

Special Issue

ROS Signalling and Cell Turnover

Message from the Guest Editor

Reactive oxygen species (ROS) are a group of chemically reactive molecules that are crucial in controlling metabolic pathways. Several normal biochemical processes lead to the formation of ROS, which are counteracted by antioxidant systems that keep ROS levels low. Importantly, ROS are essential second messengers that regulate multiple signal transduction pathways and, in this way, control cell fate. ROS exert their function by modifying the redox state of cysteine residues in transducing proteins, including protein kinases and transcription factors. Thus, critical decisions on cell fate, such as cell division, survival, or activation of cell death programs, depend on ROS levels, which result from a delicate balance between ROS-producing and ROS-scavenging pathways. ROS also plays a fundamental role in inflammation, immune response, cancer, and cardiovascular and neurodegenerative diseases. This Special Issue will focus on redox homeostasis in physiology and diseases. Original manuscripts and reviews covering these topics are welcome.

Guest Editor

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Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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