

## Special Issue

# Studies on Proton-Gated Ion Channels: Structural Aspects, Pharmacology and Implications in Health and Disease

### Message from the Guest Editor

Proton-Gated Ion Channels are a group of membrane-integrated complexes of protein subunits that are activated via an acidic stimulus, followed by the generation of an inward cation current into the cell. This group primarily includes acid-sensing ion channels (ASIC channels), which are the most sensitive to protons, as well as transient receptor potential (TRP) channels of the TRPV and TRPA subfamilies. Present in the neurons of the central nervous system (NS) and abundantly in the sensory neurons of the peripheral NS, Proton-Gated Ion Channels often play a critical role in various physiological and pathophysiological processes, such as synaptic plasticity, nociception, inflammation, ischemic neuronal death and other neurodegenerative processes, etc.

This Special Issue aims to gather contemporary and comprehensive research concerning both Proton-Gated Ion Channels themselves and their exogenous and endogenous modulators, including, but not limited to, the structural and functional aspects and contributions of these channels to various physiological and pathological processes, as well as the pharmacological potential that these channels have in these processes.

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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### Editor-in-Chief

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