

Special Issue

Epigenetic Regulation and Molecular Mechanisms in Cardiovascular Diseases

Message from the Guest Editor

Cardiovascular diseases remain a leading cause of death globally, yet the molecular pathways underlying their development are not fully understood. Recent advances highlight the critical role of epigenetic regulation—including DNA methylation, histone modifications, and non-coding RNAs—in modulating gene expression and driving cardiovascular pathology. This Special Issue of the *International Journal of Molecular Sciences* will focus on the latest molecular research exploring how epigenetic mechanisms influence key processes such as vascular inflammation, myocardial remodeling, atherosclerosis, and heart failure. We invite original research articles and reviews that present molecular data and mechanistic insights into the role of epigenetic regulation in cardiovascular diseases. Submissions employing state-of-the-art molecular techniques and addressing potential therapeutic implications are highly encouraged. We hope that this collection will provide a comprehensive view of the epigenetic landscape in cardiovascular diseases and foster the development of novel diagnostic and therapeutic strategies.

Guest Editor

Dr. Paschalis Karakasis

Second Department of Cardiology, Hippokraton General Hospital, Aristotle University of Thessaloniki, 54642 Thessaloniki, Greece

Deadline for manuscript submissions

20 July 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/240128

*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](https://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



[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)



About the Journal

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* 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, and molecular biophysics. *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. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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, CAPus / SciFinder, and other databases.

Journal Rank:

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