
This book provides a useful and thorough overview of a number of different aspects of the neurobiology of autism. The contributing authors are all American, and most hail from the east coast. After an introduction and overview by Isabel Rapin, the book commences with a discussion of the genetics of autism by José Piven and Susan Folstein. They report the evidence showing that autism is a highly heritable condition as well as data indicating that the liability is not for autism per se but for a more broadly conceived autistic spectrum disorder. This is a consistent theme throughout the book and is supported by evidence from a number of studies and by the frequency with which autism is diagnosed. The editors acknowledge that autism is an inevitably complex condition and that a comprehensive understanding will require the contribution of a number of different disciplines.

Next, Margaret Bauman and Thomas Kemper discuss the neuropathological abnormalities found in the cerebellum and limbic system (hippocampus and amygdala). Subsequently Jocelyne Bachevalier describes the contribution of medial temporal lobe structures to the understanding of autism and its associated problems in primates. Memory deficits in autism are described by Ronald Kiliarian and Mark Moss. Jeremy Schmahmann describes the possible role of the cerebellum in autism and George Anderson details the neurochemical findings.

Finally, Margaret Bauman and Thomas Kemper write an epilogue. One of the things that they say in this epilogue is that "One of the strengths of this book is its breadth of descriptive information about the clinical and neurobiological features of autism without a clear framework with which to fully understand the implications of these observations". At present this is the crux of the issue. Despite a welter of studies and data there is little integration across descriptive levels and disciplines. The focus in this book on the cerebellum and temporal lobe structures and the possible effects on memory and affective, expressive, recognition and regulation suggest the possibility of an integrative theory. Understandably, this is never fleshed out, but it would have been nice had the contributing authors been made to consider explicitly how the genetic, neurochemical, neuropathological and neuroanatomical findings might be interrelated. Perhaps the most striking omission from the book concerns the recent burgeoning evidence for a lack of the theory-of-mind in individuals with autism and the implications these findings have for the neurobiology of the condition. Neurobiology of autism is a quickly developing field, and it is possible that a follow-up volume will address this and the other issues raised in this book.


My initial reaction on being asked to review this book was one of interest to see how it compared to the new edition of McAlpine’s Textbook of MS or the recent excellent supplement to the Fourth Edition of Neurology devoted to the disease. However, my task was made much more difficult by the instant realisation that it was almost five years out of date. A note added in proof refers to a paper from 1991, but the bulk of the references are concerned with data from the late 1980s, with only a handful of papers cited from 1990. This is a shame as the editors have gathered an eminent selection of authors, largely from North America, to contribute to the volume, including John Prineas, Don Paty and Jack Antel. I am not sure how long up to date this book remains on the clinical usefulness, or otherwise, of experimental allergic encephalomyelitis or the lack of benefit on disability from beta-interferon. Unfortunately so much has happened in MS research over the past five years that this book has been consigned to the history of MS section on the bookshelf.


This book is dedicated to the memory of Dr Richard Heikkila, who pioneered many of the early works on MPTP induced parkinsonism. It is therefore a great shame that it does not serve as a better tribute to him. The book is presented in an attractive format with a focus on the presentation of the data. The editors work on neurobehavioral disorders of the basal ganglia and and their contribution to the clinical interpretation of basal ganglia dysfunction. The book is well illustrated with good quality line drawings and high quality photomicrographs. The editors have invited a range of authorities to contribute to the book. Many of the chapters are summarised in a clear and concise manner and the editors have provided a good introduction and an excellent conclusion. The book is well written and the editors have provided an excellent overview of the current concepts in the understanding of the pathophysiology of Parkinson’s disease. The book is an excellent reference for researchers in the field and will be of interest to any clinician who is interested in the understanding of Parkinson’s disease.


Our department subscribes to the JNPN and each edition is circulated to every member. By the time a new issue reaches me, it


This collection of papers is a result of the 4th Triennial Meeting of the International Basal Ganglia Society held in 1992. The editors are to be congratulated on the breadth of coverage of the book and the careful editing of the 193 references. However, as with all books of this type there are problems of coherence and repetition. Although several of the chapters provide excellent little reviews (for example Chapter 15 by Ferrante et al), many of them provide limited data that cannot be easily accommodated into a clear framework (for example Chapter 19 by Block et al). Introductory chapters to each of the seven sections by the editors would greatly help in this respect. In addition many of the chapters cover common ground, unnecessarily repeating themselves—for example, chapters 37, 38, 39 and 57 all discuss the evidence that the subthalamic nucleus is pivotal to the functioning of the BG and thus their role in the development and abnormal movements. Stricter editing of these chapters would have strengthened the value of this book.

Overall the book clarifies many of the issues that are currently at the forefront of basal ganglia (BG) research. For example, the concept that the BG consist of a series of parallel pathways is challenged anatomically, electrophysiologically and pharmacologically. Furthermore it is becoming clear that LTD and LTP may be a feature of the normal striatum and dependant on its dopaminergic innervation. In addition this dopaminergic innervation is not only a classical synaptic phasic one but can also influence the striatal neurons and their impinging cortical afferents by a paracrine tonic release of dopamine. This may be important in the normal functions of the BG especially with respect to their role in non-motor functions and the clinical pathophysiology of BG related disorders.

Therefore this book provides much useful information, but is more of interest to the scientist than clinician. Furthermore its size and price limits its appeal, and so those to whom the book most appeals will have either contributed to it or be in possession of more recent reviews and papers.

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