Special Issue

Microglial Functions in Neurodegenerative Diseases: In Search of Potential Therapeutic Targets

Message from the Guest Editors

Microglia, as the resident immune cells of the central nervous system, play a pivotal role in maintaining neural homeostasis and modulating responses to injury and disease. This Special Issue seeks to explore the multifaceted roles of microglia in neurodegeneration and to identify novel therapeutic targets aimed at modulating microglial function. We welcome original research articles and reviews that delve into the molecular mechanisms governing microglial activity, the impact of microglial phenotypes on disease progression, and innovative strategies to target microglia for therapeutic benefit. Topics of interest include, but are not limited to:

- Microglial signaling pathways in health and disease.
- The role of mitochondria and oxidative stress in microglial function in the context of neurodegeneration.
- Crosstalk between microglia's organelles in a pathological context.
- Emerging small-molecule or gene-based interventions focused on microglia modulation.
- Effects of microglial dysregulation on neuronal function.

Guest Editors

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Deadline for manuscript submissions

closed (20 December 2025)

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/si/222498

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About the Journal

Message from the Editorial Board

Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

Editors-in-Chief

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JCR - Q2 (Cell Biology) / CiteScore - Q1 (General Biochemistry, Genetics and Molecular Biology)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.5 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).