

1. Record Nr.	UNINA9910253905803321
Titolo	Dental Stem Cells: Regenerative Potential // edited by Barbara Zavan, Erierto Bressan
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Humana , 2016
ISBN	3-319-33299-6
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (IX, 287 p. 39 illus., 34 illus. in color.)
Collana	Stem Cell Biology and Regenerative Medicine, , 2196-8985
Disciplina	612.31
Soggetti	Regenerative medicine Tissue engineering Stem cells Biomedical engineering Dentistry Biomaterials Regenerative Medicine/Tissue Engineering Stem Cells Biomedical Engineering and Bioengineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	1. Dental stem cell (DSC): classification and properties -- 2. Protocols for DSC isolation, amplification and differentiation -- 3. Isolation and Cryopreservation of Stem Cells from Dental Tissues -- 4. Epigenetics of Dental Stem Cells -- 5. Dental Stem Cells and Growth Factors -- 6. Nano surface & Stem Cells for Implants -- 7. Dental Pulp Stem Cells and Hydrogel in Pulp Regeneration -- 8. Dental stem cells for pulp regeneration -- 9. Stem cells for periodontal regeneration -- 10. Dental stem cells for tooth regeneration -- 11. Dental stem cells for bone regeneration -- 12. Neuronal properties of Dental Stem Cells -- 13. MSCs and Biomaterials -- 14. DSC As A New Cellular Resource For Corneal Stromal Regeneration -- 15. DSC-differentiated hepatocytes for treatment of liver diseases.
Sommario/riassunto	This book focuses on the basic aspects of dental stem cells (DSCs) as

well as their clinical applications in tissue engineering and regenerative medicine. It opens with a discussion of classification, protocols, and properties of DSCs and proceeds to explore DSCs within the contexts of cryopreservation; epigenetics; pulp, periodontal, tooth, bone, and corneal stroma regeneration; neuronal properties, mesenchymal stem cells and biomaterials; and as sources of hepatocytes for liver disease treatment. The fifteen expertly authored chapters comprehensively examine possible applications of DSCs and provide invaluable insights into mechanisms of growth and differentiation. Dental Stem Cells: Regenerative Potential draws from a wealth of international perspectives and is an essential addition to the developing literature on dental stem cells. This installment of Springer's Stem Cell Biology and Regenerative Medicine series is indispensable for biomedical researchers interested in bioengineering, dentistry, tissue engineering, regenerative medicine, cell biology and oncology.
