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Mathematical Modeling of Cell Crosstalk

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Deadline for manuscript
submissions:

closed (31 July 2022)

Message from the Guest Editors

This issue will publish a collection of mathematical 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 facilitate 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 germsoma 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



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Special Issue



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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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