

## Special Issue

# Cell Programming for Cardiovascular Disease Modeling and Therapy

### Message from the Guest Editor

Cardiovascular diseases still represent a leading cause of mortality in the developed countries with highly limited therapy options. A main reason is the very limited regeneration potential of collapsed cardiomyocytes – therefore novel approaches toward personalized regenerative therapy and drug development are of major importance. In recent years, forward programming of iPSCs as well as Direct Reprogramming of somatic cells and adult stem cells have introduced entirely novel options to circumvent obstacles commonly encountered in regenerative medicine by utilizing autologous cells as the source of treatment. This has greatly benefitted from efforts to identify and optimize master regulator combinations to redefine cellular fates. Multiple research groups have shown direct somatic cell conversion towards cardiovascular cells, thereby avoiding a pluripotent intermediate state. The current Special Issue will accept original studies, reviews and technical reports in the field of cardiovascular cell programming, disease modeling and cell based therapy, written by scientists active in the field.

### Guest Editor

Prof. Dr. Robert David

1. University Medical Center Rostock, Clinic for Cardiac Surgery, University of Rostock, Rostock, Germany
2. Dept. Life, Light & Matter, Interdisc. Faculty, University of Rostock, Rostock, Germany

### Deadline for manuscript submissions

closed (31 March 2021)



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/39441](https://mdpi.com/si/39441)

*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)* 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)