Special Issue

Metabolic Oscillations Controlled by the Biological Clock

Message from the Guest Editor

It is known now that at the cellular level, the biological clock is composed of the canonical molecular clock driving the 24 h cycles of transcription–translation-based feedback loops and a metabolic oscillator also named cytooscillator, commanding daily variations at the level of cellular redox state (reactive oxygen species and peroxiredoxins), glycerolipid enzyme expression and metabolism and other parameters. There is a very close cross-talk between the molecular clock and the metabolic oscillator in a cell, tissue or the whole organism which is perfectly visualized when the circadian timing system is disturbed as a consequence of modern life.

Original research and review articles are welcome to this special issue to shed light on novel observations regarding metabolic oscillations controlled by the biological clock that may impact on physiology, behavior and aging in health or even in disease progression, drug susceptibility and chronochemotherapy.

Guest Editor

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Deadline for manuscript submissions

closed (20 February 2025)



International Journal of Molecular Sciences

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Message from the Editor-in-Chief

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