Book reviews

Immunopathology of the Eye. By A. H. S. RAHI and A. GARNER. 1976. Pp. 343, figs, tables, refs. Blackwell, Oxford (£11.50)

The emergence of the vertebrate phyla has been accompanied by the evolution of an elaborate system for the recognition and elimination of both invading pathogens and abnormal mutant cells. Phylogenetic studies indicate that the ability to mount a specific immune response to potentially harmful agents is correlated with the presence of lymphoid tissue. The central role in this protective mechanism is the lymphocyte, regarded until quite recently, as a phlegmatic spectator. Herein lies the main theme of *Immunopathology of the Eye*.

The authors have described step-by-step the rewarding paths of research which were followed in the recognition of this highly complex and subtle mechanism. The existence of two distinct populations of lymphocytes, the nature of antigens, the structure and specificity of antibodies, the types of hypersensitivity and the concept of tolerance to the body's own tissues are all clearly described and their individual influence is discussed.

The eye has a unique place in immunology by virtue of its two avascular structures, the cornea and the lens, which are almost isolated from this system. The vascular uvea and the conjunctiva, however, provide centres for lymphoid reaction. Furthermore the absence of lymphatic drainage in ocular tissues amounts to a loss of the afferent limb of the immune response. Ocular antigens have no alternative but to drain into the blood stream and thus diluted may fail to stimulate any lymphoid reaction or alternatively, if their concentration is high enough, evoke a generalized response.

Applying these fundamental concepts to the various ocular structures, chapters follow on the conjunctiva and eyelids, the cornea, the uvea, lens, retina, optic nerve, and orbit. The immunology of ocular tumours has deservedly a section of its own and the chapter on ocular involvement in systemic disorders leads us towards an understanding of the aetiology of a group of diseases which have baffled the greatest medical minds since the beginning of time. A final chapter on the mode of action of some of the immunosuppressive agents brings to a close an absorbing account of ocular immunopathology.

The authors are to be congratulated on summarizing present knowledge of this difficult and expanding subject in such a way as to make it understandable to the clinician and investigator alike. Apart from its undoubted practical and scientific value their survey cannot fail to recall in the reader that sense of wonder which all students of medicine have experienced at some stage in their career and perhaps have lost awhile.

S. J. H. MILLER

Neuro-ophthalmology. By R. SACHSENWEGER. 1975. Pp. 627, 332 figs, 32 tables, refs. Thieme, Leipzig (DM107)

This book compares unfavourably with most English language texts on the subject. It contains no references (only a list of monographs at the end) so it must be

considered purely as a textbook, and as such it is a formidable introduction to a complex subject. On the credit side the specialty has been fully covered by the 36 contributors with the exception of investigative procedures where the role of fluorescein angiography is understressed and no mention is made of the recent important advance in neuroradiological techniques with the introduction of the EMI scanner. The section on neuroanatomy is excellent and the text is adequately, although not profusely, illustrated in monochrome.

R. COAKES

Symposium on Glaucoma. By O. M. FERRER. Pp. 260, figs, tables, refs. Thomas, Springfield, Illinois (\$22.50)

As one glaucoma symposium follows another the question must arise as to whether their frequency is justified by the rate at which new information about glaucoma is being accumulated. But perhaps these symposia have functions other than the communication of the latest research work; perhaps they provide a milieu for sober reflection on the significance of new findings when the first flush of optimism has faded and the time is right for the real value of these new findings to be communicated to those who have the task of looking after patients with glaucoma. Such is the impression gained from reading the account of the proceedings of the sixth meeting of the Horacio Ferrer Eye Institute held in Miami in March 1973. Compared with some other symposia there is relatively little about the physiology of the intraocular pressure and most of the material is presented in terms of its practical application, the main topics covered being the optic disc and the importance of its assessment in the diagnosis and management of glaucoma, medical treatment, and surgery. A quick way to learn most of the important points which were raised is to read the 10 pages of the preface. On the technical side of the publication, it is a pity that the quality of the paper is not matched by the typographical standard because there are several spelling mistakes and similar errors. It does not take long to read this book and it is time well spent if one is looking for good commonsense ideas about glaucoma in clinical practice.

J. GLOSTER

The Wilmer Ophthalmological Institute: The First Fifty Years, 1925-1975. By M. E. RANDOLPH and R. B. WELCH. 1976. Pp. 216, 78 figs. Williams and Wilkins, Baltimore (\$12)

A golden commemoration is, and has long been, an occasion for congratulation, and when the anniversary concerns the Wilmer Ophthalmological Institute in Baltimore, opened in 1925—22 years before our Institute in London—to the congratulation must be added rejoicing in view of the immense value its influence has had on the development of ophthalmology in America and elsewhere.

The story of its birth is interesting. Like most golden

events it was all due to a woman. Mrs Aida Breckinridge was one of those typically American women—handsome, intelligent, and immensely determined. Fortunately for Johns Hopkins she developed glaucoma; more fortunately her surgeon was Wilmer; most fortunately the operation was a success. She considered that Wilmer deserved a better milieu than was afforded by the Episcopal Eye, Ear, and Throat Hospital in Washington, although he had the largest and most distinguished private practice in America. Mrs Breckinridge's views can clearly be understood for Wilmer was the handsomest man the reviewer has seen and one of the most charming and, withal, an excellent ophthalmologist and surgeon. So with the utmost zeal and determination, with the help of the Rockefeller Foundation and Johns Hopkins Hospital, she collected \$3 700 000 and the Wilmer Institute was born.

This book divides the history of the first 50 years of the Wilmer Institute into three eras, the periods of its three directors and professors: The Wilmer era 1925–34, the Woods era 1934–55, and the Maumenee era 1955–75. At first the Institute took over a somewhat rundown building in the hospital complex until a new building was completed in 1929, and before Wilmer retired subdepartments of pathology, physiology, bacteriology, chemistry, and physiological optics had been established and the Institute had become recognized as one of the leading centres in ophthalmology. Woods's directorship saw further growth and expansion and a great enhancement of its reputation, partly due to the unique achievements in research of Alan Woods himself and the amazingly comprehensive original and classical work of Jonas Friedenwald. When on the retirement of Woods, Edward Maumenee, an old Johns Hopkins student, was

enticed from the chair at Stanford University to return to the Institute its work and influence steadily increased, despite the premature and lamented death of Friedenwald. During his tenure, in 1964, the Woods Research Building and the Friedenwald Library greatly increased the capacity of the institution together with the renovation of the whole building.

This book gives these events in a fascinating and detailed way. It tells how ophthalmology evolved during those 50 years, the changes in cataract and retinal and vitreous surgery, the rise and decline of Woods's belief that tuberculosis was the cause of uveitis and in its treatment by the use of 'barrels of tuberculin' and later of streptococcal vaccine, and the host of medical and technological advances that have characterized these years, particularly in Maumenee's time.

The book has also great personal interest. There are full biographies of the three directors, of Jonas Friedenwald, Frank Walsh, Charles Iliff, Louis Sloan—and the artist, Annette Burgess. Not the least feature of interest is the record, with photographs, of the house-staffs during these years; it is extraordinary how many of them have disseminated into responsible posts all over the United States, and how different they look now compared with their appearance in their youth.

In this volume we almost have a history of American ophthalmology over half a century. For indeed the Wilmer Institute has been fortunate—in the ability of its directors, in the great mass of medical clinical material available to it in Johns Hopkins Hospital, and in the availability of superb laboratories for the basic sciences in the associated university.

STEWART DUKE-ELDER

Notes

The Page and William Black Postgraduate School of Medicine

New York, 22 January 1977

A postgraduate course on 'Dyslexia: current developments', co-sponsored by the New York State Branch of the Orton Society Inc. under the direction of Virginia Lubkin, MD, FACS, will be held at the Mount Sinai Medical Center.

Further information may be obtained from the Director, The Page and William Black Postgraduate School of Medicine, Mount Sinai School of Medicine, Fifth Avenue and 100th Street, New York, NY 10029, USA.

Seventeenth Annual Instructional Course in Contact Lens Fitting

New Orleans, 17–19 February 1977

The Rudolph Ellender Medical Foundation (an AMA-approved course in continuing medical education) will be presenting its seventeenth annual instructional course. Special convention room rates will be offered by the Fairmont Hotel.

Further information may be obtained from Jos. A. Baldone, MD, President, Rudolph Ellender Medical Foundation Inc. Roof, Delta Towers, New Orleans, 70112, USA.