

Special Issue

State of the Art and Future Directions of Synthetic Biology-Armed Vaccine Development

Message from the Guest Editors

Synthetic biology provides novel approaches for rebuilding existing biological systems or redesigning new ones from scratch for various applications. Over time, the so-called “bottom-up” synthetic biology has expanded to many research subjects, including biology, chemistry, computational sciences, and engineering. The state-of-the-art concepts and strategies of synthetic biology can also activate and shape the future of vaccine development into the next generation. Thus, we would like to invite researchers worldwide to contribute to this Special Issue with recent advances in the vaccine/antibody production and mechanism study armed with rational designs from synthetic biology. We welcome high-quality mini-review and research articles with results from various host models aimed at either laboratory or industrial level. Articles on synthetic cell-based antigen display or drug delivery systems are also welcome.

Guest Editors

Dr. Jian Xu

School of Life Sciences, East China Normal University, Shanghai 200062, China

Dr. Jae Man Lee

Laboratory of Creative Science for Insect Industries, Kyushu University Graduate School of Bioresource and Bioenvironmental Sciences, Motooka 744, Nishi-ku, Fukuoka 819-0395, Japan

Deadline for manuscript submissions

closed (30 November 2023)



Vaccines

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 9.9
Indexed in PubMed



mdpi.com/si/129802

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).