# **Special Issue**

## Vaccines Based on Dendritic Cells: Breaking Barriers to New Immune Response Approach

## Message from the Guest Editor

Dendritic cells (DCs) are versatile cells that bridge the gap between innate and adaptive immune responses. They are potent antigen-presenting cells that control both T cell immunity and tolerance. DCs are often downregulated in diseases such as cancer, where they are called tolerogenic DCs and have a crucial role in inducing peripheral tolerance. Recent studies on vaccines based on nucleic acids such as DNA or mRNA have shown remarkable results in treating diseases such as COVID-19 and multiple solid tumors. We invite contributions of original reports, observations, or reviews to highlight (i) their role in preventing relapses in cancer, (ii) the metabolic signaling pathway target, (iii) the ability to cross the blood-brain barrier in pathological processes or as a vaccination strategy, and (iv) recent advances in novel therapeutic vaccines based on dendritic cells.

## Guest Editor

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## Deadline for manuscript submissions

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## 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

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