



*genes*



an Open Access Journal by MDPI

## The Role of Centromeres in Genome Stability

Guest Editor:

### **Dr. Simona Giunta**

Laboratory of Chromosomal and Cell Biology, The Rockefeller University, New York, NY 10065, USA

Deadline for manuscript submissions:

**closed (30 June 2020)**

### **Message from the Guest Editor**

Centromeres are fascinating chromosomal loci required for the faithful transmission of genetic information.

Recent evidence has pointed at important DNA-based transactions happening at centromeres. LncRNA transcripts originated from centromeres bear unexpected roles in stabilizing proteins binding to the region and promote kinetochore function. Recent evidence indicates that centromere alpha-satellite DNA suffers from instability due to recombination, especially enhanced in the context of cancer and cellular senescence. These, raise interesting questions on how transcription, repair, and other processes impact centromere stability and function and how the deterioration of centromere repeats integrity may be implicated in human health and disease.

We encourage contributions with novel experimental methods, including computational approaches, that bring forward alternative hypotheses, highlighting centromere association with genome and chromosome stability, or contributing to understanding centromeres' role in disease. We will also consider any manuscript that advances the understanding of these “dark” regions of our genome.



[mdpi.com/si/33794](https://mdpi.com/si/33794)

# Special Issue



*genes*



an Open Access Journal by MDPI

## 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

## 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?

## 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](http://www.mdpi.com)

[mdpi.com/journal/genes](http://mdpi.com/journal/genes)  
[genes@mdpi.com](mailto:genes@mdpi.com)  
[X@Genes\\_MDPI](#)