Special Issue

Modulation of Biochemical, Cellular and Physiological Mechanisms in Response to Oxidative Stress in Animals

Message from the Guest Editors

Oxidative stress has profound effects on biochemical, cellular, and physiological processes. If oxidative stress is not ameliorated, it may result in irreversible oxidative damage to macromolecules and cellular components, thus contributing to the pathogenesis of various conditions and diseases, as well as aging. Oxidative stress is implicated in animals' health and welfare through multiple ways, such as cellular signaling, cell death pathways as apoptosis and ferroptosis, autophagy, inflammation, and metabolic dysregulation. The regulation of these cellular pathways by several internal and external factors, such as enzymatic or non-enzymatic antioxidants, may ensure the timely response of cells and subsequently their prolonged stamina against oxidative stress. The elucidation of these underlying mechanisms is crucial for developing strategies to mitigate oxidative stress and its associated welfare and health risks in animals. For this reason, we kindly invite you to submit your original research papers and reviews to the Special Issue "Modulation of Biochemical, Cellular and Physiological Mechanisms in Response to Oxidative Stress in Animals".

Guest Editors

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About the Journal

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.

Editor-in-Chief

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