BOOKS RECEIVED

Microbial drug resistance

Edited by S. MITSUHASHI and H. HASHIMOTO. 1975. Baltimore, London and Tokyo: University Park Press. Pp. xvi and 566. £26.75.

This volume comprises a large number of contributions to the field of plasmid studies with particular reference to antibiotic resistance. It covers primarily the molecular and epidemiological aspects of the subject, and there are few articles that have direct clinical relevance, that is, dealing with the treatment of patients.

The majority of the papers are by workers in the plasmid field; indeed, of the 48 in this volume, 36 are of Japanese origin, and no less than 15 involve Mitsuhashi in person. The non-Japanese contributors comprise a much less wide-ranging group, and their inclusion may seem to be rather idiosyncratic. For example, few of the speakers at the outstanding Symposium organised by the American Society for Microbiology in New Orleans in January 1974 (see ASM publication "Microbiology 1974") have contributed to this volume.

It is worth raising the matter of the Japanese domination in this book for two main reasons. The first is that it was through the pioneer efforts of the Japanese—notably Watanabe, of course—that R factors were put on the scientific map (now that Watanabe is dead, where do the Japanese stand in this field?). Secondly, since most of the non-Japanese articles duplicate what has been published elsewhere in easily accessible form, do the Japanese contributions make the purchase of this book worth while?

At the same time, there is no obvious indication here of any single Japanese worker cutting new ground. Perhaps the most impressive work is slightly to one side of the main thrust of the volume, namely, the excellent studies on penicillin- and cephalosporin-hydrolysing enzymes. Sawai has been pre-eminent in this field for some time; and, of course, Umezawa is a giant among workers on antibiotics and their action. The work described by Arai is excellent, but owes its inspiration strongly to a period he spent with Clowes in the USA. Similarly, Mise's excellent paper owes a great deal to Arber. In summary then: much competent work, but nothing outstandingly original; and much that is repetitious, particularly among the non-Japanese.

This assessment helps us to answer the second question. This compilation is rather unrepresentative and should not be taken to describe the state of the plasmid art in 1976—far from it. But the volume does contain several useful summaries of work by the Japanese "plasmidologists" brought together in one place. It is, therefore, a very useful book to have available in the Library for reference. In particular, its interest to the "medieval" microbiologist is likely to be confined to those with a pretty good grounding in the arcane sophistications of molecular microbiology.

M. H. RICHMOND

Chemotherapy of infectious disease

By H. H. GADEBUSCH. 1975. Cleveland, Ohio: C. R. C. Press, Inc. Pp. 105. US \$29.95.

The title is misleadingly general. This short book has the specific aim of reviewing experimental methods used to evaluate chemotherapeutic agents. Its five chapters are concerned with bacterial, fungal, viral and helminthic infections, and with models for topical chemotherapy. Each chapter covers a lot of ground and has full references to the models described. The authors have, in the main, heeded their editor's injunction in trying to answer the thorny question—how useful are these models in predicting chemotherapeutic efficacy?

The answers, as one would expect, vary a good deal from case to case, but the essential need for models of this sort to bridge the gap between purely in-vitro studies and application in man is convincingly demonstrated.

H. P. LAMBERT

The epidemiology of human mycotic disease

Edited by YOUSEF AL-DOORY. 1975. Springfield, Illinois: Charles C. Thomas. Pp. xv and 346. £14.60.

As Dr L. Ajello emphasises, on p. 290 of this book, the true incidence of mycotic disease and its socioeconomic impact are still unknown. Fungal diseases, particularly the cutaneous mycoses, are common and constitute a real public health hazard. The subcutaneous and deep-seated (systemic) mycoses, though less frequently encountered in Western countries, exact a considerable toll of lives and pose practical and fundamental problems for physician and pathologist alike.

The Editor has done a service to medicine by compiling the major epidemiological features of the mycoses of man in a single, readable and adequately referenced volume. There are few texts that deal generally with the mycoses, and few, indeed, that can serve pathologists both as a reference source and as refresher material. This book should prove useful to the tyro, no less than to the expert, and can be recommended to both.

ROSALINDE HURLEY

Cell membrane receptors for viruses, antigens and antibodies, polypeptide hormones, and small molecules

Edited by R. F. BEERS, JR and E. G. BASSETT. 1976. Ninth Miles International Symposium. New York: Raven Press. Pp. xiv and 540. US \$43.50.

Published reports of meetings are generally either out of date by the time they appear on the market, or printed by cheap and rapid processes in such a manner that they come to resemble a PhD thesis or a florist's guide rather than a scientific tome. The Ninth Miles International Symposium on cell-membrane receptors is neither. Although the date of the symposium is carefully withheld from the reader, the number of references to papers published in 1975, and some even in 1976, testify to a rapid and efficient editorial process. Equally commendable are the layout and production of the book. Clear tables and figures, including some excellent electron micrographs, accompany each chapter. The latter word is used deliberately, for that is what the main presentations of the symposium have become: a clear summary of the current status of the field for expert and general reader alike, followed by a well-balanced account of the most recent results, fully but not inordinately referenced. A refreshing change from the type of chapter so often found in Annual Reviews.

The book is divided into four main sections. The first, on polypeptide-hormone receptors, covers recent work on the binding of insulin, growth hormone, prolactin, luteinising hormone and chorionic gonadotrophin. Not only is the isolation and function of the receptors described but also—exemplified by an interesting chapter on insulin receptors in disease by C. R. Kahn—their physiological significance.

The second section, on virus receptors, deals with picornaviruses, adenoviruses, paramyxoviruses, RNA tumour-viruses and poxviruses. Cunningly inserted is a short summary on the "glycophorin" of red cells, by V. T. Marchesi, on the grounds that it is, among other things, the receptor for influenza virus.

The third section describes the receptors on B and T lymphocytes, the consequences of IgE binding and the rather complex macrophage-lymphocyte system. One wishes that this part had been a little longer.

The final section is on receptors for small molecules. It ranges from the acetylcholine