

Special Issue

The Molecular and Cellular Mechanisms of Neurodegenerative Diseases

Message from the Guest Editor

Neurodegenerative diseases are a group of age-related complex diseases in the central nervous system including Alzheimer's disease (AD), Parkinson's disease (PD), frontotemporal lobar degeneration (FTLD), amyotrophic lateral sclerosis (ALS), Huntington's disease (HD), and prion diseases. They are characterized by protein aggregates in particular cell types and brain regions, selective neuronal loss, neuroinflammation, progressive degeneration of the nervous system, and neurobehavior changes. Over the last decade, our understanding of neurodegenerative diseases has witnessed significant advances, especially at the molecular and cellular levels, although there are no effective therapeutics to prevent or halt these devastating diseases to date. The goal of this Special Issue is to gain a better understanding of the cellular and molecular mechanisms in the pathogenesis of different neurodegenerative disorders, with a focus on protein homeostasis, unfolded protein response, synaptic dysfunction, neuroinflammation, alterations in brain metabolism, mitochondrial dysfunction, and oxidative stress mechanisms at the molecular and cellular levels.

Guest Editor

Dr. Hongjun (Harry) Fu

Department of Neuroscience, The Ohio State University Wexner Medical Center, Columbus, OH 43210, USA

Deadline for manuscript submissions

closed (30 September 2023)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



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*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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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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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

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