

Special Issue

Novel Biomaterials and Tissue Engineering Approaches in Periodontal Regeneration

Message from the Guest Editor

As the of this Special Issue of *Biomedicines*, I would like to invite colleagues who have experience in both the dental and biological fields and who are experts in dental tissue engineering to participate. This Special Issue will serve as a report on the state of the art in basic, translational, and clinical research in the tissue engineering field, to provide fellow dentists and researchers from various specialisms with information on regenerative techniques. This Special Issue will cover, but will not be limited to, the following topics:

- 3D bioprinting;
- Bases of periodontal physiology;
- Regeneration aspects of periodontal therapy;
- Regeneration aspects of implantology;
- 3D models of the periodontium;
- Mesenchymal stromal/stem cells (MSCs), preferably of dental origin;
- Cell senescence in MSCs;
- Cell aging in MSCs;
- Therapeutic approaches to attenuating the senescence/aging phenotypes of MSCs;
- The state of the art of clinical applications of stem cells in bone and periodontal regeneration.

It is my pleasure to invite you to submit a manuscript for consideration for this Special Issue. Full papers, communications, and reviews are welcome.

Guest Editor

Dr. Federico Mussano

CIR Dental School, Department of Surgical Sciences, University of Turin, Turin, Italy

Deadline for manuscript submissions

30 November 2025



Biomedicines

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed



mdpi.com/si/235567

Biomedicines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomedicines@mdpi.com

[mdpi.com/journal/
biomedicines](https://mdpi.com/journal/biomedicines)





Biomedicines

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed



[mdpi.com/journal/
biomedicines](https://mdpi.com/journal/biomedicines)



About the Journal

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

Editor-in-Chief

Prof. Dr. Felipe Fregni

1. Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).