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Titolo	Neurogenetics : Current Topics in Cellular and Developmental Neurobiology / / edited by Boris Egger
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Descrizione fisica	1 online resource (215 pages)
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Chapter 1. Introduction to neurogenetics -- Chapter 2. Neurogenetic analysis in Caenorhabditis elegans -- Chapter 3. Regionalisation of the early nervous system -- Chapter 4. Early neurogenesis and gliogenesis in Drosophila -- Chapter 5. Neural stem cells and brain tumour models in Drosophila -- Chapter 6. Eye development in Drosophila: from photoreceptor specification to terminal differentiation -- Chapter 7. Neurogenetics of memory, learning and forgetting -- Chapter 8. Evolution and origins of nervous systems -- Chapter 9. Neural stem and progenitor cells in the mammalian brain -- Chapter 10. Models of neurodegenerative diseases.
Sommario/riassunto	This textbook provides students with knowledge of neurogenetics, neurogenesis, neuronal specification and function, neuronal networks, learning and memory formation, brain evolution, and neurodegenerative diseases. Students are introduced to topics of

classical developmental genetics as well as modern molecular and neurogenetic methods. Using a wealth of examples from current research, the textbook takes a strong applied approach. Using animal models such as Drosophila melanogaster and Caenorhabditis elegans as well as mammalian systems, the interrelationships between genes, neurons, nervous systems, and behaviour under normal and pathological conditions are illustrated. The textbook aims encourage students to address biological questions in neurogenetics and to think about the design of their own experiments. It targets primarily master and graduate students in neurobiology, but is also a valuable teaching tool for instructors in these fields.