Special Issue

Genetic and Molecular Insights into Cardiovascular Disease: From Mechanisms to Precision Medicine

Message from the Guest Editors

This Special Issue, "Genetic and Molecular Insights into Cardiovascular Disease: From Mechanisms to Precision Medicine", will showcase cutting-edge research and reviews exploring the genetic and molecular basis of CVD. Topics of interest include, but are not limited to, the following:

Genetic variants and pathways driving CVD risk and outcomes;

Epigenetic modifications (e.g., DNA methylation, histone modifications) in CVD pathogenesis;

The role of non-coding RNAs (e.g., miRNAs, IncRNAs) in cardiovascular biology;

Integration of polygenic risk scores (PRSs) and Mendelian randomization (MR) for causal inference and risk prediction;

Translational applications of genetic and molecular diagnostics in personalized CVD management (e.g., the sex gap in CVD). We welcome original research articles, reviews, and perspectives exploring the genetic and molecular mechanisms behind CVD and their implications for precision medicine. This Special Issue will provide a platform for researchers to share insights into the genetic architecture of CVD and its potential in transforming clinical practice.

Guest Editors

Dr. Lingfeng Luo

Division of Vascular Surgery, Department of Surgery, Stanford University School of Medicine, Stanford, CA, USA

Prof. Dr. Laurent Metzinger

HEMATIM, le Centre Universitaire de Recherche en Santé (CURS), Université de Picardie Jules Verne, Amiens, France

Deadline for manuscript submissions

15 December 2025

G C A T T A C G G C A T

Genes

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.5
Indexed in PubMed



mdpi.com/si/235929

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

mdpi.com/journal/ genes



G C A T T A C G G C A T

Genes

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.5 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

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

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, PubAg, and other databases.

Journal Rank:

JCR - Q2 (Genetics and Heredity) / CiteScore - Q2 (Genetics (clinical))

