



Journal of  
***Cardiovascular  
Development and Disease***



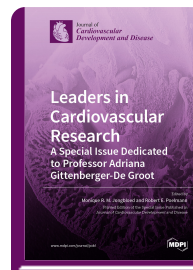
*Special Issue Reprint*

## **Leaders in Cardiovascular Research: A Special Issue Dedicated to Professor Adriana Gittenberger-De Groot**

[www.mdpi.com/books/reprint/5885](http://www.mdpi.com/books/reprint/5885)

Edited by  
Monique Jongbloed  
Robert Poelmann

ISBN 978-3-0365-4047-4 (Hardback)  
ISBN 978-3-0365-4048-1 (PDF)



The arterial pole is one of the most complex parts of the heart both in development and disease. It involves the collaboration and orchestration of contributions from the first and second heart fields as well as the neural crest. The precursor cells differentiate into endocardial cushions and putative cardiac valves, the myocardium, and epicardium of the heart, but also into the different layers of the main arterial vessels. These include not only the aorta and the pulmonary trunk but also the pulmonary and coronary arteries, and during development, the arterial duct. Many transcriptional and signaling networks act in timely concert to acquire the proper asymmetric development and function and pressure and flow dynamics. This is not only a human or even mammalian ‘enterprise,’ but is also taking place in so-called ancestral forms from fish to reptiles, including birds. In humans, it is small wonder that many clinical syndromes may arise when something in this complexity is amiss.

This Special Issue of JCDD contains contributions focussed on the heart fields, congenital cardiac malformations and associated syndromes, with special emphasis on the cardiac outflow tract.

The Issue is devoted to Prof. Dr. Adriana Gittenberger-de Groot, who dedicated her extensive career to research on cardiovascular development.



Order Your Print Copy  
You can order print copies at  
[www.mdpi.com/books/reprint/5885](http://www.mdpi.com/books/reprint/5885)

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



## Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



## Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



## High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



## High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



## Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.