

Special Issue

The Function of Glial Cells in the Nervous System: 2nd Edition

Message from the Guest Editor

This Special Issue is a continuation of our previous Special Issue on “[The Function of Glial Cells in the Nervous System](#)”. In nervous system homeostasis, glial cells, or neuroglia, play a collective role. Essentially all aspects of the nervous system's formation and function are orchestrated by the diverse and dynamic functions of glial cells. These include forming synapses, regulating synaptic transmission and plasticity, maintaining redox balance, maintaining ion and water homeostasis, establishing the blood–brain barrier, controlling toxicity in the extracellular space, and establishing myelin sheets. Furthermore, these cells play a crucial role in immune and inflammatory functions in pathological conditions, contributing to both healthy and diseased states with neurological outcomes. In this regard, a major objective of this Special Issue is to collect studies and reviews on glial cells and the glial–neuronal interaction rearrangements that occur during aging or in neurodegenerative diseases, possible glial biomarkers, as well as studies on therapeutic approaches with which to counteract these compromised mechanisms.

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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