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New Discoveries in Calcium Signaling-Related Neurological Disorders

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Message from the Guest Editor

The ubiquitous intracellular messenger calcium (Ca^{2+}) exerts regulatory control over virtually every activity in eukaryotic cells, particularly in excitable cells. Within neurons, Ca^{2+} assumes a crucial role in the regulation and modulation of essential physiological processes, spanning from synaptic activity to neuronal plasticity. Given the necessity for a highly refined and precise control of Ca^{2+} levels within specific cellular compartments in neurons, the organizational structure of the Ca^{2+} signaling machinery in neurons is notably intricate. The malfunctioning of the Ca^{2+} signaling pathway, which oversees numerous neuronal processes, has been linked to the onset and progression of significant neural disorders in humans. Conditions such as Alzheimer's disease, bipolar disorder, and schizophrenia have been implicated in instances where the Ca^{2+} signaling pathway experiences dysregulation.

This Special Issue aims to put together all the recent findings on how Ca^{2+} dysregulation can contribute to the outcome and progression of several neurological disorders.



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Special Issue



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Message from the Editorial Board

Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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