reference for graduate students and postdocs beginning a research career in this specific area, but feel it is probably too focused and unbalanced to be of general interest to senior scientists and clinicians.

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Alzheimer's Disease and Related Disorders Annual 2001. Edited by Serge Gauthier and Jeffrey Cummings. Published by Martin Dunitz. 216 pages. C$87.00 approx.

What is common to β-pleated sheets and PET therapy or to axial FLAIR and the neuropsychology of the capacity to consent? Well, it is all in a day for those specializing in dementia and for the editors of an annual collection of reviews and essays in this field. This is the second annual collection edited by Gauthier and Cummings (unfortunately, contents of the first annual collection are not listed) and is as eclectic as any deliberation in the field or indeed as in any field in medicine. The untoward deterioration of manifold higher brain functions with aging now has the attention of clinical professionals and researchers from a remarkably wide range of disciplines that reflect the complexity of both the etiology and pathogenesis and management. This management in wide measure needs to consider the social setting of the affected individual. Early chapters address etiology and pathogenesis and pharmacotherapy of particular interest to neurologists and neuropathologists; three chapters address depression, behavioural manifestations of interest to neuropsychiatrists and psychiatrists, and a final chapter addresses geriatricians and family physicians caring for patients in the later stages of debility. I first read chapter 3 by Scheltens on neuroimaging, hoping for clarification of the indications in diagnosis. Recent studies of mesial temporal atrophy, regional cortical atrophy and white matter change have given conflicting results that suggest that findings will mainly support what is clinically obvious. Although research studies superimposing MRI and PET or SPECT appear to give greater precision in detection of Alzheimer's disease, guidelines of the American Academy of Neurology recommend against use of metabolic imaging in daily practice. There is room for considerable skepticism about the value of imaging of conditions where multiple pathologic processes appear to intersect. One of these processes that I suspect enters discussion in the memory clinic infrequently, amyloid angiopathy, is thoughtfully reviewed by Vinters. We learn that the amyloid does not form in the vessels of the white matter although leukoencephalopathy is seen in some forms. We also learn that 5% of patients dying with Alzheimer's disease will be found to have cerebral hemorrhages.

The possibility that effective disease-modifying therapies are in sight is reflected in two chapters. The first by Cole provides a detailed discussion of mechanisms of amyloid formation and disposal and the second by Peterson reviews "mild cognitive impairment", the term used to include subjects exhibiting the earliest manifestations of Alzheimer's disease and most likely to benefit from these therapies. This latter syndrome is identified through clinical judgement and the development of a definition suitable for clinical studies will require some ingenuity. One of the editors, Gauthier, reviews studies of cholinergic agonists that have been overshadowed by the recent success with cholinesterase inhibitors. It is too early to abandon this approach to symptomatic therapy. The other editor, Cummings, contributes to one of three chapters updating well-trod approaches to diagnosis and therapy of depression and the psychosis and agitation in dementia. Correlation of behaviour with the anatomy of neurodegeneration in the different dementias provides insights of potential use in therapy. The penultimate chapter by Marson and Briggs provides an informative review of competency and its neuropsychologic assessment in dementia, citing their recent studies in this new field research. Volicer's chapter, perhaps unavoidably, last reviews issues in management arising in the late stages of dementia. Few patients die in a persistent vegetative state so that provision of meaningful activities and sensory stimulation is a requirement for most patients. Among medical, behavioural and caregiver issues, I found that his discussion of tube feeding very informative.

Professionals interested in dementia will find something of interest here in their own fields as well as enlightenment in the related disciplines. Unlike other annual collections of reviews, this one is well-indexed. I found some irritating redundancy in exposition, suggesting a need for greater use of the red pencil by senior authors and editors. Figures are well-reproduced (chapters 2 and 3), except that a blow up of medial temporal lobe images in chapter 3 would have been helpful.

John R. Wherrett
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Basal Ganglia and Thalamus in Health and Movement Disorders. 2001. Edited by K. Kultas-Ilinsky, I.A. Ilinsky. Published by Kluwer Academic/Plenum Publishers, New York. 378 pages. C$142.50 approx.

This text is notable for the authors selected. There is a "who's who" of movement disorders beginning with Anne Young, Jack Penney and Mahlon DeLong and including the Toronto Western Hospital group (including Jonathan Dostrovsky, William Hutchison, Karen Davis and Andres Lozano). Do not be put off by the dry title. There is vertical integration from basic science to clinical application. For those who wondered how pallidotomy works in Parkinson's disease when the classic model of basal ganglia predicts chorea or excessive movement, the answers are approached in these chapters.

There is logical division of the formidable topic into Historical Perspectives, Anatomical and Functional Organization, Neurotransmitters, Receptors and their Role in Motor Behavior, Movement and Sleep Disorders, Plasticity in Movement Disorders, Neuronal Activity in Movement Disorders, Mechanisms and Efficiency of Novel Treatment for Movement Disorders. Each section is further divided into chapters that touch upon every aspect of basal ganglia and thalamic circuitry and their implications in movement disorders.

The chapter on microcircuits could benefit from more diagrams, the text itself being quite dense. Whereas, the chapter on local and efferent neurons has lavish histochemistry panels that add to its comprehension. The editors' chapter dealing with primate organization and connection of the motor thalamus is well-organized and well-written. The subject matter is key to understanding the organization of the basal ganglia and thalamus.

The sections on plasticity in movement disorders and neuronal activity in movement disorders deal with primate and human studies. These findings explain much of the paradox of the classic basal ganglia model. Finally, there is a brief transcript of discussions from the meeting on which this work is based.

https://doi.org/10.1017/S0317167100121079

Basal Ganglia and Thalamus in Health and Movement Disorders is written with a uniformly high quality. It is readable, current and the work presented is of a high standard. Although proceedings of consensus meetings and gatherings of "experts" have earned a dubious reputation among practising clinicians, meetings such as this international workshop offer a rare opportunity for leading lights in a field to share their current research, to form alliances across borders and to stimulate new arenas of thought. In this respect, these proceedings offer the practising neurologist, neurosurgeon and neurophysiologist a glimpse at the state of the basal ganglia and demonstration of how far our understanding has evolved over the past 10 years as a result of clinical imperatives.

J. Miyasaki
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Neurology and Medicine. 1999. Editored RAC Hughes, GD Perkin. Published by BMJ Books. 415 pages. C$66.15 approx.

This volume contains a collection of essays which have appeared in the Journal of Neurology, Neurosurgery and Psychiatry on a variety of aspects of medical neurology. The contributors are an outstanding group of experts in the field and include P.K. Thomas on diabetes in the nervous system, Michael Aminoff on chorea and dystonia and Patricia Moore on the neurology of vasculitides. There are chapters on the neurology of the respiratory, renal, hepatic and dermatological systems.

The contributors are international and include experts from the United Kingdom, the United States and from Australia. It is aptly stated in the foreword that it is not intended to be encyclopaedic but the volume is easy to read, and as a quick reference for the neurologist who needs to refresh his memory on the various aspects of medical neurology, it is reasonable value. There are areas which one might have expected to have been covered in such a volume, notably metabolic encephalopathies. However, this useful volume thoughtfully covers the chosen selected topics. It was published in 1999 so parts of it are somewhat out of date, such as the chapter on stroke but there are still good general principles to be found in the volume. This would be a useful addition to the shelves of the busy internist or the neurological consultant.

Professor G.C. Ebers
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Handbook of Multiple Sclerosis. Third Edition. 2001. Edited by Stuart D. Cook. Published by Marcel Dekker, Inc. 687 pages. C$292.50 approx.

This third edition of this text expands upon the recent developments in the understanding and treatment of multiple sclerosis (MS). Topic covered include the epidemiology, genetics, the putative pathogenesis, to the clinical presentations and current diagnostic tools. Current options for treatment are discussed, ranging from symptomatic approaches to disease modifying agents to ongoing potential therapeutic targets. The book is divided into three main sections that include the etiopathogenesis, the clinical and pathological changes and the therapeutic considerations.

The chapters are written by different authors, who are known to be experts in the field of MS. It is well referenced, with a varying depth of coverage of a topic depending on the different authors. Overall, the discussions are generally abbreviated and concise. More detailed discussions are found in the basic science chapters discussing the auto-immune hypothesis and animal models. The text does provide a good summary of the epidemiological history and update as to the different diagnostic tools including the MRI. The results of the clinical trials in the treatment of relapsing-remitting disease are thoroughly discussed, but the biases of the different authors are readily apparent (such as the interferon dosage controversy), especially in the chapters discussing the newer disease modifying agents. Sections on the cognitive impairment and newer MRI techniques are notably included in this text. Inevitably, other topical highlights (such as the McDonald criteria for MS) or the more recent evidence and advances in different treatment issues over the past year are not presented, reflecting the rapidly evolving pace of this field. However, future experimental therapies are included at the latter chapters of the book, discussing the rationale and the empirical results from preliminary data thus far.

Overall, this text is a good up-to-date reference for clinicians, residents and other health care professionals, who are interested or involved in the medical management of patients with MS. It is well written, concise, with good references. The text includes black and white photomicrographs and other graphics including tables, graphs and illustrations that are well laid out. There is a tendency to have some repetition of topics as the different chapters are written by different authors discussing overlapping areas, but this does not deter from the overall quality and usefulness of this text.

Liesly Lee
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Management of Dementia. 2001. Edited by Simon Lovestone, Serge Gauthier. Published by Martin Dunitz. 168 pages. C$55.70 approx.

This is an excellent pocket reference for those who wish to treat Alzheimer's disease. Lovestone and Gauthier are leading authorities in the field, one a psychiatrist, the other a neurologist, and both have had biochemistry background which is a good credential for expertise with pharmacological agents. The management of Alzheimer's disease has become an important issue not only for psychiatrists and neurologists, but geriatricians, general practitioners, and general internists because the disease is so prevalent and now we have fairly effective therapies. Management, of course, includes not only treatment but also diagnosis and differential diagnosis, and this little book deals with these issues in a compact yet comprehensive manner.

Behavioural and sleep disturbance in psychiatric symptoms in Alzheimer's disease are given specific treatment. Biomarkers, genetic testing, and treatment with cholinesterase inhibitors and disease modification agents are well covered. There is also a chapter on long-term care for the patient with dementia and at the end a special supplementary chapter on assessment scales including MMSE, MDS, ADAS-Cog, clock drawing, Behav-AD, Severe Impairment Battery (SIB), NPI, Cornell Scale for Depression, IDDD, the Bristol ADL, the GDS, FAST, CDR, the Burden Interview, and finally an appendix of screening, assessment and management algorithms. The book is well-indexed, has ample references, and recommended reading lists.

https://doi.org/10.1017/S0317167100121079