Special Issue

DNA Helicases: Mechanisms, Biological Pathways, and Disease Relevance

Message from the Guest Editor

DNA helicases have emerged as a prominent class of nucleic acid metabolizing enzymes that play important roles in genome maintenance and cellular homeostasis. DNA helicases not only play essential roles in replication, DNA repair and recombination, they also influence gene expression and chromosome structure and act to resolve dynamic DNA structures that pose a source of genomic instability. Although the basic mechanism of unwinding structured nucleic acids shares some basic commonality, research shows there are specialized DNA unwinding mechanisms that can be regulated by post-translational modifications and protein interactions. With the discovery of genetic disorders linked to helicase gene mutations and various cancers associated with helicase defects, it has become more important than ever to characterize and document the molecular and cellular functions and pathways of DNA helicases to gain new understanding and move toward translational approaches in medicine. This Special Issue of *Genes* will be dedicated to a compilation of articles on DNA helicases from leading experts in the field.

Guest Editor

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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?

Editor-in-Chief

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