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Nota di contenuto	Chapter 1: Trying to reveal the mysteries of stem cells using "omics" strategies -- Chapter 2: Genomics, Proteomics, and Metabolomics for Stem Cells Monitoring in Regenerative Medicine -- Chapter 3: Metabolic profiling of the Mesenchymal Stem Cells' Secretome -- Chapter 4: Different Gene Expression Profile of Mesenchymal Stem Cells from Various Sources -- Chapter 5: Genomic and Proteomic Monitoring of Stem Cell-Derived Exosomes -- Chapter 6: Proteomics Approaches Applied to Regenerative Medicine; Perspectives in stem cell Proteomics -- Chapter 7: Lipidomics of Adipogenic Differentiation of Mesenchymal Stem Cells -- Chapter 8: OMICs Profiling of Cancer Cells -- Chapter 9:

Genomics, Proteomics and Metabolomics of Cancer Stem Cells (CSCs)
-- Chapter 10: From OMICs to Ethics, points to start the debate --
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Sommario/riassunto

This book provides thorough coverage of high-throughput OMICs technologies for the monitoring of stem cells and regenerative medicine. Specific topics covered include the genomics, proteomics, and metabolomics aspects of regenerative medicine, metabolic profiling of mesenchymal stem cells, genome profiling of mesenchymal stem cells, OMICs monitoring of stem cell-derived exosomes, stem cell proteomics, lipidomics, OMICs profiling of cancer (stem) cells, and finally ethical considerations of OMICs-based investigations. Chapters are authored by world-renowned scientists who have valuable expertise in the field of OMICs and regenerative medicine. Genomics, Proteomics, and Metabolomics: Stem Cells Monitoring in Regenerative Medicine, part of Springer's Stem Cell Biology and Regenerative Medicine series, is essential reading for researchers, clinicians, biologists, biochemists, and pharmaceutical experts conducting research in the fields of stem cell biology, molecular aspects of stem cell research, tissue engineering, regenerative medicine, cellular therapy, OMICs, bioinformatics, and ethics.
