OBITUARY

LESLIE TILLOTSON WEBSTER
1894–1943

LESLIE TILLOTSON WEBSTER was born in New York City on July 23, 1894. After graduating from Amherst College in 1915 he studied medicine at Johns Hopkins University, where he graduated in 1919. After one year in the department of pathology at Johns Hopkins Medical School, he joined the staff of The Rockefeller Institute for Medical Research in 1920; he remained at the institute, of which he became a member in 1934, until his death on July 12, 1943.

From the beginning of his scientific career, Dr. Webster was strongly attracted to the study of factors operating in the spread of infectious diseases in different kinds of populations. When he began his work it was a matter of common observation that epidemics arise in the midst of a population, reach a maximum and then, after killing a number of individuals, wane. The reason for this cyclic course was attributed to chance contact with an infective agent. It was assumed that a highly virulent strain of an infective agent overcame the resistance of equally susceptible individuals of a population, thereby starting an epidemic. Then, as the number of cases increased, the elimination by death of many individuals in the population took place accompanied at the same time by active immunization of those that had suffered a sublethal infection. It was assumed that such a process eventually brought to an end an epidemic, leaving behind only individuals with an increased resistance. In this conception of epidemics little attention was paid to the host factor. Dr. Webster's work proved that in a given population individuals differ greatly in their susceptibility to infection, and that the host factor plays an important role in the rise and fall of epidemics.

By careful and painstaking work Dr. Webster proved that individuals have different degrees of resistance and susceptibility to infection, that these qualities are segregable and inheritable and that strains of animals can be developed by proper inbreeding so that some are highly resistant while others are exceedingly susceptible. By using properly bred animals he proved that in an experimental epidemic there is no need for an infective agent of exceedingly high virulence in order to start an epidemic; it is sufficient that the number of susceptible animals constitute a certain proportion of the population. The epidemic continues as long as enough susceptible animals are present, and, when the number of susceptibles reaches a certain low level, the infective agent through lack of proper soil ceases to be active, thus ending an epidemic. The individuals surviving an epidemic are resistant, not through a process of active immunization but through their inherited qualities. This was Dr. Webster's fundamental contribution to epidemiology and one that has had a marked influence on all modern work on infectious diseases.

In the field of virus infections, Dr. Webster's contributions have been many and important, especially his studies on rabies. Through his investigations more accurate methods of diagnosis were developed and his studies on antirabic vaccines led to a better evaluation of their potency and to the use of ultraviolet light in their preparation. His studies of human encephalitides has thrown light on many problems in this field; he particularly showed the value of albino mice in investigations of these maladies.

At the time of his death Dr. Webster was fully occupied by the study of the influence of dietary factors on resistance and susceptibility to infectious diseases. It is most unfortunate that his death deprived him of the pleasure of harvesting the fruit of this work. To his friends and to those who had the great privilege of being associated with him in scientific endeavor, his death has caused an irreparable loss; his critical scientific qualities, his kindness and devotion to his friends will long be remembered.

J. CASALS
T. M. RIVERS

WALTER E. McCOURT

PRIVATE funeral services were held on June 1 for Walter Edward McCourt, assistant chancellor of the Washington University, St. Louis, who died suddenly of a heart ailment on May 30 at his home.

Dean McCourt, fifty-nine years old, had been a member of the faculty since 1906. He had been in charge of the department of geology and geography since 1907 and served as dean of the Schools of Engineering and Architecture from 1920 to 1928.

Besides being one of the most popular teachers at the university Dean McCourt was active in scientific and discussion groups, both of a local and national nature. He was a former president of the Engineers Club of St. Louis, and for twenty-five years served as secretary of the American Institute of Mining and Metallurgical Engineers for this district.

Born in Brooklyn, N. Y., he received an A.B. degree in 1904 and an M.A. in 1905, both from Cornell University. He joined the Washington University faculty the following year. He was first an instructor in geology; was promoted to assistant professor in 1907, to associate professor in 1912 and three years later to full professorship.

He was a celebrated authority and lecturer on vol-

canoes, national parks and mountains. His classes at the university were among the favorite science courses. During his travels he had collected a valuable collection of picture slides which he often used with his lectures.

LEWIS F. THOMAS

WASHINGTON UNIVERSITY,
ST. LOUIS

DEATHS AND MEMORIALS

DR. IVIN SICKELS, professor emeritus of geology at the College of the City of New York, died in his ninetieth year on August 5.

THE death is announced of Baron Gerard de Geer, from 1877 to 1924 professor of geology at the University of Stockholm, founder of the Geochronological Institute there and an authority on glacial and post-glacial problems. He was eighty-four years old.

THE *Journal* of the American Medical Association reports that a public campaign to raise at least $300,000 to be donated to the University of Cincinnati College of Medicine as a fund dedicated to the memory of Dr. Mont R. Reid was opened on July 12. The fund is to be used to supplement the regular budget of the College of Medicine and is intended "to honor the memory of a great citizen, to advance the cause of medical science and teaching and to promote the health of our community." An annual deficit varying from $18,000 to $25,000 has been met usually through the personal efforts of Dr. Reid.

SCIENTIFIC EVENTS

THE ROSS INSTITUTE OF TROPICAL HYGIENE

IT is pointed out in *The British Medical Journal* that the part played by the Tropics in providing indispensable products of all kinds has never perhaps before been so forcibly brought to the notice of the public as now. Nor in this connection has the importance of malaria and the need for controlling this most deadly of tropical diseases been so clearly demonstrated. Measures of control of malaria have now been developed in many parts of the world, but in none has progress in this respect been more conspicuous than in India. Particularly has the work of the Ross Institute of Tropical Hygiene (India Branch) in the Indian tea, jute and mining industries been a striking example of such progress. We have previously drawn attention to the part played by the institute in coordinating the resources of individual interests in these industries and in organizing and developing systematic research and active prosecution of measures throughout the many gardens, estates and labor forces concerned. The *Journal* summarizes as follows the information given in the annual report for 1941–42:

Among contributors to the cooperative action initiated by the institute are listed over twenty agents and companies controlling more than 200 estates, with a total acreage of nearly half a million; extracts from reports by medical officers and others give evidence of the scale and beneficial results of the measures undertaken. In the account of the year's activities malaria control naturally takes first place, and some interesting facts are given of the result of anti-malaria work on a number of estates. Methods of biological control have been widely made use of, because owing to their cheapness and permanent character such measures have largely eliminated the high recurrent cost of oiling schemes. There are now at least 4,000 miles of streams and drains on tea estates in which the breeding of *Anopheles minimus*, the chief malaria carrier in this region, has been controlled by the "dense shade" method, whilst the regular training and cleaning of streams and the institution of "flushing" devices and other anti-larval operations have been widely extended.

Perhaps the most immediately interesting part of the report concerns the branch's activities in relation to the military situation in India. The invasion of Burma by the Japanese has introduced many acute problems, not the least of these being malaria in the frontier districts and among refugees passing into India by this route from Burma. Dr. Ramsay, principal of the India Branch, has with his great knowledge of the local malaria problems involved been able to give much help, at their request, to the military authorities. The branch has also been able to forward the war effort by providing trained Indian malaria surveyors. About 600 Indians, many of whom have volunteered for service, have now been trained at Ross Institute training centers. Several British medical officers formerly employed by the tea industry are also now, as a result of training and experience in anti-malaria work, rendering invaluable service as malariologists with the Army in different theaters of the war. The report notes the retirement for health reasons of Dr. David Manson, in whose laboratory at Cinnemara much research work has been carried out and over 200 malaria surveyors trained. Mention is also made of the very valuable results from the researches of Dr. Muirhead Thomson, of the London School of Hygiene and Tropical Medicine, upon the bionomics of the carrier species *A. minimus*, whose life history has been intensively investigated in the field.

THE BUDGET OF THE UNIVERSITY OF WISCONSIN

THE budget of the University of Wisconsin for the 1943–44 fiscal year, including funds for teaching and