

GHI Seminar

Special seminar by invited speaker

Joanne Engel

Director, Microbial Pathogenesis and Host Defense Program, University of California, San Francisco (UCSF)

Chlamydia is a Master Cell Biologist: The Secret Lives of Intracellular Pathogens

Chlamydia trachomatis is a leading cause of genital and ocular infections for which no vaccine exists. Upon entry into host cells, *C. trachomatis* resides within a membrane-bound compartment — the inclusion — and secretes inclusion membrane proteins (Incs) that are thought to modulate the host-bacterium Interface. In the absence, until recently, of being able to genetically manipulate *Chlamydia*, we used high through-put affinity purification/mass spectroscopy to identify potential host binding partners for the Incs to infer and explore their function. We have identified high confidence host protein interactors for ~2/3 of the Incs and will discuss potential interactions with retromer-dependent vesicular trafficking and dynactin function at the centrosome. This study demonstrates the value of proteomics in unveiling host-pathogen interactions in genetically challenging microbes.

Host: Alexandre Persat

Tuesday, July 17, 2018



12:15, SV 1717