

## Book reviews

**Microwave Cookbook of Pathology. The Art of Microscopic Visualization.** Mathilde E Boon, LP Kok. (Pp 224; 64 colour plates; Dfl. 105.00.) Coulomb Press. 1987.

It is becoming increasingly apparent that microwave technology can make an important contribution to the effectiveness and efficiency of current technical practices in histopathology laboratories. The authors of this interesting book are pioneers in this field and their enthusiasm is undeniably compelling. While specialised knowledge is required to appreciate the information concerning the physics which govern the behaviour of microwaves, few would have difficulty in appreciating the potential of microwaves to accelerate fixation and staining without in any way reducing the quality of the final product. Indeed, in many instances, and in frozen sections in particular, the quality can be greatly improved. Of course only time will tell if the many remarkable claims made by the authors can be substantiated, and there are problems to be overcome, notably with regard to temperature control; but it is beyond question that laboratories should be looking closely at this interesting development and this book will certainly convince them of the need to do so.

FD LEE

**Colour Atlas of Anatomical Pathology.** A Cooke, B Stewart. (Pp 262; soft cover £19.95.) Churchill Livingstone. 1988. ISBN 0-443-03596-2.

This colour atlas will not make the suburban coffee table. It will, however, be welcome in the armchair and sometimes in the laboratory. It is jointly produced by a pathologist and a professional medical photographer. Thus the pictures are well chosen and of almost uniformly high standard. The use of modern light or royal blue backgrounds enhances the visual effect better than the "complementary" green which used to be fashionable. A wide range of conditions is included.

Quite what the function of macroscopic colour atlases is, remains uncertain to me, but the examination candidate to whom I lent my review copy disappeared fast enough with it and still has the book. Maybe they are an aid to revision. Certainly it's easier to take an atlas with you than carrying around a lot of specimen pots. If copyright didn't exist

this particular one could help an awful lot of pathology lecturers in the preparation of transparencies. Anyway, the book is a good one of its genre, and in paper back is not too expensive.

JD DAVIES

**Pathologic Diagnosis of Fungal Infections.** FW Chandler, JC Watts. (Pp 320; \$156.50.) Raven Press. 1988. ISBN 0-89189-251-6.

This atlas of fungal infections produced under the imprimatur of the American Society of Clinical Pathologists is a delight to have. There is a well chosen selection of gross and microscopic preparations as well as some representative electron micrography. The excellent photographs are balanced by a text which takes an analytical approach to diagnosis rather than one based on taxonomy. An initial chapter provides rules and framework for the detection and identification of fungi in histologic sections. The diseases illustrated are grouped according to their morphological similarities. There is sound teaching on the special techniques of use in this field. Few of us have much current experience in the field and most clinical pathologists will find it reassuring to have the book in their library. It is relatively expensive but this only reflects the quality of production. The book is a credit to the authors and to the American Society of Clinical Pathologists.

G SLAVIN

**Pathology of Infertility. Clinical Correlations in the Male and Female.** Ed B Gondos, DH Riddick. (Pp 388; 2 colour plates; 354 figs; DM 189.) Georg Thieme. 1987. ISBN 3-13-677001-3.

Infertility is a growth industry at the moment. The numbers of biopsy specimens and blood samples taken to investigate and treat infertility in both sexes is increasing, and the publication of a book on the pathology of infertility, rather than simply on its clinical and physiological aspects, is timely. This book presents the developmental, hormonal, immunological, and morbid anatomical causes of infertility in both sexes in a clear and easily readable way. Much of the information in the book is available in existing gynaecological and general pathology text books, but the contributors have updated it and the references and illustra-

tions are good. As a comprehensive review of the pathology of infertility this book can be highly recommended.

D LOWE

**Neuromuscular Diseases. A Practical Approach to Diagnosis and Management.** 2nd ed. M Swash, MS Schwartz. (Pp 456; 202 figures; £99.) Springer. 1988. ISBN 3-540-19505-X.

Neuromuscular diseases are common in clinical practice and their proper investigation must be coordinated and interpreted in relation to the clinical, neurophysiological, and pathological findings. The purpose of the first volume of this book was to describe and correlate these various parameters at various stages in the evolution of the diseases. In the seven years since the first edition of the book there have been many important developments in our understanding of neuromuscular diseases. The new edition includes a considerable amount of new clinical and scientific data and it includes several new chapters. Illustrations have been extensively revised and improved and there are many new references. Aspects that have been particularly expanded include the genetical aspects of neuromuscular diseases, quantitative electromyographic techniques, cardiomyopathies, plexus and root lesions, and the metabolic myopathies and neuropathies.

Both of the authors have a particular interest in neuromuscular disorders and the content of the book very much reflects their personal and very considerable experience. The book is clearly written and its personalised style creates enjoyable reading. It achieves its aim in presenting an overall picture of neuromuscular disorders, and the second edition is a considerable improvement on the first. I recommend this book to all with an interest in neuromuscular diseases and those that have already bought the first edition would not be wasting money by purchasing the second. If the authors ever decide to produce a third edition I recommend that they try and include some colour photographs in the pathology sections.

WR TIMPERLEY

**Clinical Pathology in the Elderly.** A Textbook of Laboratory Interpretations. H Rochman. (Pp 222; £40.50.) S Karger. 1988. ISBN 3-8055-4694-7.

Twenty years ago a text book on the inter-

pretation of laboratory results confined to the elderly would have been regarded with incredulity. Not only had there been little or no work done on establishing the normal reference range but there was no general recognition that values for the elderly might be different from the normal adult range. Moreover, there would have been suspicion that detailed investigation of the elderly was either inappropriate or a waste of time; but times they are a-changing. Successful treatment of the elderly is now commonplace and it is understood that some test results which are abnormal in a young adult do not indicate disease in an 80 year old. How far to investigate a particular patient's abnormal result is an everyday clinical problem. A better feel for the importance of laboratory testing can only help decision making and Professor Rochman's guidance is welcome. It is aimed at clinicians and is clearly written but in striving to be comprehensive (haematology is covered as well as biochemistry) there is not the necessary depth which a geriatrician might hope for in a specialist monograph. Recommended as a useful read for doctors in training.

PW OVERSTALL

**The T-Cell Receptor.** UCLA Symposia on Molecular and Cellular Biology New Series Vol 37. Ed MM Davies, J Kappler. (Pp 432; \$76.) Alan R Liss. 1987. ISBN 0-8451-2672-5.

It is now clear that genes encoding the  $\alpha$  and  $\beta$ -chains of the T-cell receptor account for the specificity of the cells expressing them; and many of the functions of cells expressing these receptors have been documented. In addition, the properties of T-cells expressing receptor  $\gamma$  and  $\lambda$ -chains is in some way linked to non-MHC-restricted lysis, or to MHC class II restricted signals: such cells may be important in inflammatory diseases such as rheumatoid arthritis. In this context the present publication in the molecular and cellular biology series is of particular importance. It contains a unique collection of articles which describe the important molecular events related to T-cell receptor expression, and the potential importance of the various T-cell receptor molecules in T-cell activation and maturation. T-cells interact with foreign antigens through their membrane bound T-cell receptors, which are composed of heterodimers of  $\alpha$  and  $\beta$ -chains each of which contain variable and constant regions. The mapping and generation of diversity and polymorphism is therefore

important to an understanding of T-cell antigen interactions; articles included in this publication refer to the gene maps of  $\alpha$  and  $\beta$ -chains of human and murine origin. The T-cell receptor is associated with CD-3 polypeptides on the surface of mature peripheral blood T-lymphocytes mediating specific recognition of antigen in the context of MHC products; a further T-cell receptor (TCR- $\gamma$ ) has been reported; the association of accessory molecules such as CD-4 and CD-8 not covalently bound to the T-cell receptor is under investigation: these findings and problems are all comprehensively addressed in this book. Furthermore, other chapters cover the molecular aspects of recognition molecules, such as LFA-1 and CD-2, and ICAM-1 and LFA-3, which are important in the process of cell-cell contact. The book will prove an excellent reference for those researchers and clinicians who wish to gain a precise understanding of the molecular basis of antigen recognition, and is an example of how molecular biology has been applied to further our understanding of an important subject of biology and immunology.

CW POTTER

**Neuropathology.** Current Topics in Pathology. Vol 76. Ed CL Berry. (Pp 155; 85 figs; DM 168.) Springer. 1988. ISBN 3-540-16732-3.

Conventional pathologists commonly either refer neuropathological problems to remote and tardy experts, or take a limited approach and may not make the best diagnostic and educational use of their cases. As an attack on such unnecessary weaknesses, Professor Berry has edited interesting chapters by four experts. Two are excellent and should be used by everyone who performs necropsies—Professor Adams on non-missile head injuries and Weller on how to examine the nervous system (the latter should have come first). Both are full of skilled, practical advice, and clear illustrations, ranging from use of a fish slice to diffuse axonal degeneration. The other two are more mixed. Dr Anderson has taken a brief but encyclopaedic view of acute viral encephalitis that mingles common and fashionable disorders in a way that will help trainees more than practitioners. Dr Scholz has covered most spontaneous causes of dementia in the adult in a similar manner. Both of these authors have an irritating wealth of spelling errors, and Dr Anderson has also suffered unexpectedly poor black and white micro-

photographs accompanying excellent coloured plates. On balance, the real value of the expertise of Adams and Weller dominates and makes this a book worth having in every laboratory, because no one can fail to gain from studying the brain.

AD DAYAN

**Special Veterinary Pathology.** RG Thomson. (Pp 66f; £69.50). Blackwells. 1988. ISBN 1-55664-045-5.

Writing for undergraduate veterinary students Dr Thomson and his colleagues have also produced a book that will enthral postgraduate clinical pathologists, albeit on a "fancy that" basis. It is beautifully produced, lavishly illustrated, and constructed on a system by system basis rather than a species by species one—so there is a chapter on the endocrine system, one on the haemopoietic system, and so on.

Gems abound. Immune haemolytic anaemias are particularly troublesome in dogs, piglets commonly become iron deficient, bracken poisoning causes aplastic anaemia in cows, horses get haemophilia, and chickens get gout. The pictures are unforgettable—acromegalic beagles and pseudomaphrodite pigs jostle with a mind boggling gallery of zoonoses.

What a shame few readers of the *Journal of Clinical Pathology* will ever see it. They would probably learn far more than veterinary pathologists browsing through one of the worthier undergraduate texts on human pathology—and be better entertained.

JS LILLEYMAN

**Oxalate Metabolism in Relation to Urinary Stone.** The Bloomsbury Series in Clinical Science. Ed. G Alan Rose. (Pp 197; 98 figs.; £48.00). Springer. 1988. ISBN 3-540-19517-3.

This monograph is the proceedings of a workshop involving scientists and clinicians interested in hyperoxaluria and urolithiasis, edited to blend the contributions into an easily readable, well illustrated, and nicely balanced treatise where the strong links between basic science and clinical medicine are emphasised. It is a subject which usually receives only passing reference in standard textbooks of chemical pathology but this book reviews new developments in diagnosis and management.

An accurate measurement of urinary