

Special Issue

The Role of Basal Forebrain and Thalamic Structures in the Regulation of Sleep and Wakefulness

Message from the Guest Editors

The role of basal forebrain and thalamic structures in the regulation of sleep–wakefulness and associated cortical oscillations was recognized as early as in the 1960s. They are famously described as important components of the ascending reticular activating system. In the past two decades, significant advancements have been witnessed in methodological development and transgenic mouse models. Research using new and novel approaches has provided further insight into the nature of the complex circuitry and distinct neuronal subpopulations, with distinct receptors and ion channel subtypes, which work in concert to regulate sleep within the basal forebrain and thalamus and in connection with other brain regions. This Special Issue of Brain Sciences aims to present the latest research from the past decade which sheds new light on the importance of the basal forebrain and thalamic regions in the regulation of sleep and wakefulness.

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