Book reviews

Monitoring Human Exposure to Carcinogenic and Mutagenic Agents. Proceedings of a joint symposium held in Espoo, Finland December 1984. IARC Scientific Publications no 59. Ed A Berlin, M Draper, K Hemminki, H Vainio. (Pp 457; £25.) Oxford University Press. 1985.

The Janus faces of toxicology are its intellectual pursuit of chemical effects on living matter and, often quite separate, its practical use in predicting chemical hazards. Common to both is the need to measure the effective dose—that is, the quantity present at the active site—or better still bound to the sensitive enzyme DNA, or other vital macromolecule. The future of much investigative and predictive toxicology will centre on determining effective doses in man and other animals as the best means of setting safe limits on exposure.

The papers on this subject given at an international meeting in 1984 have now been published. They show that cytogenetics and various biochemical and immunological techniques are being developed to assay the sometimes very low levels of exposure to alkylating chemicals. The methods are sensitive as they may have to cope with femtomoles or less, and they are being pushed to the limits of present analytical capabilities. Attempts to apply them to workers exposed, for example, to ethylene oxide and organic amines have shown that reliable measurements can be made but that humans seem to carry a background load of alkylation, possibly due to diet, smoking habit, or endogenous nitrosation. The relation between “spontaneous” cancers and alkylating chemicals remains to be explored.

The book contains well written reviews in areas not readily covered by other sources. It will be of considerable interest to toxicologists, biochemists, epidemiologists, and others concerned with the safe use of chemicals.

AD DAYAN

Myelofibrosis: Pathophysiology and Clinical Management. Haematology Vol 4. Ed SM Lewis. (Pp 207; \$78.00.) Marcel Dekker. 1985.

I have always had some difficulty in precisely defining what is meant by myelofibrosis, and although I'm not sure that this book helps me towards this end, I

greatly enjoyed the collection of views covering all aspects of the subject. Dr Lewis refers to the twenty common synonyms used in the past and more appear in other chapters. Its place in the spectrum of myeloproliferative disorders is well reviewed by Dr Geary, and chapters on histology, ferrokinetics, cytogenetic studies, acute myelofibrosis and treatment thoroughly cover the clinical aspects. The chapter on haemopoietic progenitors by Hibbin and Goldman brings us up to date on recent experimental work, and it is perhaps surprising that the chapter on treatment contains no mention of a possible role for vitamin D when the *in vitro* studies look so interesting. This is a nice review of current information and attractively produced: whether it is a bargain at £56 for 200 pages (at current prices) is a matter for individual judgement.

A JACOBS

Colour Atlas of Histopathology. 3rd ed. RC Curran. (Pp 292; 804 photomicrographs; £22.50.) Oxford University Press. 1985.

This is a greatly improved version of the popular introductory atlas. The plates are larger and clearer with many new additions. The text has been amplified and better organised, and the index is comprehensive. Finally, the dimensions of the book now permit its inclusion on the bookshelf rather than the coffee table. Although the stated target is undergraduates, the atlas will continue to be best used by juniors during their first few bewildering months of diagnostic histopathology. It will also be of value to enquiring medical laboratory scientific officers. The only fault is a paucity of architectural views. “High power pathologists use low power lenses”: this book does reinforce the tendency of beginners to go straight to high power. This detail excepted, the atlas is practical, inexpensive, and highly recommended. It should be found beside the microscope of any first year pathologist.

S KNOWLES

The Urinary Tract and the Catheter. Infection and other Problems. (Pp 126; £17.) John Wiley. 1985.

This is a well written, informative, but expensive little book. The text and illustrations are attractively presented, and there is a comprehensive and useful list of references at the end of each chapter. It aims to be a

practical guide to the care of patients with disorders of micturition, including incontinence, which require management by catheters or other appliances. The book achieves its object with a clear description of basic urological principles, and microbiologists will find the chapters dealing with these matters educational. They are, however, unlikely to discover many new facts in the sections concerned with sterilisation and disinfection of catheters and endoscopes, and the pathogenesis, diagnosis, and treatment of urinary tract infections.

The book is ideally suited to the needs of nursing officers working in infection control, and they should be encouraged to read the whole text.

JD SLEIGH

Isolation and Identification of Micro-Organisms of Medical and Veterinary Importance. The Society for Applied Bacteriology Technical Series no 21. Ed CH Collins, JM Grange. (Pp 387; £45.) Academic Press Inc. 1985.

The pedestrian title given to this volume belies the extremely informative contents of the book. The editors have made a personal selection of 24 organisms that are not often handled extensively in diagnostic laboratories and have commissioned well known authorities in each field to write a chapter in such a manner that a laboratory faced with the need to set up an investigation could use the relevant chapter as a laboratory manual. Hence this is a laboratory manual of little used tests and media. The omission of instructions for tests commonly performed in diagnostic laboratories permits space for detailed and practical instructions for the relevant investigations.

The organisms covered are: Pseudomonads and related bacteria; Vibrios, Aeromonas and Pleisomonas; Klebsiellas; *Pasteurella multocida*; Brucellas; *Yersinia enterocolytica* and related species; Legionellas; *Gardnerella vaginalis*; Campylobacters; *Nisseria gonorrhoeae*; differentiation of Staphylococci; *Streptococcus mutans* and other streptococci from the oral cavity; listeriosis in farm animals in Great Britain; *Listeria monocytogenes*; *Bacillus anthracis*; Clostridia; detection of *Clostridium difficile* enterotoxin; leptospirosis and leptospirosis; Mycobacteria; primary isolation of *Chlamydia trachomatis* and *Chlamydia psittaci* in *in vitro* cell culture; *Mycoplasma pneumoniae*; detection and isolation of pathogenic fungi; bovine mastitis (examination of milk in control schemes) bacteria associated with diseases of fish.

Although there is some unevenness in the chapters, most are excellent, and I strongly recommend that all diagnostic laboratories should have access to a copy.

ELIZABETH SHAW

Aspiration Biopsy. Cytologic Interpretation and Histologic Bases. LG Koss, S Woyke, and W Olszewski. (Pp 502; £72.25.) Williams and Wilkins, 1985.

The introduction to this book covers fundamental principles and techniques, including a helpful account of relevant imaging methods. The book then divides into two major sections, one dealing with palpable lesions and the other with lesions accessible only with the aid of imaging techniques. Although the authors modestly say the "book has many gaps," it is, in fact, remarkably comprehensive. For each site the text gives an account of pathological and clinical problems followed by a detailed description of the cytological findings. Written mainly by the senior American author, the text is eminently readable and supported by an excellent bibliography. The illustrations, largely provided by the European authors, consist predominantly of black and white photomicrographs of the cytopathology with relevant histopathology, and they are of a consistently high standard. While appreciating their reasons, one regrets the authors' decision to exclude air dried Romanowsky stained material. Despite this minor reservation the book should be warmly welcomed as an essential addition to the library in any department working in this rapidly developing field.

HELENA E HUGHES

Human Prenatal Diagnosis. Clinical and Biochemical Analysis. Vol 18. Ed Karen Filkins, Joseph F Russo. (Pp 424; \$90.00.) Marcel Dekker Inc, 1985.

This volume on human prenatal diagnosis introduces, investigates, and clarifies diagnosis, genetic counselling, and intervention; new and experimental techniques are presented and a wide range of topics are covered. In some places the book contains useful recommendations for current practice—for example, listing five sets of indications for amniocentesis for cytogenetic disorders. These recommendations are qualified as "sufficiently established for routine clinical applications," other indications, although considered are "not sufficiently es-

ablished." In other chapters, such as ultrasoundography: first and second trimesters, no such useful summary is given. This is understandable as the knowledge in that area is not as well established as that of cytogenetic abnormalities. The book is thus uneven, sometimes addressing the non-specialist, and sometimes the research worker and those at work in referral centres. There are even hints of this uneven quality in the wise and comprehensive introduction by Kushnik. One recurrent theme is the current extensive work being carried out to "prevent" a small percentage of disabling genetic diseases.

Despite being at the beginning of prenatal diagnosis we are already confronted with the problems of the cost effectiveness of "preventing" rare diseases. This north American book does not help a hard pressed team plan their allocation of resources. In part this arises from the difficulties of distinguishing between research and standard clinical practice. Most of this book seems concerned with the evolution of a possible future.

This is a useful book for referral centres for genetic and congenital disease, however, because it contains a very wide range of review articles.

RA HARKNESS

1985 Year Book of Pathology and Clinical Pathology. Ed KM Brinkhous. (Pp 456; £43.) Blackwells, 1985.

Yet another volume of this perennial has appeared, and it is just as interesting as ever and more attractive. The format has been changed to mark the 85th anniversary of the original Practical Medicine Year Books, and this volume is the 38th annual of the current series. To provide over 250 abstracts, with pithy relevant observations by the editors accompanying most abstracts, about 87 journals have been screened, including not only pathology and clinical pathology journals but also clinical and pure scientific journals.

The first part on pathology, occupies nearly three quarters of the text and contains 16 chapters. The first chapter, on general pathology, is subdivided into nine sections, one of which is a new section on perinatal and paediatric pathology with 10 abstracts. The other 15 chapters are devoted to systemic pathology. The second part of the book, comprising seven chapters, relates to clinical pathology. These include chemical pathology, toxicology and drug monitoring, microbiology, parasitology, blood banking, haematology, quality control (devoted mainly towards clinical chemistry and

haematology), and clinical applications (with references to SNOP and SNOMED).

In all parts of the book the increasing application of polyclonal and monoclonal antibody techniques is evident. Quite apart from the book's usefulness with respect to specific problems, it is a useful text to browse through during a tea break. It is so difficult these days to keep abreast of the advances within one's own discipline, that one tends to avoid learning about advances in other disciplines; but the effort should be made nevertheless. This book provides an opportunity to do just that.

In addition to a subject index the book has an author index. At first glance £45 seems to be quite a lot to pay for this book, but at roughly 10p per page or 17p per abstract it is good value for money.

JF BOND

Immunoassay. An Introduction. R Edwards. (Pp 162; soft cover £11.95.) William Heinemann Medical Books Ltd, 1985.

This book provides a very useful account of the various immunoassay methods in current use in laboratories. There is a brief historical introduction, and the basic concepts of the various assay methods are explained. The book is well laid out and the figures are a model of clarity. It assumes little medical knowledge and is an ideal book for those wishing to learn the basics of immunoassay. There are individual chapters on methods such as radioimmunoassay, enzyme labelled immunoassay, and particle agglutination. The book ends with a good overview of the laboratory application of the various assay methods.

The book seems to be aimed at students of biochemistry, technicians, and perhaps medical students taking intercalated degrees. It is not well suited to the needs of post graduate students due to insufficient technical detail and few references. All in all, however, it would be a good starting point for the undergraduate who wishes to learn about immunoassay methods. I shall certainly recommend it to any student who wishes to have an introduction to immunoassay methods.

CHW HOBBS

Science Writing for Beginners. AD Fair. (Pp 117; paperback £5.80.) Blackwells, 1985.

Anyone who reads this book will find it both interesting, easy to read, and amusing.