to appear very many months after the participants have met and are records of work which has already become known by other means. This criticism certainly cannot be levelled against this symposium on regional cerebral blood flow which has appeared with commendable swiftness and records work in progress. Inevitably this means that much is incomplete and conclusions only tentative but this is no blemish; workers in this field are enabled to know what is currently in progress and to assess the potentialities of work with radioactive inert gases and thermal probes.

The clinician will be particularly interested in the demonstration that focal cerebrovascular lesions produce a fall in total cerebral blood flow as well as a local fall at the site of the lesion, which may be demonstrable when other investigations have proved negative. They will also be interested in the demonstration that after carotid ligation in young people for aneurysm there is a marked fall in carotid blood flow even though the vascularity as demonstrated by angiography seems adequate. The operation, though life-saving, cannot be regarded as ideal.

The symposium is therefore greatly to be welcomed and will be of value to research workers and clinicians alike.

INTRACRANIAL ANEURYSMS AND SUBARACHNOID HAE- MORRHAGE By W. S. Fields and A. L. Sahs. (Pp. xv + 518; illustrated.) Springfield: Charles C. Thomas. 1965. This book contains the proceedings of the twelfth annual scientific meeting of the Houston (Texas) Neurological Society on the theme of intracranial aneurysms and subarachnoid haemorrhage. It consists of a series of individual chapters devoted to many different aspects of intracranial vascular disease. It is divided into three main segments devoted to anatomy, angiography, and treatment, the last subject forming more than half the book. This volume is really composed of the present day views of a variety of workers in each field: some chapters deal with large series of cases, others with new forms of treatment the value of which must as yet be unknown. Much more experience of such new techniques, together with a long-term follow-up, are required before a true assessment of the values can be made.

It is well produced with extremely clear print on glossy paper and many excellent illustrations.

MYEOGRAPHY By Vincenzo Valentino. (Pp. x + 273; 221 figures.) Springfield, Illinois: Charles C. Thomas. 1965. This book seems to be designed to assist doctors undergoing a formal course of instruction in neuroradiology, for the author specifically says that he believes that to become proficient in the practice of myelography 'more than a few months' haphazard training' is essential. There will be general agreement with Dr. Valentino about this but a book designed for advanced training in any speciality must achieve a high standard of clarity and accuracy. This is not always the case here. Indeed, the text as a whole is prolix and sometimes obscure. There is a full historical survey of possible methods of myelography with gas or air, and with water-soluble and oil-soluble media but some of the author's comments upon them read more like personal prejudice than scientific appraisal. It is often better to let the facts speak for themselves. It is also irritating to read that 'a special apparatus (for gas myelography) is in use at the Sera- fimerlasaretet in Stockholm' and then to find that this is left undescribed.

The references are numbered and given in full at the end of the book, and reference numbers are scattered through the text. But in addition to these references by number, authors' names (unnumbered and undated) are also freely mentioned and one can only deduce what paper is being referred to by searching for these same names in the general reference list and assuming that the two correspond. Again, although this is not a short book (263 pages) and the importance of making radiological measurements of the transverse and antero-posterior diameters of the spinal canal is referred to (as it should be), very few actual figures are given, and these are not sufficiently precise to be helpful.

Not all of the illustrations are equally convincing, but many of them are beautiful and perhaps for these the book is worth a place in a neurosurgeon's or neuroradiologist's library. But if it is to be recommended to the trainee, it will have to be drastically re-written. The general layout and production are in accord with the high standards which one expects of the publishers.

A. N. GUTHKELCH

LECTURE NOTES ON NEUROLOGY By Ivan T. Draper. (Pp. ix + 230; 29 figures. 18s. 6d.) Oxford: Blackwell Scientific Publications. 1965. This is a simple but well presented account of diagnosis and treatment, which will be useful to the final year medical student. There is little to criticize, but the myth of macular sparing in occipital lobe destruction appears again! The choice of books for further reading is very surprising to the reviewer.

CYBERNETICS OF THE NERVOUS SYSTEM. Progress in Brain Research Vol. 17 Edited by the late Norbert Wiener and J. P. Schadé. (Pp. 424; 143 figures. 120s.) Amster- dam, London and New York: Elsevier. 1965. The publication in 1948 of Norbert Wiener's Cybernetics: or control and communication in the animal and the machine' stirred many hopes, some more rosy than considered, of a new and powerful approach to problems in psychology, neurology, and psychopathology. Certainly it stimulated an entirely fresh orientation, one armed with precise theoretical weapons, whose full effect has yet to emerge. The volume under review was intended as a Festschrift to Professor Wiener on his seventieth birthday. His death last year, between himself choosing the contributors and its publication, converted it into a memorial volume.

It is difficult to feel that these essays do justice to so distinguished and richly seminal a person. In some, the more mathematical, formal precision is achieved but at the expense of retreat, sometimes aided by careless interpretation of empirical literature, from the stubborn...
variety of biological findings. Others hark unduly back to their authors’ previously published views. Many are more technically accomplished than inspiring. Yet the book comprises a great variety of excursions, some specialized some general. Different readers will find interest in different items, and some may even find fresh starting points for exploration. But it is a book to borrow from a library, not one for the individual to buy.

R. C. OLDFIELD


The appearance of this British Medical Bulletin is timely since the field of research with which it is concerned has recently expanded with astounding rapidity. The British Council are to be congratulated on this compilation, edited by Professor P. B. Bradley, of 16 papers dealing with various aspects of the pharmacology of the central nervous system. All the contributors to this publication are experts and active workers in the specialized subject about which they are writing. There is an excellent introduction written by the late Sir John Gaddum.


This book is to some extent a Russian commentary and elaboration on the work of western physiologists, and especially those in the United States, on the diencephalon. The argument and discussion is only occasionally forced into an artificial mould by the demand to pay lip service to Pavlovian physiology. In general Russian workers seem to confirm the results of their western colleagues. However, the original work reported in the book, as opposed to opinions expressed on the work of others, falls between two stools. It is not given with sufficient factual and experimental data for independent critical assessment as would be expected in an original paper: nor is it presented in a clearly argued form with the implications and conclusions drawn as representing the considered thought of a given school. Despite this however it is interesting to know what is going on in this field in Russia.


This book, according to the publishers, is directed to ‘physicians, surgeons, neurologists, psychiatrists, endocrinologists, and laboratory workers in the field of carbohydrate metabolism’. Furthermore, we are told that the ‘bibliography is selected but extends to include all the important literature on this and related topics’. In these two sentences the potential reader is warned of the weaknesses of this book. The authors would have been better advised to cone down their sights on to a more selected group of readers and to have been far more critical in their selection of the literature they quote. There are in fact no fewer than 1,144 references straggling over 75 pages of text. They are not arranged in alphabetical order and are thus put effectively beyond recall. Furthermore, there is nothing more exasperating than reading a long and closely argued paragraph to be told at the end that the design of the experiments was such that the work does not merit further consideration.

These criticisms apart, the book is packed with information even though the wheat and the chaff are somewhat inextricably mixed. Nevertheless the book will surely be of value, particularly to neurologists and to those interested in clinical research in carbohydrate metabolism. The book is well produced and misprints are remarkably few, and the price, considering the excess of references, is by present day standards not outrageous.


The specialized functions of the nervous system, with the consequent heterogeneity of its structure and the variations of its cell types, both neuronal and glial, impose very obvious limits to the application of many of the methods of classical biochemistry, despite the great advances that have taken place and still are taking place as a result of their use in the study of both the normal and the diseased nervous system. By its very nature indeed the nervous system invites the application of the finer methods of modern histochemistry and cytochemistry, and the present volume provides an admirable survey of the progress that is being made in this field. The editor has widely planned this book not as a recipe book of technical methods, but rather to assess the significance and validity of histochemical methods as applied to problems of neurobiology. The book is divided into three parts, the first dealing with techniques, the second with the histochemistry of the normal nervous system, and the third with histochemistry as applied to a wide range of neuropathological problems. As one would hope in a book of this type, the myelin sheath and the many fascinating problems concerned with the processes of Wallerian degeneration and the changes occurring both in experimental allergic encephalomyelitis and in the naturally occurring demyelinating diseases are dealt with broadly and fully. There are also excellent and highly informative chapters on the cerebral storage diseases, cerebrovascular disease, anoxic brain injury, the effects of ischaemia, the retina and its diseases, and the neuromuscular junction and muscle.

The book contains a surprising amount of detailed information over a very wide front. It is well written and well edited, and the plates, figures, and diagrams are plentiful and well reproduced. It is, in short, a highly readable monograph which any investigator of the nervous system, or of its diseases, will find of real value and interest.

R. H. S. THOMPSON