

Book reviews

The Prostatic Cell: Structure and Function.

Parts A & B. Eds GP Murphy, AA Sandberg, and JP Karr. Part A: Morphologic, Secretory, and Biochemical Aspects. Progress in Clinical and Biological Research, Vol 75A. (Pp 538; illustrated; £54.40.) Part B: Prolactin, Carcinogenesis, and Clinical Aspects. Progress in Clinical and Biological Research, Vol 75B. (Pp 380; illustrated; £40.70.) Alan R Liss Inc. 1981.

The US National Cancer Institute supports programmes concerned with specific cancers in order to stimulate research. These two volumes are the products of a Workshop in March 1981 and published in November 1981. The objective of the Workshop was to "cover aspects of prostatic morphology, physiology, biochemistry, and pathology that had not been explored in depth at previous meetings of a similar nature."

The wide range of topics covered is impressive and shows how molecular and cell biologists are now beginning to apply techniques established in other fields to the prostate. Perhaps the moral here is that scientists have discovered that if money is available for studies on the prostate it might make sense to use rat prostate rather than rat liver! There are several excellent short reviews on subjects now of great interest to cell scientists on, for example, the nuclear matrix, the cytoskeleton and the role of the basal lamina in cell attachment, growth and differentiation, all of which emphasise the point that prostatic cells are basically similar to all other cells, their hormone dependence being only a minor although striking modulating factor. Most of the other papers deal with the structure and function of unique prostate proteins, prostatic secretion, trace metals in the prostate, and chromosomes. Volume 2 deals extensively with prolactin and briefly with experimental carcinogenesis. The final section on clinical studies is perhaps more accurately described as "studies which may (perhaps) have clinical applications". On balance, this is a useful reference book for those concerned with basic research on the prostate but it is not likely to be of immediate significance to a busy clinician or pathologist.

LM FRANKS

Actinomycetes. Proceedings of the Fourth International Symposium on Actinomycete Biology. Eds KP Schaal and G Pulverer. (Pp 600; illustrated; DM 220.) Gustav Fischer Verlag. 1981.

This supplement of the *Zentralblatt für Bakteriologie* contains the Proceedings of the fourth International Symposium on Actinomycete Biology which was held in Cologne in 1979. It provides a comprehensive survey of the present state of knowledge in this field, and contains both reviews and original reports. Chapter headings (numbers of individual papers in parenthesis) include taxonomy (16), morphology (5), ecology (6), pathogenicity and immunology (7), physiology (9), biochemistry (9), biosynthesis (17), and genetics (9).

Accumulation of information on actinomycetes in the past decade has been rapid, and this volume contains a wealth of information: more than 1600 references are cited. The range of topics is very wide, covering restricted studies of individual biosynthetic pathways and more general review articles.

Despite late publication (more than two years after the symposium) and high cost (more than £50), this volume is of great value in bringing together, in a single volume, so many different focal topics dealing with the biology of actinomycetes.

DWR MACKENZIE

Medical Laboratory Statistics. Institute of Medical Laboratory Sciences Monographs. Paul W Strike. (Pp 203; illustrated; £5.75 paperback.) John Wright & Sons Ltd. 1981.

A relatively painless introduction to the statistical methods most often needed in the analysis of laboratory data is given in this pocket-sized book. However, it is not a "cook book" in that there is plenty of discussion of the reasoning behind most of the techniques described. The content is rather different from that of most competitors, through the inclusion of detailed discussion of topics such as reference ranges, quality, multiple regression, discriminant analysis, and method comparison studies (this being the last and most difficult chapter), and makes this book particularly suited to the intended readership. Missing are the two-sample *t* test (in favour of a non-parametric test), χ^2 tests, and analysis

of variance, but several important aspects of statistical analysis are included that are not usually found in introductory texts, such as calculation of sample size, data transformation, and plotting of residuals. This book can be recommended for medical laboratory scientists.

DG ALTMAN

Introduction to Oral Immunology. AE Dolby, DM Walker, and N Matthews. (Pp 102; illustrated; paperback £5.95.) Edward Arnold (Publishers) Ltd. 1981.

The authors identify the need for an introductory text on the oral aspects of immunology and meet this need admirably. Although a basic knowledge of immunological principles is assumed, the authors manage cleverly to revise many of these within the text. Excellent brief, but balanced accounts are provided of the immunology of dental caries, pulp and periapical conditions; periodontal disease; immunity and neoplasia, and candidosis. Ulcerative and bullous lesions are dealt with rather briefly; no mention is made of acute ulceromembranous gingivitis. Consideration is lacking of mucosal lesions such as lupus erythematosus and of salivary gland lesions. These are however ever minor criticisms of a most readable account which should be of value not only to undergraduates but also to postgraduates both for those studying for further qualifications and those who merely want to update their knowledge.

D GORDON MACDONALD

Therapeutic Drug Monitoring. Eds A Richens and V Marks. (Pp 528; illustrated; £20.) Churchill Livingstone. 1981.

Therapeutic Drug Monitoring is a timely publication and is one of those laboratory-clinical developments that have caught on. For the progressively minded physician it is a means of putting practical therapeutics on a sound footing, and for the clinical chemistry/clinical pharmacology laboratory this elaboration offers opportunity for expansion and for getting finance for long-awaited new analytical equipment. There remain, though, the sceptics, and the layout and content of this book is intended to furnish a balanced presentation—warts and all. In this respect the opening chapter by Koch-Weser is highly commendable. Thereafter the topics tend to be paired with one chapter clinically balanced by another on the laboratory technique which is admir-

able. It would be too much to expect every contribution to attain a uniformly high standard and, regrettably, a few of them seem to have taken a somewhat narrow view of the subject. In consequence other relevant work may be overlooked. What is omitted, moreover, is a fearless cost-benefit analysis such as would be demanded by funding bodies for a service of this kind.

These reservations apart, few hospital clinical chemistry or chemical laboratory departments could afford to disregard this book.

R GOULDING

Electron Microscopy in Human Medicine. Vol 3. Ed Jan Vincents Johannessen. (Pp 397; illustrated; £49.95.) McGraw-Hill Book Company (UK) Limited. 1981.

The ultrastructure of micro-organisms of clinical relevance is reviewed in this book. The first section on viruses is a simple guide to specimen preparation and to virus recognition and classification, ideal for the non-virologist who may occasionally be invited to join in an ultrastructural virus hunt. The remainder of the book is aimed more at the microbiological specialist. The largest section is on bacteria. Its encyclopaedic coverage is occasionally marred by minor errors in the detail of the text, but the illustrations are excellent and the chapter will be a valuable reference source. Sections on protozoa and fungi conclude the text. A bizarre error in Fig 6.11 identifies what is undoubtedly a small unmyelinated nerve as an activated lymphocyte.

The book might have benefited from a greater emphasis on host-parasite interactions. Perhaps a broad concluding chapter giving a general overview of this subject would have placed these individual specialised contributions in a more balanced biomedical perspective. Nevertheless, as it stands, this book will be of value to electron microscopists and to specialist microbiologists who will prize it for its broad coverage and its generally excellent illustrations.

PG TONER
DJ PLATT

Current Topics in Pathology. Vol 70. Cervical Cancer. Ed G Dallenbach-Hellweg. (Pp 259; illustrated; DM 144, US\$61.30.) Springer-Verlag. 1981.

The object of this book is not to provide a complete account of cervical cancer

but to highlight recent ideas on the subject, considering not only pathology but also clinical aspects and treatment.

Outstanding amongst the nine chapters is a comprehensive, lucid and witty account of the aetiology and epidemiology of cervical cancer by Rodkin. I particularly enjoyed his scathing comments on "the oncogenic power of the prepuce", his noting that "smoking is not sexually transmissible", and his identification of "the nuptial bed as the variable with direct biology relevance, particularly if visited for the first time at an early age."

Holzner provides a useful summary of the advantages and disadvantages of the various types of cervical biopsy whilst there is a good, but occasionally slightly opaque, discussion of pathogenesis by Koss. The overall editor, Gisela Dallenbach-Hellweg, contributes an interesting, though controversial, chapter on the effects of exogenous hormones on cervical cancer and its precursors and is to be congratulated on having assembled a stimulating and worthwhile volume.

H FOX

Control of Hospital Infection. A Practical Handbook. 2nd ed. Eds E.J.L. Lowbury, G.A.J. Ayliffe, A.M. Geddes, J.D. Williams. (Pp 325; £16.50.) Chapman & Hall Ltd. 1981.

The second edition of this valuable book has been extensively revised and brought up to date to include new problems and practices. The standard of coverage is high although inevitably variations in length and detail of different sections reflect the interest of the contributors as well as the importance of the subject. This edition is still described as a "handbook" although increased in size and weight well beyond that point. The practices advocated are sound and accepted. The most valuable chapters are those dealing with Special Wards and Departments, giving clear advice in considerable detail, and some of the appendices are particularly helpful distillations of knowledge and practice. This book should be consulted by all who have responsibility for infection in hospital.

GL GIBSON

Leukocyte Function. Ed Martin J Cline. (Pp 149; illustrated; £15.) Churchill Livingstone. 1981.

Leukocyte Function contains chapters on neutrophil function, monocyte-macro-

phage function, chemotaxis, leukocyte antigens, granulocyte differentiation and culture, and histochemical reactions of leukocytes. The title is deceptive as it suggests information on the function of leukocytes other than neutrophils and monocytes whereas it deals almost exclusively with these cells. It does this exceptionally well with precise experimental details of laboratory techniques and will be invaluable to any centre setting up these studies. Although most informative, the chapters on leukocyte antigens and HLA typing is slightly inappropriate as it is only likely to be applied in specialised centralised laboratories. There is a rather pedestrian chapter on histochemical reactions of leukocytes, standard methods of which are in general use in most haematology laboratories. In essence, however, this slim volume is an excellent laboratory manual providing a comprehensive guide to techniques used in the study of phagocytic cells and in bone marrow culture.

AW SEGAL

Endoscopy and Biopsy in Gastroenterology. Technique and Indications. Eds. Fruhmorgen, M Classen. (Pp 198; illustrated; 24 tables; soft cover DM 28, US\$15.40.) Springer Verlag. 1980.

This English translation of a book by German gastroenterologists provides a well regimented account of biopsy techniques. It is in two parts, a general and a special section. The latter chapters all conform to a standard pattern for easy reference. Each technique is dealt with under set titles—instruments, patient preparation, postoperative care, technique, indications, contraindications, and complications. In the first general section are found chapters on organizing an endoscopy unit, documentation, and the pathologist. The correct emphasis is placed on providing complete clinical data and large biopsies.

However, I imagine most pathologists will seldom need to refer to this book though it does provide a useful background knowledge on endoscopic procedures. In these times of austerity however it is cheaper to walk over to the endoscopy department and look around for oneself.

AB PRICE