BOOK REVIEWS

Recent Advances in Pathology, No. 9, eds C. V. Harrison & K. Weinbren. 1975.
Churchill Livingstone, Edinburgh & London. 279 pp., illustrated.
A$27.60.

This latest addition to the series entitled 'Recent Advances in Pathology' consists of nine essays by ten authors. The first five chapters have general wide-ranging headings and consist of a consideration of the diseases of the cardiovascular system (E. G. J. Olsen), lymph nodes (C. V. Harrison), liver (K. Weinbren) and kidney (J. R. Tighe) together with a review of current knowledge of the lymphocyte (K. Henry and J. M. Goldman). The last four chapters are much more narrow in their scope. They deal with medullary carcinoma of the thyroid (E. D. Williams), miscellaneous soft tissue sarcomas (D. H. Mackenzie), pathology of the innervation of skeletal muscle (L. W. Duchen) and amyloidosis (G. A. Stirling).

The format of the book is altered and in this issue the subheadings of the chapters have been omitted from the page of contents. Although partial compensation for this is made by the provision of an index, several subheadings appended to the chapter titles would be an advantage.

The authors of the various chapters are all new except for the editors who have continued with their sections on the liver (K. Weinbren) and lymph nodes (C. V. Harrison). The section on the cardiovascular system includes a useful section on the primary cardiomyopathies.

The more narrowly oriented chapters of the latter part of the book, while admirable in themselves, have replaced what were chapters on wider topics such as diseases of the lungs, endocrine organs and bones in earlier editions.

In the past, this series has provided information which is generally accepted and which is, at the same time, not readily available in standard textbooks at the time of publication. The current issue has also achieved this and, like its predecessors, is well documented and will repay examination when subjects within its ambit are considered.

B. A. Warren

White Cells in Inflammation, ed. C. Gordon Van Arman. 1974.
Charles C Thomas, Springfield, Illinois. 138 pp., illustrated.
US$14.50.

This little volume of six chapters was prepared from heavily edited and expanded papers presented at various meetings of international 'Inflammatory Research Association' during the years 1970–2. Despite its somewhat pretentious title, it does not aim at an authoritative account of the role and inter-relationships of the various leukocytes in the spectrum of the inflammatory response, but rather to focus attention on certain specific
aspects of leukocyte function and behaviour. The six chapters are entitled: Platelets and permeability factors; White blood cells and crystal-induced inflammation; The role of serum complement in neutrophil-mediated inflammation; Quantitative studies of inflammation and granuloma formation; The Macrophage and formation of pedal oedema in normal and granulocytopenic rats.

Interest is immediately stimulated by a timely survey of information and speculation on the role of the platelet in inflammation which is well sustained in the succeeding segments dealing with crystal arthropathy, granulomatous inflammation and an integration of information on the functions of complement and blood leukocytes. The final chapter is however an anticlimactic recital of seemingly artificial correlations of the types of experimental oedematous reactions with leukocyte responses, which is reminiscent of inflammologists' obsession, in the last two decades, for the plotting of innumerable time-courses of exudation for a vast variety of stimuli of doubtful practical significance.

A well illustrated volume with useful rather than comprehensive bibliographies, it is likely to have an appeal limited to those with interests within the research areas cited, as well as for general pathologists seeking fundamental perspectives in the face of the massive modern literature pertaining to leukocytes in inflammation.

A. W. J. Lykke

_The Physiopathology of Cancer_, 3rd Edition, ed. F. Homburger. Volume 1. _Biology and Biochemistry_, ed. P. Shubik. 1974.
S. Karger, Basel and Sydney. 407 pp., illustrated. A$21.50.

This book represents the first of two new volumes in the Physiopathology of Cancer series. Six of the seven chapters deal with various aetiological aspects of malignancy which are classified under the broad headings of carcinogenesis and viral oncogenesis. Each contribution contains not merely a useful review of the literature, but in addition, sections highlighting some of the more important recent advances, including for example, the role of modifiers and the value of promoting action. The seventh chapter contains an excellent overview of the vital subject of tumour specific antigens which form the basis of new diagnostic assays in human cancers and the understanding of which is fundamental to development of successful methods of immunotherapy.

The book contains useful information both for the research worker and for the interested clinician who wish to familiarize themselves with the current state of cancer research.

The second volume in the series which is due to appear this year will deal with diagnosis and recent trends in treatment including radiotherapy, chemotherapy, hormones and immunotherapy. If, as expected, it is as good as Volume 1, these two books should complement each other in providing an up-to-date account of clinically relevant aspects of oncology.

A. Basten

_Neoplasia and Cell Differentiation_, ed. G. V. Sherbet. 1974.
S. Karger, Basel and Sydney. 411 pp., illustrated. A$35.00.

Those oncologists, and especially pathologists among them, who feel the need for greater understanding of the nature of tumours as counterbalance to the knowledge now available
about aetiology, natural history and modes of physical, chemical and immunological therapy, should add this book to their reading. Its title establishes at once its theme that tumourous behaviour has to do with differentiation, not in the sense of grading, but in relation to the way in which the expression of information in the genome is controlled.

The book comprises eleven comprehensive review papers by authors from Britain, France, Canada, U.S.A. and Russia who were obviously chosen for their first-hand knowledge of their subjects. The tenor is set by John Simnett of Newcastle-upon-Tyne in the first article ‘Nuclear differentiation in the development of normal and neoplastic tissues’ in which the rival propositions of somatic (genetic) mutation and induced abnormal differentiation are thoroughly and dispassionately reviewed. There then follow papers on nucleocytoplasmic relationships, the regenerative process, the roles of cell surfaces in cell behaviour, differentiation and organization of tumours and the behaviour of tumour cells in vitro or in transplants into embryos. These articles provide a mine of information on such subjects as dedifferentiation in the formation of the regeneration blastema, the appropriateness of the Jacob-Monod theory of genetic control for metazoan systems, chemical agents as gene inhibitors, tumour antigens on cell surfaces, the stimuli and inhibitors of cellular movement, the organization of cell groups into tissue structures, the significance of chromosomal deviation in tumours, and the relevance of germ layer theories to teratomas. They bear upon wound healing, metaplasia, tissue regeneration and, naturally, tumours; references are comprehensive and up to date. They are well written but, because of their content, not easy to read for persons new to the material. It is a pity, therefore, that only a few of the articles have summaries.

Although this book has little direct application to the everyday practice of pathology, I am sure that much of its content will bear upon our approaches to cancer in the not too distant future.

E. S. Finckh

Progress in Experimental Tumor Research. Volume 19.
Immunology of Cancer, eds F. Homburger (series), V. Richards (volume). 1974.
S. Karger, Basel and Sydney. 410 pp., illustrated.
A$49.50.

This volume of the above series contains a wealth of new information about experimental and applied aspects of the immunology of malignant disease. The topics are well chosen and form a logical sequel to the previous Volume 13 devoted to the subject published four years ago. There are authoritative contributions on onco-induction, the role of viruses in neoplasia, cytotoxic mechanisms and immunological enhancement. Furthermore the relative importance of these phenomena is discussed in a wide variety of malignant states varying from acute leukaemia to carcinoma of the cervix and prostate.

For the clinically oriented reader reference is made to the significance of paraproteins in malignant disease, immunodiagnostic techniques (e.g. alpha-foeto-protein) and immunotherapy (e.g. in melanoma). The only significant omission is a critical review of the controversial problem of specificity of killer cell activity in tumour resistance. Nevertheless this book can be strongly recommended to research workers and clinicians alike with an interest in the field of oncology.

A. Basten
Forensic Medicine. A Guide to Principles, I. Gordon & H. A. Shapiro. 1975. Churchill Livingstone, Edinburgh, London and New York. 396 pp., illustrated. A$29.95.

The authors of this book state that they 'have tried to reduce the vast field of Forensic Medicine to manageable proportions by emphasizing the underlying principles', and that they 'have discarded the medico-legal mythology that still pervades much forensic thinking'. They have succeeded in neither. Most of the text is given over to traditional forensic pathology. The illustrations have for the most part reproduced badly. The one on page 76 purports to illustrate suicidal strangulation, but it illustrates the classical findings in sexual asphyxia, a diagnosis which is supported by the accompanying text. This condition does not rate a mention as a specific entity in the entire book.

Sudden Death in Infancy Syndrome is dealt with very sketchily and the authors give the impression that the forensic pathologist is justified in diagnosing accidental mechanical suffocation on a negative necropsy in an infant. These and similar errors make the entire text suspect.

This is unfortunate as there is within the book much sound and widely accepted material. Each section is followed by an impressive list of references which, however, tend to be rather out of date.

For whom is this book intended? The senior medical student and young practitioner require guidance in the medico-legal aspects of their work, their relationships with the Law Offices and Officers and the duties, privileges and obligations of doctors under the legal system of the country in which they practise. The authors have deliberately omitted these aspects. The more experienced practitioner, when faced with an occasional foray into the forensic field, could find himself led sadly astray were he to depend entirely on this book. The specialist in forensic pathology will read it with critical interest. The legal practitioner who relies on its content as a source of material for examination, or cross examination, of the expert witness may well regret doing so.

Perhaps a subsequent extensively revised edition will be more worthy of recommendation.

J. M. N. Hilton