

## Special Issue

# Physiology and Pathophysiology of Neurodegeneration: New Insights and Advances from Molecular to Cellular Level

### Message from the Guest Editors

The pathophysiology of neurodegeneration involves complex cellular and molecular mechanisms related to neuronal injury, repair, inflammation, and dysfunction. Understanding the cellular and molecular events leading to the transition from neuronal homeostasis to physiopathological states is a central focus of biomedical research in neurodegenerative diseases. This Special Issue highlights innovative research on cellular and molecular dynamics in nervous tissue, including processes such as myelination, neuronal excitability, molecular and cellular turnover, and the modulation of signaling pathways disrupted in neurodegenerative diseases. Topics of interest include, but are not limited to, mechanisms underlying protein misfolding and aggregation, RNA processing dysregulation, proteasome impairment, neuroinflammation, excitotoxicity, and cytoskeletal and mitochondrial dysfunctions. Additionally, this Special Issue will highlight advances in molecular-based drug delivery systems, novel therapeutic targets, and predictive biomarkers. We invite original research articles, communications, and comprehensive reviews to contribute to this crucial field of study.

### Guest Editors

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### Deadline for manuscript submissions

20 December 2025



## International Journal of Molecular Sciences

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Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



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*International Journal of  
Molecular Sciences*  
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### 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.

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### Editor-in-Chief

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