

## Book Reviews

**PET AND NMR.** Series: Neurology and Neurobiology, Volume 21. Edited by Leontino Battistin and Franz Gerstenbrand. Published by Alan R. Liss, Inc., New York, 518 pages. \$119Cdn approx.

This volume is an attempt to show how PET and NMR can be complimentary in the study of brain structure and function. Experiments in NMR imaging (MRI) and *in-vitro* spectroscopy are sited to emphasize that we are on the threshold of NMR use in the study of brain chemistry. Many technical papers are presented which detail methods of attempting to do just that. *In-vitro* tissue studies are used as a model of how to later do *in vivo* spectroscopic investigation. There are clinical as well as bench studies, each with the goal of learning how to measure chemistry in the brain. There is even a theoretical chapter suggesting how to image physiological events.

The section on positron emission tomography is written by an authoritative group from Europe, Britain and the US. A broad selection of topics is covered including measurements of cerebral blood flow, oxygen metabolism, glucose metabolism and receptor kinetics in various disease states. The tracer kinetic methodology to assess receptor binding is discussed in an excellent chapter by Gjedde, Wong and Wagner. Horwitz et al discuss correlational methodology in the analysis of PET data, a subject which has become somewhat controversial. In addition, the contribution of single photon emission enhanced tomography (SPECT) to functional brain imaging is discussed.

This book provides a review of some PET techniques along with NMR spectroscopy and imaging in a single volume. However, more complete current reviews of PET are available, such as the book edited by Phelps, Mazziotta and Schelbert and for MRI in the book edited by Brant-Zawadzki and Norman.

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**STROKE, A CLINICAL APPROACH.** By Louis R. Caplan and Robert W. Stein. Published by Butterworths, 1986. 343 pages. \$45.50.

In the preface the authors state: "Our goal has been to interpret and organize the newer advances into practical terms referable to the daily care of stroke patients. The book is intended as a manual for the general practitioner, internist or surgeon confronted with stroke patients and for the medical student and house officer in training." It can be said unhesitatingly that the authors have admirably succeeded in fulfilling these goals.

Within the burgeoning neurologic literature, there is still a place for thoughtful, clinically-oriented publications such as this one. We find here a distillation of the authors' extensive experience detailing a personal but always rationally justified approach to the manifold problems posed by patients with cerebrovascular disease. One welcomes the opportunity to probe the thought processes of experts concerning the management decisions in stroke patients which many of us face on a daily basis. Numerous controversial issues in stroke management (eg. when to initiate anticoagulation in the patient with stroke

arising from a cardiac embolus or management of asymptomatic carotid stenosis) are given a balanced treatment with ample reference to data from the literature and the Harvard and Michael Reese Stroke Registries.

A noticeable flaw in the book is the quality of the CT scans and angiograms. Instead of the originals artistic reproductions are used which are generally poorly done and appear like overexposed radiographs. Occasional points are overcategoric. Many readers may find themselves spending an inordinate amount of time at the bedside if they strictly follow the authors' admonition: "Do not leave the bedside before you feel confident in your localization". The choice of section and chapter divisions is logical and well planned with the exception of the chapter on treatment which would be better placed in the 3rd section ("Prevention, Complications and Rehabilitation") than in the first on "General Principles". Also the second section would be more aptly titled "Specific Varieties of Stroke" than "Stroke Syndromes".

These are minor detractors from what is otherwise a very readable and attractive book. Although intended mainly for non-neurologists, this volume will undoubtedly prove useful for neurologists as well who wish to review basic concepts and recent advances in cerebrovascular disease. Within its short length this text provides a remarkable amount of practical information. If read throughout it will not fail to reward the reader with a rich collection of clinical pearls.

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**THE NEURO-IMMUNE-ENDOCRINE CONNECTION.** Edited by Carl W. Cotman, Roberta E. Brinton, Albert Galaburda, Bruce McEwen and Diana M. Schneider. Published by Raven Press. 166 pages. \$60Cdn approx.

This volume of eight chapters is based upon the proceedings of a meeting devoted to neuroimmunology held in April of 1985. The editors have attempted to integrate information from three different areas for those who are familiar with perhaps only one of the disciplines of interest.

The first half of the monograph introduces concepts of immune function, nervous system function and innervation of the immune system, and culminates in a review of the common organs of cellular communication in the immune and nervous systems.

The next three chapters explore systems interaction: (a) chemical messengers of the immune system and a possible role for the factors on nervous system function; (b) the effects of neurotransmitters and hormones on the immune system; and (c) the similarities between the phagocytic cell types of the immune and nervous systems—macrophages and astrocytes respectively.

The last chapter deals with the neural immune interaction from a neuro-psychological perspective by suggesting a close relationship between abnormalities of the immune system and behavioural deficits that develop in childhood.

The format of this monograph is clearly not an attempt to merely publish the often disjointed proceedings of a meeting.