Book reviews

serves as a starting point for wider reading. However, in a book of this length the specialist cannot expect to find many new facts within his own particular field.

Some of the illustrations are of poor quality, but otherwise the book is good value for money.

PETER RACK

Amyloidosis. Edited by Jan Marrink, Martin H Van Rijswijk. (Pp 378; \$92.00.) Dordrecht: Kluwer Academic, 1986.

Amyloidosis has attracted increasing attention in recent years. Protein chemists have discovered the characteristic molecular structure of amyloid and various diseases, associated with extracellular deposition of this substance, have been the subject of intense scientific investigation. It has been realised that differences in chemical composition are reflected in the variety of clinical and pathological manifestations. The nervous system is particularly prone to be affected and its involvement ranges from the rare familial amyloid neuropathy to the common neurodegenerative disorder of Alzheimer's disease.

This book is, in fact, a Festschrift to Professor Enno Mandema on occasion of his retirement from the University of Groningen where he organised the First International Symposium on amyloidosis. The contents are divided into seven sections. The first gives a brief and illuminating introductory background which is followed by a section each on chemistry and ultrastructure, clinical aspects and pathogenesis. Separate sections are devoted to familial, senile and experimental amyloidosis.

The individual chapters vary in length and standard: a few are hardly more than extended abstracts, while others are concise, if not comprehensive, reviews. There are only a few chapters on the nervous system: one reviews amyloidogenic proteins in general, while three papers concentrate on Alzheimer's disease. The controversial issue of scrapie associated fibrils and their relationship to infectivity is briefly covered. The various types of familial amyloidotic polyneuropathies are meticulously discussed in two chapters. I particularly liked the chapters by Masters and Beyreuther and by Glenner and Wong: this preference perhaps reflects one's own interest. This book will be a useful guide for those who are interested in amyloidosis in general, but is lesser value for neuroscientists whose research centres on neurodegenerative disorders.

PL LANTOS

Stress and Coping in Time of War: Generalizations from the Israeli Experience. (Brunner/Mazel Psychosocial Stress Series Vol 7). Edited by Norman Milgram. (Pp 420; \$54.50.) New York: Brunner/Mazel Distrib: Raven Press, 1987.

This volume emanates from a conference held in Tel Aviv in 1983. Many of the papers have been revised since their original presentation. The writers are, with one exception, Israeli investigators.

Every war seems to involve the rediscovery of old facts about battle and its psychological casualties. Israeli experiences highlight, once again, the value of "front line care" and the finding that those who recovered and returned to active duty did not succumb again to any further stress reactions. The empirical data concerning these matters are presented as percentages rather than absolute numbers for reasons of military security. There are some useful accounts of the regimes followed in the forward treatment units, and also concerning the experiences of individual prisoners in a Syrian jail and the experience and aftermath of terrorist attacks or forced evacuation.

Many of the chapters are statements or reviews of theory. Apart from their local preoccupations, these chapters do not say anything very new. There is a useful final chapter summarising the findings and making recommendations for the future. As always, in such studies, the vital importance of that somewhat insubstantial but powerful force "group morale" emerges as one of the key factors of success in survival in very severe stress.

JLT BIRLEY

Tumours of the Nervous System. By TH Moss. (Pp 166; £88.00.) Berlin: Springer-Verlag, 1986.

This ultrastructural atlas is organised in 24 sections. Each consists of a description of a tumour or a group of tumours and of a number of illustrations of their main ultrastructural features. A few references follow the text in each chapter.

The first eight chapters deal with benign and malignant gliomas and choroid plexus papillomas and are followed by others describing nerve cell tumours, meningiomas, schwannomas, neurofibromas, haemangioblastomas and germinomas. In the last six chapters the reader is acquainted with craniopharyngiomas, chordomas, pitu-

itary tumours, lymphomas, sarcomas and metastatic carcinomas.

The list of neoplasms included in this publication is fairly comprehensive, but I was disappointed to find that certain tumours which may be important in the differential diagnosis, such as melanoma, small cell "carcinoma" and paraganglioma, were omitted. In many instances the selection of tumours illustrated seemed arbitrary (for example six pictures of a choroid plexus papilloma, four of the myxopapillary ependymoma) and I have the impression that pruning some unnecessary pictures would have made place for other, perhaps more important tumours.

Generally, the fixation of tissues is good and only occasional fixation artefacts are noticeable. The quality of the pictures is variable; many of them are good, but some are too dark while, in others, the contrast is excessive. Moreover, the legends of a few pictures are questionable: I do not think fig 1.2 shows basement membrane; as for the "proliferation" of basement membrane of fig 4.4, I am not sure it is not proteinaceous material; and the normal collagen in fig 15.5 is not apparent. Also, in far too many instances legends are a mere repetition of the text. The legends could have been better used to increase the amount of information available to the reader.

Since this atlas was intended to be a "basic reference and diagnostic aid", I would have expected more space to be given to differential diagnosis. In fact there is little and, as in section 14, it is rather confusing.

On the whole the text is well written and the book is easy to read. The essential features of most tumours are clearly outlined and illustrated. In conclusion, I see this Atlas more as an approach to the ultrastructure of tumours of the nervous system, than an everyday diagnostic guide. The price seems high for a book of this size.

F SCARAVILLI

Visual Neuroscience. Edited by JD Pettigrew, KJ Sanderson, WR Levick. (Pp 448; £75.00.) Cambridge: Cambridge University Press, 1986.

In the first week of September 1983 a symposium to record the contribution of Peter Bishop to visual neurosciences was held on Lord Howe Island a few hundred miles to the east of Australia. The contributions were given by those who had worked with or been

influenced by Peter Bishop, and this book is a collection of review articles on many topics of current interest in the visual neurosciences. Amongst the authors are many of the most prominent names in vision research and the standard of each contribution is consistently high. The book is divided into six sections covering the retina, retinogeniculate connections, visual development, comparative visual physiology, the visual cortex and integrative aspects of vision. Each section is comprised of a number of papers reviewing aspects of these topics.

It is a tribute to the editors that there is consistency of style and presentation which greatly facilitates understanding of the sometimes difficult concepts and makes for ease of cross reference. Although this book can be used for reference, each article can be taken as telling an interesting story, outlining the development of research in for example retinal neuro anatomy and physiology, colour vision, optic nerve fibre grouping, the lateral geniculate nucleus and binocular vision amongst a host of other interesting topics. All the contributions are given by basic visual neuroscientists with the exception of one chapter by a clinical neurologist.

Despite the clear non-clinical bias of the majority of articles this book will still be of great interest to those neurologists concerned with visual physiology. In particular the sections on retina and retinogeniculate connections have the appeal of possible clinical correlation with visual evoked potential measurements and assessment of the more subtle aspects of vision such as contrast sensitivity.

At £75.00 this book is expensive but for those in this research field or interested at the clinical level this book provides many fascinating correlations and can be strongly recommended.

CJK ELLIS

Planning Strategies of Intracranial Microsurgery. By Wolfgang Seeger. (Pp 417; DM 268.00.) Vienna: Springer-Verlag, 1986.

This is a beautifully, even extravagantly, illustrated book produced in order to show the younger neurosurgeon how to approach brain lesions in the most economical and gentle way at craniotomy. It draws on the

author's personal experience, and on the data collected over several years in individual cases, to show that logical analysis of the newer imaging methods of CT and MRI scans may be transposed to the surface markings of the skull very exactly, without the benefit of stereotactic techniques. The author concentrates on the details of surgery for intrinsic brain tumours, a topic frequently neglected in standard texts of operative neurosurgery.

In the first part, general principles of surgical planning on the basis of neuro-radiology are discussed. In the second, the strategy of approaching specific examples of cerebral lesions is copiously illustrated. The English usage is slightly stilted, and there are occasional errors in spelling; however, the illustrations are so apposite that they carry the meaning eloquently. The book is a celebration of the intellectual approach to technical neurosurgery. The author, and his co-workers plan the anatomical route to be followed in such detail the day before surgery, that, as the author mentions in his foreword, there is a danger that this may be forgotten by the time of the procedure. It is a very serious work, and as well as being a training manual for junior neurosurgeons, it should be seen as a counsel of perfection for senior neurosurgeons. However, some will find it too detailed and too mechanical in its approach to neurosurgery and will favour a more intuitive approach to each individual craniotomy. The book should find a place in the library of all neurosurgical departments which believe they can employ accurate microneurosurgical operative techniques for intrinsic brain lesions.

DGT THOMAS

Electromyography for Experimentalists. By Gerald E Loeb, Carl Gans. (Pp 373; £18.75 p/b; £50.95 cloth.) London: University of Chicago Press, 1986.

When Lord Adrian recorded electromyographic activity in the 1920s he initially used a modified version of Einthoven's string galvanometer and in later experiments developed the technique of needle electromyography. The impact of electromyography on

clinical and experimental neurophysiology was not clear at that stage. Indeed, before needle electromyography, its future was by no means secure, as was suggested by Lord Adrian himself in his Oliver-Sharpey lecture, in 1925, on "The Interpretation of the Electromyogram". He began with the statement... "The subject of these lectures is not one in which striking advances have been made in the last few years. It is one which raises many more questions than it solves, and it may turn out in the end to have little or no importance in practical medicine".

Since these pioneering days there has been a veritable explosion in the number of techniques and gadgets available to measure activity within the nervous system. In spite of Lord Adrian's circumspection, many of these techniques have found a place in both clinical and experimental neurophysiological practice. This apparent level of sophistication may be misleading as the choice of experimental paradigms that will provide comprehensible answers to carefully defined questions ultimately rests with the initiative of the investigator. *Electromyography for Experimentalists* is concerned with these points. It is not so much a textbook of electromyography as a "how to do it" guide for the neurophysiologist, emphasising an understanding of basic concepts and techniques before their application. The book is primarily designed for animal neuroscientists, in particular, those about to establish a laboratory. However, all neurophysiologists will find useful information in this volume. There is much practical advice on the choice and design of equipment, recording devices and the planning and performing of experiments. The authors have not concerned themselves with specific areas of neurophysiology but have illustrated the basic principles involved in a way that will stimulate the interested reader to pursue matters further. There are clear discussions on the basic concepts of neuromuscular physiology and the measurement of electrical signals from muscles. Due emphasis also is given to muscle mechanics and the movement produced by muscle contraction. With this background detail, the basic principles that help bridge the interface between electrical engineering and biology are presented from a practical viewpoint. The book is written in an approachable and digestible style, interspersed with encouraging advice. Traditionally, such information is transmitted by word of mouth, under the watchful eyes of senior colleagues. The advice contained in this book will provide a useful adjunct to this.

PD THOMPSON