

## Special Issue

# Insights into Mitochondrial Iron Metabolism: Connections to Cancer and Other Pathologies

### Message from the Guest Editor

Iron is an essential element for the maintenance of cellular functions, and it exists within a complex metabolic network. At the center of the iron metabolic network is the mitochondria, which house the machinery required for the generation of iron–sulfur clusters and heme for insertion into the necessary proteins. Both processes, iron–sulfur cluster biogenesis and heme synthesis are complex biochemical processes. Both co-factors are utilized in a variety of cellular processes that are required for the maintenance of homeostasis and cell survival. For example, there are a plethora of DNA metabolic enzymes that contain [4Fe-4S]<sub>2</sub><sup>+</sup> clusters that are required for the maintenance of genomic integrity. The overarching goal of this Special Issue is to highlight research on the role of the various features of mitochondrial iron metabolism (e.g., iron–sulfur cluster biogenesis, heme synthesis, mitochondrial ferritin, etc.) in maintaining cellular homeostasis. This Special Issue welcomes review articles and original research on mitochondrial iron metabolism and its connection to fundamental biological processes and pathology, including studies on cancer.

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### Guest Editor

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### Deadline for manuscript submissions

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## International Journal of Molecular Sciences

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### Message from the Editor-in-Chief

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