

Special Issue

mRNA-Based Vaccine Development

Message from the Guest Editors

The COVID-19 pandemic has had a devastating impact worldwide, causing widespread illness, loss of life, and economic hardship. However, the rapid development of mRNA technology platforms has offered a glimmer of hope in the fight against the pandemic. Two of the most widely administered vaccines against SARS-CoV-2 are based on mRNA technology, highlighting the potential of this innovative approach for preventing and controlling future epidemics and pandemics. While mRNA-based vaccines have shown promising results, there are still significant challenges including, e.g., the sub-optimal expression of antigens *in vivo*, stability at ultra cold temperatures, higher cost of goods, etc. Advancements in the existing mRNA technology and the fostering of innovative approaches are key to facilitating the discovery and development of improved vaccines. The scope of this topic will include original articles related to improving mRNA replicons/constructs, finding ways to improve immunogenicity and reduce reactogenicity, investigating targeted delivery, formulation strategies, exploring alternative routes of administration, reducing vaccine development timelines and more.

Guest Editors

Dr. Arun Kumar

Vaccine Research and Development, Coalition for Epidemic Preparedness Innovations (CEPI), 0277 Oslo, Norway

Dr. Martina Ochs

Vaccine Research and Development, Coalition for Epidemic Preparedness Innovations (CEPI), London NW1 2BE, UK

Deadline for manuscript submissions

closed (31 July 2024)



Vaccines

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 9.9
Indexed in PubMed



mdpi.com/si/167166

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

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





Vaccines

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 9.9
Indexed in PubMed



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



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

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPIus / 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 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).