

# The Making of a Fly: The Genetics of Animal Design

*Peter A. Lawrence*

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**Peter A. Lawrence : The Making of a Fly: The Genetics of Animal Design** before purchasing it in order to gauge whether or not it would be worth my time, and all praised *The Making of a Fly: The Genetics of Animal Design*:

0 of 0 people found the following review helpful. Five Stars By Ryan Massie I love it the best book I ever bought! 2 of 4 people found the following review helpful. complex book By Customer you need knowledge of genetics to enjoy it, tried to follow the stages of development but it is almost just a laboratory note book 27 of 31 people found the following review helpful. Self-builder By Howard Schneider The general reader interested in not only how a single fly egg cell develops into a complex, formed fly, but how genetic and molecular biological experiments are used to determine such mechanisms, will find this book useful. The maternal systems that establish positional information in the egg cell, followed by the development of parasegments, and followed by expression of groups of cells, are described. It is shown that a large amount of genetic information is required to simply organize the embryo, besides building it. Many of the genes discussed have homologues in other higher animals such as vertebrates.

Understanding how a multicellular animal develops from a single cell (the fertilized egg) poses one of the greatest challenges in biology today. Development from egg to adult involves the sequential expression of virtually the whole of an organism's genetic instructions both in the mother as she lays down developmental cues in the egg, and in the embryo itself. Most of our present information on the role of genes in development comes from the invertebrate fruit fly, *Drosophila*. The two authors of this text (amongst the foremost authorities in the world) follow the developmental

process from fertilization through the primitive structural development of the body plan of the fly after cleavage into the differentiation of the variety of tissues, organs and body parts that together define the fly. The developmental processes are fully explained throughout the text in the modern language of molecular biology and genetics. This text represents the vital synthesis of the subject that many have been waiting for and it will enable many specific courses in developmental biology and molecular genetics to focus on it. It will appeal to 2nd and 3rd year students in these disciplines as well as in biochemistry, neurobiology and zoology. It will also have widespread appeal among researchers. Authored by one of the foremost authorities in the world. A unique synthesis of the developmental cycle of *Drosophila* - our major source of information on the role of genes in development. Designed to provide the basis of new courses in developmental biology and molecular genetics at senior undergraduate level. A lucid explanation in the modern language of the science.

From the Back Cover Understanding how a multicellular animal develops from a single cell (the fertilized egg) poses one of the greatest challenges in biology today. Development from egg to adult involves the sequential expression of virtually the whole of an organism's genetic instructions both in the mother as she lays down developmental cues in the egg, and in the embryo itself. Most of our present information on the role of genes in development comes from the invertebrate fruit fly, *Drosophila*. The two authors of this text (amongst the foremost authorities in the world) follow the developmental process from fertilization through the primitive structural development of the body plan of the fly after cleavage into the differentiation of the variety of tissues, organ and body parts that together define the fly. The developmental processes are fully explained throughout the text in the modern language of molecular biology and genetics. This text represents the vital synthesis of the subject that many have been waiting for and it will enable many specific courses in developmental biology and molecular genetics to be focussed upon it appealing to 2nd and 3rd year students in these disciplines as well as in biochemistry, neurobiology and zoology. It will also have widespread appeal amongst researchers.