BOOKS RECEIVED

Textbook of Medical Parasitology

R. PANJARATHINAM. 1990. ISBN 0 86311 128 9. Orient Longman Ltd, Madras. Pp 189. £6.50.

Dr Panjarathinam has written this book primarily for undergraduate medical students and states in the preface that much emphasis has been given to those parasites prevalent in India. In this aspect, the book fulfils its stated purpose, and deals concisely with malaria, filarasis, and other parasitic diseases common to that area of the world. Among the many disappointing aspects to this book was the total absence of reference to the spectrum of parasitic opportunists found in association with HIV infection and its sequelae. No mention of the acquired immune deficiency syndrome was made in the relevant sections on *Pneumocystis carinii* and *Toxoplasma gondii*.

The absence of photomicrographs in the book is compensated by a plethora of illustrations. However, these were without adequate scale and of confusing quality; a serious drawback in a subject where accurate diagnosis in the field depends so much on visual recognition and measurement of parasitic forms seen under the microscope. The chapters on the helminths have been covered well, although they suffer, as the rest of the book, from factual errors and outdated information.

This book, at low cost, would be most useful for those medical students travelling to the Indian subcontinent on elective study periods. However, the presence of superior texts available from Teaching Aids at Low Cost (T.A.L.C.) make this book second choice in this situation.

R. ELLIS

Basic Human Immunology

Edited by D. P. STITES and A. I. TERR. 1991. Prentice-Hall International Inc. Pp 234. £19.15.

The content of this book is drawn directly from its larger parent, *Basic and Clinical Immunology* (7th Edition) which has been for many years, and through successive editions, a popular textbook of immunology for tutors and students, particularly in medical schools. The larger book has received international acclaim; its merits lie in the clear and well organised text supported by excellent illustrations and tables but, above all, in the consistency with which the understanding of human clinical immunology has been related to the growing depth of knowledge of the functioning of the immune system gained through research with laboratory animals. Human immunology has come of age and from the bigger book it has been possible, with the latest edition, to draw out what is, for the most part, a satisfyingly comprehensive account of the organisation and function of the human immune system. The text lacks many of the possible confusions created in other books by use of data and nomenclature of laboratory animals in relation to the human immune system. The purpose of this book as a compact but comprehensive introductory text for students of human immunology is, in my view, and with certain reservations, well achieved. After a brief historical introduction, chapters deal, in logical and well integrated fashion, with the structure and development of the immune system, the concepts, cellular and molecular basis of the immune response, the role and organisation of the human histocompatibility complex and the T cell receptor. As appropriate in a modern textbook of immunology, the properties of cytokines as cell growth factors and as inducing and

regulating factors of the immune response, take a prominent position. A major strength of *Basic and Clinical Immunology* has always been the chapters dealing with inflammation (mechanisms, cells and mediators) and complement. These chapters are to be found in the smaller book but their impact is less here because their relevance in considering host immunity to infection and clinical conditions of tissue damage mediated by immunological events is lost without the opportunity to move across to the clinical chapters. My major criticism of this book, which is worthy in most other respects, is that whilst passing reference is made to microbial immunity in, for instance, the chapters on inflammation, complement, the immunoglobulins and the mucosal immune system, there is no chapter dedicated to the strategy and mechanisms of the human immune system in combating microbial infections. To my mind any introductory textbook of human immunology should present this topic as fundamental knowledge of the first order. The immune system evolved primarily as a protective mechanism against infection and our current understanding of its properties and complexities have to be interpreted in accord with this perspective. The book misses the mark in this respect and in my opinion the larger text offers better value for money.

D. CATTY

Chlamydial Infections

Edited by W. R. BOWIE, H. D. CALDWELL, R. P. JONES, P. A. MÅRDH, G. L. RIDGWAY, J. SCHACHTER, W. E. STAMM and M. E. WARD. 1990. Cambridge University Press. Pp 602. £50.00 (\$80).

Cicatricial eye disease due to chlamydia was first described in 1500 BC and, today, this organism still continues to produce a high morbidity worldwide from blinding trachoma, infertility resulting from pelvic inflammatory disease, and neonatal infections. This book is the result of a meeting which is held every 4 years and brings together leading researchers from the spheres of clinical and laboratory work, including cell and molecular biology, genetics, immunology and epidemiology. Each of the 13 main chapters consists of a series of research papers. The papers are preceded by a very useful authoritative overview of recent advances in each field.

The first two papers contain some fascinating time-lapse photographs of the development of chlamydial inclusions in infected cell cultures. There are many interesting papers reflecting current themes in chlamydial research. Not surprisingly, the largest chapters reflect the application of powerful new techniques currently used in molecular biology and genetics. There are several papers on the characterisation of specific epitopes of the major outer-membrane protein which will, it is hoped, lead to the development of a vaccine. These are followed by other papers which further investigate the protective and pathogenic nature of the immune response. The host-parasite relationship is examined in animal models, including the failure of protective immunity following infection, and the pathogenesis of complicated eye and genital disease. There is a short section on *Chlamydia psittaci* infections. Advances in knowledge of clinical disease are dominated by descriptions of the relatively recently identified *C. pneumoniae*. In laboratory studies, diagnosis by the polymerase chain reaction is compared with tissue culture and appears to show good correlation in high-risk populations. Remarkably little is mentioned about the problems of contamination which have dogged the diagnosis of other infections by this technique, and studies in low-risk populations will be awaited with interest. This diagnostic method should be evaluated in male

urine samples which would obviate the need for urethral sampling. The section on chemotherapy contains a report of in-vitro resistance to tetracycline and clindamycin by genital isolates of chlamydia from patients with apparent failure of antibiotic treatment. Despite the widespread use of antibiotics, chlamydial infections have, thankfully, remained remarkably sensitive to tetracyclines and erythromycin in clinical practice and the epidemiology and clinical significance of such resistant strains needs urgent evaluation.

Rather surprisingly, a short summary was omitted from many papers and, in addition, I would have found details of conference discussions on selected papers useful. These small points do not detract overall from a book which contains a wealth of contemporary knowledge and research on chlamydial infections. The overviews provide an excellent introduction to the non-specialist and the papers will be essential reading for those either commencing or currently involved in related clinical and laboratory research. It should find a place in the libraries of all departments involved with the diagnosis and management of this common human infection.

E. MONTEIRO

Textbook of Human Virology

Edited by R. B. BELSHE. 1991. ISBN 0-8151-0667-X. Mosby Year Book Inc. Pp 1064. £66.00.

This is the second edition of a text that was first produced in 1984. It has been extensively updated and expanded to encompass the burgeoning information available in clinical virology. There are over 1000 pages and 45 chapters of well written text.

The first part of the book consists of chapters on virus structure, classification and replication, on immunology of viruses, diagnostic virology and antiviral chemotherapy. The rest of the chapters are laid out in terms of virus families, subfamilies and genera and if there is to be a criticism of the text, it is that this approach to the subject tends to be less clinically accessible than one based on organ systems. Nevertheless, this is an excellent textbook. The editor has done a marvellous job in unifying the style of 59 different authors. Each of the remaining chapters provides extensive authoritative information on the structure, biology, epidemiology, pathogenesis, laboratory diagnosis, management and prevention of infection by the various viruses. Topics such as hepatitis C, hepatitis E, human herpesvirus 6 (but not 7), spongiform encephalopathies and "paraviral" conditions such as Reye's and Kawasaki syndromes are all covered.

Furthermore, the new edition of Belshe has the benefit of a more robust cover which should not fall apart despite extensive and frequent consultation. I thoroughly recommend this book, which is very good value at £66.

C. A. HART

Staphylococci

Edited by DOROTHY JONES, R. G. BOARD and M. SUSSMAN. 1990. ISBN 0267-4440. Blackwell Scientific Publications, Oxford. Pp 193. £15.00.

This soft-backed, journal-format book contains 14 review articles from the 1989 Society of Applied Bacteriology symposium on the staphylococci. It is in a style similar to an earlier supplement of the same series on the Enterobacteriaceae. The excellent articles cover the classification, ecology and molecular biology of the group, and various aspects important in medical, veterinary, dairy and food microbiology.

A book of this size cannot hope to present detailed accounts of all these aspects. Medical microbiologists will look in vain for a review of human infection with coagulase-negative staphylococci. However, in this search they will discover much interesting information on the staphylococci in a far broader context than is portrayed in medical texts. I found the articles on veterinary (Staphylococci in healthy and diseased animals, by Devriese), food (Incidence, origin and significance of staphylococci on processed poultry, by Mead and Dodd; *S. aureus* and related staphylococci in foods, by Mossel and van Netten) and dairy microbiology (Staphylococci in milk and milk products, by Gilmour and Harvey) interesting and enlightening, and particularly enjoyed the review on the role of staphylococci in fermented sausage (Nychas and Arkoudelos).

The current classification of staphylococci is covered in the introduction (Baird-Parker) and three further articles (Chemical and molecular classification, by Schleifer and Kroppenstedt; Systematics and natural history 1, by Kloos; Systematics and natural history 2, by Noble) which also contain much useful information on the ecology of the group. These articles will probably be of more direct interest to medical microbiologists, together with those on toxins (Staphylococcal toxins in human disease, by Arbuthnott *et al.*; Production, purification and identification of the staphylococcal enterotoxins, by Tranter and Brehm), methicillin-resistant staphylococci (Cookson and Phillips) and the normal flora of man (Marples *et al.*) All are well written and informative.

The broad approach inevitably leaves gaps, but it is a refreshing change from the increasing insularity of medical microbiology—one for the shelf!

J. MAGEE