Books Received


CATASTROPHIC BRAIN INJURY. 1996. Edited by Harvey S. Levin, Arthur L. Benton, J. Paul Muizelaar and Howard M. Eisenberg. Published by Oxford University Press Canada. 267 pages. $C58.00 approx.


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

HANDBOOK OF MUSCLE DISEASE. 1996. Edited by Russell J.M. Lane. Published by Marcel Dekker Inc. 792 pages. $C254.00 approx.


THE BIOCHEMICAL BASIS OF NEUROPHARMACOLOGY - SEVENTH EDITION. 1996. Edited by Jack R. Cooper, Floyd E. Bloom and Robert H. Roth. Published by Oxford University Press Canada. 518 pages. $C42.00 approx.

Book Reviews


Professor Brown, of the Department of Psychology, Dalhousie University, Nova Scotia, states in the preface to his book that he set out to produce a textbook for students in Psychology, Biology, Nursing, Health Education, and other fields of Arts and Science and for more advanced students in physiology, anatomy and medicine. I think that he has succeeded in this aim very nicely indeed. The text is divided into fifteen chapters, some of which provide a high-level overview of the topic (e.g. chapter 2 – The endocrine glands and their hormones) while others provide a more detailed, in-depth approach (e.g. chapter 10 – Receptors for peptide hormone, neuropeptides and neurotransmitters). The chapters are arranged in such a fashion that they build, one on another, and lead the reader/student through the topics in a connected and logical fashion. I found the writing style easy to read and the numerous line diagrams were clear and helped illustrate and expand on the textual material. Each chapter ends with a series of Further Readings that highlights both recent papers and classics from the neuroendocrine literature. Following each chapter there is also a series of Review Questions and Essay Questions that would be particularly useful to anyone using this text for a course. For the student, these questions provide a useful aid to self-assessment. The References that end each chapter are reasonable, comprehensive, and up-to-date.

For someone approaching the topic of Neuroendocrinology from a behavioral standpoint, I was mildly surprised that Professor Brown had not dealt with the work of Levy and others that suggests that sexual orientation may be related to size differences in certain hypothalamic nuclei. I also found that the index was not as comprehensive as it might have been. For instance, to find sexual behaviour you have to look under behaviour and then look up each of the topics listed under that. Finally, I was unclear as to why the overview of the book had been left to the final chapter.

These minor criticisms aside, I found this to be a very useful book. It brings together a wealth of neuroendocrine information and is the most comprehensive and up-to-date source for this, of which I am aware. The book contains far more information in it than would be needed by the practising neurologist, neurosurgeon, or endocrinologist. It should however be available as a reference in departmental libraries. Residents in Neurology, Neurosurgery, and Endocrinology will find this text very useful for reviewing the basic science of receptors and neurotransmitters/neuropeptides. Once again, it should be available in department libraries for this purpose. For anyone having to run a course on Neuroendocrinology at the undergraduate or graduate level, this would make a very suitable and welcome teaching aid.

Paul E. Cooper
London, Ontario


This volume is a comprehensive text and reference on negative motor phenomena. It is a biproduct of an international workshop held in April 1994. From Canada, presentations are made by Dr. Fred Andermann, Dr. Peter Ashby and Dr. Warren Blume. Negative Motor Phenomena refers to the involuntary lapses in motor muscle tone or postural control. It can also be defined clinically by an absence of initiation of action, or interruption of an ongoing voluntary motor act or a lapse in normal muscle tone during a sustained posture. Electrically there are periods of electrical silence on EMG at a time when normal muscle contraction should have been present, as in the maintenance of a posture against gravity. The three major
neurological disorders in which negative motor phenomena play a devastating role are cataplexy, certain types of epilepsy, and a form of myoclonus. Asterix is the most familiar form of negative myoclonus. Negative motor phenomena are also part of normal motor behaviour, occurring for example, in REM sleep.

The text is very nicely organized and laid out in sections; Section I - Clinical Syndromes, Section II - Cortical Mechanisms, Section III - Brain Stem Mechanisms, Section IV - Spinal Cord Mechanisms, Section V - Pharmacology, Section VI - Summary that is very well written by Dr. James W. Lance.

Although some of the material is by nature a review article of earlier published work, other papers are refreshingly unique. The very unassuming title “Drop Attacks” chapter by Lee and Marsden is in fact a delightful review of “101 Causes of Drop Attacks” starting with attacks associated with weak legs ending with Binswanger’s Disease. The chapter “Clinical Aspects and Features of Cataplexy” by Guillemineault and Gelb gives a very thorough discussion of this dramatic and curious entity from clinical descriptions to basic science to what’s currently known about the genetics of this disorder.

Within the ten years since it was introduced the magnetic coil stimulator has proven to be a useful tool to study inhibitory effects on the brain. Transcranial magnetic stimulation (TMS) of occipital cortex can inhibit visual perception, TMS of the sensory motor cortex, after a continuous stimuli to the hand can inhibit somatosensory perception and with trains of repetitive TMS, speech output and memory of various types can be impaired.

As an overview this was a well written book by experts in the field and extensively referenced. Each of the chapters was revised after the workshop in light of discussions and comments that took place and can be considered definitive reviews at this juncture. There may be some who would feel that the subject matter is narrow and perhaps not too much interest to general neurologists but that would be an error. Regardless of one’s area of interest one will nonetheless encounter patients with atomic seizures, elderly “folks who fall” and patients with Parkinson’s Disease who “freeze”. Although apparently widely dissimilar disorders there is in fact a common theme that ties them all together in terms of negative motor phenomena. This is a text that neurology residents would want to refer to in preparation for rounds, practicing neurologists would refer to for current reviews and neurophysiologists and neurochemists would want to refer to for timely reviews that are well referenced. If this text is not on your own personal library shelf then it should certainly be in the department’s library.

Michael W. Jones
Vancouver, British Columbia


The timeliness of this volume which focuses on the experiential aspects of pain was emphasized by the simultaneous arrival of a supplement to the official journal of the American Academy of Neurology, ‘Neurology’ on chronic pain mechanisms and management. Published as a CME activity to highlight dissatisfaction by patients and physicians with the results of chronic pain treatment.

The present volume is the latest in a series on pain research and therapy which has been published regularly for over 15 years. It is the product of a satellite symposium of the 7th World Congress of Pain, and was held in Beaufour in August 1993. Highlighted by an introductory chapter by William Willis Jr., this volume of monographs is divided into six sections containing thirty-six chapters by seventy-five contributing authors. The first seven chapters in Section 1, Nociception, Pain, and Consciousness, set the stage for the remaining sections by reviewing relationships between nociception and relevant attributes of the state of consciousness.

For the first time in recent series, a considerable amount of new information on pain processing at the thalamic and cortical levels is presented. These chapters are complemented and extended by a broad consideration of the neuropsychologic aspects of pain including the affective, cognitive, and emotional components. Emerging from this body of data is the inescapable conclusion that we have now reached the point where future pain research must now target humans with chronic pain disorders.

It is of interest to the clinician involved in managing patients with chronic pain, that this volume and the Neurology CME supplement, conclude that successful therapy of pain emerges from targeting both nociception and the emotional, affective, and cognitive aspects of consciousness. The seminal and central role of antidepressants in chronic pain management highlighted in the Neurology supplement, is dealt with in depth in a chapter on efficacy and mechanisms based on a review of clinical trials.

The field of nociceptive research has seen revolutionary changes over the past two years, while the field encompassing experiential aspects of pain remains in its infancy. As such, some parts of the present volume, particularly the section on abnormal pain states are slightly dated. Overall however, this is a timely volume that the editors hope will stimulate increasing interest in pain research thanks to novel quantitative approaches some of which are reviewed here.

R.J. Riopelle
Kingston, Ontario


The aim of this book, along with the other volumes in the “Frontiers in Headache Research” series is to demonstrate the major advances made in our understanding of the headache disorders. This volume reports on the presentations and discussions of the November 18-20, 1994 5th International Headache Research Seminar convened in Copenhagen. This book illustrates the dramatic progress which is occurring in headache research, progress which has already yielded significant therapeutic dividends at least for that 16% of the adult population which suffers from migraine. The list of contributors also highlights the important role of the pharmaceutical industry in driving this progress, with over 20% of the contributors having direct links to industry by position of address.

In addition to the opening and closing chapters, the book has six sections. Section 1 focuses on the general use of models in drug