genes

an Open Access Journal by MDPI

IMPACT FACTOR 2.8

Indexed in: PubMed

CITESCORE 5.5

Genetic Research of Iron Homeostasis and Related Diseases

Guest Editor:

Prof. Dr. Mayka Sánchez Fernández
Departamento de Ciencias Básicas de Ciencias de la Salud, Universitat Internacional de Catalunya, Immaculada, 22, 08127 Barcelona, Spain

Deadline for manuscript submissions:
closed (25 June 2022)

Message from the Guest Editor

Iron is an important micronutrient in the hematopoietic process and part of iron containing proteins, in the form of heme groups or Fe/S clusters. Iron is involved in many vital cellular processes and responses, such as oxidation–reduction reactions, mitochondrial respiratory chain, DNA/RNA synthesis.

In mammals, iron levels are regulated by the liver-secreted hepcidin. At a cellular level, iron homeostasis is controlled by IRP1 and IRP2, two proteins that control the expression of the genes involved in iron uptake, storage, and utilization.

Iron metabolism dysregulation leads to diseases including different forms of anaemias, i.e., myelodysplastic syndrome, atransferrinemia; iron-overload conditions, such as neurodegenerative diseases, or ataxias; and diseases involving dysfunctional Fe/S cluster proteins, such as mitochondrial dysfunction syndromes.

Great efforts have been made to reveale the genetic causes of most of these diseases, as well as their underlying molecular regulatory mechanisms. In the future, we will certainly uncover additional novel genes involved in iron-related diseases and advancing in our knowledge concerning iron regulation in health and disease.

GCAT TACG GCAT genes

IMPACT FACTOR 2.8 | Indexed in: PubMed | CITESCORE 5.5

an Open Access Journal by MDPI

Editor-in-Chief

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

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?

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))

Contact Us

Genes Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/genes
genes@mdpi.com
𝕏@Genes_MDPI