

Special Issue

Role of Nrf2 in Neurodegenerative Diseases

Message from the Guest Editors

In recent decades, the incidence of neurodegenerative disorders has increased worldwide. Among the different pathways compromised in this diverse group of neurodegenerative diseases, mounting evidence highlights a central role of mitochondrial detrimental changes, oxidative stress, altered cerebral glucose metabolism, and metabolic/bioenergetic shifts that frequently precede cognitive abnormalities. The central element interlinking these complex pathways is Nrf2, a critical transcription factor that coordinates the expression of more than 500 cytoprotective and metabolic genes modulating inducible defence systems and regulating not only the antioxidant response but also mitochondria functioning as well as multiple points of the cell intermediary metabolism. This Special Issue aims to provide insight into the role of Nrf2 in the interplay between the multifaceted molecular pathways linking metabolic/bioenergetic alterations, neuroinflammatory mechanisms, vascular dysfunction, and cognitive impairment associated with neurodegeneration.

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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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