

Special Issue

Models and Advances in Genetics of Down Syndrome

Message from the Guest Editor

Down syndrome (DS) is the most common form of intellectual disability (ID) in the world. This disorder is caused by an extra copy of chromosome 21 (Hsa21). Many features appear during the lifetime, some with higher risk during the early phase in persons with DS, suggesting that specific genetic associated to trisomy 21 predispose to some disorders. In the last years, a series of new studies, both at the cellular and organismal levels, have raised the understanding about the genetics of DS, the identification of pathways and driver genes, and the validation of several therapeutic avenues at the preclinical level. They have also highlighted the alteration of several biological processes during development or in the adult, and unravelled new unexplored dimensions such as neurodevelopmental alterations, the origin of DS comorbidities, the evolution of the condition over the entire lifespan, the onset of Alzheimer's disease, prenatal and over the life treatment. In this special issue we would like to gather reviews or manuscripts that focus on these topics to better understand the genetics of DS and to propose alternative for reducing its impact in human.

Guest Editor

Dr. Yann Herault

University of Strasbourg, CNRS, INSERM, ICS, Institute of Genetics and Molecular and Cellular Biology, 67404 Illkirch, France

Deadline for manuscript submissions

closed (1 September 2021)

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

Genes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.2
Indexed in PubMed



mdpi.com/si/76157

Genes

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

[mdpi.com/journal/
genes](https://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 5.2
Indexed in PubMed



[mdpi.com/journal/
genes](https://mdpi.com/journal/genes)



About the Journal

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.

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))