

Special Issue

Cellular and Molecular Mechanisms of Heavy Metal Toxicity: From Death to Immortality

Message from the Guest Editor

Pivotal to the cellular response to heavy metal toxicity are reactive oxygen species (ROS), which lead to DNA damage, lipid peroxidation, alteration of signaling and transport proteins or modulation of enzyme activities. Heavy metals may alter the cellular redox status by increasing ROS generation or damaging ROS-scavenging defenses, both resulting in elevated ROS levels, and impacting physiological ROS signaling as well as downstream signaling pathways involved in cellular life and death decisions. In this context for this Special Issue, investigators and experts in the field are invited to submit high quality original articles reporting novel findings regarding molecular and cellular mechanisms of heavy metals (single or mixtures) or review articles summarizing the status-quo and postulating updated and stimulating hypotheses.

Keywords:

- oxidative stress
- cell death
- carcinogenesis
- mutations
- toxicology
- molecular mimicry
- signal transduction
- redox status

Guest Editor

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Deadline for manuscript submissions

closed (28 February 2023)



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