

quantitative verification, dosimetric analyses of miniature multileaf collimators, initial experience with intensity modulated radiotherapy for brain tumors, conformal treatment and a comparison of three methods for beam shaping for larger tumors, and a description and initial experience with the Cyberknife. The Cyberknife is one of the more recent methods of radiosurgery where a small linear accelerator is mounted on a robotic arm and with the use of frameless stereotaxy, tumors can be targeted with immediate corrections for any patient motion during the treatment.

Two papers discuss the integration of SPECT (single photon emission computed tomography) and functional MRI into a radiosurgery plan and represent initial forays into incorporating physiologic information into radiosurgery, as opposed to the current paradigm of anatomic based radiosurgery. Studies in this direction may allow for an improvement in the therapeutic ratio whereby critical normal tissues could be spared, whereas more active tumor regions could receive higher doses.

The rest of the book includes several clinical series detailing results in patients with benign and malignant intracranial tumors. The last section includes results of radiosurgery for trigeminal neuralgia, and two papers describing initial results of the use of radiosurgery for primary and metastatic extracranial tumours with the use of a body stereotactic frame.

This book is the third volume in a series dealing with a topic (radiosurgery) for which the literature is exponentially increasing yearly. It is intended to disseminate a collection of papers from the annual meeting of the ISRS, and as such represents a good assortment of papers on various aspects (both developmental aspects and clinical series) of the state of radiosurgery today. It is a good reference for physicians involved in radiosurgery and would be of value for the novice to learn of the results of clinical series of patients with specific diagnoses.

*N.J. Laperriere
Toronto, Ontario*

PSYCHOPHYSIOLOGY-HUMAN BEHAVIOR AND PHYSIOLOGICAL RESPONSE. Fourth Edition. 2000. By John L. Andreassi. Published by Lawrence Erlbaum Associates, Inc. Publishers. 458 pages. \$C86.25 approx.

On page one of the first chapter, the author expands on his first definition of psychophysiology, “the measurement of physiological responses as they relate to behavior” to “the study of relations between psychological manipulations and resulting physiological responses measured in the living organism to promote understanding of the relation between mental and bodily processes”. This book reflects both these definitions well. The first few chapters start by reviewing basic neurophysiology and methods of measurement such as EEG, ERPs and EMG. The book then delves into findings by these and other measures as they relate to behavior and other mental phenomenon chapter by chapter. Within chapter three, “The EEG and Behavior: Motor and Mental Activities”, there is a section on EEG in memory and recall, and an interesting section on EEG, hypnosis, imagery and meditation. In later chapters, findings of EEG and Event-Related Brain Potentials in relation to behavior, intelligence, perception and other mental activity are extensively reviewed. After chapter 7, which is devoted to Event-Related Slow Brain Potentials and behavior, with extensive examination of P300

in relation to such things as stimuli detection, discrimination and memory, the author moves on to explore findings from EMG, electrodermal activity, pupillometry and eye movement in relation to various mental activities. Three comprehensive chapters are devoted to cardiovascular reactivity as measured by heart rate variability, blood pressure, and blood volumes, in response to emotions, motivation, personality, brain activity and stress. There are good chapters summarizing use of measures in deception and clinical applications of measures and findings in neurological and psychiatric disorders such as Parkinson’s disease and depression.

Overall, I found this book enjoyable to read. There was a good logical progression from one topic to the next. It is very comprehensive, extensively documenting positive, negative or controversial findings by many measures of mental processes ranging from attention, concentration, memory, perception, sensation, intelligence, affect, language, and cognition to sleep. Figures and tables are abundant. There is good use of titles and subtitles at the beginning of each paragraph highlighting each new topic and subtopic, making it easy to find material or refer to. Summary paragraphs of findings and conclusions at the end of each topic discussed and at the end of each chapter make key points easy to remember. On the very practical side it is fairly priced, soft covered and of a size that’s easily transportable.

This book is appropriate for anyone working in the neuroscience field needing a quick but thorough reference summarizing findings by measures on behavior and mental activity, in particular EEG, ERPs and EMG. This book would certainly be helpful for medical students, residents and postgraduate students as it summarizes large amounts of information in a way that is very easy to remember. This book is also appropriate for researchers and clinicians who need a quick reference text in this field, as specific information is easy to find and well-referenced.

*Alan D. Lowe
Toronto, Ontario*

MEMORY DISORDERS IN PSYCHIATRIC PRACTICE. 2000. Edited by German E. Berrios and John R. Hodges. Published by Cambridge University Press. 520 pages. C\$95.47 approx.

In an entertaining, systematic format, with wide subject appeal, Berrios and Hodges successfully explore the multi-faceted and expanding field of memory disorders while concurrently acknowledging and blending various aspects and contributions of psychiatry and psychology, resulting in an interesting and convincing argument for multidisciplinary management. Both Berrios, Consultant and University Lecturer in Neuropsychiatry at Addenbrooke’s Hospital at the University of Cambridge and Hodges, Professor of Behavioural Neurology at the University of Cambridge Clinical School and MRC Cognition and Brain Sciences Unit, are well-qualified to edit this comprehensive review. As they state in the preface, to be comprehensive, the study of “memory” must expand beyond organic disorders to what they describe as phenomena that clinically fall under the less specific description of “memory complaints”. Moreover, it is within this rather novel classification that the authors believe clinicians from scientific, medical and psychological domains can collectively identify and design successful management plans to previously underserved patient populations.

This book is divided into three sections. Part I contains a comprehensive review of fundamental theories of memory, an extensive investigation of the literature on depression and memory, and the underpinnings or neuropsychology of memory followed by an examination of the concept of metamemory. In particular, chapter one by Berrios takes the reader on a delightful romp through the ages while reviewing the qualitative and conceptual aspects of memory complaints and disorders. In a refreshing style, Coull and Sahakian provide a practical and informative chapter on the psychopharmacology of memory, which, rather than summarizing the literature, raises the reader's awareness of the contradictions in research on the neurochemical basis of memory and attention. They also provided suggestions and supported ideas for future research and investigations.

Part II focuses on the clinical, or more commonly described psychiatric memory disorders, e.g. the dementias, the amnesic syndrome and depressive pseudodementia. Initially, Hodges, Berrios and Breen provide detail on the origins, principles and organization of the Cambridge Memory Clinic. This serves to outline their multidisciplinary approach (bringing together behavioural neurology, neuropsychiatry and neuropsychology) toward accurate diagnosis and successful treatment of patients with both functional and organic memory disorders, arguing strongly for integrated clinical services. There are other thought provoking chapters on emerging ideas on memory impairments in functional psychosis (e.g. schizophrenia), cleverly weighing the evidence on "structural" or "functional" abnormalities, with references to research supporting how specific memory impairments would be explained by each opposing theory.

Part III examines a wide range of "memory complaints" which often confront clinicians in day-to-day clinical practice, this range from Déjà vu and flashback memories, hypochondria and dissociative amnesia, to malingering and the medical-legal aspects of memory disorders. A historical review often prefaces each chapter and provides the reader with a helpful reference point and clear understanding of the development of the clinical diagnosis of each "disorder". It is suggested by Marková and Berrios, in their chapter on paramnesias and delusions of memory, that the concept of memory needs to be expanded from the narrow definition readily accepted since the turn of the century, to one which revisits the phenomena often presented by patients, by going beyond the 'symptoms' described in known nosologies, and exploring new phenomenological markers. Lamb and Prigatona provide a comprehensive and clinically practical useful chapter on tests and techniques for detecting and measuring malingering. To illustrate these techniques, the authors provided four case studies and led the reader through the interpretation and resulting diagnosis for each patient. They correctly caution against the prevailing risk of misdiagnosis, stressing the necessity of clinical judgement to be based on "objective, scientifically derived measures interpreted by experienced clinical neuropsychologists". The final chapter by Solomka and Grounds offers an important primer on how to prepare court reports for the patient involved in compensation litigation, with a detailed outline of the fundamentals involved in describing the impairments in all necessary domains, e.g. psychological, functional and daily living. Although it is clearly understood that legal implications, formats and court proceedings are unique to each country, this outline provides a constructive foundation for the clinician preparing medical-legal reports.

Memory Disorders in Psychiatric Practice is written in an easy narrative style that is a pleasure to read. The only minor shortcoming of this practical text is a somewhat excessive emphasis on the historical background at the beginning of each chapter. This book is a useful addition to the literature for psychiatrists and neuropsychologists, and other mental health care professionals working with patients with memory complaints. While comprehensively informing the reader about the complexities of memory disorders, it provides a useful reference source for various aspects of memory theory, classification, assessment and treatment. The footnotes at the end of the volume further expand the reader's understanding of concepts and terminology, and add greater depth to the expansive literature review each author conducted. This book will be of great benefit to the graduate level student, resident, neuropsychologist and psychiatrists who are in need of a definitive text on disorders of memory.

Robyn J. Stephens
Toronto, Ontario

PROGNOSIS OF NEUROLOGICAL DISORDERS. Second Edition. 2000. Edited by Randolph W. Evans, David S. Baskin, Frank M. Yatsu. Published by Oxford University Press Canada. 758 pages. C\$159.00 approx.

In their preface to the first edition of this volume the editors state: "This book is a practical guide for the neurologist and the neurosurgeon that can be used on a daily basis as a reference source when discussing prognosis with patients and their families, colleagues, and other interested parties." The book is divided into 12 parts. It begins with five chapters that cover *Issues in Prognosis* from an ethical, psychological, medical-legal, clinical and economic perspective. While interesting and well-written, this section is rather dry and is not an "easy read". The remaining parts cover a variety of neurological and neurosurgical conditions, divided primarily along etiological lines, following the usual congenital, infectious, inflammatory, etc. type of classification.

Unfortunately, in my opinion, the editors' stated aim is not met. The manner in which the authors of the individual chapters have approached their review is not stated. We do not know if a systematic approach was used in searching the literature and while much literature is cited, often there is not a summarising conclusion at the end that would be helpful to the clinician. In any particular chapter, it is often difficult to find relevant prognostic information. For example, if I were seeing a patient with a whiplash type of injury and I consulted the chapter on this condition, it is almost impossible to use the data to provide a prognostic statement to my patient without combing through the chapter and extracting information from the numerous studies cited. In other chapters, the scope of the prognostic statements is very narrow. For instance, the chapter on primary headache disorders devotes thirteen of its fourteen pages to a review of headache definition and epidemiology but only part of one page is given over to treatment and prognostic statements and the statements on prognosis refer only to analgesic rebound headache. Here once again, while the authors cite fourteen papers on prognosis, they do not comment on whether this is a comprehensive list or how these papers were selected and they do not comment on the quality of the individual papers. When available, the Cochrane Library provides a much more organised and evidence-based review.