# Special Issue

# Mathematical Modeling of Cell Crosstalk

### Message from the Guest Editors

This issues will publish a collection of mathemetical and computational models that can study how cells communicate with each other across an organism's diverse cell types and tissues and how cell crosstalk mediates the outcome of diseases. Written by a group of experienced researchers who stand at the frontiers of computational cell biology, these models can faciliate our understanding of the complexities of cell signaling, differentiation, and proliferation towards the formation of complex traits and diseases. Coupled with the ever-expanding availability of single-cell analysis data, these models will find their immediate implications for modelling important biological processes, such as tumour-immune dynamics and germ-soma crosstalk, with the ultimate goal of improving human health and reproduction. Keywords

- cell-cell interaction
- single-cell analysis
- mathematical model
- omics data
- gene regulatory networks

### Guest Editors

Prof. Dr. Rongling Wu

Department of Public Health Sciences, Pennsylvania State University College of Medicine, Hershey, PA, USA

Dr. Song Wu

Department of Applied Mathematics and Statistics, Stony Brook University, Stony Brook, NY, USA

### Deadline for manuscript submissions

closed (31 July 2022)

**Cells**

**an Open Access Journal by MDPI**

**Impact Factor 5.2**
**CiteScore 10.5**
**Indexed in PubMed**

mdpi.com/si/105440

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

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

# 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 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).