BOOK REVIEWS

Life in Research. By DEREK RICHTER. (Pp 170; £3.95). Sutton: Stuart Phillips Publications, 1989.

It has been both pleasure and privilege to review this book; at least I have in common with Dr Derek Richter that we got Membership on the same day, he by election, an honour to the R.C.P. He is a founding father of the science of brain chemistry; early work included the discovery of monoamine oxidase. These memoirs describe his move from pure chemistry for humanitarian reasons and the battle for funds, laboratory space and hospital links as psychiatry was dragged into the twentieth century.

Physicians are at best front-men liaising with scientists; Dr Richter became clinician as well as trail-blazer. Recurring themes are his efforts to set up international links in brain research and to foster both greater public awareness of mental illness and self-help for it. Lesser ventures included hill-farming, half-way homes for rehabilitation and a fruitful role as donor for A.I.D. All this is told with artless candour by a man always ready to see the best in other men. His real heroes are Wieland of Munich and Gowland Hopkins of Cambridge. The latter at eighty once reached the entrance to his department at the same time as a friend of mine with a fellow undergraduate. "You first, gentlemen," said the Nobel Laureate and past-president of the Royal Society, "two come before one". That was the humility of the great; Derek Richter is a worthy disciple. This is a record of how inspiration, hope and hard work created a new science from nothing; it should fascinate far more than just neurologists and psychiatrists.

SIMON CURRIE

Nerves and the Gastrointestinal Tract Falk Symposium 50. Edited by M V SINGER AND H GOEBELL. (Pp 817; Price: £95.00 (US $165.00). Publisher: Lancaster, MTP Press Ltd. Distributor: Kluwer Academic Publishers Group, 1989.

This book is a product of the 50th Falk Symposium, a series of excellent conferences on diverse aspects of gastroenterology generously supported by Dr H. Falk. It will be of little interest to clinical neurologists, and it is noteworthy that no conventional neurologist is a contributor (unless it be the unfortunate person from Marburg listed as K.B????). Nevertheless, it stands as an excellent account of the rapidly moving and intriguing area of gastro-intestinal "neurology", and the publishers have done well to produce it almost faultlessly in little over a year.

For the uninvolved majority, the key parts are the several lengthy reviews, and summaries of the various sections, by leaders such as Gershon, Hirschowitz, Szurszewski, Walsh and Wingate which, published alone, would make a valuable, small textbook on the topic. However, all contributions to the conference have been faithfully included, though many are little more than abstracts, completing the up-to-date perspective but mainly as reference points for the cognoscenti.

Those whose vocation lies within the cranium may feel disquiet at references to the "gastro-intestinal brain", but that is an understandable shorthand for the self-contained enteric nervous system, autonomous as well as autonomic, differing chemically and structurally from the rest of the parasympathetic system but interacting with the rest of the ANS and the CNS.

The network of eight different neuron types is described and beautifully illustrated by W Stach, while J D Wood of Ohio explains how the neuronal network functions to produce co-ordinated intestinal motor activity and Szurszewski describes interactions between the enteric nervous system and pre-vertebral ganglia. Yvonne Tache disentangles the role of eight neuro-regulatory peptides, such as thyrotropin-releasing factor and calcitonin, as transmitters in the brain influencing autonomic nervous function.

The weakest section is that on "psychoviscera and behavioural aspects of gut function", simply because it is still so uncertain why abnormalities of gut function arise despite the circumstantial evidence of altered enteric system behaviour.

Alimentary neurology is not set to become a new sub-speciality, but knowledge of it will become essential for comprehending gastroenterologists, and the insights it offers into the function and purpose of nerves will certainly impinge on somatic neurophysiological thought.

JOHN R BENNETT

Brain Imaging: Applications in Psychiatry. Edited by NANCY C. ANDREASEN, MD, Ph.D. (Pp 384; £55.00 hardback). Cambridge: Cambridge University Press, 1989.

This edited volume is a highly valuable contribution to the range and applications of brain imaging techniques in the study of psychiatric disorders. Indeed, the style of the contribution is such that it serves both as an introductory reference book and also a source of more detailed information for those requiring more specialist knowledge.

The book is laid out in 5 chapters, covering computed tomography, nuclear magnetic resonance imaging, computerised EEG and evoked potential mapping, single photon emission computer tomography (SPECT) and positron emission tomography (PET). All the contributors are recognised experts with wide practical experience in the application and limitations of the various techniques.

The great value of the format adopted, namely covering all imaging techniques, is that many of the basic principles in one discipline are relevant to another. For instance, an understanding of back projection in computed tomography is important in understanding image reconstruction in positron emission tomography. All chapters contain an account of basic techniques followed by a discussion of the methods in their application and an account of findings in clinical research. Particularly good is the section on methodological problems encountered in PET research where issues such as anatomical localisation are considered in great depth from many different perspectives. Although this book is highly specialised the overviews of the applications of the various techniques make it easily accessible to those wanting an up to date and critical account of brain imaging techniques in psychiatry.

RJ DOLAN

Difficult Diagnoses in Adult Communication Disorders. Edited by N HELM-ESTABBROOKS AND J L ATEN. (Pp 218; Price: £16.50). Boston: Little, Brown & Co. UK Distributor London, Cole & Whurr Ltd, 1989.

This is a somewhat unusual but interesting book on communication disorder. It consists of individual case histories which have proved difficult or instructive to analyse and is based on an American Speech and Hearing Association Convention that met in 1987. Cases are grouped into several categories, e.g. fluency disorder, unusual behaviour associated with head injury; possible psychogenic disorder; aphasic classification problems; diagnostic and management strategies; difficulty in diagnosing dementia in the presence of dysphasia.

All case presentations are quite reasonable and each problem is discussed in considerable depth, in most cases to an appropriate degree although perhaps more could have been said about localisation.

This is certainly not a book for beginners. It assumes considerable background knowledge of aphasia tests and would be difficult reading for the majority of UK Neurologists, I fear! It is primarily aimed at speech therapists with a marginal interest in aphasiology and for this small market the monograph would have considerable appeal.

CH HAWKES

Handbook of Neurological Investigations in Children. By JOHN B P STEPHENSON AND MARY D KING. (Pp 244; Price: paperback £25.00). Butterworth Scientific Ltd, 1989.

This book, another in the excellent "Handbook of Investigations in Children" series, is not a volume designed to be read from cover to cover. It is so stuffed with practical advice and information that the authors have resorted to every possible device in order to compress this diverse subject into a portable and handy size. Liberal use of acronyms is made and on rare occasions their prose style becomes so terse as to be almost unintelligible. However, as a practical aid to this subject it functions quite magnificently.

The material is presented in two halves with the first devoted to a description of the investigations themselves. The authors indicated that it would be impossible to cover all known neurological investigations in a "handbook", but all those areas likely to be required by the non-super-specialist are covered and at a functionally adequate level. Each chapter describes a different series of techniques and is illustrated by useful case histories, which demonstrate both the correct use of investigations and some of the pitfalls