

## Special Issue

# Biological Research of Rhythms in the Nervous System

### Message from the Guest Editors

Network oscillations are essential for cognitive functions, they are modified by psychoactive substances, and oscillopathies contribute to cognitive dysfunction in neurologic and psychiatric diseases. Biological research of rhythms in the nervous system involves a wide variety of approaches, and requires the collaboration of scientists in different fields, from mathematical modeling and signal analysis to neurophysiological experiments on membrane, cellular, and network levels, to human electroencephalography and clinical studies of cognitive deficits due to impairments of these mechanisms. The past decades saw major advances in understanding the origin of neural oscillations and in collecting essential observations on altered patterns of rhythmic activity serving as biomarkers in clinical practice. This Special Issue will focus on recent research of rhythmic activity of the nervous system including basic research concerning cellular and network mechanisms, the effect of psychoactive compounds on oscillations, and its pathology in neuropsychiatric disorders with cognitive deficits.

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### Guest Editors

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### Deadline for manuscript submissions

closed (20 August 2025)



## International Journal of Molecular Sciences

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