chapters is to be found in individual papers in the neurosurgical literature, the way in which they have been brought together in this book is of great value, not only to the student neurosurgeon, but also to those already established in this field.

In addition to the excellent surgical/operative contribution, of particular interest are the historical and comparative anatomy chapters, and the chapters on adjuvant therapy of tumours. It will be a long time before this book becomes dated. The majority of the chapters are excellently referenced and the book is well indexed. It represents excellent value for money and I would anticipate that the problem that most neuroscience libraries would have is actually to keep it in their library.

AJW STEERS

Physiological Psychology: An Introduction. By Simon Green. (Pp 393; £10.95.) London: Routledge & Kegan Paul, 1987.

This is a book from the *Introductions to Modern Psychology* series. As stated by the author, the book was designed as a textbook of "manageable size" for psychology undergraduates. It aims to provide an introduction to the major topics in the field, and to cover some of the advances of the last two decades, while emphasising the psychological approach to the study of the relationship of brain function and behaviour. For this purpose, the book consists of 12 chapters which respectively cover the anatomical and functional organisation of the nervous system (two chapters), brain chemistry, sensory systems, hemispheric differences, memory and learning, habituation, central and peripheral mechanisms of emotion (two chapters), sleep and arousal, motivation, brain chemistry and psychopathology. A noticeable omission is a chapter on the spinal and brain mechanisms involved in the neuronal control of movement. The author notes that detailed presentation of motor processes are excluded as he considers this area to be of less psychological interest. Psychologists working on motor processes would of course disagree, and would argue that the topic is fundamental to the understanding of any form of overt behaviour. Furthermore, as major advances have been made in investigating and understanding the motor system during the last two decades (for example research on dopaminergic pathways in the basal ganglia) such a chapter

would have been in line with one of the stated aims of the book.

Throughout the book, the style of writing is clear and diagrams are simple, two major requirements if newcomers to the field are not to be put off by their first exposure to the complexities of brain function. The chapter on brain chemistry particularly stands out by being concise and informative. Overall, the book does fulfil its aims by presenting the majority of advances made during the last twenty years and by keeping the focus on the psychological approach to brain function. The brief but necessary reminder of ethical guidelines for animal experimentation is a welcome feature. At £10.95, the book might still be within the financial grasp of some undergraduates. Time will show whether Simon Green's (1987) *Physiological Psychology* will come to replace the somewhat larger size Tompson's (1967) *Foundations of Physiological Psychology* which has introduced several generations of psychologists to these complex topics.

MARJAN JAHANSHAHI

Disorders of the Cervical Spine: Diagnosis and Medical Management. By John H Bland. (Pp 377; £40.00.) London: WB Saunders, 1987.

Professor John Bland has had a life long interest in the cervical spine. He is a rheumatologist and immunologist and this volume reflects not only his life long interest but also his medical approach to these disorders. The sub-title in fact describes well the contents of this book. The management is considered from the medical point of view and there is little in this book that the surgeon will find useful. For instance, out of 363 pages of text there is half a page on cervical radiculopathy and just under one page on cervical myelopathy. Professor Bland does not mention the surgical treatment of cervical radiculopathy amongst the seven treatments suggested and under the treatment of cervical myelopathy he considers that surgical therapy is indicated only in unusual circumstances. He feels that extensive laminectomy, foraminotomy and excision of osteophytes are not commonly successful.

Yet, on the other hand, this book is clearly a labour of love and Professor Bland's approach to the cervical spine is refreshing and unusual. I have enjoyed browsing through this book; there is much in it that I agree with but there is also a rather large component that I have to dis-

agree with. I don't think this book would appeal particularly to neurosurgeons or neurologists.

CBT ADAMS

Lumbar Spine Surgery: Techniques and Complications. Edited by Arthur H White, Richard R Rothman and Charles D Rao. (Pp 587; £82.00.) Washington: The Mosby Company. UK Distrib: Blackwell Scientific Publications, 1987.

The aim of this book is to provide a broad perspective on lumbar spine surgery and it achieves this to a considerable degree. This is not a standard textbook and it does not offer any "right" way to practise spinal surgery. Instead, it shows the wide range of currently available techniques, ideas and experience so that each surgeon can choose intelligently those which will be most appropriate to his patients and his practice.

The editors successfully combine the widely diverging views of 41 sometimes highly individual authors. In order to avoid a didactic approach, many of the procedures are described by more than one author. This inevitably leads to some duplication but has the great merit of showing the range of surgical experience. Alternative procedures for the same problem are compared and contrasted. Throughout, there is a commendable attempt to present alternative and sometimes conflicting views. Particularly useful features are brief but critical comments by the senior editor and an illuminating survey of experienced spinal surgeons. Historical, basic science and biomechanical chapters complement the surgical chapters and again help to put surgery into perspective.

Inevitably, such an approach leads to some gaps. The emphasis is orthopaedic rather than neurosurgical and exclusively extradural. Indications, complications and results are well covered in general terms but there are not many hard data, particularly on results. The emphasis is naturally surgical rather than clinical and it is recognised that this may not always be appropriate for low back disorders. There are some views with which each reader will strongly disagree but others which support personal prejudices. With all its strengths and weaknesses this book offers a rich and stimulating perspective on lumbar spine surgery and can be recommended to every aspiring and established spinal surgeon.

GORDON W ADAMS