Special Issue

Advancing Vaccine Research: Contributions from Molecular, Cellular, and Omics Approaches

Message from the Guest Editors

Vaccines have long been proven a highly efficient means to confer protection to various infectious diseases, and a rush for protective vaccines against SARS-CoV-2 is ongoing. The fast-developing field of omics sciences is delivering a deluge of nucleotide and protein sequence data from pathogens that, together with powerful bioinformatics tools and databases, are prompting astonishing advances in vaccine development. Advances in cell biology are unravelling nonconventional structures such as membrane vesicles as potential sources and vehicles of antigen presentation and delivery. This Special Issue aims to gather papers that use omics approaches such as genomics and proteomics, alternative biological structures such as extracellular vesicles, or innovative experimental methodologies to identify antigens for subunit vaccine investigation and development, as well as papers on bioinformatics tools, databases, and highthroughput techniques and instrumentation, in order to help in vaccine research and development. Papers in all formats accepted in the journal are welcome.

Guest Editors

Dr. Jorge H. Leitão

Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal

Prof. Dr. Manuel José Rodríguez-Ortega

Departamento de Bioquímica y Biología Molecular, Universidad de Córdoba Edificio Severo Ochoa Planta Baja, Campus de Rabanales, 14071 Córdoba, Spain

Deadline for manuscript submissions

closed (15 February 2022)



an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 9.9 Indexed in PubMed



mdpi.com/si/64892

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

mdpi.com/journal/vaccines





an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 9.9 Indexed in PubMed



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).

