

cuse, N.Y. Medical research is being conducted by Merck, Sharp and Dohme Research Laboratories at Rahway, N.J., where the ten new types of the synthetic penicillin were prepared. These types are all antibiologically active and could not have been obtained through the fermentation process. They are being tested on animals.

### Fellowships in Psychiatry

The American Psychiatric Association has announced that the next review of applications for Smith, Kline and French Foundation fellowships in psychiatry will be held in May. Applications must be received *before 15 Apr.* by the Fellowship Committee, P.O. Box 7929, Philadelphia, Pa.

Seven chief types of Smith, Kline and French Foundation fellowships are available: (i) support for advanced training for full-time staff psychiatrists of public mental hospitals and schools for the retarded; (ii) awards to hospitals for visiting lectureships and for teaching fellowships; (iii) support for medical schools, teaching centers, and so forth, for extension training programs; (iv) student fellowships to encourage talented medical students to engage in summer activities in psychiatry (the aim here is not only to draw more students into psychiatry as a life work, but also to expand the psychiatric knowledge of those who plan to enter other fields); (v) medical fellowships to encourage broadened skill in psychiatric problems of everyday practice by physicians other than psychiatrists; (vi) foreign scholar lectureships to bring outstanding men to the United States; and (vii) residency training fellowships under unusual circumstances.

### U.N. and Medical Irradiation

A recent statement by the United Nations Scientific Committee on the Effects of Atomic Radiation about the responsibilities of the medical profession in the use of x-rays and other ionizing radiation ends with the following summary.

1) The Scientific Committee on the Effects of Atomic Radiation established by the United Nations General Assembly accepts the view that the irradiation of human beings, and especially of their germinal tissue, has certain undesirable effects.

2) Information received so far indicates that, in certain countries (Sweden, United Kingdom, United States of America), by far the most important artificial source of such irradiation is the use of radiological methods of diag-

nosis and that this may be equal in importance to radiation from all natural sources. It is possible that such radiation may be having a significant genetic effect on the population as a whole.

3) The committee is fully aware of the importance and value of the medical use of radiations but wishes to draw the attention of the medical profession to these facts and to the need for a more accurate estimate of the amount of exposure from this source. The help of the medical profession would be most valuable to make it possible to obtain fuller information on this subject.

4) The committee would be particularly grateful for information through appropriate governmental channels on ways in which the medical irradiation of the population can be reduced without diminishing the true value of radiology in diagnosis or treatment.

### John Mayor Appointed

The board of directors of the AAAS announces the appointment of John R. Mayor to the newly established position of director of education. Since September 1955, Mayor has served on the association's staff on a temporary appointment as director of the Science Teaching Improvement Program that is financed by a grant from the Carnegie Corporation of New York. The new appointment reflects a decision of the board of directors that active effort to improve the teaching of science and mathematics should constitute a major and continuing part of the association's program.

The direction of work in science education calls for a thorough acquaintance with both science and education. Mayor has both. His doctorate was in mathematics; his first major position was as chairman of the department of mathematics at Southern Illinois University; from 1947 to 1955 he was associate professor and professor of mathematics at the University of Wisconsin. Early in his career he developed an interest in the education of teachers of mathematics, and at the University of Wisconsin he held appointment in the department of education as well as the department of mathematics. At Wisconsin he also directed the work in mathematics at the university high school and for 1954-55 served as acting dean of the school of education.

The association's activities in the field of science teaching were described at



the time of Mayor's original appointment [*Science* 122, 145 (22 July 1955)]. The new appointment means that those activities can be continued under permanent and excellently qualified guidance.—D. W.

### Tubercle Bacillus Anniversary

Seventy-five years ago this month the first description of the rod-shaped microorganism which is the specific cause of tuberculosis was given the world. The story of Robert Koch's isolation of the tubercle bacillus and how he proved, in a paper read before the Berlin Physiological Society on 24 Mar. 1882, that it was the cause of tuberculosis is told in the March issue of the *Bulletin* of the National Tuberculosis Association.

The organisms that Koch described are from 1/5000 to 1/6000 of an inch long and approximately 1/25,000 of an inch wide. Yet, as the *Bulletin* article points out, they are made up of protein, fats and waxes, and carbohydrates. "Their chemical composition is extremely complex, and despite the fact that for 75 years we have known how to isolate the tubercle bacillus and to grow it under artificial conditions, we still do not understand it well enough to know why it has such a predilection for human tissue and why it is so difficult to kill it in the human body without hurting the tissue itself."

### Puerto Rican Health

Puerto Rico's effective health and sanitation campaign has lowered its death rate to 7.2 per 1000. This is two points lower than the United States figure.

As recently as 1940, life-expectancy in Puerto Rico's slums and farm villages was 46 years. Today, it has been raised to 68. Infant mortality, malaria, and tuberculosis all have been reduced drastically.

The main factor in this transformation has been the island's intensified health and hospital program. Since 1948, 24 health centers, a 1000-bed psychiatric hospital, and an 800-bed tuberculosis sanatorium have been constructed. The island now has 12,096 hospital beds and a \$34-million budget for the Department of Health for the current fiscal year.

To staff these facilities, the University of Puerto Rico's medical school is turning out more than 50 scholarship graduates a year who are obliged to work 1 year in the Department of Health for every year they receive government financial aid to complete medical school.