

Special Issue

Building the Neurons: Cytoskeleton Dynamics and Organelle Interaction in Health and Disease

Message from the Guest Editors

The cytoskeleton and its interactions with organelles play essential roles in neuronal development and the maintenance of neuronal health. Disruptions in these processes are closely linked to a broad spectrum of neurodevelopmental and neurodegenerative disorders. Recent studies have highlighted the importance of cytoskeleton–organelle interactions in regulating intracellular transport, organelle positioning, and cellular homeostasis, all of which are critical for synapse formation and neuronal plasticity.

Understanding how these interactions are established, maintained, and altered during development and disease is key to uncovering the mechanisms underlying neuronal function and dysfunction.

Recent advances in live-cell imaging, super-resolution microscopy, proteomics, and endogenous protein labeling have enabled deeper insights into the dynamic nature of these interactions.

This Special Issue welcomes original research and review articles focused on cytoskeleton–organelle interactions in neurons, particularly studies employing innovative methodologies to uncover novel mechanisms in both physiological and pathological contexts.

Guest Editors

Dr. Xing Liang

Department of Biology, Stanford University, Stanford, CA 94305, USA

Prof. Dr. Lars Ove Brandenburg

Institute of Anatomy, Rostock University Medical Center, 18057 Rostock, Germany

Deadline for manuscript submissions

1 September 2026



Cells

an Open Access Journal
by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed



mdpi.com/si/263480

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, 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 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).