Special Issue

Systems Immunology Approaches in Infectious Diseases

Message from the Guest Editors

With the advent of advanced molecular technologies, a massive amount of immunological data is now available in the field of infectious diseases. Incorporating and applying mathematics, computer science, engineering, and biology, the Systems Biology approach allows a simplified representation of the complex host–pathogen interactions during infections and enhances our ability to investigate and combat diseases.

This research topic will be designed to feature the latest novel findings about molecular and cellular mechanisms of host antiviral defense from high-throughput experimental methodologies to computational and theoretical approaches. All papers will be comprised of multidisciplinary approaches to handling the existing challenges faced in this fast-growing field. The vision of this Special Issue is to bring clinicians; engineers; basic scientists such as biologists, immunologists, physicists, and mathematicians; and big data analytics together to provide readers with the current state of the art of systems biology approaches in understanding immunity against pathogens, and aiding the development of antiviral therapies.

Guest Editors

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A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

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