

what the market will stand. Whole laboratories can be run on the excess profits of this comparatively simple test. Instant experts on AFP screening have been springing up like toadstools, and conferences earnestly debate the scientific, ethical and organizational aspects of the subject. This book is a record of one such conference.

But one must not be too cynical about the motivation behind the surge of interest in AFP screening. As conference proceedings go, this book is not without merit. The early chapters, concentrating on the biology of AFP, are the best part but unfortunately only constitute about one quarter of the book. Thereafter, it is slow trudge through familiar landscapes, with everyone sounding tired and dispirited, as well they might be. One of the editors does his best by using the opportunity to get some of his collected doggerel into print. Somehow the fatuity of

The fetal proteins are a transient group
And alphafetoprotein leads the troupe

just about sums it all up.

D. J. H. BROCK
Human Genetics
Western General Hospital
Edinburgh EH4 2XU

Biotechnology, volume 6A, *Biotransformations*.
Edited by K. KIESLICH. Weinheim, FRG: Verlag
Chemie. 1985. 473 pages. DM425.

This book is a part volume of a comprehensive treatise in eight volumes on *Biotechnology*. It is itself a comprehensive treatment of biotransformations – the chemical reactions, effected by micro-organisms, that lead to products of commercial/industrial significance and which are less conveniently obtained in other ways.

The subject matter of the book is dealt with in eleven chapters, each written by an established expert. Following a general review of methodologies, each chapter then concentrates on a specific product area – steroids, sterols, terpenoids, alicyclic and heteroalicyclic compounds, natural and semisynthetic alkaloids, antibodies, aromatic and heterocyclic structures, aliphatic hydrocarbons, amino acids and peptides, and, finally, carbohydrates.

In general, the subject matter is treated exhaustively and in an accessible form. As with all (telephone) directories this is not the book to curl up with for a light read, but, as a source of information, it provides a valuable starting point for further studies provided one can afford it.

BRUCE A. HADDOCK
Bioscot Ltd.
King's Buildings
West Mains Road
Edinburgh EH9 3JF

Genetic Manipulation of the Early Mammalian Embryo, Banbury Report 20. Edited by F. COSTANTINI AND R. JAENISCH. Cold Spring Harbor, New York: Cold Spring Harbor Laboratory. 1985. 320 pages. \$63 cloth. ISBN 0 87969 220 0.

The almost simultaneous report in 1981 from five different groups of the transformation of mouse embryos by direct injection of DNA into eggs – producing transgenic animals – instantaneously introduced a new era which will see a revolution in our approach to mammalian genetics and development. At last mammalian geneticists have a tool which will allow them to perform the type of powerful analyses for so long solely the province of microbial geneticists.

This book provides the state of the art at the Fall 1984 Banbury Conference at Cold Spring Harbor and by the very nature of the publication gap and the rapid progress in the use of transgenics some of the recent exciting advances are not covered; for example the dissection of the regulatory sequences of the elastase gene by Palmiter, Brinster *et al.*, the production of transgenic pigs and sheep by the same group and the production by Leder's laboratory of an allele of a previously known locus (*limb deformity*) by insertional mutagenesis in a transgenic mouse. A more rapid publication of the proceedings of this type of conference would therefore seem desirable. It would also have been valuable to have a record of the discussion after each paper (so useful, for example, in *Recent Progress in Hormone Research*) which would give the reader a clearer idea of where the contributors feel the work is going next.

Most of the major workers with transgenics are represented in section III and IV of the book and they present a comprehensive and exciting picture of the range of uses for the new technology especially in the area of regulation of gene expression. Sections I and II try to broaden the meeting out to Developmental Genetics and, Viruses and Viral Vectors and here some of the papers sit uneasily together with the main thrust of the meeting. Furthermore the exciting prospects of using retroviral and other vectors as a method of efficient transformation are under-represented given the amount of current research in the area.

In conclusion this book is to be recommended as a starting point for geneticists wishing to get a background and see the breadth of what all the excitement is about in mammalian genetics today and from which to peruse the pages of *Cell*, *Nature* and *PNAS* to get up to date in this field.

GRAHAM BULFIELD
Genetics Group
Agricultural and Food Research Council's Poultry
Research Centre
Roslin, Midlothian