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

specialisation has continued, a book that encompasses the entire field of pathology is unlikely to be as popular as a single-discipline treatise directed at experts in that discipline.

Although the book is expensive it is eminently readable, the more general chapters on the evaluation of methods in clinical chemistry and the place of the computer in medical bacteriology and the chapter on shared clinical laboratories being perhaps more generally useful for the specialist reader. The latter chapter is of particular interest should the potentially wider exploitation of private practice in Great Britain become a reality.

G. W. PENNINGTON

Microbiology. Molecules, Microbes and Man. 2nd edition. By Eugene W. Nester, C. Evans Roberts, Nancy N. Pearsall and Brian J. McCarthy. (Pp. xii + 769; illustrated; £10.00.) Eastbourne, Sussex: Holt Rinehart and Winston. 1978.

Reviewing textbooks designed for American undergraduates is usually something of a chore as they seldom come anywhere near to what we expect for our medical students. This one is different. Apart from the inevitable idiosyncrasies of spelling (mold, ameba—though the glossary allows amoeba—sulfa) and an understandable dwelling on things American (I did not know that Frau Hesse, who was responsible for the introduction of agar, came from New Jersey) I found much that I teach, and quite a bit more that I liked. This arises from the fact that the authors clearly have the needs of preclinical students of medicine and 'health-related fields' in mind.

The book has five main parts. The first, 'Foundations of Microbial Life', although it includes material taught either at school or in preclinical departments of physiology or biochemistry in the UK, also includes much that I teach preclinical students, neither falling below nor exceeding requirements. I found the chapters on bacterial anatomy, growth, metabolism, and genetics particularly good.

Part II, 'The Microbial World', also contains much that is relevant and little that is irrelevant to the preclinical student. The descriptions of bacteria are brief and shorn of most technical detail, and those of medical importance are distinguished in an Appendix.

Part III, 'Microbes and Human Beings' (perhaps 'Man' is no longer permissible), takes up almost one-third of the book.

The aim is to illustrate ideas rather than produce a comprehensive treatise on infection, and one should not be surprised that *Streptobacillus moniliformis* and its L-forms has as much space as *Staph. aureus*. The book is, after all, not aiming to provide teaching on the diagnosis and management of infection. A welcome innovation in a book of this kind is the consideration of pathogens under the headings of the diseases that they cause, which is the way many medical teachers now approach the subject. Once again, British students may find offensive the elementary anatomy that introduces some of the sections. The chapters on epidemiology and antimicrobial agents were among the few that I found inadequate.

The remaining sections on 'The Environment' and 'The Continuing Frontier' are not strictly relevant to the medical undergraduate but provide interesting collateral reading.

In conclusion, I commend this book to the attention of those who teach pre-clinical medical students. Even if our students cannot afford to buy the book individually, it could usefully be given space on library shelves.

I. PHILLIPS

British Medical Bulletin, Volume 34, No. 2, 1978. 'Thrombosis'. Scientific editor Duncan Thomas. (Pp. 101-212; illustrated; £5.00.) London. The British Council. 1978.

'Thrombosis' follows the recent issue on 'Haemostasis', and the two provide an excellent and up-to-date review of all major topics in this complex field. The issue on 'Thrombosis' combines successfully the biochemistry and pathology of thrombosis in the first seven papers, with the clinical, diagnostic, pharmacological, and epidemiological aspects in the remaining eight articles. This Bulletin is a useful addition to any postgraduate library and of major importance to those in the field of thrombosis, for whom it provides up-to-date references and competent summaries of current views.

M. BROZOVIC

Chelation Therapy in Chronic Iron Overload. Edited by Edward C. Zaino and Richard H. Roberts. (Pp. x + 148; illustrated; \$17.95.) Miami: Symposia Specialists. 1977.

These papers and discussions from a one-day conference held in New York in May 1977 reflect a renewed hope that

toxicity from chronic iron overload, particularly in the thalassaemia disorders, may be preventable. Several participants show that prolonged intravenous or subcutaneous infusions of the iron chelator desferrioxamine give much more effective negative iron balance than intramuscular injections. The reported studies of possible clinical benefits and hazards of intensive chelation with desferrioxamine rely mainly on cardiac function tests and are very preliminary. It is clear, however, that at present there is no oral iron-chelating agent likely to match parenteral desferrioxamine. It is therefore disappointing in a symposium co-sponsored by the manufacturers, CIBA, to find no hint of work on more practical alternatives (such as a slow release preparation of the drug) to replace the chronic use of a subcutaneous infusion pump. Much of the data has since been published elsewhere, limiting the book's value even for those working in this field.

M. J. PIPPAID

Atlas of Neonatal Histopathology. By A. Moragas, A. Ballabriga, and Maria Teresa Vidal. Translated by A. Valdes-Dapena, M. A. Valdes-Dapena and N. B. Saunders. (Pp. xv + 238; illustrated £43.75.) Philadelphia, London, Toronto: W. B. Saunders. 1978.

This is a superbly produced volume based on 3000 necropsies on neonates in Barcelona. All of the 376 illustrations are well chosen colour photomicrographs of very high technical quality. They are each accompanied by a concise informative case-history, which has clearly lost nothing in translation by the Valdes-Dapenas. The range of material presented is very comprehensive and includes much that is relevant to the postneonatal period of childhood. The placenta is omitted as are those subjects like malformations of the heart, which are not suitable for illustration by photomicrographs. Both the pictures and the text clearly indicate an underlying very high standard of clinical and pathological practice.

Unlike many atlases, the book is of convenient size to go on library shelves. At the sale price it will clearly remain a connoisseur's item. This is a pity as it has much to offer the trainee and, indeed, many items of interest to the experts in this field.

A. H. CAMERON