

a critical evaluation of the question connected with localisation of functions. In this respect two points are worth mentioning. First, that the precision in defining the nature of the cognitive deficits is as important as the precision in the methods required to localise a lesion; without this parallel development conclusions regarding the relationship between function and structure are likely to be limited. The second point is that the whole subject of a discrete localisation of function in the brain should be viewed with caution as it is more likely that complex behaviours are reliant upon the integration of information from different areas within the brain.

MARIA A WYKE

**Slow Virus Infections.** By VD Timakov, VA Zuev. (Pp 245; £10.00.) MIR Publishers—Distrib New York: Praeger, 1983.

This book covers the interesting and rapidly growing field of persistent infection largely from the point of view of human disease. Unfortunately the work is out of date as there are no references later than 1975. When first published in Russian in 1977 it would have provided a most interesting account of these diseases, but it cannot now be accepted as authoritative.

WB MATHEWS

**Neurotransmitters and Drugs, Second Ed.** By Zygmunt L Kruk, Christopher J Pycock. (Pp 204; £6.95.) Beckenham: Croom Helm Ltd, 1983.

"*Neurotransmitters and Drugs*" provides a concise and readable account of the ways in which drugs can interact with neurotransmitter processes. The opening chapter summarises the basic concepts underlying neurotransmission whilst each of the following chapters deals with a specific neurotransmitter or related group of neurotransmitters. In a stepwise fashion each chapter outlines the synthesis, storage, release and inactivation of each neurotransmitter, before describing how drugs used clinically may interact with these components to produce their therapeutic effects (a format which makes the book especially useful for rapid revision purposes). These interactions are also summarised in tabular form at the end of the chapter. In addition to therapeutic effects, mention is also made of how these

drugs may interact with neurotransmitters to produce their unwanted side effects. Although mainly dealing with the classical neurotransmitters, there are also chapters devoted to some of the more obscure neurotransmitters, including the peptides and histamine.

Overall the book provides a sound introduction to the subject of neuropharmacology for students of medicine and pharmacy, both due to its content and format. It may also provide a useful source of revision for more advanced students of neuroscience.

EAMONN KELLY

**Functional Radionuclide Imaging of the Brain (Serono Symposia Publications from Raven Press, Vol 5).** Edited by Philippe L Magistretti. (Pp 384; \$73.50.) New York: Raven Press, 1983.

The last two decades has seen enormous developments in the methods of imaging the brain and measuring its blood flow and metabolism. Each method has its advantages and disadvantages. Perusal of the literature does not always make this apparent as each technique has its enthusiastic advocates, a state of mind which is not always compatible with critical evaluation.

The present volume has the merit that the whole range of imaging techniques— isotope scintigraphy, CT X-ray scanning, single photon emission tomography, PET scanning and xenon clearance techniques are all reviewed by experts. There is a useful opening chapter on the blood brain barrier which is very relevant to many of these techniques. In addition their application to vascular disease, tumours and aging is considered in various ways. The book will be useful to people engaged in one or other aspect of this field who wish to obtain an overall view. The speed of progress is, however, underlined by the fact that extensive though the coverage of the book is, it has not reached nuclear magnetic resonance.

JOHN MARSHALL

**Atlas of the Human Brain and Spinal Cord.** By Dyal NP Singh, FB Cookson. (Pp 88; £8.95.) Beckenham: Croom Helm Ltd, 1983.

This atlas cannot be recommended to medical and dental students, for whom it is

intended. It aims to supplement available works by its specialised dissections and stained preparations. Unfortunately, the quality of photographic plates is erratic. Many do not reveal the three dimensional subtleties of the dissections; too frequently important areas are indicated only by a black arrow ending in a dark cavern of shadow. There is confusion over the plane of section in several of the illustrations. There is no system in the staining of slices at any one level. Magnified sections through the diencephalon, brain stem and spinal cord are helpful; but again, some of the reproductions are so dark as to be useless. There is a laudable attempt to introduce the student to computerised tomographic brain scans but these are of such lamentable quality as to be meaningless. Without extensive revision, this atlas will not deserve to stand alongside the established favourites.

P NIGEL LEIGH

**Neurobiology of Cerebrospinal Fluid 2.** Edited by James H Wood. (Pp 961; \$89.50.) New York: Plenum Publishing, 1983.

Gone are the days when one simply measured the CSF total protein and sugar levels. Wood's second volume now gives a total of 108 chapters by individual area experts on the diverse contents of spinal fluid. The balance is still weighted in favour of lower molecular weight compounds (16 of 58 chapters) such as neural transmitters, peptides, amines and the like and rather less on proteins (8 of 58). This also partially redresses the further imbalance of Volume I. The interests are a partial reflection of the editor's, namely surgical, since 43 of the 136 authors hail from such departments. Nevertheless the contents are in the main quite up to date and extensively referenced as one would expect from such a tome. There is the inevitable amount of overlap but not to an excessive degree. It would be nice to know that CSF lactate has considerably improved upon the measurement of glucose but perhaps that will be for Volume 3?

On balance the book fills a real need for the encyclopaedic (although still slightly patchy) approach to a Cinderella fluid. No one who takes an enlightened interest in his CSF results should be without it.

EJ THOMPSON