organisation of the GABA receptor complex and provides a unique reference volume on this topic.

From the establishment of GABA as a neurotransmitter substance the volume turns to the characterisation of post-synaptic GABA receptors and the evidence for multiple forms of such sites. There follows a group of chapters which deal with the idea of the existence of a GABA receptor complex. This comprises not only a recognition site for GABA but also a chloride ionophore site at which some convulsant drugs act and a further site at which benzodiazepine drugs may act to modulate GABA receptor function. The characterisation and the interaction between these various sites is explored in detail. Also discussed are the important issues of receptor localisation in brain tissue and receptor purification. The development of antibodies to components of the GABA receptor complex illustrates the role molecular biology has to play in neurotransmitter receptor characterisation. Of particular interest is the continued search for an endogenous ligand for benzodiazepine receptors. This field of investigation has now provided a whole range of antagonist, agonist, partial agonist and inverse agonist compounds with which to continue to investigate the structural and functional properties of the GABA receptor complex.

Overall, an excellent book which I recommend to all those interested in this area and a valuable addition to the series of volumes on receptor biochemistry and methodology.

P JENNER

Role of RNA and DNA in Brain Function: a Molecular Biological Approach. Edited by Antonio Giuditta, Claire Zomzely-Neurath and Barry B Kaplan. (Pp 320; £41.95.) Dordrecht: Martinus Nijhoff, 1986.

This volume represents the published proceedings of the symposium entitled "Role of DNA in Brain Activity" which was a satellite meeting of the 10th meeting of the International Society for Neurochemistry held in Italy in May 1985. As such, the book suffers from the usual drawbacks of all published conference proceedings. The balance is dictated by those who were invited and accepted, there is a lack of uniformity of style and considerable repetition of background information such as the fact that in the brain something like 2 to 5 fold more genes are transcriptionally active than in

other organs. These drawbacks are all acceptable provided the meat of the book is genuinely informative and in this case, it is. This is a book worthwhile having on one's personal bookshelf and certainly in the library.

Molecular neurobiology is one of the new subdisciplines of the moment. It has not yet developed to the point when it becomes impossible to keep track of all aspects of molecular biology studies as they relate to the nervous system. This book is a useful starting point for those scientists who are contemplating applying molecular biological techniques to the study of all manner of neurobiological problems and to those wishing to have an idea of what is going on. It is a fairly comprehensive survey of what had been achieved in 1985 and although things have moved on, it is a relatively simple matter to acquaint oneself with the subsequent literature on any topic included in this book.

Several chapters deal with the complexity of gene expression in the brain, describing estimates of the number and abundance of different mRNAs, the peculiar property of the brain in having large amounts of mRNA lacking a poly A tail (we still do not know the significance of this) and a couple of chapters from Sutcliffe and Milner and colleagues and a chapter from Lim and coworkers describing studies of brain specific mRNA as a means of identifying and characterising novel brain-specific proteins (eg new neuropeptides) and for investigating mechanisms of brain-specific gene expression. One mechanism for the latter, as originally proposed by Sutcliffe, may involve specific repetitive sequences known as "identifier sequences" is discussed in one chapter but more recent literature has questioned this role for these sequences and this is just an example of how fast moving is molecular neurobiology.

There are chapters on cloning of cDNA and the study of expression of genes for several well known proteins of neurochemical interest; these are tyrosine hydroxylase, synapsin I, proopiomelanocortin (POMC), proenkephalin A, prodynorphin or proenkephalin B and tubulin. The latter is perhaps of more interest to cytoskeleton researchers who are not otherwise catered for in this volume, apart from the description by Lim *et al* of a microtubule-associated protein that appears to be abnormally expressed in foetal Down's syndrome brain. These chapters also describe *in situ* hybridisation studies, a technique which is now very popular and is likely to be as informative as immu-

nocytochemistry has proved to be in studying the brain. One chapter by Herbert and colleagues also reports on one of the first studies of regulation of neuron-specific gene expression. This is a transfection study of the upstream sequences of the POMC gene necessary for the cAMP controlled response. It is perhaps a pity that there is no chapter from one of the groups who have cloned the acetylcholine receptor.

Restriction fragment length polymorphism (RFLP) analysis is included and there are two types of hereditary conditions covered in this context, Duchenne and Becker muscular dystrophies and X-linked mental retardation. Huntington's disease is omitted. Alzheimer's disease is only now being studied by RFLP analysis but there is a useful chapter describing isolation of mRNA from postmortem brain including Alzheimer brain. mRNA isolation is the starting point for many types of molecular biological studies of human brain disease and so this chapter may turn out to have the widest appeal.

Chromatin and DNA content and their modifications in neurons are also given respectable coverage although we are still ignorant of their functional implications. Finally, there are the more speculative areas of learning associated with metabolic changes in DNA and RNA which are also given an airing. The powerful molecular biological tools now in our possession should mean that speculation will be minimised fairly shortly and perhaps the brain, like the immune system, will show us some new genetic mechanisms. Who knows, maybe one element of memory will turn out to be somatic rearrangement of genes encoding certain synaptic elements.

BH ANDERTON

The Clinical Roots of the Schizophrenia Concept. Translations of Seminal European Contributions on Schizophrenia. Edited by John Cutting and Michael Shepherd. (Pp 238; £27.50.) Cambridge: Cambridge University Press, 1986.

This book contains 19 articles by eminent German, Swiss, and French psychiatrists concerning schizophrenia and related conditions. Some are household names, starting with Emil Kraepelin (1896). All are distinguished and it is agreeable to come across writers who are now less well remembered such as Weygandt, Minkowski, and Chaslin. The clinical descriptions are masterly and makes one think that there are more Old

Masters than current ones. Jacques Lacan's account (1932) from his thesis, of *The case of Aimée or self-punitive paranoia*, makes compulsive and very Gallic reading—it starts with the attempted assassination of a famous actress.

The editors use the word "seminal" in their introduction, and indeed on the cover. What harvest has the seed produced? At best, the authors provide superb examples of descriptions and understanding of abnormal experiences. An interest and skill in this activity is essential for all psychiatrists. In addition, naturally, there are attempts to "explain" these phenomena, or to trace their origins, or delineate the "fundamental disturbance". It is tempting to say that the all-too-familiar array of such explanations, which are still very much with us, were limited by the lack of the technical expertise which is now becoming available. But this may be more of a philosophical problem than a scientific one. In this respect, the most recent essay, by Professor Janzarik from Heidelberg, is of particular interest. In *The Crisis in Psychopathology* (1976), he gives, in the editors' words, "both an apology and a concise review of the trends in psychopathology during this century". In it, he states the "truly effective psychiatric treatment can never be developed until definitive psychopathological entities are established". But a "definitive psychopathological entity" is fundamentally a theoretical concept, and treatment may be truly effective for reasons for which no theory yet exists. On the other hand, "effective treatment" needs to be assessed by reliable and generally agreed criteria. In the process of devising our current criteria, something has been lost, and this collection reminds us of just how much, and how little, that is.

JLT BIRLEY

Medical Mimics of Psychiatric Disorders. (*Progress in Psychiatry series*) Edited by Irl Extein and Mark S Gold. (Pp 198; £15.00.) Washington: American Psychiatric Press Inc. UK Distributors: Cambridge University Press, 1986.

In the last few years it has become increasingly difficult for more than two clinicians or scientists to meet without one of them suggesting that a book containing their utterances should be published. The greater appreciation of quantity over quality and the financial rewards of the exercise, coupled with the technology that allows fast pro-

cessing of the written word, are some of the aetiological factors in this epidemic which threatens to engulf us all and for which effective treatment is anxiously awaited.

The American Psychiatric Association has now decided to add to this paper mountain by publishing the contributions to some of the yearly symposia in a series entitled *Progress in Psychiatry*. The current volume, one of the first in the series, contains a motley collection of papers dealing with the neurological screening of psychiatric patients, psychiatric manifestation of seizure disorders, associations of hypothyroidism and hypothalamic-adrenal system disorders with affective and other psychiatric illness, depression in drug addicts and medication and toxin induced psychiatric disorders. At best, as in the seizure disorders chapter, the reader is presented with a rambling, over-long review of the subject. At worst, and there are numerous examples of this, the aspiring psychiatrist is regaled with a detailed description of auscultatory percussion as a means of detecting subdural haematomas. Perhaps only those interested in learning about this archaic procedure in the era of brain imaging should be encouraged to buy the book. The rest of us can find better uses for our money.

MARIA A RON

Neuroendocrinology: a Clinical Test. By Mary L Forsling and Ashley Grossman. (Pp 206; £22.50.) Beckenham: Croom Helm Ltd, 1986.

In their introduction, the authors of this slim volume make no apology for the physiological/biochemical bias of an essentially clinical test. This is an interesting approach but has led to a somewhat unbalanced review of clinical neuroendocrinology. Most of the chapters contain excellent sections concerned with the physiology of pituitary hormone release and its control by the hypothalamus but the sections on clinical management are a good deal less comprehensive and even a little sparse. One suspects that the original title for the book was simply "Neuroendocrinology" and that "a clinical test" was added as an afterthought. Perhaps the authors themselves were uncertain about their potential readership. It is suggested that the text might be suitable for junior hospital doctors, senior medical students, specialists in non-endocrine disciplines, scientists and paramedical workers. Whilst

sections of the book will be of interest to all of these I doubt whether, as a single text, it is suitable for any. Clinicians, for example, would be disappointed to find no chapter on the radiology of neuroendocrine disease and no chapter on the neuro-ophthalmological complications of pituitary disease.

Minor criticism must also be made of the proof reading prior to publication. The structure of TRH, for instance, is shown under the heading "TSH". It was also disconcerting to note that the third reference in the introductory chapter is incorrect.

The book is good in parts, and the chapter on posterior pituitary function is particularly worthy of mention, but I doubt whether it can compete with texts on neuroendocrinology which are already available.

NF LAWTON

The Neurology of Schizophrenia. (Handbook of Schizophrenia Vol 1.) Edited by HA Nasrallah and DR Weinberger. (Pp 430; \$92.50.) Amsterdam: Elsevier Biomedical Press, 1986.

Although this is not the only handbook series on schizophrenia which appears to be in publication at the present time, this first edition certainly does credit to the overall potential of the series. Entitled *The Neurology of Schizophrenia* it consists of a series of well constructed reviews which emphasise the overall neurological abnormalities that have been discovered in schizophrenia. These include not only the findings from clinical and imaging studies, but also the anatomical, neurological and virological data.

The first chapter is an excellent introduction to the neurological examination in schizophrenia, reminding us that patients with psychiatric disorders very often present with observable clinical signs which should be looked for. This is followed by a review of the differential diagnosis of schizophrenia, then a comprehensive review of the motor abnormalities of schizophrenia by Manschreck. The latter emphasises the fact that motor abnormalities seem intrinsic to schizophrenia, and in contrast to usual expressed opinions, in some forms decrease following the administration of neuroleptic drugs.

Chapter 4 deals with tardive dyskinesia, and includes speculation on the site of pathology in the condition based upon current evidence. These chapters are followed by reviews on the EEG and evoked poten-