Record Nr. UNINA9910557108203321 Titolo Biobanking and Regenerative Medicine Basel, Switzerland:,: MDPI - Multidisciplinary Digital Publishing Pubbl/distr/stampa Institute, , 2020 Descrizione fisica 1 electronic resource (100 pages) Soggetti Medicine Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Regenerative medicine and tissue engineering play significant roles in the treatment of currently intractable conditions, such as chronic heart failure, stroke, chronic osteoarthritis, and other maladies. Regenerative medicine and tissue engineering generally depend on the utilization of stem cells to treat patients but may also utilize mature cells that would not normally be considered as stem cells (e.g., skin). Stem cells (like mature cells) may be obtained from many sources in the body including bone marrow, cord blood, cord tissue, adipose tissue, etc. Although stem cells are often used in therapy immediately upon isolation, in many circumstances, the stem and progenitor cells will be harvested, processed and banked frozen until a later time. Biobanking is a convenient alternative to same-day therapeutic use, in that it allows for patient recovery (e.g., from liposuction), provides time to identify the best treatment options, and may allow for multiple interventions with

additional patient inconvenience or risk.