BOOKS RECEIVED

Publications of the present sort suffer from three disadvantages—first, there is the scatter of topics and the limited amount of information; second, the information rapidly becomes out-of-date, because the data are subsequently published in a more definitive form; and, third, the high cost renders the information relatively inaccessible. Nevertheless, this volume may tempt a clinician with an interest in research to become an immunologist.

G. L. ASHERSON

TUMOUR VIRUS INFECTIONS AND IMMUNITY

This book contains the proceedings of a symposium held in Philadelphia during two days in April 1975. It contains 16 chapters covering a range of topics in the field of tumour-virus interactions with animal cells in vitro and in vivo, but is mainly concerned with the immunological phenomena associated with these interactions. The RNA tumour-viruses and herpes viruses receive most attention, and only one chapter is devoted to a small DNA tumour-virus. In this, Croce deals with the association of SV40 genome with human chromosome 7. An obvious disadvantage of a collection of contributions such as this is that almost all the data will have been published elsewhere before the book appears. Nevertheless, the information is often presented in a more assimilable form and in association with contributions that augment and complement each other. It is a book for the specialist and more particularly the specialist on the immunological aspects of tumour virology. A welcome inclusion, not often encountered in books of this type, is a useful index.

I. A. MACPHERSON

MODERN METHODS IN MEDICAL MICROBIOLOGY. SYSTEMS AND TRENDS

Compared with other aspects of pathology, especially chemical pathology and haematology, many of the techniques used routinely in medical microbiology have changed little since the early days of this century. Recently, however, efforts have been made by microbiologists and others in various parts of the world to harness developments in the physical sciences to the needs of microbiology. This has come about partly because of increasing numbers of specimens sent to hospital and public health laboratories and partly because of a growing appreciation of the need for better control and standardisation of routine procedures.

"Modern methods in medical microbiology" is based on the proceedings of a symposium held in November 1974 and sponsored mainly by the Eastern Pennsylvania Branch of the American Society of Microbiology. It has been written essentially for clinical microbiologists and technicians with the object of providing clear practical descriptions of new methods in clinical microbiology, advice on how to evaluate them and how to decide which ones to use in particular circumstances. It is claimed that the book covers major new developments that may contribute to future advances, and that it defines their limitations and comparative advantages. How far these aims have been achieved is a matter of judgement, and judgement is difficult at the present time in such a rapidly developing field. Even so, this book would seem to serve a useful purpose if only to indicate where frontiers are being expanded.

The contributions vary a good deal in quality and especially in their standard of writing. Some of the earlier ones tend to be parochial and antecedotal but others are of considerably more general interest and wider relevance.

After an interesting introduction by John C. Sherris which laudably stresses the need to maintain clinical relevance in medical microbiology, the book is divided into four parts. The first deals with the role of regulating agencies in the USA, in particular how the Food and
Drug Administration and the Center for Disease Control are starting to implement recent legislation aimed at regulating commercially produced in-vitro diagnostic products, as well as assessing technical proficiency in clinical laboratories. There is also an account of how a state public health laboratory performs its training and regulatory functions in respect of hospital and independent clinical laboratories operating within the Medicare system.

The second part usefully reviews various methods for rapidly detecting and identifying bacteria in clinical specimens, and includes chapters on the detection of microbial antigens, impedance measurements, microcalorimetry, gas-liquid chromatography, the Limulus test for detecting and assaying endotoxin produced by certain gram-negative bacilli, and mini-culture methods for detecting bacteriuria. There is a thoughtful and thought-provoking chapter by Henry D. Isenberg on the rapid identification of enterobacteria by biochemical means, and an exceptionally useful and critical review of the applications of immunofluorescence tests to the diagnosis of bacterial infections by William B. Cherry. There follows a particularly well written and well illustrated chapter by Genevieve S. Nygaard on systems for isolating and identifying anaerobic bacteria, with much practical information on modern techniques in this field.

Section three deals with applications of immunology to the diagnosis of bacterial, fungal, viral and autoimmune diseases. It includes an exceptionally informative chapter by Jean H. Joncas on the relationship between heterophil antibodies and antibodies to Epstein-Barr virus in patients with infectious mononucleosis.

The fourth and last section of the book is concerned with new trends in microbiology. The chapter on radioimmunoassay is disappointing, being too brief for such an important subject and written in a style likely to irritate sensitive readers. It includes, for example, the term "microbiological organisms". Is this intended to enhance the status of mere microbes or those who work with them? There is a good review by Eileen L. Randall on radiometric techniques in microbiology, but a few critical thoughts on the subject would have been welcome. The chapter on the use of gas chromatography for identifying microbes by Robert J. Mandle and Thomas J. Wade is exceptionally well written and a pleasure to read. It is most informative and can be strongly recommended to those unfamiliar with the subject but who wish to start learning about it. The final chapter, which concerns the role of the computer in microbiology, has eight authors. A Digital Equipment Corporation PDP computer with 32K of 18 bit word core, 3 million characters of fixed head disc-storage as well as 24 million characters of moveable head disc-storage and operating with programmes written in a language known as MUMPS would appear also to have had a hand in writing this chapter. The system described is aimed primarily at producing routine laboratory reports. Mention is not made of acceptability by users of the system; the cost is not stated; neither has much attention been given by the authors to obtaining useful epidemiological information for controlling infection. This is regarded merely as "spin off", but most medically orientated microbiologists would surely regard it as of primary importance.

In his concluding remarks at the symposium, Dr Vern Pidcoe expressed the view that we are moving from traditional practices into an era of new technological advances and concepts. Anyone who has experienced the resistance to introducing even a simple machine to traditionally trained microbiology technicians in this country may wonder how long this may take. For those wishing to persevere, or who can find a way round such obstacles, this book is recommended. In comparison with the cost of some of the equipment mentioned therein, £9.25 for the book is not exorbitant.

C. E. D. Taylor

The Parvoviruses


Since the first parvovirus isolation in the late 1950s a considerable amount of information has accumulated about these interesting agents. Unfortunately these reports are scattered