Book reviews

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Principles of Gene Manipulation. An Introduction to Genetic Engineering

3rd edition. By R W Old and S B Primrose. (Pp 409; figures + tables. £11.80.) Oxford: Blackwell Scientific Publications. 1985.

I was very pleased to have been given a copy of *Principles of Gene Manipulation* to review, because someone had 'borrowed' my second edition and forgotten to bring it back, which I think says a great deal about the usefulness of this book.

Now in its third edition, Old and Primrose have revised and updated their textbook and, as a result of the rate of progress in this field, have increased its size and scope. The areas covered are: introduction, basic techniques, cloning in *E coli* using various vectors, construction of genomic and cDNA libraries, DNA sequencing, cloning in other micro-organisms, plant and animal cells and expression of cloned gene products, applications to medicine and industry (including a section on patients), and appendices of useful information. Generally the coverage is very thorough, but I would have liked to have seen more information and examples in the section dealing with the application of DNA technology to medicine. The authors restrict themselves to a brief description of prenatal diagnosis of haemoglobinopathies and do not mention any of the exciting recent advances in human gene mapping using DNA probes combined with linkage analysis and somatic cell hybridisation. Nor is there any mention of the progress in the understanding of cancer made possible by the application of recombinant DNA techniques. Perhaps it is asking too much for an introductory text, but I do feel that more space should have been devoted to describing the way in which the technology has allowed such a variety of problems to be tackled.

However, in its coverage of the techniques themselves this is an admirable book. It is well written, clearly illustrated, and contains plenty of useful references. I would recommend this updated edition to any undergraduate or research worker in biology or medicine. I only hope that this book will spend a little longer on my bookshelf than did its predecessor!

DUNCAN SHAW

Genetics

3rd edition. By Monroe W Strickberger. (Pp xxi+842; figures + tables. £15.95.) London: Collier Macmillan. 1985.

It can be argued that in the last few years so much has been learned of the genetics of man that the Medical Geneticist now has little need of a text book of general genetics. However, for those who do not share this view, there are several excellent texts including, for example, John Fincham's *Genetics* in this country, and Irwin Herskowitz's *Principles of Genetics* in North America. Strickberger's *Genetics* has now reached its third edition and therefore must have a following.

It is designed as a comprehensive course in general genetics. Certainly it is all embracing with illustrative examples chosen from micro-organisms, fungi, higher plants, and animals including man, and all the usual subjects are covered, including a section on gene manipulation. Statistical methods are dealt with particularly well. It is well illustrated with two tone diagrams and each chapter concludes with a list of references for further reading and a number of problem exercises, but unfortunately no answers are provided.

This is an attractive, very readable, and up to date text book with much to recommend it, especially for those who are not concerned only with the genetics of man.

ALAN E H EMERY

Gene Expression in Muscle

Edited by R C Strohman and S Wolf. (Pp 434; figures + tables. \$62.50.) New York: Plenum Press. 1985.

This book represents the proceedings of a meeting sponsored by the Muscular Dystrophy Association of America, held at Totts Gap, Pennsylvania in October 1983. The purpose of the meeting was to bring together available information on gene expression in muscle in an attempt to gain insights into the pathogenesis of Duchenne muscular dystrophy. The topics chosen for analysis range from the clinical phenotype of Duchenne dystrophy, alterations of gene expression in muscle disease, regula-