1. Record Nr. UNINA9910739427003321

Titolo	Stem cells and prostate cancer / / Scott D. Cramer, editor
Pubbl/distr/stampa	New York, : Springer, c2013
ISBN	1-4614-6498-6
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (182 p.)
Altri autori (Persone)	CramerScott D
Disciplina	616.99 616.99/463
Soggetti	Prostate - Cancer - Genetic aspects Stem cells
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Preface -- Stem Cells and Prostate Development -- Isolation and Characterization of Prostate Stem Cells -- Prostate tumor initiating cells -- TIC Markers and methods of characterization -- Genetic Control of Self Renewal of the TIC -- Therapeutic targeting of the prostate TIC.- The prostate stem cell niche.- Tumor stroma control of the prostate TIC.- Targeting the prostate stem cell for chemoprevention.- Stem cell models for functional validation of prostate cancer genes -- Index .
Sommario/riassunto	Recent evidence demonstrates that normal prostate tissue contains stem cells. There is also accumulating evidence that prostate cancer contains a population of cells with stem cell-like characteristics referred to as cancer stem cells, or tumor initiating cells. Both the normal prostate stem cell and cancer stem cell populations have important implications for the generation, therapeutic targeting, and prevention of prostate cancer. This book will explore the role of stem cells in normal prostate development and prostate cancer, methods for isolation and characterization of normal prostate stem cells and prostate tumor initiating cells, the functional relationship between normal stem cells and prostate tumor initiating cells, the relationship of prostate cancer genetics and self-renewal and differentiation, the prostate stem cell as a target for therapeutics and prevention, and the utility of stem cells for prostate cancer models. This book synthesizes

these concepts and more into a single volume accessible to basic and translational researchers in prostate cancer and beyond.