

Books Received

ADVANCES IN NEUROLOGY VOLUME 84: NEOCORTICAL EPILEPSIES. 2000. Edited by Peter D. Williamson, Adrian M. Siegel, DW Roberts, VM Thadani, MS Gazzaniga. Published by Lippincott Williams & Wilkins. 666 pages. C\$233.73 approx.

ALZHEIMER'S DISEASE AND RELATED DISORDERS ANNUAL. 2000. Edited by Serge Gauthier, Jeffrey LCummings. Published by Martin Dunitz Ltd. 255 pages. C\$102.82 approx.

AXONAL REGENERATION IN THE CENTRAL NERVOUS SYSTEM. 2000. Edited by Nicholas A. Ingoglia, Marion Murray. Published by Marcel Dekker. 736 pages. C\$330.75 approx.

BEHAVIOR AND MOOD DISORDERS IN FOCAL BRAIN LESIONS. 2000. Edited by Julien Bogousslavsky and Jeffrey L. Cummings. Published by Cambridge University Press. 554 pages. C\$117.60 approx.

BRAIN TUMOR IMMUNOTHERAPY. 2000. Edited by Linda M. Liau, Donald P. Becker, Timothy F. Cloughesy, Darell D. Bigner. Published by Humana Press. 373 pages. C\$198.45 approx.

CRANIOSYNOSTOSIS DIAGNOSIS, EVALUATION, AND MANAGEMENT, SECOND EDITION. 2000. Edited by M. Michael Cohen, Jr., Ruth E. MacLean. Published by Oxford University Press. 454 pages. C\$319.50 approx.

CURRENT NEUROLOGIC DRUGS. THIRD EDITION. 2000. Edited by Lewis P. Rowland. Published by Lippincott Williams & Wilkins. 378 pages. C\$88.20 approx.

DIFFERENTIAL DIAGNOSIS IN NEUROLOGY AND NEUROSURGERY A CLINICIAN'S POCKET GUIDE. 2000. By Sotirios A. Tsementzis. Published by Thieme. 336 pages. C\$51.45 approx.

FUNCTIONAL NEUROIMAGING IN CHILD PSYCHIATRY. 2000. Edited by Monique Ernst, Judith M. Rumsey. Published by Cambridge University Press. 426 pages. C\$264.60 approx.

GABA IN THE NERVOUS SYSTEM: THE VIEW AT FIFTY YEARS. 2000. Edited by David L. Martin, Richard W. Olsen. Published by Lippincott Williams & Wilkins. 510 pages. C\$183.75 approx.

HANDBOOK OF ATAXIA DISORDERS. 2000. Edited by Thomas Klockgether. Published by Marcel Dekker. 712 pages. C\$316.05 approx.

NEURONS IN ACTION COMPUTER SIMULATIONS WITH NEUROLAB. 2000. By John W. Moore, Ann E. Stuart. Published by Sinauer Associates, Inc. 93 pages. C\$44.02 approx.

NEURO-ONCOLOGY THE ESSENTIALS. 2000. Edited by Mark Bernstein, Mitchel S. Berger. Published by Thieme Medical Publishers, Inc. 508 pages. C\$219.03 approx.

NEUROSCIENCE, SECOND EDITION. 2001. Edited by D Purves, GJ Augustine, D Fitzpatrick, LC Katz, A LaMantia, J McNamara, SM Williams. Published by Sinauer Associates, Inc. 681 pages. C\$113.11 approx.

NEUROSURGICAL CLASSICS II. 2000. Edited by Robert H. Wilkins, Gloria K. Wilkins. Published by American Association of Neurological Surgeons. 592 pages. C\$124.95 approx.

NEUROTROPHIN PROTOCOLS. 2000. Edited by Robert A. Rush. Published by Humana Press. 274 pages. C\$131.56 approx.

THE AUTONOMIC NERVOUS SYSTEM IN HEALTH AND DISEASE. 2000. By David S. Goldstein. Published by Marcel Dekker. 616 pages. C\$286.65 approx.

THE EFFECTS OF EARLY ADVERSITY ON NEUROBEHAVIORAL DEVELOPMENT. 2000. Edited by Charles A. Nelson. Published by Lawrence Erlbaum Associates. 345 pages. C\$117.52 approx.

THE FEELING OF WHAT HAPPENS. 1999. By Antonio Damasio. Published by Harcour Brace. 386 pages. C\$22.00 approx.

Book Reviews

RADIOSURGERY. 1999. Edited by E. Alexander III., D. Kondziolka, C. Lindquist, J.S. Loeffler, R. Smee. Published by S. Karger AG, Basel. 294 pages. C\$372.00 approx.

This book is a selection of papers presented at the 4th International Stereotactic Radiosurgery Society (ISRS) Meeting in Sydney, February, 1999. The papers are grouped into the following sections: advances in technology, imaging and radiosurgery,

radiobiology, arteriovenous malformations, benign tumors, malignant tumors, and other indications.

The first paper is an excellent historical review of the development of the Gamma Knife at the Karolinska Institute in Stockholm and included some long term results on cohorts of patients treated in Sweden for arteriovenous malformations, vestibular schwannomas, and trigeminal neuralgia.

The technology section includes papers addressing dosimetric

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.

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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.

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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.