Senile Dementia: Outlook for the Future. *Modern Aging Research Vol 5.* Edited by Jean Wertheimer & Maurice Marois. (Pp 562; £52.00.) New York: Alan R Liss Inc, 1984.

The book comprises the proceedings of the Internal Conference "Senile Dementia in the Course of the New Two Decades" held in Lausanne in May 1983. A wide range of topics relating to dementia are encompassed including neurochemistry, pathogenesis, epidemiology, therapeutic possibilities and the social and economic consequences of cerebral atrophy. Sir Martin Roth draws together these various strands of research into a final chapter of General Conclusions.

Despite the fact that this is a hardback volume, the individual papers retain their original typography and the eccentric translation of the mainly non-English contributions, while not detracting from their scientific content, preserves the idiomatic flavour of the various languages. For those with special interest in the field, some of the contributions are now a little outdated and at a cost of £52 the book is unlikely to prove attractive to the general reader and is destined for the library shelves.

D NEARY

Neurobiology of Vasopressin. Current Topics in Neuroendocrinology Series Vol 4. Edited by D Ganten and D Pfaff. (Pp 180; \$31.60 approx.) Heidelberg: Springer-Verlag, 1985.

The publication of a book devoted to vasopressin, and a planned volume on oxytocin, attest to the research interest of the neurohypophyseal hormones. Both the vasopressin and oxytocin systems have proved valuable in the application of new methods and the chapters provide histories of recent advances in neurobiological techniques. Thus chapter one relates the story of the elucidation of the synthesis of active hormones from largely inactive precursors and culminates in the recent application of the new DNA technology to the isolation and sequence of the complete vasopressin gene in the rat, which includes the signal peptide, neurophysin and glycoprotein in addition to arginine vasopressin. In addition the single nucleotide mutation in the vasopressin deficient Brattleboro rat has been defined. The vasopressin system has also been an obvious target for the electrophysiologist; Clarke and Merrick describe in their chapter the advantages of working on large, easily

localised neurons with discrete well defined projections. The recent advances in neuro-anatomical techniques are also reflected in the final chapter on anatomical pathways. Chapters on the volume regulation of secretion and cardiovascular regulation and hypertension complete the five chapters of this book.

The use of vasopressin as a model system in many different disciplines enables these chapters to be read with interest in their own right. Overall, however, the book lacks cohesion and one wishes for a greater editorial presence. A general introduction or even a preface, would have been valuable. The lack of cross-referencing is obvious; for example in the chapter on cardiovascular regulation it is stated that no vasopressin neurons have been observed outside the hypothalamus, and yet recent studies using colchicine which demonstrate perikarya in amygdala and locus caeruleus are fully discussed in chapter five. Finally the coverage appears uneven for a book on the neurobiology of vasopressin.

A great deal is written on the peripheral effects but there is no reference to the behavioural effects. The question of whether the observed behavioural changes with vasopressin are secondary to an influence on arousal or more specifically to an effect on memory systems is an unresolved but important question, and the large amount of available data would justify a chapter in itself.

This book is not of direct relevance to the clinician but the individual chapters do make fascinating general reading and provide a useful reference source for the specialist. For those seeking a standard reference book on the neurobiology of vasopressin this is not comprehensive.

MARTIN ROSSOR

Pain Measurement in Man. Neurophysiological Correlates of Pain. Edited by Burkhart Bromm. (Pp 486; \$98.00.) Amsterdam: Elsevier Biomedical Press, 1984.

This book results from a symposium held in Hamburg in September 1983. It naturally reflects the interests of its editor who selected the mainly European contributors. Pain is taken to be a sensory experience with a single dimension varying only in intensity although there is a nod in the direction of a more subtle approach from North America in the chapters by Melzack, Clark and Gracely. There is a special emphasis on

evoking experimental pain by brief exactly controlled stimuli such as laser pulses. Since the editor believes "pain is the consequence of the activation of nociceptive afferents" the first experimental section has four chapters by the expert schools on recording from single human afferent fibres. Although these chapters show difficulty in demonstrating a fixed relation between the firing of nociceptors and perceived pain with normal subjects let alone with patients, the assumed fixed relation of response to stimulus with nociceptors as the messenger bearers remains the leitmotif for most of the book. As the editor states, "In pain measurements in man the most important variable is the verbal report". In view of the unfortunate tendency of well trained subjects to disobey specificity theory in their verbal reports, there is a fascination in recording nonverbal responses in order to discover what the subjects should be saying. For this purpose, section three contains five chapters on muscular and autonomic reflex responses. Section four has five chapters on EEG analysis and section 5 has six chapters on evoked cerebral potentials and pain. The next section has seven chapters on the quantification of pain sensation with some authors clearly not in sympathy with the general assumption of the book that a lawful relation must be found between painful stimulus and painful response without other factors intruding. Finally there is a section on the measurement of the efficiency of pain modulating treatments. The 39 chapters of this book provide an up to date summary of one approach to the measurement of pain and the use of particular stimuli of experimental pain. The symposium was especially detailed on EEG analysis of considerable sophistication and on a study of evoked potentials.

PD WAID

Microsurgery of Cerebral Aneurysms. An Atlas. By Zentaro Ito. (Pp 230; \$222.25.) New York: Elsevier Science Publishing Co. Inc. Outside USA: Elsevier Science Publishers, Amsterdam, 1985.

"The problem is that everyone *wants* you to do your first hundred appendicectomies, but not necessarily in their hospital." This cynical but invaluable advice, given to the present reviewer at an early stage in his surgical career, served to emphasise amongst many things the inescapable truth that operative technique is only really learnt in the operating room. The book under review does not displace that opinion. This is

extremely expensive volume containing the author's ideas on microvascular surgery for intracranial aneurysms based upon over a decade of personal experience. The illustrations that necessarily occupy a large proportion are in the main good, although some are vitiated by being in an anatomical rather than in a surgical projection. Others are in an excessively schematic or artistic style which does not really contribute. A significant number, including those showing trays of instruments and the author operating, are superfluous. In some introductory sections the author makes observations on the pathophysiology of cerebral blood flow following aneurysm rupture without any really appropriate or valuable discussion of the implications. Despite several attempts this reviewer was left unclear on the author's view on the timing of operative intervention. In many places the English is somewhat stilted. The surgical approaches to a wide range of intracranial aneurysm are described and various aspects of technique mentioned but, the illustrations notwithstanding, the points made would not be readily understood by the inexperienced. Some ambitious microvascular anastomoses are described but no indication is given as to how frequently they have been used in practice and, as throughout, there is no analysis of results.

It is difficult to know who might benefit from this volume: the established surgeon will either agree or disagree and the novice will be unlikely to appreciate the points made. The presently available range of assistant's eyepieces, closed circuit television and video equipment for the operating microscope leave the teaching of operative technique firmly where it started—in the operating room. This book cannot be recommended.

J PUNT

Principles of Behavioral Neurology. Edited by M-Marsel Mesulam. (Pp 404; \$68.75.) New York: FA Davis. UK Distribution Quest-Meriden Ltd, 1985.

Behavioural neurology is a large and difficult subject and is mastered by very few neurologists, certainly in the UK. For any who wish to make the effort this is perhaps the best general introduction at the moment. After an especially well thought out introductory chapter on anatomy and other basic aspects there is a good chapter on mental status examination, supplemented by a brief referenced description of many of the more

commonly used special neuropsychological tests. There follows a series of chapters on different aspects of cerebral dysfunction. Dr Mesulam who contributes a substantial section of the book, notably the early chapters just mentioned, can be congratulated on his choice of co-authors who all excel to a greater or lesser degree. Together they have produced an excellent volume more or less comprehensive and not too psychologically orientated to inhibit the dedicated neurological student.

J MEADOWS

Evoked Potentials: Neurophysiological and Clinical Aspects. Edited by C Morocutti and PA Rizzo. (Pp 436; \$111.00.) Amsterdam: Elsevier Science Publishers, 1985.

This book records the papers presented at the successful Evoked Potentials Symposium which was held in Rome in 1984, though curiously the published work makes no mention of that meeting. The papers are grouped under the usual four headings according to stimulus modality: somatosensory, auditory, visual and multimodality evoked potentials. Articles summarising current ideas by acknowledged leaders in the field are interspersed with data on a wide variety of clinical conditions. Thus we find Desmedt on SEP generator sources, Starr on the auditory pathway origins of the brainstem responses and Celesia on VEP and positron emission tomography correlation, as well as authoritative papers by the Craccos, Matthews, Jones, Halliday, Kjaer and Bodis-Wollner, to name a few of the well known contributors. Not all of this work is especially new of course, and one or two of the illustrations are very familiar indeed, but I found it helpful and convenient to have these papers in a single volume. It is interesting to compare this book with *Clinical Applications of Evoked Potentials in Neurology* (editors Courjon, Mauguère and Revol), a work well known to EP buffs and also the proceedings of a conference, in Lyon in 1980. The most obvious, though not particularly surprising difference between the present volume and the earlier one is the decline in papers about EPs in multiple sclerosis: only two compared with 21. Less too on long-latency event related potentials than in 1980; this certainly would have surprised me six years ago when there were ideas around about P300 latency providing some sort of objective measure of dementia, but clinically at least, promise has still to be

fulfilled here. One might have expected more on evoked potentials in neurosurgical monitoring by now but though auditory and somatosensory evoked potentials have established roles we still lack a visual stimulus which balances sensitivity and specificity successfully in the operating theatre. Notable increases since 1980 are papers on clinical applications of EPs other than demyelinating diseases: for example Friedrich's ataxia, diabetes mellitus, neurosyphilis, pseudotumour cerebri among others. There are also useful articles on two important growth areas: the electroretinogram, both to flash and pattern stimulation and central motor conduction: there Rossini's "unifocal" technique of low-voltage transcutaneous cortical stimulation is described.

This book is a useful addition to any evoked potentials laboratory library if one can afford it; it contains reviews of the basic science and many suggestions for clinical applications, generally with sufficient information on methodology to allow one to try out a new technique without further recourse to the literature.

NMF MURRAY

Behavioral Neurology. 3rd Ed. By Jonathan H Pincus and Gary J Tucker. (Pp 327; £22.50 cloth; £10.95 paper.) Oxford: Oxford University Press, 1985.

It is apparent that there is much common ground between neurology and psychiatry. The traditional distinction between "organic" disorders (neurology) and "functional" disorders (psychiatry) is increasingly difficult to sustain. The borderland is sometimes referred to by psychiatrists as "neuropsychiatry", "organic or biological psychiatry", and by neurologists as "behavioural neurology" and "neuropsychology". There may well be subtle differences between the meanings and implications of these terms but broadly they encompass the border zone between neurology and psychiatry which this book attempts to explore. In the UK at present this borderland is mainly populated by psychiatrists and the subject hardly exists as a neurological discipline. In the USA on the other hand neurologists perhaps more than psychiatrists have contributed to the field, but American psychiatry is currently moving steadily in this direction away from its previous psychodynamic emphasis. It is appropriate therefore that the book is written jointly by an American neurologist and