

Special Issue

Viral Immune Imprinting and Vaccine Design

Message from the Guest Editor

The development of an effective vaccine against a viral infection requires knowledge of the mechanisms of viral pathogenesis and the immune responses required to prevent and control the infection. Two critical, but not well understood, factors that can influence vaccine protection are immune imprinting and innate trained immunity. The host's first encounter with a viral infection or viral antigen can shape its subsequent adaptive (imprinting) or innate (trained) immune responses against related, but distinct, pathogens or vaccines. This type of immune memory can either enhance or interfere with protection and is critical to understanding how to guide future vaccine designs. For this Special Issue, we invite articles on the effects of immune imprinting or trained immunity in shaping the host's immune response and/or protection from viral infections. We also invite articles that expand our understanding of the underlying mechanisms mediating the induction of immune imprinting or trained immunity and insights into their impact on vaccine efficacy and design.

Guest Editor

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