

Special Issue

Oxidative Stress and Inflammation in Health and Disease

Message from the Guest Editors

Oxidative stress and systemic inflammation are connected processes that can influence and amplify each other. Oxidative stress can activate immune cells to release pro-inflammatory molecules and to generate reactive oxygen species, as part of their defense mechanisms. In turn, pro-inflammatory cytokines can trigger the generation of more radicals, creating a vicious cycle that sustains chronic inflammation and leads to tissue damage in various organs. This Special Issue aims to highlight the current understanding of the bidirectional relationship between inflammation and oxidative stress and their role in the development and progression of various diseases and conditions such as cardiovascular and respiratory diseases, neurodegenerative and reproductive system disorders, diabetes and obesity, and cancer. Moreover, studies on how lifestyle factors (environmental exposures, antioxidant adjuvant treatments, diet, etc.) can contribute to the reduction or increase in the risk of these chronic conditions are welcome. This Special Issue will accept original articles and reviews dealing with the molecular aspects of oxidative stress and systemic inflammation.

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