1. Record Nr. UNINA9910346749103321 Autore Lluis Fajas Titolo Metabolic Adaptation to Cell Growth and Proliferation in Normal and **Pathological Conditions** Pubbl/distr/stampa Frontiers Media SA, 2018 Descrizione fisica 1 online resource (70 p.) Collana Frontiers Research Topics Soggetti Medicine Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Proliferating cells must adapt their metabolism to fulfill the increased requirements for energy demands and biosynthetic intermediates. This adaptation is particularly relevant in cancer, where sustained rapid proliferation combined with the harsh conditions of the tumor microenvironment represent a major metabolic challenge. Noteworthy, metabolic reprogramming is now considered one of the hallmarks of cancer. However, the one size fits all rarely applies to the metabolic rewiring occurring in cancer cells, which ultimately depends on the combination of several factors such as the tumor's origin, the specific genetic alterations and the surrounding microenvironment. In the present Research Topic, we compile a series of articles that discuss different metabolic adaptations that proliferating cells undergo to sustain growth and division, as well as the potential therapeutic

window to treat certain pathologies, with a special focus on cancer.