

references embraced by both of them.

Like previous ones, this is a timely and useful reference volume. A more extensive subject index would undoubtedly have enhanced its value. There is no author index, apparently in line with recent policy of total elimination from the text of authors' names, replaced by reference numbers in

the bibliographies. While this may contribute to economy of space, and perhaps in keeping down the cost of the volume, it does appear to detract from the readability, notwithstanding the excellent print.

David Shugar

The Nuclear Envelope and the Nuclear Matrix

Edited by G.G. Maul

Alan R. Liss; New York, 1982

x + 324 pages. \$34.00

This volume reports the proceedings of the second Wistar Symposium held in September 1981. There is a widespread view that the proceedings of meetings should not be published; I have considerable sympathy with this attitude. Too often these reports are ephemeral and in addition they lack the detail given in conventional journals. Moreover, of course, they are not refereed.

The present example is an exception — perhaps for a specific reason. Nuclear–cytoplasmic transport and the structure and physiology of the nuclear matrix have been hazy areas of research which have not attracted the fashion-conscious scientific public. I suspect that the contradictions in the literature, the imprecise techniques and the novelty of the ideas have all contributed to the disfavour with which these areas have been regarded. The recent renaissance of interest in the cytoskeleton is paralleled by a resurgence of studies of transport across the nuclear membrane and of the physiology of the intranuclear skeleton, but it would be premature to expect a review of these topics at this time.

This book does, however, provide a state-of-the-art account of these topics. It may be divided roughly into 8 contributions concerned with the nuclear envelope, 3 concerned with transport and 10 articles on the nuclear matrix; but there is considerable integration within the articles.

The contributions concerned with the nuclear envelope describe efforts to analyse the structure of the nuclear pore complexes, the enzymes of the nuclear envelope and the evidence relating to transport across the nuclear envelope.

The work on the nuclear matrix is both stimulating and irritating. Several excellent contributions describe the progress in the characterisation of the nuclear matrix which is slow but steady. The most stimulating section of the book, in my view, consists of 4 contributions which relate newly-replicated DNA to the nuclear matrix. The evidence for this association is clearly set out by the original workers and readers can judge for themselves the strength of the evidence. By contrast, the suggestion that transcription is coupled to the nuclear matrix is not supported by persuasive evidence. The book ends with a thoughtful and provocative article on the evolution of the nuclear matrix and envelope.

This is a very useful book because it brings together a disparate set of authors and their work. Interested people will find in this volume an up-to-date, clear and reasonably concise exposition of what little we know of the nuclear envelope and matrix. I anticipate that this book will be much quoted as this field expands in the near future.

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