



Advance in Bone Biology

Guest Editors:

Dr. Elisa Mazzoni

Department of Chemical,
Pharmaceutical and Agricultural
Sciences, University of Ferrara,
44121 Ferrara, Italy

Dr. Monica Montesi

National Research Council of
Italy Institute of Science and
Technology for Ceramics (ISTEC-
CNR), Via Granarolo 64, I-48018
Faenza, Italy

Dr. Maria Rosa Iaquinta

Department of Medical Sciences,
University of Ferrara, 64/b,
Fossato di Mortara Street, 44121
Ferrara, Italy

Deadline for manuscript
submissions:

closed (30 November 2023)

Message from the Guest Editors

Stem cell-based bone regeneration is currently receiving increasing research attention. Despite encouraging results on regenerative medicine, knowledge regarding bone regeneration must be evaluated. Cross-talk between immune cells and other cells in the bone regeneration process allows for bone fracture healing. Biomaterials with suitable surface modification strategies are contributing significantly to the rapid development of the field of bone tissue engineering. Moreover, biomaterial-mediated modulation of the immune response for regulating key bone regeneration events, such as osteogenesis, osteoclastogenesis, and inflammation, shows how these biomedical applications can be utilized for future bone tissue engineering applications.

This Special Issue, "Advance in Bone Biology", aims to provide new information on the regulatory mechanisms of bone regeneration by focusing on the biological interaction between stem cell differentiation, the immune system, and the role of innovative materials. Authors are invited to submit original research and review articles related to these subjects.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of
Odontostomatologic and
Specialized Clinical Sciences,
Sez-Biochimica, Faculty of
Medicine, Università Politecnica
delle Marche, Via Ranieri 65,
60100 Ancona, Italy

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Author Benefits

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

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI