is being steadily carried out. Human studies on the thalamus and cortex are already well advanced and the ingenious gate-theory for pain has stimulated valuable therapeutic studies. This volume, one of a major new series, is a valuable record of present ideas. As the editor rightly observes, in an active research field it is both necessary and usual to find conflicts of ideas between different expert contributors. Doubtless many of the ideas in this book will be superseded but it is a good summary of current views on the somatosensory system.

J. A. SIMPSON

CURRENT TOPICS IN NEUROPATHOLOGY Edited by K. Jellinger. (Pp. 241; illustrated; price not stated.) Facultas: Vienna. 1973.

This paper-bound volume of 241 pages contains 37 of the papers presented at the 4th Danube Symposium on Neuropathology which was held in May 1973. Papers were presented by East and West German, Polish, Rumanian, Swiss, Hungarian, American, and Austrian neuropathologists. Three of the main themes of the symposium—developmental abnormalities, inflammatory and viral diseases, and cerebral tumours and their experimental induction—have been published. There is much of interest in all of the papers but many of them have appeared as formal publications in the European literature. Only two of the papers in this volume are in English. The majority of the others have English summaries which are either too short to convey more than the simplest outlines to the non-German or have completely lost their meaning in inaccurate translation. As an example, the English summary of Dr Dudka's paper on 'Primary, circumscribed melanomas of the nervous system' seems to be far from what he meant in respect of the established existence of melanin containing cells in some meningiomas and Schwannomas.

Most of the illustrations of macroscopical preparations, light and electron microscopy have printed well and adequately supplement the texts of some detailed papers on human malformations, such as corpus callosum agenesis, and holoprosencephaly.

This is the kind of volume that those neuropathologists who attended the conference would probably like to have, but for others it would probably be worthwhile browsing in a library copy.

D. DOYLE

AROMATIC AMINO ACIDS IN THE BRAIN Produced by the CIBA Foundation. (Pp. 408; \$18.60.) Elsevier/Excerpta Medica/North-Holland: Amsterdam. 1974.

The aromatic amino acids are of special significance

to brain function. Thus tryptophan is, for example, important in control of protein synthesis and in relation to formation of the biogenic amine serotonin. Changes in concentration of the aromatic amino acid or its derivatives occur in sleep and stress. It appears that the level of brain tryptophan is a key factor in affective disorders and possibly in schizophrenia, while serotonin is implicated in the biochemistry of headache. Well-recognized are the neurological effects of inborn errors of tryptophan, phenylalanine, and tyrosine metabolism. There was, therefore, good reason for the holding and publication of a CIBA Foundation symposium in May 1973, at which the basic biochemistry of brain aromatic amino acids was examined in depth. Each of the 20 articles by acknowledged experts begins with an abstract and the text of about 10 pages is usually followed by an edited discussion. The result is an excellent book in which the high scientific standard is matched by a clear attractive format. The book begins with a review of factors controlling plasma amino acid (especially tryptophan) concentration. This is followed by an account of amino acid transport in the brain. Their metabolism to a range of biogenic amines, as well as nutritional factors regulating levels of the amino acids and their derivatives, are reviewed.

Attention is particularly focused on the role of tryptophan and 5-hydroxytryptamine. The final part of the book deals with the topical question of tryptophan concentration and control of brain protein synthesis. Amino acid imbalance may competitively reduce availability of amino acids for synthesis or, as has been suggested, cause polysomal disaggregation. Recent information is given on these points and the use of analogues of phenylalanine and tryptophan is examined.

A. N. DAVISON

CEREBELLAR CORTEX, CYTOLOGY AND ORGANIZATION

By S. L. Palay and V. C. Palay. (Pp. 348; illustrated; \$64.) Springer: Berlin. 1974.

This book has been produced over many years with loving care not only by the authors but by the publishers, with thoroughness, attention to detail, and calm assessment of knowledge obtained to date. It is not hard to predict that it will become a classic, a joy to possess for those who like medical books and essential consultation for all those working on the anatomy and physiology of the cerebellar cortex.

All the cellular constituents are taken in turn, Purkinje cells, mossy fibres, basket and stellate cells, and many more, dealt with vividly by 'a little history' and then our knowledge brought up-to-date by electron micrographs of impeccable quality, or freeze-etch replicas and camera lucida drawings.