

## Special Issue

# Cellular and Molecular Mechanisms of Heart Development: Implications for Heart Disease and Regeneration

### Message from the Guest Editor

Heart development is an intricate process that commences when clusters of cells form the primitive heart tube, which subsequently undergoes dynamic changes in morphology and cellular composition before finally establishing a fully functional and mature heart. The cellular and molecular processes that drive cardiac development are finely balanced, and any disruption can lead to a variety of cardiac diseases. This Special Issue aims to highlight the recent advances in understanding the cellular and molecular mechanisms of cardiac development and their implications in heart disease and regeneration. The topics may include (but are not limited to):

- Myocardium/endocardium/epicardium;
- Neural crest cells;
- Second heart field;
- Cardiac fibroblasts;
- Cardiac valves;
- Cardiomyopathies;
- Congenital heart defects;
- Arrhythmias;
- Inflammation;
- iPS-derived models;
- Animal models;
- Transcriptomics, e.g., single cell/nuclei.

### Guest Editor

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### Deadline for manuscript submissions

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## International Journal of Molecular Sciences

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### Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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### Editor-in-Chief

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