



## Trace Metal Element Metabolism in Biological Systems

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### Message from the Guest Editors

Metals are essential for life because they are required in a multitude of biological processes. Enhanced understanding of the molecular mechanisms underlying metals metabolism is crucial not only for the discovery of novel targets able to modulate these processes, but also the development of effective therapeutic strategies or compounds, to ultimately ameliorate or prevent the associated diseases. However, the cellular and molecular mechanisms of metals contributing to these disorders are largely unclear at present.

This Special Issue aims to highlight recent advances in the molecular mechanisms underlying the physiology and pathophysiology of metal homeostasis, especially for metal roles in keeping regular biological metabolism pathways, and their dys-homeostasis-induced disordered metabolism pathway. The content will include molecular mechanisms of metal homeostasis, the contacts between them and the relationship between metals and diseases, multi-biological interactions, and it will bring together different disciplines of metals to uncover their internal laws in but not limited to human neurodegenerative diseases, cancers, plant disease, and epidemic disease.





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## Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

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