Studies on host interactions and pathogenesis of emerging human viruses: Zika and Influenza in focus

Dr Shashank Tripathi

Research Assistant Professor Global Health and Emerging pathogens Institute, Microbiology Department, Icahn School of medicine at Mount Sinai, New York.

I have been investigating the biology of two medically important viruses such as Zika and Influenza A viruses. I will discuss some of the recent findings on how Zika virus evades host innate immunity and the application of this information in developing a new ZIKV mouse model. In the field of Influenza biology, we have used the Flu 'Big Data' to discover several novel pro and antiviral factors, with follow up on host factors required for virus budding. In the process, we have also created a web interface called 'Metascape' for comparative gene set enrichment analysis, which is an useful tool for the scientific community.