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Titolo	Molecular Genetics of Axial Patterning, Growth and Disease in the Drosophila Eye // edited by Amit Singh, Madhuri Kango-Singh
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Early eye development: Specification and Determination -- Molecular genetic mechanisms of axial patterning: Mechanistic insights into generation of axes in the developing eye -- Catching the Next Wave: Patterning of the Drosophila Eye by the Morphogenetic Furrow -- Cell Morphogenesis -- Cell Polarity in Drosophila Retina -- Negative regulation for neural patterning in the Drosophila eye -- Cell Adhesion during Drosophila eye development -- Modulation of Developmental Signaling by the Proteostasis Network -- Drosophila eye as a model to study regulation of growth control: The discovery of size control pathways -- Contribution of the Drosophila eye to unraveling the basis of neurodegeneration -- Genetic regulation of early eye development in non-dipteran insects -- Development and evolution of the Drosophila Bolwig's organ: a compound eye relict -- Index.
Sommario/riassunto	Undoubtedly, Drosophila melanogaster, fruit fly, has proven to be one of the most popular invertebrate model organisms, and the work horse for modern day biologists. Drosophila, a highly versatile model with a genetic legacy of more than a century, provides powerful genetic, cellular, biochemical and molecular biology tools to address many

questions extending from basic biology to human diseases. One of the most important questions in biology focuses on: how does a multi-cellular organism develop from a single-celled embryo? The discovery of the genes responsible for pattern formation has helped refine this question. *Drosophila* eye model has been extensively used to study molecular genetic mechanisms involved in patterning and growth. Since the genetic machinery involved in the *Drosophila* eye is similar to humans, it has been used to model human diseases and homology to eyes in other taxa. This book will discuss molecular genetic mechanisms of pattern formation, axial patterning, growth regulation in *Drosophila* eye, and more.
