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Hypoxia and Oxidative Stress

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Message from the Guest Editors

Hypoxia and the generation of reactive oxygen species (ROS) share a toxic dependency on each other. Hypoxia is a result of lack of oxygen, whereas increased levels of ROS can result from increased levels of oxygen. Additionally, in cases of reoxygenation, hypoxia leads to an increase of ROS generation.

With this Special Issue, we kindly invite you to submit your latest research findings or reviews covering two aspects in particular—new knowledge of the mechanisms and pathways involved in the generation and actions of ROS under or after hypoxia and under physiological and pathophysiological conditions, and new knowledge of regulations of mediators of hypoxic pathways in which ROS are involved. Additionally, papers describing new methods that can be used to detect and distinguish different types of ROS under hypoxic conditions are welcomed. We believe this Special Issue will offer a snapshot of the current knowledge of the interplay between ROS and hypoxia, which will not only include important current advances, but will also be a worthwhile resource for researchers worldwide wanting to deepen their knowledge in this field.



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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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