

Book reviews

Physiological Aspects of Clinical Neurology Edited by F. Clifford Rose. (Pp. 343; illustrated; £16.00.) Blackwell Scientific Publications: Oxford. 1977.

To mark the centenary of the birth of Sir Gordon Holmes a symposium was held at Charing Cross Hospital the theme of which was the title of this book in which the scientific papers which comprised the symposium are collected.

The subject matter has been grouped into two broad sections, the first dealing with different aspects of the physiology of visual perception and the second with the organisation and control of movement. A third section deals with a number of miscellaneous topics.

Each chapter is a short account of a physiological or clinical topic derived from the author's own work, and although some of the topics are closely related each chapter is complete in itself. As might be expected when the list of participants includes some of the most illustrious names in contemporary neurology, many of the chapters are of unusual interest and distinction. This is particularly the case when the author has been able to develop a subject which bears directly on Sir Gordon Holmes own particular contribution. The book has been carefully edited, and a clear style of presentation has been maintained throughout. The production is of high quality with good illustrations. It is a fitting tribute to Sir Gordon Holmes which will appeal to a wide range of interests in clinical neurology, the associated sciences, and ophthalmology.

J. A. R. LENMAN

Neurobiologie de l'Apprentissage Edited by J. Delacour. (Pp. 213; illustrated; frs 120.) Masson: Paris. 1978.

This is the proceedings of a seminar organised by Professor Delacour in the "Ecole des Hautes Etudes en Sciences Sociales." It brings together workers from medicine (physiology, psychology, pharmacology, and mathematics).

Memory and learning are prominent subjects in the contributions, which vary from general discursive reviews to detailed papers on some special aspect. Their value also varies greatly. The general reviews tend to be uncritical and, in some cases, rather out-of-date.

Long-term and short-term memory are given an airing. Encoding is discussed in the now rather limiting terms of chemical processes. The segregated functions suggested over a decade ago for right and left temporal areas in human memory are recapitulated without comment, though some attempt is made to integrate the findings into a credible picture of memory function.

It is difficult not to consider "memory" in the crayfish and in man, and perhaps in man and pure bred mice, as mechanisms different in degree and kind. The apparent identification of these disparate is confusing. In general, learning and memory need more clear and separate definition. The book makes no reference to a number of recent views on memory mechanisms, arising from philosophy and pure psychology. Despite their origin, they can usefully impinge on neurobiology. Nevertheless the book serves a useful purpose in purveying the shared interests in memory and learning problems of a number of separate disciplines. If it reaches the right readership, it may initiate new approaches to old problems. This is badly needed in the field of memory.

C. W. M. WHITTY

Myopathies By Jaap Bethlem. (Pp. 281; illustrated; \$39.25, Dfl.96.) North-Holland: Amsterdam, New York, Oxford. 1977.

Professor Bethlem of Amsterdam has written this short book for clinicians who do not specialise in muscular diseases. Based on a classification prepared by the Research Group on Neuromuscular Diseases for the World Federation of Neurology, the presentation is mainly clinical or based on a selection of recent literature. Some of this is accepted a little uncritically but serves to draw attention to a number of working hypotheses current in this difficult field. A short paragraph on the facioscapulohumeral syndrome is an indication that the Landouzy-Dejerine disease may not be an entity. But this is the quandary of all classification at present. Which is to be the reference criterion—clinical picture, histology, biochemistry, or whatever? Is it acceptable for a single disease to have different

modes of inheritance? Until this is settled it is impossible to decide whether some disorders should be classified as variants or discrete entities. Although written for nonspecialists, this book will be used frequently by those interested in muscle disease as a quick survey of the literature on some unusual types of myopathy because it is surprisingly comprehensive and easy to find the unusual syndrome by reference to its outstanding feature. Despite its clinical orientation, the illustrations are all of histology, but they are well-chosen and beautifully reproduced.

J. A. SIMPSON

Slow Virus Infections of the Central Nervous System Edited by V. Meulen and M. Katz. (Pp. 258; illustrated; \$27.50.) Springer-Verlag: Heidelberg, New York. 1977.

What infection occurs worldwide with a virtual 100% mortality and with no trace of a host response? What is the relevance of slow virus infection to multiple sclerosis? There is no prize for the answers, unless it is the Nobel. This small book presents some of the problems of this type in the field of slow virus infections of the central nervous system, and summarises up-to-date research. The book is based on a workshop held in March 1975 (why did it take nearly three years to bring out—an incubation period which makes even Creutzfeldt-Jakob disease look impetuous?).

The first section deals with unconventional agents and gives the extraordinary story of kuru, Creutzfeldt-Jakob disease, transmissible prion protein, dementias, and animal diseases such as scrapie. The progressive unravelling of this group of diseases is one of the most exciting and important features of modern neurology. As Dr Mims puts it "... coming upon Gajdusek and Gibb's research is like coming upon the periodic table or the double helix after studying some medical text on alchemy." The second section deals with conventional agents and includes a fascinating chapter on progressive multifocal leucoencephalopathy and the possible relationship of PML agents in the aetiology of human cerebral neoplasms, and a concise account of the