

whole. It is not easy within the complexities of modern neurochemistry to present data in a form which is understandable to those requiring an introduction to this area. This is certainly a book I shall recommend to my postgraduate students and to clinical colleagues.

P JENNER

**Alzheimer's Disease and Related Disorders.** *British Medical Bulletin Vol 42 Number 1.* Edited by M Roth and LL Iversen (Pp 116; £16.00.) Edinburgh: Churchill Livingstone, 1986.

The British Medical Bulletin has a well-deserved reputation for publishing high quality, authoritative and up to date reviews on topical and controversial subjects. In this singular collection of essays it does not fall short of this standard. Sir Martin Roth introduces this issue by reminding us of the increase in the ageing populace and the attendant increase in demented patients. This is already both a medical and a social problem, and one which in my estimation will require both recognition and the formulation of definite policies by national governments of whatever colour.

This volume is mainly devoted to recent developments. The contents survey epidemiology, clinical and neuropsychological assessment, genetics, brain imaging, neurophysiology and pathology. More specialised chapters cover the cholinergic disorder (E Perry), transmissibility (Corsellis) and non-cholinergic pharmacological treatments (Kopelman and Lishman).

It is now clear that the Alzheimer brain is abnormal in respect of many neurotransmitters and that the serviceable cholinergic hypothesis, though it sheds light on the amnesic defect, fails to explain any fundamental processes in causation. The similarities with Parkinson's disease (Quinn, Rossor and Marsden) and the claimed overlap of these two very common illnesses of late life is expounded. And yet the therapeutic response of Parkinson's disease has not been mirrored by the successful rational use of cholinergic agonists in dementia (Hollander *et al.*) It is a sign of our current ignorance of both cause and remedy that the vital issues of management (in the general sense of looking after afflicted patients and appraising resources, advocacy and education) need a good review, albeit with a strong sociological bias (T Arie).

This issue of the BMB contains a mass of data and sources, valuable both for the basic scientist and clinician. Opinions are

ventured by the braver and perhaps the more mature contributors, lending a more personal and stimulating aspect to their chapters. All the major problem areas are identified and explored, so that if the going is tough in places, the reader's efforts are likely to be rewarded. I much prefer this compilation of data and references to the multitude of more ephemeral published symposia available.

JMS PEARCE

**A Method of Psychiatry. 2nd edition.** Edited by Stanley E Greben, Vivian M Rakoff, George Voineskos. (Pp 474; \$32.75.) Philadelphia: Lea & Febiger. UK Distrib: Quest-Moridien Ltd, 1985.

This is the second edition of the undergraduate textbook of psychiatry prepared by faculty members of the Department of Psychiatry of the University of Toronto. It is designed to reflect their particular methods of teaching which are broadly based, and regard the psychiatrist as physician and healer. The second edition aims to expand on the first, following the changes in knowledge and emphasis in the speciality with particular reference to old age, newer ideas about schizophrenia, psychosomatic mechanisms and the relationships between psychiatry and other medical specialities. It is a difficult book to review in that it must presumably complement a teaching course to which the reader does not have access and which is clearly more detailed and academic than undergraduate courses in this country.

The book is divided into a number of sections, the later, clinical ones being mainly of quite a high standard, and at a level more appropriate to postgraduate students. The content includes a wide range of approaches to all the main groups of disorders and some helpful references. The "how to do it" chapters assume that a psychotherapeutic relationship is the ultimate aim, but the chapters on history-taking and examinations have some good points.

However, the early chapters are very disappointing, containing discussions in great and confusing depth on some subjects (such as infancy and childhood) whilst ignoring totally the difficulties of early adult life and allowing only two and a half sides to a very "middle class" account of old age. There are at least four chapters dealing with aspects of psychosomatic relationships, whose definitions range from the non-existent to the multiple and conflicting and would require considerable sophistication to

make sense of. It is hard to see the first two sections as a useful introduction to the rest of the volume and for our use it might be better to suggest using the contents almost in reverse order.

In summary this book might be of some use to postgraduates, but would not be helpful to most undergraduates. It would not be a book to invest in, if funds were limited.

ISOBEL CARD

**Neurohistochemistry: Modern Methods and Applications. Neurology and Neurobiology Vol 16.** Edited by Pertti Panula, Heikki Paivarinta, Seppo Soini. (Pp 710; £39.00.) New York: Alan R Liss Inc, 1986.

This is largely a collection of review articles, devoted to recent applications of immunohistochemistry to the study of neurotransmission; it is dedicated to the pioneer Scandinavian neuro-histochemist, Olavi Eranko.

The three parts are devoted to techniques, developmental studies and neurotransmitter systems. In the first, interesting discussions on the use of recombinant-DNA technology in the identification of neurotransmitter, prohormones and on the use of image analysis in studies of the hypothalamic nuclei are included. The middle part concentrates on neuronal development with three contributions devoted to the SIF cell of sympathetic ganglia. The effects of host thyroid depletion on developing rat parietal cortex are explored and there is a wide ranging, well-illustrated summary of peptidergic neuron ontogeny. In the final part, an historical chapter by Hokfelt contains a notable section on neuropeptide coexistence within neurons (also discussed in a later article), and there are interesting contributions on benzodiazepine receptors in rat and human brain and the synaptic connections of immunolabelled catecholaminergic neurons studied ultrastructurally.

FR WELLS

**The Pathology of the Myelinated Axon. (Current Trends in Neurosciences Series.)** Edited by M Adachi, A Hirano, SM Aronson. (Pp 406; £105.75.) Tokyo: Igaku-Shoin. UK Distrib: Stonebridge Distribution Ltd, 1985.

It is not stated either by the publishers or the editors whether this beautifully produced

book is to form one of a series, as its subtitle might suggest. The aim of the book is to "acquaint the wide audience of neuroscientists with the current status of knowledge of the morphology of the diseased myelinated axon under selected conditions". The emphasis is on electron microscopy.

There are 16 chapters, the majority concerned with experimental work. The editors have given authors "ample freedom to organize and present the fruits of [their] personal studies". The book starts well with an excellent description by Rosenbluth, of axolemmal structure as observed in freeze-fractured preparations of myelinated fibres from normal nerves, from several mutants with abnormalities of central or peripheral myelin and from demyelinated nerves. Mouse mutants are also the subject of three further chapters. Comprehensive accounts are given of wobbler (Mitsumoto and Bradley), an animal with lower motor neuron disease, and twitcher (Scaravilli), a mouse with globoid cell leucodystrophy. The chapter on the dystrophic mouse (Nakamura and Okada) is less complete, lacking clinical details and reference to the more recent studies of the basal lamina deficiency. Mutants with abnormalities of CNS myelin are also included by Nagara and Suzuki in a chapter on radial components of central myelin. Three chapters deal with demyelination and remyelination in the CNS. Ludwin describes clearly his studies on cuprizone-induced lesions; Raine and Traugott give a comprehensive and superbly illustrated account of EAE, which includes much relatively recent work, and is prefaced by a survey of the pathology of multiple sclerosis. JHM virus-induced demyelination is well reviewed by Erlich and Fleming. Saida has surveyed myelin antigens and immune-mediated demyelination in the PNS. These nine chapters are the best and likely to be the most useful. Those remaining include case studies in dysglobulinaemic neuropathy and in membranous lipodystrophy (Nasu disease). An experimental electron microscope study of CNS changes induced by disulfiram is based on immersion fixed material. Another experimental study of encephalopathy due to thiamine deficiency does not include more recent findings on serotonergic neurons which might be relevant to its pathogenesis. (It is surprising in a publication of this quality to find computer-printed graphs.) The "fruits of their personal studies" have largely dictated the authors' choice of topics for the chapter on the pathology of the peripheral myelinated axon. Likewise, almost a half of the chapter on diabetic neuropathy is devoted to the authors' studies on basement

membrane changes. The recognition of artefact is important, particularly in electron microscopy, but the restricted topic of post-mortem change in peripheral myelinated fibres is inappropriate for this publication.

This is a volume of assorted topics whose chapters vary as widely in quality as any "proceedings of a meeting". Nearly a half of the chapters have no references later than 1982, probably reflecting an over-long gestation period for publication. It was perhaps unwise of the editors to encourage description of the contributors' own studies rather than to concentrate on pure review articles, since this has in some cases led to an unduly biased approach. Of far more value is the type of well balanced review article to be found, for example, in *Recent Advances in Neuropathology* (a third volume must surely be due).

Even were this book to fill all the scientific requirements, its extremely high price is likely to prove the ultimate deterrent.

JEAN M JACOBS

**Handbook of Studies on Schizophrenia. Part 1: Epidemiology, Aetiology and Clinical Features. Part 2: Management and Research.** Edited by GD Burrows, TR Norman, G Rubinstein. (Part 1 Pp 260; \$72.25. Part 2 Pp 328; \$92.50.) Amsterdam: Elsevier Science Publishers, 1986.

These two volumes provide the most comprehensive contemporary account of schizophrenia that I know of. The editors are psychiatrists from the University of Melbourne, Australia, but the 63 contributors are from around the world, mostly from North America. The first volume is mainly concerned with causal issues, the second with treatment. The book is well balanced and all major topics are covered. My main criticism concerns the price. It is traditional amongst academic reviewers to complain about book prices, but £120 for the two volumes is really excessive. One wonders if the marketing director of Elsevier is living on a different planet. Is it worth buying, even at this price? I think so, because of its comprehensive coverage, its up-to-date contributions and the quality of each chapter.

It is never easy to review a multi-author book because there is no single thesis that one can evaluate. Each contributor states his own position, emphasises some point or reports a selective series of experiments. I think that the editors might have grouped

the contributions more intelligently so that diagnostic, causal and prognostic considerations, for example, could be formally assessed. The time has come, in my view, for authors to stick their necks out and not hide behind multi-factorial models of cause and multi-professional packages of treatment. Jasper damned a contemporary book of psychiatry with the faint praise that it was "too perfect, not a single mistake". Some of the contributions to this book and the overall impression attract a similar comment. Either schizophrenia is a brain disease or not? If it is a brain disease what parts of the brain are affected? If it effects the frontal lobes or the right hemisphere or the corpus callosum, for example, then the chapters on epileptic psychosis and puerperal psychosis are either redundant or should be placed in proper perspective. If schizophrenia is a brain disease then social factors are not equal in importance. These questions are crucial to an understanding of schizophrenia and if I were editor of such a handbook I would organise the contributions so as to provide answers to these questions.

Krapelin and Bleuler still tower above all subsequent writers on schizophrenia precisely because they attempted a single formulation of the condition. Since then we have been fact-gathering only. However, if one wants to know the facts about schizophrenia, this is the book to turn to.

J CUTTING

**The Pineal Gland During Development From Fetus to Adult.** Edited by Derek Gupta, Russell J Reiter. (Pp 274; £40.00.) Beckenham: Croom Helm Ltd, 1986.

The claims made at the start of this book, that the most dramatic advance in neuroendocrinology of the decade has been the recognition of the importance of the pineal gland and its secreted substances, and that the pineal has now a central place in neuroendocrinology, still do not apply to man. There has however been a very considerable increase in knowledge about the human as well as animal pineal, human melatonin rhythms, and the innervation by the pineal of the surrounding brain. This book, mainly by continental authors, is a laudable attempt to summarise modern knowledge of pineal anatomy and function.

There are four main themes. These are pineal development, maturation, sexual differentiation, and ageing. The emphasis is