

Book Reviews Recensions

Handbook of Functional Neuroimaging of Cognition. Cabeza R, Kingstone A, editors. Cambridge (MA): The MIT Press; 2001. 412 pp with index. ISBN 0-262-03280-5 (cloth). US\$65.00.

The *Handbook of Functional Neuroimaging of Cognition*, edited by Roberto Cabeza and Alan Kingstone, is intended as a survey of the variety of cognitive functions currently under examination using functional neuroimaging and of the issues and problems faced by investigators in this field. The book begins with several chapters on the methods used and the history of how these methods were developed. It continues in a second section with imaging findings in the different cognitive domains (i.e., attention, language, visual recognition, semantic memory, episodic memory and working memory) and concludes with a section on imaging of special populations.

There are several aspects of this book that will be most welcome to interested readers, particularly newcomers to the field. The 3 chapters on history and methods include concise but useful information on how the techniques work and how imaging data are analyzed and also provide a historical context, which is often ignored. In addition, there are discussions of experimental design and network approaches to imaging analysis, topics that anyone interested in this field should be aware of.

Each of the remaining chapters includes a relevant background on the particular area of interest and a concluding section devoted to

issues and problems specific to that area. This is an important feature in the chapters covering the cognitive domains because the presentation of cognitive and theoretical perspectives before the particular evidence from neuroimaging experiments gives a context for interpreting these data in light of the broader fields of cognitive science and neuropsychology. The "Issues" sections also are useful in providing a discussion of caveats that should be kept in mind and in illustrating questions that remain to be addressed. The final section of the book discusses imaging of older adults and cognitively impaired patient populations. A minor quibble is that the final chapter only briefly covers a variety of patient populations, such as patients with lesions and schizophrenia, and leaves out a number of other interesting diseases, both neurological and psychiatric, that have been studied with functional neuroimaging.

The book is the product of a conference held a few years ago, and each of the chapters is written by a well-known expert in the area. However, the information provided is still highly relevant, mainly because of the extensive discussions of background and current problems mentioned above. It is clear that each of the authors has given considerable thought to the task, rather than viewing this as simply another exercise in scientific writing. Thus, not every aspect of cognitive function is covered, but the thoughtful approach to those that are covered more than makes up for any omissions.

The book is attractively put to-

gether and includes a section of colour figures, which are important for visualizing imaging results. On the whole, then, this will be a valuable book for those looking for an introduction to functional neuroimaging, as well as for investigators who are working in the field and are interested in learning about work outside of their area of specialization.

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Neurobiology of Mental Illness. Charney DS, Nestler EJ, Bunney BS, editors. Oxford: Oxford University Press, Inc.; 2001. 984 pp with index. ISBN 0-19-514780-4 (paper). CDN\$143.95.

It is truly amazing that the scientific information related to neurobiology of mental illness has filled a volume this large. This reflects the enormous progress of neuroscience and related disciplines such as molecular genetics and neuroimaging in the last 2 decades.

The task to organize this wealth of information into a comprehensive and all-encompassing volume was certainly a great and difficult undertaking, considering that the book has 139 contributors from 44 institutions. The well-deserved credit goes to the editors (Charney, Nestler and Bunney) and section editors (Heninger, Bunney, Nemeroff, Charney, Hyman, Davis and Leckman), all leading experts in the field, for giving the volume a conceptual and organizational uniformity that makes the book an easy-to-read resource.