

Aggregation chimaeras

Mammalian Chimaeras. By A. McLaren. Pp. 154. (Cambridge University: Cambridge, London and New York, 1976.) £8.

It might be said that the laboratory mouse is the *Escherichia coli* of modern mammalian biology, since great things are expected of this species. Mouse genetics is one field in which the Woman's Liberation Movement is already passé, for the field has long been dominated by a group of outstanding ladies. Dr McLaren is certainly one of them. Her little book, as she lovingly calls it, certainly shows her intelligence and breadth of understanding.

Characteristically feminine attentions to details are most pleasing. The subjects are mostly what have variously been called allophenic or tetraparental mice produced by the fusion of two blastocysts, but Dr McLaren prefers to call them aggregation chimaeras. Injection chimaeras refer to those that are produced by the injection of one or more cells into a blastocyst of a different genotype as practiced by Richard Gardner. These animals are very useful for analysis of clonal differentiation of embryonic cells. Degrees of intermingling that inevitably occur between neighbouring clones can also be assessed. They are also ideally suited to distinguish genetic effects that are mediated through humoral factors from those that are

exclusively intracellular. The wealth of information accumulated by Tarkowski, Minz, McLaren, and by a number of others, is presented in a very orderly manner and in sufficient detail.

Inevitably, a few very important pieces of information apparently failed to make the deadline, but who can blame the author for this. For example, M. F. Lyon's recent demonstration that totally androgen-insensitive *Tfm/Y* male germ cells in the body of chimaeric male mice can mature and differentiate to functional spermatozoa was nearly a fatal blow to those who believed in the androgen dependence of male germ cells. Similarly, the discussion on the great preponderance of males among XY/XX chimaeric mice would have become more meaningful if more recent findings on H-Y antigen's testis-organising functions were introduced.

With regard to immunology, another recent finding that Ia antigens, controlled by at least two immune response (I_r) loci, are very strongly expressed on B cells, but only very weakly on most T cells, would surely have modified Dr McLaren's discussion of findings on chimaeric mice between high responder and low responder strains.

I believe that almost every problem-solving biologist who deals with higher vertebrates would find this book instructive and informative.

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Practical problems of the visual world

Vision and Acquisition: Fundamentals of Human Visual Performance, Environmental Influences and Applications in Instrumental Optics. By Ian Overington. Pp. xix 380. (Pentech: London; Crane, Russak: New York, 1976.) £14.

This is an unusual and useful book. Its main value is that it focuses attention on the problem of how a human detects and recognises a target in adverse conditions.

Although much of the work described was undertaken for military purposes, many of the results are pertinent to civilian life—for example, the flying of modern high speed aircraft poses many human problems particularly in visual performance. But even at the lower speed of driving a car many accidents are believed to occur because of a failure in visual perception or recognition. This is

particularly true in motorway driving in poor visibility, often resulting in a tragic loss of life and injury.

The book is particularly valuable in that it contains many references to special reports that most visual scientists would not come across. There are a few errors particularly when the physiology of vision is discussed, but none of these are of a misleading nature.

I hope that this book will encourage some laboratory bound visionaries to look out of the window and consider the practical problems that the visual world presents. Conversely, it may also encourage engineers to pay more attention to modern visual physiology and possibly even to seek the advice of visual scientists more frequently.

The book is very neatly presented and illustrated, and bears the high price of today's publication costs.

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Virology symposia

Animal Virology. (ICN-UCLA Symposia on Molecular and Cellular Biology. Vol. IV. Edited by D. Baltimore, A. S. Huang and C. F. Fox. Pp. xi+824. Academic: New York and London, 1976.) \$29.50; £18.

THE ICN-UCLA Symposia on Molecular and Cellular Biology held each spring at skiing resorts in California or Colorado provide a pleasant and useful forum for the subjects discussed. Baltimore, Huang and Fox organised what seems to have been a most interesting meeting on animal viruses, that even included a session on plant viruses. Much of the emphasis was on viruses known to be oncogenic, including an interesting session on cell transformation and differentiation, but there were also sessions on the molecular organisation of negative-strand RNA viruses, on viral messenger RNA synthesis, and on viral protein synthesis. Thus, as the organisers say in the preface (as editors of the published proceedings), "this meeting considered broad issues and recent advances in animal virology, and treated tumor viruses in the context of the range of animal viruses rather than as a separate problem."

In my opinion this volume should never have been published. True, it is one of the better volumes of its kind, but I deplore the practice of routine publication of symposia proceedings. It clutters up the literature and overburdens library budgets. Perhaps some of these volumes are profitable to publishing companies: they are not profitable to scientific endeavour. The only purpose it serves is to amplify the contributors' publication lists. The ICN-UCLA symposia are published by typescript photo-reproduction methods and appear about 6 months after the meetings are held. Most of the papers in the volume under review had by that time been printed with essentially identical data in academic journals as proper publications. Those that have not, may have been disapproved by reviewers and editors. The symposia proceedings are not subject to review and there is no distinction between invited and proffered papers.

Scientific organisers of symposia are usually apologetic on requesting manuscripts for publication, explaining that the financial sponsors demand them. The sponsors should realise that the meeting is important, not the publication, and there are other ways of making the sponsorship known. It is time that scientists declined to present talks on current research at symposia if publication is obligatory.

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