transverse limb defects in this study by Wynne-Davies and Lamb, there was one relative affected with a similar defect, a monozygotic twin. We feel that it would be a pity if the figures quoted by Drs Lindenbaum and Firth deterred other authors from reporting unusual recurrence of similar defects within a family.

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BOOK REVIEWS

100+ Principles of Genetics. Anthony J F Griffiths, Joan McPherson. (Pp 387; £9.95). New York, Oxford: W H Freeman. 1989.

The main text of the book is 120 principles of genetics, covering classical, molecular, and population genetics, set out in general groups of topics that include genes and inheritance, mutation, gene structure and function, recombinant DNA technology, organ-elle genes, and quantitative and population genetics.

The text itself is very easy to read with each principle in dark, bold type at the top of the page, a limited amount of explanatory text, and one or more excellent black and white line diagrams. There are also 78 problems with worked solutions with references to the relevant principles.

Although the authors indicate that the principles can be read in numerical sequence, each page has multiple cross references to other principles as appropriate. If one followed these without adhering to the numerical sequence, reading this text could be like some children's books currently in vogue where each page offers a number of alternative choices making it difficult to know when one has or will finish the book!

The most serious drawback of this textbook, to my mind, is when difficulties of understanding might be

encountered. For example, the mathematical formulae in the principles dealing with population genetics are, in some instances, merely stated without demonstration of their derivation. In this eventuality, the reader would have to refer back to their basic genetics textbook. I feel the text would be greatly enhanced by cross references to standard textbooks or journals that lucidly explain particular topics to assist in this situation.

The authors indicate in the introduction that this book could be useful as a supplement to textbook(s) in fundamental genetics and might be used to update or review a basic understanding of genetics. I would accept that this book might be useful for the latter purpose but would not expect many students of genetics to purchase it for that purpose alone, even if it were also used for the former. A genetics textbook with a good summary at the end of each chapter or the liberal use of a highlight pen might suffice.

R F MUELLER

Genetics of Neuropsychiatric Disease. Ed L Wetterberg. (Pp 363; £50.00.) New York: Stockton Press. 1989.

This book presents the Proceedings of a symposium held in Stockholm in 1988 which focused on the application of genetics, particularly molecular genetics, to neuropsychiatric disorders. It is divided into four sections: on research methods, research models, applications to particular diseases, and the likely directions of future research.

Most of the contributors are well known in this field and have provided brief and to-the-point coverage of quite a wide range of topics, which will be of interest to psychiatrists, neuroscientists, and to geneticists who have a particular interest in disorders of the nervous system.

The first section of the book on methods contains very useful brief accounts of techniques of DNA analysis and linkage analysis, as well as presenting a gene map of diseases, enzymes, and proteins that may be of relevance to the understanding of neuropsychiatric disease. The same author, Wahlstrom, also contributes an informative chapter on the potential use of chromosome aberrations in mapping mental disorders. Other

chapters, such as that on the molecular genetics of PKU, are interesting but of less immediate relevance to general neuropsychiatry where the bulk of the work consists of far commoner conditions, such as schizophrenia and manic depressive illness. If the book has a principal weakness it is that these topics and classical approaches are not more extensively covered. The time honoured methods of family, twin, and adoption studies still provide the strongest evidence that abnormal genes are involved in the aetiology of abnormal behaviour. Therefore, it is a pity that, in the understandable enthusiasm for the 'new genetics', the more classic methodologies that have driven psychiatric genetics so far, and are still good for a few more miles yet, are largely overlooked.

Aside from this criticism, and the fact that collections of 'photoready' chapters are never quite as pleasing to the eye as a book set in uniform type, this volume is a useful addition to the literature and should have a definite place in the libraries of all departments and research units interested in this field.

PETER MCGUFFIN

Molecular Genetics of Muscle Disease: Duchenne and Other Dystrophies. British Medical Bulletin, July 1989, volume 45, number 3. Ed A J Buller, J Goodfellow, J M Newsom-Davies. (Pp 828; £25.00.) Edinburgh: Churchill Livingstone. 1989.

In his introduction to this second issue of the *British Medical Bulletin* devoted to muscular dystrophy, A J Buller observes that the magnificent advances in muscle research that have occurred in the last nine years have been partly the result of the support of applied research by the muscular dystrophy charities. It is not surprising that many chapters in this volume deal with recent advances concerning the Duchenne/Becker gene and with methods of examining gene transcription in muscle. M E Buckingham describes the enormous variety of muscle proteins, some owing to multiple genes, and others owing to differences in splicing the same gene. The current function, or evolutionary importance, of such diversity is unclear. The development of the primitive muscle cell, or myoblast, to