that in gelatin every third amino acid could be glycine, every sixth proline, and every ninth hydroxyproline. This finding led him to postulate a systematic periodicity in the location of these amino acids in the peptide chain. With Niemann he extended the application of this concept to a wider series of amino acids in other proteins, and advanced the general hypothesis that the individual amino acids are situated in proteins in regularly recurrent orders dependent on periodicities the numerical values of which are multiples of powers of 2 and 3. Though later evidence suggests that this hypothesis represents an oversimplification, the basic idea has stimulated many useful studies, not the least of which has been the development in Bergmann's own laboratory of precise methods, novel in principle, for the analytical determination of amino acids for which no reliable procedures had previously been available.

Max Bergmann possessed in a high degree the capacity for forming and maintaining affectionate friendships. He was incapable of malice, and never displayed rancor towards those who had wrecked his career in his native land. He was gifted with an inextinguishable fund of quiet humor, he was invariably generous towards younger men and towards the scientific work of his colleagues, and his innate modesty was never clouded by his objective though unexpressed recognition of the value of his own achievements.

He is survived by his wife, a son and a daughter.

HANS T. CLARKE

COLUMBIA UNIVERSITY

DEATHS AND MEMORIALS

DR. ROBERT H. MACKNIGHT, research associate in biology at the University of Rochester, died on August 3. He was twenty-nine years old.

GEORGE WILLETT, since 1928 curator of ornithology at the Los Angeles County Museum, died on August 2 at the age of sixty-six years. He had been connected with the museum since 1927. He was vice-president of the American Ornithological Union and secretary of the Cooper Ornithological Club, Inc.

DR. E. HADORN, professor of zoology at the University of Zurich, Switzerland, has written to Dr. Curt Stern, of the University of Rochester, that the following German zoologists have been killed in action: E. Ries, E. Becker and W. Köhler.

A TABLET to commemorate the work of the late Sir William Bragg, O.M., and of his son, Professor Sir Lawrence Bragg, presented by Mrs. Smithells, the widow of Professor Arthur Smithells, of the University of Leeds, was unveiled on July 20 by Professor R. Whiddington, F.R.S. The inscription on the tablet reads: "Near this place in the old Physics Laboratory in the year 1913 William Henry Bragg, Cavendish professor of physics in this university from 1909 to 1915, and his son, William Lawrence Bragg, began their joint researches and established with the first x-ray spectrometer the nature of x-ray spectra and the principles of crystal analysis for which they were awarded the Nobel Prize in 1915."

SCIENTIFIC EVENTS

SCIENCE IN DENMARK AND NORWAY

THE scientific correspondent of *The Times*, London, reports that the Royal Society is taking a very active part in renewing the cordial relations which have by long tradition existed between men of science of Great Britain and of the lands recently liberated from Germany. In this connection Professor A. V. Hill has paid a visit to Denmark and Norway. *The Times* describes his visit as follows:

He went as the delegate of the society, to bear its greetings, to present to the academies of the two countries copies of all that the Royal Society has published since 1940, and to request the academies to be instrumental in distributing to scientific workers of their respective countries certain sums of money from a fund founded, in memory of Sir Horace Darwin, for the purchase of scientific instruments.

He received a most cordial and sincere welcome at Copenhagen and at Oslo, and has returned with the greatest admiration for the spirit that he found abroad, and with high hopes for the future of Danish and Norwegian science.

Science in Denmark has not suffered as badly as in most countries occupied by the Germans. Until the autumn of 1943 the invaders were on their best behavior, but at that time the *Gestapo* became active and students ceased to attend the colleges. Professor Rehberg, the zoologist, was brutally mishandled by the Germans for lack of cooperation, and he and a good many other men of science were imprisoned, but escaped when the prison was very skillfully bombed by us. Research, however, continued in the laboratories which were not despoiled, and much excellent work has been published in the *Proceedings* of the academy.

Food is in good supply and the generous Danes have done and are doing sterling work in collecting food for Norway and Holland. Their chief scientific need is books and journals, and English text-books for students. To show how quickly the Danes have been able to establish themselves, they are contemplating an expedition next year for marine biological investigation, a subject in

which they have high traditions, off the west coast of Africa. They already have a ship and funds. They trust that our authorities will facilitate the work, in which they will gladly welcome the aid of the British biologists.

Norway has suffered much more than Denmark. The president of the academy, Professor Bull, was three years in a concentration camp: the scientific laboratories have been stripped of apparatus and the departments closed. In consequence, little scientific work has been carried out during the war and the Norwegians are having great difficulty in getting their courses started again. Medicine in Norway attained, before the war, a very high standard, and it is most desirable that medical instruction should get under way as soon as possible. The Danes are taking a large number of Norwegian medical students, and Norway is anxious that some of her best post-graduate students should study in England. These men are ready to come now and there are very real reasons why we should help. Norway's geologists are anxious to serve for a period in our surveys abroad and her oceanographers and biologists would gladly take part in our expeditions.

THE OFFICE OF RESEARCH AND INVENTIONS OF THE NAVY DEPARTMENT

THERE is given in *Chemical and Engineering News* an account of the new Office of Research and Inventions to guide navy research activities, which has been established by the Navy Department, under the direct supervision of the Secretary of the Navy. The office was formed by merging the Naval Research Laboratory, the Special Devices Division of the Bureau of Aeronautics, the Office of Research and Development and the Office of Patents and Inventions.

Rear Admiral Harold G. Bowen, U.S.N., who was director of the Office of Patents and Inventions, and was associated with the development of radar and high-pressure, high-temperature steam propulsion for naval vessels, has been placed at the head of the new office. Captain Luis de Florez, U.S.N.R., director of the Special Devices Division of the Bureau of Aeronautics and winner of the Collier trophy in 1944, will be assistant chief.

The office is authorized by the Secretary of the Navy and Chief of Naval Operations to continue and to instigate such experimentation as is necessary to maintain the superiority of American naval weapons. It will assist in the adaptation to naval needs of jet propulsion, rockets, gas turbines and numerous weapons and techniques still in a secret category and will deal with all chemical engineering projects for the Navy.

STUDY OF THE CAUSES AND TREATMENT OF CANCER

AT a press conference on August 7, presided over by Alfred P. Sloan, Jr., chairman of the General Motors Corporation, it was announced that the Alfred P. Sloan Foundation had made, for a ten-year study of the causes and treatment of cancer, a grant of $4,000,000 to Memorial Hospital for the Treatment of Cancer and Allied Diseases, which will now become an international center for the study of the disease.

Participating in the conference were Dr. Charles F. Kettering, president of the American Association for the Advancement of Science, vice-president and director of research of the General Motors Company; Reginal G. Coombre, president of the hospital, and Dr. C. P. Rhoads, director of the hospital.

The gift in connection with the recently announced expansion program of Memorial Hospital will provide for a building especially designed for the purpose, self-contained in all its various research functions. It will be erected at an estimated cost of $2,000,000 on property now owned by Memorial Hospital adjacent to its present location.

In addition, the Alfred P. Sloan Foundation will undertake to provide $200,000 a year toward the operating cost for a definite period of ten years. This is estimated to be not more than half of what might be profitably employed. It is to be hoped that others interested in the same objective will provide additional financial support.

The Sloan-Kettering Institute building will stand in the middle of Memorial Cancer Center. It will be conducted by a separate Board of Trustees composed of men primarily interested in research, and the funds entrusted to the charge of these trustees will be used for no other purpose than for research. As an integral part of the center, however, all the clinical facilities and material of the other units of the center will be available to the institute.

While the gift provides for most of the financial requirements of the research phase of Memorial Cancer Center, it will not be fully effective from the point of view of its ability to render service until it is completed. This will necessitate approximately $3,000,000 to $4,000,000 in addition. These additional funds will provide for an increased bed capacity at Memorial Hospital proper, for fellowships for the training of specialized medical personnel and for equipment necessary to the servicing of the new James Ewing 300-bed unit to be erected at the center by the City of New York. When this program has been completed, there will be no comparable center wholly devoted to the cause of cancer, and so fully integrated, existing anywhere in the world.

A separate board of trustees will supervise the institute. There will be four representatives of the foundation and five of the hospital.

The Cancer Center will be a unit of a group of institutions for medical care, teaching and research.