Special Issue

Signalling Mechanisms Regulating Cardiac Fibroblast Function

Message from the Guest Editors

Cardiac fibroblasts represent a major cell population in the heart, playing essential roles in extracellular matrix (ECM) remodeling, intercellular communication, and tissue repair. In healthy myocardium, fibroblasts maintain homeostasis through balanced ECM turnover and paracrine signaling. However, under stress or injury, these cells undergo activation into myofibroblasts, leading to excessive ECM deposition, fibrosis, and impaired cardiac function. Understanding the signaling pathways that govern fibroblast behavior is therefore essential for uncovering mechanisms of both physiological adaptation and pathological remodeling.

This SI will focus on the signaling mechanisms that control cardiac fibroblast activation, communication, and function. We particularly welcome contributions that dissect intracellular pathways (e.g., TGF-□/SMAD, MAPK, PI3K-AKT, Hippo-YAP, Wnt) and their integration with extracellular and mechanical cues. Manuscripts highlighting fibroblast heterogeneity, single-cell and spatial insights, cross-talk with cardiomyocytes, endothelial cells, and immune cells, as well as novel therapeutic strategies to target fibroblast signaling, are strongly encouraged.

Guest Editors

Dr. Haofei Wang

Department of Pathology and Laboratory Medicine, University of North Carolina, Chapel Hill, NC 27599, USA

Dr. Yanhan Dong

Department of Pathology and Laboratory Medicine, University of North Carolina, Chapel Hill, NC 27599, USA

Deadline for manuscript submissions

20 April 2026

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/si/255107

Cells
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
cells@mdpi.com

mdpi.com/journal/cells

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/journal/cells

MDPI

About the Journal

Message from the Editorial Board

Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

Editors-in-Chief

Dr. Alexander E. Kalyuzhny
Dental Basic Sciences, University of Minnesota, 308 Harvard St. SE, Minneapolis, MN 55455, USA

Prof. Dr. Cord Brakebusch
Biotech Research & Innovation Centre, The University of Copenhagen, Copenhagen, Denmark

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Cell Biology) / CiteScore - Q1 (General Biochemistry, Genetics and Molecular Biology)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).