

to the evolution of his master species) and I. I. Gottesman discussing the nature of psychological traits, explaining the complex genetic bases likely to be involved and the manifold sources of relevant knowledge in fields like pharmacogenetics and cytogenetics.

J. A. BEARDMORE

*Department of Genetics, University College of Swansea*

GENETIC MOSAICS AND OTHER ESSAYS. Curt Stern. Harvard University Press (distributed in England by Oxford University Press). 1968. Pp. 185. 62s.

One expects anything written by Professor Curt Stern to be of major interest; this book is no exception. Written in a direct and simple style which effectively overcomes the conceptual difficulty of much of the material, the reader is carried buoyantly along by Stern's evident enthusiasm.

There are four essays of different lengths; in the first, "Mendel and Human Genetics", Stern traces the development of the subject, its beginnings and highlights the interaction between the key scientists involved.

The largest work in the book is a review of genetic mosaics—individual organisms which consist of cells of more than one genotype—in particular as they occur in *Drosophila*, mice and humans. The account is liberally spiced with examples, illustrating the myriad origins of mosaicism. Stern finds grounds for speculating that while the identification of one's father is proverbially uncertain, one also cannot be sure of the identity of one's genetic mother—she may even be one's uncle! One of the commonest types of mosaic is a gynander—where cells of male and female genotype coexist in one individual: in mammals the physiology and behaviour of gynanders is complicated by the circulating sex hormones, but in insects the expression of the sexual state of the cell may be quite autonomous.

Under the general heading of mosaics Stern also includes animals which contain populations of cells of functionally different genotype, and therefore discusses the Lyon hypothesis, intersexes and even antibody formation.

In the third essay Stern illustrates how artificially induced genetic mosaics have provided material for the study of cellular interaction in developing tissues. Stern and his school have made central contributions to this area of research—one of the most difficult and challenging mysteries left in biology. In spite of Stern's efforts there is a danger that the reader will become inextricably enmeshed in semantics, but the elegance of the methods described is bound to appeal.

Finally there is a reprint from *Science* of a short "sermon" on the joys and pitfalls of the research life. This reminds one that the modern fashion of writing about experiments as objectively as possible leaves out the personality of the investigator, and allows here a welcome glimpse of Professor Stern.

This book must be read and will be enjoyed by anyone whose field of interest overlaps even slightly with its contents and there will be few who can compete with Stern's deep knowledge and balanced view of the literature.

PETER A. LAWRENCE

*Department of Genetics, University of Cambridge*