

Special Issue

Toll-Like Receptors and Human Disease

Message from the Guest Editor

Toll-like receptors (TLRs) are a family of type I transmembrane proteins that play a critical role in immune surveillance and disease pathogenesis. Humans express ten functional TLRs. Generally, TLRs detect multiple components released by microorganisms (pathogen-associated molecular patterns (PAMPs), dying or lytic cells (damage-associated molecular patterns (DAMPs), and chromatin-associated molecular patterns (CAMPs), thus playing a critical role not only in immune surveillance but also in disease pathogenesis. This Special Issue mainly focuses on recent research in TLRs and the role of their related signaling pathways in infectious (bacterial and viral infections) and non-infectious disease (neurological, metabolic, inflammation, cancer, and cardio-vascular origin) progression. The most intriguing theme of this Special Issue is the recent development of specific TLR agonists and antagonists and their effect on treating human diseases. This Special Issue provides an excellent collection of contemporary reviews and research articles covering the importance of targeting TLRs and their signaling pathways for new therapeutic drug development against human disease.

Guest Editor

Dr. Vinothkumar Rajamanickam

Division of Diabetes, Endocrinology and Metabolism, Department of Internal Medicine, University of Nebraska Medical Center, Omaha, NE 68198, USA

Deadline for manuscript submissions

closed (31 May 2025)



Cells

an Open Access Journal
by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed



mdpi.com/si/218734

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).