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# Intracellular Organellar Ion Channels and Molecular Physiology

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# **Message from the Guest Editors**

Dear Colleagues,

Intracellular membranes have ion gradients across them. It is expected that ion channels and transporters play important roles in generating and/or maintaining these gradients and in using the electrochemical gradients to drive movement of signals and materials across membranes. In this Special Issue, experts will provide a detailed introduction to the ion channels of interest in each organelle and will discuss their physiological or pathophysiological functions. The intracellular membraneenclosed organelles generally include ER, Golgi apparatus, mitochondria, lysosomes, chloroplasts, endosomes, lysosome-related organelles, peroxisomes. trafficking vesicles. secretory granules. synaptic vesicles. phagosomes, autophagosomes, vacuoles, etc. Exosomes are also considered because of their intracellular origin. The general theme is to discuss cation or anion channels discovered with relatively high certainty and crystallize the current understandings into a mechanistic basis for physiology and pathophysiology.













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# Message from the Editor-in-Chief

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