

## Special Issue

# New Insight into Vector Borne Diseases

### Message from the Guest Editors

Mosquitoes and other blood-feeding arthropods are vectors that impose severe public health risk diseases of bacterial, parasitic, and viral nature. Approximately 80% of the world's human population is at risk of one or more vector-borne diseases, with over 300 million cases and about 1 million human deaths annually. Vector-borne diseases still account for more than 17% of infectious diseases, despite substantial developments in the study of vector biology. Specifically, insect-borne viruses constantly pose a risk of pandemic, and the lack of vaccines and other effective prevention for most vector-borne diseases places pressure to have more integrated approaches that target the disease transmission system rather than the pathogens alone.

The focus of this Special Issue of *Biomolecules* is on the most recent advances related to the contribution of the vector to the process of pathogen transmission and host immunity, as well as the current status of arthropod vectors and vector-borne diseases, with special emphasis on alternative approaches to controlling vectors of disease, host–pathogen–symbiont interactions, functional genomics, and vector competence.

---

### Guest Editors

Dr. Gaurav Shrivastava

Laboratory of Malaria and Vector Research, NIAID, National Institutes of Health, Rockville, MD, USA

Dr. Moises Leon-Juarez

Instituto Nacional de Perinatología, Ciudad de México 11000, Mexico

---

### Deadline for manuscript submissions

closed (15 December 2023)



## Biomolecules

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.8  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/si/124235](https://mdpi.com/si/124235)

*Biomolecules*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[biomolecules@mdpi.com](mailto:biomolecules@mdpi.com)

[mdpi.com/journal/  
biomolecules](https://mdpi.com/journal/biomolecules)





# Biomolecules

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.8  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/journal/  
biomolecules](https://mdpi.com/journal/biomolecules)



## About the Journal

### Message from the Editorial Board

*Biomolecules* is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

---

### Editors-in-Chief

Prof. Dr. Peter E. Nielsen

Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

Prof. Dr. Lukasz Kurgan

Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, 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, CAPIus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Biochemistry)