

## GERONTOLOGY

# Aid Humans in Old Age

➤ **ANIMALS** with short life spans may help human beings live healthier lives to a ripe old age.

Studies of such short-lived animals as rats, mice and guinea pigs may show doctors what body factors to suppress in humans and what to supply them with individually in order to slow down the aging process, Dr. Sidney Olansky of Emory University, Atlanta, reported.

Dr. Olansky, a delegate to the White House Conference on Aging in Washington, D. C., and chairman of the conference work group on sensory changes and consequences, said his group favored such animal studies to learn more about all sensory changes in the aged, including vision, hearing, skin, taste and smell.

He said studies with quick-aging animals living under controlled conditions may enable doctors to:

1. Control conditions existing in the body (from disease and injury).
2. Understand how disease and injury occur in the body.
3. Understand genetic factors connected with aging to supply chemicals the body needs (perhaps pigment if too little in the skin) or to suppress the excess in the body (perhaps excess sensitivity to light due to antibodies).

Dr. Olansky said two recommendations his group will make to Congress are:

1. Establishment of centers for study of aging in key geographical locations, where the influence of climate, heredity and racial characteristics can be studied.
2. Investigation of itching, a serious problem in the aged, among both old persons and young ones who suffer from premature aging of the skin.

Comparing young persons with aging

skin, but without the other old age characteristics or diseases, with young persons without aging skin might show a measurable factor, which could then be applied to the aged, Dr. Olansky said.

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## Ignore Healthy Oldsters

➤ **THE PRESENT SYSTEM** of spending millions of dollars on care of the sick while virtually ignoring the opportunities for prevention of illness and preservation of health is like "stamping out brush fires rather than clearing the undergrowth," Dr. Leonard W. Larson, president-elect of the American Medical Association, believes.

Dr. Larson, at an opening session of the White House Conference on Aging in Washington, D. C., restated a point emphasized repeatedly by the AMA in its fight against efforts to include medical care for the aged in social security provisions, namely, that most elderly persons are well.

"We must do more than react to the minority of older persons who are ill," he said. "We must act for the great majority who are well. We must shift our emphasis from defense to offense."

The individual's responsibility for his own health, the development of lifelong habits of healthful living, should begin in grade school so that children will realize that they are planning for 80, 90 or 100 years of useful life.

In addition, Dr. Larson said, the older person must have a reason for living longer.

"Medical progress and rising standards of living have granted us the gift of added years. A major question we must now answer is 'For what?'"

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## CYTOLOGY

# Tissue Rejection Explored

➤ **AN ELECTRON MICROSCOPE** producing images 100,000 times the size of the original object will be used at Peter Bent Brigham Hospital in Boston in an attempt to discover why tissue transplants such as kidneys are rejected.

Dr. Gustave J. Dammin, professor of pathology at Peter Bent Brigham Hospital and Harvard Medical School, reported the receipt of a \$45,573 grant from the National Heart Institute, U. S. Department of Health, Education and Welfare, for purchase of the microscope.

It was at Peter Bent Brigham Hospital that a kidney transplant was made between non-identical twins, using total body irradiation, Jan. 24, 1959. But this was after numerous failures, even in transplants between identical twins.

Dr. Dammin was one of the six physicians involved in the successful transplant between non-identical twins. It is his hope that the electron microscope will reveal

cellular changes not seen with the most powerful optical microscopes, which can magnify only 5,000 times the size of the original object.

"In our studies of cell and tissue fractions," he said, "the constituents found to be antigenic (producing antibodies) may be characterized better through electron microscopy."

Dr. Dammin said the electron microscope could make important contributions to the study of "clinical problems related to kidney malfunctions, high blood pressure and related diseases."

Dr. Joseph M. Corson and Dr. Lewis T. Mann Jr. will be associated with Dr. Dammin in the electron microscope program. Dr. Dammin said the information available through this microscope would aid investigators in medicine, surgery and radiology as well as pathology.

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## PUBLIC HEALTH

# Good Health Postpones Compulsory Retirement

➤ **COMPULSORY RETIREMENT** at the age of 65 is declining, partly because more older employees are in good health than they were a generation ago.

An editorial in the Journal of the American Medical Association, 174:2227, 1960, reports that a sizable number of firms liberalized their retirement programs after the AMA committee on aging asked labor and industry to re-evaluate their arbitrary retirement systems.

Among other reports in the AMA's official magazine, p. 2229, is one predicting a large increase in lung cancer as tuberculosis deaths continue to decline.

Drs. Broda O. Barnes of Denver, Colo., and Max Ratzenhofer of Graz, Austria, base their conclusions on data from 25,546 autopsies performed during the past 15 years at the University of Graz. Of the cases studied, 868 had lung cancer.

During the period of study, the researchers report two important changes took place. First, the average age of patients who died from tuberculosis was increasing, so the tubercular patient was approaching the "cancer age" before death. Second, the association of tuberculosis with malignancy became more frequent.

They report that, if their observations are confirmed, it appears there are two diseases competing for the same person: tuberculosis at an early age and lung cancer as he grows older.

A trouble-shooting clinic for emotional problems at City Hospital, Elmhurst, Queens, New York, initiated by Dr. Leopold Bellak, director of psychiatry, is said, (p. 2214) to give the kind of service that could aid the "lonely crowd" in every community.

The clinic is open 24 hours a day so that anyone can walk in and talk over his problems. To date, it has handled more than 2,000 cases.

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## GENERAL SCIENCE

# MIT Engineer Named As Science Adviser

➤ **SPECIAL ASSISTANT** for Science and Technology to the new administration is Dr. Jerome B. Wiesner, electronics engineer and radiation specialist at the Massachusetts Institute of Technology.

A long-time friend of President-elect John F. Kennedy, the 45-year-old scientist served during the recent political campaign as the Democratic candidate's top adviser on nuclear disarmament and test suspension. But even while he was actively campaigning for Kennedy's election, he served on the Science Advisory Committee to President Eisenhower, for whom he has the highest regard and respect.

At all times, his advice on scientific matters was the same to both men and did not reflect his political leanings.

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