



## Novel Insights and Advances in Aquatic Vaccines

Guest Editors:

**Dr. Erlong Wang**

College of Animal Science and  
Technology, Northwest A&F  
University, Yangling 712000,  
China

**Dr. Tao Liu**

College of Animal Science and  
Technology, Northwest A&F  
University, Yangling 712000,  
China

**Dr. Yibin Yang**

Yangtze River Fisheries Research  
Institute, Chinese Academy of  
Fishery Sciences, Wuhan 430223,  
China

Deadline for manuscript  
submissions:

**12 July 2025**

### Message from the Guest Editors

Vaccination is one of the most effective methods to control infectious diseases in aquaculture. Aquatic vaccines have shown potential beneficial effects on human health by overcoming negative effects due to the abuse of pharmaceuticals and antibiotics, as well as their residues in food and the environment. In recent decades, scientific and technological advances have paved newer paths in both basic and applied research areas of aquatic vaccines. Efforts in new technologies, approaches and strategies have been devoted to developing and designing novel aquatic vaccines with a higher quality and efficiency. Reverse vaccinology and structural vaccinology were also employed to screen stronger antigens and develop immunomics-based and computer-aided vaccines. Genetic engineering recombinant and chemical methods were applied to design adjuvant vaccines, polyvalent and combination vaccines, nanoparticle-based vaccines/nanovaccines and targeted vaccines. Moreover, novel insights also have been proposed to reveal the immunoprotective mechanism of aquatic vaccines and enrich the knowledge of immune response mechanism including mucosal and systemic immunity in aquatic species.





an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Ralph A. Tripp**

Department of Infectious  
Diseases, College of Veterinary  
Medicine, University of Georgia,  
Athens, GA 30602-7387, USA

## Message from the Editor-in-Chief

*Vaccines* (ISSN 2076-393X) has had a 6-year history of publishing peer-reviewed state of the art research that advances the knowledge of immunology in human disease protection. Immunotherapeutics, prophylactic vaccines, immunomodulators, adjuvants and the global differences in regulatory affairs are some of the highlights of the research published that have shaped global health. Our open access policy allows all researchers and interested parties to immediately scrutinize the rigorous evidence our publications have to offer. We are proud to present the work and perspectives of many to contribute to future decisions concerning human health.

## 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**, **PMC**, **Embase**, **CAPLus / SciFinder**, and **other databases**.

**Journal Rank:** JCR - Q1 (*Immunology*) / CiteScore - Q1 (*Pharmacology (medical)*)

## Contact Us

---

*Vaccines* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/vaccines](http://mdpi.com/journal/vaccines)  
[vaccines@mdpi.com](mailto:vaccines@mdpi.com)