Book reviews

ANTIBIOTIC AND CHEMOTHERAPY By Mary Barber and Lawrence P. Garrod. (Pp. vii + 366; illustrated. 35s.) Edinburgh and London: E. & S. Livingstone. 1963.

Antibiotics and sulphonamides nowadays provide much of the clinical pathologist's daily work. He must do numerous sensitivity tests by methods which, though technically simple, are difficult to perform accurately, and he is often asked to advise his clinical colleagues about the treatment of their patients. It is for the second of these functions that this book, by authors of unrivalled experience, will be chiefly valuable to pathologists, though the short section on laboratory control is also useful.

This is not a comprehensive textbook on the treatment of microbial diseases. Such a book would be larger, probably less up to date, and in any case beyond the competence of authors who rightly state that the treatment of patients embodies clinical considerations about which bacteriologists as such cannot advise. Their aim has been to give as much factual information as possible about treatment directed against the microbe, and in this they have succeeded well. The result, in a book of modest size, is an authoritative and balanced account of modern chemotherapy. The first part deals with the properties of the drugs, their actions on microbes, and the factors in the host which may influence their therapeutic efficiency. (The chemotherapy of protozoal, helminthic, and malignant diseases is excluded.) The second part is concerned with practical aspects of chemotherapy of infections, classified by systems.

Among the many good things in the book, the chapters on the penicillins, on drug resistance, and on the general principles of treatment are outstanding. The space given to different drugs is not always commensurate with their importance. Novobiocin and the erythromycin group each has more pages than the tetracyclines. This policy is probably correct, since the less often a drug is used, the more information may be needed when it is given. The sulphonamides are described very thoroughly but their limitations are insufficiently stressed, for example, in the treatment of haemolytic streptococcal pharyngitis. Pharyngitis in which haemolytic streptococci cannot be demonstrated is more probably caused by adenovirus or Coxsackie virus, insusceptible to chemotherapy, than by particular types of *Str. viridans* which the authors suggest as possibly responsible. But these are small faults in a good book which is strongly recommended as a balanced presentation of the principles of rational chemotherapy. Its clear style makes it a pleasure to read.

W. A. GILLESPIE

THE IMMUNOLOGICALLY COMPETENT CELL. Ciba Foundation Study Group No. 16. (Pp. 110; illustrated. 15s.) London: J. & A. Churchill. 1963.

This is yet another example of the value of the Ciba Foundation Study Group monographs. The contents

report a one-day study group held in honour of Sir Macfarlane Burnet, O.M. Although consisting of only 104 pages of text, the amount of up-to-date information contained in it is quite remarkable. It emphasizes the remarkable way in which, thanks to modern techniques, research has been concentrated on the reaction of cells rather than individuals as a whole. As a result, many new concepts have arisen such as the functional importance of thymic elements, of lymphocytes as a whole, and of cytophilic antibody. The technique of fluorescence microscopy is most ably dealt with by Professor R. G. White, and many new and stimulating ideas are suggested. It is fitting that amongst all the interesting articles and discussion Sir Macfarlane Burnet himself should describe an excellent piece of work which aims at making a quantitative assessment of an immune response. It amounts to a homograft reaction in the hen's egg which enables one to count the number of cells capable of responding to an iso-antigenic environment. The editors and publishers are to be commended on the rapid production of material which will be so valuable both to research workers in this field, to pathologists in general, and even to senior students.

G. J. CUNNINGHAM

INTERNATIONAL REVIEW OF EXPERIMENTAL PATHOLOGY, Vol. 2. Edited by G. W. Richter and M. A. Epstein. (Pp. xi + 446; illustrated. 114s. 6d.) New York and London: Academic Press. 1963.

When the first volume of this book appeared last year it was to many pathologists an event of major importance. An annual review of this type satisfied a long-felt need and the contents of the first volume brilliantly exceeded expectation. The second annual review almost reaches the standard of the first.

The first subject dealt with is acridine orange staining of viral nucleic acids and, although at the moment of interest largely to specialists, clearly represents a labelling method of future importance to pathology. The second chapter discusses cytochemical aspects of experimental leukaemia. The third section (by Burkitt and Wright) deals with the morphology and epidemiology of the Burkitt lymphoma and it is a very valuable account, although rather overtaken by events in that experimental evidence of its viral origin is not included. There follows an invaluable discussion of the use of statistics in the aetiological study of cancer by Clemmesen. The next subject is a good survey of the biological effects of ionizing radiations. This is followed by a first-rate historical account of the study of the microscopic morphology of injured living tissue. Boyden then contributes a stimulating discussion of the cellular recognition of foreign matter. The book concludes with an account of the structure and degradation of melanin with normal and pathological tissues which contains much information probably unknown to many pathologists.