



*genes*



an Open Access Journal by MDPI

## Genetics, Development and Functional Genes of Insects

Guest Editors:

**Prof. Dr. Hui Ai**

Hubei Key Laboratory of Genetic Regulation and Integrative Biology, School of Life Sciences, Central China Normal University, Wuhan 430079, China

**Dr. Qian Wang**

College of Life Science, Tongji Univesity, Shanghai, China

**Prof. Dr. Jie Liu**

College of Life Science, Hubei Univesity, Wuhan, China

Deadline for manuscript submissions:

**10 August 2024**

### Message from the Guest Editors

Dear Colleagues,

Functional genes in insects are responsible for a variety of biological processes, including development, reproduction, metabolism and responses to the environment. These genes contribute to the diverse adaptations and behaviors observed in different insect species. For example, insect olfactory genes, including odorant-binding proteins, chemosensory proteins and odorant receptors, are often highly specific, allowing them to respond to particular pheromones or odors associated with food sources or mates. When an odor molecule binds to an olfactory receptor, it triggers a series of molecular events leading to a nerve signal that is interpreted by the insect's brain. Understanding these molecular processes helps researchers decipher how insects perceive and respond to different scents. Olfactory molecular biology involves studying the genes and genetic mechanisms that underlie the development and function of olfactory receptors. This knowledge can be crucial for manipulating insect behavior or developing novel pest control strategies.



[mdpi.com/si/195510](https://mdpi.com/si/195510)

# 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 & Heredity*) / CiteScore - Q2 (*Genetics*)

## Contact Us

*Genes* Editorial Office  
MDPI, St. Alban-Anlage 66  
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](https://twitter.com/Genes_MDPI)