

Special Issue

Oxidative Stress and Skeletal Muscle Function

Message from the Guest Editor

Excessive stretching and intensive exercise causing rupture of myofibril filaments lead to skeletal muscle loss of function through the failure in the excitation-contraction coupling system. These events generate inflammatory response and an higher reactive oxygen species (ROS) production. ROS are continuously generated in the body and are usually promptly inactivated by the cellular antioxidant defenses. In skeletal muscle, low concentrations of ROS modulate cell signaling processes and are required for normal force production, while higher ROS concentrations can lead to DNA, lipid, protein, and carbohydrate modifications, which can cause cellular function impairment and a reduced force production thereby contributing to muscle fatigue.

This Special Issue Oxidative Stress and Skeletal Muscle Function invites submissions of manuscripts, either original research or reviews with an emphasis on describing new biomarkers or novel exercise-regulated signaling pathways as well as new techniques and research approaches involved in the interplay between oxidative stress, physical activity, nutritional strategies and skeletal muscle damage.

Guest Editor

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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