

Special Issue

MicroRNAs and Mitochondrial Dynamics in Heart Regeneration

Message from the Guest Editors

In recent decades, research has shown key roles for MicroRNAs in the post-transcriptional regulation of gene expression in major cardiac physiological and pathological events. Indeed, there has been an exponential growth in studies reporting the contribution of microRNAs to various processes underlying the pathology of cardiac muscle and as well as to potential therapeutic targets. On the other hand, cardiomyocyte mitochondria are known to be highly dynamic, continuously moving and undergoing fission and fusion, forming interconnected networks; however, the involvement of these processes in heart disease and health is not fully understood. Abnormal mitochondrial dynamics lead to dysfunctional mitochondria and thus disrupt energy production and increase oxidative stress, resulting in cardiomyocyte apoptosis and heart tissue damage. In this Special Issue, we would like to present the current progress in the heart field regarding these two important topics. We welcome original research papers and updated reviews on new insights into the pathogenesis, regulatory pathways and beneficial roles of miRNAs and mitochondrial dynamics in heart regeneration.

Guest Editors

Dr. Eltyeb Abdelwahid

Feinberg Cardiovascular Research Institute, Feinberg School of Medicine, Northwestern University, Chicago, IL 60611, USA

Dr. Katherine Athayde Teixeira de Carvalho

Pelé Pequeno Príncipe Research Institute, Cell Therapy and Biotechnology in Regenerative Medicine Research Group, Curitiba, Brazil

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
genes@mdpi.com

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Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider *Genes* for your next genetics paper?

Editor-in-Chief

Prof. Dr. Selvarangan Ponnazhagan
Department of Pathology, The University of Alabama at Birmingham,
1825 University Blvd, SHEL 814, Birmingham, AL 35294-2182, USA

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