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Autore	Chakravorty Nishant
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Nota di contenuto	Chapter 1. Regeneration and tissue microenvironment -- Chapter 2. Non stem cell mediated tissue regeneration and repair -- Chapter 3. Immunological Perspectives Involved in Tissue Engineering -- Chapter 4. Advances in Medical Imaging for Wound Repair and Regenerative Medicine -- Chapter 5. Role of Biosensors in Regenerative Therapeutics: Past, Present & Future Prospects -- Chapter 6. Acute and Chronic Wound Management: Assessment, Therapy and Monitoring Strategies -- Chapter 7. Stem cells and therapies in cardiac regeneration -- Chapter 8. Hydrogel-based Tissue-mimics for Vascular Regeneration and Tumor Angiogenesis -- Chapter 9. Advances in 3D Printing Technology for Tissue Engineering -- Chapter 10. Adult Neurogenesis: A Potential Target for Regenerative Medicine -- Chapter 11. Regenerative approaches in the nervous system -- Chapter 12. Prenatal interventions for the treatment of congenital disorders --

Chapter 13. Understanding LncRNAs in biomaterials development for osteointegration -- Chapter 14. Current approaches in vertical bone augmentation and large bone deficiencies in the oro-facial region -- Chapter 15. In-vitro and in-vivo tracking of cell-biomaterial interaction to monitor the process of bone regeneration -- Chapter 16. The Prospects of RNAs and Common Significant Pathways in Cancer Therapy and Regenerative Medicine.

Sommario/riassunto

This book focuses on the recent innovations and therapeutic potentials of regenerative medicine and discusses the applications of stem cells, biomaterials, and tissue engineering in regenerative medicine. The book covers essential aspects of regenerative medicine, including tissue microenvironment, immunological perspectives, stem, and non-stem cell-mediated approaches, imaging techniques, biomarkers, and 3D printing technology. It also reviews the applications of biosensing technologies in regenerative medicine, including biomanufacturing, organ-on-a-chip technologies, and as indicators of therapeutic efficacy. Further, it focuses on the regenerative medicine approaches for diseases of the central nervous system. It also provides the therapeutic potential of regenerative medicine to improve soft tissue and wound healing, cardiovascular, neural, bone, and orofacial regeneration.
