and terms of membership can be obtained from the Secretary at 21 Regent Terrace, Edinburgh 7.

Mutation Research; a New Journal of Genetics

THE increase in the bulk, and in the specialization, of research in the field of genetics is reflected in the appearance of another new journal, *Mutation Research*, an international journal on mutagenesis, chromosome breakage and related subjects (Amsterdam: Elsevier Publishing Co.). The editor is Prof. F. H. Sobels, of the University of Leiden, assisted by a large international editorial board which includes most of the active workers in this field. The first issue, dated May 1964, contains 10 major papers ranging from viruses to mice and generally of a high standard; the first paper, most appropriately, is by H. J. Muller whose fundamental discovery, in 1927, of the mutagenic action of X-rays inaugurated the whole field of mutation research. The volume will comprise approximately 600 pages; the annual subscription is £6 10*s*.

Reproduction of Mammals

THE Eighth Oliver Bird Lecture given in London on November 23 by Dr. Alan F. Guttmacher, on intrauterine devices used to control human fertility, was followed by a three-day international symposium on the "Comparative Biology of Reproduction in Mammals", held at the Zoological Society of London. The symposium was organized jointly by the Zoological Society and the Society for the Study of Fertility, and supported financially by the World Health Organization. A large proportion of the twenty-eight invited speakers came from overseas and included many distinguished biologists from the United States, the Commonwealth countries and Europe. Some of the topics were of a general nature, such as the evolutionary trends in the physiology of reproduction and the factors controlling the gestation period. The majority of the papers, however, dealt with particular aspects of the reproductive process in the male or female of a particular species or group of mammals. A complete session, at which five papers were read, was devoted to the consideration of reproduction in marsupials. To make the proceedings of the symposium available as soon as possible to all interested workers, abstracts of the papers will be published in the *Journal of Reproduction and Fertility* in the early part of this year and the full papers will appear later in the *Symposia of the Zoological Society of London*. Midway through the programme the overseas speakers visited the newly established Wellcome Institute of Comparative Physiology in Regent's Park. At its conclusion, Dr. Carl G. Hartman was presented with the first Marshall Medal of the Society for the Study of Fertility, by its chairman, Prof. A. S. Parkes. Looking back on these meetings, one was struck not only by the great volume of work that is being done on this subject at the present time, but by the enormous amount that is still to be learned before anything like a fully comprehensive picture can be presented. Dr. Guttmacher's lecture underlined the problems of population control, and the symposium did much to reveal the potential value of comparative studies in the regulation of the reproductive process of mammals.

Radiation Preservation of Foods

IN Russia and Canada, potatoes are already being irradiated for commercial purposes and, following the recent Ministry statement on the subject, it is quite possible that food preservation by irradiation may begin in Britain very soon. Those interested in radiation preservation of food should read the report *Radiation Preservation of Foodstuffs* (Second Scandinavian Meeting on Food Preservation by Ionizing Radiation, Stockholm, September 9–11, 1963. Arranged by the Royal Swedish Academy of Engineering Sciences. Edited by Per-Olof Kinell and Vera Runnström-Reio. IVA Meddelande Nr. 138. Pp. 87. Stockholm: Ingeniorsvetenskapsakademien, 1964, 25 kr.). Five of the papers in the report are concerned with irradiation facilities, source strength, dose measurement, and dose distribution. The electron linear accelerator at Risø, Denmark, has been operated since 1961 for the industrial radiation sterilization of disposal surgical supplies at the rate of about six tons a month. In conventional heat treatment of canned foods the centre of the can must, of necessity, receive less severe heat treatment than the periphery. This problem can be overcome to some extent with radiation treatment by irradiating the cans from both ends.

One of the chief problems after sprout inhibiting or radurization doses is the recontamination of the food with micro-organisms. This increased susceptibility to storage rot is due either to: (1) tissue damage facilitating the access of micro-organisms; (2) residual radiation-resistant organisms now deprived of competitors; or (3) a combination of (1) and (2). Radiation can affect the wound healing mechanisms of plants to such an extent that flora which are normally harmless can become an important cause of storage rot. After irradiation, therefore, foods must be stored under refrigeration as close as possible to 0° C. *Aureobasidium pullulans*, also known as *Pullularia pullulans* or black yeast, is a very widely distributed fungus which is known to cause damage to wounded soft fruits in the United States. This organism has been shown to be very radiation resistant. The report also discusses the irradiation of fruit juices. The best method of preservation appeared to be irradiation with 0·5 Mrad, storage for a day at room temperature, and then heat treatment at 50° C. The yeasts were severely attacked both by the radiation and the heat treatment. When semi-preserved fish (tidbits) were irradiated, it was found that 300 krad was the highest acceptable dose from an organoleptic point of view.

There is a description of the use of ultra-violet radiation in the food industry, especially for meat storage when it is used to prevent the growth of psychrophilic bacteria. By irradiating either crystalline or dissolved D-glucose with 10 Mrad a substance toxic to *Pseudomonas* has been produced.

Research in Mental Health

THE Schizophrenia Research Fund has been established to support research into problems connected with mental illness in general and schizophrenia in particular. The fund is administered by a Board of Trustees, and Mr. L. Kelly (Schizophrenia Research Fund, City Gate House, Finsbury Square) is acting as secretary. Initial impetus has been given to the fund by a gift of £50,000 from the Rothschild family, and the establishment of a Schizophrenia Research Fellowship, to which Dr. D. Straughan has been appointed. Dr. Straughan, who is at present at the Institute of Animal Physiology, Babraham, Cambridge, will work in the Department of Psychological Medicine in the University of Edinburgh. The fund will provide greater security of tenure than has hitherto been possible in research in this field, and Dr. Straughan's initial contract is for seven years. His work at Babraham has been concerned with pharmacological aspects of mammalian brain physiology, and he will concentrate on the biochemical basis of schizophrenia. It is hoped that this initial effort will attract interest in, and support for, work in the immense field of research bearing on the problems of mental health.

The Royal Society and Nuffield Commonwealth Bursaries Scheme

AWARDS under the Royal Society and Nuffield Foundation Commonwealth Bursaries Scheme have been made as follows: Dr. S. I. Ali, lecturer in botany, University of Karachi, to enable him to study taxonomic problems of Leguminosae of West Pakistan at Kew and the British