

## Special Issue

# New Insight into Redox Homeostasis and Oxidative Stress in Health and Disease: Focus on Cardiac and Vascular Function

### Message from the Guest Editors

Reactive oxygen species (ROS) and reactive nitrogen species (RNS) play a fundamental role in maintaining cardiovascular homeostasis through redox signaling mechanisms that regulate vascular tone, myocardial function, metabolic adaptation, and cell growth and survival, among other processes. Under physiological conditions, ROS/RNS signaling is subject to tight spatiotemporal regulation and is intimately integrated into metabolic networks. However, the dysregulation of these processes can shift cellular homeostasis towards oxidative or nitrosative stress, promoting endothelial dysfunction, inflammation, fibrosis, cellular senescence, and cell death, as observed in cardiovascular diseases such as atherosclerosis, hypertension, stroke, myocardial infarction, and heart failure. The objective of this Special Issue is to promote this paradigm shift, which may entail the transformation of redox-based interventions into clinically effective strategies for the prevention and treatment of cardiovascular disease. We invite you to submit your latest research findings or a review article to this Special Issue.

### Guest Editors

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### Deadline for manuscript submissions

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## 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

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