Special Issue

Oxidative Stress in Striated Muscle and Other Tissues

Message from the Guest Editor

ROS play an important signaling role in skeletal and cardiac muscles, as well as in other tissues closely associated with calcium signals. Several signaling pathways in striated muscle can be activated by an increase in reactive oxygen species (ROS) and reactive nitrogen species (RNS) production. The large magnitude of calcium signals involved in both the contractile process and the deleterious processes induced by excess ROS/RNS production has made the study of the physiological role of ROS difficult. Abnormal ROS/RNS production appears to be involved in several striated muscle-related diseases, including muscle wasting, muscular dystrophies, aging-related sarcopenia, cardiac wasting and cancer cachexia. Metabolic diseases such as obesity are also related to abnormal ROS/RNS handling by muscle cells, leading to insulin resistance and T2D. We invite you to submit your latest research findings or a review article to this Special Issue, which will collate current research in both striated muscle and exercise concerning ROS/RNS production, ROS/RNS regulation and ROS-/RNS-related deleterious processes and diseases.

Guest Editor

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Deadline for manuscript submissions

closed (30 June 2025)



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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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