Special Issue

Advances in DNA Vaccine Research

Message from the Guest Editor

Recently, DNA vaccines have emerged as a promising method for preventing and controlling diseases. They consist of a plasmid with a DNA sequence encoding a target protein or antigen that activates the host's immune response. DNA vaccines offer many advantages, including increased stability, easy scalability and production, lack of any infectious agents, safe storage and easy handling, while also inducing both cellular and cell-mediated immunity. Additionally, the efficacy of DNA vaccines can be further enhanced by vehicles that help the contents of DNA vaccines enter specific cells. However, further research is needed to fully understand the immune response induced by DNA vaccines and its mechanisms. In this Special Issue, we welcome original research articles and reviews in the following areas:

- DNA vaccines;
- Methods for DNA vaccine production;
- Methods for DNA vaccine delivery;
- Vector design for DNA vaccines;
- Vaccine insert design;
- Adjuvants for DNA vaccines;
- DNA vaccine delivery;
- Immune response induced by DNA vaccines;
- Applications of DNA vaccines;
- Plasmid-based vaccines;
- Advantages of DNA vaccines;
- DNA vaccine formulations.

Guest Editor

Dr. Dabbu Jaijyan
Department of Anatomy and Neurobiology, Virginia Commonwealth University, Richmond, Virginia, USA

Deadline for manuscript submissions

closed (28 February 2026)

Vaccines

an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 9.9
Indexed in PubMed

mdpi.com/si/213945

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

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

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.

Editor-in-Chief

Prof. Dr. Ger Rijkers
Department of Health, Cognition and Behavior, University College Roosevelt, 4331 CB Middelburg, The Netherlands

Author Benefits

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).

MDPI