

familiar in a number of schools, in which senior medical students visit the homes of clinic patients to study and report on their environment and the emotional background of their diseases. These are five-finger exercises in personalized clinical care; they should be reinforced by more difficult and more significant tasks set by the student's instructors in psychiatry.

The core of preventive medicine—the adjustment of the individual patient to his physiological equipment and status—can hardly be taught successfully in didactic courses. The student needs to see his instructor handling patients in the clinic and at the bedside in a way that makes full use of the resources of medicine for bringing about such an adjustment—resources which are still all too meager for the infinite variety of the task. The department of preventive medicine can not hold itself aloof from other clinical departments if it is to do and to promote such teaching: its members must take their places on the clinical team of the teaching hospital and do their part to enrich general medicine rather than attempting to build up a separate discipline.

The task of the department of preventive medicine, in sum, is then:

- (1) To teach the medical student what he needs to know about available techniques for the prevention of communicable disease;
- (2) To give him an understanding of epidemiology and quantitative methods in medical science;
- (3) To sensitize him to opportunities for arresting the development of non-communicable disease;
- (4) To make him aware of the patient as a person and thus to initiate him more fully into the art of medicine; and ultimately
- (5) To show him how medicine can help to maintain or increase productive energy in both normal and handicapped individuals.

It will be seen that these objectives can be translated only in part into a formal curriculum. The more significant service of the professor of preventive medicine is to act as catalyst—offering new points of view, broadening clinical concepts, stretching the imagination, and nourishing the philosophy of both his students and his colleagues.

## OBITUARY

### WILLIAM SPENCER CARTER 1869–1944

INCREASINGLY significant is the influence of American medicine in the development of medical training and research in outlying parts of the world. A notable pioneer in transfusing the best of American medical idealism and methodology in the Pacific area was William Spencer Carter, who died in Auburndale, Mass., on May 12, 1944.

Dr. Carter was a leader in the development of clinical physiology, an outstanding medical administrator, and a generous guide in promoting medical education and research.

Born in Warren County, N. J., on April 11, 1869, Dr. Carter graduated in medicine from the University of Pennsylvania in 1890. As a medical student he had worked in the private laboratory of Dr. Isaac Ott at Easton, Pa., on cerebral heat centers. Following the receipt of his degree in medicine he became demonstrator of pathology at the University of Pennsylvania. In 1894 he was assistant professor of physiology at Pennsylvania, and in 1897 he came to Galveston as professor of physiology at the University of Texas Medical Branch. At Galveston Dr. Carter organized one of the first physiology laboratories in the South.

Dr. Carter's executive ability was recognized in 1903 when he succeeded the late Dr. Allen J. Smith as dean of the University of Texas School of Medicine, Dr. Smith having returned to the University of Penn-

sylvania. Under Dr. Carter's administration the University of Texas School of Medicine developed effective leadership in medical education and research in the Southwest in intimate association with the John Sealy Hospital.

At the request of the Rockefeller Foundation, the University of Texas lent Dr. Carter in 1922 to the University of the Philippines, Manila, where he assisted in the organization and development of the medical school. In 1923 Dr. Carter became associate director of the Medical Sciences Division of the Rockefeller Foundation. As such, he made an important survey of medical education in the Philippines, Australia, South Africa, Java and New Zealand. In 1925 Dr. Carter became acting director of Peking Union Medical College, where he assisted in the notable expansion of medical educational efforts in China. In 1926 he went to India to make an official survey with recommendations for the future of medical education in that area. He was instrumental in the establishment of the School of Tropical Medicine at Calcutta.

Dr. Carter retired from work with the Rockefeller Foundation in 1934. Shortly thereafter he returned to the University of Texas to serve again as dean of the Medical Branch until 1938, when he retired to his home in Massachusetts.

Dr. Carter had come originally to Galveston in connection with yellow fever work. At the University

of Texas Medical Branch he inaugurated courses in hygiene and public health, and founded the department of pharmacology. He succeeded in adding a number of buildings to the plant of the John Sealy Hospital and assisted in promoting the building of the special out-patient clinic and Children's Hospital.

In 1892 Dr. Carter won the Boylston Prize for his investigations on leucocytosis and blood serum. In 1903 he was awarded the Alvarenga Prize. While his publications were not many, they were important and stimulating. His study of the physiological action of the poisons from various species of *amanita* in 1901 remains a classic. He was among the first to study the pronounced general physiological disturbance resulting from ether anesthesia. His studies on intraspinal pressure were important in practical application in withdrawing cerebrospinal fluid and in making intraspinal injections. During World War I he made important investigations on the use of citrated blood for transfusion. His studies on the function of renal epithelium stimulated much subsequent work.

In the field of public health Dr. Carter was a pioneer in promoting measures for the control of tuberculosis. He advocated the registration of all cases, the control of milk supply through pasteurization, the establishment of special hospitals and a broad educational campaign designed to acquaint the people with the dangers of tuberculosis, the way it spreads and the methods of preventing it. He was among the first to emphasize the dangerous sequelae of mild, acute infections such as scarlet fever.

Dr. Carter was a member of the National Board of Medical Examiners, the American Physiological Society and the College of Physicians of Philadelphia. He was prominent in the affairs of the American Medical Association, and a respected public leader in promoting a reasonable appreciation of the practical significance of medical affairs. Dr. Carter made lasting friendships wherever he went, and inspired all who knew him to strive more effectively for healthy human welfare.

A stimulating medical teacher and executive, Dr. Carter greatly influenced the course of medical education and medical effort over a wide area of the world. He was the type of medical leader of which many indeed are needed these days.

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#### LOSSES IN PERSONNEL OF SOVIET BOTANY DURING THE WAR

THE last mail coming from the U.S.S.R. after a very long intermission brought sad news of heavy

losses in the ranks of Soviet botanists during three years of the war. Some of them are direct results of military action and some apparently may be attributed to severe sufferings caused by the war, especially in besieged Leningrad and its vicinity, and to natural causes.

The following notes give some biographical data on the most important of deceased botanists.

The truly irreparable loss for botanical science is the death of Evgenii Vladimirovich Wulff (1885-1941), one of the most outstanding and erudite of Russian botanists, killed by a bomb fragment on December 21, 1941, in Leningrad. Wulff, who at the time of his death was senior specialist and curator of the Herbarium of Cultivated Plants, Geographical Department, Institute of Plant Industry, was active in many branches of botanical science: historical plant geography, flora and vegetation of Crimea, taxonomy of cultivated plants and history of botany. His more important publications include: "Introduction to Historical Plant Geography" (Russian, 1932, 1933 and English translation 1943); "Historical Plant Geography" (Russian, 1936) and "Flora taurica," 3 fasc. (1927-30). A more extensive biographical sketch of Wulff will appear soon in *Chronica Botanica*.

Dr. Vladimir Petrovich Maleev (1894-1941), who died on December 21, 1941, was one of the best authorities on the flora and vegetation of the Caucasus and Crimea and the acclimatization of subtropical plants. He was born on February 24, 1894, at Kharkov and educated in the same city, graduating in 1917. After teaching biology and botany for some years, he served in various botanical institutions in the Caucasus, 1923-26, in Nikita Botanical Garden in Crimea, 1926-30, and in 1931 joined the Institute of Plant Industry in Leningrad. In 1934 he became senior botanist of the Geobotanical Department of the Institute of Botany. He made several exploring trips to the Caucasus, 1919-26, 1934-35, 1936-38 and 1941, and to Tien Shan in 1939. He is the author of more than 60 botanical works, including "Vegetation of the Black Sea Region" (Russian, 1940); "Tertiary relicts of the flora of western Caucasus" (Russian, 1941), etc.

Dr. Vadim Sergeevich Poretsky (1893-1942), professor of plant morphology and systematics at Leningrad University, died on February 8, 1942, in Vaibokala. His greatest contribution to science is his work on the taxonomy of cryptogams and the study of fossil diatoms of Leningrad Province and Ladoga Lake. He was born at Vazo, Esthland, and graduated from St. Petersburg University in 1917. He became assistant in botany at Perm University in the same year, and in 1921 removed to Leningrad, where he was assistant professor of botany of the Institute of Agriculture and since 1923 was connected with the Leningrad Botanical Garden and University.