



Transcriptional Regulation of Cardiac Development and Disease

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Message from the Guest Editors

The heart is the first organ that forms and functions during embryonic development. Cardiomyocyte proliferation is a prerequisite for cardiac regeneration in the adult.

Increased cardiomyocyte repair needs additional adequate blood supply (angiogenesis) for proper cardiac function. Damaged cells must be removed by immune cells and the tissue temporarily stabilized by a fibrotic response. However, excessive or prolonged immune and fibroblast activation will result in additional damage and impaired function due to increased tissue stiffness. Thus, for efficient cardiac repair after injury, not only cardiomyocyte proliferation, but also adequate timing of angiogenesis, immune, and fibrotic response must be well orchestrated.

This Special Issue of IJMS will bring together the most recent advances in understanding the various aspects of the transcriptional regulation of cardiac development and disease, from basic science to applied therapeutic approaches, and will provide new insights into the complex transcriptional regulation of cardiac development, disease, regeneration, and the different cell types involved.





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Message from the Editor-in-Chief

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