Mesenchymal Stem Cells and Craniofacial Regeneration


About the eBook

This monograph provides a current and in-depth review of scholarly information about mesenchymal stem cells and their application in the craniofacial region of the human body. Chapters in this volume cover biological and conceptual information about mesenchymal stem cells, induced pluripotent stem cells, craniofacial regeneration, new methods of scaffold fabrication, tooth regeneration and three-dimensional printing in dentistry.

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- Fundamental Concepts and Features of Mesenchymal Stem Cells: Proliferation, Differentiation, Migration and Immunomodulatory Characteristics
- Three-dimensional Printing in Dentistry: An Advanced Technology for Craniofacial Regeneration
- Induced Pluripotent Stem Cells: Proliferation, Migration, MicroRNA, Signaling Molecules
- Craniofacial Defects and their Regeneration: Destruction and Regeneration of the Periodontium, Craniofacial Tumors, Trauma, and Congenital Defects
- Cell Sheets Engineering And Transplantation in MSCs Regeneration
- New Methods of Scaffold Fabrication: Cellinstructive Scaffolds, Structural Scaffolds, Scaffolds Fabricated from Smart Materials Able to Respond SENSITIVELY to Environmental Cues
- Tooth Regeneration: Dentin Regeneration, Periodontal Ligament Regeneration, Dental Pulp Regeneration