## Raise for Britain's Physicians

A 5-percent interim pay rise for general practitioners in Britain's National Health Service went into effect on 1 May. The increase also applies to senior hospital medical and dental staffs, including specialists and consultants. A 10-percent rise was granted earlier to junior staff members. Physicians and dentists in the National Health Service are seeking a 24-percent increase, and the general practitioners have threatened to withdraw from the service this fall.

The interim increases were granted pending a report from a Royal Commission that has been appointed to make a complete review of the service's salary scale. The British Medical Association, which is backing the withdrawal plan, was not mollified by the pay concession. It termed the 5 percent an arbitrary figure decided on by the Government without negotiation or arbitration. The British Dental Association also described the raise as unsatisfactory.

## Accreditation of Mouse Producers

The greatly expanded contract program of the Cancer Chemotherapy National Service Center (National Cancer Institute) for the screening of compounds for possible anticancer activity and the increased research grants program of the National Institutes of Health have necessitated a major increase in the production of laboratory mice. The shortage of mice of certain inbred strains has been especially critical, for the transplantable tumors used in the screening program grow only in these particular inbred strains.

For a long time the main source of supply for inbred mice was the Roscoe B. Jackson Memorial Laboratory at Bar Harbor, Me. However, the demand for inbred mice exceeded the production capacity of this laboratory. Therefore it became necessary to devise methods by which commercial laboratory mouse producers with no training in the principles of genetics could cooperate with the Jackson Laboratory and other mammalian genetics laboratories in producing an increased number of inbred mice. These methods had to insure the genetic homogeneity of all mice of any specific strain, even though produced at different geographic locations; the methods also had to insure that variability of the mice because of environmental differences would be kept to a minimum.

Following the pioneer work of William Lane-Petter of the Laboratory Animals Bureau in establishing a system of accreditation for commercial laboratory animal producers in Great Britain, the development here of a similar system of accreditation based on a series of animal husbandry and breeding standards, coupled with periodic inspections of accredited producers, seemed to be the best solution to the problem. Such a program has been one of the major aims of the Institute of Laboratory Animal Resources (National Academy of Sciences-National Research Council) since its inception in 1952. The Cancer Chemotherapy National Service Center (CCNSC) therefore requested the Institute of Laboratory Animal Resources (ILAR) to undertake the development of a series of minimum animal husbandry and breeding standards for use in assuring an adequate supply of inbred mice for its screening program.

A series of conferences was held in which members of the ILAR Committee on Standards, ILAR and CCNSC staff members, a number of mammalian population geneticists, and a majority of the commercial laboratory mouse producers cooperated in developing a set of minimum standards which would incorporate the latest scientific requirements and yet be economically practical. Personal visits and discussions by staff members at a representative number of commercial and academic laboratory mouse-breeding facilities, as well as at a number of major laboratories using mice, also aided in making the standards as practical as possible

Accreditation of commercial breeders of inbred and/or random-bred laboratory mice based on conformity with the Minimum Standards for the Commercial Production of Random-bred and Inbred Laboratory Mice, as determined by periodic inspections by a responsible organization, is intended to assure the purchaser that the mice have been produced under good environmental conditions and proper genetic control. Thus variability from either environmental or genetic causes should be minimal in successive lots of random-bred mice from the same accredited producer; variability of inbred mice of a specific strain from any accredited producer should also be minimal.

The success of this program of accreditation will rest solely upon the cooperation of the commercial laboratory mouse producers and the academic, governmental, and industrial laboratories using mice. As is stated in the preamble to the *Minimum Standards*, it is expected that the standards will be revised from time to time as experience dictates. All suggestions for improving the *Minimum Standards* or any other part of this program will be gratefully received. Copies of the *Minimum Standards* may be obtained from Mr. Berton F. Mill, Executive Secretary, Institute of Laboratory Animal Resources, National Academy of Sciences, 2101 Constitution Ave., NW, Washington 25, D.C., or from Dr. George L. Wolff, Section on Screening, Cancer Chemotherapy National Service Center, National Cancer Institute, Bethesda 14, Md.

The Institute of Laboratory Animal Resources (NAS-NRC) intends to develop similar sets of standards to cover the production of other laboratory animals in the near future. Ten million mice is a conservative estimate of the number used annually in this country by academic, governmental, and industrial laboratories. In view of this preeminent position as an experimental animal in biological and medical research, it is appropriate that the mouse is the first laboratory animal for which such a program of standardization has been developed.

Committee on Standards T. C. Byerly, *chairman*, T. Aarons, R. H. Barnes, N. R. Brewer, L. R. Christensen, C. N. W. Cumming, C. L. Davis, R. J. Flynn, G. E. Jay, Jr., C. A. Slanetz, J. E. Williams

## Radio Pill for Studying

## Gastrointestinal Physiology

A new radio broadcasting capsule which can be swallowed like a medicinal pill was demonstrated recently at the Rockefeller Institute, New York. As it passes through the intestine, this small FM broadcasting transmitter signals the activity of the digestive tract to an outside receiver. The capsule has been developed and tested jointly by the Rockefeller Institute, the New York Veterans Administration Hospital, and the Radio Corporation of America.

This new device for studying the physiology of gastrointestinal pressure was made by Vladimir K. Zworykin, affiliate in biophysics in the institute's Medical Electronics Center and honorary vice president of RCA, and John T. Farrar, chief of the Gastroenterology Section of the New York Veterans Administration Hospital and assistant professor of clinical medicine at the Cornell University College of Medicine. The pill, which was developed by engineers in RCA's commercial electronic products organization in Camden, N.J., is being tested clinically by Farrar and his associates.

In its present stage of development, the capsule must be considered as an experimental technique but one which holds important implications for future medical research. The device is plastic and measures approximately 11/8 in. long and 4/10 in. in diameter.

The various electronic components of the capsule-transistor, oscillator, a fer-