Topical Collection

Glycosylation and Cell Biology

Message from the Collection Editor

The complex interplay of sugar metabolism and protein glycosylation and the impact of protein glycosylation on protein sorting for their targeted transport to cellular destinations are increasingly attracting our attention. These challenging topics are related to cellular functions at higher organizational levels, such as receptor-mediated cell signaling (refer to glycosylation as main regulator of growth and death factor receptor signaling and to VEGFR in endothelial cells), which is regulated by receptor glycosylation or via altered raft sorting.

Another topic of high research actuality refers to rare *O*-glycosylation types and their regulatory influence on cellular pathways (*O*-GlcNAc), on cell–cell interactions (*O*-mannosylation of cadherins) and cell–matrix interactions (*O*-mannosylated lecticans in the perineural net). What is the functional implication of glycans exhibiting the protein-specific, peripheral sugar modulation LacdiNAc (e.g., in self-renewal of embryonic stem cells by regulating LIF/STAT3 signaling)?

The Special Issue is offering a platform for featuring the most recent original work on these topics together with high-standard surveys.

Collection Editor

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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.

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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).