

is to be found at a few research establishments and a few farms scattered throughout the U.K. It has been developed over the last 25 years or so, all the people concerned with the venture are alive and active, and publications about it go back to at least 1969. It now seems that it may have a single gene which increases litter size, and which closely mimics the Booroola gene if it is not the same one. The breed was developed by screening diverse populations which, if success is anything to go by, is worth all the other genetic manipulations put together. Yet, in the index to this volume, there are only two references to Cambridge sheep, though they missed at least one (page 16). One reference is the most fleeting possible, and merely includes the Cambridge in a whole list of prolific sheep. The other describes the use of the Cambridge in an experiment on rearing multiple lambs at pasture. Otherwise, the breed and the work on it is totally ignored. At least the method of selection used to develop it might have been more thoroughly examined, along with other possible methods. More serious perhaps is the wider neglect of this material for research. The Cambridge may not be everyone's idea of a good commercial breed, mostly because it has more lambs per ewe than the ordinary flockmaster can manage. But I find it hard to imagine that research workers can get excited about differences of 0.15 of a lamb when the Cambridge breed has resulted in differences of several fold. The omission is hard to explain. I can scarcely believe it was from ignorance, and I am loath to believe it was from prejudice. I also wondered whether I should say something about the lack of reference to the New Zealand success story with co-operative breeding schemes to improve prolificacy. But that puts me in danger of betraying a prejudice of my own, so I decided it was safer not to mention the point.

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Genetic Recombination. Edited by JOHN H. WILSON. Berkshire: Addison-Wesley. 1985. 517 pp. £29.95. ISBN 0 8053 9790 6.

This book has a misleading title. It is not a new volume designed to bring us up-to-date on the current state of the art and arguments concerning all aspects of genetic recombination, as one might expect, but something quite different: a reprinting of ten reviews from *Annual Reviews of Genetics*, four from *Annual Reviews of Biochemistry* and one from *Annual Reviews of Plant Physiology*, published originally over the years 1975–1983 and all devoted to particular aspects of genetic recombination. The articles are grouped under the headings MEIOTIC RECOMBINATION (six reviews), MITOTIC RECOMBINATION (four reviews) and BACTERIAL RECOMBINATION (five reviews which include articles on the two phages T4 and P1 but omit lambda).

These reviews are generally very well written, were more than up-to-date at the time of writing since unpublished work was described wherever possible, and they retain more than a historical interest in view of the importance of the subject. So it would be valuable for anyone with a particular interest in genetic recombination to have them all on the shelf together. However, the articles all come from volumes which should be readily accessible in most libraries used by potential readers, and it is questionable whether such duplication is really worth while. Potential customers should, therefore, be quite sure what they are buying before laying out £29.95. It is also worth remarking that the complexities of the processes involved in genetic recombination make for heavy reading, which will no doubt become easier when they are better understood.

This book is one of a new series called the Annual Reviews Special Collections Program, based on the Annual Reviews volumes so that no other review sources such as *Advances in Genetics* or *Microbiological Reviews* are tapped. It will be interesting to see what other

broad topics can be extracted from the last 10 years of Annual Reviews Inc. publications to make up an attractive volume for the busy reader, and whether other Review Series follow suit.

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Methods in Microbiology, Vol. 17: *Plasmid Technology*. Edited by PETER M. BENNETT and JOHN GRINSTED. Florida: Academic Press. 1985. 336 pp. £25.00. ISBN 0 12 521517 7.

Plasmids have now been detected in nearly fifty genera of bacteria, including members of all the main bacterial groups, and it seems that no genus (and perhaps no species) will be found which has managed to do without them. So plasmids have a great intrinsic interest, due to the varied contributions they make to bacterial life and their ability to evolve for the benefit of their hosts, quite apart from their major contribution to genetic engineering progress. This book succeeds in giving at the same time both a brief survey of current knowledge on many aspects of plasmid biology, with useful historical information and references incorporated, and also a series of well-tried recipes for performing the main techniques available for studying and making use of plasmids.

The topics covered, after a general introduction on identification of plasmids at the genetic level, include conjugation, transformation by plasmid DNA, study of plasmid replication *in vivo*, isolation, purification and electron microscopy of plasmid DNA, use of restriction endonucleases, analysis of clones based on hybrid plasmids, the detection and use of transposable elements, minicell systems, and DNA sequencing. The articles generally assume a rather minimal technical experience in the reader, and include sufficient detail in describing procedures and notes on what is critical in the various techniques, for them to be useful to students and newcomers in the field. The simplified procedure for extraction with phenol (chapter 6), and the details of different transformation procedures (chapter 4) are good examples. The editors have also taken care to avoid too much duplication between different articles. The book is comparatively cheap for a hardback at £25.00, and should be of value as a handbook in many laboratories as well as on the shelves of Biology Department Libraries. It stands up well to the competition from the many books on genetic engineering which have recently appeared, and I don't think it will rapidly become outdated.

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Psychological Aspects of Genetic Counselling. Edited by ALAN E. H. EMERY and IAN M. PULLEN. Florida: Academic Press. 1984. 256 pp. £19.50 (Cloth). ISBN 0 12 238220 X.

Doctors are increasingly aware that most if not all aspects of clinical practice have psychological implications for the patient. Paradoxically, patient counselling receives little or no emphasis in the medical undergraduate curriculum and most learn piecemeal by practical experience. This is especially relevant to genetic counselling which if poorly performed can have disastrous consequences for the consultands and their families.

This book has 17 contributors and covers a wide variety of topics which are broadly related to genetic counselling and reproductive planning. Certain messages are recurrent