

## Special Issue

# Novel Insights in Cardiac Research: Mechanisms, Therapies, and Emerging Technologies

### Message from the Guest Editor

This Special Issue aims to present the latest advancements in the field of cardiac cellular physiology, focusing on both foundational insights and innovative therapeutic approaches. We encourage contributions that explore recent breakthroughs in understanding the molecular and cellular mechanisms underlying cardiac function, arrhythmogenesis, and myocardial diseases. The issue will also highlight emerging strategies in therapeutic intervention, ranging from novel drug targets to cutting-edge technologies, including light-based approaches, gene editing, and personalized medicine. More specifically, we invite original research articles, reviews, and perspectives that address, but are not limited to, the following topics: 1. The mechanisms of arrhythmogenesis and its molecular pathways. 2. The cellular and molecular basis of myocardial diseases. 3. Light-based approaches in cardiac research and therapy. 4. Gene editing technologies for precision cardiac therapies. 5. Advanced models for cardiac disease modeling and therapy.

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### Guest Editor

Dr. Francesco Lodola

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### Deadline for manuscript submissions

closed (31 May 2025)



# International Journal of Molecular Sciences

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## 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.

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### Editor-in-Chief

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