Book reviews

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Recombinant DNA and Medical Genetics

Edited by A Messer and I H Porter. (Pp xvii + 207; figures + tables. \$29.00.) New York: Academic Press. 1983.

This book, although a symposium report, provides an excellent overview for the more general reader on how recombinant DNA techniques are being applied to the study of inherited disorders. The various chapters are brief, clearly written and illustrated, and between them cover most of the topics that are of current interest. Although the symposium dates from November 1982, it does not appear dated, perhaps because the contributors have included much information that was still unpublished at that time.

The book opens with a brief but clear introduction to the basic techniques which will put the inexperienced reader at ease. Following chapters do not have a particular sequence, but a series of papers on specific loci give a detailed picture of how understanding is progressing in growth hormone defects and in the haemoglobinopathies, as well as in the area of immunogenetics and the HLA region. Those more concerned with the applications of DNA polymorphisms will find clear accounts in the chapter by Ray White and colleagues and in those by Francke on cytogenetic localisation and by Latt on the construction of flow sorted libraries. The chapters on X chromosome inactivation and on the Y chromosome will be of particular interest to those in the field of sex differentiation.

Finally, the promise of new techniques that may uncover yet more genetic variation is shown by the chapter of Lerman and colleagues on melting properties of DNA.

Altogether this book can be recommended to anyone wishing to gain an introduction to the applications of the new DNA technology. Already many of the topics discussed that might have seemed speculative at the time of the symposium are well established, and after perusing this book the reader should have a good understanding of their value.

PETER S HARPER

Advances in Human Genetics

Volume 13. Edited by H Harris and K Hirschhorn. (Pp xix + 312; figures + tables. \$42.50.) New York, London: Plenum Press. 1983.

One has come to expect a high standard from this

series and this volume is no exception. Three of the five topics: 'The genetics of blood coagulation' by J R B Graham and colleagues at Chapel Hill, 'Human antibody genes: evolutionary and molecular genetic perspectives' by Jay Ellison and Leroy Hood from the California Institute of Technology, and 'Mutations affecting trace elements in humans and animals' by David Danks and J Camakaris from Victoria, are just the subjects for a review at the present time. These papers not only bring together in an orderly fashion a lot of data from diverse sources, but attempt a general interpretation of the likely mechanisms involved, which brings the subject 'alive'.

The remaining topics concentrate on a particular clinical condition. Gillian Turner and Pat Jacobs review marker X linked mental retardation, currently one of the enigmas of clinical genetics. The last contribution by Seymour Kaufman reviews phenylketonuria and its variants.

One of the arguments for producing a yearly review series is that progress is so rapid that one cannot easily keep up except in one's own particular field. The same phenomenon, of course, means that reviews may rapidly become 'out of date', although the extent to which this happens varies. For example, Kaufman makes no mention of even the rat phenylalanine hydroxylase cDNA clone, let alone the human gene probe, despite other quoted personal communications with Savio Woo 1983. The publishers have attempted to minimise this problem by including short addenda at proof stage, which allowed Ellison and Hood to correct one of their figures for example, but this facility was not used by two of the authors when perhaps it should have been.

At a price of \$42.50, buying the book is more likely to be of interest to libraries and genetics units than individuals. Many are under great financial pressure to cut back, but this is certainly not the time to discontinue the series.

MARCUS PEMBREY

Perspectives in Mutation Epidemiology

Committee 5 Report. International Commission for Protection against Environmental Mutagens and Carcinogens. (Pp 361; figures + tables. \$25.00.) Amsterdam: Elsevier. 1984.

The International Commission of Protection against Environmental Mutagens and Carcinogens