Book Reviews

Brain and Reading. Volume 54, edited by Curt von Euler, Ingvar Lundberg and Gunnar Lennerstrand. Pp. xviii + 390. Macmillan Press, Basingstoke, Hampshire, 1989. £50.00.

This book edited by three distinguished workers from Sweden reports the proceedings of what is claimed to be a cross disciplinary conference reflecting major advances in the field of developmental dyslexia. The runners in this field come from widely spaced starting blocks in neurology, neuropsychology and psycholinguistics. Twenty-nine chapters are contained under the headings of Introduction, Hemispheric Specializations and Interactions, Phonetics and Phonology, Memory Functions and Language, and Visual Analysis and Saccadic Strategies in Reading.

What used to be considered, in simplistic terms, a discrete area of developmental arrest in the language centres of the brain leading to learning difficulties, particularly prominent in children of middle-class origins, has matured into a much more sophisticated and refined analysis.

We learn that early development anomalies of the left hemisphere affect linguistic processing and phonetic discrimination. Left hemisphere function suppresses right hemisphere involvement, though a surprising degree of language function is now thought to depend on the integrity of the right hemisphere. Language difficulties may reflect defects in the connections between the two hemispheres. The old fashioned notion that dyslexia was a discrete deficit is now challenged by findings of subtle associated defects in attention, perception and motor functions. Memory disturbances are significantly impaired so that many dyslexics have a reduced ability to get conscious access to the phonemic level. Defects in comprehension of language add to the child's difficulties. It is of interest that although abnormal eye movements are not responsible for reading difficulties, in dyslexic subjects the control of eye movements and of saccadic strategies may interfere with the processing of information which leads to impaired reading.

Overall this book contains a remarkable amount of up to date information which will be of value to those concerned with dyslexic children and to those involved in research. Unfortunately the production is appalling, the publishers having accepted a variety of typescripts, some with justified some with unjustified right margins, which produced an untidy and uneven appearance which may deter many would-be readers. Many of the papers are simply scripts of work published elsewhere by the authors. There is inevitably much repetition which has evaded the editorial red pencil. What could have been an invaluable collection of essays or reviews is presented as an ill-digested morass of information. The current fashion for exigency amongst medical publishers seems to precipitate reputable editors along with its tide of indelible print. Sadly most workers in this field will not want to purchase this type of presentation, and the present

restraints on libraries will not encourage them to select this ephemeral work for its shelves.

J.M.S. Pearce

*Department of Neurology,
Hull Royal Infirmary,
Hull,
N. Humberside HU3 2SZ.*

Communicable and Tropical Diseases, G.C. Cook. Pp. 330. Heinemann Medical Books, London, 1988.

This book is a volume in the 'Mainstream Medicine' series, which is designed both to help the postgraduate examination candidate and to provide information that will be of benefit in the clinical situation. This particular volume is wide ranging in its contents; the author (from the London School of Hygiene and Tropical Medicine) has not only provided concise descriptions of numerous infections, ranging from the commonplace to the distinctly exotic, but has also included topics such as the control of hospital-acquired infections, antimicrobial therapy and vaccinations for travel. I think he has tried to squeeze in too much and the result is patchy and rather lacklustre.

As might be expected, given the author's background, the accounts of tropical diseases are the most detailed. At times the detail verges on the excessive: it seems bizarre to mention metagonimiasis and gastrodisciasis in a book of this length – especially when there is barely any clinical detail about such common infections as rotavirus or Norwalk agent infections and nothing at all about the congenital rubella syndrome. Indeed, there are whole sections that are very sketchy and would provide very little authoritative information for those in either the examination hall or the clinic. The book does have the virtue of being relatively inexpensive but there are others that I would recommend as offering better value-for-money.

M.J. Wood

*Department of Communicable and
Tropical Diseases,
East Birmingham Hospital,
Birmingham B9 5ST.*

Comparative Nutrition, edited by Sir Kenneth Blaxter and Ian Macdonald. Pp. vii + 264. John Libbey & Co., London, 1988. £24.00 UK; \$47 US; FF285.

Comparative Nutrition is a specialized handbook which records the proceedings of the 9th International Symposium on Nutrition sponsored by the Trustees of the Rank Prize Funds. Comparative studies are the bedrock on which major advances often proceed and are an integral part of research activity in all the medical sciences. Without research on animals one could not

proceed safely to experiments in man. This does not mean that the results found in animals always appertain to man and this is clearly brought out in this book and discussed in the final chapter.

The book comprises a further 16 chapters on diverse aspects of nutrition. There is much emphasis on energy exchange and metabolism with discussion on the variability of energy metabolism in man, amongst different races and in infants. Obesity has a chapter to itself discussing the controversial area of thermogenesis. The value of such reviews rests not only on their presentation but especially on the extensive references provided. It often takes such a symposium for an eminent scientist to present a comprehensive overview which, in itself, is an advance in one's understanding of the subject. For instance, Shetty and Soares review the variability of the resting metabolic rate in man and conclude that the between and within subject coefficient of variability is about 10% and 2% respectively when energy intake and physical activity are controlled. Likewise, Henry and Rees have reviewed the literature concerning the variability of the resting metabolic rate between races and have found that in those living in the tropics, their metabolism is lower than predicted using European standards; why this occurs is discussed but is still unanswered.

Further chapters discuss in depth nitrogen metabolism and protein requirements, lipid metabolism and dietary fibre. There is also an intriguing chapter on the retardation of ageing by diet and a useful review on the aetiology of atherosclerosis. Vitamin specialists should also find the chapters on fat soluble vitamins and the antioxidant functioning of vitamin C of interest. Fraser has provided an extensive and, as usual, precise and authoritative review on bone metabolism while Yagil discusses salt and water metabolism with interesting details; for instance camel's milk contains urea to provide an additional source of nitrogen for a suckling animal. Obviously this book is aimed at the specialist market but if the reader is interested in any of the above topics then selective reading will not disappoint.

Roland Jung
Department of Medicine,
Ninewells Hospital and Medical School,
Dundee DD1 9SY.

Genetics of Neuropsychiatric Diseases Volume 51, edited by Lennart Wetterberg. Pp. xiii + 363. Macmillan Press, Basingstoke, Hampshire, 1989. £50.00.

It is a disconcerting experience to have written a slightly dismissive review in the past, only to find that one turns time and again to consult the very book that one has dismissed.

At first glance this volume has a lot going against it. The title is misleading because only a relatively few neuropsychiatric diseases are covered, there were at least five typographical errors on the first page that the reviewer looked at (like 'falls negative' for false negative), and the print is by desk-top computer and varies from chapter to chapter. Lastly, this reviewer has always had misgivings about the publication of conference proceedings, and this volume is the printed edition of an

International Symposium held in Sweden in 1988.

Having got off to a bad start, I liked it more and more. There are some excellent chapters, including good summaries of the fragile X syndrome, the genetics of Tourette syndrome, acute intermittent porphyria, phenylketonuria, narcolepsy and Wilson's disease, and these are all written by experts in the field, and could serve as a constant source of reference.

In the section on research methods there is a very good section on linkage analysis for those who need to understand it, and many authors in different chapters discuss how to proceed from a linked marker to a cloned gene.

It was interesting to read Riccardi's views on the spectrum of disorders comprising neurofibromatosis, and the confusing situation of affective disorders designated to three separate loci (on chromosome 11, on the X, and chromosome 6) is well discussed by Kidd and Kennedy.

The problem is that this book is on the way to being indispensable to this initially sceptic reviewer!

M. Baraitser
Department of Clinical Genetics,
The Hospital for Sick Children,
Great Ormond Street,
London WC1N 3JH.

Virology, Roger Hull, Fred Brown and Chris Payne. Pp. x + 325. Macmillan Press, Basingstoke, Hampshire, 1989. £39.50.

Virology has grown so large that those working in one field have no time to read the literature of other fields and so know little about them. But sometimes one does need to know, when the unexpected crops up, and then a comprehensive reference, like this Directory and Dictionary is invaluable. Everything is listed in alphabetical order, so that hart's tongue fern virus is followed by HAT medium and Hazara virus (from a Pakistani tick, in case you didn't know). Many key references to all kinds of things, from the PCR reaction to PLRV (potato leafroll virus) are given.

Leafing through its pages I at first thought it had covered every kind of virus except Brain, Italian, and the rest which infect computers. But there are a few gaps: *Molluscum contagiosum* is given, but not viruses of molluscs, and at least one kind of phage which one encounters in human faeces is not illustrated in the diagram of phage morphotypes on p. 165.

The appendices, extending to 72 pages just of lists of viruses, cover the known viruses of insects and their hosts, and all the known bacteriophages. They represent a mammoth task of collecting data, and this reviewer is certainly not competent to find fault with them.

This work can strongly be recommended to every virologist who lifts his eyes above his routine tasks and reads outside his immediate field, and especially to every teacher whose smarter students are always trying to catch out the old man.

T.H. Flewett
Regional Virus Laboratory,
East Birmingham Hospital,
Birmingham B9 5ST.