

Special Issue

The Molecular Mechanisms behind Mast Cell Allergic and Innate Immune Responses

Message from the Guest Editor

Exocytosis is the final step in the secretory pathway, serving a central role in cell communication with its environment and the coordination of its cellular functions. In immune cells, such as mast cells, regulated exocytosis mediates their immediate response, which leads to the release of a variety of inflammatory mediators that are pre-formed and stored in cytoplasmic secretory granules (SGs). Mast cell exocytosis is crucial in mediating mast cell pathological responses in allergy and anaphylaxis, and their physiological innate immune responses, in their capacity as sentinel cells of the immune system. Yet, the mechanisms that underlie mast cell degranulation and the one behind the biogenesis of the mast cell SGs aren't clear. Given the heterogeneity of mast cells and their SGs, the multiple stimuli mast cells respond to and the fact that mast cells can utilize distinct modes of exocytosis to release their SG content, it is argued that mechanisms that control mast degranulation and the release of their SG content are not unifying. The Issue welcomes articles that address different aspects of mast cell secretion.

Guest Editor

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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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