

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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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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