1. Record Nr. UNINA9910261134303321 Autore Marietta Herrmann Titolo Microenvironment-Derived Stem Cell Plasticity Pubbl/distr/stampa Frontiers Media SA, 2017 Descrizione fisica 1 online resource (114 p.) Collana Frontiers Research Topics Soggetti Medicine Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Plasticity is the hallmark of stem cells. At the same time, stem cells, like Sommario/riassunto any other cell type, are influenced by their microenvironment and respond to it accordingly. A specific microenvironment is defined by a variety of factors, including biological and chemical factors, cell-cell interactions, but also metabolic and mechanical cues. Such dynamic and specialized microenvironment where the stem cells reside is considered a stem cell niche. Tissue injury as well as malignant tissue alterations lead to changes in the niche influencing the plasticity and biology of residing stem cells. Similarly, the niche changes upon tissue damage, which eventually induces differentiation of stem cells and

ultimately regeneration of the tissue.