Special Issue

Molecular Mechanisms of Exercise on Cardiac and Skeletal Muscle Function

Message from the Guest Editor

This Special Issue on "Molecular Mechanisms of Exercise on Cardiac and Skeletal Muscle Function" aims to explore the intricate molecular pathways through which exercise exerts its beneficial effects on cardiac and skeletal muscles. Regular physical activity is well-documented to enhance cardiovascular health, improve muscle strength, and promote overall well-being. However, the underlying molecular mechanisms that mediate these effects remain an active area of research. This Special Issue will delve into recent advances in understanding how exercise influences gene expression, protein synthesis, metabolic pathways, and cellular signaling in muscle tissues. Contributions are invited from researchers focusing on diverse aspects such as mitochondrial function, oxidative stress, inflammation, hypertrophy, and adaptation processes. By compiling cutting-edge research, this Special Issue seeks to provide a comprehensive overview that will enhance our understanding of the molecular basis of exercise-induced muscle adaptations and inform future therapeutic strategies for muscle-related diseases.

Guest Editor

Dr. Kisuk Min

Department of Kinesiology, University of Texas at El Paso, El Paso, TX 79968, USA

Deadline for manuscript submissions

30 August 2025

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/si/213407

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

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).