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.

DR. JACOB ELLSWORTH REIGHARD, professor of zoology at the University of Michigan until his retirement with the title emeritus in 1927, died on February 14 in his eighty-first year. He served for forty-one years on the faculty and for seventeen years as director of the university museums.

DR. WILLIAM DICK CUTTER, secretary of the Council on Medical Education and Hospitals of the American Medical Association since 1931, from 1923 to 1928 dean of the New York Post-Graduate Medical School, died on January 22 at the age of sixty-three years.

ARTHUR HENRY PRATT, consulting civil engineer and chief hydraulic engineer of the Public Service Commission of New York, died on February 1 at the age of sixty-seven years.

MERRILL J. MACK, professor of dairying at the Massachusetts State College, died on February 9. He was thirty-nine years old.

SCIENTIFIC EVENTS

NEW HAVEN INDUSTRIAL MEDICAL SERVICE

NEW HAVEN COUNTY physicians in cooperation with the Department of Preventive Medicine of the Yale School of Medicine have approved the creation of an Industrial Medical Service in factories which do not now have adequate medical service.

Plans have been drawn up for the organization of the service in five plants in New Haven County, each having a personnel of not more than 300 persons. The service will consist of a director, who shall be a physician trained in industrial medicine and is to be responsible for administration and for meeting problems in industrial hygiene, and a nurse trained in industrial medicine. A grant to defray some of the initial expenses has been made by the New Haven Foundation.

"It is estimated that two years will be required to determine whether this service is justifiable and worth continuing or not. At the end of this period the Section of Preventive Medicine of the Yale School of Medicine will review the project. The opinion of the New Haven Medical Association will be solicited at that time."

The functions of the proposed Industrial Medical Service will be:

1. To serve as a demonstration that adequate medical service for small plants is possible.

2. To act in a consultative capacity for those plants in determining the nature of actual or potential hazards (such as the introduction of new factory methods) and to render advice concerning their correction and avoidance. This service is to complement rather than to supplement the service available to industry by the Bureau of Industrial Hygiene of the State Department of Health.

3. To initiate programs of disease prevention in those plants when they seem necessary or advisable. This does not include medical care, which remains in the hands of the family physician.

4. To arrange for pre-employment and periodic physical examinations. These will be given by local physicians.

5. To carry on research problems which have to do with the health of workers in various types of industries and to use the data in an effort to decrease the incidence of disease.

A committee from the New Haven Medical Association will censor the operation of the plan to handle any complaints and any proposed changes. A monthly list of accidents and illnesses in those plants which use the service will be examined by the committee.

HEALTH SERVICES OF THE COMMONWEALTH FUND

THE Commonwealth Fund reported on January 19 that it had appropriated $1,841,332.46 in the year ending September 30, 1941, for purposes associated with "the welfare of mankind," in accordance with the wish of its founder, Mrs. Stephen V. Harkness.

In the past year the fund gave subsidies or consultant services in twenty-eight states in support of four main objectives: the encouragement of research and of good teaching in medical schools; the enrichment and extension of public health services to rural communities; the provision or improvement of hospital facilities and the standardization of hospital services in rural communities; and the strengthening of community facilities for mental health services.

Since most medical research undertakings aided by the fund are of long duration, only three of the thirty-eight pieces of research subsidized during the year were new. These were a clinical statistical review of a series of cases of essential hypertension, at the Columbia-Presbyterian Medical Center; a study of gynecological diagnostic methods, at Cornell University Medical School; and a study of cancer-producing substances from human tissues, at the University of Chicago.

At five schools of medicine departments of preventive medicine were subsidized; special provision was made during the year for the expansion of this department at Tulane. At one school, the University of Louisville, the department of psychiatry was subsidized. At four the fund helped to meet the cost of borderline services designed to link the departments of psychiatry and pediatrics. A grant was made to the Peter Bent Brigham Hospital in Boston to enlarge a psychiatric service forming part of the department of medicine. Seven promising young men