

Special Issue

The Pathophysiology of Heme

Message from the Guest Editors

Heme, an iron-containing porphyrin, is required in all our cells. As a co-factor in hemoproteins, heme participates in several essential biological processes, such as oxygen transport, mitochondrial respiration, and drug metabolism. Moreover, the heme molecule itself exhibits regulatory activities, covering a broad spectrum of cellular functions such as micro-RNA processing, transcription and translation of target genes, and the regulation of the circadian rhythm. The present Special Issue invites original research papers and reviews that aim to unravel the role of heme (1) in the regulation of physiological processes essential for cell and organ homeostasis, as well as (2) its role in the pathogenesis or in the pathologic outcomes of human diseases.

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A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

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