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

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Editor-in-Chief

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