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Nota di contenuto	Part 1. Powers Of The Zebrafish Model -- 1. Uncharted Waters: Zebrafish Cancer Models Navigate A Course for Oncogene Discovery -- 2. The Toolbox for Conditional Zebrafish Cancer Models -- 3. Approaches to Inactivate Genes in Zebrafish -- 4. Tumor Suppressors in Zebrafish: From Tp53 To Pten and Beyond -- 5. Identifying Novel Cancer Therapies Using Chemical Genetics and Zebrafish -- 6. Genomic Approaches To Zebrafish Cancer -- 7. Transcriptomic Analyses in Zebrafish Cancer Models for Global Gene Expression and Pathway Discovery -- 8. Zebrafish Discoveries in Cancer Epigenetics -- 9. Lymphatics, Cancer and Zebrafish -- 10. In Vivo Imaging of Cancer in Zebrafish -- 11. Imaging Cancer Angiogenesis and Metastasis in A Zebrafish Embryo Model -- 12. Allograft Cancer Cell Transplantation in Zebrafish -- 13. The Zebrafish Xenograft Platform: Evolution of A Novel Cancer Model and Preclinical Screening Tool -- 14. Automation of Technology for Cancer Research -- Part 2. Cancer Models in Fish -- 15. Zebrafish Models Of Human Leukemia: Technological Advances and Mechanistic Insights -- 16. Zebrafish Rhabdomyosarcoma -- 17.

Baiting for Cancer: Using The Zebrafish as A Model in Liver And Pancreatic Cancer -- 18. How Zebrafish Are Helping Us To Target Colorectal Cancer -- 19. Zebrafish Melanoma -- 20. Neuroblastoma and Its Zebrafish Model -- 21. Zebrafish Germ Cell Tumors -- 22. Malignant Peripheral Nerve Sheath Tumors -- 23. Xiphophorus and Medaka Cancer Models.

Sommario/riassunto

This volume focuses on defining the unique attributes of using the zebrafish cancer model for discovering important pathways and potential drug targets for the treatment of human cancers. Using the zebrafish model, the volume explores oncogene and tumor suppressor discovery, chemical genetic approaches, genomics, epigenetics, cancer imaging, and cell transplantation. Contributed chapters come from the most prominent laboratories working in this field, which provides a unique perspective on zebrafish models from a wide spectrum of the research community. In addition, the book offers a detailed analysis of the most current research in the area for specific zebrafish cancer models, including T cell leukemia, rhabdomyosarcoma, liver and pancreatic cancer, melanoma, neuroblastoma, germ cell tumors, and malignant peripheral sheath tumors. A chapter is also dedicated to the development and utilization of other piscine models of cancer. The compilation of chapters in the volume culminates into a comprehensive and definitive text on zebrafish and cancer, providing a much needed resource on the powerful attributes of the zebrafish model system.