



Molecular Background of Posttraumatic Neurodegeneration: Previous Evidence and Future Research Directions

Guest Editor:

Dr. Jacek Szczygielski

1. Department of Neurosurgery,
Faculty of Medicine, Saarland
University, 66123 Saarbrücken,
Germany

2. Institute of Medical Science,
University of Rzeszow, 35-959
Rzeszow, Poland

Deadline for manuscript
submissions:

30 June 2024

Message from the Guest Editor

Dear colleagues,

This Special Issue will focus on the effects of single or repetitive brain trauma on the biomolecular processes, potentially leading to full-blown neurodegenerative disease. By causing a prolonged neuroinflammatory response, promoting oxidative stress, or directly damaging the fragile structures of the cytoskeleton in neural tissue components, TBI is believed to trigger and sustain the process of neurodegeneration in a variety of conditions. Overall, we aim to establish the most important interconnections between the molecular background of both TBI and neurodegenerative conditions and to track the innovative paths of research worth pursuing in future projects. All papers describing or summarizing recent progress in the area of research into molecular background in posttraumatic neurodegeneration are welcome.

- traumatic brain injury (TBI)
- posttraumatic neurodegeneration
- axonal injury
- neuronal loss
- Alzheimer's disease
- chronic posttraumatic encephalopathy
- tauopathy
- posttraumatic dementia





an Open Access Journal by MDPI

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

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.

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 & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI