images. In addition, boxed high-yield points provide reinforcement for major syndromes and other important details. The book begins with a comprehensive neuroanatomy chapter with numerous diagrams and pictures that illustrate the text very well. In addition to the usual brain and spinal cord anatomy, this chapter has detailed sections on neuroophthalmology and neurootology. The chapter is well written and includes good, concise descriptions of symptoms and signs related to lesions at different levels of the neuraxis. There are numerous boxed high-yield points and abundant tables to help reinforce learning. The subsequent 12 chapters cover the major neuropathologic categories: vascular disorders, epilepsy, demyelinating disorders, oncology, headache & pain, behavioral neurology and psychiatry, movement disorders, neuropathy, myopathy, infections and developmental/metabolic disorders. There is also an invaluable chapter on systemic diseases affecting the nervous system, an often overlooked topic. The chapters are written by different physicians including a Canadian.

The book's outline format enables the dissemination of vast amounts of information. The individual topics are well covered, providing details in point form and highlighting major syndromes, as well as other important points. Diagnosis, pathology and treatment details are provided for most major neurological disease. There are numerous histopathology slides, radiologic images, boxed high-yield points, and abundant tables to aid the visual learner. The book does offer the advantage of color pictures which is still uncommon in review books. Numerous diagrams depicting pathophysiologic processes, metabolic pathways and drug mechanism of action can be found throughout the book. There is an abundance of summary tables which render it easier for the reader to compare and contrast the different pathologies.

As with most American review books, it may be lacking certain features required for those studying for the Canadian Royal College exam. As most review books, it does not provide a method for approaching clinical symptoms. One can argue that this is not the role of a review book but it needs to be kept in mind. Furthermore, some of the treatment approaches, especially in stroke are not referenced so it is not clear which studies substantiate the treatments put forth. There is also a lack of information on how current the genetic data is and this is a problem in the chapter on movement disorders since it reports only a few of the DYT mutations.

The Comprehensive Board Review in Neurology provides a tool for assimilating vast amounts of information in a comprehensive, easily digestible manner. It reviews the major neurological diseases and should be adequate for American board exams. Those studying for the Canadian Royal College exam, however, will require a more clinical approach based text in addition to review books such as this.

Maria Carmela Tartaglia
London, Ontario, Canada

ADVANCES IN FUNCTIONAL AND REPARATIVE NEUROSURGERY. 2006. Edited by J.W. Chang, Y. Katayama, T. Yamamoto. Published by SpringerWienNewYork. 153 pages. Price C$120.

This book comprises a collection of short clinical and experimental research articles originating from the conferences of the Neurorehabilitation Committee of the World Federation of Neurosurgical Sciences (WFNS) and the 1st Congress of the International Society of Reconstructive Neurosurgery (ISRN) which were held in Seoul on September 2005. Its 153 pages are divided into topics of neurorehabilitation, involuntary movement disorders, pain control, epilepsy, spinal cord and cell transplantation and nerve grafting. For those involved in research in this area, this book provides an excellent historical snap-shot of the work being done at that time.

The single article on neurorehabilitation is a review of a comprehensive rehabilitation unit whose main aim is early rehabilitation with all aspects of therapy involved from the outset. The goal is an ideal one – achieve optimal recovery of all aspects of life including physical, mental and social aspects.

The section on movement disorders is dominated by articles discussing deep brain stimulation (DBS). Microelectrode recording is reported as mandatory when inserting electrodes rather than as a complementary procedure. This may reflect a regional bias.

A wide variety of surgical solutions for pain modification are covered including cortical stimulation (motor cortex and anterior cingulate cortex), intrathecal baclofen treatment and DREZ lesions (both percutaneous and open). A wide range of pain disorders are covered with no generalization regarding the effectiveness of any specific technique.

The articles on epilepsy are an inhomogeneous group reporting on deep brain stimulation, vagus nerve stimulation or Gamma knife radiosurgery for seizure control. The spinal cord section consists of an experimental report regarding spinal cord stimulation and its effects on cerebral blood flow and a case report on the reversal of neurological deficits due to syringomyelia after decompression.

The revolutionary field of stem cell transplantation for regeneration of damaged nervous tissue is covered in the final section and is essentially a collection of articles on the role that stem cells may or may not play in future years. There is little in either of these sections that would be of use outside the experimental field.

This book covers a wide range of topics, not altogether related, as one would expect from a collection of articles from a symposium. The articles are generally short (up to six pages) and easily readable. It is a good summary of the topics covered by the Congresses but may be of little use for the majority of clinicians. It does however give a good example of the topics that were covered during the symposium.

Jacqueline McMaster, Christopher R. Honey
Vancouver, British Columbia, Canada

PROGRESS IN EPILEPTIC DISORDERS - PROGRESS IN EPILEPTIC SPASMS AND WEST SYNDROME. 2007. By Franco Guzzetta, Bernardo Dalla Bernardina, Renzo Guerrini. Published by Editions John Libbey Eurotext. 184 pages. Price C$100.

West syndrome is characterized by infantile spasms and the EEG pattern of hypsarrhythmia. The syndrome is rare but usually disastrous with developmental regression and eventual mental retardation. This book begins with a notation: "A group of clinical researchers recently met in Rome to discuss hot points concerning infantile spasms and West Syndrome". We know little else about the meeting except that this book seems to summarize the "hot points"

in 11 chapters. Each author is well known but the topics and true intent of the book are a bit mysterious.

An initial chapter by Riikonen places West Syndrome in the proposed International League Against Epilepsy 2001 classification and attempts to generate hypotheses about the pathophysiology. Avanzini correctly notes that "more than a century and half after the unsurpassed description of William West on his own son, the intimate nature of IS remains elusive". Guerrini illustrates a number of cases that run counter to our usual concepts of West Syndrome such as an 8-year-old boy with asymmetric late onset spasms and normal cognitive development. Bernardina emphasizes 80 personal cases to discuss interictal EEG patterns and suggests that hypsarrhythmia is a form of non-convulsive status while Vigevano shows some elegant polygraphic studies of ictal EEG in spasms. Gobbi briefly reviews non-epileptic mimics and other epileptic syndromes that have spasms. A long, detailed chapter by Atkinson reviews "New paediatric behavioural and electrophysiological tests of brain function for vision and attention to predict cognitive and neurological outcomes"; however, there is no real data about West syndrome. Developmental features of West Syndrome are discussed by Deonna who focuses on a careful analysis of 12 cases. This theme is also discussed by Guzzetta. Chugani outlines the use of PET in the surgical treatment for West Syndrome and Coppola discusses thoroughly the medical treatment but does not dwell on methodological issues.

The book would have benefited from more editing. Nearly all chapters define West syndrome but not always in the same way. There is an uneven use of the terms cryptogenic and idiopathic. In most places WS means West Syndrome but in one chapter it suddenly becomes Williams Syndrome. Many illustrations are complex and hard to follow. There are frequent references to the Delphi definitions of Lux et al – it is unfortunate that he did not participate in the book because his studies have been so well constructed.

The "hot points" are difficult to ferret out. For example, I found the comments about a long delay before cognitive recovery in some patients with West Syndrome particularly interesting. The concept that idiopathic spasms typically have no focal features is of interest, although contradicted in several chapters. There is no debate or discussion between the chapters although knowing the authors guarantees that there was much argument.

Who should read this book? I doubt it would be of much value to those seeking an introduction to West Syndrome. Experts in the subject will not find much new. Those seeking guidance in treatment choices will not be helped. A few pediatric epileptologists who are searching for exceptions and peculiar aspects of West Syndrome may benefit.

We need large co-operative study groups to make progress in this devastating but rare disorder. This book illustrates this need.

Peter Camfield
Halifax, Nova Scotia, Canada

THE CLINICAL NEUROPHYSIOLOGY PRIMER. 2007. Edited by Andrew S. Blum, Seward B. Rutkove. Published by Humana Press. 526 pages. Price C$105.

The Clinical Neurophysiology Primer is just that, a primer for Electroencephalography (EEG), Nerve Conduction Studies (NCS), Electromyography (EMG), Polysomnography (PSG), and Evoked Potentials (EP). The only method for covering all of these topics in one volume is a primer, as to attempt to cover all of these topics in any other method would be an injustice.

This book starts with a chapter on basic electronics, valuable for trainees in EEG and perhaps EMG as well. Each chapter has a nice addition of review questions and answers at the end, perfect for studying for more general examinations. There are well constructed figures throughout the primer, especially in the chapter for the cortical basis of the EEG. It is confusing for some chapters to cover technological features of both EEG and EMG, but again, this is to be thought of as a summary. Again, the short duration of a number of chapters precludes more examples of EEG or NCS waveforms to be demonstrated. Although most epileptic disorders are covered, there again are deficiencies. There is also no section on critical care for either of EEG, EMG, or surgical considerations in EP. For EMG sections, there was room for additional figures for anatomical or electrophysiological considerations, such as diagrams demonstrating Martin-Gruber anastomoses or the anatomy of the median and ulnar nerves. The plexopathy chapter is particularly short for a difficult topic. Also, a critical portion of NCS is the anatomical considerations in stimulation of the peripheral nerve, and this was not covered. Some strong points in the book are excellent chapters on transmission at the neuromuscular junction, sleep and PSG, and the scientific basis of EEG. Overall, the chapters vary in their success.

As a primer, this book is adequate for residents of Neurology and Neurosurgery not planning to perform EEG, EMG or EPs. There are nice additions on sleep and PSG which also complement the other portions of the book well. For those planning to perform certification examinations for these electrophysiological assessments, I would not recommend this text, and instead suggest more focussed and specialized textbooks within the field of interest.

Cory Toth
Calgary, Alberta, Canada