

Special Issue

Stem Cells and Regenerative Medicine: In Vitro and In Vivo Studies

Message from the Guest Editor

In recent years, stem cell therapy has become a very promising and advanced scientific research topic. Stem cells have the capability to self-renew and to differentiate into several cell types, and are involved in physiological regeneration processes. With so many stem cell replacement therapies currently going through clinical trials, there is a compelling need to understand the mechanisms behind a successful therapy. In this context, the use of biomaterials to manipulate stem cells providing control of their behavior and homing has received great interest, becoming a pivotal step for the development of innovative stem cell transplantation solutions. This Special Issue aims to provide the latest updates on stem cells and their in vitro and in vivo applications in the regenerative medicine field, opening novel and advanced strategies for tissue-repairing processes and many other clinical applications.

Keywords: stem cells; stem cell homing; stem cell tracking; regeneration; tissue injury; biomaterials

Guest Editor

Dr. Alessia Peserico

Faculty of Bioscience and Technology for Food, Agriculture and Environment, University of Teramo, 64100 Teramo, Italy

Deadline for manuscript submissions

closed (31 July 2024)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 8.1
Indexed in PubMed



mdpi.com/si/143628

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

mdpi.com/journal/

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





International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 8.1
Indexed in PubMed



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

ijms



About the Journal

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.

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

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 (Inorganic Chemistry)