

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.

Dr. Afanasii Nikolaevich Danilov (1879–1942), senior specialist of the ecological department of the Institute of Botany, who died in January of 1942 in Leningrad, was an old plant physiologist well known for his works on symbiosis of lichens and photosynthesis of cryptogams and higher plants. He was born in Mogilev and graduated in 1911 from St. Petersburg University. In the same year he became conservator of the Tifliss Botanical Garden but in 1914 returned to St. Petersburg as a member of the staff of the Botanical Garden. In the Institute of Botany he worked first in the cryptogamic department and since 1937 in the department of ecology. His writings include: "La symbiose, comme facteur de l'évolution" (1921); "Hydrochrome der Cyanophyceen und Florideen" (1922) and many other articles in periodicals.

Dr. Ivan Ivanovich Sprygin (1873–1942), well-known geobotanist, was born on July 5, 1873, at Penza and died on October 1, 1942, in the same city. After his graduation from Kazan University he taught natural history from 1897 to 1919 and made several exploring trips to Penza and Saratov provinces and to Turkestan. He was professor of botany of the Middle Asia University (Tashkent), 1920–21, and director of the Penza sanctuary, 1925–38, and the Botanical Museum, 1938–40. He is the author of many articles on plant geography.

Konstantin Illarionovich Solonevich (1903–42), geobotanist and specialist on the flora of arctic and northern regions, was born on March 12, 1903, at Tosno and educated at Leningrad, attending first the Institute of Agriculture and then the university, from which he was graduated in 1930. He explored Kola Peninsula in 1927, 1932–34 and 1935–36, Karelia in 1928–29 and directed paleobotanical investigation of the Leningrad region in 1935–36. He was connected with the geobotanical department of the Institute of Botany until his death on February 9, 1942, in Borisova Griva. His publications include "Ein Beitrag zur Vegetation des nordöstlichen Teils des Lowosero Gebirges" (*Kola-Halbinsel*) (1936); "Notes sur la régression de l'aire du pin en la péninsule de Kola" (1940), etc.

Nikolai Fedorovich Komarov (1901–42), geobotanist and student of steppe vegetation, was born in 1901 at Tver and, after teaching for some years in lower schools, entered the University of Voronezh and was graduated in 1926. He served in the Museum of Natural History of Voronezh and lectured on botany and soil science in the Institute of Agriculture and the university of the same city, becoming docent of botany in 1932. Since 1935 he was associated with the Institute of Botany, working first in the Botanical Museum and then in the department of raw materials. He is the author of "Nature of Voronezh Province" (Russian, 1929); "Les unités géobotaniques de Voro-

nège et de Koursk" (1940); "Relief and Geographical Distribution of Plants" (Russian, 1940) and some other articles.

In the death of Woldemar H. (Vladimir Andreevich) Tranzschel (1868–1942) plant science lost one of the most prominent mycologists of our time. We have to add only a few facts to the appreciation of his work which has already been published in *SCIENCE* (99: 443, 1944) by Rolf Singer. He was born on January 16, 1868, at St. Petersburg and educated in the same city. After his graduation in 1889, he served as assistant in botany and curator of the Botanical Museum of the St. Petersburg University, 1891–92, assistant in botany at the Institute of Forestry, 1892–98, and assistant in plant morphology and systematics at Warsaw University, 1898–99. In 1900 he returned to St. Petersburg as curator of the Botanical Museum of the Academy of Sciences and since that time was connected with this institution until his death late in 1942. He founded the cryptogamic herbarium which, under his guidance, became one of the best in Europe. But he was not only a herbarium scientist, he collected extensively in Viborg (Vipuri), Novgorod and St. Petersburg provinces, in Turkestan, the Far East and the Crimea. He was deservedly considered a great authority on Uredinales and the results of his 50 years' study are incorporated in his masterpiece, "Rusts of the U.S.S.R." (Russian, 1938).

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RECENT DEATHS

DR. JOSEPH BRENNEMANN, until a year ago professor of pediatrics and head of the department of the School of Medicine of the University of Southern California, died on July 2. He was in his seventy-second year.

WILLIAM CATESBY JONES, of the division of chemistry of the State Department of Agriculture of Virginia, died on July 10 at the age of sixty-three years.

ALEX. W. MCCOY, consulting geologist of Tulsa, Okla., died on July 1 at the age of fifty-five years.

DR. A. H. REGINALD BULLER, emeritus professor of botany and founder of the department of botany of the University of Manitoba, died on July 3. He was in his seventieth year.

J. R. NORMAN, deputy keeper in the Department of Zoology of the British Museum (Natural History), died on May 26 at the age of forty-five years. Since early in the war he had been in charge of the Tring Museum, now a branch of the British Museum.

THE death is announced of Professor J. Shaw Dunn, who has held the chair of pathology in the University