



## New Insights into Cardiac Ion Channel Regulation

Guest Editor:

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### Message from the Guest Editor

Dear colleagues,

The ordered electrical excitation of the heart coordinates the efficient pumping of blood throughout the body. Cardiac arrhythmias are electrical disturbances that are often the manifestation of drug toxicity or acquired or genetic diseases. Clinicians and scientists collectively work to identify the basis and prevention of different arrhythmogenic mechanisms. Molecular, cellular, animal, and clinical studies have identified several major families of clinically important cardiac ionic currents and their associated genes and proteins. These studies have led to new discoveries in ion channel regulation at the level of gene transcription, mRNA splicing and stability, translation, protein assembly, intracellular transport (trafficking), second messenger modification, and biophysical function. In this Special Issue, we focus on foundational and emerging concepts in cardiac ion channel regulation, with an emphasis on how this information contributes to a better understanding of normal cardiac excitation and arrhythmogenicity.





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