would be an excellent introduction for cell biologists interested in membranes.

M. S. C. BIRBECK

Cancer Chemotherapy—Fundamental Concepts and Recent Advances. (Pp. xiii + 577; illustrated; £17.30.) Chicago: Year Book Medical Publishers. 1975.

This book contains a collection of 32 papers presented at the 19th Annual Clinical Conference on Cancer (1974) of the University of Texas, MD Anderson Hospital and Tumor Institute. Twenty-two of the papers were contributed by members of the local hospital staff. The conference was intended to emphasize the expanding role of cancer chemotherapy in the management of cancer patients, and 16 papers are concerned directly with the chemotherapy of different human tumours. There are also papers on cell kinetic principles, animal models as predictive systems, immunological aspects of chemotherapy, and prospectives for immunotherapy for human sarcomas. The book contains the Heath Memorial Award Lecture of 1974 given by Dr. Gordon Zubrod on the 'Contributions of Chemotherapy to the Control of Cancer'. While several of the papers contain information not published elsewhere, the majority are review articles based on information available in the summer of 1974. The article by Carbone on the 'Role of Chemotherapy in Treatment for Breast Cancer' lists six breast cancer adjuvant studies, two of which have since reported significant decreases in tumour recurrence rates. Several articles refer to recent advances in the management of mesenchymal tumours and testicular cancer with chemotherapy. The book, which is well produced, is dedicated to the memory of Myron Karon, who died shortly after the meeting. Although the quality of the individual contribution is high, the fact that little new information is presented and the price will deter many from buying this book.

M. H. N. TATTERSALL

Histochemical Techniques. 2nd edition. By J. D. Bancroft. (Pp. ix + 348; illustrated; £9.50.) London and Boston: Butterworths. 1975.

This technical manual stands somewhere between the general books on histological technique and the more specialized ones devoted to histochemistry. It includes

standard methods for carbohydrates, lipids, pigments, minerals, and nucleic acids as well as those for enzymes. Thus it serves the admirable purpose of linking histological techniques in general use with the specialized techniques of enzyme histochemistry and anything which breaks down the artificial barrier that has been built up around histochemistry, suggesting that this is something special, different, and difficult, is to be encouraged. The text would be improved by more use of chemical formulae and equations in the explanation of the mechanism of histochemical methods. Chemical techniques need chemical language.

Because of the inclusive definition of histochemistry this small book may appear incomplete to the technologist at the bench as it does not provide techniques for fibrillar proteins such as reticulin but it does give detailed methods for the demonstration of reactive groups within the protein molecule; there are still many laboratories more likely to demand the demonstration of the former than the latter. For this reason, while this is unlikely to replace the established reference and general texts that are already in histopathology laboratories, it should continue as a useful addition.

R. A. B. DRURY

IARC Monographs on the Evaluation of Carcinogenic Risk of Chemicals to Man. Volume 8: Some Aromatic Azo Compounds. (Pp. 357; Sw. Fr. 26.) Lyon: International Agency for Research on Cancer. 1975. Distributed for IARC by the World Health Organization.

The latest volume in this series summarizes laboratory and clinical data on 32 aromatic azo compounds, many of which are widely used as artificial colourants. The format is similar to that followed in the previous seven monographs except that comments on mutagenicity are now included. None of the compounds considered here has been shown to be carcinogenic for man though at least one of them—*para*-dimethylaminoazobenzene—has long been recognized as a potent hepatocarcinogen in rats. Although providing a useful summary of a scattered literature, this particular volume in the Lyon series is less likely to be of direct interest to the hospital pathologist than its predecessors; but it will have performed a useful service if it stimulates the histopathologist (in particular) to look

more closely at some of the chemicals that are regularly used in his laboratory.

R. L. CARTER

Diseases of Muscle: a Study in Pathology. 3rd edition. By Raymond D. Adams. (Pp. xvi + 588; illustrated; \$35.00.) New York and London: Harper and Rowe. 1975.

The previous editions of this standard work were published under joint authorship but Professors D. Denny-Brown and Carl Pearson have retired, and Raymond Adams has produced an entirely new volume. It can be highly commended. Much new material has been added, notably in the fields of ultrastructure and chemistry. Functional and experimental as well as purely morphological aspects of muscle in both health and disease are covered. It is a measure of the author's ability to handle a large quantity of data in a concise and lucid manner that the present edition is only 32 pages longer than the original work published in 1953. Although this is essentially a book for the specialist, it is also a work of reference for the general histopathologist and is worthy of a place in the laboratory. The illustrations are excellent. By the standards of today it is reasonably priced. The only serious fault in the book is in the index; an example is Zenker's degeneration associated with thyrotoxicosis which the index claims is dealt with on page 595. A remarkable piece of information considering the book contains only 588 pages!

M. S. DUNNILL

Opportunistic Fungal Infections. Edited by Ernest W. Chick, Albert Balows, and Michael L. Furcolow. (Pp. x + 359; illustrated; \$22.50.) Illinois: Charles C. Thomas. 1975.

This book consists of a collection of papers given at the Second International Conference on Opportunistic Fungal Infections held in 1972. The papers are grouped under six headings: Scope of opportunistic fungal infections; Serological and immunological aspects; Clinical aspects; Specific diseases; Veterinary aspects; Therapeutic aspects.

Individual chapters vary greatly as to their interest and value, and not all (as admitted by the authors themselves) justify inclusion under the title of the book. Immunological procedures, fluorescent antibody techniques, immunodiffu-

sion tests, skin tests, and clinical immune factors in host response are reviewed under the second heading. Although these chapters provide useful information, more detailed data on methods and a more extensive bibliography would be helpful. Topics well presented under the heading Clinical Aspects include opportunistic infections in surgery and in ophthalmology. Candidosis, mycetomas, nocardiosis, mucormycosis, histoplasmosis, blastomycosis, coccidioidomycosis, and dermatophyte infections are among the specific diseases covered. This section also includes a chapter on the histopathology of opportunistic fungal infections. There is a short section on veterinary problems in this field, and the treatment of animals is briefly dealt with in the final section of the book. The surgical and medical treatment of human opportunistic infections is well summarized.

The book as a whole contains little new information but does bring together in one volume the experience and knowledge gained over recent years about the diagnosis and therapy of opportunistic mycoses. The increasing prevalence of these diseases is stressed by the editors, and the scope of topics covered makes this book of potential interest to both clinicians and microbiologists.

Y. M. CLAYTON

Methods and Achievements in Experimental Pathology. Vol. 7: Disease Patterns. Edited by G. Jasmin and M. Cantin. (Pp. vi + 232; illustrated; Sw. Fr. 129, \$54.00; approx; 20% discount for individuals.) Basel: Karger. 1975.

While antivivisectionists feel that experiments on animals are immoral, pharmaceutical companies need animal models for the development of new drugs, and Regulatory Committees demand more and more safety tests, involving the use of animals, on drugs, pesticides, food ingredients, and industrial chemicals. Some of those who design experiments, carry them out, or presume to interpret results of them, have little knowledge of the naturally occurring diseases of the animals used or of whether these diseases are really valid models of seemingly similar human diseases. This book purports to provide relevant information in this area by considering correlations between human and animal diseases. Its eight contributions are concerned with congenital malformations, liver diseases,

colonic ulceration, osteoporosis, diseases of muscle, endocrinopathies, nude mice, and the pathology of ageing.

Those who hope to find in the book lists of valid disease models will be disappointed, for most contributors are more concerned with the deficiencies of existing models and with the research that still needs to be done ('the experimental product of liver diseases similar to those in man is still in its infancy') or merely advance pet theories (eg, that most Westerners eat too little calcium and too much phosphorus and that carrageenan-induced colonic ulceration in guinea pigs resembles ulcerative colitis in man).

The book, however, contains more than enough useful information (eg, on endocrinopathy production and the pathology of ageing) for it to command a place in medical libraries which serve research interests.

F. J. C. ROE

Pathogenesis and Mechanisms of Liver Cell Necrosis. Edited by D. Keppler. (Pp. xi + 257; illustrated; £9.50.) Lancaster: Medical and Technical Publishing. 1975.

This English language record of an international workshop held in Germany in November 1974 includes general papers on morphological and biochemical aspects of liver injury and protection, as well as discussion of specific poisons. Several of the papers deal with recent and potentially important work on the effects of phalloidin on liver cell membranes and contractile proteins. The book is well produced.

P. J. SCHEUER

The Pathology of the Heart. Edited by Ariela Pomerance and Michael J. Davies. (Pp. x + 622; illustrated; £22.50.) Oxford: Blackwell Scientific Publications. 1975.

There are several general books on cardiac pathology, and the appearance of another makes it inevitable that one makes comparisons and asks what will be the place of the newcomer. Coming from the same stable as Morson and Dawson's *Gastro-intestinal Pathology*, with the same excellent production, of similar weight and page size, it is smaller than Hudson or Gould, larger than Olsen. There are similarities to the last two in

the chapter headings, with a short section on congenital heart disease that may not always be sufficient for day-to-day problems.

The strength of this new book lies in its practical approach and its emphasis on distinguishing between the changes that are caused by disease, by abnormal haemodynamics, and by ageing. From one author there are particularly good descriptions of mucoid degeneration of the mitral valve (floppy valve), cardiac amyloid in the aged, isolated aortic valve disease and thrombotic endocarditis, most of which can be found in the postmortem room each week and too often go unrecognized or are uncritically accepted. From the other editor the chapters on the conducting system and the cardiomyopathies stand out. Professor Hutt's chapter on tropical cardiac pathology brings out the fascination of problems such as endomyocardial fibrosis, and Mr. Whitney's chapter on cardiovascular diseases in animals other than man reminds us that we can learn from the natural experiments of comparative pathology.

This book does not attempt to be encyclopaedic or compendious but, by stressing the abnormalities that are easy to miss or difficult to assess, those that are common in old age and those which are rare or are caused by surgery, trauma or medical treatment, the authors have succeeded in producing a book that has attractive features that are different from its competitors. It should be of particular value to the pathologist in the postmortem room or at the clinical meeting who wants to discuss with the clinician both the structural and functional changes that the heart has undergone. This deserves to succeed because it is well suited to the needs of the clinical pathologist.

R. A. B. DRUGG