

recording studies in rodents to *in vitro* investigations of LTP in hippocampal tissue and protein synthesis correlates of learning. The lesion and recording studies document the development of experimental techniques which have led to some correspondence between the various strands of research into vertebrate memory function.

The chapters on neurophysiological biochemical and pharmacological approaches to memory were of considerable interest serving to highlight the complexities of the processes which may underly the modulation and development of "memories". The chapters by Morris and Baker and by Rose provide useful discussions of the complex methodological problems faced by investigations attempting to relate changes at the level of the synapse or molecule to alterations in behaviour.

The Neuropsychology of Memory provides a broad ranging collection of articles dealing with research issues, methods and problems. The contributors and the editors are to be congratulated in providing up-to-date state of the art surveys with many citations to work in press or published in 1984. Overall this volume is likely to prove a useful source reference to those involved either in research, or in teaching at an advanced level.

RA MCCARTHY

Trauma of the Central Nervous System (Seminars in Neurological Surgery Series.) Edited by Ralph G Dacey Jr., H Richard Winn, Rebecca W Rimel and John A Jane. (Pp 352; \$76.50.) New York: Raven Press, 1985.

This significant volume is the twelfth in a series most aptly named *Seminars in Neurological Surgery*: it comprises 27 chapters by 81 contributors, all but three of the chapters hailing exclusively from the USA. The exceptions being one English, one Japanese and one joint Scottish-American venture. The book is well produced; all illustrations and figures are clear and there are copious seminal references. Seventeen chapters concern head injury and nine spinal injury. The book ends with an excellent review of all aspects of neural trauma covered by the contributors. The only significant omission is rehabilitation, serving by its absence to emphasise the inadequacy of rehabilitation facilities in many countries, including the UK. Both clinical and laboratory aspects are covered and several original studies of quality are included; indeed, the selection

illustrates nicely the relationship between laboratory and clinical research in current neurosurgical endeavours. There are useful descriptions of the functions of the CNS Trauma Research Programmes of the National Institute of Neurological and Communicative Disorders and Stroke, and of the University of Virginia's Traumatic Coma Data Bank. Several clinical and pathological studies emphasise the continuum of the spectrum of head injury from the minimal to the most severe. Valuable chapters on recovery of memory and cognitive function explore the fascinating differences in response to injury shown by the immature brain compared to that of the older child or adult and further dispel that that most naive, but often uttered neurological platitude "children do better than adults after head injury". They do not, they just do differently. The Pennsylvania model of closed head injury elegantly delineates the range of diffuse axonal injury and its clinicopathological correlates. There is a useful review of current concepts of the blood-brain barrier and its response to injury and interesting contributions on pathophysiological and metabolic consequences of spinal cord injury. The value of peripheral nerve as an experimental model is explored as is the potential of naloxone and thyrotropin-releasing hormone in the therapy of spinal cord injury.

All the aforementioned contributions are interesting, valid and well presented but perhaps the real value of this book is that it states unequivocally the limited achievements of aggressive medical management of cranial and spinal injury and places CNS trauma firmly in the sphere of public health, where there is considerable need and scope for serious epidemiological and sociological studies aimed at reducing the number of people sustaining these devastating injuries.

This book is highly recommended to neuroscientists, traumatologists and intensivists involved in the management of cranial and spinal trauma.

JAG PUNT

The Nervous System: Introduction and Review, 3rd Ed. By Charles R Noback and Robert J Demarest. (Pp 272; £18.95.) Maidenhead: McGraw-Hill Book Co (UK) Ltd, 1985.

This textbook should provide the undergraduate with an appreciation of the basic concepts of the organisation and function of

the nervous system. The initial chapters are designed to orientate the student by explaining the terminology used, the gross anatomy of the brain and its basic elements. Brief discussions follow on the development of the nervous system and the essentials of neurophysiology.

The bulk of the text is devoted to neuroanatomy with numerous informative and well labelled illustrations. Constant reference is made to applied neuroanatomy with examples of clinical and neuroanatomical correlations. Though the text describing the basic neuroanatomy is generally clear, that describing the clinical features is sometimes imprecise and may be confusing. Nevertheless, the literary style is very readable and it is particularly reassuring to learn that the cells of the mature taste buds are replaced every 200 to 300 hours. Each chapter concludes with a short list of well chosen references.

The authors have succeeded in their aim to produce an introductory text with an overview "neurobiology". It does however seem a pity that a 300 page introductory paperback has to be priced at nearly £20, thereby possibly limiting its exposure to the audience who might find it most valuable.

PD THOMPSON

Notice

Authors who intend to submit papers for publication in the *Journal of Neurology Neurosurgery and Psychiatry* are reminded of the notice which has appeared in each issue since October 1985 on the inside front cover. Papers rejected by the Editor will not be returned to authors but will be kept for three months and then destroyed by shredding.