

Methods in Molecular Genetics. Gene and Chromosome Analysis (Part A). Kenneth W. Adolph (ed.). Academic Press (Harcourt Brace), London. 1993. Pp. 404. Price £34.00, hardback, ISBN 0 12 044301 5.

The preface to this book states that "this new series *Methods in Molecular Genetics* will provide practical experimental procedures for use in the laboratory" and that it "will be of value to researchers, as well as to students and technicians". Since the editor explains that molecular genetics is concerned with DNA sequences of genes, regulation of gene expression, and the proteins encoded by genes, you could be forgiven for having the same expectations of the book as I did. "Great", I thought. Something to bridge the gap between consulting Maniatis, and having to traipse over to the library to find that *particular* paper". That particular paper, of course, is always in the journal which 'should be on the shelves, because it's not out on loan', but is in fact lost for ever down the back of some photocopier. I hoped that this book would deal with topical areas of research, whilst remaining sufficiently general to be easily 'dipped into' when experimental tips were required from those who had been there before. To my disappointment, the book did not turn out to be the oracle I had envisaged.

This first volume, '*Gene and Chromosome Analysis*' (Part A) is on eukaryotic cells and, in particular, human cells. It is divided into five sections: Gene Cloning; Cell Hybrids; Chromosome Mapping; DNA and DNA-Protein Interactions and Gene Expression — each of which presents selected new methods relevant to important topics such as genome organization, development and cancer. I suppose it was unreasonable to expect that such diverse subjects could be covered within four hundred pages, without some assumption of the prior knowledge of the reader, but I consider it my prerogative as a reviewer to be unreasonable. If the book is aimed at readers who require an explanation of what molecular genetics and related fields are concerned with, then those readers (in embarking on most of the techniques described in the book) are being asked to beat Lynford Christie over 100

metres before they can walk. In my opinion, even a reputable molecular biology lab would have difficulty in performing some of the experiments described. This is not meant to detract from the skills of 'reputable molecular biology labs', (whatever they may be) but to stand as testament to what this book's contributors are achieving in their labs.

The contributors provide comprehensively detailed and referenced chapters to demonstrate exactly what can be achieved with a bit of know-how (and a little funding) in the field of molecular biology. The book would be very useful for someone in a closely related field, because of this level of detail (such as where one obtains suitable micro titre plates) and the extensive referencing in each chapter. However, I feel that such facts are co-incidental to many readers who might be interested in the field, but not to the level, for example in chapter 10, of wanting to produce detailed DNA maps of large chromosomal regions (let alone invest in an automated workstation to achieve this).

To return to my point concerning the level at which the book is pitched, I feel that its overall impact could have been strengthened by a little editorial intervention. This is not to say that the content of the chapters should have been diluted, but a brief general discussion of the aspects considered in each of the five sections would have greatly aided the reader who was not completely familiar with the field. In summary, if you are involved in the specific fields covered in this volume, and are prepared to invest in the automated work station if need be, you should buy this book (after all it won't break your bank). However, if you are just looking for a general appreciation of the area and techniques involved, get it out of the library. Either way, it represents a good read, but if you buy it, you will only want to go on spending!!!

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