

Special Issue

Chromosome Replication and Genome Integrity

Message from the Guest Editor

Genome replication is central for cellular proliferation and is critically implicated in several diseases. Various factors associate with the replication fork, to promote replication, globally or at specific genomic regions, such as telomeres and centromeres, and at genomic locations containing DNA lesions, structured DNA, repetitive segments, and heterochromatin. Some of the DNA metabolism reactions associated with genomic replication facilitate DNA synthesis and replication restart, activate or dampen DNA damage response pathways coordinating repair and/or the origin usage program, resolve topological intermediates arising from recombination or transcription-replication clashes, establish or disrupt chromatin modifications and chromosome structure. Deficiencies in these individual pathways cause various human genetic disorders, or predispose to cancer and progeria. This Special Issue will address the mechanisms through which processes responding to adverse genome perturbations occur, providing an overview of recent developments in specialized research topics and critical perspectives on upcoming challenges. Sincerely, Dr. Dana Branzei

Guest Editor

Dr. Dana Branzei

Fondazione IFOM Istituto FIRC di Oncologia Molecolare, Milan, Italy

Deadline for manuscript submissions

closed (31 October 2018)

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/14661

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))