BOOKS RECEIVED

Molecular Aspects of Immune Response and Infectious Diseases (Advances in Host Defense Mechanisms, Volume 7)

In their introduction the Editors state that this volume aims to provide "an overview of the latest research on the immune response to infectious disease at the molecular and cellular level". This book is a collection of lectures and papers given at a Conference held in July 1989. As is inevitable, such a volume suffers from two disadvantages. Firstly, the subject matter has become outdated by the time that the book appears in print—"state of the art" reviews on any of the topics are better provided by journals like Immunology Today, Reviews in Infectious Diseases or Contemporary Topics in Microbiology and Immunology. Secondly, the range of topics covered is idiosyncratic—presumably based on the particular interests of the conference organisers and editors; for example, only five of 22 papers in this volume relate to the immunology of infectious diseases and the chapter titled "Molecular characterisation of cytokines and their receptors" deals with IL-7 and IL-1 only, with not even a brief overview of other cytokines.

Individual chapters may appeal to particular readers; for example, I enjoyed the chapter on molecular aspects of autoimmune responses to streptococcal proteins and that on progress towards schistosomiasis vaccines. However, I cannot recommend this book as being a critically useful addition to the bookshelf of a general reader (clinical microbiologist, infectious diseases physician or clinical immunologist) interested in the immunology of infectious diseases. Individual chapters may well turn up on bibliography lists generated by computer searches and found to be of interest.

D. S. KUMARARATNE

Principles and Practice of Clinical Virology. 2nd Edition

The rapid growth and development of clinical virology has led to the production of a second edition of this book barely two and a half years after the first. The editors have enlisted the help of 39 internationally recognised experts to update and extensively revise the previous edition, incorporating new data relating to epidemiology, pathogenesis, diagnosis, prevention and management of infection. How does the second edition differ from the first, apart from a 46% increase in price compared with the launch price of its predecessor? The latest edition is printed in a bolder type, the format is for chapters on the individual chapters may well turn up on bibliography lists generated by computer searches and found to be of interest.

Antiviral Compounds from Plants

This book is an introduction to the comparatively new field of the use of plants for the production of antiviral compounds. The field clearly requires the collaboration of botanists, chemists and virologists.

The first three chapters describe virus infections, viral strategies of replication, persistence and transmission, and the second chapter on viral replication is short and, in fact, describes the mechanisms of action of plant compounds in relation to the steps of viral replication. The section on persistent infections and transmission are quite good; the one on variation of viruses is based on classical references but is usefully updated in the section on the mutation frequencies of viral genomes.

The chapter on control of virus infections, vaccines are discussed mainly with regard to their disadvantages. However, the greatest successes in controlling viral infections (and for that matter infections in general) have been achieved by mass vaccination programmes (smallpox, measles, rubella, polio). I would like to have seen a more balanced account of the indications for prophylaxis and therapy in viral infections, and on the relative merits and problems of vaccines and antiviral agents.

The chapter on methodology in antiviral research is useful and provides detailed discussion on the measurement of viral targets, valid levels of inhibition of infectivity, meaningful conclusions from in-vitro tests, the number of particles per infectivity unit, and issues of the biology of the host cells and of animal models. A section is included on how to choose and purify plant extracts. Many plant extracts contain photosensitisers of potential antiviral activity, some basic data on photochemical reactions are provided.

In chapters 7–14, different groups of antiviral compounds extracted from plants are described. Each chapter contains a summary of the distribution of compounds in plants, their biological activities and biosynthesis, chemical formulae of the main compounds, a review of the relevant literature of the antiviral activity to about early 1988, numerous viral inactivation curves, LD99 and MIC tables, and discussions on possible mechanisms of action. For most of these chapters there are useful summary tables. The discussion of quercetin...