subject close to the work of the authors, particularly of Brodal. There are many references, and the index is also helpful. As the introduction indicates the emphasis falls on the topographical localisation within the olivocerebellar projection. Animals figure prominently: this is an experimental field. More contemporary techniques, for example autoradiography, fluorescence and horseradish peroxidase are referred to when appropriate along with older microscopic approaches, including that of Golgi. There is no electron microscopy. Some of the figures are the time-honoured line drawings with dots, triangles, squares and dashes. Towards the end there is a section on "some functional correlations". The correlations do not include the human ones. This is not a book for everyone, but those, clinicians and others, interested in the field will find it very informative.

I JANOTA

Chronic Pain: Psychosocial Factors in Rehabilitation. Edited by R Roy and E Tunks. (Pp 226; £22.25.) London: Williams and Wilkins, 1982.

In the Midlands it is well-known that the scrap merchants are often millionaires. The concept of taking other people's waste material and using it for profit can be extended to medicine, where many have made a successful living assessing and treating the cast-offs of other physicians. Those who deal with chronic pain form part of a group that has attempted in recent years to provide a therapeutic medium for some of those large number of unsatisfied patients who wander from one doctor to another seeking further opinions and receiving further intervention usually to little success. The flourishing activity in this field, including books, journals, and international conferences, testifies the rich pickings that may be found.

One of the most interesting facets of chronic pain has been the growing recognition that, like a number of other chronic conditions, the most effective management is often multidisciplinary, and the presenting problems are best viewed not in the framework of traditional medicine, but more in relation to the context within which the symptom arises. The authors of this book, a social worker and a physician, have brought together a number of writers to discuss the psychosocial factors that have bearing upon rehabilitation of chronic pain patients. While most of the contributors are from Canada, chapters are also contributed from the USA and Europe. The volume makes interesting reading, and attempts to grapple with the complex problem of the management of chronic pain. Those who seek information on

where to stick needles, or how to apply vibrators, or even on the latest information on the workings of the gate theory will be disappointed. Merskey outlines the problems of being dualistic with regard to pain, emphasising his, now accepted, definition that pain is "an unpleasant sensory and emotional experience which is associated with tissue damage or described in terms of tissue damage". Starting with a unitary concept, Violon takes us through the process involved in becoming a chronic pain patient, emphasising the family, social, and psychiatric variables that form part of the progress towards chronic disability. The relationship of chronic pain both to the social concept of the "sick role" and the relationship of chronic pain to occupational status are discussed prior to the series of chapters which outline different forms of therapies. These include behaviour and cognitive therapies, family therapy, conjoint marital therapy, group therapy, and some psychiatric managements including use of antidepressants and other psychotropic drugs.

The essential philosophy of the book is summed up in the final chapter "Future Directions". The editors state their acknowledgement of the growing awareness that "even when the chronic pain is associated with organic damage, psychosocial variables play an important part in maintaining and/or aggravating the problem". Those who have felt that the management of chronic pain is solely a medical problem would do well to note the growing interest by non-physicians in the therapeutic process, and in particular, as is emphasised on many pages in this book, their optimistic approach directed towards patients' needs, which stands in contrast to the pessimistic shake of the head and the demoralising comment that "nothing can be done for you".

MICHAEL TRIMBLE

Doppler Ultrasound in the Diagnosis of Cerebrovascular Disease. Edited by Robert S Reneman and Arnold PG Hoeks. Chichester Research Studies Press, John Wiley & Sons, 1982. (Pp 294; £19.50.)

There exists a gap which could be properly described as a chasm between the science of haemorheology and its clinical application. The reason for this is the complexity of the physical principles which govern the flow of non-Newtonian fluids through tubes. The gap is regrettable because currently there is much evidence that a great deal can be done at the clinical level to understand and influence the flow of blood through arteries hopefully with benefit to patients.

The present volume will do much to bridge the gap because the exposition of the physics is unusually clear and can be followed even by the non-mathematical who skip the formulae but wish to understand the concepts and principles. This in turn provides a basis for understanding the use of Doppler ultrasound to determine flow velocity and to detect impediments to it. Doppler has been around for some time but its use was largely restricted to a few centres who pursued it with devotion. This again is because its successful use demands understanding of the physical principles underlying the signals obtained. This book will promote that understanding.

At the present time Doppler in experienced hands can be relied upon to detect an occlusion of an accessible artery and a stenosis of 50% or more. Objection may be raised that it is often lesser degrees of stenosis which are important as a source of emboli. This is true but it is important to concentrate on what the Doppler will show whilst remaining aware of what it will not show. Moreover the maximum potential of Doppler has not yet been reached and the development of imaging techniques promises more.

This work surveys the scene well. It is clearly well documented and referenced and can be strongly recommended.

JOHN MARSHALL

Textbook of Clinical Neuropharmacology. By Harold L Klawans and William J Weiner in conjunction with Paul A Nausieda and Christopher G Goetz. (Pp 381; \$44.20.) New York: Raven Press, 1981.

Neurological Clinical Pharmacology. By M Eadi and J T Tyrer. (Pp 401; £24.95.) Lancaster: MTP Press Ltd, 1980.

A decade ago there were virtually no textbooks of clinical neuropharmacology; now they come in droves. This is a healthy reflection of the transition of classical descriptive and diagnostic neurology into a therapeutic speciality with effective treatments for many of its major illnesses. Whether there are enough neurologists in the United Kingdom to deliver these treatments is another matter – certainly there are enough good new books to tell them how to do it.

Eadie and Tyrer have produced a scholarly monograph on "Neurological Clinical Pharmacology". The distinctive feature of their approach is a welcome emphasis on the principles of the pharmacodynamics and pharmacokinetics of each of the therapeutic agents described. There is an excellent introductory chapter on general principles of neuropharmacology. The major portion of the text then is laid