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Disturbances of Circadian Hormonal and Metabolic Rhythms in a Changing Environment

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Message from the Guest Editor

The neuroendocrine system plays a key role in adaptations of animals and humans to variations of environmental conditions. The system is under complex feedback control, and the production of most hormones exhibits distinct circadian rhythms. Circadian oscillations are generated at the molecular level by coordinated transcription of clock genes and synchronize many physiological and metabolic processes. Understanding the molecular mechanisms at the interface between the circadian and neuroendocrine system and their control of metabolic processes can help to identify the key nodes, which are important for health.

This Special Issue will focus on molecular mechanisms underlying rhythms in the biosynthesis and action of different hormones, which are disturbed by recently changing environmental conditions such as light pollution, stress, metabolic dysfunction, and diseases. Special emphasis is given on metabolic rhythms, which are not only outputs of the circadian system but also feedback to the circadian clocks to align tissue-specific processes with environmental conditions.













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Message from the Editor-in-Chief

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