ing such a fine piece of work. No library, whether personal or public, can afford to be without it.

J.W. Norris,
Toronto, Ontario

FUNDAMENTALS OF NEUROPHYSIOLOGY. Third Edition. Edited by R.F. Schmidt. Published by Springer-Verlag. 346 pages. $27.00 Cdn.

In some ways Schmidt's Fundamentals of Neurophysiology is a superb book. It really does start from the basic fundamentals and logically and clearly develop most of the major themes of neurophysiology. The illustrations have been improved and the text honed, presumably based on experience gained from the first two editions. It has multiple choice questions for the student to test his knowledge after each section.

However, the text has really not kept pace with the subject. Schmidt's preface is dated Summer, 1985, but the bibliography contains virtually no references after 1981. Only one paragraph is devoted to peptides including a passing mention that they may serve as neuromodulators. This lack of emphasis is strange considering Schmidt's own interest in pain pathways where peptides feature so prominently. Similarly, I could find no mention of single channel recording, a technique developed by his fellow countrymen Neher and Sakmann, despite the enormous impact of this technique on the field. None of the recent, striking advances in the molecular structure and function of sodium channels, ACh channels, the Na-K pump etc. is to be found. Even at the systems level recent work is ignored. The role of Golgi tendon organs is given in terms of protective reflexes, such as the "jackknife reflex," despite the clear demonstration by Rymer and his colleagues a few years ago that Group III afferents are responsible for such reflexes, not Golgi tendon organs.

I am forced to conclude that despite its strengths for teaching some introductory courses, major revisions to update the material are essential. Unless this is done, "Fundamentals of Neurophysiology" will become a highly evolved dinosaur, but even the most advanced dinosaurs could not escape extinction in the face of a changing world. It would be a shame if this fine textbook were to suffer a similar fate.

Richard B. Stein,
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BEHAVIORAL NEUROLOGY: A PRACTICAL APPROACH. By Howard S. Kirschner. Published by Churchill Livingstone. 230 pages.

This book lives up to its name in offering a practical approach to behavioral neurology. It consists of 12 chapters. Chapter 2, on the bedside mental status examination, is useful although short. The author's use of "short term memory" to mean recent memory is misleading, although clinicians tend to use this term inaccurately. There are chapters dealing with most of the major areas in behavioral neurology and a chapter on the behavioral aspects of epilepsy. The section on the agraphias may be faulted for being too short.

The discussion of the various theoretical aspects of neurobehavioral syndromes is adequate though not extensive.

The book is well written; it is concise, clear and easy to read. There are helpful tables, well reproduced CT scans, a few MRI's and useful diagrams. The chapters are well referenced.

This book would not replace the more detailed texts and monographs in the field but, as a concise review of a primer, serves a purpose. It is recommended for neurologists, residents and neuroscientists as general reading.

Andrew Kertesz,
London, Ontario

NEUROLOGY IN PRIMARY CARE. Edited by Robert C. Cantu. Published by MacMillan Publishing Co., 1985. 424 pages. $43.50 Cdn.

To a large extent, I liked this book. To quote the preface, "NEUROLOGY IN PRIMARY CARE is a practical and current reference covering all of the commonly encountered disorders of the central nervous system. We have excluded the esoteric . . . we focus primarily on recognising and treating the neurologic disorders likely to be seen in a primary - care practice." Indeed, the authors mainly adhere to this; for example, in the chapter on Degenerative CNS Diseases, a list of the disorders is given and then the crucial ones such as Alzheimer's and Parkinson's are discussed in detail. In the chapters on Metabolic Diseases, however, the author cannot suppress his neurological compulsiveness, and describes everything including Marchiafava-Bignami's and Pelizaeus-Merzbacher's diseases — conditions I have yet to see in 20 years of pure referral neurology. Conversely, the same author could give more detail in his chapter on headache.

The references are well chosen, up to date and not too numerous, though the section on cranial trauma gives mainly sports medicine references. Most illustrations are excellent. There are good, well reproduced CT scans and many very fine line drawings, but the line drawings in the Neuropathies section were hard to see even with my glasses. Under Trauma, there are some rather large, not too clear photographs of intracranial clots of doubtful instructive value, good line drawings as in the same author's chapter on spinal trauma would have been much better.

Much of the book is very practical, clear and useful, concentrating on the meat and not the sauce; particularly, the chapter on epilepsy. It has some excellent tables enabling some important information to be gleaned easily. The book's main fault is that of many multi-author works, namely a lack of overall style and uniformity. In massive reference tomes this is acceptable, but it detracts from a text of this type. For instance, the writing in the chapters on Vascular Disease is fluid and extensive, whereas that in the chapter on Neuropathies is as terse as a nerve action potential.

I think this is a good book, almost achieving its stated purpose and worth buying now. With attention to the overall plan and style of the book and tighter editorial control the next edition could be a winner.

Charles A. Simpson,
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