stances appears to be the only recourse, and the Council plans to assign to the Research Corporation or other suitable agency patents on such substances as should be thus controlled.

Radiation Research

The Committee on Radiation for the past eight years has been encouraging research upon the biological effects of various types of radiation (x-rays, ultraviolet light, infra-red rays, radium emanations, etc.). It has been gratified in having been able to bring to bear in this field resources not only of appropriations from certain of the foundations, but also the loan or donation of apparatus and supplies, representing in the aggregate large amounts, from a number of instrument makers and manufacturers. These have been made available to collaborators at universities and research institutions, but in doing so the committee has followed the policy of not attempting to furnish continuing support of a given program of investigation indefinitely, but rather of expecting that institutional provision will be made for the continuation of promising programs of investigation after initial assistance from the committee. During the past year the committee has thus supported thirteen projects carried forward from the previous year and nine new projects, with grants of moderate amounts, and has also arranged for the loan by manufacturers of x-ray apparatus to investigators in ten or twelve cases and for the loan of radioactive substances.

A special enterprise of the committee has been brought to completion during the year in a scrutiny of the problem of mitogenetic radiation. The conclusion from the present study is in general that present methods fail to demonstrate positively the existence of mitogenetic emanations, and that further productive work in this field must depend upon the development of more sensitive instruments and perhaps new methods of approach. (A report upon these investigations has just been published by the Council as *Bulletin No. 100,* August, 1937.)

These examples present some account of the nature of the activities in which the National Research Council has been engaged, but it is recognized that whatever value there may be in any of these operations is really due to contributions of time and counsel and effort from the scientific men of the country themselves. The Council has provided merely a mechanism to enable these men to aid their common purposes. The operation of the mechanism is in the hands of those who wish to use it. The Council is deeply grateful to all the agencies that have contributed funds for its use and to all those individual scientists who have joined in carrying out the purposes for which the Council was created.

OBITUARY

DAVID HENDRICKS BERGEY

On September 5, 1937, died David Hendricks Bergey, pioneer, scientist, scholar, teacher and friend. He was born on December 27, 1860, at Skippack, Pennsylvania. His early education was received in the public schools of Montgomery County. He went to a private school for several summers and then became a teacher in the public-school system. Dr. Bergey attended the West Chester Normal School for one session and Ursinus Academy for a term. In the spring of 1881, he began the study of medicine in the office of Dr. Samuel Wolfe, of Skippack, and in the fall of the same year he entered the Medical Department of the University of Pennsylvania. He was graduated from it in 1884, receiving the degrees of bachelor of science and doctor of medicine.

Dr. Bergey practiced medicine in North Wales, Pennsylvania, from June, 1884, to October 1, 1893. Then he began his long and faithful service to the University of Pennsylvania. On November 6, 1894, he was appointed Thomas A. Scott fellow in hygiene in the Laboratory of Hygiene of the university. During that year he received the degree of master of arts in science and philosophy from Illinois Wesleyan University. Dr. Bergey then served successively in the Laboratory of Hygiene as assistant in chemistry, 1895–96; first assistant, 1896–1928; director *pro tem* of the School of Hygiene and Public Health, 1928–29; director of the Laboratory of Hygiene, 1929–31, and director *pro tem* of the Laboratory of Hygiene, 1931–32.

In the School of Medicine of the University of Pennsylvania he was appointed assistant professor of bacteriology in 1903. In 1916 the degree of doctor of public health was conferred upon him by the university. From that time until his retirement on June 30, 1931, he served as assistant professor of hygiene and bacteriology, 1916–26; professor of hygiene and bacteriology, 1926–31, and director of the Department of Hygiene, 1929–31. He was recalled from retirement to become acting professor of hygiene for the school year 1931–32. Dr. Bergey also held the position of professor of hygiene and bacteriology in the Graduate School of the University of Pennsylvania, 1928–32.

His services at the university were interrupted during the world war while serving in the armed forces of his country from 1917–1919. He was appointed as a first lieutenant in the Medical Reserve Corps,

U. S. A., and was honorably discharged from active service with the rank of major. He served as chief of the laboratory staff at Fort Oglethorpe, Georgia.

Upon his permanent retirement from the University of Pennsylvania in 1932, Dr. Bergey became director of research in biology of the National Drug Company, of Philadelphia, and retained that position until the time of his death.

He belonged to a number of learned societies, among them the Philadelphia County, Pennsylvania State and American Medical Associations, the American Association for the Advancement of Science, the Society of American Bacteriologists (president in 1915), the Society of Natural History, the College of Physicians of Philadelphia, the Pathological Society of Philadelphia, the American Public Health Association, Association of Military Surgeons, Sigma Xi, the Society of Experimental Biology and Medicine, and he was a member of the Pennsylvania German Society. He was the founder of the Eastern Pennsylvania Chapter of the Society of American Bacteriologists.

His industry and sound scholarship are attested by a voluminous bibliography of his contributions to biology, hygiene and the genealogy of his own family. He contributed seventy-six papers and seven books. His papers cover a variety of subjects, to mention a few in the field of bacteriology, tuberculosis, typhoid fever, diphtheria, streptococci, bacterial classifications and the pedagogy of bacteriology. In the field of immunity there are papers on opsonins, phagocytosis, anaphylaxis and the results of his last researches, which were on tetanus toxoid. Besides these he contributed many additions to our knowledge of hygiene and sanitation. His text-book on the principles of hygiene passed through seven editions. His greatest contribution is "Bergey's Manual of Determinative Bacteriology," which has passed through four editions, with a fifth in press. One has only to read a few pages of the book to appreciate his mastership of details, thoroughness and scholarly judgment. In spite of his critics the volume stands as a great contribution to American bacteriology. Its acceptance everywhere as a basis for bacteriological taxonomy is, in itself, testimony to its enduring value.

As a teacher Dr. Bergey was meticulous in his explanation of bacteriological details; he was painstaking, conscientious and always scientifically honest. He could be firm and uncompromising when the occasion demanded. He was very modest and very humble. His loyalty to his chief, the late Dr. Alexander C. Abbott, was indeed noble, but, unfortunately, his own true worth and ability were often overshadowed by it. As a man among his associates Dr. Bergey was well beloved. He was always interested in the problems of younger men, fair and kindly in his criticism, generous in giving sound advice and enthusiastic in all progress.

He is survived by his wife, the former Annie S. Hallman, whom he married in June, 1884, and by his brother, Nelson H. Bergey, of Philadelphia.

America has lost a pioneer in the field of bacteriology and hygiene; he was one of the last of the great morphologists. His associates have lost a good friend. We shall miss his cheery smile, his kindly welcome and his generous help.

CARL J. BUCHER
HARRY E. MORTON

PHILADELPHIA, PA.

RECENT DEATHS AND MEMORIALS

DR. FRANCIS W. O'CONNOR, director of the department of tropical diseases at Columbia University and associate professor of medicine, died on October 3 at the age of fifty-three years.

SPENCER PRITCHARD HOWELL, explosives engineer of the U. S. Bureau of Mines at Pittsburgh, died on September 23 at the age of fifty-seven years.

DR. GRACE O. MCGEOCH (Mrs. John A. McGeoch), who received the doctorate of philosophy from the University of Chicago in 1936 and has done work in experimental, genetic and educational psychology, died at her home in Middletown, Conn., on September 5.

DR. J. R. AIREY, distinguished as a mathematician and until his retirement in 1933 principal of the City of Leeds Training College, died on September 16 in his seventieth year.

MISS A. LORRAIN SMITH, formerly of the British Museum (Natural History), known for her work in mycology, died on September 7 at the age of eighty-three years.

THE *Journal* of the American Medical Association states that plans are under way to create the Marriott Memorial Fund for Research in Pediatrics, in honor of the late Dr. Williams McKim Marriott, formerly professor of pediatrics and dean of Washington University School of Medicine, St. Louis. The following are members of a committee in charge of the project: Dr. Malvern B. Clopton, Dr. George R. Throop, Dr. Philip A. Shaffer, present dean of the medical school, Dr. Alexis F. Hartmann and Dr. Park J. White, Jr. In addition to the endowment, a portrait of Dr. Marriott will hang in the St. Louis Children's Hospital. The cost of the portrait will be paid from the principal of the fund, while the income from the remainder will be devoted to research in the field of pediatrics. Dr. Marriott served as professor of pediatrics at the university from 1917 to 1936 and as dean from 1923 to 1936.