Book reviews

ESSAYS ON THE NERVOUS SYSTEM A Festschrift for Professor J. Z. Young Edited by R. Bellairs and E. G. Gray. (Pp. 511; illustrated; £11.50.) Clarendon Press: Oxford. 1974.

It is impossible, in a short review, to do justice to a collection of essays by 20 authors, in which the common factor is homage to a great teacher and researcher on his 67th birthday. Professor J. Z. Young, F.R.S. has been head of the Anatomy Department at University College London for 29 years during which he has inspired and collaborated with many of the most honoured names in modern neurobiology. His fascinating study of the octopus nervous system is known to all, but perhaps the practising neurologist is most familiar with his wartime contributions on the regeneration of mammalian nerves. It is, then, not surprising that the chapters on nerve injuries, nerve growth, synaptic morphology, and skeletal muscle are of most immediate value to the clinician. Every chapter is an excellent survey of an aspect of the nervous system in which the author has specialized. Naturally, anatomical studies are prominent, but by no means dominant. Indeed, if the appointment of an experimental zoologist to a chair of anatomy ever required justification, here it is. Each of the distinguished group of contributors moves freely from structure to function. This is a book for the clinical neurologist to browse in, and a good collection of reviews for the experimentalist in many fields. Our best wishes to J.Z. in his retirement.

J. A. SIMPSON

REFLEX ACTIVITY OF THE SPINAL CORD By R. S. Creed, D. Denny-Brown, J. C. Eccles, E. G. T. Liddell, and C. S. Sherrington. (Pp. 216; illustrated; £4.00.) Oxford University Press: London. 1972.

How many monographs on current research will command a reprint in 40 years? Here is one which is still so important that the reviewer's excuse for a belated report is that he was compelled to re-read it from cover to cover, for this book and its predecessor, Sherrington's *Integrative Action of the Nervous System*, are the seminal studies in our understanding of the coordinated function of the nervous system. Annotated by D. P. C. Lloyd, it is shown to be extremely relevant to modern studies on the spinal cord (though Dr Lloyd has reservations on interpretations based on post-synaptic potentials). The phenomenal growth of neurophysiology based on the

microelectrode and d.c. amplifier has clarified the functions of nerve cells and synapses at the unitary level but how little have we advanced since this book was published in our understanding of the functioning of groups of neurones, let alone the intact nervous system? How little has the practice of clinical neurology been influenced by microelectrode studies when compared with those of the Sherrington school? To pose these questions is to understand why there is a continuing demand for this classical work. We are indebted to Professors D. P. C. Lloyd and A. K. McIntyre for the beautiful reprint and its addenda.

J. A. SIMPSON

MUSCLE BIOPSY: A MODERN APPROACH By Victor Dubowitz and Michael H. Brooke. (Pp. 486; illustrated; £7.50.) Saunders: London. 1973.

Volume 2 in the series *Major Problems in Neurology* is highly recommended. Written by two outstanding British and American contributors to the recent advance in knowledge of muscle histochemistry, the book is a valuable summary of the state of the art in 1973 and must be the standard reference work on the subject. Even a cursory reading makes it obvious that something must be done with respect to classification of muscle and other diseases. Clinical entities are shown to subsume many apparently different pathological and electrophysiological disorders and it is natural that the pathologist should claim to be the final arbiter in classification. But it is clear that no histological picture is unique to any particular clinical syndrome; the clinician may beg to doubt the validity of other bases for classification. Before the rise of histochemistry we were taught that biopsy of muscle was of little value because the muscle had a limited repertoire of response. The repertoire has expanded beyond the ken of all but the dedicated but there are still few diseases in which the pathologist working 'blind' can predict the clinical syndrome or, in many instances, be certain whether he is dealing with a myopathy or with a primary disorder of lower motor neurones. In this situation it is tempting to adopt a unitary hypothesis—that all muscular diseases are due to sick neurones. 'All cats have four legs so everything with four legs is a cat' is still a false syllogism even if the 'legs' are highly coloured histological pictures or electrical phenomena. One misses colour in the numerous illustrations but the black and white reproductions