

Special Issue

Cellular and Molecular Biology of the Beta Cell

Message from the Guest Editor

Glucose metabolism is regulated through a feedback loop between insulin-producing pancreatic β -cells and insulin-sensitive tissues, in which tissue sensitivity to insulin correlates with the magnitude of β -cell response. Metabolic (dys)homeostasis is controlled by fine-tuned and non-permanent modulations of gene expression in response to extracellular stimuli. Although the mechanisms underlying β -cell dysfunction are still debated, emerging data suggest that specific molecular and cellular effects are necessary for β -cell adaptation to metabolic stress. This Special Issue aims to provide an overview of the recent molecular and cellular cues involved in the control of β -cell mass and/or function and propose an integrated view of the biological effects that could contribute at the β -cell level to metabolic disorders, such as T2D. We hope that the original research and reviews presented by expert laboratories will be valuable to improve our knowledge of the fascinating β -cell and provide new concepts to prevent or propose new treatment strategies to counteract β -cell failure.

Guest Editor

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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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