

Special Issue

Rescue Therapies and Molecular Mechanisms of Perinatal Brain Injury

Message from the Guest Editors

This special edition will focus on understanding the mechanisms of perinatal brain injury and the related development or optimization of therapies for perinatal brain injury. The specific causes of perinatal brain injury include hypoxic-ischemic encephalopathy (HIE), infection/inflammation and preterm birth. Therapeutic hypothermia is now well established to improve normal survival after moderate to severe HIE in term and near-term infants. However, many will still develop brain injury despite hypothermia. Moreover, it is not currently available for preterm infants, in the developing world most infants develop spontaneous hypothermia anyway, and there is emerging evidence that infection-sensitized hypoxia-ischemia may respond less well to therapeutic hypothermia. The challenge is now to identify therapies whose mechanisms of action are different to and complementary with those of hypothermia to further improve outcomes. Better understanding the mechanisms underlying the evolution of perinatal brain injury will help to rationally identify potential therapeutic targets for future studies.

Guest Editors

Prof. Alistair J. Gunn

University of Auckland, Department of Physiology, Auckland, New Zealand

Dr. Joanne O. Davidson

Department of Physiology, Faculty of Medical and Health Sciences, University of Auckland, Auckland 1023, New Zealand

Deadline for manuscript submissions

closed (30 April 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/45833

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)* 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, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)