research on aging and vascular diseases might be donated by foundations or by individuals to various medical schools and institutions. An annual income of $50,000 or $100,000 could well be used for this purpose by each medical school. Fourth, federal support is highly desirable, but its present program is quite inadequate. Fifth, popular subscription, which has aided treatment of tuberculosis and poliomyelitis, might yield support for medical research.

Some sources of funds for the study of aging and vascular diseases on a larger scale than is now possible is urgently needed and should be established in the immediate future.

SUMMARY

The increase in death rate with increasing age over that at the age of ten accounts for over a million deaths each year in the United States. To what extent these deaths are due to the aging process remains to be determined, but the progressive loss of resistance to nearly all diseases appears to play a large role even in youth and middle life. Since loss of resistance to disease, as well as loss of ability, seems to result from an underlying aging process we may look upon aging as constituting our greatest medical problem.

Second in importance to the aging problem is that of the vascular and renal diseases, since these are involved in nearly 50 per cent. of the deaths after the age of ten (in addition to the effect of aging).

Until more is known about aging and vascular diseases we are not justified in predicting what can or can not be done about them. A new experimental method in which healthy animals of different ages are killed by a known measurable cause offers possibilities for determining the nature of the aging process.

Our two outstanding medical problems are being neglected largely because of the lack of funds to support both the long-term research and the raising of old animals needed for adequate investigation in this field. New endowments as well as changes in the policies of existing foundations are urgently needed.

Supplementary Note: The war situation which has arisen since this paper was written does not lessen the urgent need for endowments in aid of research on aging and vascular diseases. The deaths from these causes, even among young and middle-aged people, will far exceed the war casualties. Diminished stamina after the age of 40 handicaps both our military and our productive capacity. Hence, continuous colonies of animals should be established immediately in order that old animals will be available for intensive research two or three years from now.

OBITUARY

CHARLES WILLIAM LINES, JR.

September, 1920–January, 1942

CHARLES W. LINES, JR., fellow in botany at the University of Wisconsin, died suddenly on January 9, in Oxford, Miss. (Hospital), as a result of injuries sustained in an automobile accident near there on January 3. He was enroute to Madison, Wisconsin, from Dallas, Texas, where he had attended the Christmas meetings of the American Association for the Advancement of Science as a representative of the Zeta Chapter of Phi Sigma.

He was born in Du Bois, Pa., September 24, 1920. After receiving public-school education at Du Bois, he entered Penn State, where he pursued a varied curriculum, graduating in botanical sciences in 1939. After one semester as a graduate student at Penn State, he went to the University of Wisconsin as a scholar in botany. He was made a fellow in botany for 1941–42.

Among the many accomplishments and endeavors which, despite his chronological youth, were many, his work at the University of Wisconsin was concerned mainly with physiology of fungi, while others, such as wild life conservation, plankton zoology, limnology, ecology, botanical taxonomy and physical chemistry, shared much of his eager interest and time.

He was a member of several scientific and honorary societies, among which were Phi Beta Kappa, Sigma Xi, Phi Sigma and the American Association for the Advancement of Science.

As a scientist Charles Lines was a conscientious, persevering and scholarly person. His future seemed pointed toward unbounded successes and scientific accomplishments. It is sad indeed to have to report the premature termination of such a promising career.

CLASSMATES AND FRIENDS

UNIVERSITY OF WISCONSIN

RECENT DEATHS

DR. ARTHUR MICHAEL, appointed professor of chemistry at Tufts College in 1881; professor of organic chemistry at Harvard University since 1912 and emeritus professor since 1936, died on February 8 in his eighty-ninth year.

DR. LAWRENCE J. HENDERSON, Abbott and James Lawrence professor of chemistry at Harvard University, died on February 10 at the age of sixty-four years.

DR. SAMUEL W. LAMBERT, formerly professor of clinical medicine and dean of the College of Physicians and Surgeons of Columbia University, died on February 9 at the age of eighty-two years.