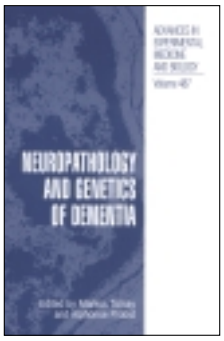

Neuropathology and Genetics of Dementia

(Volume 487 of *Advances in Experimental Medicine and Biology*), edited by Markus Tolnay and Alphonse Probst, Kluwer Academic Publishers, 2001, Price US$90.00, 270 pages, ISBN 0-306-46558-2

This is a book largely written from a scientist's view on basic research for clinicians. Each chapter gives a good, broad introduction of a particular research field, including its history and current key issues.

I have been working on Alzheimer's disease for a few years and still find myself interested in the chapter by Samuel Gandy and Suzana Petanceska (*Regulation of Alzheimer β-amyloid Precursor Trafficking and Metabolism*; p. 85) for their description of the development of the field. However, the discussions in the book are of a depth that might be more suitable for neuropathologists and clinicians as a general introduction. The discussions about tau, α-synuclein and ubiquitin, for example, are rather general and brief, considering the dynamic fields that have been moving fast in recent years.

However, it has been increasingly difficult lately to capture the breadth of neuroscience research in a conference proceedings book, such as this. The nice, unique feature of this book is the description of specific pathological phenomena that underlie many of the discussions of various dementia. For example, readers can find common features, such as aggregated and misfolded proteins, hidden in the pathogenesis of various dementia disorders as discussed in some of the chapters. This might be a good way to present a disease to a scientist who has usually been so focused in his or her research that he or she is losing the big picture of their subject. Therefore, this book could also be beneficial for scientists studying dementia mechanisms.

The discussion of genetics and especially the single nucleotide polymorphisms (SNP) in certain genes associated with dementia was impressive. With the fast development of functional genomics, a growing body of evidence for the genetic background of dementia is being uncovered. This will not only provide entry points and insights into the mechanisms underlying dementia, but will also shed some light on the era of pharmacogenomics that is fast approaching clinicians. The limit of the book is that the topics are not well balanced, which could be a result of the format of the *Swiss Society for Neuropathology XVIII International Winter Meeting on Neuropathology and Genetics of Dementia* (23–26 March 2000, St Moritz, Switzerland).

For example, there are two major chapters that discuss in great detail the hormonal regulation of Alzheimer's pathogenesis, which are important topics but definitely not the main picture of the field. Amyloid precursor protein (APP) processing, as well as β-secretase (BACE) and γ-secretase mechanisms, for example, remain the major focus of the field. These topics are rich in pathological and genetic studies for the most common dementia, but were under-represented in this book, which focuses on the neuropathology and genetics of dementia. Such an imbalance could leave a one-sided view of the research field in a clinician's mind. Another minor disappointment is the lack of some hot key words in the index, such as 'misfolding', 'aggregation' and 'single nucleotide polymorphism', which are indeed discussed in various chapters. These terms each represent a specific field and could have added some nice connection lines across some of the chapters.

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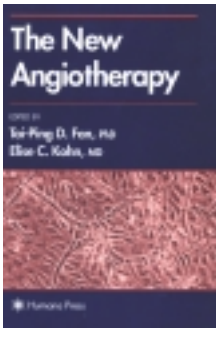

The New Angiotherapy

Edited by Tai-Ping D. Fan and Elise C. Kohn, Humana Press, 2001 Price US$150.00, 609 pages, ISBN 0-89603-464-X

The crucial role of blood vessels in supplying cells with oxygen and nutrients has long been recognized and the concept that deliberate inhibition of new blood vessel formation can be used to treat diseases was first proposed by Folkman and Danekamp in the early 1970s. However, it has only been in the past decade that dramatic advances in our understanding of the basic mechanisms of blood vessel formation has made feasible the systematic testing of the hypothesis that controlling blood vessel growth represents a key target for disease management in the clinic. For example, results of the first clinical trial to stimulate angiogenesis for the treatment of ischemic heart disease were only first reported in 1998. Nevertheless, the fundamental attractiveness of this concept and its potential application in the treatment of a wide variety of diseases has led to a plethora of research and development activities by both academic and industrial groups. Although exciting, the many new

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