

BOOK REVIEW

Finding meaning in the cover design

Advanced Genetic Analysis: Finding Meaning in a Genome

R Scott Hawley and MY Walker
Blackwell Science Ltd, Oxford. 2003; 239 pp.
£54.95, paperback. ISBN 1-40510-336-1.

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Reviewed by G Brock

This book is intended to describe the basic principles that underlie genetic analysis in a manner that could and should be understood by those undertaking an advanced course. It is much more compact than a previous book on this subject at just fewer than 240pp (the previous tome by Suzuki *et al*, being a more meaty 600 + pp). However, brevity notwithstanding, I found this to be a well thought out and agreeably presented book. The subject matter follows in a logical progression from types of mutation, mutants and how to find them, then onto the array of organisms or 'Gallery of Model Organisms' one can use. In this section each species is concisely introduced but links are provided both to appropriate URLs and further reading, allowing an informed choice to be made. The complementation test and suppression are covered in some detail followed by chapters on epistasis and gene function then genetic fine-structure analysis. Finally the book is concluded with two chapters on recombination and chromosome segregation.

The equations and formulae in some chapters may prove daunting and perhaps dissuade one or two students. However, help is again on hand with further detailed information and useful reading. Those that persevere may not find it amusing that the authors admit some of the chapters are obsolete in the 'postgenomic era', this admission being strategically located after those chapters have been ploughed through. However, I think

in this respect they are correct, for though superseded they nevertheless provided a valuable historical perspective and should probably be read. Generally, this is a well-written book and the use of boxes and figures enhances the overall accessibility. These flow with the text and help to illustrate as opposed to being located several pages from the point that is being made. However, a question and answer section at the end of some or all of the chapters is a glaring omission and one that could have considerably aided student comprehension. Also, although generally well referenced, these are then collated at the end; perhaps a more comprehensive selection may have resulted from a chapter listing. An opportunity to emphasise the points made is presented by the summary sections for each chapter. However, in all cases, while a relatively extensive introduction has been made these sections are disappointingly short. Again a combination of question and answer with summary points would have been most beneficial. Finally, I felt that a longer epilogue or even a chapter speculating on the future prospects for genetic analysis in light of recent developments might have been appropriate. The authors clearly have a vast amount of experience and their thoughts on the future for this field would have made for interesting reading.

These minor points aside I would recommend this book as a valuable text for those wishing to know more about this subject.

As a postscript, I remain in the dark as to the significance of the cover design also used as a chapter heading and general icon throughout the book. A straw poll of colleagues turned up a number of suggestions from a cross-section of a *Drosophila* brain to the X-chromosome. However, its true identity is unknown or well hidden in the body of the text.

G Brock

Division of Molecular Genetics, Institute for Biomedical and Life Sciences, University of Glasgow, Anderson College 5, 56 Dumbarton Road, Glasgow 11 6NU, Scotland, UK
E-mail: gjb5j@udcf.gla.ac.uk