

## Special Issue

# Molecular Basis of Cardiac Fibrotic Remodeling: Prognosis of Fibrosis in the Heart

### Message from the Guest Editors

Cardiac fibrosis is a pathological process with excessive secretions and deposits of extracellular matrix proteins such as collages, elastin, proteoglycans, and fibronectin. The differentiation of fibroblasts to myofibroblasts is recognized as a critical process in fibrosis. Transforming growth factor  $\beta$  (TGF- $\beta$ ) promotes this process through Smad-2/3-dependent or -independent pathways. Cellular sources and molecular mechanisms that regulate TGF- $\beta$  production and function remain incompletely understood. Atrial fibrotic remodeling is associated with atrial fibrillation. Expansion and dilatation of ventricles result in cardiac remodeling and eventual heart failure. Fibrotic remodeling is one of the major features of cardiac remodeling. Molecules that prevent or ameliorate cardiac fibrosis may be novel targets for chronic heart failure, coronary artery disease, diabetic cardiomyopathy, or other heart disease. The aim of this Special Issue is to highlight recent advances of molecules with definitive mechanisms of cardiac fibrosis and remodeling. Investigators of fibrotic remodeling of the heart are especially encouraged to submit.

### Guest Editors

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### Deadline for manuscript submissions

closed (20 October 2024)



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*Biomolecules* is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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