

Special Issue

Computational and Unconventional Microscopy for Cellular Imaging

Message from the Guest Editors

We are organizing an issue to capture the excitement surrounding the relative Cambrian explosion of methods and instruments that is enabling researchers to reconstruct or improve cellular images using computers. Thus far, the use of such techniques has had a broad impact, enabling researchers to see deeper into turbid samples, visualize cellular detail beyond the diffraction limit, infer fluorescent stains, or simply denoise their confocal images. This Special Issue of *Cells* will cover a broad array of imaging techniques, including developments and applications in fluorescence microscopy, label-free imaging, adaptive optics, and applied artificial intelligence. We encourage scholars to submit original research with a theoretical, experimental, or application focus, and produce review articles and tutorials. The topics of this Special Issue include, but are not limited to

- Unconventional imaging techniques for cellular imaging
- Advancements in live cell microscopy
- Cellular imaging techniques enabled by artificial intelligence and machine learning
- Imaging through turbid tissues and adaptive optics for cellular level studies

Guest Editors

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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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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).