## **Special Issue**

# The Cellular and Molecular Mechanism of Hypertrophic Cardiomyopathy

Message from the Guest Editors

Hypertrophic cardiomyopathy (HCM) is the most common inherited cardiomyopathy, characterized by cardiac hypertrophy, heart failure and an increased risk of sudden cardiac death and stroke.

The genetic basis of HCM has been largely unveiled, leading to the identification of thousands of genetic variants mainly affecting genes encoding sarcomeric proteins. Recently, genome-wide association studies demonstrated that the same genetic pathways may lead to distinct disorders (hypertrophic and dilated cardiomyopathy) through opposing genetic effects, and provided evidence that a polygenic score based on common HCM susceptibility variants may explain interindividual differences in HCM disease severity among carriers of rare disease-causing variants. Also, most of the molecular mechanisms leading from the genetic defect to the clinical phenotype remain at least in part unclear.

The issue is to provide readers with a comprehensive overview on state-of-the-art knowledge at the molecular and cellular level of the mechanisms involved in the development of HCM, its pathophysiology and mechanisms of clinical progression.



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Impact Factor 5.2 CiteScore 10.5 Indexed in PubMed



mdpi.com/si/96969

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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.

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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).

