Book reviews


Haematologists in training require an atlas of high quality photomicrographs for day-to-day reference as a supplement to microscopy. The 1969 first edition of Hayhoe and Flemans’ atlas was widely appreciated and it now appears in a significantly improved second edition with more than double the number of photomicrographs, higher quality of reproduction, and a more efficient and attractive layout. The text is limited to short legends to the figures. These improvements will undoubtedly increase the atlas’s popularity, and the new section on lymph node and spleen imprints, and also centrifuged deposits from cerebrospinal and pleural fluids is a further useful addition. Despite the authors’ disclaimer that both marrow trephine sections need not be included since reporting on them is generally the province of histopathologists, trainees in haematology do require to be familiar with trephine morphology and many haematologists report on them. Trephine sections provide essential information for both diagnostic and training purposes. While this is an excellent atlas of the traditional narrow aspirate, a complementary chapter on marrow sections would increase its popularity even further.

J STUART


A common sense assessment of both the organisation of, and the methodologies used, in the assay of hormones in European countries is discussed in this short book.

The report points out the advantages and disadvantages of centralised and decentralised endocrinology services stressing the necessary close collaboration between the clinician and the laboratory worker. Minimum requirements in terms of equipment are listed for three different types of laboratory, while both internal and external quality control are briefly discussed. It is pleasing to realise that in Britain we seem to have the situation well under control, but more difficult to understand why a British chemical pathologist practising hormonal analysis was not included in the listed participants.

This is an easily read book which will be of use in those countries where a nationwide endocrine laboratory service is currently being established.

GW PENNINGTON


The proceedings of a meeting are contained in this book which discusses the exciting prospect of soft ionisation processes and increased mass range making it possible to investigate thermally labile and low volatility molecules which are of importance in biological systems and hitherto outwith the scope of mass spectrometry. Its authors are selected international experts in their fields and it is an important book to read to appreciate the range of current developments and their potential to research in the biological sciences.

The application of mass spectrometry to biological materials has been limited in the past by the requirement that the sample must be in the vapour phase prior to ionisation and also by the molecular weight capable of detection. A chapter of the book is devoted to the implementation of high field magnets to extend mass range at maximum sensitivity thus permitting analysis of biopolymers such as peptides and oligosaccharides up to approximately 3000 amu. Electron impact and positive and negative chemical ionisation give the most useful structural information while field desorption has particular value for high mass and polarity compounds. This latter ionisation method is comprehensively reviewed and its elegant application described to the identification of carcinoen-modified DNA components. Other areas covered are CF-plasma desorption mass spectrometry, laser desorption, fast atom bombardment, multisector instruments, and the coupling of liquid chromatography.

AM LAWSON


Biology of Skin Cancer is the fifteenth of a series of workshops on the Biology of Human Cancer published by the International Union against Cancer. The book is published in soft back, has no diagrams or illustrations, but contains over one thousand references.

As an interested amateur in the cancer field I found the coverage comprehensive, and the sections on geographical racial variability, variation, chemical carcinogens, and ultraviolet induced cancers especially informative. Yet the information is curiously dated and static for all its comprehensiveness. Although every conceivable biochemical measurement of lipids, proteins, enzymes, cyclic nucleotides, prostaglandins, and cell kinetics are considered, there are few impressive differences between malignant and normal tissues. Perhaps eventually there will be convincing explanations of how carcinogens as diverse as polycyclic hydrocarbons, x-rays, ultraviolet light, viruses, and failure of DNA repair alter normal cells to cancerous ones and also what the molecular bases (at the protein or enzyme level) of these changes are.

In the meantime “state of the art” reviews such as this will be of some interest to pathologists, dermatologists, human geneticists, immunologists, oncologists, and medical students.

FM POPE


The proceedings of the American Red Cross 13th Annual Scientific Symposium held in Washington, D.C. on 14-15 May 1981 are reported in this book. It is really a festschrift dedicated to Professor Kenneth M. Brinkhouse for his distinguished contribution to coagulation and haemostasis and consists of a series of contributions from eminent workers in the field. The result is a series of fine chapters which lack any cohesion and I feel the book has been unfortunately titled. However the individual chapters by
themselves will act as an excellent source of reference for specialised workers in coagulation and fibrinolysis.

CD FORBES


Dr Rudden aims to provide "a concise yet comprehensive review of cancer biology". His approach to the subject is original in that over two thirds of the book is devoted to cellular differentiation and its aberrations, and to the phenotypic characteristics of transformed malignant cells. Complex arguments are clearly presented and their experimental basis is usually well described. These four chapters form the most satisfactory part of the text. Paradoxically the author is less successful in presenting the simpler aspects of tumour biology; the opening section on the nature of malignant tumours, in particular, is superficially written and lamently illustrated. Clinical implications are somewhat underplayed except in a speculative last chapter in which some future prospects for preventing and curing cancer are discussed. There is an adequate bibliography which covers the literature up to 1980.

RL CARTER


This short, well-produced book will be of interest chiefly to American microbiologists since much of the "hardware" it describes, and the administrative methodology it advocates, find greatest relevance in the USA; indeed, in the context of British microbiology it is difficult both from the title of the book and from its contents to decide quite why this type of publication is needed. Apart from chapter 5, which contains good descriptions of PRAS role tube methods, the anaerobic chamber, and anaerobic jar, the text does not go deeply into the practical or theoretical aspects of clinical anaerobic microbiology. Clinical aspects of anaerobic infections are briefly listed in two pages, while in the 10-page chapter on the determination of antibiotic susceptibility of clinically important anaerobes, the only antimicrobials mentioned (once each) are tetracycline and erythromycin.

The text as a whole is well written but repetitive and sometimes quaint, for example, "a methylene blue indicator becomes reduced to a white color". This book, while being far from comprehensive, is thought-provoking, especially in the area of laboratory management.

AT WILLIS

Pathology of Congenital Heart Disease. AE Becker and RH Anderson. (Pp 498; illustrated; £45.) The Butterworth Group 1981.

The undeniable cardiac bias of the Postgraduate Pathology Series so far is fully justified with the addition of the present volume. The work of Becker and Anderson is already familiar to those working in the field of paediatric cardiology, but now it is presented to the wider pathological readership which it deserves. The authors' approach to congenital heart disease is summarised as sequential chamber localisation and it is based on the recognition of the cardiac chambers using three main features—morphology, connections, and relations. The system, which is clearly described in the first chapter, is the key to the subsequent account of specific anomalies which forms the bulk of the volume. There are also valuable chapters on cardiac tumours, syndromes associated with cardiovascular lesions, and on pulmonary complications. The style is lucid and readable. The numerous diagrams are a model of clarity and information. Black and white illustrations are notoriously demanding in this field and a high standard has been achieved. The references are selective and right up to date. This is an excellent book, highly recommended to the trained and the trainee alike.

AAM GIBSON

Immunology at a Glance. 2nd ed. JHL Playfair. (Pp 70; illustrated; paperback £4.) Blackwell Scientific Publications. 1982.

This is the 2nd edition of John Playfair's intriguing presentation of modern concepts in immunology as a series of diagrams, one for each facet of the subject. It is not greatly changed from the first edition. It is said not to be a book for immunologists—but I wonder. I imagine that, like myself, many immunologists would benefit from seeing diagrammatic presentations of less familiar areas of the subject which put their own ideas in perspective. Many of the diagrams could be useful adjuncts to lecturing a group of students. Some diagrams, particularly the only new one in this edition on the genetic control of antibody synthesis, seem to me to require an appreciable knowledge of immunology to understand them.

There is a dilemma inherent in the approach of this book. Are even the most complex concepts amenable to simplified explanations? This is partly a philosophical question about the nature of explanation and whom it will satisfy. Clearly John Playfair believes it is possible to be brief and yet succinct. Whether he is entirely successful or not others will judge for themselves, for there is surely something for everyone in this short and moderately priced book.

RA THOMPSON


The Atlas of Pulmonary Pathology is a valuable bench book for the practising histopathologist with an extensive cover of both common and rare lung diseases.

It is divided into twenty-one chapters, with a good account and choice of subjects. There are many useful line and coloured simple diagrams interposed and followed by coloured and a few black and white macroscopic and histological photographs. Radiographs and electron micrographs are not included. The inclusion of up to twenty-one references at the end of each chapter is a useful feature. The index is comprehensive and allows easy access to the contents. The quality of some micrographs is not of the best but was perhaps dictated by the reasonable price.

Somewhat surprisingly the atlas does not include an expected introductory chapter on pulmonary anatomy. Reflecting the expertise of the authors, occupational lung disorders (3 chapters) and lung tumours (5 chapters) receive particular attention. Lung tumours are well illustrated and are a useful guide to the recently agreed revised WHO classification. The chapter on interstitial pneumonias is a very useful modern...