Special Issue

Molecular Mechanisms in Heart Rate Regulation and Cardiac Arrhythmias

Message from the Guest Editor

Over the past few decades, cardiac arrhythmias have persisted as a major global health concern and are expected to increase in prevalence due to aging populations and increasing incidences of associated chronic diseases. Understanding the molecular basis of cardiac arrhythmias provides valuable insights for the prevention and management of this global concern. We cordially invite you to submit manuscripts that highlight novel findings in the molecular causes. progression, and treatment of cardiac arrhythmias as well as key mechanisms in heart rate regulation. Both original research articles and reviews that focus on molecular results are welcome. This Special Issue will highlight the molecular mechanisms underlying the intrinsic and neurohumoral regulation of heart rate, the development and maintenance of cardiac arrhythmias, and innovative therapeutic approaches for the treatment and/or prevention of these conditions. With an emphasis on molecular mechanisms and emerging therapeutic approaches, this Special Issue will offer an engaging and thorough overview of the latest breakthroughs in cardiac arrhythmias and heart rate regulation.

Guest Editor

Dr. Yingjie Liu

College of Nursing and Health Innovation, University of Texas at Arlington, Arlington, TX 76010, USA

Deadline for manuscript submissions

30 May 2026



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/257303

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

mdpi.com/journal/ ijms





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





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.

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

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 and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

