

1. Record Nr.	UNINA9910831194203321
Autore	Heim Sverre
Titolo	Abnormal chromosomes : the past, present, and future of cancer cytogenetics // Sverre Heim, Felix Mitelman
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley-Blackwell, , [2022] ©2022
ISBN	1-119-65203-0 1-119-65204-9 1-119-65205-7
Descrizione fisica	1 online resource (211 pages)
Disciplina	616.994042
Soggetti	Chromosome abnormalities
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	"Explore the past, present, and future of cancer cytogenetics In Abnormal Chromosomes: The Past, Present, and Future of Cancer Cytogenetics, globally renowned researchers Drs. Sverre Heim and Felix Mitelman deliver a state-of-the-art review of how cancer cytogenetic analyses have contributed to an improved understanding of tumorigenesis as well as to the diagnosis and treatment of cancer patients. The book also discusses how cytogenetics -- the study of chromosomes - meets, interacts with, and cross-fertilizes other investigative technologies, including molecular somatic cell genetics. The book provides an impetus to think more deeply about the role chromosomes, and their abnormalities, play in health and disease, especially in neoplastic disorders. From which origins did cytogenetics develop? How did the finding of acquired chromosomal abnormalities in cells of leukemias and solid tumors influence our understanding of cancer as a biological process? How was information of this nature put to good use in the clinical management of cancer patients? Abnormal Chromosomes: The Past, Present, and Future of Cancer Cytogenetics offers readers: A thorough introduction to ancient theories of disease, the advent of cellular pathology, and how a scientific interest in

chromosomes developed Comprehensive exploration of the conceptual importance of Theodor Boveri and his somatic mutation theory of cancer. A detailed chronological resume of cancer cytogenetic discoveries during the century. In-depth discussions of the role of chromosome abnormalities, oncogenes, and tumor suppressor genes in leukemias, lymphomas, and solid tumors, together with a survey of what chromosome analyses have revealed about the clonal evolution of neoplastic cell populations. A discussion of the importance of pathogenetic classifications of neoplastic diseases, the role chromosome abnormalities play in this context, and which technological breakthroughs can be expected in chromosome-oriented cancer research

Abnormal Chromosomes: The Past, Present, and Future of Cancer Cytogenetics was written for everyone with a scientific or clinical interest in cancer, especially how acquired chromosome abnormalities lead to neoplastic transformation. The book teaches how cytogenetic analyses contribute to a better understanding of tumorigenesis, but also how the finding of specific chromosome aberrations can be crucial for the diagnosis, prognosis, and management of cancer patients"--
