

Special Issue

The Language of Neural Cells: Decoding Molecular Signaling in Neurodevelopmental and Neuro-Oncological Disorders

Message from the Guest Editors

Cells communicate through a sophisticated molecular language comprising signaling pathways that regulate vital processes such as growth, differentiation, disease progression and death. In neurodevelopmental and neuro-oncological disorders, however, this language is often distorted. Mutations, epigenetic modifications, and the aberrant expression of signaling components can alter cellular communication, leading to disrupted development, uncontrolled proliferation, or neurodegeneration.

This Special Issue aims to explore the dysregulation of signaling pathways specifically in the context of complex disorders of the nervous system, including rare ones.

We invite original research articles and reviews that reveal the molecular mechanisms that contribute to resistance, and how targeted interventions can repair the altered cellular communication for better therapeutic outcomes. Topics may include, but are not limited to, receptor-mediated signaling in neural cells, transcriptional dysregulation in neurodevelopment and neurodegeneration, molecular mechanisms of resistance in CNS tumors, apoptosis induction, epigenetic regulation, and the therapeutic modulation of signaling networks.

Guest Editors

Dr. Marilena Briglia

Dr. Alice Foti

Dr. Adriana C. E. Graziano

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/246364

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

[mdpi.com/journal/
cells](https://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](https://mdpi.com/journal/cells)



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, CAPus / 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).