Book reviews

Principles of Neural Science. Edited by Eric R Kandel and James H Schwartz. (Pp 731; £22.50 paper, £45 board.) London: Edward Arnold, 1981.

Combined neuroscience courses have now been taught in universities and medical schools for some years. However, many of the standard textbooks are woefully inadequate in their treatment of the brain sciences, and indeed, there are few books available covering the topic from a scientific viewpoint. This new book therefore is extremely welcome, and deals with almost all the topics found in a typical second year science or medical degree course. Since this is an introductory text, the treatment of each topic is not exhaustive, and many people may find their own particular subject, such as the X, Y and W ganglion cells of the retina, long latency stretch reflexes in muscle, or the details of gating mechanisms for pain, covered only briefly. Yet on the whole this text provides a balanced introduction to the neurosciences.

The book is well-produced, and, in the tradition of all good American textbooks, is very pleasing to the eye—an essential prerequisite for undergraduate teaching. There are an enormous number of newly produced illustrations, most of which provide a clear and excellent summary of the text. Each of the chapters is written by a member of the course team at Columbia university, which gives the book an overall unity which is usually so lacking in multi-authored texts. However I find it difficult to believe that this book is simply a version of the normal student teaching course. The scope is quite enormous, from single cell physiology to the pathology of schizophrenia, and it seems more likely that courses in different universities will cover only various portions of the book, rather than follow it through chapter by chapter.

Despite its all-embracing title "Principles of Neural Science", this is really a human neurophysiological textbook. Neuroanatomy is not covered in detail, since this would be practically impossible in one volume, but there are very useful short chapters at intervals covering relevant anatomical detail. Neuropharmacology is mentioned only towards the end of the book in the section on behaviour and learning.

Examples from human neurology are used well and provide concrete detail to which students can refer. The book ends with three appendices dealing with simple models of current flow in neurons, the cerebrospinal fluid and neuroradiological techniques, including interpretation of CT scans, and the physical laws of neuro-ophthalmology.

It is a pleasure at last to recommend a complete and up-to-date introduction to the neurosciences.

J ROTHWELL

DSM-III Case Book. A Learning Companion to the Diagnostic and Statistical Manual of Mental Disorders, 3rd Ed. Edited by Robert L Spitzer, Andrew E Skodol, Miriam Gibbon, Janet BW Williams. (Pp 400; Board \$29.95, Soft \$16.00.) Washington: American Psychiatric Association, 1981.

Although British psychiatrists must be given the credit for bringing to attention the marked differences in diagnostic habits between themselves and their colleagues abroad, and for first developing relatively sophisticated techniques for the assessment of psychopathology, there can be little doubt that the new American classification, the DSM-III, is going to have profound repercussions in this country with regard to our own diagnostic habits. The product of much hard work, it has produced a multiaxial approach to the evaluation of psychiatric disorders with precise descriptions and many categories additional to the earlier classifications such as the DSM-II. Clearly grasping the intricacies of such a scheme is difficult, and the DSM-III Case Book has been introduced in an attempt to help those who wish to explore this field further. It presents case vignettes from real patients which have been edited to focus specifically on information relevant to the differential diagnosis. The latter is then discussed and difficulties of interpretation highlighted. In one section the differential diagnosis of particularly difficult problems is analysed and the authors discuss their reasons for a particular choice in preference to others. Coming to know the DSM-III using such a manual is more interesting than labouring through the DSM-III itself and provides a useful way for clinicians to gain experience in applying the diagnostic principles. In particular, British psychiatrists should note that the DSM-III

criteria are more explicit and strict than the 9th revision of the International Classification of Diseases (ICD 9) and that the multiaxial classification introduces personality disorders and specific developmental disorders in axis 2, physical disorders in axis 3, and psychosocial stresses and the highest level of functioning over the past year in axes 4 and 5. As such they should take note of it, and this unusual book, available in both soft and hard covers, is recommended as one way of achieving this.

MICHAEL TRIMBLE

Peripheral Neuropathies: Report of a WHO Study Group (Pp 138; SW Fr 9.) Geneva, World Health Organisation, 1980.

This small handbook is the result of a meeting in Geneva in 1979 of a WHO Study Group on Peripheral Neuropathies. It should be emphasised that this is a different organisation from the Peripheral Nerve Study Group which has met in alternate years either in Europe or in the United States during the last decade. Indeed it is doubtful from the list of participants whether there has been any overlap in membership between the two groups.

In general this report provides a concise and informative account of current problems concerning peripheral neuropathies. As with any small volume dealing with a large subject, however, there are omissions. In the section on the cellular biology of peripheral nerves, for example, axonal transport and biochemical features are well covered, including a detailed consideration of gangliosides and their possible role in treatment, whereas pathological and physiological aspects fare less well. Little attention is paid to the work of Aguayo's group on neuronal/Schwann cell relationships, and recent work on the distribution of sodium and potassium channels and on the problem of saltatory and continuous conduction in demyelinated nerves is omitted. In the clinical section there is a classification of peripheral neuropathies which attempts to incorporate pathological distinctions as well as aetiological ones. This leads to some difficulties; for example, "peroneal muscular atrophy" is included among the axonopathies and "Charcot-Marie-Tooth syndrome" among the myelinopathies. There is no discussion of the classification recommended in 1968 by the Neuromuscular Study Group of the World Federation of Neurology, or of the modifi-

cations subsequently proposed by Gardner-Medwin and Walton in 1974.

The clinical section contains a useful review of the annual incidence of various neuropathies in different countries. In general, however, this section lacks balance and certain subjects receive disproportionate emphasis at the expense of others. For example, several pages are devoted to rare inherited conditions such as abetalipoproteinaemia, Fabry's syndrome and Refsum's disease, whereas clinical aspects of common neuropathies (Guillain-Barré syndrome, leprosy) receive cursory treatment. (There is, for example, no mention of thickened nerves in the clinical account of neural leprosy.) The few pages devoted to mechanical and traumatic nerve lesions do not do justice to the subject; if more detailed treatment was not possible, it might have been wiser to have omitted this section.

RW GILLIATT

Neuropsychiatric Features of Medical Disorders. By James W Jefferson and John R Marshall. (Pp 383; £24.50.) London: Plenum Medical Book Company, 1981.

Liaison psychiatry was the vogue speciality of the sixties and seventies, displacing psychosomatic medicine, a discredited hybrid with a penchant for facile theorising that betrayed all too clearly its origins in psychoanalytical dogma. The earliest tests displayed all of the wide eyed enthusiasm of the freshly converted. The contribution that psychiatrists might make to medicine was explored with an almost Messianic zeal. Recent publications strike a more cautionary note. There is an awareness that a conventional psychiatric training (and this is particularly true of the United States) may leave the specialist ill-equipped to deal with the technicalities of general medicine. This concern is evident throughout this book. The authors, who are both psychiatrists with extensive general hospital experience, state their aims clearly in the preface: to acquaint their readers more fully with the neuropsychiatric aspects of physical illness and medical drugs. It is important to be clear what the book is not about. It does not concern itself with neuropsychiatric symptoms that are manifestations of primary brain disease or dysfunction; nor with the neurological side effects of psychotropic drugs. Stress-related somatic syndromes of a functional nature such as spastic colon receive no

more attention than is necessary to gauge the importance of their contribution to the differential diagnosis of authentic organic disorders. Such self-imposed restrictions seem entirely reasonable: these areas have already been covered by standard and highly acclaimed text books. How well does the book succeed? One major difficulty is that it is not easy to describe the neuropsychiatric symptoms of a disorder without first summarising the condition itself. As a consequence it reads rather like a potted version of an undergraduate medical text book. Another problem is the ubiquitous but somewhat unvarying nature of psychiatric symptoms as they accompany physical disease. Anxiety, irritability and fatigue make their appearance page after page and have relatively little specific diagnostic value. This cannot be helped but hardly makes for easy reading. The allocation of space is at times rather arbitrary. If there is any overriding principle it often seems that the more obscure the subject the more attention it gets. Thus disorders associated with disturbed magnesium metabolism get five pages, organophosphate poisoning four. In contrast alcohol related problems are accounted for in four pages and thiamine deficiency in three. Coverage is often variable. Male erectile impotence is dealt with in detail, ejaculatory impotence barely mentioned and female sexual dysfunction ignored completely. Many somatic syndromes of probable psychogenic origin, for example, low back pain chronic prostatism, receive no mention.

These criticisms notwithstanding it remains a useful reference book and any well endowed Department of Psychiatry with a foothold in a general hospital would do well to have it on its library shelves. Sections on endocrine disorder, fluid-electrolyte disturbance, vitamin disorders and toxins are particularly thorough. At £24.50p it cannot, however, be regarded as value for money for the individual buyer.

BRIAN TOONE

Depression. The Facts. By George Winokur. (Pp 166; £5.95.) Oxford: Oxford University Press, 1981.

This book is mainly written for sufferers from depression and for their relatives but is also addressed to nurses, social workers, ministers of religion, and other professional workers who are likely to meet people suffering from depression.

To deal satisfactorily with a topic for such a wide and diverse readership is a difficult task for anyone to undertake.

The book deals with many aspects of depression but stresses the biological factors and approaches to treatment, dealing with some of them at length and in detail. For the lay reader the rather hasty dismissal of unhappiness as a matter unrelated to the real subject matter of the book, "depression . . . a clinical state often requiring intervention", will be surprising and not entirely comprehensible. The lay reader's problem in comprehension will be compounded by the detailed chapter on classification of the major disorders. The treatment of some topics is in such detail it will be of value to postgraduate students of psychiatry but other important and relevant topics are dealt with scantily and others omitted. Here lie the main weaknesses of the book; it is too idiosyncratic in its opinions to be so dogmatic; the level at which topics are considered is very variable; and little advice is given on the management of the more common types of unhappiness including bereavement. Style in writing is a matter of preference; but for me the author's rather confident, racy style is unsuitable for the material he presents.

This book is disappointing, and has suffered in being prepared for too wide a readership; it is not successful in satisfactorily meeting the needs of any particular group. I hope the author will try again as his experience and distinguished research in the field make him eminently suitable to be the author of an authoritative book on depressive disorders for a lay readership.

RHS MINDHAM

Peptides of the pars intermedia. Ciba Foundation Symposium 81. (Pp 300; £19.50.) London: Pitman Medical, 1981.

This is the published account of a Ciba Symposium on the intermediate lobe of pituitary held in June 1980 under the chairmanship of Michael Besser. It is an outstandingly good review of the structure, chemistry and physiologic functions of this mysterious part of the endocrine system. Changes in colour have always been of major interest in biology. The role of the pituitary gland in endocrinology was first indicated not by a study of growth but by the independent observation of Smith and Allen in 1916 that