

Special Issue

Epithelial Ion Transport in Health and Disease

Message from the Guest Editors

The transport of ions by epithelial cells is essential for a wide range of physiologically important processes, such as acid–base and fluid balance, defense against pathogens, the digestion and absorption of nutrients, efficient sensory transduction, and tissue differentiation as well as repair. Dysfunction in epithelial ion transport underlies many diseases, such as secretory diarrheas, hypertension, COPD, cystic fibrosis, ARDS, pancreatitis, and hydrocephalus, to name just a few. This Special Issue will bring together original research and review articles related to the functional and pathological roles of ion transport in epithelial tissues in health and disease. It will highlight new discoveries, approaches, and technical developments in epithelial research. The main feature of this Special Issue is to highlight emerging new roles played by ion transporters and channels in epithelia, as well as how this information is being harnessed to develop new therapeutic strategies for important human diseases.

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