

## Special Issue

# Genome Maintenance and Cancer Predisposition

### Message from the Guest Editor

Eukaryotic organisms have developed a variety of genome maintenance mechanisms to preserve their genetic information. Failure in these mechanisms can result in genomic instability, a hallmark of cancer. Mutations in genome maintenance genes have been reported to cause cancer predisposition syndromes. Patients with these syndromes display elevated levels of DNA damage and chromosome alterations that lead to genomic instability. At the same time, elevated DNA damage and genomic instability in cancer cells may lead to upregulation of residual DNA repair pathways, which support tumor cell survival. This in turn contributes to therapeutic resistance, particularly for DNA-damaging chemotherapy, leading to the progression of malignancy. We welcome reviews, new methods, and original articles covering many aspects of genome maintenance and cancer predisposition. These include but are not limited to cell cycle checkpoints, mitosis, DNA damage response, DNA replication, DNA repair, chromatin regulation, and chromosome segregation, many of which are dysregulated during cancer progression.

### Guest Editor

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### Deadline for manuscript submissions

closed (15 July 2022)

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### 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?

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### Editor-in-Chief

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