Principles and Practice of Clinical Electrophysiology of Vision

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“Scribble, scribble, scribble,” said the Duke of Gloucester to the author of *The Decline and Fall of the Roman Empire*. “Always another damn thick square book, eh, Mr. Gibbon?” When we first saw the height of the pillar of our page proofs, our feelings were mixed: pride at the industry of the contributors competed with wonder that Gibbon had recorded the thousand-year history of the entire civilized world in considerably fewer pages than seemed necessary to describe a specialized branch of applied clinical science which is barely 50 years old (and, of course, Gibbon incorporated a much greater number of jokes in his volumes than do we).

The need for an authoritative text was born on us by conversations with our colleagues when the possibility of the book was first raised some 4 years ago. There are several excellent works—some of them in English—which deal with various aspects of clinical electrophysiology and the eye. None of them completely meets the needs of the worker in the clinical laboratory, in the sense that detailed practical information on techniques and practical problems is needed in the same volume as the basic physiology and anatomy, the theoretical concepts, and the clinical findings. All these disciplines are encountered (if not mastered) by a practitioner in this field, and, in our experience, a successful practitioner must refer fairly frequently to such sources to understand and properly utilize the developments in the field. We have aimed at complete coverage for such persons, but of course we could not include articles on every topic. Many important aspects of cortical and lateral geniculate structure and function and the biophysics of excitable tissue have not been covered. We have regretfully not included many fascinating aspects of retinal biochemistry and cell biology. These we thought to be of lesser clinical relevance than the material on ancillary and clinical methods of examination.

The itch to be encyclopedic was not to be resisted, when several chapters, received early in the project, seemed to break ground either in the completeness of exposition or in the elegance with which difficult subjects were explained. We also were able to include as a contributor a founder of the field—Ragnar Granit—who recruited Goste Karpe to exploit the new electrophysiology for the purposes of clinical ophthalmology. This led to the burgeoning of the subject. Happily, this process continues, implying that any future book on this subject must be selective. Today, however, we have been able to present more than one contribution on the same topic, and thus not stifle discordant opinions, which are to be expected in so young a discipline. This is not to say we have not edited our contributors’ results to minimize overlap, and we apologize to those of them who are smarting at our pruning. Our thanks are due to them all, and in reading their contributions we have ourselves learned a great deal about our own subject.

Our thanks also to our staff who assisted us, colleagues of the International Society for Clinical Electrophysiology of Vision who encouraged the project, and the people at Mosby-Year Book who graciously allowed us to turn a book of 350 pages into one of more than 800!

Errors of omission are all our own, and especially, in the choice of authors: we have turned to a considerable extent to the younger contributors in the field, in the confident expectation that their increasing reputations will add lustre to the book.

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