

the cortical evoked response, development, and general models. The book is intended as a research aid. As such it is undoubtedly useful. It will also be useful to university teachers and to ophthalmologists as a well-produced introduction to an important subject. A. L. HOLDEN

**Movements of the Eyes.** R. H. S. CARPENTER. 1977. Pp. 420. figs., refs. Academic Press, London (£13.50)

Following after an interval of only 4 years Ditchburn's massive volume entitled *Eye movements and Visual Perception*, this book is based on a less phenomenological but more contemporary approach. If a recent article in the *Lancet* is anything to go by, then clinical workers may well be worried by Carpenter's philosophical basis of systems analysis. However, every time one tests eye movements one takes advantage of the existence of the system, and an understanding rooted in general principles (ably expounded in an appendix) must be of advantage to doctor and patient alike.

The author's account is one of total physiology, with pathology not getting much of a look in. There is little doubt that this will act as a deterrent to clinical workers, but they should resist being deterred. The descriptions of the afferent functional anatomy and neurophysiology are lucid, the relation between eye movements and vision instructive, and the survey of the organisation of the visuomotor system thoughtful and provocative. Though the unjustified line lengths play havoc with the reader's eye movements, he is still encouraged to read it from cover to cover. R. A. WEALE

**Advances in Experimental Medicine and Biology.** Vol. 77. Retinitis Pigmentosa: Clinical Implications of Current Research. Edited by M. B. LANDERS, M. L. WOLBARSH, J. E. DOWLING, and A. M. LATIES. 1977. Pp. 266, figs., refs. Plenum Press, New York (\$30)

The recent upsurge of interest in retinitis pigmentosa (RP) is indicated by the several symposia and many papers on various aspects of this topic that have been appearing in recent years. These are the proceedings of a symposium sponsored by the Association for Research in Vision and Ophthalmology in 1975, and are in three sections: natural history and diagnosis, research models, and current trends in therapy.

Any symposium on a topic such as RP which gathers together clinicians, research scientists, and social workers is to be encouraged. If any progress is to be made in our understanding of a group of disorders as complex as RP, it will only be by continuing discussion between members of different disciplines, each of whom must communicate the advances and the problems of his field of interest and indicate the manner in which these problems might be solved by the research of others. In 2 days it would have been impossible to cover all areas of research where advances have been made in our understanding of the

retina and of the dystrophies that afflict it. The papers in the section on research models review the advances in our understanding of retinal dystrophies in mice and rats; it is unfortunate that there were no contributions on the canine dystrophies.

The papers on current trends in therapy are thought-provoking and will present clinicians with problems of how, and if, patients with RP should be treated, particularly in relation to exposure to light, body temperature, and thyroid dysfunction. The section on the natural history of human RP was the least satisfactory. It is essential for clinicians to emphasise the heterogeneity of RP in any study of patients with this diagnosis. Lumping them together, as one contributor did, is meaningless, for RP is no more a single disease than is the pox or diarrhoea. It is also disappointing to read that sporadic cases most likely represent the autosomal recessive form of RP. They do not in Britain, and probably do not in many other parts of the world. Despite these criticisms, this record of the symposium is welcome. BARRIE JAY

**Eye Movements.** Arvo Symposium 1976. Edited by BARBARA A. BROOKS and FRANK J. BAJANDAS. 1977. Pp. 223, figs., refs. Plenum Press, London (£27)

The last decade has witnessed the publication of several excellent books dealing with eye movements, most of which have resulted from the collaborative efforts of neuro-ophthalmologists, engineers, physiologists, and psychologists, who have brought to the study a catholic and comprehensive treatment. The present volume, despite the all-embracing title and quality of contributions, is more restricted in scope than most. Essentially the book consists of 10, somewhat lengthy, specialised articles which could equally well have appeared as a supplement to an international journal, and much of its content is already accessible in the journals. Nevertheless, despite doubts about the book as a worthwhile investment, the standard of contribution is uniformly high.

An introductory chapter by David Cogan outlines some of the outstanding problems of ocular motility awaiting solution, each defined with clarity and brevity. In chapter 3 the Miami group provide a useful summary of several years' work otherwise available only in numerous scattered papers. A final chapter by David Sparks and Jay Pollack collates useful data on the role of the superior colliculus in the generation of saccadic eye movements. The remaining articles are more specialised, dealing with specific aspects of cerebellar function, neurophysiology of brain stem nuclei, optokinetic nystagmus, and congenital oculomotor apraxia. Perhaps of particular interest, almost as a lesson in the elegant application of physiology and anatomy, is the careful demonstration by Stephen Highstein that 'anterior' internuclear ophthalmoplegia is probably attributable to lesions of axons of abducens interneurons which ascend in the medial longitudinal fasciculus to innervate contralateral medial rectus neurones. M. GREY