

Special Issue

Molecular Pathogenesis and Treatment in Neurodegeneration: Current Evidence and Future Directions

Message from the Guest Editor

Neurodegeneration is a typical pathological condition of aging characterized by synaptic impairment, neuronal death, and cognitive decline. The formation of amyloid deposits in specific areas of the brain has been reported to be responsible for neuronal death. However, several events participate in cell apoptosis, including deregulation of calcium homeostasis, neuroinflammation, mitochondrial dysfunction, and oxidative stress. The involvement of multiple cellular and molecular mechanisms hinders the development of strategies to counter and/or diagnose the cognitive decline underlying neurodegenerative diseases. Moreover, in the absence of a direct cause–effect link between potential risk factors and cognitive decline, the development of preventive approaches to minimize the impact of neurodegeneration still requires further investigation. Therefore, this Special Issue aims to gather information regarding the molecular mechanisms underlying neurodegeneration to identify new potential diagnostic, therapeutic, and preventive strategies to counteract cognitive decline.

Guest Editor

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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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