



The Versatility of Mitochondrial Calcium: Insights in the Regulation of Redox Signaling

Guest Editor:

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Message from the Guest Editor

This Special Issue will highlight studies relating to the interplay between calcium and redox signaling. Calcium (Ca^{2+}) is a crucial second messenger involved in intracellular molecular routes, and it plays an essential role in cell fate decisions from birth, through to development, and finally to death. Ca^{2+} signaling is put in place by an intricate network of proteins, differently localized inside cells which sense and spread Ca^{2+} signals by spatio-temporal means in order to regulate cellular processes. Ca^{2+} signaling pathways interact with other cellular signaling systems such as reactive oxygen species (ROS). Originally considered as simple detrimental by-products of metabolism, it is now evident that ROS generated in sub-toxic amounts may act as signaling molecules involved in various physio-pathological processes. This Special Issue aims to collect papers (both original articles and review) which highlight the crosstalk of these two systems in physiology, and how this can be dysregulated in human diseases generating potentially harmful effects.





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Message from the Editor-in-Chief

It has been recognized in medical sciences that in order to prevent adverse effects of "oxidative stress" a balance exists between prooxidants and antioxidants in living systems. Imbalances are found in a variety of diseases and chronic health situations. Our journal *Antioxidants* serves as an authoritative source of information on current topics of research in the area of oxidative stress and antioxidant defense systems. The future is bright for antioxidant research and since 2012, *Antioxidants* has become a key forum for researchers to bring their findings to the forefront.

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