



## Exosome: New Approaches of Therapy for Cell Death

Guest Editors:

**Dr. Sujeong Jang**

Department of Physiology,  
Chonnam National University  
Medical School, Hwasun,  
Jellanam-do 58128, Republic of  
Korea

**Prof. Dr. Han Seong Jeong**

Department of Physiology,  
Chonnam National University  
Medical School, Hwasun,  
Jellanam-do 58128, Republic of  
Korea

Deadline for manuscript  
submissions:

**closed (15 March 2023)**

### Message from the Guest Editors

Stem cell-based therapies for repair and regeneration show a paradigm shift; however, stem cell therapy to treat neurodegenerative disease has not been as successful as expected in some preclinical studies. Many groups have studied whether the therapeutic effect of mesenchymal stem cells (MSCs) is due to the cell type, microenvironment after transplant, or disease model. However, in vivo MSC treatment has risks related to cell differentiation and their tumorigenic potential, and the consequent failure to reach the target site or reach the injured site in the brain is negligible. Neuroprotection of MSC occurs due to its secretion of different proteins which have paracrine and autocrine therapeutic activities. The secretome/conditioned medium from MSC is a heterogeneous bioactive molecule considered a biotechnological product, which is safer compared to the living MSC. The secretome directly contributes to the recovery of the damaged tissues. Therefore, considering their regenerative and restorative abilities, the secretome/exosome from different sources of MSC is proposed as the main biological effector as a possible alternative to MSC treatment in neurodegenerative diseases.





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