

Special Issue

Nanotechnology-Based Vaccines for the Prevention of Infectious Diseases

Message from the Guest Editor

Potential epidemics and pandemics pose challenges to global health. To address these challenges, innovative vaccine platforms and delivery strategies are essential for improving stability, delivery efficiency, immune responses, and protective efficacy. Nanotechnology is a transformative approach to vaccinology.

This issue aims to advance the latest innovations in novel vaccine nanomaterials, formulations, delivery systems, immune modulation strategies, and their translational applications. This issue will compile original research and review articles focusing on cutting-edge developments that address key challenges in infection prevention. We welcome submissions on the following topics:

- Nanoparticle-based vaccine delivery systems (e.g., lipid nanoparticles, polymeric nanoparticles, virus-like particles, extracellular vesicles)
- Targeted antigen delivery and immune activation strategies
- Nanovaccines designed to induce mucosal immunity
- Applications of mRNA/DNA vaccines
- The biocompatibility, safety, and toxicity of nanovaccines
- Clinical translation and regulatory considerations
- Nanovaccines for zoonotic and emerging pathogens

Guest Editor

Dr. Wandi Zhu

Center for Inflammation, Immunity and Infection, Georgia State University, Atlanta, GA 30303, USA

Deadline for manuscript submissions

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Vaccines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
vaccines@mdpi.com

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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

Prof. Dr. Ralph A. Tripp

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

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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).