1. Record Nr. UNINA9910349443703321

Titolo	The Drosophila Model in Cancer / / edited by Wu-Min Deng
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-23629-3
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (VI, 250 p. 56 illus., 55 illus. in color.)
Collana	Advances in Experimental Medicine and Biology, , 0065-2598 ; ; 1167
Disciplina	614.5999 616.994027
Soggetti	Cancer research Molecular biology Cell biology Biomedical engineering Cancer Research Molecular Medicine Cell Biology Biomedical Engineering/Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Prelims -- Drosophila model in cancer: an introduction -- Using Drosophila models and tools to understand the mechanisms of novel human cancer driver gene function -- The initial stage of tumorigenesis in Drosophila epithelial tissuesi -- Drosophila models of cell polarity and cell competition in tumourigenesis -- Two sides of the same coin – compensatory proliferation in regeneration and cancer -- P53 and apoptosis in the Drosophila model -- Autophagy and tumorigenesis in Drosophila -- Filling the gaps among obesity, the CDK8 module, and uterine tumors using Drosophila -- MicroRNAs in Drosophila cancer models -- Cancer Stem Cells and Stem Cell Tumors in Drosophila -- Drosophila as a model for tumor-induced organ wasting -- Drosophila melanogaster as a model system for human glioblastomas -- What Drosophila Can Teach Us About Radiation Biology of Human Cancers -- Drosophila based cancer drug discovery frameworkIn -- Index.

Sommario/riassunto

This volume provides a series of review articles that capture the advances in using the fruit fly, Drosophila melanogaster, model system to address a wide range of cancer-related topics. Articles in this book provide case studies that shed light on the intricate cellular and molecular mechanisms underlying tumor formation and progression. Readers will discover the beauty of the fly model’s genetic simplicity and the vast arsenal of powerful genetic tools enabling its efficient and adaptable use. This model organism has provided a unique opportunity to address questions regarding cancer initiation and development that would be extremely challenging in other model systems. This book provides a useful resource for a researcher who wishes to learn about and apply the Drosophila model to tackle fundamental questions in cancer biology, and to find new ways to fight against this devastating disease.