BOOKS RECEIVED

Immunochemistry

Edited by C. J. VAN OSS and M. H. V. VAN REGENMORTEL. 1994. ISBN 0-8247-9123-1. Marcel Dekker, Inc. Pp. 1069. \$195.00.

One's first reaction to the declared aims of the editors of this book was that they had set themselves an impossible task. The book is intended to present the principles of the chemical and physical basis of immunological interactions *in vitro* and *in vivo*, not only to those with a specialist interest in immunology but also to the non-specialist. Surprisingly, it succeeds in this ambitious approach to a very large extent. The authors present the basic principles of immunology and immunochemistry in a readable and accurate form. The information is also quite up-to-date even allowing for the delay between preparation of the manuscript and appearance in print. Much of the text is not specifically immunochemical but covers ground common to more general texts on immunology. This makes the book almost self-contained and it would be quite possible to obtain a basic grounding in immunology from this without reference to other texts.

However, there are many more specialised chapters which deal with, among others, the immunochemistry of bacterial, viral, parasitic, blood group and tumour-associated antigens. These chapters are generally well presented and provide at the very minimum a sound introduction to the subject matter. The chapter on bacterial antigens provides a useful introductory review of the subject which covers all major areas. The chapter on viral antigens is much narrower in scope and concentrates almost exclusively on picomavirus, influenza and HIV antigens. Although these are the most extensively studied viral antigens, it is rather disappointing to find that others, such as hepatitis B, adenovirus and poxvirus antigens have been omitted.

In contrast, the chapter on parasite antigens is much more comprehensive and makes a determined attempt to provide a rounded view of the subject. The chapter on immunochemistry of vaccines attempts a difficult task. It would probably have been better to have incorporated the material into the chapters on bacterial, viral and parasite immunochemistry although there is a brief but useful summary of the use of adjuvants in vaccines.

The chapter on immunochemistry of allergens takes a refreshing view of this often badly handled subject. The author leans heavily on his own and other work which has adopted a molecular approach to the characterisation of allergens. While much of this still requires validation in relation to clinical correlates, the approach is rational and certainly welcome. The latter sections of the book consider aspects of immunochemical and immunological methodology but without going into technical details. This is not a text book of practical immunochemistry but an introduction to the principles.

This is inevitably a multi-author text with both well-known contributors and others of less conspicuous reputation. Nevertheless, the chapters are well integrated and the volume holds together well. I could find no major inaccuracies and only trivial errors, mostly typographical.

The editors have done an excellent job in assembling this book. It will be useful to anyone wishing for an introduction to immunology and immunochemistry. The only deterrent is the price, which will probably put it beyond the reach of most individual purchasers. Nevertheless, it should be an essential addition to the library.

M. J. CORBEL

PCR-based Diagnostics in Infectious Disease

G. D. EHRLICH and S. J. GREENBERG. 1994. ISBN 0-865-42252-4. Blackwell Science Ltd, Oxford. Pp. 698. £77.50 (hardback).

This book aims to provide a guide to the organisation and implementation of PCR-based diagnostics for a range of audiences. The book is divided into three main sections. The first describes the theory of PCR, practical considerations and the establishment of a PCR laboratory. Section two deals with the role of PCR in a system-related manner where each chapter consists of a review of relevant micro-organisms and how PCR can help the diagnostic process. The final section of the book provides protocols for the detection of specific antibiotic resistances and novel (non-cultivable) bacterial pathogens by amplification of 16S rRNA are also covered.

Each chapter provides a reasonable picture of the subject under discussion; however, for a single manual there is much repetition in the final section. This is a large book (nearly 700 pages) which could be considerably shorter. A series of smaller books on PCR-based diagnostics in infectious diseases of system-related infections which combined the chapters on system-related relevance of PCR with the corresponding laboratory protocols may have been a more appropriate format. It may be of interest to infectious diseases clinicians who are interested in what PCR may have to offer their field, if they have managed to miss all the other publications on PCR and do not have access to computerised literature search facilities. Some of the diagrams could be better, e.g., the illustration of the theory of PCR. The application of PCR-based techniques to the characterisation of bacterial strains for epidemiological investigations is not covered.

This is yet another book on PCR, which was probably too ambitious. The review-type nature of the majority of this book may be useful as a teaching and reference manual. The comprehensive listing of published primer sequences given in most chapters in the final section is helpful. However, the laboratory protocols are probably less than ideal for novices and inappropriate for experienced PCR hands, who will always obtain the most up-to-date publication and available sequence data.

J. ZOE JORDENS

Collins and Lyne's Microbiological Methods, 7th Edition

C. H. COLLINS, P. M. LYNE and J. M. GRANGE. 1995. ISBN 0-7506-0653-3. Butterworth-Heinemann Ltd, Oxford. Pp. 493. £35.00.

The publication of this seventh edition of *Collins and Lyne's Microbiological Methods* is testament to the enduring demand for this work since its first appearance in 1964. Those familiar with earlier editions will recognise the format, although there has been some revision and updating to reflect advances and accepted changes in microbiological laboratory practice.

Introductory chapters cover safety, quality assurance, laboratory equipment and sterilisation. These are followed by descriptions of culture media and the various methods used for bacterial culture and identification, automation, mycology and counting bacteria. These are sections on clinical material, antimicrobial susceptibility testing, and food, water and environmental microbiology. The remaining chapters are devoted to the organisms encountered in the clinical microbiology laboratory. These take only 190 pages