**Book Reviews**

**Cancer Biology Reviews Vol 2.** Eds J. J. MarchaloniS, M. G. Hanna & I. J. Fidler (1981). New York: Marcel Dekker Inc. 296 pp. Sw.Fr. 118.00 net.

This is the second in a series of Cancer Biology Reviews, and provides a good and comprehensive overview of the various facets of the metastatic process. The opening chapter by Zeidman presents an outline of metastasis by the blood stream and the lymphatic system. Dealing mainly with experimental metastases, chapters by Hart and Robin cover in depth the mechanisms of tumour-cell invasion, including the mobility of malignant cells, their production of lytic enzymes, angiogenesis factors, plasminogen activator, collagenases etc. The origin and fate of blood-borne tumour-cell emboli is discussed by Warren, including the shedding of cells from primary tumours and thrombus formation, and aspects of the influence of anti-coagulant and anti-platelet drugs on metastasis. Fidler and Nicolson describe the immunobiology of experimental metastatic melanoma, to illustrate the heterogeneous nature, in respect of metastatic potential, of tumour cell populations. Finally, Sugarbaker discusses the patterns of metastases in human malignances.

This book is well produced, albeit in camera-ready form, and well referenced, though an index would have been a valuable addition.

M. V. Pimm

**Organ Preservation for Transplantation.** Eds A. M. Karow & D. E. Peg (1981). New York: Marcel Dekker. 705 pp. Sw.Fr. 196.00 net.

The title of this book may prove misleading. In it, the editors take organs to include complex cellular tissues such as blood, sperm, embryos, marrow, skin and cornea, as well as those conventionally regarded organs, such as kidney, heart and liver. Likewise, transplantation is correctly used in its broadest sense to describe any tissue transfer, including transfusion and insemination. Nor is the discussion restricted to viable cells, since techniques for freeze-drying allografts of bone and other tissues are described. Indeed, culture techniques for malignant cells and micro-organisms are about the only examples excluded from consideration. Thus, the book ranges far more widely than the title might indicate.

The text is logically organized into 5 parts. Parts 1 and 2 deal with the general principles of preservation, and subjects covered include in vitro survival of cells, assessment of viability, cell separation, control of contamination, biophysical and biochemical reactions during cryopreservation, the pharmacology of cryoprotectants, engineering and technical considerations, and the principles of freeze-drying. Several of these topics might warrant a book in their own right, yet the authors have compressed a wealth of information into short but comprehensive accounts. The chapters dealing with fundamental cryobiology, engineering and freeze-drying are particularly good models of lucid presentation of difficult concepts. I was pleased too that a whole chapter was devoted to microbial surveillance, since this is rarely given serious consideration.

In Part 3, the preservation of viable cell suspensions and tissues is described in detail. Erythrocytes, leukocytes, platelets, marrow and foetal liver, human gametes, skin and chorio-amnion, cornea, bone and cartilage, and endocrine tissues, each justify a separate chapter. The available preservation methods are well reviewed.

Part 4, on the preservation of solid organs, includes chapters on perfusion technology, metabolic inhibition, and cryopreservation, as well as the storage methodology for kidneys, hearts, lungs, livers, pancreas, intestine and even brain. Finally, in Part 5, the description of freeze-drying allografts of tissues such as bone, tendon and dura mater for subsequent clinical usage, is crisp and succinct.

The editors have done an excellent job in collecting so much information into 705 pages, and have produced an important book. It was disappointing to find so many typographical errors per page. That criticism apart, however, this revised edition is a substantial improvement on the first, and will be welcomed by research workers and
clinicians alike for its comprehensive coverage of a difficult field. Even at the high price, it is strongly recommended, and should be a valuable addition to any surgical department's library.

C. Green

Advances in Clinical Cytology. L. G. Koss & D. V. Coleman (1981). London: Butterworths. 355 pp. £25.00 net.

Although the earliest methods of tissue diagnosis made use of cytological specimens, the techniques were largely forgotten with the introduction of tissue processing. Consequently, in its development during recent years, it has been looked upon as a "new" discipline. But progress has been rapid, and it is already possible to publish "Advances in Clinical Cytology". This book's value lies in that it includes chapters describing advances in practical diagnosis and chapters dealing with recent research in cell biology from which future diagnostic methods may emerge. The chapters provide useful and well referenced reviews of the subjects considered, which include cytological diagnosis of endometrial cancer, polyoma virus infection, occult lung cancer, thyroid disease, ophthalmological disease and the use of smear preparations in neuropathology. The quality of the illustrations is high and add much to the value of the text. The chapters dealing with more recent research present a valuable picture of the foundations from which further advances will be made. This is a book which can be recommended to practising cytopathologists.

E. B. Butler

Colour Atlas of Breast Cytopathology. C. Grubb (1981). London: HM and M Publishers. 72 pp. £25.00 net.

This volume, slim though it is, nevertheless represents very good value for money at £25, and I have no hesitation in recommending it. The atlas is comprehensive and detailed, and does not balk at illustrating material from aspirates that are less than satisfactory, but provide many of the diagnostic problems and pitfalls that beset the cytopathologist in dealing with such specimens. The illustrations are excellent, cellular morphology sparkingly clear, and the captions concise and to the point. The index is a model of its kind, though printed in such small type as to make reading something of a problem to those without a magnifying glass.

While it may seem churlish to cavil at any aspect of such an excellent volume, this reviewer feels that the lay-out is cramped, uninspired and less attractive than the illustrations deserve: no doubt consideration of cost militated against lavishness, but it does seem a pity. Nevertheless, I am confident that experienced cyto-pathologists and students alike will benefit from this atlas.

R. Yule