JOHNS HOPKINS UNIVERSITY - SCHOOL OF MEDICINE

RETROVIRUS LABORATORY GUEST SEMINAR

Dr. Susana Valente

Associate Professor

Department of Infectious Diseases

The Scripps Research Institute

Host: Dr. Charles Bailey

Assistant Professor

Dept. of Molecular & Comparative Pathobiology

Eradication without Reactivation - Silencing of the HIV reservoir

We discovered that an analog of a natural product, didehydro-Cortistatin A (dCA), is a very potent inhibitor of HIV-1 transcription (Mousseau et al. Cell Host an Microbe, 2012). Working at sub-nanomolar concentrations, dCA binds to the basic domain of the viral Tat protein and inhibits Tat activated transcription. Based on the mode of action of dCA in latently infected cells, our recent studies highlight an alternative approach to the “shock and kill” HIV eradication strategy. In this model, a Tat inhibitor would block the Tat feedback-loop initiated after low-basal reactivation and prompt the viral promoter into deeper transcriptional inhibition (Mousseau et al. mBio, 2015). dCA treatment combined with ART would be aimed at blocking ongoing viral replication, reactivation and replenishment of the latent viral reservoir, possibly culminating in a functional cure.

Tuesday, June 28, 2016

10:30am - 11:30am Tilghman Auditorium

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