Special Issue

Organellar Ca^{2+} Transport in Plant versus Animal Cells: Can We Learn from Each Other?

Message from the Guest Editors

Ca2+ is the second primary messenger inside cells and acts as the most prominent signal in many biological processes in plant and animal cells. In addition to Ca2+ influx and efflux across the plasma membrane, intracellular organelles also participate in concert to orchestrate Ca2+ dynamics that control cellular functions locally and globally. The relevance of intracellular organelle Ca2+ transporters in regulating cell function has been recognized for a very long time. The recent advancements in applying genetic, chemical and super-resolution imaging tools have placed the research of organellar Ca2+ transporters at the center stage over the last decade. Nevertheless, the important topic covered in this Special Issue is yet to be discussed systematically. This Special Issue aims to collect original manuscripts and review articles on recent findings of organellar Ca2+ transport studies in plant and animal cells, with an attempt to shed light on the fundamental principles that govern their commonalities and differences throughout the evolution. As such, we may learn from this comparison and to further advance this research field.

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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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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).