

Books Received

APPLICATIONS OF NEURAL NETWORKS TO TELECOMMUNICATIONS 3. 1997. Edited by Joshua Alspector, Rodney Goodman, Timothy X. Brown. Published by Lawrence Erlbaum Associates. 292 pages. \$C104.00 approx.

BRAIN CONTROL OF BEHAVIOUR. 1997. By Paolo Pinelli. Published by Karger. 344 pages. \$C389.00 approx.

CENTRAL NERVOUS SYSTEM INFECTIOUS DISEASES AND THERAPY. 1997. Edited by Karen L. Roos. Published by Marcel Dekker, Inc. 770 pages. \$C254.00 approx.

NEONATAL CEREBRAL ULTRASOUND. 1996. By Janet M. Rennie. Published by Cambridge University Press. 242 pages. \$C117.00 approx.

SEIZURES AND EPILEPSY IN CHILDHOOD. A GUIDE FOR PARENTS - SECOND EDITION. 1997. By John M. Freeman, Eileen P.G. Vining and Diana J. Pillas. Published by The Johns Hopkins University Press. 320 pages. \$C22.00 approx.

SEXUAL AND REPRODUCTIVE NEUROREHABILITATION. 1997. Edited by Mindy Aisen. Published by Humana Press. 244 pages. \$C129.00 approx.

STRESS - VOLUME 1 AND 2. MOLECULAR GENETIC AND NEUROBIOLOGICAL ADVANCES. 1996. Edited by Richard McCarty, Greti Aguilera, Esther L. Sabban and Richard Kvetnansky. Published by Harwood Academic Publishers. 1002 pages. \$C325.00 approx.

THE NEUROPSYCHOLOGY OF DREAMS. 1997. By Mark Solms. Published by Lawrence Erlbaum Associates. 292 pages. \$C78.00 approx.

THE TEMPORAL LOBE AND LIMBIC SYSTEM. 1997. By Pierre Gloor. Published by Oxford University Press Canada. 865 pages. \$C194.00 approx.

Book Reviews

FRACTURED MINDS: A CASE-STUDY APPROACH TO CLINICAL NEUROPSYCHOLOGY. 1996. By Jenni A. Ogden. Published by Oxford University Press Canada. 290 pages. \$C40.00

This book describes the work of psychologists in the field of neuropsychology and their contribution to the assessment of the brain-damaged patient, to neurologic and neurosurgical diagnosis, to rehabilitation and to research. The author is a senior lecturer in clinical psychology at the University of Auckland in New Zealand and is associated with the Departments of Neurology and Neurosurgery there. The methods of assessment of cognitive function are described as they include the clinical interview, the choice of test procedures and their application to the full range of cognitive (intellectual) functions. Happily, and contrary to the practice of many neuropsychologists in Canada if not North America, the author is fully aware of the limitation of the tests, the problem of inadequate normal values, the absence of corrective measures for various psychological states, and the importance of interpreting the test results within a broader clinical context. The role of the neuropsychologist is correctly defined as a contributor to the process of diagnosis, and working as part of a multidisciplinary team which includes neurologists, neurosurgeons, psychiatrists, rather than as a sole practitioner who will go on to provide seemingly final and authoritative opinions on the existence of brain injury and other neurologic disorders.

The main portion of the book consists of clinical case studies with detailed descriptions of the neuropsychological test results. These include examples of global amnesia, aphasia, hemineglect, autotopagnosia, object and face agnosia, frontal lobe dysfunction, dementia, and the disabilities which follow subarachnoid hemorrhage, organic solvent exposure, corpus callosum section, and hemispherectomy. The clinical accounts are given in an interesting and lucid manner. The difficulties with

everyday life and behaviour are described and the neuropsychological defects are discussed with reference to current publications and concepts. A patient with a "minor closed head injury" is also included, with a history of brief concussion, a post-traumatic amnesia of several hours followed by typical post-concussion symptoms, and with demonstrable impairment of memory, sustained attention and new learning, with associated emotional difficulties, all of which subsided after a few months. This case example is in refreshing contrast to the diagnosis of mild head injury so readily promoted by many Canadian neuropsychologists and psychiatrists and other non-neurologic practitioners in patients who have never even struck their heads.

The text is highly recommended to medical students, students of psychology, to graduate physicians as well as to practicing neurologists, neurosurgeons and other health care professionals who are involved with neurologic disorders.

*Henry Berry
Toronto, Ontario*

DISORDERS OF THE VESTIBULAR SYSTEM. 1996. Edited by Robert W. Baloh, G. Michael Halmagyi. Published by Oxford University Press Canada. 687 pages. \$C194.00

This comprehensive hand-book on Disorders of the Vestibular System arrives at a time when there has literally been an exponential increase in interest in vestibular disorders in the field of medicine. The Editors have carefully selected many contributors to this volume who have expertise in the various areas that are discussed in detail in the four parts that make up this comprehensive and up to date text.

While multi-author texts can often be disjointed and difficult to read this text was a pleasure to read. Each chapter provides a wealth of information regarding the topic discussed. The first

section, Part 1 deals primarily with those basic mechanisms of the vestibular system that are important for practitioners in the field to understand in order to be able to diagnose and treat diseases affecting the peripheral and central vestibular systems. Particularly useful was the chapter on how the brain compensates for vestibular lesions which is often a difficult area for physicians to understand and to explain to their patients.

Part 2 emphasizes the clinical evaluation and the critical importance of obtaining accurate historical information from the patient about the nature and duration of their symptoms of vestibular dysfunction. There are also several good chapters on detailed laboratory evaluation including ENG, rotational testing, auditory function and neuro-imaging. This part of the book is rounded out by 3 chapters on otolith testing, posturography and vestibular evoked potentials with good analysis of their potential uses and weakness in diagnosing and treating patients with vestibular disorders.

The third part of this text deals exclusively with the common vestibular disorders and diseases that clinicians deal with on a daily basis. The chapters on vestibular disorders due to cerebral vascular disease as well as the psychiatric aspects of vestibular disorders are particularly good as the former deals with a cause of vestibular dysfunction that is often overlooked, and the latter deals with the difficult territory of psychiatric conditions and how they overlap with vestibular disorders. Many patients with vestibular symptoms who have little in the way of abnormalities on objective testing are often labeled as having psychiatric illnesses when in fact this may not be the case. Therefore more effort needs to be expended to understand the linkage between vestibular dysfunction and some of the psychiatric conditions that are discussed in this chapter.

The final part of the text book deals with the treatment of vertigo ranging from medical therapy to surgical procedures and ending off with a good chapter on the role of vestibular rehabilitation in patients who have sustained vestibular loss whether it be peripheral or central in nature.

In summary this is an excellent text book which is well written and thoroughly enjoyable to read. The clinical experts who have authored individual chapters clearly have a great interest in vestibular disorders, and the editors have organized the book into four easy to understand sections. There are many diagrams, tables and illustrations which add to the understanding of each topic discussed. The entire text is well referenced and the index is extremely useful. This text is strongly recommended for neurologists and otolaryngologists who have an interest in neurology as well as for practicing neurologists, neurosurgeons and otolaryngologists who may have an interest in learning more about this exciting field of medicine. I therefore have no hesitation in strongly recommending it and have no doubt that it will be a landmark text book against which subsequent books in this field will be judged.

*Toni R. Winder
Lethbridge, Alberta*

CATASTROPHIC BRAIN INJURY. 1996. Edited by H.S. Levin, A.L. Benton, J.P. Muiselaar and H.M. Eisenberg. Published by Oxford University Press, New York, Oxford. 267 pages. \$C57.50

This monograph contains 12 chapters devoted to head injury written by experts including Bryan Jennett, Muriel Lezak and Paul Muiselaar. The following aspects are reviewed: epidemiology of head injury, clinical and pathological features of the vegetative state, neurochemical changes in head trauma, medical complications in the rehabilitation ward, pharmacological management, outcomes (emphasis on cognition), ethical issues and concludes with a survey of experimental research in neuroprotective strategies, neurotrophic factors and neural transplantation.

The book is not a comprehensive text on neuro-trauma and assumes the basic aspects of neurological trauma and its management have been mastered. It is not strongly clinically oriented and is weak on the acute management of the patient with head injury. Selected aspects are discussed in considerable detail with little redundancy among the chapters. I found the following aspects to be especially informative: the improvement in prognosis related to MRI scanning and functional neuro-imaging, a thorough review of late complications (seizures, behaviour, spasticity, dystrophic calcifications, abulia and its pharmacological management), prediction of return to work, ethical issues surrounding the decision to withdraw care, and some further insights into primary brain damage.

The monograph should appeal to those interested in neuro-intensive care, especially neuro-trauma, and in neuro-rehabilitation. While it will not serve as a practice manual, it provides additional useful knowledge for the clinician and a view to promising directions of research.

*G. Bryan Young
London, Ontario*

HANDBOOK OF MULTIPLE SCLEROSIS: NEUROLOGICAL DISEASE & THERAPY SERIES/43. 2nd EDITION. 1996. Edited by Stuart D. Cook. Published by Marcel Dekker, Inc. 640 pages. \$C227.00

The last several years have seen a growing sense that multiple sclerosis (MS) may ultimately become a more treatable disease. The recently completed North American interferon and copolymer trials have fueled this optimism and, with this change, basic and clinical researchers have been brought into a closer working collaboration with industry in combined efforts to advance knowledge and find a cure for this vexing and crippling disease. With significant recent progress in basic science and clinical research, dozens of promising treatment strategies are now being tested in pilot and full scale clinical trials. The pace of these changes in basic neuroscience, immunology, virology, molecular genetics, clinical trial methodology and MRI research mandates a concise and yet thorough compilation of this work in one volume. The revised and expanded *Handbook of Multiple Sclerosis* (Editor: SD Cook) does a splendid job of bringing together this body of knowledge for clinicians and basic scientists.

In this text, Cook has again assembled many of the major contributors to the field to review recent advances in their respective areas of interest. Most of the authors have extensively revised and expanded upon the material covered in the first edition (the chapter on Evoked Potentials is essentially