Some understanding of basic mathematics helps. The exposition is clear and thorough, such that for geneticists the book is a good teaching manual for general statistical methods, such as (maximum) likelihood and the newer jackknife and bootstrap techniques.

An appendix of some 50 pages of listing of computer programs is included, for use in estimating linkage disequilibrium and *F* statistics and manipulating DNA sequence data. The programs are themselves useful, but I fail to see the point of these listings, as anyone wanting to use them would request them on disk rather than attempt an error-free retyping.

The book's most significant feature is that it is *useful* both as a teaching and reference manual, and I think it is likely to become a standard. One anecdote suggests this: As soon as I received a copy of the book, one of my students borrowed and kept it, reluctantly returning it for me to review because Christmas approaches and she hopes to get money to buy her own.

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Methods in Molecular Biology IV: New Nucleic Acid Techniques. Edited by JOHN M. WALKER. Clifton, New Jersey: Humana Press, and Chichester UK: John Wiley & Sons. 1990. 560 pages. £42. ISBN 0 89603 127 6.

My father was a marine engineer and the only manual I ever saw him consult was an ancient and weighty tome entitled *The Efficient Use of Steam*. Unfortunately, genetic engineers cannot pass on to their apprentices a similar compendium of timeless truths. Instead they can spend largish sums on technical manuals that rapidly become obsolete.

What should one look for in such a manual? Obviously they should describe new techniques with an adequate theoretical background and reference list. They should also be written by experienced practitioners who can provide clear and well tested protocols. Particularly if a technique is novel these requirements are not always achieved. This is most obvious in a couple of chapters of this volume where the authors are courageous enough to publish the photographic record of the experiment and the result is no advertisement for their protocol.

While this volume does provide a great deal of useful information, most of it can be found in published manuals. Whether or not it is desirable, a new generation of molecular biologists are being brought up on kits. These kits come with protocols which are sometimes poor but generally more detailed than the protocols presented here. Neither the kits nor this manual really attempt controlled comparisons between alternative novel techniques in a rapidly developing area such as the detection of single copy genes with chemoluminescent probes. This book is useful in parts but unlikely to become standard since the established manuals cover the basics more comprehensively and the attempt to concentrate on more recent and more specialized areas runs into problems of rapid obsolescence and competition from the 'kit protocols'.

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