

1. Record Nr.	UNINA9910842285203321
Titolo	The Heterogeneity of Cancer Metabolism // edited by Anne Le
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-77736-X
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (186 pages)
Collana	Advances in Experimental Medicine and Biology, , 0065-2598 ; ; 1063
Disciplina	616.99407
Soggetti	Cancer research Immunology Cancer Research
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part 1: The metabolism of cancer cells -- Chapter 1: Glucose Metabolism -- Chapter 2: Glutamine Metabolism -- Chapter 3: Amino Acid Metabolism -- Chapter 4: Lipid Metabolism -- Chapter 5: Epigenetics and oncometabolites -- Part 2: Heterogeneity of Cancer Metabolism - Chapter 1: Specific oncogenetic mutations lead to specific metabolic phenotypes within the same tissue of origin -- Chapter 2: Intratumoral heterogeneity of cancer cell metabolism -- - Chapter 3: Differential metabolism in vitro and in vivo -- Part 3: Carcinoma associated fibroblasts -- Chapter 1: Characteristics of CAF's -- Chapter 2: Reverse Warbug EFF -- Chapter 3: Metabolic exchange between CAFs and cancer cells. .
Sommario/riassunto	Genetic alterations in cancer, in addition to being the fundamental drivers of tumorigenesis, can give rise to a variety of metabolic adaptations that allow cancer cells to survive and proliferate in diverse tumor microenvironments. This metabolic flexibility is different from normal cellular metabolic processes and leads to heterogeneity in cancer metabolism within the same cancer type or even within the same tumor. In this book, we delve into the complexity and diversity of cancer metabolism, and highlight how understanding the heterogeneity of cancer metabolism is fundamental to the development of effective metabolism-based therapeutic strategies. Deciphering how cancer cells utilize various nutrient resources will enable clinicians and researchers

to pair specific chemotherapeutic agents with patients who are most likely to respond with positive outcomes, allowing for more cost-effective and personalized cancer therapeutic strategies.
