

Book reviews

Electron Microscopy in Human Medicine. Vol 8. 'The Liver, The Gallbladder, and Biliary Ducts'. Ed JV Johannessen. (Pp xv + 271; illustrated; £23.40.) McGraw-Hill International Book Company. 1979.

This book presents an account of the ultrastructure of normal and diseased human liver with small additional chapters on mammalian gallbladder and bile ducts. It is profusely illustrated with over 240 photographs, the large majority being transmission electron micrographs of high quality. The small number of illustrations of light microscopic appearances are not very helpful and perhaps could have been omitted as the book will be of interest mainly to those with some special knowledge of liver pathology. In human liver disease, many ultrastructural changes are non-specific and of limited value in diagnosis, and this no doubt explains the rather uneven distribution of material, by far the largest section being devoted to relatively uncommon metabolic disorders which do possess specific electron microscopic features. The inclusion of a chapter on autoimmune liver disease separate from chapters on chronic hepatitis and cirrhosis is difficult to understand, and there are a few statements in the text which do not reflect modern views on liver pathology; perhaps these conform with Eastern European experience as three of the authors are writing from Hungary. There is a very extensive bibliography and it should be a valuable book of reference for those interested in liver ultrastructure.

RS PATRICK

The Science and Practice of Clinical Medicine. Vol 4. 'Rheumatology and Immunology'. Ed AS Cohen. (Pp xxxiii + 497; illustrated; \$32.50.) Grune and Stratton. 1979.

Rheumatology and Immunology is Volume 4 of *The Science and Practice of Clinical Medicine*. The rheumatology section is divided into four parts: Regional Structure and Function, Diagnostic Procedures, Differential Approach to Major Rheumatic Syndromes, and Specific Articular Connective Tissue Diseases. The contributors to the various sections have, in general, performed very well. The text is divided into sections and subsections

with adequate illustrations, photomicrographs, and tables so that the text is easy to read. The common diseases receive the emphasis they deserve but the rarer diseases are not forgotten. In particular, their broad biological relevance is pointed out. The section on Immunology is divided into three parts: Concepts and Diagnostic Procedures, Differential Approach to major Immunological Syndromes, and Specific Immunological Diseases. The same comments can be made about this section as for the former. Indeed, many of the sections are some of the best accounts of various aspects of clinical immunology addressed to the general medical reader. The last chapter on lysosomal diseases sits rather uneasy in this book as its obvious relationship to either rheumatologic or immunologic disease is not too clear.

This book is directed to students, junior doctors, general physicians, and sub-specialists in general medicine. However, I feel that, for the medical specialist who may have to deal with rheumatological problems, one of the more standard rheumatology textbooks would be a preferable source of information than this book. For them the immunology section would be rather superfluous, especially in view of the rapid changes which this subject is undergoing at the present time. Despite this minor quibble I have little hesitation in recommending this book, which is reasonably priced considering its size and the high standard of its printing and illustration.

GS PANAYI

A Colour Atlas of Pathogenic Fungi. D Frey, RJ Oldfield, and RC Bridger. (Pp 168; illustrated; £16.) Wolfe Medical Publications Ltd. 1979.

This atlas gives a pictorial presentation of the cultures and microscopic characteristics of fungi pathogenic to man, and, where appropriate, histopathological sections showing the fungi in tissues are included. There are 90 sections, each dealing with one organism, and, on the whole, the standard of reproduction of the colour plates is very good. The frequent use of phase contrast photomicrographs of fungal structure does not, however, offer any advantage over conventional illumination in clarifying identifying features.

Forty-two species of dermatophytes are fully described, and it is in these sections that photographs of the macroscopic appearances of some of the colonies are not always typical enough for identification. Other fungi causing superficial infections and those producing subcutaneous and systemic mycoses are all comprehensively covered and well illustrated.

Summaries of the diagnostic characteristics of these fungi and references to each of them are contained in appendices. The text is clear, concise, and helpful, and the atlas should be of value to all concerned with the identification of pathogenic fungi.

YM CLAYTON

Hartley's Microscopy. WG Hartley. (Pp x + 220; illustrated; £9.75.) Senecio Publishing Company. 1979.

This is a considerably revised second edition of a book that first appeared in 1962 and which was designed for people who, while lacking training in physics and mathematics, need to use some form of microscopy in the course of their work. Yet without some understanding of the basic rules of optics, such workers, at best, are unlikely to use their microscopes to their fullest advantage and, at worst, can be seriously misled by optical phenomena beyond their ken. For as the author points out 'The laws of optics are quite impersonal, and always answer a fool according to his folly'. To explain microscopy to those 'not mathematically inclined' the author uses simple geometric optics, amply and valuably illustrated with clear line drawings. (There are over 150 figures and several plates.) Basic microscopy is very well explained, with clear definitions of terms such as resolving power and resolution, numerical aperture, refraction, diffraction, and the various forms of aberration. Several very useful rules-of-thumb are given, including the relation that should exist between the numerical aperture of the objective and the total useful magnification. This, the greater part of the book, can be highly recommended to all who use microscopes and who do not want to be concerned with mathematical optics.

The limitation of the simple, completely non-mathematical approach becomes marked when the author turns to more