

gland transplantation, the function of sex hormones secreted by living tissues, the conditions under which germ cells are produced, and a test for the male sex hormone. Research at the University of Chicago in which Moore played a leading role formed the foundation for medical progress in the treatment of prostate cancer in men and breast cancer in women.

RUSSELL J. SEIBERT, director of the department of Arboreta and Botanic Gardens for Los Angeles County, Calif., has been appointed director of the Longwood Gardens near Kennett Square, Pa., effective 15 July. The appointment was announced by Henry B. du Pont, president of the Longwood Foundation, which operates the gardens.

JAMES B. FISK, vice president in charge of research for Bell Telephone Laboratories, was elected executive vice president on 1 June. In his new post Fisk is directly responsible for all technical activities of Bell Laboratories as well as continuing as head of research.

Also effective on 1 June, ESTILL I. GREEN, director of military communication systems, was elected vice president in charge of systems engineering.

At the same time five new general department heads were named: M. L. ALMQUIST is director of systems engineering I; P. W. BLYE is director of systems engineering II; F. J. SINGER is director of systems engineering III; J. A. MORTON is director of device development under the vice president in charge of switching and transmission developments; and R. R. HOUGH is director of military electronics development II.

RAYMOND R. DICKISON, former head librarian at the Colorado School of Mines, has been named chief librarian for Oak Ridge National Laboratory.

KANEMATSU SUGIURA, associate of the Sloan-Kettering Institute for Cancer Research, New York, has been appointed an honorary member of the Japanese Cancer Association. He had an audience with Emperor Hirohito on 27 Apr.

DONALD F. MARLOWE, associate technical director for engineering at the U.S. Naval Ordnance Laboratory, Silver Spring, Md., resigned on 1 July to become dean of engineering and architecture at Catholic University. During his 14 years at NOL, Marlowe has become an authority on the applications of the theory of elasticity to mine structure.

He is succeeded by DAVID S. MUZZEY, who has served as chief of the engineering department for the past 3 years. In his new post Muzzey has supervisory responsibility for four NOL departments:

engineering, underwater ordnance, fuze, and technical evaluation. Muzzey is in turn succeeded by WILLIAM B. ANSPACHER, former deputy chief of the engineering department.

The following are among those who have recently received honorary doctoral degrees.

Oglethorpe University: MURRAY M. COPELAND, professor and director of the department of oncology, Georgetown University Medical Center.

Smith College: CAROLINE BEDELL THOMAS, associate professor of medicine, Johns Hopkins University School of Medicine.

Pomona College: AVERY S. HOYT, chief of the U.S. Bureau of Entomology and Plant Quarantine.

University of Oxford: KING GUSTAF VI ADOLF of Sweden, archeologist.

New York University: EDGAR DOUGLAS ADRIAN, Nobel laureate in physiology and master of Trinity College, Cambridge University, England; GEORGE PACKER BERRY, dean of the Harvard Medical School; VINCENT DU VIGNEAUD, chairman of the department of biochemistry, Cornell University Medical College; EVARTS AMBROSE GRAHAM, surgeon and emeritus professor at Washington University School of Medicine; BERNARDO ALBERTO HOUSSAY, Nobel laureate and director of the Institute of Medicine and Experimental Biology, Buenos Aires, Argentina; KAJ ULRIK LINDERSTRØM-LANG, director of the Carlsberg Laboratory, Copenhagen, Denmark; ROBERT FREDERICK LOEB, chairman of the department of medicine, Columbia University; THOMAS PARRAN, dean of the School of Public Health, University of Pittsburgh, and formerly Surgeon General of the U.S. Public Health Service; WILDER GRAVES PENFIELD, professor of surgery and neurosurgery, McGill University, Canada, and founder and director of the Montreal Neurological Institute; LOWELL JACOB REED, president of the Johns Hopkins University; ALFRED NEWTON RICHARDS, professor emeritus of pharmacology and vice president in charge of medical affairs of the University of Pennsylvania, and former president of the National Academy of Sciences; JONAS EDWARD SALK, discoverer of the vaccine for the prevention of poliomyelitis and director of the Virus Research Laboratories of the School of Medicine, University of Pittsburgh; HOWARD CANNING TAYLOR, JR., professor of obstetrics and gynecology, Columbia University.

Ohio State University: MELVIN DE GROOTE, vice president, Petrolite Corp.; HOMER C. FRITSCH, executive vice president, Parke, Davis and Co.

Monmouth College: P. A. WELLS, chief of the Eastern Utilization Research

Branch, U.S. Agricultural Research Service.

North Carolina State College: ELWOOD L. DEMMON, director, Southeastern Forest Experiment Station.

Pratt Institute: WALTER LEO WEIBLE, Deputy Chief of Staff for Operations and Administration, U.S. Army.

Worcester Polytechnic Institute: CLARENCE H. LINDER, vice president for engineering, General Electric Co.; HAROLD S. BLACK, research engineer, Bell Telephone Laboratories, Inc.; MILTON P. HIGGINS, president of Norton Co.

Lehigh University: FRANK M. MASTERS, bridge designer; WILMER A. DEHUFF, principal of the Baltimore Polytechnic Institute.

Columbia University: FELIX ANDRIES VENING-MEINESZ, geophysicist, University of Utrecht, Netherlands.

The following appointments to assistant professor have been announced: University of Illinois: LEO F. KOCH, biology. Western Michigan College: NATHAN NICHOLS, physics; JAMES H. POWELL, mathematics; CAROLA TRITTIN, paper technology.

Necrology

WALTER C. BAKER, 87, pioneer automotive manufacturer, Baker-Raulang Co., Cleveland, Ohio, 26 Apr.; MADISON BENTLEY, 84, psychologist, author, and editor, and former chairman of the department of psychology at Cornell University in Ithaca, N.Y., Palo Alto, Calif., 29 May; CARLE M. BIGELOW, 65, retired chemical and management expert, Fine Chemicals Division of the American Cyanamid Co. in Somerville, N.J., Bound Brook, N.J., 10 May.

WALTER H. DANE-DWORECKI, ear, nose, and throat specialist and chief of otolaryngology at the Veterans Administration Hospital in Albuquerque, N.M., London, England, 18 May.

GUSTAV EGLOFF, 69, petroleum scientist, research director for the Universal Oil Products Co. of Des Plaines, Ill., former president of the American Institute of Chemists and of the Western Society of Engineers, Chicago, 29 Apr.; ADOLPH ELWYN, 67, associate professor of neuroanatomy at Columbia University College of Physicians and Surgeons in New York, Briarcliff Manor, N.Y., 9 June; R. WILLIAM ESHMEYER, 50, fisheries expert, executive vice president of the Sport Fishing Institute and former head of fisheries research for the Tennessee Valley Authority in Knoxville, Tenn., Arlington, Va., 20 May.

THADDEUS REAMY GILLESPIE, 59, assistant professor of obstetrics at the University of Cincinnati College of Medicine, Cincinnati, Ohio, 21 Apr.; ISAAC

GLASSMAN, 64, roentgenologist and diagnostician and author, New York, 5 May; NATHAN W. GREEN, 84, retired surgeon, founder and former president of the American Society of Thoracic Surgery, Norwalk, Conn., 21 Apr.; ALBERT F. GUITERAS, 50, consulting chemist and director of Hudson Laboratories, former research coordinator, treasurer, and director of bacteriology and toxicology for Foster D. Snell, Inc., New York, 26 May.

ABNER KURTIN, 43, dermatologist and syphilologist, founder of the Albert Einstein College of Medicine of Yeshiva University, New York, 11 May.

GEORGE MILLER MACKEE, 77, dermatologist, professor emeritus of dermatology at New York University, consultant at Stamford and St. Joseph's hospitals in Stamford, Conn., and St. Luke's and St. Vincent's hospitals in New York, Stamford, Conn., 8 May; HARRY MANDELBAUM, 60, assistant in medicine and director of the hypertension clinic at the Jewish Hospital in Brooklyn, N.Y., and clinical professor of medicine at the State University of New York College of Medicine in Brooklyn, New York, 27 May; JOHN PUTNAM MARBLE, 58, research geochemist, chairman of the committee on measurement of geologic time of the division of geology and geography, National Research Council, Washington, D.C., 6 June; C. ERNEST MILLAR, 69, agronomist, retired head, department of soil science, Michigan State University in East Lansing, Beverly Hills, Calif., 27 Mar.

GROVER CLEVELAND NANCE, 72, former head of the geology and geography department of Winthrop College, Rock Hill, S.C., 24 May; PAUL SUMMER NICKERSON, 63, associate professor of education and psychology at The Citadel, Charleston, S.C., 15 May.

JOSEPH I. PASCAL, 65, ophthalmologist, adjunct ophthalmological surgeon at the Hospital for Joint Diseases, Beth David Hospital, and Harlem Eye and Ear Hospital, director of the eye department of Stuyvesant Polyclinic Hospital, and co-founder and former director of the American Institute of Optometry, New York, 22 Apr.; EDWARD C. PFAHL, 78, engineering consultant, Brookhaven, Miss., 18 Apr.; HAROLD ROMAINE PHALEN, 66, head of the department of mathematics at the College of William and Mary, Williamsburg, Va., 30 May; GEORGE W. MACPHERSON PHILLIPS, 67, chemical engineer with the U.S. Department of Agriculture's Eastern Utilization Research Branch, Philadelphia, Pa., 24 Apr.

WILLIAM C. REAVIS, 73, psychologist and an emeritus professor of education at the University of Chicago, Chicago, Ill., 1 June; JAMES VINCENT RICCI, 64, clinical professor of gynecology and obstetrics at

New York Medical College, consulting gynecologist and obstetrician at Beekman-Downtown and Columbus hospitals, New York, 11 May; LISLE A. ROSE, 51, professor of general engineering and director of University of Illinois engineering and information publications, Champaign, Ill., 23 May; S. LEWIS RUBINSOHN, 69, surgeon and chief of proctology at the Einstein Medical Center, Northern Division, Philadelphia, Pa., 1 May; A. DAVID RUSSELL, president of the Russed Pharmacal Corp., New York, 5 June.

FERDINAND R. SCHEMM, 55, heart specialist, a founding director of the Great Falls Heart Research Institute in Great Falls, Mont., St. Louis, 16 May; CARL ALWIN SCHENCK, 87, forester, founder of the first school of forestry in the United States, Lindenfels, Germany, 16 May; ALFRED A. SCHILLER, 39, associate professor of physiology at the University of Illinois College of Medicine in Chicago, Ill., Palo Alto, Calif., 21 Apr.

ISADORE M. TRACE, 75, heart specialist, a founding physician of Mount Sinai Hospital, Chicago, Ill., and professor of medicine at Chicago Medical School, Chicago, 4 May.

ITZHAK VOLGANI, 75, founder and head of the Jewish Agency's agricultural experiment station in Rehovoth, Tel Aviv, Israel, 24 May.

PAUL A. WEBSTER, 52, specialist in silica analysis and chemist for the Hartford Empire Co., Hartford, Conn., 23 Apr.; HARRY WEISS, 63, physician and bacteriologist, adjunct physician at Mount Sinai Hospital, associate attending physician at Sydenham Hospital, New York, 21 Apr.; JOE YOUNG WEST, 51, science professor at Towson State Teachers College, Towson, Md., 29 Apr.; DONALD W. WHITLOCK, 61, research engineer for Keuffel and Esser Co. of New York, Orange, N.J., 19 Apr.; JOSEPH A. WHITTINGTON, 57, post engineer at Blue Grass Ordnance Depot, Richmond, Ky., 24 Apr.

Education

■ Concern over the nation's short supply of scientific manpower led a University of California scientist to take a new step in solving that problem. Arthur B. Pardee, assistant professor of biochemistry and assistant research biochemist in the university's Biochemistry and Virus Laboratory at Berkeley, launched a program for placing high-school science students in research laboratories for summer work.

At the end of March Pardee wrote to science teachers in some 30 high schools throughout the San Francisco Bay area. He asked them to discuss with their outstanding science students the prospect of

summer work in research laboratories at the University of California and suggested that the students apply for the positions by letter.

Some 40 applications were submitted. Since only about 10 jobs were available at the university, Pardee has talked with research laboratories in industry and in other universities in an effort to place the students.

■ Four new graduate programs, three of them leading to the Ph.D. degree, will be offered by the Stevens Institute of Technology next September. The new degrees can henceforth be earned in the departments of chemistry, mathematics, and physics, which already award advanced degrees at the master's level.

The fourth new degree toward which Stevens graduate students now will be able to work is that of master of science in civil engineering. This makes civil engineering the eighth department in which the master's degree can be earned.

The eight departments now offer graduate degrees in 15 major areas of specialization in engineering and science. The three new doctoral programs bring to four the number of departments awarding the doctorate. The department of mechanical engineering already accepts candidates for the degree of doctor of science in applied mechanics.

■ An engineering psychology section has been established in the electrical engineering division of the Franklin Institute Laboratories for Research and Development. Ezra S. Krendel, who joined the laboratories' staff in 1949, has been appointed section chief.

■ The New York University College of Engineering will inaugurate programs in nuclear engineering and engineering science in the fall, and Dean Thorndike Saville states that the college has discussed with the U.S. Atomic Energy Commission plans for construction this summer of a subcritical nuclear reactor for laboratory use. The new graduate program, for which the degree of master of nuclear engineering has been authorized, is the first in the New York metropolitan area and among the first in the country.

The planned subcritical reactor would be the first of its kind at a university. It cannot maintain a chain reaction and therefore is appropriate for university classroom studies. Economical, safe, and accurate for experiments in undergraduate and graduate education in nuclear engineering, it would be built at a cost of a few thousand dollars. (The cost of constructing and installing operating research and industrial reactors amounts to millions of dollars.) Uranium would be on loan from the AEC.