

Notices and Books

MUSCULAR DYSTROPHY AND OTHER INHERITED DISEASES OF SKELETAL MUSCLE IN ANIMALS Edited by J.B. Harris. *Annals of the New York Academy of Sciences*, 317, 716p. 1979 U.S. \$80.00.

Following the first description of a dystrophic mouse strain in 1955, a vast scientific literature has accrued on this and other animal models of neuromuscular diseases. It is therefore to the joint credit of John Harris and the New York Academy of Sciences that a symposium was held on this subject in New York in January, 1978. Despite the expansive title, nine-tenths of the proceedings deal with muscular dystrophy and workers in this field will discover a wealth of genetic, pathological, biochemical and electrophysiological information. Significantly, a quarter of the papers in this international symposium are from Canadian laboratories. Throughout the proceedings, the onus is very much on the reader to judge for himself to what extent an animal model of dystrophy, be it murine, avian or hamster, resembles one of the human forms. The paper by Mendell's team, describing experimental studies of plasmalemmal integrity, offer some guidance on this important question. The length and quality of the contributions vary considerably but all have something to say and are worth reading. The most heated discussions appear to have involved the concept of functional denervation (Harris *et al v.* Law) and the interpretation of, and justification for, therapeutic trials in dystrophic laboratory animals. One of the most intriguing papers is the first full account by Cosmos' group on the reversal of dystrophic features in chicken muscles following cross-innervation. These published proceedings are obviously mandatory reading for every serious worker in the field of hereditary neuromuscular diseases and can be recommended accordingly.

A final note. The symposium was held shortly before the death of

Alexander Sandow, who helped to organize the Conference and to whom the proceedings have been dedicated. Participants at the conference were fortunate in having had a last opportunity to see and hear this remarkable and much admired doyen, still brimming with intellectual vigour in his 78th year.

Alan J. McComas MD

PAIN MECHANISMS. A PHYSIOLOGICAL INTERPRETATION OF CAUSALGIA AND ITS RELATED STATES. W.K. Livingston Plenum Press, New York 1976. 253 pages.

Pain Mechanisms reflects one person's search for truth. At this time, when physicians and their associated health workers are being bombarded with tomes, monographs, papers, theses, articles, seminars and conferences on Pain, it is a delight to read — indeed reread — W.K. Livingston's Pain Mechanisms. The woods become clearer in spite of the trees.

First published in 1943 and reprinted in 1976 it is one man's attempt to place in physiological and anatomical perspective the meaning of pain.

Doctor Livingston accomplished the task impressively in 1943. Based on long experience as a physician, neurosurgeon, teacher and researcher, he synthesized that wealth of observation and knowledge into a holistic concept of the individual. He envisaged a patient wherein life's multiperceptions, memories, hopes, fears, strengths and frailties impinge — from higher or lower centres — upon the internuncial pool to effect the phenomenon of pain. Although his thrust is to the question of how causalgia may come to be, his processes of thought and search for explanation emerge as fundamental to the wider understanding of the appearance of pain. Inhibition, facilitation, irradiation, spatial summation, autonomic influence, are replaced by

today's euphemisms — modulation, integration and biological feedback. But the canvas is the same. And in a very perceptive almost prolyptic sense, he pondered the influence of histochemicals. Enter the endorphins.

Ahead of its time, the book is easy to read because it is unpretentious. It proceeds from anatomical through physiological and psychological interpretations to clinical experience, inference and treatment. Tribute is paid to the giants who preceded him and were his contemporaries in philosophy, neurology, and physiology.

But the merits of the writing belong to Livingston. In a thoughtful, reasoned and honest manner, he has put the story of pain plainly, as an unfinished sketch on a canvas. His students and others are contributing to some of the highlights and shadows, but the structure, form and perspective are all there, unchanged this last thirty-five years.

This book should be read and be in the library of every serious student of pain and physician who would wish to help his patient "in pain".

W.O. Geisler

BOOKS RECEIVED

Advances in Anatomy — Vol. 55, Fasc. 3. Embryology and Cell Biology: Cell Types and Connectivity Patterns in Mosaic Retinas by H.J. Wagner — Springer-Verlag, Berlin, Heidelberg, New York 1978, 81 pages. \$23.10.

Plasmapheresis and the Immunobiology of Myasthenia Gravis by Peter C. Dau MD — Houghton Mifflin Professional Publishers, Boston, Mass. 1979, 400 pages. \$44.00.