Special Issue

The Immunology of Allergy and Asthma

Message from the Guest Editors

Skin, airway and gut mucosae are directly exposed to external matters. This environmental pressure challenges skin/mucosal epithelial barriers and immunity to prevent unnecessary responses and adapt to exposures. Homeostasis in skin/mucosal barriers involves complex interplay between structural and immune cells; dysregulation causes chronic activation, epithelium damage, remodeling and organ dysfunction. This scenario in rhinitis, asthma, food allergy or dermatitis is driven by allergen-specific IgE from dendritic-T cell interactions triggering B-cell switching. Distinguishing IgE-mediated, allergic and non-specific inflammation here remains urgent clinically and immunologically; type 2 activation is a dominant trait targetable by biologics. Fundamental mechanisms for type 2/non-type 2 activation and IgE production need delineation to prevent disease in at-risk individuals or induce remission. Also, mechanisms of acute nonspecific reactivity to food/drug triggers involving mast cells need characterization. Additionally, study structural cells and host-microbiome interactions to unravel novel mechanisms and therapies.

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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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