Book reviews

Stimulants: Neurochemical, Behavioural, and Clinical Perspectives. Edited by Ian Creese. (Pp 360; \$56.00.) New York: Raven Press, 1983.

Stimulants of brain function represent a very wide range of drug substances utilised in ways which can be commonplace and to the advantage or disadvantage of the user. It is therefore a formidable task to attempt to summarise aspects of research into stimulants in a single multiauthor volume. Inevitably, some areas are given greater emphasis than others. Certainly the properties of amphetamine are described extensively despite, in all probability, its lessening clinical importance. Evidence that abuse of amphetamines might cause neurotoxicity raises the possibility that long-term effects are associated with functional brain damage. Other groups of stimulants receive less attention. Cocaine is well reviewed by Post and Contel while Snyder and colleagues raise the intriguing spectre of adenosine receptors in brain mediating the actions of caffeine and related compounds. Surprisingly, there is little included on nicotine or smoking which is perhaps an oversight. In addition no data are provided on drugs of interest to clinicians, such as hydergine or acetylcholine precursors, which may affect psychomotor state in the elderly or demented. Drugs potentially altering cerebral blood flow might also have been included. However, the definition of "stimulant" is so broad that the content of the volume will inevitably reflect the interests of the editor. Overall, as a complement to the other books in this series, a worthwhile addition to the library. However, I was not impressed by the balance between topics or the highly specialised content of many chapters which makes indigestible reading in such a general area of interest.

P JENNER

Abnormal and Clinical Psychology—an Introductory Text. By JE Orme. (Pp 270; £17.50 H/back; £8.95 P/back.) Beckenham: Croom Helm Ltd, 1984.

This book is primarily aimed at undergraduate and postgraduate psychology students, including clinical psychology students. Although it purports to address both abnormal and clinical psychology, the coverage is very uneven. About four-fifths

of the book deals with psychological and psychiatric theories, classification and assessment, with only the final fifth devoted specifically to psychological treatment.

There is much that is unsatisfactory. Firstly, there are a number of startling errors. For example, it is held that the statistical model of abnormality "... is now frequently used in defining the intellectually subnormal." (p.2), and incest "... between brother and sister in childhood and adolescence is the most common." (p.35). Secondly, the unevenness of the treatment has led to certain areas being inadequately covered, the clearest instance being that only five pages are specifically about childhood disturbances. Thirdly, the material is presented in a poorly organised and unsystematic fashion—the very first paragraph of the chapter on organic disorders discusses toxic causes. Finally, the approach to the subject matter has an old-fashioned air. For example, mental handicap is discussed in outdated terminology such as subnormality and many of the more recent developments in clinical psychology, such as personal construct theory and cognitive-behavioural treatment, receive only the most cursory of mentions. It is perhaps indicative of this datedness that only 13% of the references cited are less than five years old; in more up-to-date books the proportion is usually 25% or more. In short, because of its many and serious shortcomings, this book cannot be recommended.

T TRAUER

Progress in Experimental Tumour Research Series Vols 27 and 28.

Brain Tumor Biology and Brain Tumor Therapy. Edited by ML Rosenblum and CB Wilson. (Vol 27: Pp 260; Vol 28: Pp 288; \$94 each or \$141 the set.) Basel: S Karger, 1984.

The two volumes on brain tumours in Karger's prestigious series of Progress in Experimental Tumor Research are devoted to biology and therapy. The first volume edited by ML Rosenblum and CB Wilson of the Brain Tumor Research Center, San Francisco, covers miscellaneous subjects of carcinogenesis, pathology and physiology. The molecular aspects of tumour induction and the possible relevance of DNA damage and repair in chemical carcinogenesis are reviewed by Kleihues and Rajewsky; their chapter was written at the time when the first papers on oncogenes were published and conse-

quently, this exciting development in the understanding of the molecular basis of malignancy could not be adequately covered. The multi-stage process of carcinogenesis in the brain is followed by Laerum, Mork and de Ridder from initiation to the appearance of overt malignancy: the correlated *in vivo* and *in vitro* investigations have provided an excellent experimental approach.

With the introduction of electron microscopy, immunohistochemistry, tissue culture and cytogenetics, the phenotypic and genotypic heterogeneity of brain tumours has been increasingly realised. The cellular pleomorphism which may exist even within the same neoplasm can result from diverging processes of differentiation and anaplasia; cellular phenomena discussed by Rubenstein, Herman and Vandenberg, which influence not only evolution, but also the prognosis of brain tumours. The morphological pleomorphism of gliomas has been amply confirmed by *in vitro* experiments on cell clones, chromosomal analyses, DNA measurements, immunohistochemical techniques and by investigations of tumour-associated antigens. These five chapters give a good and concise account of recent developments in the appropriate fields.

In the section of physiology, there are chapters on regional blood flow and blood to tissue transport in experimental models on peritumoural oedema and PET scanning, both in human and experimental tumours. The work of Blasberg's group brings into sharp focus the functional complexity of transport mechanisms which exist between blood and tumour tissue. The morphological and physiological abnormalities of blood vessels in gliomas contribute to the formation of cerebral oedema and the chapter on peritumoural oedema does not do full justice to this serious complication. The newly developed technique of PET scanning has the promise of providing detailed and accurate information on the metabolic activity of brain tumours and its potential usefulness has been assessed both by a British group based at the Hammersmith Hospital (Wise *et al*) and an American team for Bethesda (Kornblith *et al*). The chapter on tumour cell resistance attempts, and more or less succeeds, in elucidating the complex mechanisms which may be responsible for the resistance of gliomas to treatment. The first volume has undoubtedly helped the reader to realise that anyone whose aim is to treat, and eventually to cure, brain tumours, has to face a formidable enemy.