

## Book reviews

**Membrane Transport in Biology.** Vol. 3. Transport Across Multi-Membrane Systems. Ed. G. GIEBISCH, D. C. TOSTESON, and H. H. USSING. Pp. 459. DM148. Springer-Verlag: Berlin. 1978.

This volume is one of a series intended primarily for the general physiologist, and the contributions cover a wide field, including not only most animal epithelia but also transport systems in plant cells. Only 3 sections are of immediate interest to the ophthalmologist, namely, 2 chapters by J. A. Zadunaisky on transporting epithelia in the eye and 1 by J. H. Thaysen on the lacrimal gland. Of the contributions from Zadunaisky, Chapter 10, which deals with transport in cornea and lens, is probably the better of the 2 and includes a useful account of the author's own studies on amphibian tissue. Chapter 11, on ciliary epithelium and retinal pigment epithelium, is rather less satisfactory. The part devoted to pigment epithelium occupies barely 2 pages, although the author describes in some detail the vacuolation cycle for transport across the wall of Schlemm's canal, a process which, strictly speaking, concerns endothelium rather than epithelium. Some of the references are incomplete and in one or two cases the citations in the text are incorrect. Chapter 14, by J. H. Thaysen, provides a very useful account of current work on lacrimal secretion. Apart from these specialised sections the first 3 chapters of the book form a useful introduction to the electrophysiological and ultrastructural aspects of epithelial transport.

D. F. COLE

**Documenta Ophthalmologica Proceedings.** Genesis of Glaucoma, Wessely Symposium, Munich, 1974. Vol. 16. Ed. H.-J. MERTE. Pp. 320. \$51.00. Junk: The Hague. 1978.

This volume contains the proceedings of the Wessely symposium held in Munich in 1974. The delay in publication reflects the difficult task of editing the contents of a meeting which was given almost entirely to discussion. There were no formal papers, but the main contributions in discussion have been compiled by the authors into short articles, and these are interspersed with sequences of verbatim discussion.

The book is divided into 2 parts. The first, on the physiology and pathology of intraocular fluid exchange, contains 20 papers together with discussion on subjects as varied as the formation of aqueous humour and malignant glaucoma. The second part contains 15 papers and discussion on the pathogenesis of disc cupping and visual field defects. Finally there is a summary and overview of the meeting by its chairman, Hans Goldmann.

With a few exceptions the individual papers are of interest. Some provide a useful review of the subject under consideration, while others, for example Paul Henkind's philosophical dissertation on the pathophysiology of glaucoma field loss, highlight current

controversies. It is the discussion sequences, however, that best reflect the nature of the meeting, and these provide illuminating and often entertaining reading. So although the symposium was held 5 years ago these proceedings justify the effort of their production and are a useful addition to the literature on glaucoma.

ROGER COAKES

**Clinicopathologic Correlation of Ocular Disease: A Text and Stereoscopic Atlas.** 2nd edn. By DAVID J. APPLE and MAURICE F. RABB. Pp. 526. £78.75. YB Medical Publishers: London. 1978.

Because biopsy of intraocular tissues is rarely feasible, the most useful contribution of histopathology to ophthalmology is not so much in diagnosis as in providing an improved understanding of the nature of specific eye diseases. To explain the symptoms experienced by individual patients in terms of the causative disease process is much of what pathology is all about. Moreover, a proper appreciation of the lesion—its nature and expected behaviour—is fundamental to rational management. It is a cause for congratulation, therefore, when an attempt is made to take pathology from the laboratory to the ward, to go beyond regarding pathology merely as a means towards applying or confirming diagnostic labels, and to relate microscopical appearances to clinical practice.

The superbly illustrated text by Drs Apple and Rabb is a brave and largely successful attempt in this direction, as the emergence of a second edition after only 4 years bears witness. The text is concerned primarily with relating the clinical and histopathological appearances of ocular disease and is well served by 112 excellent stereoscopic colour transparencies tucked inside the back cover and 758 monochrome illustrations of generally good quality. The correlation would have been even more satisfying, however, had more space been devoted to the functional basis for the altered tissue morphology: for instance, an awareness of some of the factors involved in producing neovascularisation has just as much clinical significance as a knowledge of its form and complications.

After a brief introduction to ocular anatomy and embryology and a useful account of the developmental anomalies there follow 8 chapters providing a fairly comprehensive coverage of ocular diseases. A chapter dealing with the optic nerve has been added, and those on the lens and glaucoma have been separated and expanded since the first edition. Inevitably the authors sometimes hold views which are not always shared by the reviewer, but this does not necessarily imply criticism, the text being throughout balanced and reliable and adequately supported by well-chosen references.

Those who valued this book when it first appeared will need no urging to examine the updated version, and it is to be expected that it will win many more admirers.

ALEC GARNER