



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

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Message from the Guest Editors

Dear Colleagues,

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.

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Guest Editors





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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.

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