



Mitochondrial Function in Health and Disease

Guest Editor:

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Deadline for manuscript
submissions:

closed (31 May 2018)

Message from the Guest Editor

The mitochondrion hosts and coordinates an array of functions from calcium sequestration and heme synthesis to cell death. Most mitochondrial functions rely on an intact respiratory chain and oxidative phosphorylation. One of the side effects of respiration is the production of reactive oxygen species (ROS) that can be damaging to the cell. Growing awareness of mitochondrial involvement in an increasing number of diseases has led to a steady increase in medical mitochondrial research over the past decades.

This Special Issue aims to publish original research papers and reviews on aspects of mitochondrial function in various disorders ranging from aging and neurodegeneration to diabetes and cardiovascular disorders. It will focus on topics that relate to; how respiratory defects play a role in pathology; the functions of mitochondrial calcium; the influence of ROS on cell death; mitochondrial impact on redox homeostasis; the use of antioxidants for therapy; and agents that promote mitochondrial function as therapeutic targets.





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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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