Special Issue

Epigenetic Regulation and Molecular Mechanisms in Cardiovascular Diseases

Message from the Guest Editor

Cardiovascular diseases remain a leading cause of death globally, yet the molecular pathways underlying their development are not fully understood. Recent advances highlight the critical role of epigenetic regulation—including DNA methylation, histone modifications, and non-coding RNAs-in modulating gene expression and driving cardiovascular pathology. This Special Issue of the *International Journal of* Molecular Sciences will focus on the latest molecular research exploring how epigenetic mechanisms influence key processes such as vascular inflammation. myocardial remodeling, atherosclerosis, and heart failure. We invite original research articles and reviews that present molecular data and mechanistic insights into the role of epigenetic regulation in cardiovascular diseases. Submissions employing state-of-the-art molecular techniques and addressing potential therapeutic implications are highly encouraged. We hope that this collection will provide a comprehensive view of the epigenetic landscape in cardiovascular diseases and foster the development of novel diagnostic and therapeutic strategies.

Guest Editor

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Message from the Editor-in-Chief

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