

## Special Issue

# Mechanisms of Neuronal Death during Neurodegenerative Disease and the Fundamentals of Synaptic Plasticity

### Message from the Guest Editors

Neurodegeneration involves the progressive loss of neurons, leading to cognitive and motor dysfunctions. This process, often accelerated by aging, underlies various neurodegenerative diseases. The mechanisms contributing to neurodegeneration are complex, including neuroinflammation, mitochondrial dysfunction, oxidative stress, altered synaptic plasticity, and disrupted protein homeostasis. However, the exact mechanisms are not fully understood, limiting the effectiveness of current therapeutic approaches. While neurodegenerative diseases share common features, they also present unique challenges that require tailored treatment strategies. A deeper understanding of these mechanisms is essential for identifying new therapeutic targets. This Special Issue aims to showcase the latest research on neurodegeneration, focusing on mechanisms and potential therapeutic approaches. We invite both original research and comprehensive reviews.

### Guest Editors

Prof. Dr. Mark Kindy

Prof. Dr. Santosh D'Mello

Prof. Dr. Kumar Sambamurti

### Deadline for manuscript submissions

closed (31 December 2024)



## International Journal of Molecular Sciences

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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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