Special Issue

Biomechanics of Bone and Dental Implants

Message from the Guest Editors

This Special Issue will give an up-to-date view of the Biomechanics of Bone Tissue and Dental Implants, useful both for academic researchers and clinicians in their daily practice. Topics covered will include the different behaviors under loading of different types of bones, ranging from D1 to D4; the bone modeling and remodeling; and the importance of different implant shapes; thread configurations, implant-abutment connections, and implant surfaces for best achieving long-term implant success. The clinical implications and benefits for patients could be very significant and related to the understanding of optimal implant positioning (over the implant crest, at the level of the crest, under the crest), the use of the immediate loading and immediate post-extraction implants concepts and techniques, such as the healing of the alveolar socket. Also, what happens to peri-implant mineralized tissues in the long term (even more that 3 decades) will be discussed. We welcome colleagues involved in this field to contribute original articles or reviews to this Special Issue.

Guest Editors

Prof. Dr. Adriano Piattelli

School of Dentistry, Saint Camillus International University for Health Sciences (Unicamillus), 00131 Rome, Italy

Prof. Dr. Douglas A. Deporter

Discipline of Periodontology, Faculty of Dentistry, University of Toronto, Toronto, ON M5G 1G6, Canada

Deadline for manuscript submissions

31 January 2026



an Open Access Journal by MDPI



mdpi.com/si/237570

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

mdpi.com/journal/osteology





an Open Access Journal by MDPI



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Umile Giuseppe Longo

Department of Orthopaedic and Trauma Surgery, Università Campus Bio-Medico di Roma, Via Alvaro del Portillo, 00128 Rome, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 22.3 days after submission; acceptance to publication is undertaken in 5.6 days (median values for papers published in this journal in the first half of 2025).

Recognition of Reviewers

: APC discount vouchers, optional signed peer review, and reviewer names published annually in the journal.

