

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. Schadé 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