Special Issue

Advances in Aquatic Animal Immunology and Vaccine Development for Disease Prevention

Message from the Guest Editor

Aquatic animal health is crucial not only for sustainable aquaculture and biodiversity, but also for global food security and public health. Aquatic animals, including fish, crustaceans, and mollusks, are susceptible to a wide range of infectious diseases that can lead to significant economic losses and ecological disruptions. Moreover, some aquatic pathogens pose zoonotic risks, threatening human health. Understanding the immune mechanisms of aquatic animals and developing effective vaccines are essential steps toward mitigating these risks and promoting sustainable aquaculture practices. This Special Issue invites original research articles, reviews, and short communications that focus on the following topics:

- Mechanisms of innate and adaptive immunity in aquatic animals;
- Novel vaccine development and delivery systems for aquatic animals;
- Immune responses to emerging and reemerging infectious diseases in aquatic species;
- One Health approaches to aquatic animal vaccination and disease prevention;
- Innovative strategies for vaccine storage, distribution, and administration in aquaculture settings.

Guest Editor

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About the Journal

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.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 19.6 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).

