immune mechanisms in the fetus and newborn (W. C. Marshall) add to the wealth of information one can find here.

The book is generally well illustrated; Figure 3-1 is rather complicated to produce in this size, and the type is just readable; the text (page 168) refers to liver lesions shown in Figure 5-8, but one finds this is an x-ray of chest; in Table 5-2 the total number of cases, shown in the heading as 167 and in the table as 169, do not tally.

These, however, are minor details which do not detract from the value of the book, and I would regard it as a valuable asset to the library shelf of all workers, both clinical and laboratory, in this field.

JEAN M. SCOTT

Aids to Pathology. By Michael F. Dixon. (Pp. vii + 245; illustrated; £3.50.) Edinburgh, London, New York: Churchill Livingstone. 1978.

Abraham Lincoln, on being asked to recommend a book, is alleged to have written: 'For people who like this sort of book, this is the sort of book they will like'. In the case of *Aids to Pathology* I am tempted to do the same since I must confess a prejudice against the presentation of knowledge in the form of lists of facts to be memorised swiftly in the pre-examination period and then, as swiftly, to be forgotten. It is true that this book is presented as a 'revision guide' and not as a substitute for a conventional textbook, but many years' experience of medical students has taught me that they are likely to use inexpensive texts of the 'Aids to' variety as their only personally owned textbook. This having been said, the contents of this book, especially in the general pathology section, are up to date and well presented and show evidence of a considerable degree of scholarship on the part of the author.

N. WOOLF

Pulmonary Pathophysiology—the Essentials. By J. B. West. (Pp. ix + 227; illustrated; £7.50.) Oxford: Blackwell. 1977.

Based on lectures to medical students, this book, a companion to *Respiratory Physiology: the Essentials*, is also intended for a wider qualified audience. The first section discusses some of the many available tests of lung function in a lucid and balanced manner with excellent simple line diagrams that are a feature throughout the book. The second and

third sections on the function of the diseased and the failing lung also provide concise explanations of the abnormal function that may be present—particularly the sections on respiratory failure, mechanical ventilation, and chronic bronchitis and emphysema. However, the physiological discussions compete for space in this very concise volume with clinical and pathological accounts of each disease that are very dogmatic and simplified but do set the scene for the discussion of functional abnormality. Brevity forbids but the shortest explanation of some more complex concepts—inequality of ventilation, O_2 - CO_2 diagram, and the technique of estimating ventilation and perfusion inequality, the effects of which are mentioned frequently enough in the text to have deserved longer introductions. The book adequately references larger works and is easy to read apart from one bad typographical error on page 196. Its generally clear style should make this book invaluable for medical students, and the physiology at least should be helpful for 'anaesthetists, cardiologists, intensive care personnel and respiratory therapists'.

S. G. SPIRO

Hepatotropic Factors. Ciba Foundation Symposium 55 (new series). Edited by Ruth Porter and Julie Whelan. (Pp. ix + 405; illustrated; \$36.00.) Amsterdam: Excerpta Medica. 1978.

This book is another in the excellent series arising from Ciba Foundation Symposia. The aims of the symposium were to accumulate authoritative opinion on the highly complex subject of hepatotropic factors—circulating factors which are thought to stimulate and/or protect the liver in respect of growth and regeneration. Contributions have been made from experts in the fields of *in-vitro* studies using isolated hepatocytes, from those using refined surgical techniques to investigate the phenomena in experimental animal models, and from those working to alleviate liver-orientated problems in the clinical situation. This conglomeration of varying fields of interest has provided fertile ground for the discussion of ideas, production of hypotheses, and constructive criticism.

Each chapter contains a brief review of the present knowledge from the author's standpoint and progresses to conclusions drawn from experimental or clinical data. Sufficient technical information is provided to facilitate understanding of the

methods employed, and for those wishing to delve deeper into scientific or surgical techniques a comprehensive bibliography follows each chapter. The discussions arising from each presentation are reported, along with a general discussion at the end of the symposium, and these are particularly valuable since they allow for views to be expressed from different angles and with the introduction of new information where relevant. The exact nature and mode of action of the factors controlling liver growth and regeneration are not resolved by this symposium, but the whole field is exposed to the most contemporary scientific and clinical scrutiny. Interesting new developments in techniques for the study of isolated hepatocytes and for measuring liver parenchymal blood flow are reported, and it seems that these and other sophisticated methods reported in the book should advance knowledge in this field for the future.

The book has been set out in such a way that the natural progression from studies on isolated cells through to clinical observations in certain disease makes it eminently readable, and yet so much up-to-date information has been included that it will also find service as a reference text for anyone involved in the study of liver function, liver regeneration, and control of liver growth in relation to body growth. The spectrum of participants has ensured that the book will be of interest to anyone working on problems associated with liver whether they be physiologists, biochemists, endocrinologists, gastroenterologists, or surgeons.

B. J. FULLER

Neisseria gonorrhoeae and Gonococcal Infections. Report of a WHO Scientific Group. Technical Report Series 1978. No. 616. (Pp. 142; illustrated; Sw. fr. 12.) Geneva: WHO. 1978.

In November 1976 a WHO Scientific Group concerned with *Neisseria gonorrhoeae* met in Geneva to (i) evaluate the present knowledge about *N. gonorrhoeae* and the infections and complications produced by it; (ii) determine the most constructive lines of research that should be pursued; and (iii) produce a control policy. The Group's deliberations, presented in detail, cover the following aspects: components of gonococci (pili, capsules, lipopolysaccharides, etc); pathogenesis (attachment, invasion, rôle of phagocytes, etc); animal models (types and

their need); immune response (humoral and cell mediated); epidemiology (incidence and prevalence rates; association with infertility); possibilities for predicting future incidence); clinical manifestations; collection, isolation, and identification of gonococci; antimicrobial susceptibility (including a section on β -lactamase producers and an appendix on their detection); therapeutic and control measures. Each section has recommendations for further study and a comprehensive list of relevant references.

The final recommendations are that a more sensitive serological test should be developed and the rôle of gonococcal components in pathogenesis be determined. Furthermore, there should be continuous surveillance of antimicrobial susceptibility and attention to antibiotics other than penicillin. The book is a fund of information for those interested or indeed actively working in the field, and although appearing more than one year after the Geneva meeting it is still up-to-date and can be highly recommended.

D. TAYLOR-ROBINSON

Evans' Histological Appearances of Tumours. 3rd edition. By David J. B. Ashley. (Pp. ix + 857; illustrated; £40.00.) Edinburgh, London, New York: Churchill Livingstone. 1978.

This well-known book has made a welcome reappearance after a lapse of 12 years ably revised and with much new material by Dr D. J. B. Ashley. The book retains its familiar pattern with detailed accounts of tumour histology coupled with a discussion of the histogenesis. There is a particular emphasis on clinical features and presentation. This comprehensive coverage makes 'Evans' valuable as a bench book, and its up-to-date references provide a good starting point for further reading. In the maze of journals and monographs available today the single-author approach has much to commend it for those trying to get an oversight, and the book is particularly useful for those preparing for the MRCPPath examinations.

There is a new double-column format, which makes for easy reading, and the text is supplemented by many photographs, which overall achieve a high standard though individual ones fall short and are not helpful. My own copy of the second edition fell to pieces after rough usage by a succession of junior

staff; the third edition is commendably bound in a robust fashion.

Dr Ashley is to be congratulated on so ably assuming the task of Dr Winston Evans. He can be assured that the third edition will serve as useful a function as its predecessors.

G. SLAVIN

An Atlas of Artifacts: Encountered in the Preparation of Microscopic Tissue Sections. By S. W. Thompson and L. G. Luna. (Pp. xi + 190; illustrated; \$21.) Springfield, Illinois: Charles C. Thomas. 1978.

To be asked to review this book brings out the paranoia, but all histopathologists live in a little world of artifacts. Come clean—do some of your sections contain artifacts that should not be there? As your laboratory repertoire and its equipment have proliferated, have the routine H and E sections deteriorated? Those who can say 'no' are heaven born (all pathologists are, of course, honest); the rest of us must take this book seriously.

It is vast, with over 450 monochrome photomicrographs, 48 repeated in colour. It is comprehensive, starting with 'artifacts' like carbon particles and foreign body reactions that are not artifacts, and ending with a defective mounting medium, which is not now available and which we did not use when it was. In between are lots of adequate photographs of all the artifacts that you have ever seen, and more besides. Many are old rogues that we have known since our school days.

The purpose of a book of this kind is clear—to demonstrate artifacts, state their cause, and tell us how to avoid them. Does it succeed? Yes, up to a point. It is easy to pick up and glance at, almost impossible to read. The text is not progressive; it is made up of short legends to figures that are not set out in the same pattern as the photographs, and when it tries to do this, gets it wrong (pp. 36, 48, 158). It is repetitive, with 15 photographs of ice crystal artifacts, and 18 of mercury pigment, both of which we know about anyway. The scrappy text never has the chance to explain the complexity of some artifacts which may be multifactorial, nor does it stress that a technical defect can cause multiple cutting or staining artifacts. Pathologists will not enjoy being told that the majority of fixation artifacts are the fault of the pathologist (p. 22).

An important book—buy it, read it, and leave it in the tea-room. It will provoke argument and may well improve your sections, but there is still a place for

other books on this subject.

P.S. Is it artifact or artefact? Ars, artis, third declension, feminine; arti- is an old spelling of the ablative case, still extant in Caesar. Both spellings are respectable.

R. A. B. DRURY

Structure and Function of Cells. By Colin R. Hopkins. (Pp. xiii + 266; illustrated; £3.50.) London, Philadelphia, Toronto: W. B. Saunders. 1978.

Any book that bridges the gap between two subjects in the medical curriculum must be a good idea. In this case it is the correlation of biochemistry with cell structures as revealed by various histological techniques and especially by electron microscopy.

The text is clear and concise and it is well illustrated by good micrographs and useful diagrams. It is possible that in fact it is a bit too concise and full of information for easy reading by the average medical or science undergraduate at whom it is primarily aimed. It would perhaps appeal more to medical students on intercalated BSc courses or postgraduates taking up careers in medical sciences, ie, those who already have an acquaintance with the relevant terminologies. In any case, the surprisingly low price puts it within the pocket of 'students' at all levels.

To read such a correlation of biochemical function with ultrastructure is very satisfying, and a pathologist is left with the desire to extrapolate the findings in normal cells to those of pathological process such as neoplasia.

JULIE CROW

Progress in Clinical Pathology. Volume VII. Edited by Mario Stefanini. (Pp. xv + 397; illustrated; \$48.50; £31.50.) New York, San Francisco, London: Grune and Stratton. 1978.

This mainly American volume is one of a series said to be directed primarily, but not exclusively, at the pathologist who practises in a community hospital and not a large university hospital, or within the walls of a medical school. If this is the aim, the standard of chapter content is extremely variable, dealing with essential everyday knowledge—for example, in the chapter on the clinical assessment of the kidneys—to topics hardly yet out of the research category, such as cyclic nucleotides and clinical problems.

In Britain, where the trend to increasing