

## Special Issue

# Arboviral Infections (Dengue, Chikungunya, Zika, and Other Mosquito-Borne Diseases): Immune Response and Vaccine Development

### Message from the Guest Editors

Dengue virus (DENV), a mosquito-borne flavivirus, poses a significant global health burden, with over 100 million symptomatic infections annually. The immune response to DENV infection is a double-edged sword: while adaptive immunity can confer long-term serotype-specific protection, cross-reactive antibodies and T-cells may exacerbate disease severity during secondary heterotypic infections. This Special Issue explores advances in molecular immunology, vaccine design, and therapeutic strategies targeting host immune pathways. Topics also include cross-protective immunity, the role of pre-existing immunity to related flaviviruses (e.g., Zika), and innovative biomarkers for predicting disease progression. Contributions addressing gaps in diagnostics, vaccine efficacy, and immunomodulatory therapies are encouraged to inform global dengue control efforts. Research areas may include (but are not limited to) the following:

- Dengue virus infection
- Immune response
- Antibody-dependent enhancement (ADE)
- Cross-reactive immunity
- Viral pathogenesis
- Cytokine storm
- Neutralizing antibodies
- T-cell response
- Vaccine development
- Dengue serotypes
- Host-pathogen interactions

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### Guest Editors

Prof. Bo Peng

Shenzhen Guangming District Center for Disease Control and Prevention, Shenzhen 518107, China

Dr. Xiaolu Shi

Microbiology Laboratory, Shenzhen Center for Disease Control and Prevention, Shenzhen, China

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## Vaccines

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

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## About the Journal

### Message from the Editor-in-Chief

*Vaccines* (ISSN 2076-393X), founded in 2013, now has a firm history of publishing peer-reviewed, state-of-the-art research papers on vaccines and vaccination in the broadest sense. Areas covered include, but are not limited to, novel and emerging vaccine technologies, building on in-depth knowledge of what constitutes a protective immune response. These can be new vaccines for old diseases, or old vaccines for new diseases. Vaccines against cancer and autoimmune diseases explicitly are also within the scope of the journal. Because public opinion and even government policies towards vaccines and vaccination have changed, vaccine policy and public health issues are major concerns. Climate change will also have an impact on the spread of infectious diseases, and thus also on vaccine and vaccination policies worldwide.

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### Editor-in-Chief

Prof. Dr. Ger Rijkers

Department of Health, Cognition and Behavior, University College  
Roosevelt, 4331 CB Middelburg, The Netherlands

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#### High Visibility:

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

#### Journal Rank:

JCR - Q2 (Medicine, Research and Experimental) /  
CiteScore - Q1 (Pharmacology (medical))

#### 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 2.8 days (median values for papers published in this journal in the second half of 2025).