This book will be of interest to residents in psychiatry and psychiatrists interested in biological underpinnings of psychiatric disorders. It is an excellent reference for both clinicians and researchers. This book may also appeal to behavioural neurologists and psychologists. I expect this book to have a broad appeal because it connects research advances in basic sciences such as cellular biology, genetics, and imaging of neuropsychiatric disorders, with the understanding of their etiology and management. It thus provides a firmer and more scientific basis for clinical decision-making. At the same time, it can serve as a very useful starting point for students and researchers who wish to explore new possibilities for research or to understand their new data in context of existing body of knowledge.

Paul Sander
Toronto, Ontario


The literature on clinical research in the neurosciences has had an explosive growth in the last several years. Clinicians face the increasing challenge of making sense of this abundance of clinical research and applying its results to their patients. There have been few organized efforts to provide clinicians in the neurosciences with the tools they need to successfully address this challenge. Hofman’s and Mayeux’s book is one example of such an endeavour.

Contrary to what the book’s title would suggest, the focus is not on investigating neurological diseases in the sense of searching for diagnoses, but rather on carrying out various types of clinical research in neurological diseases.

The first half of this concise and clearly written book deals with contemporary aspects of clinical research methodology, such as survival analysis, genetic epidemiology, outcomes research, decision analysis, etc. The topics on research methodology are well-chosen, reflecting those most frequently encountered by clinicians. Unfortunately, the size of the book and the large number of topics mandates brief chapters and economy of depth in the treatment of most themes. Readers will find this panoramic view of current clinical research methodology accessible and for the most part relevant. However, they will have to consult regular sources for a deeper understanding of most themes.

The second half of the book addresses thirteen common neurological conditions, with brief descriptions of diagnosis, etiology, epidemiology, intervention, prognosis and implications for clinical practice. Although the quality of the evidence is not systematically addressed, a major strength of this section is that most chapters support many of their statements with references to actual research data, which readers can consult if needed. Many of the chapters emphasize and describe epidemiological data, a useful compilation not often found in neurological texts.

Clinicians in the neurosciences will find this a useful resource to assist them in making sense of the evidence and bringing it to the bedside.

Samuel Wiebe
London, Ontario


As someone who has the previous four editions of Antiepileptic Drugs sitting on his shelf (with pages well-dog-eared, and backs well-broken), I read this most recent edition with interest. I was not disappointed. It remains the gold-standard reference book on anticonvulsant drugs.

This is the fifth edition of Antiepileptic Drugs. This most recent version has been edited by R. Levy, R. Mattson, B. Meldrum and E. Perucca, who collectively bring a diverse wealth of clinical and international expertise to this edition. Antiepileptic Drugs is a multi-authored text with 127 different authors (five of whom are Canadian). These authors represent experts from around the world, from basic science to clinical science, from industry to government and academia. However, despite the plethora of authors, the book is well-edited, and thus reads evenly and easily. The text has been substantially updated from previous editions. Chapters concerning “traditional” drugs have been updated; new chapters have been added to capture the unprecedented expansion in the field of epilepsy pharmacotherapy.

The book is assembled in a very logical and user-friendly fashion with 18 sections. Section I starts with 15 chapters assembled under the general heading of “General Principles”. These 15 chapters comprehensively cover a range of topics, including the neurophysiological effects of anticonvulsant drugs, drug-drug interactions, combination therapy, laboratory monitoring of blood levels, and the use of anticonvulsant drugs in children, women and the elderly. Following this thorough introduction, the book then dedicates the following 16 sections each to a separate anticonvulsant drug (or class thereof): benzodiazepines, carbamazepine, felbamate, gabapentin, lamotrigine, levetiracetam, oxcarbazepine, phenobarbital, phenytoin, primidone, succinimides, tiagabine, topiramate, valproic acid, vigabatrin and zonisamide. Typically each one of these drugs has four or five chapters dedicated to it, which comprehensively discuss topics such as mechanisms of action, pharmacokinetics/biotransformation, clinical uses, interactions with other drugs, and adverse effects. Where appropriate, other topics, such as efficacy and use in nonepileptic disorders, are also presented. For each of these drugs, the information provided is complete and up-to-date, while maintaining reasonable succinctness. The final section of the book (section XVIII) gives a superb overview of drugs in early clinical development. Future agents such as ganaxolone and harkoseride are discussed.

The strengths of this book are many. It is as up-to-date as a hardbound textbook can be. No major topic related to anticonvulsant drugs has been neglected. All topics are dealt with in an authoritative and complete manner, with a writing style that, in general, presents facts in an easily assimilated manner. The chapters on mechanisms of action are particularly strong and well-written. Valuable clinical information is provided for the newer agents such as levetiracetam and zonisamide. Each chapter is exceedingly well-referenced. Notwithstanding the utility of modern computer-aided algorithms for searching literature databases, many chapters contain citations to “literature gems” not easily found during a routine literature search. This reviewer found no substantive factual error over the course of this book.

The weaknesses of this book are few. As a minor criticism, I felt...