

incorporate a review of existing technology and a discussion of the current state of the art. The papers are well illustrated and contain detailed technical information.

This is a specialist's book, rather than a beginner's. EM laboratories and individuals involved in advanced EM techniques will find it a useful source of reference to current methods in various specialised areas of biological electron microscopy, with the emphasis on the underlying scientific principles of the methodology.

PG TONER

Laboratory Animal Medicine. Ed JG Fox, BJ Cohen, and FM Loew. (Pp 750; \$60.00.) Academic Press. 1984.

Every scientist who enjoys both the privilege and the need to work with laboratory animals must be sensitive to the special circumstances of their husbandry and to the requirement for humane experimental techniques. To meet these demands the management of laboratory animals has developed into a discipline in its own right.

Laboratory Animal Medicine is produced by the eponymous American College. It is intended to describe all major aspects of biology, husbandry, disease, and experimental techniques considered appropriate for species likely to be used in the laboratory, ranging from amphibian to primates. It is reasonably comprehensive, often well illustrated, and contains very many references. It is also (and appropriately) dominated by American practices, some of which would not be accepted in Britain. Overall, it is of definite value as a source of ideas and experience, and should be consulted by all experimentalists, but it can only be regarded as complementary to our UFAW Handbook, the forthcoming joint Royal Society guidelines, and the various specialised monographs now available.

AD DAYAN

Textbook of Gastroenterology. IAD Bouchier, RN Allan, HJF Hodgson, and MRB Keighley. (Pp 1560; £55.) Bailliere Tindall. 1984.

This multi author textbook has four editors and aims to be a comprehensive textbook of gastroenterology giving sound clinical advice with a scientific basis. It is heartening that the two important subjects of the irritable bowel syndrome and functional gut disease are given prominence and are covered fully and eloquently in a balanced

manner. However, although the authors say they have not eschewed controversy, the editors have allowed very controversial things to be said in a somewhat dogmatic manner. For example, it is very difficult reading the chapter on biliary dyskinesia to know which patients would respond to endoscopic sphincterotomy. This diagnosis was popular in the fifties and sphincteroplasties were done by surgeons in the fifties and sixties, but the procedure fell into abeyance when the results of longterm follow up were disappointing. Certainly, some of the features of these patients would make one suspect that it would be difficult to distinguish them from patients with "non-disease" as described by Clifford Hawkins. Furthermore, although Dr Watson is very fair in saying that the coeliac compression syndrome is controversial, he gives no clear indication as to how to select from the myriads of patients with abdominal pain, an epigastric bruit, and coeliac compression on radiology those who will benefit from operative treatment. Certainly, it is now common practice to endoscope all patients with gastric ulcers and also those who have had upper gastrointestinal bleeds. One would have liked to have seen an analysis of the pick up rate for gastric lesions by endoscopy compared with good double contrast barium meals and the effect on ultimate mortality of the slightly earlier diagnosis of carcinoma. Although the author on gastrointestinal haemorrhage declares that it has been stated that early endoscopy does not alter the mortality of the bleeding episode, he goes on to say that the view that early endoscopy is not mandatory should be resisted strenuously. But he bases this on a personal statement by an enthusiastic endoscopically orientated physician rather than on an analysis of the published work. Clearly, endoscopy does have an important role in the design of trials and search for better treatment but not necessarily in the routine management of upper gastrointestinal haemorrhage.

In a future edition I hope that the design of the book will make it easy for the reader to know who is writing the section he is reading. At the moment the authors of the individual sections are given only at the beginning of each chapter, not even on the initial title page, and it is difficult to thumb through the book to try to find the appropriate author, which can be infuriating. Furthermore, it can be difficult to find out where the appropriate references are. The editing has not been meticulous, as shown by the lack of sequential numbering of the tables and figures in the chapter on small

gut disease.

This book should have a good future but it needs more careful editing and cross reference between editors so that a more uniform view can be put forward. If not, it might be useful, as in other textbooks in other disciplines, for the editors to give comment on the contributions where there are controversial.

A DAWSON

Ultrastructural Effects of Radiation on Tissues and Cells. Proceedings of the Scanning Electron Microscopy Meetings 1981 and 1982. Ed KE Carr and TM Seed. (Pp 172; paperback \$20.) Scanning Electron Microscopy Inc. 1984.

This paperback volume is a compilation of seventeen papers originally published in the proceedings of the Scanning Electron Microscopy meetings of 1981 and 1982. The contents, therefore, have already been available for some time to the readers of that journal. The justification for their republication lies in making these papers more widely available to a topic based rather than a technique based readership.

Cell and tissue radiobiology has tended in the past to concentrate more on kinetic and statistical considerations, giving relatively less attention to morphology. These papers help to redress the balance, dealing as they do with ultrastructural aspects of membranes, cell surfaces, cytoplasmic and nuclear alterations, and tissue contours in response to irradiation of various types. The papers are all reviewed, each concluding with a 'dialogue' between reviewer and author which enhances the value of the text. It is fair to say that while the book has a common theme in ultrastructural radiobiology it rather lacks a thread of continuity, an inherent feature of a compilation of this sort.

This is not a text book but a collection of research reports concerning the application of ultrastructural techniques in diverse areas of radiation biology. As such, it will be of greater interest to specialists in these fields than to a more general readership.

PG TONER

Computer-Assisted Image Analysis Cytology. Monographs in Clinical Cytology, Vol 9. Vol ed SD Greenberg. (Pp 201; DM 117; US \$58.75.) Karger. 1984.

A compilation of eight papers relating to various aspects of image analysis is contained in this book. Two of the items dis-

cuss in detail the equipment needed to produce an image analysis system and describe examples currently in use in America. Such hardware is capable of analysing very complex biology structures, but is very expensive. The remaining articles illustrate the application of this equipment to pathological and cytological problems, including the objective assessment of cervical carcinoma, renal radiation injury, muscle biopsy analysis, and the detection of bladder cancer from the cells of voided urine. One article discusses the comparison of different types of anaemia with normal red blood cells using unstained blood films. Several articles document the difficulties encountered in the preparation of material for computerised microscopy and the problems resulting from digitisation.

This is a well produced, useful volume, but it is very similar in both format and content to another recent book from this publisher.

C SOWTER

Monoclonal Antibodies: Principles and Practice. James W Goding. (Pp 276; \$22.50.) Academic Press. 1984.

It is now a decade since Köhler and Milstein's classic paper which led to the development of monoclonal antibody technology. Hybridoma techniques have now advanced from the research laboratory and are used across a wide range of scientific disciplines and are obviously in widespread diagnostic and therapeutic use. At the same time there has been a bourgeon of text books on this subject — one might ask if a further addition to the literature is justified? However, the well established stable of the Hall Institute has again provided a good blend of both the theoretical and practical aspects of the subject resulting in a book which will find equal place in the routine and research laboratory. To highlight a few useful techniques described in the book: biotinylation of antibodies, use of monoclonals in molecular cloning (surely an area of development for the future), and raising of monospecific polyclonal antibodies (!). However it is a pity that immunoenzyme methods in histology are not covered — maybe this will be included in later editions. Moderately priced, I would recommend purchase of this useful text.

MA HORTON

Autoimmunity: Basic Concepts; Systemic and Selected Organ-Specific Diseases. Concepts in Immunopathology. Vol 1. Eds JM Cruse and RE Lewis. (Pp 361; Sw fr 198; US \$118.75.) Karger. 1985.

This is the first volume in a new series designed to keep the scientific community abreast of recent advances in basic biological and clinical aspects of immunological disorders. The objective is largely achieved with excellent chapters on the regulation of the immune response by suppressor cells, natural killer cells and the idiotypic network, and the ways in which some of these can be modified to prevent (or even reverse) the lesions of experimental allergic encephalo-myelitis, thyroiditis, and other autoimmune diseases in animals. There is also an interesting account of the diverse immunological disturbances which lead to systemic lupus erythematosus in different strains of mice. Perhaps not surprisingly the sections on autoimmunity in rheumatoid arthritis and clinical disorders of the blood and skin are something of a hotch-potch. Not an easy book to read but worthwhile for those wishing to come to grips with a difficult developing subject.

RB GOUDIE

Organ Based Autoimmune Diseases. Concepts in Immunopathology. Vol 2. Eds JM Cruse and RE Lewis. (Pp 278; Sw fr 149; US \$89.25.) Karger. 1985.

This is a sequel to the recently published volume "Basic Concepts; Systemic and Selected Organ-specific Diseases". There are interesting reviews of autoimmunity in endocrine disease, insulin dependent diabetes mellitus, myasthenia gravis, encephalomyelitis, and tubular and glomerulo-nephritis. Other chapters dealing with the cellular immunology of multiple sclerosis, autoimmune aspects of human reproduction, and autoimmune reactions in the eye are adequate and informative though less dynamic in their approach. Much of the account of sperm antibodies, for example, consists of a catalogue of techniques which may be used for diagnostic purposes and the clinical interpretation of results with little reference to their role in the pathogenesis of male or female infertility. Three chapters by different authors deal with diabetes mellitus and present somewhat different views of the subject so there is inevitably considerable repetition. Those who are interested

in autoimmunity in general and that affecting pancreas and nervous system should certainly read this book.

RB GOUDIE

Lecture Notes on Forensic Medicine. 4th ed. DJ Gee. (Pp 231; paperback £8.50.) Blackwells. 1984.

This is a good condensed account of the essentials of Legal Medicine. The padding and repetition inherent in standard textbooks has been most successfully removed without making the resultant concentrate too dry and inedible. It is presented in such a way that the facts stick in the mind. It is ideal reading for undergraduate students and general practitioners would do well to keep it on a shelf in the surgery.

The ethical features such as consent are well dealt with. Confidentiality, also well done, is very important, and new situations are constantly arising. Most of the pitfalls that may confront a young doctor are explained. Other good features include the interpretation of blood splashes at the scene of a crime, the bodily changes occurring after death, firearms, and accidental poisoning. It is a good idea to include the names and addresses of the main Poison Centres in the country. The section on toxicology is slightly out of date with respect to the current common suicidal poisons, but the fashion in suicide changes so rapidly these days that it is practically impossible for any book to keep abreast of the latest innovations.

R CROMPTON

Pathology of the Esophagus. Horatio Enteline and John Thompson. (Pp 192; DM 136; US \$50.80.) Springer. 1984.

This book opens with a scholarly account of the embryology, structure, and function of the normal oesophagus endorsed with the stamp of personal experience. Schatzki rings, other mucosal and muscular rings, webs, diverticula, atresia, fistula, cysts, and hernias are described in meticulous detail and the pathophysiology of functional disorders such as achalasia, diffuse spasm, systemic sclerosis, diabetes etc, enriches the text. Adenocarcinoma as a complication of Barrett's oesophagus is relatively rare varying from 2-4-4% of cases of oesophageal carcinoma but it is suggested that if one considers adenocarcinoma of the lower oesophagus and gastro-oesophageal junc-