

Contents

Early Eye Development: Specification and Determination	1
Emmi Bürgy-Roukala, Sara Miellet, Abhishek K. Mishra and Simon G. Sprecher	
Molecular Genetic Mechanisms of Axial Patterning: Mechanistic Insights into Generation of Axes in the Developing Eye	37
Meghana Tare, Oorvashi Roy Puli and Amit Singh	
Catching the Next Wave: Patterning of the <i>Drosophila</i> Eye by the Morphogenetic Furrow	75
Justin P. Kumar	
Cell Morphogenesis: Tracing the Paths of Induction During <i>Drosophila</i> Ommatidial Development	99
Jennifer Curtiss	
Cell Polarity in <i>Drosophila</i> Retina	141
Sang-Chul Nam	
Negative Regulation for Neural Patterning in the <i>Drosophila</i> eye	163
Kwang-Wook Choi	
Cell Adhesion During <i>Drosophila</i> Eye Development	183
Ruth I. Johnson	
Modulation of Developmental Signaling by the Proteostasis Network	203
Kristin D. Patterson and Janice A. Fischer	
<i>Drosophila</i> Eye as a Model to Study Regulation of Growth Control: The Discovery of Size Control Pathways	229
Shilpi Verghese, Indrayani Waghmare, Shree Ram Singh and Madhuri Kango-Singh	

Unraveling the Basis of Neurodegeneration using the <i>Drosophila</i> Eye	271
Pedro Fernandez-Funez, Jonatan Sanchez-Garcia and Diego E. Rincon-Limas	
Genetic Regulation of Early Eye Development in Non-dipteran Insects . .	295
Markus Friedrich, Ying Dong, Zhenyi Liu and Iris Yang	
Development and Evolution of the <i>Drosophila</i> Bolwig's Organ: A Compound Eye Relict	329
Markus Friedrich	
Index	359

Molecular Genetics of Axial Patterning, Growth and
Disease in the Drosophila Eye

Singh, A.; Kango-Singh, M. (Eds.)

2013, XIV, 368 p. 68 illus., 63 illus. in color., Hardcover

ISBN: 978-1-4614-8231-4