studies of the amyloid A4 protein precursor (APP) gene. Although this is also located on chromosome 21, it does not contain the primary genetic defect in familial AD. However, the abnormal deposition of this protein is clearly a prominent feature of the neuropathology of AD. Studies of the several different forms of mRNA coded for by this gene and its regulation are described in a number of chapters. This work is likely to lead to an increased understanding of the pathogenesis of AD. However, a major unresolved issue remains that of how early in the chain of pathogenic events amyloid deposition is located.

Overall this book is of a higher standard than is usually encountered in conference proceedings and is exceedingly well presented. It will be of value to those working in this area but most of the chapters are probably too technical for those less well acquainted with the subject.

M J OWEN

Practical Genetic Counselling

3rd edition. By Peter S Harper. (Pp 306; £25.00.) Wright. 1988.

It is good to see the third edition of this book, which is unique in its comprehensive cover of most of the genetic problems encountered in clinical practice. It contains major changes and additions. There is a new chapter on congenital malformation syndromes and dysmorphology, while the rapidly advancing area of molecular genetics is covered in a much revised chapter.

The book is organised in three parts. Part 1 covers general aspects of genetic counselling in its broadest sense. The basics of mendelian, chromosomal, and molecular genetics are well described, as are the applications to carrier detection, prenatal diagnosis, risk determination, and segregation analysis. The final chapter in this section is devoted to 'The genetic counselling clinic' and reflects the author's great experience and practical approach and will be very valuable to those who are interested in setting up or understanding clinics of this sort.

Part 2 deals systematically with specific organ systems and their inherited disorders and has excellent references and sources of further information.

Part 3 deals with 'Genetic counselling and society'. There is much valuable information in an appendix on sources of information, including the addresses of genetic centres in Britain.

This book is probably not designed for clinical

geneticists, although I suspect that many always have a copy near by. Its main attraction will be for perceptive clinicians in other specialties who realise how profoundly genetics is impinging on their practice. It is possible to dip into this book and find something about almost any genetic disorder, while the general chapters provide an excellent revision course for those whose clinical genetics is either very rusty or non-existent.

I suppose there is a danger that this book will encourage people to believe that they can cope with any genetic problem, but as the general awareness of the importance of genetics increases, most clinicians will appreciate that there are many pitfalls, not least of which are the problems created by genetic heterogeneity and the need for precise diagnosis of rare disorders.

The style and presentation of the book are very attractive although even this paragon among books contains occasional errors. However, one has to search hard for even minor mistakes, for example, figure 5.5 (a) is not a fully informative pedigree.

This book is without doubt one of the most useful currently available. It can be thoroughly recommended to any clinician or scientist interested in this rapidly advancing field.

RODNEY HARRIS

Advances in Human Genetics

Edited by Harry Harris and Kurt Hirschhorn. Volume 18. (Pp 383; \$59.50.) New York: Plenum Press. 1989.

As in previous volumes in this series, five review articles are presented, one largely clinical, one largely cytogenetic, and three which straddle the interface of molecular biology and clinical medicine.

In a clear and concise update of HLA disease association Bell, Todd, and McDevitt describe the structure and function of the major histocompatibility complex (MHC). The chapter concentrates on the class II region, with which the strongest disease associations have been found, associations which are being refined through sequencing of the class II loci. Although other factors, both genetic and environmental, play a role in the genesis of the diseases showing HLA association, unravelling the molecular basis of the associations will provide insight into a key step in their aetiology. Furthermore, the hope expressed by the authors, that peptide-MHC interactions underlying these diseases might in the future be modified directly, does not seem too remote.

Cohen and Levy review the major chromosome