Special Issue

Neuroinflammation in Brain Health and Diseases

Message from the Guest Editors

Neuroinflammation can be instrumental in both positive and negative aspects of brain physiology and functioning, where acute and transient neuroinflammatory responses are essential for removing pathogens, tissue repair, brain development, and chronic and persistent induction of neuroinflammation results in debilitating outcomes on neuronal functions, causing progressive neurodegeneration. It suggests that the impact of neuroinflammatory molecules must be context and time-dependent. Although microglia, the innate immune cell in the brain, is the central player in neuroinflammation, other cells including astrocytes, endothelial cells, and the infiltrated adaptive immune cells, significantly contribute to this process. It has been demonstrated that inhibiting critical neuroinflammatory pathways by anti-inflammatory molecules can attenuate neuronal loss and improve CNS functions. This Special Issue on 'Neuroinflammation' aims to showcase the recent investigations addressing the critical inflammatory pathways governing brain physiology and functions in health and diseases. This will highlight the potential neuroinflammatory pathways that can be considered for future drug development.

Guest Editors

Dr. Debashis Dutta

Department of Pediatrics, Darby's Children Research Institute, Medical University of South Carolina, Charleston, SC, USA

Dr. Nemil Bhatt

1. Neurology Department, University of Texas Medical Branch, Galveston, TX, USA
2. Mitchell Center for Neurodegenerative Disease, University of Texas Medical Branch, Galveston, TX, USA

Deadline for manuscript submissions

31 January 2026

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/si/212541

Cells
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
cells@mdpi.com

mdpi.com/journal/cells

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/journal/cells

MDPI

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

Dr. Alexander E. Kalyuzhny
Dental Basic Sciences, University of Minnesota, 308 Harvard St. SE, Minneapolis, MN 55455, USA

Prof. Dr. Cord Brakebusch
Biotech Research & Innovation Centre, The University of Copenhagen, Copenhagen, Denmark

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

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 16 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).