seized to carry the factual descriptions into speculations about function and purpose. The seven excellent chapters include discussions on the analysis of MHC antigens at the protein and DNA levels, their organisation in the plasma membrane, restriction, properties of target cells, immune response genes and Ia antigens, MHC complement components, and finally speculations on evolution and function.

This is not an easy book but it is certainly rewarding and brings together many of the threads of current research into the 'fine structure' of the MHC, surely itself the Rossetta stone of immunopathology.

RODNEY HARRIS

Genetic Variants and Strains of the Laboratory Mouse
Edited by Margaret C Green. (Pp xvi+476; 7 figures+28 tables. DM 240.) Stuttgart, New York: Gustav Fischer Verlag. 1981.

It is impossible to praise this book too highly. We have here, within the confines of a single volume of moderate size, all the essential information on all aspects of the genetics of the laboratory mouse that anyone may require. Every laboratory where mice are used should have a copy.

Although the book contains contributions by a number of specialists, the larger part is written by Dr Green herself. It is a catalogue of all the known genes in the mouse, with brief, lucid accounts of their effects as well as the essential references. These accounts are marvels of compression but brevity is not achieved at the cost of significant detail. The references are given where most readers like to find them, immediately following the account. This chapter, in fact, is a book within the book, and as such is a worthy successor to Grüneberg's *The Genetics of the Mouse*.

If the expansion of our knowledge of the subject continues at the present rate, this book is bound to be out of date before long. It is to be hoped that Dr Green will keep in mind the need for a revised edition one day.

Books of this nature are all too often marred by unsatisfactory indexes. The one in this book is a joy to use and a model to be adopted.

M S DEOL

Animal Models of Inherited Metabolic Diseases
Progress in Clinical and Biological Research, Volume 94. Edited by Robert J Desnick, Donald F Patterson, and Dante G Scarpelli. (Pp xix+519; figures+tables. £43·00.) New York: Alan R Liss. 1982.

This book is a compilation based on papers presented by veterinarians, physicians, and scientists at a symposium convened at the National Institutes of Health in October 1981. It is a timely summary and prospectus discussing the recognition and selection of animal model analogues of human inborn errors of metabolism, their evaluation for the investigation of genetics and pathology at the molecular level, and possible approaches to effective treatment. There are 30 contributions divided into seven main sections. These deal with: the genetic basis of disease, which includes mouse models of human thalassaemia; the detection of animal models, including the biochemical screening of cats and dogs; models of lysosomal storage diseases; inborn errors of connective and epidermal tissues; disorders of immune function and histocompatibility; disorders of hormone action, including hormone resistance; and miscellaneous models and considerations. Each section has sufficient introductory material to set the scene and most contributions are followed by a helpful discussion. The references are exhaustive throughout and there is a particularly useful compendium listing 200 animal models for 110 inherited metabolic disorders. It is perhaps appropriate that the summarising chapter of a book dealing with animal models should have been presented in doggerel!

The book could be read with profit by all with an interest in the genetics, biochemistry, and pathology of human and animal inborn errors of metabolism.

A D PATRICK

Genetic Recombination. Understanding the Mechanisms
By H L K Whitehouse. (Pp x + 415; figures + tables. £23·75.) Chichester: Wiley. 1982.

This book is a comprehensive review covering most of the important aspects of recombination in genetics. The book describes the early historical discoveries made in DNA phages and *E coli* and the more recent mechanisms proposed for recombination in eukaryotes. It is useful to find all of the evidence and reviews on this subject in one volume so that the various mechanisms can be compared in different organisms.

One of the main problems with the text is that it is often so detailed that it is difficult to extract information readily. Many paragraphs begin with a reference, such as Jones *et al* (1974), making the book much more of a detailed literature survey of recombination rather than an up to date general review of the field. Obviously, it is an excellent book

for the specialist. Readers not directly involved in recombination, however, might find chapters in standard genetic textbooks easier to read and understand.

KAY E DAVIES

Early Diagnosis of Fetal Defects
Current Reviews in Obstetrics and Gynaecology 2. By D J H Brock. (Pp xi + 165; figures + tables. £7·95.) Edinburgh: Churchill Livingstone. 1982.

The aim here was a moderate sized book for obstetricians covering laboratory based methods of antenatal diagnosis. Further volumes in the series are promised on physical methods such as ultrasound.

The book contains a great deal of information and answers many of the questions most frequently asked of clinical geneticists by obstetricians. The scientific background to clinical practice is emphasised throughout. Several topics are introduced by a brief historical survey. Important published data are quoted and critically discussed and the bibliography is extensive and runs up to 1981.

The author stresses in his introduction the importance of counselling in antenatal diagnosis and I liked his table showing the minimum 'agenda' of such a counselling session. The question of fetal loss after amniocentesis is carefully reviewed.

The meat of the book consists of three chapters, on chromosome disorders, neural tube defects, and Mendelian disorders. There is up to date coverage of such topics as recombinant DNA techniques, fetal blood and tissue sampling, and first trimester trophoblast sampling. I should have liked a more extensive explanation of the use of linked polymorphisms, whether detected by DNA or by gene product analysis, in antenatal diagnosis. Many people find the underlying concepts difficult to grasp.

The last two chapters are on screening and future developments. This arrangement results in some topics being awkwardly split between chapters, but the detailed contents page is a help in looking things up quickly.

Apart from a few minor quibbles, such as the implication on page 42 that 49,XXXXY and 49,XXXXX people have the same phenotype as 47,XXY and 47,XXX respectively, everything in this book is sound and well thought out. I recommend it to any obstetrician or general practitioner who wishes to learn more about antenatal diagnosis.

N R DENNIS