



## Host Response and Immunity to Influenza A Virus Infection

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### Message from the Guest Editors

Respiratory infectious diseases, especially influenza viruses and coronaviruses, pose a substantial risk to humans due to their rapid transmission, the lack of effective universal vaccines, and the diversity in host immune responses. Influenza A viruses are highly contagious in birds, animals and humans, and frequently spillover to cause pandemics in human populations. Understanding the influenza viruses' ability to escape the immune system; identifying host factors impacting immunity; deepening our knowledge on immune responses, immune diversity, biological sex differences impacting virus pathogenesis and immune response; and developing mAbs that provide broad protection against influenza viruses are critically important to prevent influenza virus pandemics and epidemics.

This Research Topic aims to represent research studies on influenza virus pathogenesis, virus–host interactions, genetic diversity and evolution of influenza A viruses, intra-host dynamics, antiviral countermeasures and immune responses, vaccine effectiveness, variations in individual responsiveness to vaccination, and vaccination strategies.





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## Message from the Editor-in-Chief

*Vaccines* (ISSN 2076-393X), founded in 2013, now has a firm history of publishing peer-reviewed, state-of-the-art research papers on vaccines and vaccination in the broadest sense. Areas covered include, but are not limited to, novel and emerging vaccine technologies, building on in-depth knowledge of what constitutes a protective immune response. These can be new vaccines for old diseases, or old vaccines for new diseases. Vaccines against cancer and autoimmune diseases explicitly are also within the scope of the journal. Because public opinion and even government policies towards vaccines and vaccination have changed, vaccine policy and public health issues are major concerns. Climate change will also have an impact on the spread of infectious diseases, and thus also on vaccine and vaccination policies worldwide.

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