Special Issue

Advances of Optical Genome Mapping in Human Genetics

Message from the Guest Editors

Optical genome mapping (OGM) is a relatively young technology for the genome-wide detection and characterization of all types of chromosomal structural variants. It is able to encompass a wide range of variant sizes, with up to 1000× greater resolution compared to karyotyping, which is accomplished by analyzing ultra-long DNA molecules.

The number of users of this promising technique has grown rapidly in recent years and includes members of the fields of constitutional genetics, cancer genomics and basic research. So far, OGM has been successfully introduced in cancer diagnostics. Furthermore, it was shown to be a promising tool in constitutional genetics, mainly for complementing existing analytical workflows, although several stand-alone findings have been reported as well.

This Special Issue intends to compile the insights, results and knowledge of the small but ever-growing community of researchers and clinical laboratories utilizing OGM. This should help to define more clearly the viable applications of OGM and its prospective role in the toolkit of cytogenomics.

In this Special Issue, original research articles, case studies and reviews are welcome.

Guest Editors

Dr. Paul Dremsek
Institute of Medical Genetics, Center for Pathobiochemistry and Genetics, Medical University of Vienna, 1090 Vienna, Austria
Dr. Anna Schachner
Institute of Medical Genetics, Center for Pathobiochemistry and Genetics, Medical University of Vienna, 1090 Vienna, Austria

Deadline for manuscript submissions

closed (20 September 2024)

GCAT
TACG
GCAT

Genes

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.5
Indexed in PubMed

mdpi.com/si/178200

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

mdpi.com/journal/genes

MDPI

GCAT
TACG
GCAT

Genes

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.5
Indexed in PubMed

mdpi.com/journal/genes

MDPI

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))