Book reviews

NEUROANATOMY vol. 1 By R. L. Sidman and M. Sidman. (Pp. x + 645; illustrated.) London: J. & A. Churchill Ltd. 1965.

The approach employed in this volume on neuroanatomy is both unusual and refreshing. In the age of teaching machines a book which employs a similar technique is of especial interest.

There is no text in the conventional sense. The book is made up of an immense series of diagrams and skilful, and at times, very enlightening, drawings. These drawings are presented in a paired series, one on each of succeeding pages; in the first of the pair a simple question is asked of the reader and the answer is supplied on the next page. In some series the rate of progress may seem excessively slow, but the authors have worked for four years to produce a series of questions which untutored medical students could answer correctly if they worked steadily through the book.

The authors do not intend that this book should supplant other methods of teaching neuroanatomy, but they hope that the student who uses this volume will learn more from his lectures, laboratory classes, and conventional neuroanatomy texts than will his colleagues who have not previously facilitated their learning mechanisms.

This volume deserves a trial in one or more medical schools where it might be distributed at random to half the class and the examination results of the two halves of the class subsequently compared. Meanwhile, more imaginative students will do well to buy or beg a copy.

The authors' venture into new methods of teaching deserves encouragement. If the method succeeds its application to other spheres of medical education will be eagerly awaited.

STUDIES ON THE PIRIFORM LOBE By F. Valverde. (Pp. vii + 131; 59 figures. 60s.) London: Oxford University Press. 1965.

This is a remarkable monograph, coming from one of Ramon y Cajal's last pupils. Until 1960 Dr. Valverde worked in the Institute Cajal at Madrid. He is now at Harvard. The book is a detailed treatment, in the best Cajal tradition, of the connexions of the piriform cortex. Only parts of it have appeared in abstract form previously and the book will be a 'must' for those concerned with this part of the brain.

The author is concerned less with primary olfactory connexions and more specifically with secondary and tertiary inter-connexions, emphasizing the role of the amygdalag complex in the scheme. His methods, especially the Golgi technique, are well delineated. The Golgi procedure he describes employs certain modifications of that used by Cajal and de Castro, and seems to have some advantages over the older methods, especially in showing terminal axonal arborizations. The illustrations are good but one would like to have seen more convinc-

ing actual photomicrographs of the preparations. In addition to preparations with classical methods, the author has made many studies with the Nauta technique. The photomicrographs of the Nauta preparations showing both fibre and terminal degeneration leave something to be desired, especially the picture showing 'preterminal' or 'terminal' degeneration (Fig. 18B).

The general discussion at the end of the monograph is well written and brings together an extensive literature on the subject. Some of his results do not agree with those of other workers (for example, Powell and Cowan on rats). The differences may be important in the overall interpretation of the inter-connexions of this part of the brain. The monograph certainly represents a turning point in the study of the subject.

J. Z. YOUNG

FUNCTIONS OF THE CORPUS CALLOSUM. Ciba Foundation Study Group No. 20. Edited by E. G. Ettlinger. (Pp. xii + 156; 28 figures. 20s.) London: J. & A. Churchill. 1965.

This small volume reports the proceedings of a meeting held in September 1964, and gives a useful account of a topic which in recent years has aroused great interest and activity among research workers in experimental neurology. Several of the American workers in this field attended the conference and thus provided an up-to-date account of what is now known about the transfer of learning patterns from one side of the brain to the other.

W. RITCHIE RUSSELL

BRAIN RESEARCH Vol. I. (Pp. 116; illustrated. £5 12s. 6d. p.a.) Amsterdam: Elsevier Publishing Co. 1966.

This new journal is devoted to fundamental research in the brain sciences. It is edited by Professor Akert of Zurich and Dr. Schade of Amsterdam. The first two numbers show a wide range of papers, some using classical histological methods, for example, a fascinating study of the thalamic reticular system by the Scheibels. Other papers use physiological techniques for the study of spreading depression, and still others are biochemically based. There is a review article in the second number on 'The synapse as a biochemical self-organizing micro-cybernetic unit'. There are also short communications, announcements, and book reviews.

The journal therefore promises to help a wide range of those interested in the fundamental problems of neurology. It remains to be seen whether it will be successful in keeping together so many lines of interest.

J. Z. YOUNG

BASIC NEUROLOGY By J. P. Schade and Donald H. Ford. (Pp. 373; 150 figures. 60s.) Barking: Elsevier Publishing Co. 1965.

As medicine becomes more of a science and less of an art, the need for the student to relate his basic scientific

training to clinical practice becomes ever greater. The divorce between preclinical and clinical studies mitigates against this as do the water-tight compartments in which the pre-clinical subjects are contained. In an effort to break down some of these barriers the authors have presented the essentials of neuroanatomy, neurophysiology, neurochemistry, and neuropsychology within one cover. They have not gone the whole way and treated each part of the nervous system under these four aspects; rather they have presented these subjects in four separate sections. But at least this is a start towards a more unitive approach and the task has been well done. It is perhaps a disadvantage for the English reader to be given the Latin nomenclature for anatomical terms. The illustrations, on the other hand, are very well done. The book is certainly to be recommended

CEREBRAL EDEMA By L. Bakay and J. C. Lee. (Pp. viii + 192; 58 figures. \$9.75.) Springfield, Illinois: Charles C. Thomas. 1965.

Oedema of the brain is a complication of so many conditions—trauma, infection, neoplasms, infarction, metabolic disturbances—that one cannot be engaged for long in the practice of neurology without encountering the problems posed by its management. This volume tells us what has been learnt from the study of experimental oedema in animals, passes on to the pathophysiology of cerebral oedema in man, and after a satisfactory description of the clinical diagnosis ends with details of a variety of methods of treatment with critical assessment of the value of each. The illustrations, especially those from the electron microscope, are excellent and the bibliography exhaustive. In all this is a valuable and well-produced book upon an important and topical subject.

THE NEUROENDOCRINE CONTROL OF ADAPTION By K. Lissak and E. Endrocz. (Pp. xii + 180; 30 illustrations. 70s.) Oxford: Pergamon Press. 1965.

This volume is a translation from the German of a work originally published from Budapest in 1960. Particular attention is paid to the inter-relationships of the hypothalamic-pituitary-adrenal complex, and factors involved in the release of A.C.T.H. and the various adrenal hormones.

The general structure of each chapter is that a review of the literature is followed by an account of the authors' experiments in that field. This plan leads to a lack of balance, since the authors' work is naturally treated in disproportionate detail, yet in insufficient detail to allow the reader to assess the value of their evidence, for important information (for instance, the number of animals in each experimental group) is often lacking. The result is a rather unsatisfactory compromise between a review of the subject and a report of original work. The volume is best read as an outline of the authors' researches in the framework of the situation six years ago, rather than as a balanced review of the current status of this important aspect of the regulatory function of the neuro-endocrine system.

R. T. C. PRATT

NEUROCUTANEOUS DISEASES By John A. Aita. (Pp. ix + 85. \$4.75.) Springfield, Illinois: Charles C. Thomas. 1965.

There are a number of diseases which affect the skin and nervous system, many of them being of hereditary type. The author has listed 42 of these in this small volume, giving the sex incidence, genetic features, age of onset, pathological characteristics, and brief synopses of their dermatological and neurological manifestations. It is an excellent, practical work of ready reference that will be of great value to the practising physician, who often needs to check some point concerning one of these conditions quickly and easily.

MYOPATHIEN. GENETIK, BIOCHEMIE, PATHOLOGIE, KLINIK UND THERAPIE UNTER BESONDERER BERÜCKSICHTIGUNG DES KINDESALTERS Edited by R. Beckmann. (Pp. 268; 151 figures; 41 tables. DM. 58.) Stuttgart: Georg Thieme Verlag. 1965.

This volume contains the proceedings of a symposium held on 21 and 22 September 1964 in Freiburg under the chairmanship of Professor Karl Thomas of Gottingen. Though language difficulties have meant that this reviewer has not been able to read the papers which it includes in the degree of detail which he would have wished, the volume clearly contains much of interest. At a time when so many reports of symposia on muscle diseases are being published from the U.S.A., Canada, and Great Britain, it is a pleasure to read in this work comprehensive accounts of work being done in the clinical, genetic, biochemical, and histological fields on the continent of Europe. The volume is clearly printed, well illustrated and pleasantly produced, and all who are interested in disorders of muscle and who can read German will profit from reading and possessing it. Not only does it deal with muscular dystrophy of the myotonic and non-myotonic varieties, but there are also papers on endocrine and metabolic myopathies, experimental myopathy, and myasthenia gravis. The least satisfactory chapters come towards the end of the volume and deal with a series of uncontrolled trials of treatment of muscular dystrophy with various anabolic steroids and nucleotides and nucleosides. As was amply documented in the discussion which followed some of these papers, uncontrolled trials of this type can never hope to solve the problem of muscular dystrophy and do a disservice to medicine. This volume is not and does not claim to be a comprehensive account of muscle disease, but it contains a good deal of valuable information.

SPINAL INJURIES edited by Philip Harris. (Pp. 168; 106 figures. 32s. 6d.) The Royal College of Surgeons of Edinburgh.

It is necessary to observe, because the volume itself shows no publication date, that more than two years elapsed between the holding of this Edinburgh symposium in June 1963 and the publication of its proceedings. But in the event not much has been lost through this delay: the old arguments and disagreements, about whether to operate and how to treat the bladder, are there, and the