

Special Issue

Redox, Antioxidant and Mitochondrial Signaling

Message from the Guest Editor

Since Rebeca Gerschman and Daniel Gilbert proposed the role of oxygen free radicals in oxygen toxicity in 1954, reactive oxygen species (ROS) have been known to cause damage to biological systems. However, in early 1990, a paradigm shift occurred and the role of ROS as mediators of cell signaling emerged. Consequently, antioxidants that regulate the levels of ROS as well as ROS generators such as the mitochondria are now thought to participate in ROS-defining cell signaling in a complex biological process called redox signaling. In this Special Issue, the advancements in the last 70 years in the understanding of the roles of ROS as damage-causing species as well as regulators of physiological processes, particularly in the field of cell signaling, are discussed.

Guest Editor

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