SFB 900

SFB 900 Seminar Series

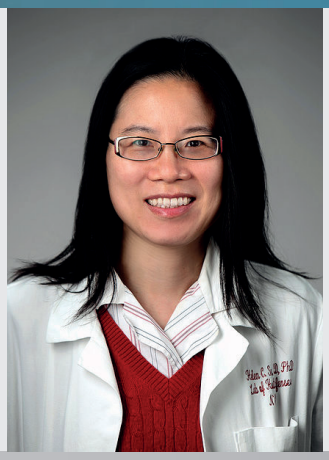
ALL GUESTS ARE WELCOME

TITLE

Cytosolic dsRNA sensors and antiviral immunity

SPEAKER

Helen Su, M.D., Ph.D., Laboratory of Clinical Immunology & Microbiology, National Institute of Allergy and Infectious Diseases, NIH, Bethesda, MD, USA



LOCATION

TWINCORE: Seminar room 0020 and seminar room 0030

There will be no video transmission due to unpublished data

01.09. 2022

3.30 PM (s.t.)

» Abstract

RIG-I-like helicases sense the presence of viral dsRNAs in cytosol, where they function to initiate type I IFN responses for antiviral immunity. We and others have previously shown that MDA5 deficiency in humans contributes to susceptibility to rhinovirus and enterovirus infection, while RIG-I haploinsufficiency has been associated with susceptibility to influenza virus infection. To investigate whether these RIG-I-like helicases have roles more broadly in human susceptibility to respiratory viruses, we have identified and functionally validated genetic variants in cohorts of patients with life-threatening COVID-19 or influenza virus. Our results suggest nuanced roles of these products in determining clinical outcome, which are consistent with the overall evidence of how type I IFN defects contribute to virus susceptibility in humans, and raise new directions for future research.

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