

## Special Issue

# Stem Cell Regenerative Medicine: From Molecular Basis to Translational Research

### Message from the Guest Editor

Stem cells are a rare subpopulation defined by the potential to self-renew and differentiate into specific cell types. The functional distinction between stem and progenitor cells is well-established in several tissues, particularly in the blood. We encourage the submission of original full research papers as well as review articles dealing with novel mechanistic insights and details of the molecular signatures of stem cell biology. Topics include, but are not limited to, the following: New insights into the molecular mechanisms of stem cell biology; Stem cell emerging technologies (e.g., bioinformatics, proteomics, metabolomics, tissue arrays, imaging); New molecular biomarkers and profiling of cancer stem cells: diagnosis, prognosis, stratification and efficacy; Molecular interactions in the niche, including stem cells, immune cells, and stroma cells; Genomic profiling of stem cells, including genetics, epigenetics, and genomic instability; Preclinical research leads to novel therapies derived from molecular processes and cellular interactions, including gene therapy, nanomedicine-based therapies, and stem cell-based therapy.

### Guest Editor

Dr. Dongjun Lee

Department of Convergence Medicine, Pusan National University  
College of Medicine, Yangsan 626-870, Republic of Korea

### Deadline for manuscript submissions

20 March 2025



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 8.1  
Indexed in PubMed

---



[mdpi.com/si/200661](https://mdpi.com/si/200661)

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

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