse, and Edna D. Booher of the School Finance Section, Office of Education. Copies are available at 60 cents each from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.

■ At a banquet held on 15 Oct. to celebrate the tenth anniversary of the incorporation of the Oak Ridge Institute of Nuclear Studies, S. R. Sapiro, manager of the Atomic Energy Commission's Oak Ridge Operations Office, presented the institute with a deed for 38 acres of land in Oak Ridge. In return, he received a check from Paul M. Gross, vice president of Duke University and president of ORINS. Heretofore, the entire tangible property of the institute has been the corporation seal. All the buildings, furniture, equipment, and research apparatus used by the institute for the past 10 years belonged to the AEC. The newly acquired land is to be the site for a permanent headquarters, a \$3,250,000 project still in the planning stage.

■ Grants totaling \$4,065,000 have been awarded by the National Science Foundation to 16 colleges and universities in the United States to support academic-year institutes designed to help high-school science teachers improve their knowledge of science subject matter. An estimated 750 high-school science and mathematics teachers will be enrolled in the institutes, which begin in September 1957.

Each teacher will pursue a program of study in the sciences and mathematics planned especially for him and conducted by leaders noted not only for competence in their fields but for skill in presentation. The grants will provide stipends of \$3000 each to approximately 50 teachers in each institute. Additional allowances for dependents and travel will also be provided.

Academic-year institutes are an outgrowth and extension of the foundation's summer institute programs, now in their fifth consecutive year. Two academic-year programs are now operating—at the University of Wisconsin and at Oklahoma Agricultural and Mechanical College. These are being renewed. The other 14 grants provide for the establishment of new institutes. The institutes at the University of Chicago and the University of Illinois are for teachers of high-school mathematics only; the others will provide work in the various fields of science as well as in mathematics.

The following list of grant recipients includes the persons to whom inquiries or application should be addressed: Harvard University, Dean Francis Keppel, Graduate School of Education; Ohio State University, Prof. John S. Richardson, College of Education; Oklahoma Agricultural and Mechanical College, Prof. James H. Zant, department of mathematics; Oregon State College, Prof. Stanley E. Williamson, department of science education; Pennsylvania State University, Mr. William H. Powers, arts and sciences extension; Stanford Univer-