

## Tentative Outline

### Special Thematic Issue for the journal : *Current Drug Targets*

#### Title of the Thematic Issue: Recent Insights and Challenges of Pharmacological Effects Against Emerging Fatal Viral Infectious Disease Outbreaks

*Guest Editors: Dr. Chandrabose Selvaraj and Dr. Dhurvas Chandrasekaran Dinesh*

- **Scope of the Thematic Issue:**

The aim of the thematic issue is to focus on the challenges of pharmacological effects against emerging deadly virus disease outbreaks. Emerging and re-emerging pathogenic viruses such as coronavirus, influenza, Ebola, ZIKA and several other arthropod-borne viruses have caused numerous global public health crises in recent years and continue to threaten public health and security. The intricate “host-pathogen-environment” relationship remains the key to understanding the emergence/re-emergence of pathogenic viruses. For clear evidence, we must understand the viral drug targets, pathogenicity, mode of transmission must be studied extensively. In that purpose, we propose this issue to address the key drug targets of emergence/re-emergence virus, phylogeny, pathogenicity, and its diagnostic methods. The review articles published from this thematic issue will contribute towards diverse topics but focus on major molecular mechanisms in host viral interactions, possible drug targets to combat them and novel diagnostic methods. It presents the latest findings of studies on the molecular structure and properties of macromolecules along with its inhibitor studies to focus the molecular insights of the disease mechanism through their three-dimensional structures. Overall, the high focus towards the structural biology of macromolecules involving in the viral disease mechanism, thereby developing/identifying novel molecules to fight the diseased condition, along with its diagnostics.

**Keywords:** Virology, Drug targets, COVID-19, Viral diseases, Structure Biology, Diagnostics.

#### Sub-topics:

The subtopics to be covered within this issue are listed below:

- Antiviral Inhibitors and Drug Repurposing for Emerging Viruses.
- Computational Chemistry of Interaction Insights of Antiviral Compounds.
- Host-Pathogen Interactions.
- Pharmaceutical/Medicinal Chemistry of Drug Binding Mechanisms.
- Structure and Dynamics of Viral Macromolecules Involved in Human Infectious Diseases.
- Viral Pathogenesis and Diagnostics

#### Schedule:

- ◇ Thematic issue submission deadline:
- ◇ Tentative submission deadline: 30<sup>th</sup>, Jan 2021.
- ◇ Tentative submission of revised manuscript: 20<sup>th</sup>, Feb 2021.
- ◇ Submission of issue: March 2021.

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