Special Issue

Imaging Endocannabinoids and Bioactive Lipid Messengers in Basic Research and Biomedical Application

Message from the Guest Editors

Endocannabinoids (eCBs) are widely-recognized lipid messengers in development, learning, and diseases. However, lipids cannot be imaged by fluorescent microscopy using antibodies or genetically engineered indicators. Thus, the cellular localization and functional distribution of eCBs has only been suggested indirectly based on the presence of cognate receptors and synthesizing and degrading enzymes. The direct visualization of eCBs with an integrated cell morphology is essential for a better understanding of the functional map and metabolic pathways of eCBs in health and diseases.   In this Special Issue, we discuss technologies that visualize eCBs and bioactive lipid messengers, directly on biological specimens. The technology of imaging mass spectrometry for MALDI, ESI, DESI, and SIMS are rapidly developing cutting-edge strategies for mapping the localization of numerous metabolites and signaling molecules by directly ionizing them without attaching any labeling molecules. Also, Raman microscopy, vibrational microspectroscopy, positron emission tomography, and lipophilic fluorescent indicators can make unique contributions.

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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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