

## Special Issue

# Genetic Basis and Molecular Mechanisms of Heart Failure

### Message from the Guest Editors

A wealth of evidence has demonstrated the relevance of gene mutations and molecular pathways in the development of heart failure, although their contribution is heterogenous and complex. Indeed, the role of genetics ranges from monogenic syndromes caused by single underlying pathogenetic mutations, to complex traits determined by the combination of multiple genetic or epigenetic individually low-penetrance loci with environmental triggers. The risk and course of heart failure depends on underlying genomic variants and mutations. As a consequence, genetic testing is starting to be applied in clinical routine diagnostics to evaluate risk, to predict prognosis and to guide treatment. This Special Issue of the *International Journal of Molecular Sciences* focuses on the genetic basis and molecular mechanism of heart failure, and welcomes both original research articles and review papers.

### Guest Editors

Prof. Dr. Massimo Volpe

1. Department of Clinical and Molecular Medicine, Sapienza University of Rome, Via di Grottarossa 1035, 00189 Rome, RM, Italy
2. IRCCS San Raffaele, Via della Pisana 235, 00163 Rome, Italy

Dr. Giovanna Gallo

Department of Clinical and Molecular Medicine, Sant'Andrea Hospital, Sapienza University of Rome, Via di Grottarossa 1035, 00189 Rome, Italy

### Deadline for manuscript submissions

closed (31 October 2024)



## International Journal of Molecular Sciences

an Open Access Journal  
by MDPI

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/179935](https://mdpi.com/si/179935)

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