Special Issue

Genetics, Development and Functional Genes of Insects

Message from the Guest Editors

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.

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

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

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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

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