

Special Issue

Genetics and Breeding of Grains

Message from the Guest Editors

Globally, cereal grains account for two-thirds of human caloric consumption. Grain crops are categorized into staple cereals, minor cereals, small grains, pseudocereals and legumes. They are used as major carbohydrate sources, protein nutrients, and edible oils. Given the importance of these grains, researchers with different academic backgrounds and expertise have developed and applied various approaches for grain crop breeding and improvement, for example, mining the key genes and dissecting the genetic basis underlying agronomical performance or grain quality, genomic analysis and QTL mapping for abiotic and biotic stresses, mutagenesis and gene editing technologies for improving particular traits of interest, and high-throughput in-field phenotyping. In this Special Issue, we welcome submissions of original research articles, review articles, and communications related to various aspects of grain breeding and modern molecular mechanisms and technologies that serve to improve future crops and yields of grains.

Guest Editors

Dr. Huang Li

Center for Plant Science Innovation, University of Nebraska-Lincoln, Lincoln, NE, USA

Prof. Dr. Hikmet Budak

1. Montana BioAgriculture Inc., Missoula, MT, USA
2. Agronomy and Horticulture Department, University of Nebraska-Lincoln, Lincoln, NE, USA

Deadline for manuscript submissions

closed (25 April 2024)

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/165365

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))