components of the syndrome, a feature of particular value to those involved in the management of patients with this disorder. Finally, the medical and surgical treatments are described. This is an excellent textbook. The chapters have been organized in a logical fashion and all major areas are addressed. The information is current and described clearly. This book should be read by all pediatric neurologists and all those with an interest in epilepsy.

Kevin Farrell Vancouver, British Columbia

AGE-RELATED DOPAMINE-DEPENDENT DISORDERS. 1995. Edited by M. Segawa and Y. Nomura. Published by Karger. 256 pages. \$C250.00

This volume, #14 in the Monographs in Neural Sciences series, contains the proceedings of a symposium held in November 1993 to celebrate the 20th anniversary of the Segawa Neurological Clinic. Given the substantial contributions that Professor Segawa has made to the understanding of hereditary progressive dystonia, it is not surprising that the majority of the first section of the book (Pathophysiology and Molecular Biology of Dopa-Related Disorders in Childhood and Adolescence) is devoted to this topic. This comprises approximately one-half of the volume and there are two shorter sections on Neuronal Circuits and Compartments of the Basal Ganglia and their Clinical Manifestations, and Monoamine Neurons: Gene and Gender Differentiation.

As is so often the case in this type of publication, the quality of the entries is variable, there is considerable duplication and the indications for including some of the articles are questionable. A number of the authors make a point of differentiating between dopa-responsive dystonia, hereditary progressive dystonia, juvenile parkinsonism, dystonia-parkinsonism and young-onset Parkinson's disease. In other chapters, the use of these terms is lax and confusing. One exception to this is the excellent review by Nygaard of the history, clinical features and genetics of dopa-responsive distonia and juvenile Parkinsonism. There are some chapters on clinical electrophysiology which contain observations of tenuous interest and are highly speculative in their conclusions. Similarly, there are three chapters on PET Scanning, most of which rehash previously reported findings and it is unfortunate that these could not have been combined into a single more scholarly overview. There is another excellent chapter in this section by Ozelius et al. on the genetics of torsion dystonia. Unfortunately the book was published shortly after the discovery of the GTP cyclohydrolase mutation in dopa-responsive dystonia and this is only alluded to in the editor's introduction.

The second section contains some very good reviews of basal ganglia anatomy (Nakano et al.; not easily digestible), dopaminergic innervation of the primate cortex (Maeda et al.) and basal ganglia regulation of eye movements (Kato and Hikosaka), but other entries in this section are either confusing or of questionable relevance.

The final section comprises three chapters. There is an intriguing entry on sexual dimorphism, particularly the hormone-independent effects of gender, but it is non-specific in its focus and like many of the other chapters, not clearly directed towards the title of the volume. There is a chapter on compartmentalization in embryonic striatal grafts and another on the role of basic FGF in the substantial nigra.

Although there are some very good chapters in this volume, the volume as a whole lacks cohesion and in my view loses from the use of repeated short entries rather than larger more global and scholarly reviews. There is a reasonably annoying number of typographical errors (including the editor's name on the cover!) and one of the more important figures in Chapter I is oversimplified and mislabelled. The references in many of the chapters are predominantly to non-peer-reviewed publications. Thus, despite the good entries, I cannot recommend this as good value for the rather steep price.

A.J. Stoessl London, Ontario

NEW TRENDS IN NUCLEAR NEUROLOGY AND PSYCHIATRY. 1993. Edited by D.C. Costa, G.F. Morgan and N.A. Lassen. Published by John Libbey & Company Ltd. 180 pages. \$C50.00

This review of the expanding role of functional radionuclide imaging in the neurosciences was originally published in 1993 in response to a symposium on "New Trends in Nuclear Neurology" which followed the 1992 meeting of the European Association of Nuclear Medicine. Rather than a compilation of the proceedings, this is a well organized, concise and balanced review of the field. The aim of the book, as stated in the preface, was to serve as "a quick reference for those Nuclear Medicine Physicians, particularly residents and young specialists, who decide to initiate their practice of Nuclear Neurology and Psychiatry". It has achieved this aim.

Included are chapters on basic neuroanatomy and physiology; neuroreceptors; instrumentation, technique and computer processing; and blood brain barrier, metabolic, receptor and perfusion radiopharmaceuticals with emphasis on SPECT agents. Clinical applications in stroke, dementia, epilepsy and psychiatry are reviewed, followed by a chapter on correlation with anatomic imaging modalities and trends in multimodality image fusion. References are extensive and up-to-date to the time of publication. Historical information is interspersed and adds interest and insight into the evolution of the techniques. Many of the classic original articles are cited. Illustrative cases are not extensive but appropriately complement the text and highlight major applications.

For a multiauthor text, it achieves a commendable balance with few major gaps and little overlap or repetition. Although some of the information on specific instruments and radiopharmaceuticals has been superceded, in total, the information is remarkably up-to-date for a rapidly evolving field. The reasonable price of the book is a welcome deference to tradition in this era of ever increasing costs. This remains an excellent introductory text and starting point from which to explore more recent developments.

Reinhard Kloiber Calgary, Alberta

INTRACEREBRAL HEMORRHAGE, FIRST EDITION. 1994. By Carlos S. Kase, Louis R. Caplan with 7 contributing authors. Published by Butterworth-Heinemann. 516 pages. Price not available.

Textbooks devoted exclusively to the topic of intracerebral hemorrhage (ICH) have been lacking until very recently. This monogram is designed to fill this void. In the preface, the authors state their purpose is to organize, coordinate, and summarize the large body of information available on the topic of brain hemorrhage in adults. They have focussed their discussions on intraparenchymal hemorrhages and deal with subarachnoid and extra-axial bleeding only as they relate to the problem of parenchymal brain

hemorrhage. Throughout the book, Drs. Caplan and Kase have emphasized the historical evolution of our current concepts and theories on intracerebral hemorrhages. The lead authors, both experts in this field, have written all the chapters on the mechanisms, clinical features, location, and treatment of intracerebral hemorrhage. Additional chapters have been contributed by authorities in neuropathology, neuroimaging, epidemiology, and neurosurgery.

The book is divided into four major sections. The first section deals with the general features of intracerebral hemorrhage and opens with an entertaining and instructive chapter providing a historical overview. Subsequent chapters on epidemiology, general signs and symptoms, pathology, and modern neuroimaging provide the necessary background for those readers lacking experience in this field. The discussion on the signs and symptoms provides clinical pearls on the presentation of intracerebral hemorrhage often neglected in this era of neuroimaging.

The second section is devoted to mechanisms of intracerebral hemorrhage. The chapters on hypertensive hemorrhages, amyloid related hemorrhages, and aneurysms and vascular malformations provide a wealth of clinically relevant material. A chapter on vasculitis and other angiopathies is particularly valuable as it assembles available knowledge on several unusual causes of intracerebral bleeding that is difficult to find in a single source. Other topics include bleeding disorders, drugs, trauma, and tumors.

Part three deals with the clinical features of intracerebral bleeding at different sites. Anatomical drawings, pathological photos, and examples of CT or MRI findings complement the text. Brief case descriptions are frequently used to add depth to the discussions. Most chapters conclude with an analysis of outcome variables and current treatment.

Part four is an overview of the prognosis of ICH and the medical and surgical therapy. The surgical discussion focuses predominantly on the issue of hematoma evacuation and ventriculostomy.

This is an excellent book which admirably fulfills its objectives. It is well written and I found it easy and enjoyable to read. It is a book written by clinical experts for use by clinicians. Each chapter is well referenced and the index is adequate and useful. The discussion on the treatment of AVMs and vascular malformations could have been expanded. Little information has been provided on the role of the "gamma knife", radiosurgery, and interventional neuroradialogical therapy. Except for these shortcomings, the book is quite thorough without being exhaustive or tedious. I would strongly recommend it to neurologists, neurosurgeons, and residents with an interest in vascular diseases of the nervous system.

Philip A. Teal Vancouver, British Columbia.

ANTIEPILEPTIC DRUGS, FOURTH EDITION. 1995. Edited by René H. Levy, Richard H. Mattson and Brian S. Meldrum. Published by Raven Press. 1148 pages. \$C233.00

There is no more rapidly expanding field in neurological therapeutics than that of antiepileptic drugs. We have witnessed the release of three new drugs in the last two years: vigabatrin, gabapentin and lamotrigine, with others such as topiramate, tiagabine and oxcarbazepine on the horizon. It is safe to predict that the pharmacological treatment of epilepsy will be quite different from our present approach ten years hence. The fourth edition of Antiepileptic Drugs has expanded considerably over its predecessor, now to 98 chapters and 1120 pages, reflecting the growing knowledge in this area.

This book in its earlier editions has become the reference "bible" for information on antiepileptic drugs, their development, pharmacology and clinical use. The present edition maintains the very high standard of content and production and will serve as a suitable reference source for neurologists, epileptologists, pharmacologists and pharmacists on all aspects of these agents. The first section, "General Principles", includes excellent chapters on pharmacolinetics, experimental aspects, clinical trial design, compliance, principles of drug selection, use of serum levels, teratogenicity, discontinuation of drugs and use of antiepileptic drugs in the elderly. This is followed by sections on the individual drugs including those which are no longer used such as bromides, trimethadione or progabide. Newer drugs and drugs under development are given ample coverage with recent data. The chapters in each section follow an orderly progression: mechanisms of action; chemistry and biotransformation; absorption, distribution and excretion; interactions; clinical use and tosicity. This well-organized format in addition to an extensive index facilitates location of specific information on a particular drug.

This volume is truly encyclopedic in scope but the editors have done a superb job in making the material from multiple authors cohesive and readable. This book should find its way onto the shelf of every epileptologist and epilepsy researcher. It should also be readily accessible to neurologists psychiatrists, neurosurgeons working in epilepsy, pharmacologists and hospital pharmacists. Neurology trainees could benefit greatly from reading several of the chapters in the "Principles" section. I congratulate the editors on providing such a usable and up-to-date reference in this burgeoning field.

A. Guberman Ottawa, Ontario

MULTIPLE SCLEROSIS FACT BOOK. SECOND EDITION. 1995. By Richard Lechtenberg. Edited by Robert W. Reinhardt, Bernice M. Wissler and Glenn L. Fechner. Published by F.A. Davis Company. 235 pages. \$C26.00

The Multiple Sclerosis Fact Book is precise, accurate and current. Dr. Richard Lechtenberg, the author, has addressed Multiple Sclerosis and its effects in easily understood terms. Clearly defined illustrations support these facts. People who have Multiple Sclerosis; those who care; the interested general public and medical personnel will benefit from this wealth of information.

Lechtenberg presents an extensive overview of what Multiple Sclerosis is; who is commonly affected and how diagnosis is determined. The author also discusses the social, psychological and sexual problems which may be encountered. In addition, explanations of lifestyle adjustments and methods of rehabilitation are offered.

Sections on "Research Efforts", "Recommended Reading" and a "Glossary of Terms" conclude this detailed, informative work.

As a comprehensive resource on the subject of Multiple Sclerosis, this is a must read.

Lynn Flynn Calgary, Alberta

ATLAS OF BRAIN FUNCTION. 1995. By William W. Orrison, Jr. Published by Thieme Medical Publishers, Inc. 112 pages. \$C77.00

This brief atlas of the brain is divided into two sections: the first is a glossary of anatomic structures with a description of