

experiments using YACs. In general, with the exception of the immunoglobulin genes, these experiments have fulfilled expectations in conveying developmentally regulated, position independent expression of the inserted gene.

"The P1 vector system for the preparation and screening of genomic libraries" (N Shepherd and D Smoller) reviews the use of this relatively new phage system for large insert (up to 80 kb) cloning. There is a balanced appraisal of its advantages and disadvantages relative to other systems, for example, YACs and bacterial artificial chromosomes. The main advantages of the P1 system are the ability to prepare large amounts of the fragment of interest, and its stability against rearrangement. However, it does seem rather fiddly to use and unless it appears in a kit form, will probably remain the province of the specialist cloner.

"Internal initiation of mRNA translation in eukaryotes" (A Kaminski *et al*) is, at 42 pages, the longest chapter in the book and provides a very detailed overview of a piece of fundamental biology. Whereas internal mRNA initiation is a common feature of prokaryotes, permitting the translation of polycistronic messages, until recently it was only well known among eukaryotic systems in the poliovirus. Recently such internal initiation has been shown for two cellular mRNAs, those for immunoglobulin heavy chain binding protein (BiP) and the *antennapedia* gene in *Drosophila*. In the case of BiP this mechanism was initially suspected because its translation persisted after poliovirus infection, which results in repression of the cap dependent mode of translation initiation. *Antennapedia* was scrutinised because it has a very long 5' untranslated region, comprising several exons and containing numerous apparently silent AUG codons. Given these precedents, other examples will doubtless soon be discovered. The significance of internal initiation is that it allows efficient use of particular mRNA species under conditions in which the majority of mRNAs would be down regulated.

"The unmasking of maternal mRNA during oocyte maturation and fertilization" (J L Grainger) addresses a problem of great biological interest, again involving mRNA. In this case it appears that the modification (by phosphorylation) of proteins binding to specific elements in the 3' untranslated regions is critical for the activation of translation at fertilisation. This illustrates another mechanism for the control of gene expression, which again may turn out to be of wider relevance.

Two other articles of possible interest are "Genetic recombination analysis using sperm typing" (K Schmitt and N Arnheim) and "Recognizing exons in genomic sequences using Grail II" (Y Xu *et al*). However, the

former is too short, and the latter too impenetrable, to be of great value.

In summary, although this book contains some useful articles I would not recommend personal purchase. It would, however, be worth making sure that the series is stocked by at least one library within a university faculty.

ANDREW WILKIE

Genetics of Mental Disorders. Part I. Theoretical Aspects. Balliere's Clinical Psychiatry International Practice and Research. Volume 1/Number 1, February 1995. Editors J Mendlewicz, G N Papadimitrou. (Pp 172; £30.00.) London: Baillière Tindall. 1995.

The preface states that the aim of this slim volume (172 pages) is to focus on the theoretical aspects of genetic research into mental disorders for the benefit of researchers and clinicians interested in the link between genetic factors and mental disorders. A second volume which will focus on more clinical topics by the same editors is to be published in 1996.

The editors have assembled an international panel of authors representing backgrounds in clinical psychiatry, molecular biology, and biostatistics. There are 12 chapters which have been grouped into three sections: "Strategies in clinical research", "Applications of molecular biology in mental disorders", and "Genetics and neurobiology".

In general the book meets its aim of providing reviews of several important areas of clinical, molecular biological, and statistical methodology relevant to psychiatric genetics. Several of the chapters are well written and cover interesting material. However, the book shares problems common to many multi-author volumes. First, the chapters are of very varied style and quality. Second, there is often repetition of the same material in different chapters. For example, twin studies are discussed in sections in each of the first three chapters. Third, some contributions focus more on the author's own work rather than addressing the stated aim of the book. An example is chapter 11 on the genetics of sleep which, although interesting in its own right, seems out of place in this volume.

Further, despite the stated aim of focusing on theoretical issues, several chapters, such as those on twin and adoption studies (chapters 2 and 3), are mainly a review of data from specific studies.

Despite the fact that non-parametric methods of analysis have assumed increasing importance in the analysis of complex disorders, very little space is devoted to such

approaches. Further, and rather disconcertingly, one of the few statements about sib pair methods is false: "The main limitation of the sib pair method is that it has to be assumed that phenocopies do not exist" (p13).

In summary, although this volume presents a useful review of several theoretical issues in psychiatric genetics, the chapters are of variable quality and insufficient emphasis is given to non-parametric and newer methods of analysis. Nonetheless, the book may be a useful addition to library collections that do not already include a recent multi-author book on the same topic.

NICK CRADDOCK

NOTICES

3rd International Symposium on Genetics, Health and Disease

The 3rd International Symposium on Genetics, Health and Disease will be held on 1-4 December 1995 in Amritsar. For further details contact: Professor Dr Jai Rup Singh, Centre for Genetic Disorders, Guru Nanak Dev University, Amritsar 143005, India. Fax: +91-183-258863/258820.

European School of Medical Genetics—9th course

The European School of Medical Genetics—9th course will be held in Sestri Levante, Genoa, Italy on 24-31 March 1996. Directors: Professor V A McKusick (Baltimore), Professor G Romeo (Genoa). *Topics:* Introduction to human molecular genetics, linkage analysis, cytogenetics, population genetics, molecular genetics, multifactorial diseases, clinical genetics, cancer genetics. *Registration fee:* 495 000 Italian Lire. *Applications:* Send your CV, a brief description of your research interests, a letter of presentation (if you wish to present a clinical case during an evening session and to apply for a travel fellowship in case there are some available, please state it clearly in your covering letter), and a certificate of your knowledge of English before 15 December to Dr Caterina Cogorno, Laboratory of Molecular Genetics, Istituto G Gaslini, 16148 Genoa, Italy. Tel: +39/10/5636370-400, Fax: +39/10/3779797.