certain areas might have been advisable.

In conclusion, while this book will certainly be of help to the audience for which it is intended, one cannot but have certain serious reservations concerning its suitability for pathologists, both undergraduate and postgraduate.

G. B. D. SCOTT

Mucosal Biopsy of the Gastrointestinal Tract (Volume 3 in the Series Major Problems in Pathology). By Richard Whitehead. (Pp. x + 202; illustrated. £4.50.) London, Philadelphia, and Toronto: W. B. Saunders Co. 1973.

As the fibrescopes proliferate, so the need for an authoritative and practical work on this subject increases. Now that the small intestine can be seen from both ends, and the intervening area can be biopsied under remote control, there is no part from which smaller and smaller biopsies cannot be taken and presented to the pathologist. Since many of the advances in this subject have been the product of clinical studies, this puts the pathologist on his mettle.

'Mucosal biopsy of the gastrointestinal tract' is comprehensive and reasonably short. The pathology and significance of gastritis is described and discussed in detail and the author's classification will be known to readers of this Journal. Japanese workers have already demonstrated that by the critical use of radiology and multiple mucosal biopsy it is possible to identify and treat gastric carcinoma in the intramucosal stage, but the chapter on gastric epithelial dysplasia and early gastric carcinoma contains only a page of text. This is a chapter which one hopes will need expansion in the future. The rare conditions, including parasitic infestations, are well described and throughout the book the photomicrographs (many at $\times 70$) are of a good quality.

In general hospitals mucosal biopsies tend to be taken for the assessment of malignancy in gastric ulceration; the investigation of malabsorption; the distinction between Crohn's disease and ulcerative colitis; and the recognition of early carcinomatous change in the colon. Crohn's colitis is well described but the section on precancerous changes of the colon is unlikely to solve all our problems. An attempt to clear away some of the confusion caused by the classification of small intestinal villous atrophy as partial or subtotal is welcome, but a close correlation with the dissecting microscope appearances and enzyme deficiencies is

needed. The author's aim of meeting the needs of the practising histopathologist is an impossible one, but has been achieved sufficiently to make this book the one to which we shall often turn.

R. A. B. DRURY.

The Physiopathology of Cancer. Volume 1. Biology and Biochemistry, 3rd ed. Edited by F. Homburger and P. Shubik. (Pp. xiv + 407; 32 figures. £14.30.) Basel: S. Karger AG. 1974.

This is the first of a two-volume third edition of a book first published in 1953. A second volume—on diagnosis, treatment, and prevention—is being prepared. Despite its general title, this first volume is concerned only with carcinogenesis (six chapters) and tumour-specific antigens (one chapter). Chapters on chemical carcinogenesis (B. L. Van Duuren, G. Witz, and A. Sivak) and naturally occurring carcinogens (G. N. Wogan) cover a lot of ground but not always in much detail or very critically. A further three chapters are concerned with two-stage theories of carcinogenesis. I. Berenblum who, with P. Shubik, wrote classical papers on this subject during the 1940s, speculates, unconvincingly, that tumour initiation results from the binding of chemical agents to nucleic acids and tumour promotion from their binding to cell proteins. More pragmatically, F. Homburger discusses 'modifiers' of carcinogenesis among which he includes cocarcinogens, factors which influence immune status, absorption, tissue concentrations, metabolism, excretion of carcinogens, and host factors such as age, sex, endocrine, and nutritional status. F. Stenbäck, H. Garcia, and P. Shubik cover some of the same ground in a generally more thoughtful contribution. W. H. Kirsten and S. B. Panem provide a useful contribution on viral oncogenesis while R. W. Baldwin competently but unexcitingly reviews tumour-specific antigens. Little attempt seems to have been made to coordinate the contributions from different sets of authors to an otherwise well-produced book which contains few facts or thoughts that are uniquely new.

FRANCIS J. C. ROE

Pathology of the Ear. By I. Friedmann. (Pp. x + 607; illustrated. £14.00.) Oxford, London, Edinburgh, Melbourne: Blackwell Scientific Publications. 1974.

The object of this work is to provide a comprehensive account of the pathology

of the auditory system, stopping at the internal auditory meatus, so to speak, where the neurologists take over. The audience the author hoped for 'is the advanced student and in particular the postgraduate who is training in otolaryngology or pathology'. His method is to proceed from without in, preceding any pathology by an account of the normal anatomy and histology supplemented as required by an extremely effective historical review. The study of the external ear and middle ear cleft is presented along logical traditional lines until one reaches at page 278 that the general pathology has not only been presented painlessly but that a very substantial account of otosclerosis has been included.

The pathology of the inner ear and deafness is really a monograph unifying the histopathology, audiometry, and biochemistry of the disordered labyrinthine and vestibular systems, the whole copiously illustrated, prominently by electromicrographs. Though Imrich Friedmann is an acknowledged master of electron microscopy in otology and in the experimental use of the tissue cultured otocyst he gives these topics no more than their due place. The whole work is characterized by judicious balance.

The bibliography and index are outstandingly good. The former is a necessary supplement to the inevitably sketchy chapter on neoplasia. The whole book is written in a style which makes for easy reading and comprehension. The detailed methodology in the third, technical, section will ensure its use by a wider market than the author envisaged.

This is an important contribution to pathology, which is recommended reading.

A. LEVENE

Medical Microbiology: Quality Cost and Clinical Relevance. By Raymond C. Bartlett. (Pp. xvii + 252; 84 figures. £8.25.) New York: John Wiley and Sons. 1974.

The cost of pathological investigations has, perhaps, been more in the forefront of the American doctor's mind than in that of the average British doctor, but the state of the National Health Service is forcing us all to take a close look at the work we do in an attempt both to cut the cost and to improve the service to the patient. In this book the Director of Microbiology at Hartford Hospital, Connecticut, looks at quality, cost, and clinical relevance of the service provided by microbiological lab-

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oratories with examples from his own department.

The author has a set policy, with which few will disagree, for the material he will accept and he has laid down the procedures for investigation and reporting such specimens in order to give meaningful results—with these some microbiologists will inevitably disagree.

The most valuable sections of this book, in the reviewer's opinion, are the sections on quality control, work loads, space, and personnel. Few laboratories will be able to match the system of records for control at all stages of laboratory work and some may consider them unnecessarily exacting but the well set-out information makes the book invaluable for laboratory administrators both medical and technical.

In an attempt to make diagnostic microbiology efficient and accurate, however, Dr Bartlett has disguised the fact that it is also an extremely interesting occupation, and produced a book which resembles an army manual incorporating American laboratory slang.

M. P. JEVONS

Tumors of the Male Genital System. By F. K. Mostofi and Edward B. Price, Jr. (Pp. xiv + 310; illustrated. \$8.00.) Atlas of Tumor Pathology, Second Series. Fascicle 8. Washington, D.C.: Armed Forces Institute of Pathology. 1973.

This fascicle covers tumours of the testis and epididymis, the paratesticular tissues, the prostate, the seminal vesicles, the male urethra, the penis and the scrotum. Not unreasonably, well over half the text is devoted to testicular neoplasms. Introductory paragraphs on the embryology and anatomy of the testis, and on the experimental approach to the histogenesis of testis tumours, are useful.

Problems of nomenclature and classification still plague us. Mostofi and Price discuss the 'British' classification promulgated in 1963, but reject it in favour of their own which is similar to that recently proposed by the World Health Organization. However, the experienced pathologist will have little difficulty in correlating the different classifications, and will find the fascicle of considerable value. On the whole, the illustrations are of good quality, and the text is well written. The inclusion of an index is welcome, as it is in other fascicles of the Second Series. It is unfortunate that proof reading did not eliminate the necessity of an erratum sheet listing seven corrections.

N. F. C. GOWING

Immunohematology Syllabus. By Richard E. Rosenfield. (Pp. iv + 108; illustrated. \$5.75.) New York: Intercontinental Medical Book Corporation. 1974.

This book helps to define where immunohaematology stands in relation to the newly emerged and separate discipline of immunology. The author, an acknowledged expert in this field, sets out to explain in physical and chemical terms many of the biological reactions familiar to blood group serologists. In doing so he takes us near the fringe of knowledge and the less serious reader will find parts of the book rather heavy going.

The case development problems presented at the conclusion of several chapters test the student's comprehension of the preceding text but one has to avoid the temptation of turning the page too quickly to read the expert answer.

Sections dealing with Rh problems will be sadly incomprehensible to many readers in this country as the author often uses a numerical notation system without simultaneous use of the Fisher alternative.

Haematologists, forensic pathologists, obstetricians, and genetic counsellors will find different sections of special interest, and there are a number of very useful tables for future reference. Candidates for the final examination of the MRCPath should read the book, but should not expect to meet many examiners putting questions at this level.

W. J. JENKINS

Needle Biopsy. By Thomas J. Deeley. (Pp. viii + 170; illustrated. £3.50.) London: Butterworths. 1974.

This small book gives details of the design and use of the various needles and trephines which are available for biopsy, including those devised for special sites such as prostate and lung. Prominence is given to the high speed drill apparatus which was developed by the author and which bears his name (Morrison-Deeley drill). The limitations and dangers of the various procedures are adequately discussed. In view of his extensive experience it is of interest to note the author's conclusions regarding the low risk of tumour dissemination along the needle track and to more distant sites. More might have been said about aspiration cytology and the preparation of tissues for electron microscopy because of their increasing use in clinical pathology.

It is evident that the author achieves

considerable success with the drill technique having obtained useful information in 92% of a consecutive series of 500 biopsies with very few false negative results. Further data on the adequacy of needle biopsy are presented for individual tissues and organs but have limited value because of the lack, in many cases, of pathological details and information on follow-up investigations of negative results.

The indications given for biopsy at various sites are mostly incomplete and sometimes misleading. Thus it is stated that jaundice in general rarely merits liver biopsy; it is implied that needle biopsy of cold thyroid nodules is adequate to confirm or exclude malignancy; the list of diseases detectable by liver biopsy includes leprosy but there is no comment on the value of the procedure in distinguishing extra- from intrahepatic obstructive jaundice; the bone biopsy chapter excludes all reference to the assessment of metabolic and endocrine disorders of this tissue; the indications for renal biopsy are discussed in one short paragraph. From these examples it should be evident that the book is only of value to those pathologists who may be concerned in performing biopsies and who require some guidance on available techniques, and to those seeking data on the adequacy of needle biopsy as a diagnostic procedure, mainly in neoplastic conditions.

R. S. PATRICK

The Eye and Its Disorders. By Patrick Trevor-Roper. (Pp. ix + 726; illustrated. £11.00.) Oxford, London, Edinburgh, Melbourne: Blackwell Scientific Publications. 1974.

The prototype of this book appeared in 1955 with a second edition in 1962 under the title of 'Ophthalmology: A textbook for diploma students', but unfortunately two years after the appearance of the second edition all the remaining copies of the book were destroyed by a devastating fire in the warehouse of the publishers—Lloyd-Luke (Medical Books) Ltd, London—and it appears now in a revised form with a new title and different publishers. It is evident, however, that the book retains much of its original style which is of an elegant nature in keeping with the writings of the author in so many aspects of ophthalmology or in related topics, and it is greatly to his credit that such a wealth of information is presented on so many