Special Issue

Molecular Mechanisms of Herbal Compounds in Neuroprotection

Message from the Guest Editor

Herbal compounds encompass a diverse array of natural substances, including flavonoids, polyphenols, alkaloids, and terpenoids. These compounds have gained attention for their potential neuroprotective effects, offering promising avenues for combating neurodegenerative diseases. They activate antioxidative pathways to combat neuronal oxidative stress and modulate inflammatory pathways to mitigate neuroinflammation. They promote the production of neurotrophic factors to support neuronal growth, survival, and plasticity. Additionally, they enhance mitochondrial function, thereby boosting cellular energy production and resilience. Moreover, they regulate exosome-mediated intercellular communication to influence neuroinflammatory responses and neuronal survival. Herbal compounds offer promising therapeutic avenues for neuroprotection and the treatment of neurodegenerative diseases. This Special Issue focuses on the molecular mechanisms of herbal compounds in neuroprotection. We also hope to publish articles exploring new molecular mechanisms underlying the neuroprotective effects of herbal compounds or articles on newly discovered herbal compounds with neuroprotective properties.

Guest Editor

Prof. Dr. Chi-Rei Wu

Department of Chinese Pharmaceutical Sciences and Chinese Medicine Resources, China Medical University, Taichung 40438, Taiwan

Deadline for manuscript submissions

closed (10 November 2024)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/206916

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

mdpi.com/journal/ ijms





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





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.

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

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 and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

