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## Genetics of Mitochondria and Cardiovascular Disease

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Deadline for manuscript  
submissions:

**5 July 2023**

### Message from the Guest Editors

Dear Colleagues,

Recent advances in genome sequencing and genetic testing help in understanding the genetic basis of multiple cardiac conditions. Mitochondria serves as the power house of cells, occupying one third of cardiac cell volume, which emphasizes the high energy demand of the organ. Unlike nuclear DNA damage, mitochondrial DNA damage cannot be effectively repaired. Together with the technological advances especially in gene editing tools, investigations into mitochondria-targeting drugs and/or mitochondria replacement therapies are cautiously being pursued.

This Special Issue aims to highlight the importance of genetic alteration in different mitochondrial-encoded and nuclear-encoded genes that occur during the development of the diseases and possible future therapeutic approaches for the rescue of mitochondria dysfunction in different cardiovascular diseases. Additionally, the present issue may shed light into the genetic and epigenetic regulation of gene and its function in different cardiovascular diseases, that pave the way for the development of diagnostic markers and therapeutic strategies.



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# Special Issue



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## Editor-in-Chief

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## Message from the Editor-in-Chief

Genes are central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fastmoving 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.

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