## Special Issue

# Molecular Phylogenetics and Phylogeography of Seed Plants

## Message from the Guest Editor

With the rapid development of sequencing technology, the cost of acquiring genomic sequences has decreased dramatically. Consequently, large amounts of genomic data for seed plants have been generated in recent decades. Thus, we have encountered an excellent opportunity to conduct research at the genomic level on the phylogenetics and phylogeography of seed plants. Genome-scale phylogenetic analyses, or phylogenomics, can yield greater confidence of inferred phylogenic relationships with little systematic bias, which is usually difficult in analyses using one or several gene sequences. Unlike phylogenomics, it is still a challenge for phylogeographic researchers to use population NGS data due to the difficulty of inferring haplotypic data from short reads sequences. Fortunately, programs with specific algorithms, such as BEAGLE and SHAPEIT, have been developed and can be used to impute and accurately phase population genomic data. This Special Issue will provide an overview of recent developments in this field of research, including critical perspectives on current and upcoming challenges.

#### **Guest Editor**

Dr. Fumin Zhang

State Key Laboratory of Systematic and Evolutionary Botany, Institute of Botany, Chinese Academy of Sciences, Beijing 100093, China

## Deadline for manuscript submissions

closed (25 September 2023)

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/124645

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

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



## **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))

