

## Special Issue

# Advances in West Nile Virus Infection

### Message from the Guest Editors

Since its first isolation in Uganda in 1937, the West Nile virus has become one of the most widespread arthropod-borne viruses globally, posing a significant public health concern. Various mosquito species act as competent vectors of the virus, and multiple avian species across different orders serve as effective amplifying hosts. Humans and horses are the primary incidental hosts, but other wild mammals and even reptiles have also been identified as incidental hosts. The complexity of interactions between vectors, hosts, and the virus itself highlights the urgent need for further research to better understand and manage the occurrence and severity of West Nile virus cases. In addition, climate change may play a crucial role in the increasing number of cases and the virus's spread to new regions. Changes in climate affect the biology, physiology, and ecology of both mosquitoes and birds, thus impacting the propagation of the virus in its natural environment. This Special Issue on West Nile virus provides a comprehensive overview of available control measures, exploring detection, ecology, immunology, vaccinology, and treatment strategies.

### Guest Editors

Dr. José María García-Carrasco

1. Biogeography, Diversity and Conservation Laboratory, Department of Animal Biology, Faculty of Sciences, University of Malaga, E-29071 Malaga, Spain
2. Department of Entomology, Washington State University, Pullman, WA 99164, USA

Dr. Adriana Elizabeth Flores Suárez

Facultad de Ciencias Biológicas, Universidad Autónoma de Nuevo Leon, Av. Universitaria s/n Cd. Universitaria, San Nicolas de los Garza 66455, NL, Mexico

### Deadline for manuscript submissions

30 June 2025



## Tropical Medicine and Infectious Disease

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 3.9  
Indexed in PubMed



[mdpi.com/si/220591](https://mdpi.com/si/220591)

*Tropical Medicine and  
Infectious Disease*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[tropicalmed@mdpi.com](mailto:tropicalmed@mdpi.com)

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





# Tropical Medicine and Infectious Disease

an Open Access Journal  
by MDPI

Impact Factor 2.8  
CiteScore 3.9  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

---

#### Editor-in-Chief

Prof. Dr. John Frean

Pathologist, Parasitology Reference Lab, Centre for Emerging Zoonotic and Parasitic Diseases, National Institute for Communicable Diseases, University of the Witwatersrand, Johannesburg 2192, South Africa

---

#### Author Benefits

##### High Visibility:

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

##### Journal Rank:

JCR - Q1 (Tropical Medicine) / CiteScore - Q2 (Public Health, Environmental and Occupational Health)

##### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 19.2 days after submission; acceptance to publication is undertaken in 3.7 days (median values for papers published in this journal in the second half of 2024).