**Book Reviews**

**Annual Research Reviews. Proteins of Animal Cell Plasma Membranes Vol. I.** D. F. H. Wallach (1977). Edinburgh: Churchill Livingstone, 154pp. £10.25 net.

Dr. Wallach has done an admirable job in presenting a complex body of information concerned with the protein constituents of animal cell plasma membranes in a concise and eminently readable fashion. As stated in the preface, the bulk of the material reviewed in this volume covers the period between April 1976 and March 1977 and was recovered from the Index Medicus and by a Medlars II computer search. The areas covered in detail can be seen from an inspection of the chapter headings, which include membrane structure, membrane enzymes, membrane methods (18pp), erythrocytes (34 pp), lymphocytes, polymorphonuclear leucocytes, platelets (11 pp), epithelia (13 pp), hormone receptors (11 pp), neuromuscular systems (10 pp) and neoplastic cells (31 pp). Each of these areas is covered in depth and Dr. Wallach comments critically about the interpretation the authors make of the data presented in their original papers, pointing to what he considers to be their strengths and shortcomings. This is particularly useful in the experiments using lectins and drugs such as cytochalasin B, to study membrane structure and function.

I believe that Dr. Wallach's review will be of great use to all research workers in the field, as well as a more general audience, and I look forward to reading subsequent volumes in this series.

S. Schor

**Pathophysiology of Carcinogenesis in Digestive Organs.** Eds. E. Farber, T. Kawachi, T. Nagayo, H. Sugano, T. Sugimura, and J. H. Weisberger (1978). London: University Park Press. 441 pp. £28.95 net.

This volume reports the proceedings of the 7th International Symposium of the Princess Takamatsu Cancer Research Fund, held in Tokyo in 1976. The 33 chapters represent an extensive coverage of most aspects of cancer of the stomach, colon and pancreas. The geographical variations in the incidence of stomach and colon cancer, and the change in their incidence amongst immigrant populations has been a major factor in focusing attention on the role of environment, and in particular diet, as a cause of malignant disease. This view has been supported by the development of animal models for the induction of digestive-tract tumours, mainly involving nitrosamine carcinogens. These matters are very effectively covered in this book, which also contains the first report of an improved animal model for cancer of the pancreas. About half the book is concerned with experimental carcinogenesis, ranging from the role of nucleic acid alkylation to studies of stomach cancer in dogs. The other half of the presentations relate to human cancer, and deal with carcinomaembryonic antigen, pre-malignant lesions and early enzyme changes associated with gastrointestinal tumours.

Those who have been concerned with experimental carcinogenesis for many years will find it interesting to note to what extent this very important area of human cancer is now considered as a problem in chemical carcinogenesis. Such an approach would have been very unlikely 10 years ago. The final chapter by Farber et al. entitled “Chemical Carcinogenesis: An emerging new perspective”, summarises this new approach.

The book is well presented and contains many illustrations (in colour where necessary). It should be of general interest to all cancer research workers, but will be of particular value to experimentalists or clinicians concerned with digestive-tract cancer.

P. Brookes

**Advances in Modern Toxicology Vol. 3. Environmental Cancer.** H. F. Kraybill and M. A. Meilman. (1977) Chichester: John Wiley. 387 pp. £18.40 net.

Volume 3 of these publications now places the emphasis of this series firmly in the field of environmental safety, particularly since Vol. I “New Concepts in Safety Evaluation”, is now being extended to include 2 further parts. Increasingly, workers from a variety of