Special Issue

The Role of Astrocytes in the Brain: From Development to Disease

Message from the Guest Editor

We welcome the submission of original research articles, reviews, perspectives, and methodological papers that address the multifaceted roles of astrocytes in the central nervous system. Topics of interest include, but are not limited to, the following:

- Astrocyte development, maturation, and regional heterogeneity;
- Astrocyte-neuron, astrocyte-microglia, and astrocytevascular interactions:
- Mitochondrial dynamics, metabolic regulation, and redox signaling in astrocytes;
- Astrocytic responses to aging, inflammation, injury, and neurodegeneration;
- Epigenetic and transcriptional control of astrocyte identity and reactivity;
- Human iPSC-derived astrocyte models and organoidbased approaches;
- Novel imaging, genetic, or single-cell technologies applied to astrocyte research;
- Translational studies identifying astrocytic biomarkers or therapeutic targets;
- Clinical correlations and postmortem analyses of astrocyte dysfunction in brain disorders.

This Special Issue aims to provide a platform for highimpact studies that advance the understanding of astrocyte biology and offer innovative perspectives for therapeutic intervention in neurological diseases.

Guest Editor

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Deadline for manuscript submissions

28 June 2026



Brain Sciences

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.6
Indexed in PubMed



mdpi.com/si/247003

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About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Brain Sciences* (ISSN 2076-3425). *Brain Sciences* is an open access, peer-reviewed scientific journal that publishes original articles, critical reviews, research notes, and short communications on neuroscience. The scientific community and the general public can access the content free of charge as soon as it is published.

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