

Special Issue

Multiple Molecular Diagnoses in Rare Disease through Massive Parallel Sequencing Approach

Message from the Guest Editors

More than 6000 rare diseases have been described so far. On the whole, 80% of rare diseases are of genetic origin and are often chronic and life-threatening. Rare diseases are characterised by a wide diversity of symptoms and signs not only among different conditions but also between patients suffering from the same disease. Due to the low prevalence of each disorder, medical expertise is rare, knowledge is scarce, care opportunities are inadequate, and research is limited. Whole exome sequencing (trio-WES) analysis has substantially improved the chance of obtaining a genetic diagnosis in rare and ultra-rare diseases. The purpose of this Special Issue is to host particularly interesting complex case reports solved by WES with final multiple molecular diagnoses, as well as research and review papers on rare diseases and complex phenotypes in order to assess the real effectiveness of WES in solving complex diagnoses and to eventually stress pitfalls in this approach solved by alternative strategies (WGS, mtDNA signature). Great attention will be given to accurate genotype–phenotype correlation in multiple molecular diagnoses in solving complex phenotypes.

Guest Editors

Dr. Manuela Priolo

SSD Genetica Medica, Grande Ospedale Metropolitano “Bianchi-Melacrino- Morelli”, 89128 Reggio Calabria, Italy

Dr. Marco Tartaglia

Molecular Genetics and Functional Genomics, Ospedale Pediatrico Bambino Gesù, IRCCS, 00146 Rome, Italy

Deadline for manuscript submissions

closed (25 November 2022)

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/101583

Genes
Editorial Office
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 5.5
Indexed in PubMed



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



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))