

## Special Issue

# Antioxidant Improvements by Nrf2 and PPAR Gamma Activation in Cardiovascular and Neurodegenerative Diseases

### Message from the Guest Editors

Mammalian cells have evolved a unique strategy to protect themselves against oxidative damage induced by reactive oxygen species (ROS). The transcription factors nuclear factor erythroid 2-related factor 2 (Nrf2) and nuclear factor peroxisome proliferator-activated receptor  $\gamma$  (PPAR $\gamma$ ) have been shown to play key roles in establishing this cellular antioxidative defense system. Nrf2 functions as a target nuclear receptor against oxidative stress and is a key factor in redox regulation in hypertension, cardiovascular, and neurodegenerative diseases. PPAR $\gamma$  is a nuclear receptor playing an important role in the management of cardiovascular diseases, hypertension, and metabolic syndrome. PPAR $\gamma$  targets genes with peroxisome proliferator response element (PPRE), leading to the identification of several genes involved in lipid metabolism or oxidative stress. Nrf2 and PPAR $\gamma$  pathways seem to be connected by a positive feedback loop. The importance of Nrf2/ARE and PPAR $\gamma$ /PPRE pathways is supported by the fact both play an important role in the control of cardiovascular and neurodegenerative diseases.

### Guest Editors

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### Deadline for manuscript submissions

closed (30 September 2021)



## 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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