ularly for young men and women who need to be reminded that modern advances are all very well, but simple observations properly recorded and interpreted with insight are still the basis of major advances. I recommend this book unreservedly to all those training in pathology in whatever speciality and hope it may stimulate a few adventurous souls to try, at least for a short period, to work away from the NHS norms of Harrow and Hackney. I recommend it also to those pathologists aged 55 who still retain some vision. It will act as a powerful stimulant to those seeking early retirement and to work overseas in the twilight of their careers, perhaps rekindling the enthusiasms of youth. This is a splendid book. Buy it.

G SLAVIN

Methods of Enzymatic Analysis. 3rd ed. Vol XI. Antigens and Antibodies 2. Ed-in-Chief HU Bergmeyer. Eds J Bergmeyer, M Grassi. (Pp 508; no price given.) VCH. 1986. ISBN 3-527-26052-8.

The third edition of this volume provides a valuable update and a refreshing insight into methods of enzymatic analysis as applied to antigen and antibodies. The main thrust of the book is centred on the ELISA technique and the various ways it can be manipulated for antigen and antibody detection. Clearly some of the techniques are still in the developmental stage so that their role as diagnostic tests is unclear but the book does provide detailed protocols so that one can develop these tests further. The increase in interest in the serodiagnosis of infectious diseases makes this a most interesting read.

RUTH MATTHEWS

Progress in Neuropathology. Vol 6. Ed HM Zimmerman. (Pp 304; \$98.50.) Raven Press. 1986.

Dr Zimmerman has again been responsible for the publication of an excellent and informative book. I agree with his statement in the Preface that some of the contributions are aimed not so much at morphology but to provide insights into the mechanisms by which morphological changes occur, hence the wide range of topics encompassed by the 13 chapters. It may seem invidious to commend particular chapters since neuroscientists in different fields will be attracted to particular topics. As a neuropathologist, however, I found the chapters on cytoskeletal abnormalities, tumour invasion and metastasis, experimentally induced brain tumours, neuron specific enolase and neuroendocrine models of brain transplantation

particularly interesting and instructive. Others might find their greatest interest in the inflammatory cell infiltrates in experimental allergic encephalomyelitis, or in the congenital myopathies. And it was also interesting to learn that the glucocorticoids may be modulators of neuropathological insults in the hippocampus. As with the previous volumes, this one must be available in any department professing an interest in the neurosciences.

J HUME ADAMS

Pathogenesis of Liver Diseases. International Academy of Pathology Monograph. Eds E Farber, MJ Phillips, N Kaufman. (Pp 384; 81.) Williams & Wilkins. 1986. ISBN 0-683-03038-8.

This volume is based on the annual long course that was held by the United States/Canadian Division of the IAP in 1986 and it is a worthy successor to its predecessors. The chosen theme is reflected over a wide field: viral and chemical carcinogenesis, immunopathology, ultrastructure, chemistry of the cell, role of the cytoskeleton in health and disease, and much else besides. The longest chapter by Ishak surveys the recent literature on diagnostic liver pathology with 921 references, a truly encyclopaedic cover of the subject. It is indeed a condensed textbook of liver pathology in itself. The editors must be congratulated on the speedy production of this compendium and the publishers on its high physical quality. It is a must for all those interested in liver disease, but its high price places it in the category of library purchases rather than the range of individual pockets.

PP ANTHONY

Atlas of Tumors of the Facial Skeleton. Odontogenic and Nonodontogenic Tumors. J Prein, W Remagen, B Spiessel, E Uehlinger. (Pp 162; DM 368.) Springer. 1986. ISBN 3-540-16167-8.

This book is based on 1256 cases contributed by clinics and laboratories in 53 cities to a Registry established in 1971 by Dösak (German Austrian Swiss Association for the Study of Tumors of the Face and Jaws). Seventeen chapters deal with tumours, tumour like lesions and cysts arising from odontogenic tissues, and a further 17 deal with tumours and tumour like lesions of bone. Each chapter describes a single type of lesion, and consists of a short text followed by clinical radiographs and photomicrographs; all of the latter are in colour. The text gives a summary of each

lesion under the subheadings "synonyms", "history", "epidemiology", "clinical features", "radiographic features", "morphology", "differential diagnosis" (both radiographic and histological) and "remarks". The translation from the German is excellent, and mostly of these summaries are helpful, but those on "synonyms" are full of traps for the unwary, and "differential diagnosis" sometimes omits common and difficult problems. The radiographs are mostly good, but the photomicrographs are rather variable, and the illustrations do not always bring out important diagnostic features. This attractive atlas illustrates well the value of bringing together the clinical and pathological evidence; it is a useful supplement to more formal texts, but is too brief to be used alone.

IRH KRAMER

Recent Advances in Anaerobic Bacteriology. New Perspectives in Clinical Microbiology. SP Borriello, JM Hardie. (Pp 337; £65.75.) Martinus Nijhoff. 1986. ISBN 0-89838-847-3.

Many of the chapters are expert contributions that review the state of the art as it was in 1985; these include Eley and Greenwood on newer antibiotics, Hamilton on sulphate reducing bacteria, and Taylor and Phillips on the taxonomy of anaerobic cocci. Some of the papers, however, are frankly "pot boilers".

One departure from conventional treatment of scientific publications is the inclusion of group photographs (of uniformly poor quality) of symposium contributors. These are unhelpful, and, mindful of the published price of £65.75 (about 14 words per penny), they should have been omitted. Editorial problems, such as duplication of one full page of the List of Contributors, and misspelling of the name of Professor Esmon, are infrequent.

The book is handsomely bound, but its high price will ensure a restricted market.

AT WILLIS

Neoplasia in Infancy and Childhood. Perspectives in Pediatric Pathology. Vol. 9. Ed HS Rosenberg, J Bernstein, WA Newton. (Pp 248; £100.) S Karger. 1986. ISBN 3-8055-437-5.

This volume of six review articles contains four contributions in specific areas of pathology—histiocytosis X, lymphohistiocytosis, leukaemia and osteosarcoma. There are two reviews on general topics; the role of

electron microscopy, and of tissue culture in the study of selected tumours. Only the purist will quibble with the inclusion of the histiocytoses in a volume on neoplasia. The chapter on histiocytosis X provides a clear and balanced account of the pathology and cytology of the condition with helpful guidance on differential diagnosis and prognosis. By contrast, the review of lymphohistiocytosis is disappointing, mainly because of the format which consists largely of a comparison, organ by organ, of the distribution of infiltration in this condition and in fatal Letterer-Siwe disease. The contributions on the leukaemias and osteosarcoma of childhood are excellent, clearly written, and informative. The claims for the role of electron microscopy in tumour diagnosis are fairly presented; the emphasis is mainly on the "small round cell" group of tumours and correlation with other diagnostic methods such as immunohistochemistry is advised. The review of tissue culture points to contributions in the field of tumour biology and regulation of tumour cell growth. This is a well produced and beautifully illustrated volume and a welcome addition to this series, which deserves to be better known in the UK than it is. Unfortunately, the price does not help in this respect.

AAM GIBSON

Gastric Carcinoma. Current Problems in Tumour Pathology. Ed. MI Filipe, JR Jass. (Pp 297; £40.) Churchill Livingstone. 1986. ISBN 0-443-03166-5.

The identification of high risk groups with consequent diagnosis at an early stage represents perhaps the only realistic means of improving the prognosis of gastric carcinoma in this country at the present time. The pathologist has an important role to play in both these endeavours and this book provides wide ranging and important practical and theoretical information through which this role may be enhanced. Of particular value are the detailed accounts of techniques such as mucin histochemistry and DNA analysis which are beginning to supplement the time honoured histological methods, but it is apparent that much still needs to be done regarding the definition and terminology of precancerous lesions such as dysplasia and metaplasia. There are, nonetheless, most useful chapters dealing with pre-cancerous conditions in general, as well as early gastric cancer and the classification of gastric carcinoma. The question of cytology receives excellent coverage and it is encouraging to see this technique

acknowledged not just as an expensive luxury but as a routine procedure. Whilst many questions about gastric cancer plainly remain to be answered there is no doubt that this book will prove to be immensely helpful to both gastroenterologists and pathologists who have to face up to the problems presented by this formidable disease.

FD LEE

The Role of Cyclic Nucleic Acid Adducts in Carcinogenesis and Mutagenesis. Proceedings of an International Meeting held in Lyon, France (IARC No 70). Ed B Singer, H Bartsch. (Pp 467; £40.) Oxford University Press. 1986. ISBN 92-832-1170-7.

This volume contains the proceedings of an IARC sponsored meeting held in 1984. Like many symposium volumes its contents are thus dated to a certain degree. Unlike many, however, there is a useful degree of coherence in the topic addressed. The peer reviewed papers provide a non-specialist with an overview of an important topic in chemical carcinogenesis studies: the formation of exocyclic nucleic acid base adducts. The foreword claims that it is the first comprehensive overview of this subject. The late Tony Loveless and his colleagues at the Institute of Cancer Research provided much of the original stimulus for this type of work with their seminal studies of bifunctional alkylating agents and the role of nucleic acid base modifications in mutagenesis and carcinogenesis. It is now over 20 years since it was shown that cyclic nucleic acid adducts can be formed in the test tube by the reaction of purine and pyrimidine bases with bifunctional agents such as glyoxal. The essential reaction consists of the addition of a further ring system or systems to the heterocyclic bases. Some cyclic adducts may have miscoding properties with respect to transcription, others may cause faulty base pairing during replication and others may cause DNA cross linking. Not only is their mechanism of action potentially diverse but it is now clear that a wide variety of chemicals can react with nucleic acid bases in this manner, including several environmentally suspect agents (vinyl chloride). Most such reactions involve labile metabolic intermediates, and complex rearrangements to yield the final stable adducts. Much work has therefore been devoted to the identification of these reaction mechanisms. About three quarters of this volume consists of papers which explore the chemistry of cyclic adduct formation by vinyl halides, carbamate esters, haloalkylnitrosoureas, bifunctional aldehydes,

and aromatics. The biological relevance of many of these test tube reactions has, however, proved more difficult to establish. Not only may intact DNA and its associated proteins protect bases from specific chemical modifications that proceed readily *in vitro* but intermediates in cyclic adduct formation may be of greater genotoxic relevance than the final stable adducts; whether DNA repair enzymes can remove cyclic adducts is also uncertain. One approach to this problem is to identify and measure adducts in cells themselves. The final section of this book, which is regrettably short, is devoted to such methods, many of which still seem to be in their infancy. In short, therefore, this book contains much that will interest chemists, toxicologists and possibly epidemiologists. There is, however, little enlightenment for the biologist seeking a simple answer to the question of what in fact is the role of cyclic nucleic acid adducts in carcinogenesis. This it should be said is simply a reflection on the present state of knowledge.

MJ O'HARE

Separation of Human Blood and Bone Marrow Cells. FMK Ali. (Pp 248; paperback £17.75.) John Wright. 1986. ISBN 0-7236-0698-6.

This book is essentially a manual of techniques for the collection, separation, and identification of cell fractions and subtypes from peripheral blood and bone marrow. Its scope is comprehensive, including details of isolation of erythroid progenitors from cell culture systems as well as more standard techniques of leucocyte separation by density gradient centrifugation and adherence. The principles of the main methods are discussed at the beginning of each chapter.

Where the author has been particularly successful is in the wealth of practical information she provides, from supplies of materials, through fine technical and logistic details of the methods, to useful comments on the reproducibility and relative merits of each technique. The writing is clear and the layout readable, and the whole book is sensibly sized and priced, with more than 350 references.

For whom will this book be useful? While many techniques will fall outside the requirements of most haematology laboratories, centres undertaking bone marrow culture and immunological investigations will find it a valuable addition to their libraries. In particular, individuals just beginning