

## Special Issue

# Stem Cells in Neurodegenerative Pathologies

### Message from the Guest Editors

Neurodegenerative diseases are characterized by the chronic and progressive loss of neuronal functions in specific brain areas, resulting in memory deficit, cognitive impairment, or impaired motor coordination. There is a wide range of hereditary and sporadic neurologic disorders such as Alzheimer's disease, Parkinson's disease, Huntington's disease, and amyotrophic lateral sclerosis. Experimental models that accurately mimic the development of neurodegenerative diseases in humans are desperately needed to understand the cause and mechanisms of these diseases, as well as to identify new therapeutic targets. Recent advances in stem cell technology have opened the path to the generation of induced pluripotent stem cells (iPSCs) from somatic cells. In this Special Issue, we aim to summarize the current knowledge in this important field and give researchers the possibility of sharing novel data on the multiple aspects of modeling neurodegeneration by using stem cells.

Co-

---

### Guest Editors

Dr. Šárka Lehtonen

1. University of Eastern Finland, A.I. Virtanen Institute for Molecular Sciences, Kuopio, Finland
2. Neuroscience Center, HiLIFE, University of Helsinki, Helsinki, Finland

Prof. Dr. Amalia Dolga

Department of Molecular Pharmacology, University of Groningen, Groningen, The Netherlands

---

### Deadline for manuscript submissions

closed (31 December 2021)



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/65257](https://mdpi.com/si/65257)

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