BOOKS RECEIVED

Medical Intelligence Unit—Strategies in Vaccine Design

G. L. ADA. 1994. ISBN 1-57059-094-X. R. G. Landes Company, Austin. Pp. 217. £74.00.

The central theme of this book is that the development of vaccines on an empirical basis, although successful in the past for many important diseases, now needs to be based on a more rational approach if current outstanding problems are to be solved. The general strategy indicated is to base vaccine design on the underlying immunology of the infectious agent and to target the appropriate arm of the immune response. Preparation of vaccines from purified "protective" antigens may not be adequate if they are not presented in a form that will trigger protective responses without concurrent immunopathology.

Eleven of the 12 chapters in this multi-author presentation concentrate on discussion of detailed aspects of the immune response. The subject matter is heavily weighted towards virus infections with three chapters dealing exclusively with aspects of the immune response to viruses, whilst only a single chapter (chapter six) deals with the role of CD8⁺ cytotoxic T cells in bacterial and parasitic infections. However, other aspects of anti-bacterial and anti-parasite immunity are discussed in several additional chapters. Chapter 9 (P. D. Cooper) provides a particularly useful discussion of adjuvants and their use for selective induction of different types of immune response. Novel adjuvants of potential clinical application as well as the more traditional, currently licensed, materials are dealt with.

Vaccines against sexually transmitted diseases are considered in the final chapter where the emphasis is placed on generating local immune responses in the genital tract.

Overall, this is a well presented and useful book that contains a great deal of information on the immunology of infectious disease. It can be recommended to anyone with an interest in vaccine development or application.

M. J. CORBEL

PCR Technology. Current Innovations

Edited by H. G. GRIFFIN and ANNETTE M. GRIFFIN. 1994. ISBN 0-8493-8674-8. CRC Press Inc., Boca Raton. Pp. 370. £41.00.

The book is paperback and spiral bound. The 33 chapters each cover a different aspect of PCR ranging from more technical considerations such as primer design or different thermostable polymerases to more applied aspects such as forensics, environmental or clinical applications. Many of the chapters also contain detailed methods but these are often those that work for the authors and this is no guarantee of success for others who wish to follow in their footsteps. Considering the scope of the book it remains lightweight and portable but this is achieved by a high density of text which can appear daunting. The chapters themselves reflect each author's individuality, some covering more general ground but others drawing only on the author's own experience and work. Similarly, the "Current Innovations" claim of the title

is rather selective, reflecting the expertise of the contributors and many other innovations remain unmentioned. This is definitely no book for the novice. The theory of PCR is not explained and a prior knowledge of molecular biology is assumed. Some chapters are also written in a style which assumes detailed knowledge of the subject under discussion. In this respect it is not recommended for general overview of PCR but would be useful for experts in a given field who might like to see what PCR could offer them or the few poor souls who have specialised in the field of PCR itself in all of its forms.

S. WILSON

Edinburgh's Contribution to Medical Microbiology

C. J. SMITH and J. G. COLLEE. 1994. ISBN 0-9511765-6-0. Wellcome Unit for the History of Medicine, Glasgow. Pp. 311. £20.00.

Few, if any, of the medical microbiology departments in Britain can match the record of achievement of the University of Edinburgh Medical School and its associated institutions. Indeed, Joseph Lister and his assistant William (later Sir William) Watson Cheyne were already pursuing bacteriological studies in 1876, and an uninterrupted stream of important microbiological investigations has flowed from the city ever since. The Robert Irvine Chair of Bacteriology, founded in 1913, is one of the oldest and most prestigious of its kind in the country—and which medical microbiologist in Britain (and elsewhere) has not benefited from the book, originally published in 1925, by one of the earliest incumbents of the Chair, T. J. Mackie, and his colleague, James E. McCartney?

Charles J. Smith, now the departmental archivist after a long and distinguished service in the laboratory, has assembled a fascinating account of the development of microbiology in Edinburgh from its beginnings, which are traced to the 18th century, to the present. There are detailed descriptions of the changes that occurred under the successive Heads of Department mirroring changes that were under way in the microbiological world at large. The text is enlivened with some splendid archival illustrations, including individual and group photographs, and there are short biographical descriptions of many of the medical, scientific and technical staff who have worked in Edinburgh over the years. A light editorial touch, and some personal comments, are provided by J. Gerald Collee, who held the Robert Irvine Chair from 1979 to 1991 and who will be remembered with affection by all concerned with the *Journal of Medical Microbiology* as its former Editor-in-Chief. Several other distinguished colleagues contribute their own personal memories of developments with which they were associated.

This book will naturally be of greatest interest to those who have spent some or all of their working lives in the Edinburgh laboratories. Indeed, some descriptions of structural changes and departmental relocations will be fully intelligible only to those familiar with the local situation. None the less, all of us in medical microbiology will be familiar with some of the personalities involved and there are many fascinating glimpses of friends and colleagues, some, sadly, no longer with us, but here portrayed in their Edinburgh prime.

D. GREENWOOD