Special Issue

Ion Channels in Healthy and Diseased Respiratory Epithelia

Message from the Guest Editors

Respiratory epithelia serve a variety of highly important functions. One of the diverse duties represents the first line of protection against the invasion by bacteria, microbes, viruses and other harmful substances in the inhaled air. The mucus lining the outer surface of respiratory epithelia usually traps the potential invaders and transports them, together with other particles, to the pharynx, driven by the constant concerted beating of the epithelial cilia. Mucus production, its ion and water composition (thus determining mucus viscosity), ciliary beating and coordination of the concerted beating are driven by the action and the interplay of a whole orchestra of ion channels in respiratory epithelia. Malfunctions of one or more ion channels or the interception of the intracellular signal cascades regulating the concerted interplay of those channels lead to severe diseases having dramatic health effects. and eventually lead to the death of patients. We encourage scientists from all fields to contribute to enlightening the role of respiratory epithelial ion channels, from molecule to malady.

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Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in Biomolecules so far. We would be delighted to welcome you as one of our authors.

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