



an Open Access Journal by MDPI

Magnesium in Differentiation and Development

Guest Editors:

Prof. Dr. Stefano Iotti

1. Department of Pharmacy and Biotechnology, University of Bologna, 40127 Bologna, Italy
2. National Institute of Biostructures and Biosystems, 00136 Rome, Italy

Prof. Dr. Jeanette A. M. Maier

Department of Biomedical and Clinical Sciences L. Sacco, University of Milano, Via GB Grassi, 74, 20157 Milano, Italy

Deadline for manuscript submissions:

closed (31 December 2019)

Message from the Guest Editors

Magnesium (Mg) is essential for life and health, since it is implicated in every primary metabolic and biochemical process in the cell, including energy metabolism, DNA duplication, RNA transcription, protein synthesis, transphosphorylation, and redox reactions. Mg also acts as an intracellular second messenger and is considered a natural calcium antagonist. This Special Issue entitled “Magnesium in Differentiation and Development” aims to provide a research platform for the collection of high-quality up-to-date original and review articles on various aspects of the cellular and molecular biology of Mg involvement in differentiation and development.

Keywords

- mesenchymal stem cell differentiation
- cardiac progenitor cell differentiation
- muscle differentiation
- immune cell differentiation
- vascular cell differentiation
- biomineralization
- stress-induced cell differentiation
- terminal differentiation and replicative senescence
- intracellular magnesium
- magnesium transporters
- cell interaction and magnesium-based biomaterials
- embryonic development
- gastrulation
- fertilization



mdpi.com/si/21189

Special Issue



an Open Access Journal by MDPI

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

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.

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

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

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