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Nota di contenuto	Chapter 1: Introduction -- Chapter 2 : Rodent Models of Down Syndrome I: Mouse & Rat -- Chapter 3: Rodent Models of Down Syndrome II: Mouse -- Chapter 4: Rodent Models of Down Syndrome III: Mouse -- Chapter 5: Modeling Down Syndrome in <i>C. elegans</i> -- Chapter 6: Modeling Down Syndrome in <i>Drosophila</i> -- Chapter 7: Zebrafish Models of Down Syndrome -- Chapter 8: Using Human Brain organoids to Study Down Syndrome -- Chapter 9: Cellular Models: Stem Cells and other Cellular Models.-Chapter 10: Conclusions and Perspectives.
Sommario/riassunto	Down syndrome is a textbook example of a chromosomal disorder and is common, occurring in 1 in 700 live births in the US. While there are many books previously published on the genetics of Down syndrome, and many studies in diverse species, this is the first book of its kind on the research models for Down syndrome that covers animal models. This book offers an in-depth introduction and discussion of the genetic models of down syndrome across diverse species, including rodents, zebrafish, drosophila, and human organoids. Authors use a cross-cutting approach to compare the strengths and weaknesses of each model system, explore how to use model organisms to study human

diseases, and capture the status of the field. This book is a useful resource for biomedical researchers and students interested in using model systems to study Down syndrome and learn about Down syndrome and other chromosomal disorders.

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