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Mitochondrial Oxidative Stress in Health and Disease

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Deadline for manuscript
submissions:

closed (31 December 2023)

Message from the Guest Editors

Dear Colleagues,

Mitochondria produce reactive oxygen species (ROS) as a natural by-product of electron transport chain activity.

In physiological conditions, the production of ROS, involved in regulating the activity of many key enzymes, is efficiently neutralized by antioxidant pathways, which regulates oxygen consumption and redox generation capacity.

In pathological conditions, excessive generation of ROS can elicit an intracellular state known as oxidative stress, when cellular antioxidant systems are no longer able to maintain physiological redox homeostasis.

This Special Issue of *Oxygen*, entitled “Mitochondrial Oxidative Stress in Health and Disease”, aims to cover the more recent advances and insights into research in these areas, ranging from biochemistry to pathophysiology, and will focus on little-studied aspects of mitochondrial oxidative stress which may help develop new health and medical applications.



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Special Issue