

## Special Issue

# Redox Control of Cardiac and Skeletal Muscle Function

### Message from the Guest Editor

The supraphysiological production of reactive oxygen species (ROS) in cardiac and skeletal muscle is a hallmark of numerous conditions associated with muscle contractile dysfunction, including but not limited to disease, inactivity, and aging. Equilibrium within the redox system is necessary to control the activation of signalling pathways that are essential for the maintenance of cardiac and skeletal muscle function. Conversely, oxidation may lead to changes in protein activities that promote beneficial adaptations in gene expression. Thus, a more comprehensive understanding of the mechanisms by which altered redox regulation can modulate signalling pathways that regulate muscle contractile protein function is needed to develop therapeutic interventions to prevent cardiac and skeletal muscle dysfunction resulting from a diverse array of conditions. This Special Issue aims to highlight original research and review articles that provide insight into understanding the role that ROS and protein oxidation play as an integral component of muscle protein breakdown and adaptation in conditions that promote cardiac and skeletal muscle dysfunction.

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### Guest Editor

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### Deadline for manuscript submissions

closed (31 December 2020)



## Antioxidants

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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.

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### Editor-in-Chief

Prof. Dr. Alessandra Napolitano  
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