Book reviews

Intraokularlinsen: Grundlagen und Operationslehre. By PAUL U. FECHNER. Pp. 156. DM.59.00. Ferdinand Enke Verlag: Stuttgart. 1980.

The last decade has seen a rapid increase in the use of intraocular lenses for the management of aphakia. New materials, new lens forms, new techniques, and revised indications are put forward almost daily, and the ophthalmologist has often to keep a cool head during this bombardment. This comprehensive, well-illustrated book goes a long way towards sorting out some of the confusion that has been created by these rapid developments and is to be thoroughly recommended. Its value is enhanced by the excellence of its illustrations. There are photographs and simple diagrams throughout, so that the book serves not only as a discussion on the history and basic principles of intraocular lens implantation but also as a manual of surgery describing the different operative techniques that need be applied for the individual lens forms. Although the author's bias towards intraocular lenses is obvious, the contraindications and complications are discussed fairly and in depth, and the bibliography is comprehensive.

One has come to expect high standards from German ophthalmic textbooks, and this volume is no exception. It should be essential reading for all eye surgeons, not only those committed to this new branch of surgery.

T. J. FFYTCH

Current Topics in Eye Research. Vol. 3. Eds. JOSE A. ZADUNAISKY and HUGH DAVSON. Pp. 336. \$35.00. Academic Press: New York. 1980.

This volume constitutes an important contribution to eye research and contains 6 authoritative articles. Two of these, by Piatigorsky and by Varma, deal with lens metabolism, one (Church) is concerned with cell genetics, another (Laing) with specular microscopy of cornea, and the last two (Copeland and Sivak) deal with comparative aspects of ophthalmology.

Piatigorsky presents a constructive and wide-ranging review of the relationship between lens crystallin synthesis and intracellular electrolytes and inclines to the view that changes in the latter may lead to severe alterations in protein metabolism and possibly to cataract formation. Varma also deals with cataractogenesis but, in this case, the specific role of aldose reductase in diabetic cataract, and he includes useful information on possible therapeutic uses of flavonoids. In a most interesting article Church discusses the basic principles of somatic cell hybridisation and its application to ophthalmological research, and one hopes that further work in the field will be stimulated. Laing describes the various techniques of specular microscopy as applied to the cornea and indicates how it may be used to obtain quantitative information on cell morphology and tissue fluorescence.

The 2 articles on the long neglected subject of comparative ophthalmology make one realise (a) that much may be learned from studying lower forms of animal life and (b) that once there was a journal (*Archiv für vergleichende Ophthalmologie*), published in the early part of this century,

devoted entirely to this topic. Copeland describes in great detail the blood supply of the choroid and lentiform bodies in 2 species (*Salmo gairdneri* and *Fundulus grandis*) as related to the pseudo branch and discusses the way in which these structures serve the nutritional requirements of the retina. In the final article Sivak works on a much broader canvas when he surveys accommodation in vertebrates and deals mainly with developments which have taken place since 1942, when Walls published his book on *The Vertebrate Eye and its Adaptive Radiation*.

Taken all in all, this is one of the most interesting books I have seen for some time and one which it has been a pleasure to review. It should certainly be available in any institution seriously devoted to eye research, and one hopes that the same high standard will be maintained in future volumes.

D. F. COLE

Visual Optics and Refraction: A Clinical Approach. 2nd edn. By DAVID D. MICHAELS. Pp. 743. £47.00. C. V. Mosby: London. 1980.

Although a great deal of work has gone into the writing of this book, the reader will find it hard to warm to it. And who, by the way, is the reader? He is one who wants to learn 'the principles of refraction as a clinical discipline in the context of optics, ocular physiology, and visual psychophysics' with pathophysiology and pharmacology added for good measure. At £47 the book may be confidently said to fall into the Scylla of overkill because it has sought to avoid the Charybdis of relevance. I am all in favour of the abandonment of 100% contrast test targets and of teaching both the novice and the old hand modern ideas of contrast sensitivity as they relate to ocular resolving power, a task attempted in this book—yet, alas, not achieved. But what is the point of dwelling on the technique of visually evoked responses when its value in refraction measurements is referenced once and not illustrated at all? Talking of references, why list papers in the extensive bibliographies if there is no textual contact with them? Is this why five secretaries had to be employed and the price of the book adjusted accordingly?

No one is going to convince your scribe that a manual of refraction needs over 700 pages. What we are presented with is an attempt to supplement Adler without his catholicity and Davson without his critical insight. In case the above opinions sound a little on the churlish side, let me add that Professor Michaels succeeds in this in so far as some of his illustrations are concerned. But the concession is wrenched from one's pen with difficulty if one is asked to stomach a passage such as the following:

'Presbyopia is an irreversible optical failure, an unexplained evolutionary blunder that comes as a psychologic shock. The patient over 40 sees his reading vision dim. Soon, he imagines, the muscles will weaken, the skin shrivel, the hand shake, the mind totter, and only an empty shell remain. In fact, there is considerable discrepancy between chronologic age and ciliary muscle function [*sic*]. Although presbyopia means . . . vision of old age, it is a poor term for today's life span. Even its onset cannot be exactly defined, for it depends on the length of the arms, the pliability of the neck, the elasticity of the ego [Young's modulus?], and the geographic latitude. . . .