

## Special Issue

# Molecular Mechanisms of Cerebrovascular Diseases

### Message from the Guest Editors

Cerebrovascular diseases are a heterogenous group of disorders that affect brain vasculature structure and cerebral blood flow regulation. The common pathological event related to cerebrovascular diseases is stroke, manifested as a sudden cessation of blood flow due to vessel occlusion (ischemic stroke), transient occlusion with recovery (transient ischemic attack), or vessel rupture (hemorrhagic stroke). Brain endothelial cell dysfunction, vessel wall deterioration, and perivascular environment remodeling are major pathological substrates in cerebrovascular diseases. This Special Issue is focused on the molecular mechanisms of endothelial dysfunction and perivascular environment remodeling that lead to lodging of thromboemboli, vessel occlusion and rupture, the mechanism of aging and metabolic vascular wall degeneration, vascular injury and remodeling in sporadic and inherited vascular malformations, and mechanisms of impaired cerebral autoregulation. We welcome submissions of original research and review articles related to any aspect of the molecular mechanisms and pathogenesis of cerebrovascular diseases, identification and exploration of novel targets, and biomarkers.

### Guest Editors

Prof. Dr. Anuska V. Andjelkovic

1. Department of Pathology, University of Michigan Medical School, Ann Arbor, MI, USA

2. Department of Neurosurgery, University of Michigan Medical School, Ann Arbor, MI, USA

Prof. Dr. Richard F. Keep

Department of Neurosurgery, University of Michigan, Ann Arbor, Ann Arbor, MI, USA

Prof. Dr. Michael M. Wang

University of Michigan, Ann Arbor, MI, USA

### Deadline for manuscript submissions

closed (28 April 2022)



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/62779](https://mdpi.com/si/62779)

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

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





# 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)* 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.

---

### 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

---

### 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)