



## Molecular Circuits Regulating Sleep and Wakeful Consciousness

Guest Editors:

**Prof. Dr. Michael Lazarus**

International Institute for  
Integrative Sleep Medicine (WPI-  
IIS), University of Tsukuba,  
Tsukuba, Japan

**Dr. Wang Yi-Qun**

Department of Pharmacology,  
School of Basic Medical Sciences  
of Fudan University, Fudan  
University, Shanghai, China

Deadline for manuscript  
submissions:

**closed (28 February 2022)**

### Message from the Guest Editors

The sleep field has recently witnessed an exponential increase in the understanding of brain circuitries regulating sleep/wake behavior. The goal of the Special Issue is to gather original research and review articles relevant to the control of non-rapid eye movement (non-REM), REM sleep, or wakeful consciousness. We are especially seeking contributions that shed light on mechanisms underlying key aspects of the sleep states, such as sleep need; the circadian, ultradian, or behavioral gating of sleep; and REM sleep homeostasis. We are open to articles that use innovative techniques to study the detailed circuit and synaptic basis of sleep/wake control, for example, electrophysiological recording or imaging used in combination with pharmacologic or the genetically driven perturbation of defined sets of neurons or glial cells in all animals that have the ability to sleep or exhibit a sleep-like behavior. We also welcome studies on the molecular profiling of sleep and wake states or the crosstalk between sleep and peripheral physiological systems (e.g., immune system or metabolism), as well as studies about physical and chemical factors that influence sleep and wakefulness.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Maurizio Battino

Department of  
Odontostomatologic and  
Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of  
Medicine, Università Politecnica  
delle Marche, Via Ranieri 65,  
60100 Ancona, Italy

## Message from the Editor-in-Chief

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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

## Contact Us

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI