Special Issue RNAi in Insect Physiology

Message from the Guest Editors

Since the discovery of the role of dsRNA to trigger gene silencing in nematodes in 1998, RNA interference (RNAi) has evolved into a potent tool for gene functional studies in fundamental research. In this process, long double-stranded RNA (dsRNA) molecules are processed into small interfering RNAs (siRNAs) that carry out specific gene silencing via hybridization to complementary target viral and cellular RNAs. In addition to siRNAs, microRNAs (miRNAs) and PIWIinteracting RNAs (piRNAs) act as participants in distinct RNAi pathways. All three small RNA pathways collectively contribute to gene silencing effects in eukarvotic cells. Importantly, due to the specific gene silencing mechanism, RNAi has recently been adopted as a novel pest control approach. This Special Issue invites contributions on various facets of RNAi research in insects, with a particular focus on gene functional studies and pest control applications. Both original research articles and literature reviews are welcome to showcase advancements in RNAi research in the field of entomology.

Guest Editors

Dr. Jisheng Liu

School of Life Sciences, Guangzhou University, Guangzhou 510006, China

Dr. Luc Swevers

Insect Molecular Genetics and Biotechnology Group, National Centre for Scientific Research "Demokritos", Institute of Biosciences and Applications, 15341 Athens, Greece

Deadline for manuscript submissions

15 December 2025



Insects

an Open Access Journal by MDPI

Impact Factor 2.9 CiteScore 5.6 Indexed in PubMed



mdpi.com/si/225025

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

mdpi.com/journal/insects





Insects

an Open Access Journal by MDPI

Impact Factor 2.9
CiteScore 5.6
Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Brian T. Forschler

Department of Entomology, University of Georgia, 413 Biological Sciences Building, Athens, GA 30602-2603, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, and other databases.

Journal Rank:

JCR - Q1 (Entomology) / CiteScore - Q1 (Insect Science)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.1 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).

