

Books received

Biomathematics. Volume 21 Introduction to Theoretical Population Genetics. T. Nagylaki. Springer-Verlag, Berlin. 1992. Pp. 369. Hardback, price £35.50. ISBN 3 540 53344 3.

Techniques for the Analysis of Complex Genomes. Rakesh Anand (ed.). Academic Press, Harcourt Brace Jovanovich, New York 1992. Pp. 239. Softback, price £19.95. ISBN 0 12 057620 1.

Transgenic Animals. F. Grosveld and G. Kollias (eds). Academic Press, Harcourt Brace Jovanovich, New York. 1992. Pp. 227. Hardback, price £37.50. ISBN 0 12 304530 4.

Chromatin: Structure and Function. Alan Wolffe, Academic Press, Harcourt Brace Jovanovich, New York. 1992. Pp. 213. Softback, price £14.95. ISBN 0 12 761911 9.

Drosophila Genetics: a Practical Course. Ulrich Graf, Nancy van Schaik and Friedrich E. Wurgler. Springer-Verlag, Berlin. 1992. Pp. 239. Softback, price £24.50. ISBN 3 540 54327 9.

Molecular Biotechnology (2nd edn). S. B. Primrose. Blackwell Scientific Publications, Oxford. 1991. Pp. 196. Softback, price £18.95. ISBN 0 632 03053 4.

Book reviews

Understanding DNA and Gene Cloning: a Guide for the Curious. (Second Edition). Karl Drlica. John Wiley, Chichester. 1992. Pp. 240. Paperback, price £17.95. ISBN 0 471 62225 7.

The second edition of this book consists of 11 chapters with the first seven describing the basic techniques used in gene cloning. Bacteria and DNA structure are introduced and discussed and then some of the basic concepts in molecular biology are tackled. This enables the reader to understand chapter eight, which is a description of how the human haemoglobin gene was cloned. The next chapter deals with some of the ways that cloned genes are used in research, dispelling the idea that a cloned gene is an end in itself. The final chapter, on retroviruses, introduces the popular topics of AIDS and oncogenes. The book ends with an appendix describing such techniques as chromosome walking and the use of monoclonal antibodies. There is a comprehensive glossary, where all the words that the author considers to be 'jargon' (quiet a few!) are defined in basic terms.

The strength of this book is that it manages to explain complex concepts and techniques in ways that require the reader to have no prior knowledge of chemistry; such words as 'catalyst' and 'precipitate' are defined in basic terms. This is achieved by the clever use of analogies, most of which are very successful. My favourite one is on page 65, where the author likens the linking of nucleotides in 5' → 3' direction to

the linking of elephants, hooked trunk to tail. However, I found the one that used John Wayne movies and Mickey Mouse cartoons almost as complicated as the real thing!

I puzzled over who would find this book useful. Because of its small size and lack of real detail, it is not a molecular biology text book. It is no challenge to Old and Primrose. However, I think it would be perfect for a bright sixth-former or someone about to embark on a molecular biology course. It would be a valuable text for a course where molecular biology/biotechnology forms a small part of the syllabus. The questions at the end of each chapter lend themselves to group discussion and encourage the reader to think 'scientifically'. I also think that any member of the medical or legal profession finding themselves needing to learn about gene cloning quickly would find this book extremely good. Unfortunately, I think the price would deter the more casual reader.

This book is not an introduction to gene cloning as such. It is more an overview of the subject, designed to give the 'curious' of the title a comprehensive insight into our fascinating world.

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