Book Reviews

Immunology in Clinical Medicine By J. L. Turk. (Pp. xi + 226. 40s.) London: William Heinemann Ltd. 1969.

The subjects learnt by medical students tend to be fragmented and each specialist is apt to consider his own field without relation to clinical disease. This is true even in immunology, although this subject throws light on diseases as diverse as systemic lupus erythematosus and malignant melanoma.

It is, however, difficult to write a good textbook of immunology for medical students. This is in part because those not immersed in the field lack the knowledge to write it, while those with detailed knowledge of immunology often lack a feeling for the needs of the medical student and the motivation to write a didactic text. Moreover, the temptation is to write a book which is too detailed and is directed towards the fundamental rather than the clinical aspects of the subject. Dr Turk has succeeded in writing a clear and fairly dogmatic account of immunology which covers most of the field and is not confined to his own special interests. The scope of the book is well described in the preface. He states that a textbook of immunology 'should discuss the immunological concepts underlying disease processes rather than the principles behind laboratory tests' and correctly emphasizes that books of multiple authorship often present either a 'confusion of opinions' or omit important topics. The bibliography is a valuable feature of the book and should serve to entice research-minded students into laboratory work.

The outline of fundamental immunology deals somewhat cursorily with the involvement of both thymus- and bone marrow-derived cells in immune responses, and the existence of high and low tolerance might have been emphasized because of its relevance to the possibility of deliberately inducing tolerance with transplantation antigens in humans. The value of the book would be increased if the principles and significance of common immunological tests were gathered together in the appendix. A glossary of immunology terms would also help. There are a few minor errors of interpretation which presumably will be altered in the second edition.

This book can be wholeheartedly

recommended to medical students and it is pleasing to see a good text book written this side of the Atlantic.

G. L. ASHERSON

Recent Advances in Immunopathology and Blood Transfusion Special issue of *Vox Sanguinis*, Vol. 16, nos. 4-5. (Pp. 208; 40 figures and 20 tables. 50s.) Basel and New York: S. Karger AG. 1969.

In May 1968 the Netherlands Red Cross Blood Transfusion Service celebrated the 25th anniversary of the founding of its Central Laboratory in Amsterdam. All who have been privileged to visit this centre during those years have always returned home transfused and enthused by the high standard of research being undertaken. This special number of *Vox Sanguinis* contains 23 papers read by distinguished immunohaematologists from western Europe and north America at the 25th Anniversary Conference, and is not only a valuable survey of immunopathology and blood transfusion as they are being currently developed but also a fitting tribute to the outstanding contribution made by Professor J. J. van Loghem, director of the Central Laboratory, and his staff to progress in this field.

The papers fall into three sections: recent advances in immunopathology and blood transfusion; autoimmunity in mice and man; the optimal use of human blood. Included also are the post-lecture discussions and a report of a glutathione workshop held during the Conference.

G. F. TOVEY

Tumors of The Breast By R. W. McDivitt, F. M. Stewart, and J. W. Berg. Atlas of Tumour Pathology, Second series, Fascicle 2. (Pp. 156; 120 figures. No price.) Washington: The Armed Forces Institute of Pathology.

The 'Atlas of tumor pathology', comprising multiple fascicles and published by the US Armed Forces Institute of Pathology, has become widely known and appreciated throughout the world during the past 20 years. The decision to proceed with the publication of a second series should be widely welcomed. 'Tumors of the breast' is the second fascicle of this new series.

This fascicle is particularly valuable in that the presentation represents the authors' own experience of the abundant pathological material and clinico-pathological data accumulated at the Memorial Sloan-Kettering Cancer Center in New York. The text is clear and succinct, and the bibliography has been well selected. The fascicle is profusely illustrated by photomicrographs of a uniformly high quality. When dealing with intra-

ductal lesions, particular attention has been paid to the use of adjacent photomicrographs in order to stress those microscopic features which are helpful in differentiating benign and malignant lesions. Although most of the fascicle is concerned, necessarily, with carcinoma of the breast, sarcomas, benign tumours and non-neoplastic conditions which may be confused with tumours (such as sclerosing adenosis) are also discussed.

This is an excellent publication which can be recommended to all practising histopathologists and to their surgical colleagues.

N. F. C. GOWING

Histological Typing of Soft Tissue Tumours By F. M. Enzinger in collaboration with R. Latees and H. Torloni. International Histological Classification of Tumours No. 3. (Pp. 119; illustrated with 152 accompanying colour transparencies. £15.) Geneva: World Health Organization. 1969.

This is the third issue in the World Health Organization's series devoted to the 'Histological typing of tumours' those relating to lung tumours and breast tumours were published in 1967 and 1968 respectively. The present publication comprises 152 photomicrographic colour transparencies (35 mm) and an accompanying booklet. The booklet contains 150 colour plates illustrating the histological appearances of many varieties of soft tissue neoplasia, together with a short text in which the tumours are defined, classified (where possible) according to histogenesis and behaviour, and their microscopic structure is briefly described. A number of non-neoplastic, tumour-like, proliferative lesions (such as myositis ossificans and proliferative myositis) are also defined and illustrated. No attempt is made to give detailed histological descriptions, and there is no bibliography. The collection of slides should prove to be of considerable value for postgraduate instruction, especially in relatively small centres where it would take many years to accumulate such a comprehensive set of photomicrographs. The fact that 16 pathologists in 14 countries collaborated in the production of the proposed classification of soft-tissue tumours is indicative of the advances now being made towards international agreement in the complex field of tumour nomenclature. All such collaborative efforts should be supported, and further publications in this WHO series will be welcome.

N. F. C. GOWING

Canadian Cancer Conference Edited by J. F. Morgan. (Pp. 442; illustrated. £8.) Oxford: Pergamon Press Ltd. 1969.

The Eighth Canadian Cancer Conference held in Ontario lives up to the high standard of its predecessors. The contributions cover nearly the whole range of cancer research from molecular biology to epidemiology and treatment.

Probably of greatest interest to haematologists at least will be the data of Sachs on the homeostatic derangements in leukaemia as revealed by bone-marrow cell culture, and the section by Friend and Rossi on differentiation in virus-induced leukaemic cells. From such evidence we may reasonably hope to identify the exact homeostatic errors that exist in various forms of human leukaemia. A more precise understanding at the molecular level will depend upon our knowledge of intracellular control of cell functions, a subject to which several papers are devoted.

Viruses retain their importance in experimental oncogenesis. For example, there are two papers which explore the basis of susceptibility to leukaemogenic viruses. In both chickens and mice the hypothesis of a single dominant gene responsible for susceptibility has proved on further analysis to be an oversimplification. Other genes or a combination of helper and defective viruses must be invoked to explain the facts.

In six papers on cell antigens we move from the well-founded though complex field of histocompatibility antigens to the much less certain area of tumour-cell specific antigens. The exciting observations of the Hellstroms that lymphocytes from patients with neuroblastoma can inhibit their own tumour cells *in vitro* will need confirmation and amplification. Both they and others emphasize that apparently new antigens in tumour cells may be no more than the reappearance of antigens normally expressed in foetal cells. This conclusion echoes Potter's observation on biochemical mimicry of foetal patterns of enzymes in hepatomas.

Once again what emerges from these proceedings is a notion of the immense complexity of neoplastic processes and of the technical dexterity needed to wrest the smallest quantum of general truth about any of the diverse forms of cancer.

H. E. M. KAY

Renal Stone Research Symposium Edited by A. Hodgkinson and B. E. C. Nordin. (xv + 332; illustrated. 70s.) London: J. and A. Churchill Ltd. 1969.

It is sad that though this symposium was held in April 1968 the proceedings are only published in November 1969. It was a fine gathering of 120 people who between them covered a wide range of topics on this small subject. These

included the historical and geographical differences in the pattern of incidence of urinary stones, the natural history of renal lithiasis, sex and age distribution, organic matrix content and x-ray diffraction studies, micro-radiographic studies in the aetiology of renal calculi, histological appearances in stone formers and non-stone formers, pyrophosphate and stone formation, activity products in urine, primary hyperoxaluria, etc. The book therefore is a mine of information. The papers are short and lucid, but the print is small. One of the most interesting papers is that on the inhibitory effect of pyrophosphate on the formation of stones, and the diminished concentration of this substance in the urine of patients who form stones. Clinically there is the interesting observation that the spouses of stone formers also tend to have a high urinary calcium excretion and that therefore 'the familial incidence of calcium containing renal calculi should not be ascribed to genetic factors unless the influence of dietary factors has been taken into account'. A useful book.

H. E. DE WARDENER

Biochemie der Gefasswand. Biochemistry of the Vascular Wall. Biochemie de la paroi vasculaire International Symposium, Fribourg, June 1968. Edited by M. Cornel and L. Laszt. (Pp. viii + 380; 102 figures and 71 tables. SFr. 80.00, DM 80.00, \$19.20, and £8.) Basel and New York: S. Karger AG. 1969.

This volume records the proceedings of an international symposium held in Fribourg in June 1968. Of the 20 papers, 10 are in German, seven in English, and three in French. Most, but not all, have short summaries in the other languages.

The field indicated by the title is covered in great detail and particularly useful papers are those on 'Ionic composition of the arterial wall' by Schoffeniels, 'Le collagene vasculaire, sa tenure et sa biochimie' by Ebel, 'The muscle proteins of the vascular wall' by Hamoir, 'A study of myosin filaments' by Shoenberg, and 'Biochemistry of elastin' by Banga. Shoenberg's contribution on myosin filaments is the only British-based paper. Each paper includes an extensive list of references and these will undoubtedly prove useful to workers in the field.

This volume will prove of great value to those who work on vascular biochemistry but cannot be expected to interest a wider audience.

T. CRAWFORD

The Cell in Health and Disease By J. K. Frost. Monographs in Clinical Cytology 2. (Pp. xii + 147; 81 figures, 2 diagrams,

and 15 charts. 78s.) Basel and New York: S. Karger AG. 1969.

This is the second of a commissioned series of 'Monographs in Clinical Cytology'. To do justice to the title would need a work in many volumes, rather than such a slim one devoted to exfoliative cytology.

The author insists at the start that *communication* is all-important. 'Of basic necessity is the recognition of adequately defined points of reference within the desired frame of activity, and the proper characterization of them with appropriate nomenclature.' Diagnostic cytologists (of whom your reviewer is one) do indeed need a marriage of their subject with cell biology in general, so that defined terms and concepts will be held in common. But the bridging of the two cytologies is not achieved by this book, nor does it give any new insight into the functional significance of what one sees in stained smears. For instance, the chapter headed 'Growth activity and functional differentiation' contains no word about the kinetics of cell populations, and little about present-day ideas of how differentiation comes about. Instead, we are introduced to euplasia, proplasia, and retroplasia, which are states of 'growth activity' (not of tissues but of individual cells) as estimated by their morphology, and uncheckable by any appeal to measurement or experiment.

The greater part of the book is taken up with morphological descriptions of cells seen in cervical smears, sputum etc, of a kind more appropriate to textbook or atlas of cytodagnosis. But a beginner could hardly use this as his reference text, and a trained person will mainly find what experience has taught him already.

A. I. SPRIGGS

Diagnostic Cytology of the Uterine Cervix VI By S. F. Patten. Monographs in Clinical Cytology, Vol. 3. (Pp. vi + 209; 190 figures. 110s.) Basel and New York: S. Karger AG. 1969.

A detailed and factual treatise of the cellular changes seen in inflammatory and benign proliferative states, in metaplasia, dysplasia, carcinoma *in situ*, and invasive cancer of the cervix in all their various forms with much quantitative data painstakingly acquired by the author and other workers. It cogently presents the case for cytology as a valuable diagnostic and prognostic tool far beyond its value as a screening procedure. This is supported by close correlation of cytological and histological changes.

This is the third in a series of discerning monographs in this field and provides a most valuable addition to the definitive cytologist's library.

O. A. N. HUSAIN