

manipulation of antibody effector functions and production of antibodies and fragments in both eukaryotic and prokaryotic systems.

The book assumes that the reader has a good background knowledge of recombinant DNA techniques and to some extent antibody engineering itself. A better balance could have been obtained by including a general first chapter introducing in more depth the concepts and theories behind the practical protocols including advice relevant throughout the book. For example, 'Recommendations on the Preparation and Use of a PCR Room' does not appear until Chapter 7, whereas the technique itself is mentioned in earlier chapters. A glossary of terminology is also missing, a valuable source of information for a novice in this particular field. Practical approach guides can prove to be a valuable source of 'base' protocols even for the most experienced researcher in the field. This text is well structured with short introductions to the chapters and to each protocol. The methods themselves are easy to follow, well detailed, step by step guides.

Antibody Engineering — A Practical Approach brings together a number of authors under the editorial control of McCafferty, Hoogenboom and Chiswell. The result is a comprehensive guide that will act as a valuable practical reference source for any researcher entering the field of antibody engineering.

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Chromosomes Today, vol. 12. N. Henriques-Gil, J. S. Parker and M. J. Puertas (eds). Chapman and Hall, London. 1997. Pp. 379. Price £60, hardback. ISBN 0 412 75240 9.

The volumes of *Chromosomes Today* represent the proceedings of the International Chromosome Conference (ICC), a meeting that takes place every three years. The meeting consists of poster sessions and about three solid days of plenary lectures reviewing recent developments in cytogenetics. I have found the meetings an excellent way to keep up with research on chromosomes, and *Chromosomes Today* a valuable reference book thereafter.

Chromosomes Today, 12 includes papers based on all the plenaries at the 1995 ICC in Madrid (the poster abstracts are published in the 1995 *Chromosome Research*, 3 supplement 1). It stands out relative to its predecessors with regard to quality of production; presumably 'camera ready' days are gone forever! There are many superb colour photographs of chromosomes and even black-and-white portraits of the plenary lecturers.

Although 'International', the Chromosome Conference has always been substantially a European affair, and, as can be seen from the list of authors to *Chromosomes*

Today, 12, there was a particularly strong Iberian representation among the plenaries at the 12th ICC. While I would have preferred more input from North American and Australasian cytogeneticists, I do believe that *Chromosomes Today, 12* is successful as a remarkably wide-ranging survey of the current state of research on chromosomes, with 22 chapters each averaging 17 pages in length. There are up-to-date contributions on many of the long-term favourite issues in cytogenetics: involvement of chromosomal change in cancer, identity or otherwise of chiasmata and cross-over events, selfishness v. neutrality of B chromosomes, orientation of univalents and sister-chromatid cohesion at meiosis, and cell cycle control from a chromosomal perspective. Other more 'modern' issues (Y-linked genes in mammals, DNA methylation, genomic imprinting) are also covered and throughout the volume we are feasted with the greatest excitement of current cytogenetics: the incredible technical developments (FISH, GISH, chromosome painting etc.) applied within a wide variety of studies.

I particularly enjoyed the review papers on use of nucleases in elucidating chromosome structure (Gosálvez *et al.*), the characteristics of chromosome regions that form G-, R- and T-bands (Craig & Bickmore), chromosome behaviour at earliest meiotic prophase (Scherthan) and the power of molecular techniques in understanding plant evolutionary biology (Leitch *et al.*). Also worthy of special mention are Peter Cook's minimalist model of chromosome packing, Harald Biessmann's fascinating story of *Drosophila* telomeres and Milton Gallardo's controversial contention that there is a tetraploid species of mammal.

All-in-all, this volume continues the excellent tradition of *Chromosomes Today* and is well worth reading. Unfortunately, at a cost of £60 it seems destined for library shelves rather than individual collections. Although the book is generally well put-together there are a few minor irritations with respect to editorial control, that I hope will be corrected for volume 13: all contributions should have had summaries, more consistency in chapter length and quality of English would have been desirable, and the colour plates and their legends could have been better positioned.

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Biological Invasions. Mark Williamson. Chapman and Hall, London. 1996. Pp. 244. Price £24.99, paperback. ISBN 0 412 59190 1.

Biological invasions are fascinating phenomena, and I can think of no-one better qualified than Mark Williamson to write about them. His interest in the subject developed