Animal Virus Pathogenesis. A Practical Approach

Edited by MICHAEL B. A. OLDSTONE. 1990. Oxford University Press. Pp 174. £18.50.

Those who are familiar with previous books from the "Practical Approach series" (eds D. Rickworth and B. D. Haines) will probably be familiar with how this volume is organised, and the evidence it addresses; however, for those new to the series, the title may be misleading. The volume introduces in separate chapters various aspects of virus pathogenesis: in each case, this is followed by a detailed description of methods and materials required to carry out the various relevant laboratory procedures. Thus, the book is a laboratory manual to the technology used in the study of animal virus pathogenesis set in a research scene. The volume is the work of 17 authors, mostly from the Skrippe Clinic and Research Foundation, California, but including experts from other countries. There are eight chapters in a total of 173 pages with headings such as "molecular characterisation of viral infections *in vivo*", "techniques for double-labelling virus infected cells" and "detection of immune complexes." The methodology is up to date (December 1990), each chapter containing a concise account of the methods used and proven; they have been written by international experts with practical experience. For post-graduate students and research workers investigating viral pathogenesis, the book represents a concise and largely complete account of the various techniques that they are likely to need; many techniques described are equally applicable to other researchers. The text is clearly written without ambiguity, and much of the work is referenced to contemporary publications: the book provides a valuable bench book and reference source for all researchers, and is strongly recommended for laboratory workers in the field.

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**Viral Vaccines. Advances in Biotechnological Processes
Volume 14**

Edited by AVSHALOM MIZRAHI. 1990. Wiley-Liss, Inc., New York. Pp. 381. £101.50.

This book, the fourteenth in the series on Advances in Biotechnological Processes, has much to recommend it. It

consists essentially of a series of six review articles covering various general aspects of viral vaccine biotechnology, such as viral vaccine production in stirred bioreactors, use of baculovirus expression vector systems, and the use of serum albumin beads with slow-release properties, as well as a further seven reviews on the current "state of the art" vaccine biotechnology applied to the control of specific viral infections such as those caused by hepatitis B virus and the picornaviruses. These latter articles represent comprehensive reviews on selected topics providing both a historical background to the particular area covered as well as an appraisal of the current situation.

Of particular interest to viral vaccinologists, at both the manufacturing and developmental level, are the reviews on the World Health Organization (WHO) attitude to use of continuous cell lines as substrates for production of human viral vaccines, and the use of polymerised, homotypic serum albumin microbeads as both a delivery system and an adjuvant for microbial antigens and peptides, which perhaps deserves more attention than it has so far attracted in the virus field.

Although the overall intention of the book appears to be to present the future prospects of viral vaccine biotechnology within the context of both past and current research, in a number of the articles the balance falls a little too much towards the history and present status of viral vaccines, much of which is well covered in standard virology textbooks.

The editor has also been fairly selective in the topics covered; for instance, there is no article covering the considerable volume of work under way on the development of vaccines against human herpesvirus infections (although the topic does find a brief mention in the section on vaccines against virus infections of the human central nervous system, and there is a separate article on Marek's disease vaccine). Similarly, the work and problems associated with the development of vaccines against the human immunodeficiency and respiratory syncytial viruses are given scant attention, while there are two articles concerned with vaccines against influenza virus.

Nevertheless, this is a very well referenced and well indexed book, placing present and future viral vaccine biotechnology into clear perspective relative to the historical background of the subject. It deserves a place on the bookshelves of both vaccine manufacturers and those involved in the current, exciting developments taking place in viral vaccine biotechnology.

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