Mammalian Development: A Practical Approach. Edited by M. MONK. IRL Press Ltd. 1987. 335 pages. Paperback £18.00, US$34.00. ISBN 1 85221 029 X. Hard cover, £27.00, US$49.00. ISBN 1 85221 030 3.

The first thing that struck me about the book was an appropriately scaled mouse on one of the cover photographs. This reflects what follows in the contents: many of the protocols are designed and scaled to deal with small amounts of material. The book consists of a collection of protocols from different laboratories. The protocols cover methods used for the recovery of eggs and embryos and various ways to study and manipulate them. As expected, most of the chapters deal with material derived from the mouse. The final chapter however, concerns itself with the retrieval, culture and fertilization of human eggs.

The first chapter, on husbandry, teaches you how to handle and look after your first mice. It is easy to become overrun by animals, so methods for keeping experiments on ice are described later in the book, in a chapter on long-term preservation of mouse oocytes and embryos. The manipulation methods described are on the handling of pre- and post- implantation mouse embryos, microinjection of DNA into fertilized mouse eggs, nuclear transplantation and the construction of chimeric mice. The analytical methods include *in situ* hybridization to RNA, cell marking, protein analysis on a miniaturized scale, construction of cDNA libraries from eggs and embryos, quantitative microenzyme assays on HPRT and PGK and the analysis of meiotic and mitotic chromosomes. It is surprising that there is scant mention of embryo-derived stem cells (ES or EK cells). Another book in the series covers this topic well; surely the reader should be referred to it.

The general format of the book is as follows: each chapter consists of a description of the methods and is accompanied by detailed protocols listed in tables, and complemented by informative diagrams and photographs. The methods described are those used in the authors' laboratories, although alternatives for some of the steps are cited. Especially welcome are the inclusion of trouble-shooting sections and the listing of equipment and chemical suppliers. Experiments with animals can be very expensive. In view of this, the price is very reasonable, especially when considering that the same amount of money would only buy six mice or 1000 units of a cheap restriction enzyme. I am confident that the book will be very useful for both those entering and established in the field.

Many of the areas covered by 'Mammalian development: a practical approach' have also been described by Hogan, Constantini and Lacy in *Manipulating the Mouse Embryo*. Ann McLaren in her introduction states 'Any self-respecting laboratory of mammalian development needs to have both books on its shelves'. I wholeheartedly agree, although maybe their place is open on the bench.

RAYA AL-SHAWI
Department of Genetics
University of Edinburgh

Vaccines '87: Modern Approaches to New Vaccines. Prevention of AIDS and Other Viral, Bacterial and Parasitic Diseases. Edited by R. M. CHANOCK, R. A. LERNER, F. BROWN and H. GINSBERG. Cold Spring Harbor: Cold Spring Harbor Laboratory, New York. 1987. 461 pages. Paper, $95.00. ISBN 0 87969 302 9.

This most recent product of the annual meetings on Modern Approaches to Vaccines at Cold Spring Harbor is an extremely well-edited volume which accurately reflects the breadth of work being carried out in the field of vaccine development. The broad spectrum of the authors from this 1986 conference, ranging from the peptide chemist through the molecular biologist and geneticist to the cell biologist and immunologist, together with the wide range of diseases being studied, retroviral, viral, bacterial and protozoan, allows a unique perspective of vaccine research to be presented. The binding and quality of print does slightly detract from the reader's enjoyment of the book, however. Over several readings, a few pages became detached and there was a tendency for the print to 'smudge'.

As with most books of this type, the delay between conference and publication will lead readers to find that some articles in their field are a little bit dated, but the breadth of topics covered ensures that there is something there for everyone. The articles are divided into five sections: Immunology; AIDS; Pathogenic Bacteria and Glycoproteins; Pathogenesis and Attenuation; and Recombinant Vectors and Parvoviruses. As a disease, AIDS dominates the volume, occupying over 25% of the contributions. However, this rightly reflects its new dominance as the world's most important health hazard, and care is given to present a number of articles for non-AIDS specialists, which review very well aspects of the molecular biology, immunology, pathogenesis and epidemiology of the disease, before moving on to discuss particular vaccine-related projects. Malariologists also have few grounds for complaint, with their subject receiving six of the eight articles related specifically to parasite vaccines.

The main value of this volume, however, lies, not in its analysis of particular diseases, but in its emphasis on Basic Immunology and New Technologies for Immunization. The Immunology section contains a very useful article by Berzofsky *et al.* outlining the importance of defining epitopes recognized by helper T cells if we wish to induce a 'memory' response or cytolytic T-cell response from a candidate vaccine. The requirement for a T-cell response was one of the