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## Development and Challenges in Microscopy for Cellular Imaging

Guest Editor:

### Prof. Dr. Ohad Medalia

1. Department of Biochemistry, University of Zurich, Zurich, Switzerland
2. Department of Life Sciences and the National Institute for Biotechnology in the Negev, Ben-Gurion University, Beer-Sheva, Israel

Deadline for manuscript submissions:

**closed (31 May 2019)**

### Message from the Guest Editor

Dear Colleagues,

Cellular imaging and structural approaches have long since revolutionized our knowledge on cellular processes. However, over the last decade we have witnessed tremendous technical advances that challenged earlier limitations and views on cellular imaging. Fluorescence imaging has evolved into an analytical and quantitative tool to reach an accuracy of several nanometers in localizing fluorophores. Cryo-EM and tomography allow viewing the molecular architecture of cells at close to life state, opening a window of opportunity towards cellular structural biology. Nuclear magnetic resonance, single molecule and force spectroscopy complement cellular imaging to produce a realistic model of cells in health and disease. Further, multicellular organs and even organisms may now be imaged at the cellular level, revealing a three-dimensional architecture that was previously difficult to obtain.

In this Special Issue of *Cells*, we invite contributions, in the form of either original research articles or reviews, on aspects related to Cellular Imaging; Papers concerning both technical issues or applications are welcome.

Prof. Ohad Medalia

*Guest Editor*



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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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*Cells* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
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