

account of its particular subject area and is therefore a valuable source of reference.

Articles in most of which the emphasis lies more towards the research of the authors include those by Robert (Structural Glycoproteins: Historical Remarks), Labat-Robert (Structural Glycoproteins and Cell-Matrix Interactions in Normal and Pathological Conditions), Moczar and Lafuma (Structural Glycoproteins from Aorta and Lung), Hornebeck and Robert (Interactions between Elastic Fibres and Cells), Lesot (Cell-Matrix Interactions during Odontoblast Differentiation), Burtin (Interactions between Tumour Cells and Matrix in Human Adenocarcinomas), and Bartali et al. (Presence and Role of Fibronectin Fragments in Transformed Cells). The last three of these chapters are especially topical and interesting.

The title of this book appears to the reviewer to be rather misleading. One might assume that there would be an in-depth coverage of those glycoproteins which have an established role in cell-matrix interactions and which have been the subject of many detailed studies, both structural and functional. Fibronectin certainly deserves much more attention than one short chapter (Structural Glycoproteins and Cell Matrix Interactions in Nor-

mal and Pathological Conditions), and mention in the chapters on Odontoblast Differentiation and Presence and Role of Fibronectin Fragments in Transformed Cells. Certainly there are detailed reviews available and references are given but surely the volume title demands a more comprehensive treatment. Exactly the same point can be made about laminin, which elicits thirty-six lines of text, about chondronectin, which is only mentioned in a table, and about vitronectin, which is not mentioned at all. At the same time, it is difficult to see how the editors justify an apparently disproportionate allocation of space to descriptions of structural glycoproteins from cornea, aorta and lung, which remain largely uncharacterized in comparison with fibronectin and laminin.

It seems to the reviewer that the word 'structural' has now outlived its usefulness as an adjective to describe glycoproteins of the connective tissue matrix. It is unfortunate that the result of the editors' retention of this name is that the emphasis in the book does not adequately reflect our current understanding of this area.

J.C. Anderson

## *The Interphotoreceptor matrix in Health and Disease*

Progress in Clinical and Biological Research: Volume 190

Edited by C.D. Bridges and A.J. Adler

*Alan R. Liss; New York, 1985*

xii + 287 pages. £37.00, \$60.00

This compilation of research chapters focuses entirely on the molecular structure and physical properties of the components of the interphotoreceptor matrix (IPM), an area of the eye which may have profound implications in the pathobiology of retinal disease. The editors have done well to obtain contributions from such a wide number

of eminent members of the ophthalmic and vision research community.

This book is arranged in two parts with the first being further subdivided. Part 1 deals with the normal function of the IPM and is subdivided into two sections the first covering morphology and the second biochemistry and cell biology. The second

and final part of the book deals with various aspects of the diseased states.

The morphology section starts with an historical review of the early years of research into an understanding of the IPM. We are then introduced to the modern concepts of the morphology of IPM as shown by rapid freezing techniques and finally the observation that there are domains of IPM material that are specifically associated with cone but not rod inner and outer segments.

The biochemistry and cell biology includes 8 chapters which attempt to describe and explain such complexities as the presence of IRBP and specific phosphodiesterases together with more general observations. The final section on disease states discusses the possible involvement of the IPM in retinal disease in relation to research findings.

Mike Boulton

## *Superoxide and Superoxide Dismutase in Chemistry, Biology and Medicine*

(Proceedings of the Fourth International Conference)

Edited by G. Rotilio

*Elsevier Science Publishers; Amsterdam, New York, Oxford, 1986*

xxi + 688 pages. £129.75 (£86.50 approx)

I must begin by confessing that I am not absolutely impartial in reviewing this book, since I attended the conference on which it is based. However, I have been asked to review the book on the (perhaps dubious) grounds that I did not submit a paper for publication in the proceedings.

The Fourth International Conference on Superoxide and Superoxide Dismutase in Chemistry, Biology and Medicine was held in Rome on September 1st-6th, 1985. The proceedings have thus appeared rather late, which is surprising since camera-ready format has been used. This has led to ugly differences in typeface in many parts of the book, despite its attractive cover and the good quality paper used for printing.

I can testify that the Conference itself was excellently organised, with many first-rate presentations and plenty of useful discussions and interactions between the participants. That said, I must question the value of publishing the proceedings at all. Most of this volume consists of short papers (usually about 5 pages) in which the

authors summarize, with inadequate descriptions of methodology, data that have already appeared elsewhere in the literature. None of the authors had the space to relate their work to the field in general. There was no attempt to report any of the discussion that took place, not even a 'state of the art' summary by a chairman. Reports of the clinical use of superoxide dismutase to treat arthritis, radiation damage and autoimmune disease first appeared many years ago, and several such reports re-occur in the present volume. However, I have yet to see a well-controlled clinical trial published in a leading medical journal, such as *Lancet* or *New England Journal of Medicine*, and I feel that publication anywhere of anything short of this should now be firmly discouraged.

Despite my enthusiasm for the conference, and my high regard for the efforts of the organisers, I cannot recommend this volume as a good buy. The price of approximately 12.5 pence per page of text makes it even less so.

B. Halliwell

Bovine interphotoreceptor matrix (IPM) is rich in protein, containing a limited and specific set of these macromolecules. The matrix proteins are synthesized by adjacent tissues (neural retina and pigment epithelium), but are not, themselves, major constituents of these tissues. Of possible functional importance are the presence of some lysosomal hydrolases and of glycoprotein components that foster the aggregation of RPE cells. The IPM contains also a unique retinoid-binding protein - IRBP, a large glycoprotein located only in the IPM.Â Journal Progress in Clinical and Biological Research. Volume 190. Pages 65-88. Publication Date 1 January 1985.