

Special Issue

Molecular and Translational Mechanisms of Cardiac Arrhythmias: From Oxidative Stress to Novel Therapeutic Strategies

Message from the Guest Editor

We are pleased to invite you to contribute to this Special Issue, focusing on the molecular and translational mechanisms of cardiac arrhythmias. Despite major advances in electrophysiology, arrhythmias such as atrial fibrillation remain associated with significant morbidity, mortality, and healthcare burdens. Growing evidence indicates that oxidative stress, molecular signaling pathways, and structural and electrical remodeling play a pivotal role in arrhythmogenesis. Understanding these mechanisms is essential in the development of more effective, personalized therapeutic strategies. This Special Issue will provide a platform for high-quality contributions that share molecular insights of translational and clinical relevance.

This Special Issue will highlight recent advances in the molecular, cellular, and translational mechanisms underlying cardiac arrhythmias and their therapeutic implications. This topic aligns closely with the scope of International Journal of Molecular Sciences by emphasizing molecular pathways, oxidative stress, signaling mechanisms, and experimental models while also extending to translational and clinically relevant applications.

Guest Editor

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Message from the Editor-in-Chief

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