

Special Issue

Cellular and Molecular Mechanisms of Lysosomal Storage Disorders

Message from the Guest Editor

Lysosomal storage disorders (LSDs) are rare, monogenic diseases that are characterized by aberrant lysosomes with storage material. These diseases often manifest as neurodegeneration and are associated with a reduced life span. Many of the LSDs result from a deficiency of a single enzyme, whereas others are caused by mutations in non-enzymatic proteins. The molecular mechanisms and cellular pathology of these diseases have been subject to intensive research for decades, but only few therapy options for these diseases are available. The purpose of this Issue is to summarize our current understanding about the pathogenesis and molecular mechanisms of LSDs, and to explore therapeutic strategies that could be used in LSDs. We also welcome manuscripts addressing the involvement of various cellular pathways such as autophagy, neuroinflammation, endosomal dysfunction and signaling pathways in the pathogenesis of LSDs. Novel concepts such as the common features of LSDs and other neurodegenerative diseases such as Alzheimer's or Parkinson's are also subjects of interest for this Special Issue.

Guest Editor

Prof. Dr. Ritva Tikkanen

Institute of Biochemistry, Medical Faculty, Justus-Liebig University of Giessen, Friedrichstrasse 24, D-35392 Giessen, Germany

Deadline for manuscript submissions

closed (15 April 2025)



Cells

an Open Access Journal
by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed



mdpi.com/si/136659

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).