

## Special Issue

# The Epicardium: Development, Pathology, and Regeneration

### Message from the Guest Editors

Over the last few decades, we have witnessed a tremendous effort to understand the molecular and morphogenetic mechanisms driving cardiovascular development. At early developmental stages, the cardiac tube is constituted by two layers: the endocardium and the myocardium. Soon after cardiac looping, a third layer is formed, the epicardium, establishing critical contribution and crosstalk with the primordial cardiac layers, which might compromise coronary vascular formation and myocardial thickening if impaired. Therefore, the epicardium, besides just externally covering the naked myocardium, is primordial in disease progression, including those apparently further apart pathologies such as atrial fibrillation. More recently, a role in cardiac regeneration has also been widely acclaimed in distinct experimental models. This Special Issue aims to cover studies on the molecular and functional roles of the epicardium in the cardiovascular system, spanning from the early stages of development to the adult heart, including cardiovascular physiopathological conditions and cardiac regeneration.

---

### Guest Editors

Prof. Dr. Diego Franco Jaime  
Dr. Rita Carmona  
Dr. Carmen Lopez-Sanchez

---

### Deadline for manuscript submissions

closed (20 June 2024)



## Hearts

---

an Open Access Journal  
by MDPI



[mdpi.com/si/162753](https://mdpi.com/si/162753)

*Hearts*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[hearts@mdpi.com](mailto:hearts@mdpi.com)

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





# Hearts

an Open Access Journal  
by MDPI



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



## About the Journal

### Message from the Editor-in-Chief

---

#### Editor-in-Chief

Prof. Dr. Matthias Thielmann

West-German Heart and Vascular Center, Department of Thoracic and Cardiovascular Surgery, University of Duisburg Essen, 45122 Essen, Germany

---

#### Author Benefits

##### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

##### High Visibility:

indexed within FSTA, and other databases.

##### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 19 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).