



## The Nrf2 Pathway: Regulation, Functions, and Potential Applications 3.0

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### Message from the Guest Editor

Dear Colleagues,

The Nrf2 pathway, a master regulator of redox homeostasis, is an integrated cellular response for electrophiles and thiol reactive compounds. In addition to its activation by environmental electrophiles, diverse mechanisms of Nrf2 activation have been reported. The Nrf2 pathway has a wide variety of functions, such as defense against oxidative stress and electrophilic toxicity, carcinogenesis protection, tumorigenesis, anti-inflammation, stem cell regulation, anti-aging, reducing mechanical stress and organelle stress, protection against brain and skin injuries. Drug discoveries targeting the Nrf2 pathway have been explored extensively, since dysregulation of the Nrf2 pathway leads to a lot of human diseases and disorders, including cancer, diabetes, atherosclerosis, and neurodegeneration.

In this Special Issue, we are widely recruiting original articles that describe new discoveries in the Nrf2 pathway regarding any relevant topic, such as physiological functions, gene regulation, activation mechanism, drug discovery, evolution, protein structure, animal models, and genomes. We also welcome review articles and commentaries.

Prof. Andreas von Knethen  
Guest Editor



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