



## Applications of Mass Spectrometry-Based Methods to Explore the Impact of Circadian Rhythms on Disease

Guest Editor:

**Dr. Robin Joshi**

Perelman School of Medicine,  
ITMAT, University of  
Pennsylvania, Philadelphia,  
United States

Deadline for manuscript  
submissions:

**31 July 2024**

### Message from the Guest Editor

Dear Colleagues,

The circadian clock is a molecular endogenous timekeeping system that allows organisms to adjust their physiology and behavior to geophysical time. Mass spectrometry (MS) is now regarded as a universal tool with high sensitivity for any possible applications. Understanding the circadian regulation of molecular processes through MS-based methods is crucial for unraveling the complex interactions between circadian rhythms and diseases, ultimately leading to the development of targeted therapeutic interventions. Therefore, we welcome the submission of full-length research articles, review articles, and short communications covering the following topics of interest for this Special Issue:

- Mass spectrometry-based absolute quantification reveals rhythmic variation in circadian clock lipids, proteins, and metabolites.
- Multiomics approach to study the potential biomarkers in circadian rhythm using mass spectrometry.
- New method development in mass spectrometry to explore the impact of circadian rhythm on disease.
- Mass spectrometry studies to study the circadian variations in drug metabolism and pharmacokinetics.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Felipe Fregni

1. Neuromodulation Center and  
Center for Clinical Research

Learning, Spaulding  
Rehabilitation Hospital and  
Massachusetts General Hospital,  
Harvard Medical School, Boston,  
MA 02114, USA

2. Department of Epidemiology,  
Harvard T.H. Chan School of  
Public Health, Boston, MA 02115,  
USA

## Message from the Editor-in-Chief

*Biomedicines* (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

## 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](#), [CAPUS / SciFinder](#), and [other databases](#).

**Journal Rank:** JCR - Q1 (*Pharmacology & Pharmacy*) / CiteScore - Q2 (*Medicine (miscellaneous)*)

## Contact Us

*Biomedicines* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/biomedicines](http://mdpi.com/journal/biomedicines)  
[biomedicines@mdpi.com](mailto:biomedicines@mdpi.com)  
[X@Biomed\\_MDPI](#)