



QUANTITATIVE & SYSTEMS BIOLOGY SEMINAR: Exploiting Adaptive Immunity to Detect and Disarm Emerging RNA Viruses

Bobby Brooke Herrera

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About The Speaker:

Dr. Herrera is a co-founder and the chief science officer of E25Bio, Inc., and a visiting scientist at Harvard T.H. Chan School of Public Health. His research uses methods in molecular biology, immunology, virology, and nanotechnology to study how emerging viruses interact with their host with the goal to design more effective rapid diagnostics and therapeutics.

Abstract:

A growing body of evidence suggests that emerging RNA viral infections can be associated with mild illness or asymptomatic infection. It is currently not known why some individuals develop life-threatening illness while others fail to develop significant symptoms. While several hypotheses could help explain this phenomenon, including properties of the infective virus or infected host, a robust immune response is a possible explanation. Experiments have revealed antibody-positive individuals who never had symptoms, but have immune cell responses that are greater in magnitude when compared to individuals who experienced severe disease. This seminar describes methodologies to identify asymptomatic Ebola virus, flavivirus, and SARS-CoV-2 infections with implications for therapeutic development.

Date:

9/24/2021

Time:

2:30 PM-3:45 PM

Location:

Please contact
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for the Zoom information.