

## Special Issue

# Genetic and Molecular Mechanisms of Hypertrophic Cardiomyopathy

### Message from the Guest Editor

Hypertrophic cardiomyopathy (HCM) is a common inherited genetic disorder affecting, manifest as left ventricular hypertrophy without any underlying cause. The hypertrophy is often asymmetric, most commonly affecting the interventricular septum, and is often associated with left ventricular outflow tract obstruction. Associated findings include myocardial fibrosis, sudden cardiac death, microvascular ischemia, and mitral valve abnormalities. Although the majority of known mutations occur in sarcomeric genes, the pleiotropic manifestations of this disorder that occur in both myocytes and nonmyocyte tissues are not easily explained by these mutations. The majority of patients also do not have identifiable disease-causing mutations, raising questions about other genetic, epigenetic or nongenetic causes. Despite significant advances in understanding how HCM sarcomeric mutations affect sarcomere function and myocardial contractility, the downstream molecular mechanisms that lead to asymmetric hypertrophy, cardiac arrhythmias, mitral valve abnormalities, and microvascular dysfunction are poorly understood. This issue calls for studies that address current gaps in knowledge.

### Guest Editor

Prof. Dr. Michael T. Chin

Molecular Cardiology Research Institute, Tufts Medical Center, Boston, MA 02145, USA

### Deadline for manuscript submissions

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

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### Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle  
Marche, Via Ranieri 65, 60100 Ancona, Italy

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