

Special Issue

Mitochondrial Permeability Transition

Message from the Guest Editors

For mitochondria to fulfill their bioenergetic function, mitochondrial inner membrane permeability needs to be tightly regulated. According to the central postulate of the chemiosmotic principle, the inner membrane should be weakly permeable to any ions other than protons transported through the ATP synthase completing the final step of oxidative phosphorylation. Mitochondrial permeability transition (mPT) is a phenomenon of the sudden increase of the permeability of the mitochondrial inner membrane. The role of mPT can range from the physiological process involved in modulation of the mitochondrial function to the central pathological event leading to the disruption of cellular energy metabolism and cell death. As a pathological event, mPT has been implicated as a central cause of cell damage in many conditions. This Special Issue will focus on current progress in the understanding of the molecular mechanisms of this multifaceted phenomenon. It will serve as a platform for the exchange of new ideas and perspectives for the future development of the field.

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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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