Book reviews

cost of £75 it seems highly unlikely that this book will be bought by many of the general diagnostic departments for whom it is intended.

D GORDON MACDONALD

X-Ray Microanalysis in Electron Microscopy for Biologists. Microscopy Handbooks 05. AJ Morgan. (Pp 79; paperback £5.) Oxford University Press. 1985.

X-ray microanalysis, and in particular, electron probe x-ray spectrometry has been available to the biologist for over a decade and has proved an invaluable adjunct to transmission and scanning electron microscopy for elemental analysis. Though simple to operate, x-ray microanalysis equipment produces results which can easily be misinterpreted by the inexperienced investigator unaware of the effects of specimen preparation or the pitfalls of spectrum analysis. This handbook provides a straightforward and well illustrated guide to all microanalysis techniques including energy dispersive spectroscopy (EDS), wavelength dispersive spectroscopy (WDS), and the backscattered electron image (BEI); and it explains clearly the physical properties and operation of these modes. It describes the various preparation methods for biological material for examination in the transmission electron microscope (TEM), explaining the advantages and disadvantages of resin and cryo techniques for elemental analysis. The one criticism that could be made from a pathological point of view is the omission of any reference to the growing role of scanning electron microscopy (SEM) with electron probe analysis in diagnostic pathology. This handbook should, however, prove to be an invaluable reference for newcomers to this field and as a teaching manual.

DA LEVISON
PR CROCKER

Liver Update 2/1985. Proceedings of an International Symposium on Recent Advances in Liver Physiology and Disease. Ed RE Kirsch, JB Kruskal, G Csomos, J Terblanche. (Pp 202; paperback £9.95; WB Saunders. 1985.

Should proceedings of meetings be published? Should hard pressed medical libraries be tempted to spend a diminishing income on proceedings? The answer is usually a clear "No" and contributors asked to

provide scripts, often some time after agreeing to participate in a meeting, will surely agree. In the case of the present volume no scripts were submitted, although someone thoughtfully provided references, and the book is a verbatim transcript of a meeting on aspects of liver physiology and related clinical topics held in Cape Town in February 1985. It has thus appeared in print after a very short gestation, comparing favourably with many journals. The mode of production has made for informality and easy reading on topics ranging from metabolism to regeneration, portal hypertension, and liver transplantation. The cast is international. If you want to know how hepatologists saw liver physiology in 1985 this seems a very reasonable way to spend £9.95.

PJ SCHEUER

Microbiology for the Public Health. The Evolution of the Public Health Laboratory Service 1939-1980. REO Williams. (Pp 223; hardback £15; softback £10.) Public Health Laboratory Service. 1985.

Although the subtitle of this book is *The Evolution of the Public Health Laboratory Service 1939-1980*, it is, in fact, a wide ranging review of all aspects of microbiology in relation to the public health.

The 15 chapters cover four phases: the origins of the Emergency Public Health Laboratory Service under the inspiration of WWC Topley in the pre-war 1930s; its role in wartime and adjustment to a peace time role when, as the Public Health Laboratory Service (PHLS), it offered what was at first the only nationwide service in microbiology; its role as an essential complement to the increasing number of laboratories of the new National Health Service; and finally a period of consolidation in the 1970s.

For each phase there are separate chapters on the administrative set up and on the scientific work, much of which could not have been done by other than a centrally administered service and its peripheral force of microbiologists skilled in field investigation as well as in benchwork. The book ends with chapters on the new role of the Centre for Applied Microbiology and Research ("Porton") within the PHLS, public health services in Europe, and an assessment of 40 years of microbiology for the public health.

Some of the illustrations are too dark to show detail, but the book is otherwise well produced.

R BLOWERS

Brucella Melitensis. Current Topics in Veterinary Medicine and Animal Science Vol 32. Ed JM Verger, M Plommet. (Pp 270; £37.75.) Martinus Nijhoff. 1985.

This book publishes 26 papers in full from nine countries given at a workshop on *Brucella melitensis* animal infection organised by the Commission of the European Communities and held in Brussels in November 1984. Not surprisingly, they are a mixed bag and although the book is full of up to date veterinary information, it lacks continuity and is difficult to read. The French editors are to be congratulated in managing to produce the book eight months after the meeting, but they have not exercised tight control and much of the English is best described as " quaint."

The disease remains a problem in sheep and goats in parts of France, Greece, Italy, Portugal, and Spain. Except for abortion, the disease is often asymptomatic in animals, and the size of the economic loss it causes is difficult to estimate, but it still poses an important public health problem for man. Current practice attempts to control the disease by widespread vaccination. This policy is moderately successful but thwarts the ultimate aim of eradication achieved by identification and slaughter of infected animals.

There are some clear messages in the text for laboratory workers. Diagnostic methods, especially serological tests require to be standardised, and reliable ways of differentiating vaccinated from infected animals need to be found. This expensive book cannot, however, be recommended to medical microbiologists for general reading.

JD SLEIGH

Cellular Pathology Technique. 4th ed. CFA Culling, RT Allison, WT Barr. (Pp 642; £35.) Butterworths. 1985.

An alternative title might be *Culling's Handbook of Histopathological and Histochemical Techniques*, the three previous editions of which, spanning almost thirty years, have been widely read and used at the laboratory bench. This book has been thoroughly revised by new authors following the death of Charles Culling, but the layout is similar, with an expanded text on fewer but larger pages. New chapters include photomicrography, quantitative methods, and immunoenzyme techniques, while cells such as those of the endocrine system and cell

products of special interest like amyloid have also been given their own short chapters. The expansion of introductory descriptions and theoretical basis of laboratory technique is particularly welcome. Staining methods can be quickly identified by their grey background but this does not improve readability of the general text as technical details of the preparation of stains and working solutions are printed in the same way as the general descriptive text. Immunoenzyme techniques are described in six and a half pages and will need expansion in the future. These revisions and additions have made the approach, format, content, and price more like those of its two main competitors, but devotees of Culling, as well as new readers, can expect to be well satisfied.

RAB DRURY

Nucleic Acid Hybridisation. A Practical Approach. Ed BD Hames, SJ Higgins. (Pp 256; soft cover £14; hard cover £22.) IRL Press Ltd. 1985. ISBN 0 947946 23 3 (soft-bound); 0 947946 61 6 (hardbound).

Molecular pathology is now a discipline in its own right; it includes, as a central part of its technical repertoire, the use of gene probes to determine the nature and effect of gene mutations. This paperback volume is the latest of the "Practical Approach" series from IRL Press and like all of them, is up to date, detailed, well produced and inexpensive. It is, however, not for beginners—they would do better to start with a general primer in recombinant DNA technology (such as Watson *et al.*, "Recombinant DNA—A Short Course"). Even in the laboratory the "Maniatis Handbook" is a better general guide, though now out of date. The real virtues of this volume are the theoretical background given in each section and the detailed recipes for making and labelling probes for carrying out *in situ* hybridisation, for quantitative hybridisation both to DNA and RNA, and for visualising nucleic acid hybrids using the electron microscope. At £14 it is cheap enough for any laboratory carrying out gene analysis (and surely this should now include most pathology laboratories in major centres). But with molecular biology moving so rapidly, it will also be necessary to replace it in two or three years' time, when the techniques all have changed yet again.

R WILLIAMSON

Membranes and Muscle. Ed MC Berman, W Gevers, LH Opie. (Pp 392; paperback £27.) IRL Press. 1985.

This is the proceedings, including abstracts of posters, of a symposium organised by the South African Medical Research Council and recognised by the International Union of Biochemistry as an IUB symposium. Clearly, Ca^{2+} was a major theme of the meeting with a valuable introductory chapter by Carafoli. The importance of plasma lemma and sarcoplasmic reticulum in Ca^{2+} homeostasis is fully covered with interesting sections on drugs affecting Ca^{2+} binding, Ca^{2+} ATP activities, and Ca^{2+} channels. Regulation of metabolism is confined to synthesis of glycogen, the role of mitochondrial creatine kinase, and carnitine function. Discussion of mitochondrial function is limited to a chapter by Packer, who links this organelle to free radicals and exercise tolerance. Myocardial disease is largely confined to ischaemic damage with little mention of metabolic cardiomyopathies.

This is a book of particular, but probably ephemeral, interests to workers in the fields of cardiac physiology and biochemistry and clearly represents a useful contribution. The editors are to be particularly congratulated on publishing the proceedings within six months of the meeting.

TJ PETERS

Notices

University of Wales College of Medicine

Honorary Professorship for Dr William Jones Williams

On the recommendation of the University of Wales College of Medicine the University of Wales has conferred an Honorary Professorship on Dr William Jones Williams. Professor Jones Williams, although not a member of staff of the College, will have the rank and status of Professor for an initial period of five years from 1 January 1986. He will play a full part in the teaching and research programmes of the College's department of pathology, while continuing his clinical activities at Llandough Hospital, where he has been a consultant pathologist since 1977.

The title "Honorary Professor" is a rare distinction occasionally conferred on outstanding scholars external to the University of Wales. Professor Jones Williams's appointment is only the second such to be made at the University of Wales College of Medicine.

Professor Jones Williams, 61 years old, trained at the Middlesex Hospital. He has spent the greater part of a distinguished career in Cardiff, seventeen years of which were spent on the staff of the Welsh National School of Medicine (now the University of Wales College of Medicine). Respected internationally for the major contributions he has made to the pathology of sarcoidosis and other granulomatous diseases, he has been a visiting lecturer worldwide, and has over 130 scientific publications to his credit, including some in his native Welsh.

He is currently President of the Association of Clinical Pathologists of Great Britain and Ireland, and also represents the College on the University of Wales Press Board and the Committee on Welsh Medium Teaching.

ACP Locum Bureau

The Association of Clinical Pathologists runs a locum bureau for consultant pathologists.

Applicants with the MRC Path who would like to do locums and anyone requiring a locum should contact Dr David Melcher, Histopathology Department, Sussex County Hospital, Eastern Road, Brighton BN2 5BE.