# Special Issue

# Therapeutic and Diagnostic Applications of Structural Vaccinology

## Message from the Guest Editor

Structural vaccinology (SV) methods that combine high-resolution structural biology techniques with computational biology and immunological validation, can drive the design of better, protein-based vaccine components, endowed with improved biochemical and/or immunological properties.
Vaccine components can have secondary uses as serological diagnostic markers that detect their cognate antibodies, induced in subjects with prior exposure to the related pathogen. Presentation of diagnostic epitopes or whole antigens belonging to different infection stages and diseases can spur the design of Multiplex diagnostic tests, capable of rapidly detecting multiple diseases and infection progress. Recent advances in single particle cryo-electron microscopy and the ability to solve the structures of larger, more complex antigen structures will inevitably provide an increased repertoire of available antigen (and antigen-antibody) structures; therefore, examples of SV are likely to increase in the near future. In this context, this Special Issue summarizes the current applications of Structural Vaccinology to both the design of novel therapeutics (vaccines) and diagnostics.

## Guest Editor

Prof. Louise J. Gourlay
Dipartimento di Bioscienze, Università degli Studi di Milano, 20122 Milano, Italy

## Deadline for manuscript submissions

closed (31 December 2021)

Vaccines

an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 9.9
Indexed in PubMed

mdpi.com/si/83934

*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) 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, 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 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).

MDPI