

DEPARTMENT OF MICROBIOLOGY & IMMUNOLOGY SEMINAR SERIES

NOTE: Dr. Gummuluru received his Ph.D. Degree in 1996 from UR in Microbiology and Immunology



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Host: Steve Dewhurst, Ph.D.

Probing Viral RNA-induced Inflammatory Mechanisms in HIV-1 Infection

Combination antiretroviral therapy (cART) lowers plasma viremia below the limit of detection in clinical assays and reduces the morbidity and mortality associated with HIV-1 infection. Individuals on fully suppressive cART, however, continue to have increased incidence of HIV-associated non-AIDS (HANA) conditions typically associated with aging, such as cardiovascular atherosclerosis, cancer, and neurologic dysfunction. Though ongoing systemic inflammation has been hypothesized to account for increased incidence for HANA conditions, molecular mechanisms have yet-to-be defined. In this presentation, I will focus on mechanisms by which HIV-1 infection of myeloid cells, such as macrophages and microglia, induces persistent innate immune responses. Specifically, I will focus on the role of the transcriptionally competent viral reservoir in macrophages and microglia, and cytoplasmic expression of unspliced viral RNA that triggers innate immune sensing by nucleic acid sensors, and the signaling mechanisms that induce pro-inflammatory responses.

Monday, October 23, 2023

12:00 PM

Upper Auditorium (3-7619)

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