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Advances in Cardiac Tissue Engineering

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Deadline for manuscript submissions:

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Message from the Guest Editors

Recent advances have led to exciting developments in cardiac tissue engineering, ranging from stem cell-derived constructs to new clinical treatments to 3D bioprinting vasculature. Efforts have been made to recapitulate the complex cardiac microenvironment using functional biomaterials. The unique microenvironment includes complex and combinatorial physiological, mechanical and biochemical cues. The physical properties and architecture of cardiac tissue influence both function and differentiation. Functional engineered cardiac tissue has the potential to improve our understanding and approach to cardiology and cardiac disorders.

The aim of this Special Issue is to present the state-of-the-art progress on such advances in cardiac tissue engineering and their scientific and clinical applications. We welcome original research articles, comprehensive reviews, methods, mini-reviews, and perspectives including (but not limited to) the following topics: 3D bioprinting cardiac tissue, tissue biomanufacturing to create functional cardiac tissue, advanced biomaterials systems to model cardiac tissues, and stem cell-based approaches.





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Message from the Editor-in-Chief

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