

Tentative Outline (Preliminary Proposal of Thematic Issue)

Special/Thematic Issue for the journal Coronaviruses

Title of the Thematic Issue: *Understanding Coronaviruses through host immune response*

Guest Editor's Name: *Dr. Vijay Kumar*

• **Scope of the Thematic Issue (Brief introduction / abstract explaining the Thematic Issue):**

The current issue of the journal Coronaviruses has a very wide scope to attract a wide range of researchers involved actively in the coronaviruses (CoVs) research area, an area that was not highlighted since their first discovery in early 1960s. However, the research in the CoVs reemerged and gained scientific attention with the emergence of 2002 severe acute respiratory syndrome (SARS) epidemic originated in China that spread to the UK, USA, Canada, Other Asian and European countries that claimed lives of thousands of people. However, then in 2012 another epidemic called middle-eastern respiratory syndrome (MERS) originated in the Middle East due to the emergence of MERS-CoV. However, the scientific community ignored these two epidemics and did not pay high attention in terms of developing vaccines and antiviral agents targeting specifically CoVs. The emergence of current coronavirus disease (COVID-19) in the Wuhan city of Hubei district of China due to the SARS-CoV-2 that took the shape of a pandemic as not a single country in the world remained untouched by this virus has shocked the general public as well as the researchers all around the world. Now we have different vaccines against COVID-19. However, we are still in a dilemma regarding the duration of immunity provided through these vaccines, immunopathogenesis of the COVID-19, and the rapid emergence of new variants of the SARS-CoV-2. Hence, this issue is available for contributors studying the history and evolution of coronaviruses, immunopathogenesis of the infections caused by CoVs, including the current COVID-19 pandemics, immunomodulatory agents for COVID-19, immunometabolic reprogramming during different phenotypes of COVID-19 (asymptomatic, symptomatic (mild, moderate, and severe) patients), vaccines for coronaviruses, and genetic basis of resistance and susceptibility to severe and mild COVID-19. This issue will serve as a good platform for researchers involved in the CoV research and audience interested in the current knowledge in the field.

Keywords: SARS, MERS, COVID-19, SARS-CoV-2, innate immunity, adaptive immunity, immunomodulatory drugs, immunopathogenesis

Sub-topics:

The sub-topics to be covered within the issue should be provided:

- History of Coronaviruses
- Immunology and immunopathogenesis of Coronaviruses
- Host-Pathogen (Coronavirus) interaction
- Immunometabolic reprogramming during COVID-19
- Immunomodulatory drugs for Coronavirus infections
- Vaccine development against Coronavirus infections

➤ Schedule:

- ✧ Deadline to submit the finalized proposal of Thematic issue: **3 months after subjected approval of preliminary proposal**
("Finalized proposal" would be the same as this document, however the "Tentative titles of the articles and list of contributors with their names, designations, addresses and email addresses" should also be included in the finalized proposal.)
- ✧ Complete Thematic issue submission deadline: _____

Details of Guest Editor:

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