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Novel Strategies on Antiviral Drug Discovery Against Human Diseases

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Message from the Collection Editors

The impact of viral infection on human health can range from mild diseases, such as the common cold, to life-threatening diseases, like that of Ebola or SARS-CoV-2/COVID-19 infections. Besides natural innate and acquired antiviral responses, vaccines and antiviral drugs are two major arsenals that can be used to fight viral infection. Vaccines are developed through the activation of the human antiviral immune response against a specific viral infection. This is very effective in eliminating some viral infections, such as polio, but is often challenged by the cross-reactivities of neutralizing antibodies, antibody-dependent enhancement of viral infection or antigenic diversity, commonly found in flaviviral infections. Antiviral drugs have some unique advantages over vaccines, as they are designed to directly modulate a viral protein or cellular pathway the virus relies on for survival. However, there are very limited or no specific antiviral drugs for most human viral diseases. This Collection aims to collect novel ideas and/or novel viral targets and methods that could be used for the discovery and development of new antiviral drugs.

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Guest Editors



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Topical Collection



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Message from the Editor-in-Chief

The worldwide impact of infectious disease is incalculable. The consequences for human health in terms of morbidity and mortality are obvious and vast but, when infections of animals and plants are also taken into account, it is hard to imagine any other disease that has such a significant impact on our lives—on healthcare systems, on agriculture and on world economics. *Pathogens* is proud to continue to serve the international community by publishing high quality studies that further our understanding of infection and have meaningful consequences for disease intervention.

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