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 For those with special interest in the field, some of the contributions are now a little outdated and at a cost of £52 the book is unlikely to prove attractive to the general reader and is destined for the library shelves.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 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.

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Microsurgery of Cerebral Aneurysms. Atlas. By Zentaro Ito. (Pp 230; \$222.25.) New York: Elsevier Science Publishing 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