

Special Issue

Epigenetic, microRNA and Long Non-Coding RNA Roles in Osteoporosis

Message from the Guest Editor

Osteoporosis is a complex multifactorial bone disorder, resulting from clinical, medical, behavioral, nutritional, and genetic factors. It results from the impairment of the balance between bone resorption by osteoclasts and bone formation by osteoblasts, leading to a high risk of bone fracture. The processes that maintain in balance the differentiation and the activity of osteoblasts and osteoclasts are controlled by specific genes and are finely regulated by endogenous and exogenous factors. Recently, epigenetic mechanisms, whose role in a number of biological processes is well documented have been demonstrated to be involved in bone metabolism, and their alterations might be implicated in the onset of osteoporosis.

The scope of this Special Issue is to investigate the role of epigenetic modifications, including DNA methylation, histone modifications, and the deregulation of miRNA-based pathways, in the pathogenesis of osteoporosis. A better understanding of the roles of epigenetic mechanisms in normal bone metabolism and in multifactorial bone disorders could help their translation into clinical practice, as well as for a better comprehension of disease pathogenesis.

Guest Editor

Dr. Gianluca Giavaresi
IRCCS Istituto Ortopedico Rizzoli, Bologna, Italy

Deadline for manuscript submissions

closed (31 July 2020)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/36394

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ijms@mdpi.com

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





International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* 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, and molecular biophysics. *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.

Editor-in-Chief

Prof. Dr. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)