the preface, the authors state that the atlas would be most useful as a review to senior residents studying for the Radiology Boards, as well as neuroradiology fellows or practitioners preparing for the CAQ examination. My experience with the atlas strongly supports this contention as it is one of the best texts I have ever seen for this purpose. The cases are collected from the "Unknown Case Conference" that occurs within the Neuroradiology Section on a weekly basis at the University of California at San Francisco. They are therefore susceptible to colloquial dogma, however, any such influence is quite subtle and widely accepted neuroradiological principles are upheld – no surprises here! The cases chosen for inclusion have been carefully selected and are excellent representations of the various disease processes that can affect the brain, meninges, and cranial nerves. Classic findings specific to each disease are demonstrated usually with modern images of very high quality. Each case is presented in a standard format that begins with the clinical presentation accompanied by the relevant images. This is followed by description of the radiological findings, the diagnosis, the differential diagnosis, and the discussion. The concise discussion is divided into the following subheadings: background, clinical findings, pathology (gross and microscopic), CT imaging findings, MR imaging findings, treatment and finally prognosis. At the end of the case, a reference of suggested up-to-date readings is provided. Highlighted in the margins of each case is a section describing pearls and pitfalls that are especially useful in informing the reader of specific clues and potential traps that help to sharpen the reader's overall diagnostic acumen. Complimenting each case is a set of additional images taken from other patients with the same disorder, permitting the reader to gain a flavor of the diversity of imaging findings that may be present. Overall, the quality and range of cases is excellent. Imaging findings stay true to the classical patterns of disease. The coverage is comprehensive providing an excellent review for a board or CAQ examination. A bulleted format is used within the subheadings that permits rapid acquisition of information decreasing the fatigue usually associated with identification of relevant information within conventional full sentence text. It is a very pleasing format for presenting the information permitting fast learning. The only negative feature, if one intends to use this text as a test of diagnostic ability (i.e. true board style testing format), is that the cases, even though they are presented as unknowns, are somewhat predictable because of their grouping into specific disease categories. Random sequencing of the cases would have alleviated this problem but organization of the text would have suffered. Nevertheless, this atlas provides a comprehensive and rapid method for reviewing non-spinal CNS disorders. I would strongly recommend it as a primary tool for Neuroradiological review. The authors and the publisher Thieme have created a web site where an additional 29 cases (to date) have been made available for review following the same format as the text. I would suggest that anyone interested in purchasing the text access this well-designed web site (www.thieme.com) to obtain their own impressions of this work.

David J. Mikulis
Toronto, ON

NEURAL TRANSPLANTATION METHODS. 1999. Edited by Stephen B. Dunnett, Alan A. Boulton, Glen B. Baker. Published by Humana Press. 576 pages. C$185.00 approx.

The first efforts in the field of neural transplantation date back to over a century ago. There has been a relative hiatus for seven or eight decades with a more recent rediscovery and a flurry of activity in this field in the last 20-30 years. We have now seen the transition from laboratory animal experiments to the application of transplantation to treat human disease. This history has been spotted by initial exuberant enthusiasm leading to the clinical use of transplants, perhaps before some of the fundamental details had been worked out. There is now a more careful rational approach with stronger scientific underpinnings and better clinical designs so that we are now in a position to make significant advances in this field.

The last decade has found tremendous advances in transplantation biology with important discoveries of the potential of stem cells that are resident in the adult nervous system and with increasing advances in the manipulation of genetic information in cells. There is an increasing number of potential sources for transplant material into the brain and the field has expanded to involve not only transplantation of neurons but also of non-neuronal cells, for example, myelogenic cells to remyelinate the diseased nervous system and the use of non-neuronal cells with genetically modified non-neuronal cells to deliver biological molecules.

The book edited by Dunnett, Boulton and Baker is divided into three areas. (1) The sources of cells for transplantation (2) The methods of implantation and (3) Factors in graft survival and function.

The emphasis is on technical aspects of transplantation procedures and the scientific basis for choosing one method and one strategy over another. The sources of transplants discussed include embryonic neural tissue, neural stem cells, immortal life cells, cells from engineered cells and cells from the testes. It does not cover certain other types of cell transplants that have been used, for example, there is no mention of placental cells or carotid body cells that have recently been shown to provide some interesting biological effects on experimental animal models of parkinsonism. The methods of implantation include details of tissue preparation and storage, of the dissociation of microinjection and the book has a summary of the application of polymer encapsulated cells for the treatment of various CNS diseases. Strategies to enhance graft survival and incorporation and immunological considerations particularly with xenographs are covered.

This book provides an excellent overview for scientists who are involved in the field of neural transplantation and its various emerging applications to treat neurodegenerative diseases and demyelinating disorders. Because of its emphasis on methods of neural transplantation rather than on the design of clinical trials it will be of use to basic scientists and those clinicians involved in transplantation programs either in a laboratory setting or in a clinical research trial setting.

Andres M. Lozano
Toronto, Canada

DISORDERS OF BRAIN AND MIND. 1998. Edited by Maria A. Ron and Anthony S. David. Published by Cambridge University Press. 373 pages. C$62.93 approx.

This splendid book contains contributions of leading international authorities from major academic centres in the United Kingdom and the United States. Each of the seven sections consists of two papers and these include: the neuropsychology of the frontal lobes and structural abnormalities in schizophrenia; the