2019 IMMID Workshop Series on Molecular and Translational Medicine

Workshop 1

HIV disease, vaccines, and therapies toward a cure

October 15, 2019
245 N. 15th Street
Philadelphia, PA

HIV DISEASE, VACCINES, AND THERAPIES TOWARD A CURE

Presentations today will focus on clinical and translational aspects of HIV disease.

9:30 AM  Introductory Remarks

Brian Wigdahl, PhD
Professor and Chair, Department of Microbiology and Immunology
Director, Institute for Molecular Medicine and Infectious Disease
Drexel University College of Medicine, Philadelphia, PA

Kenny Simansky, PhD
Vice Dean for Research
Professor, Department of Pharmacology & Physiology
Drexel University College of Medicine, Philadelphia, PA

SESSION 1: Current topics of care and research in the HIV clinical environment

9:40 AM  Opening Remarks

Organizers:
Michael Nonnemacher, PhD
Associate Professor, Department of Microbiology & Immunology
Drexel University College of Medicine

Zsofia Szep, MD, MSCE
Associate Professor of Medicine, Division of Infectious Disease and HIV
Director, Partnership Comprehensive Care Practice
Drexel University College of Medicine

Co-chairs: Julio Martin-Garcia, PhD, and Sara Schultz, MD

Go to www.drexel.edu/medicine/immid for more information
9:45 AM Pablo Tebas, MD
Professor of Medicine, Hospital of the University of Pennsylvania, Philadelphia, PA
*Gene therapy approaches to HIV cure*

10:20 AM Elias Haddad, PhD
Professor of Medicine, Division of Infectious Disease and HIV
Drexel University College of Medicine, Philadelphia, PA
*Targeting CD4 helper T cells in HIV vaccine development*

10:55 AM Dong Lee, MD
Associate Professor of Medicine and Interim Division Chief, Division of Infectious Disease and HIV, Drexel University College of Medicine, Philadelphia, PA
*Overview of Drexel HIV Partnership*

11:20 AM Amy Althoff, MD
Assistant Professor of Medicine, Division of Infectious Disease and HIV
Drexel University College of Medicine, Philadelphia, PA
*U=U at the Partnership*

11:40 AM Michael Nonnemacher, PhD
Associate Professor, Department of Microbiology and Immunology
Drexel University College of Medicine, Philadelphia, PA
*HIV Tat genetics associated with HAND in the Drexel Medicine CARES cohort*

12:00 PM *Lunch*
Lunch will be provided for all meeting attendees

**SESSION 2: PhD Candidate research presentations**

12:45 PM *Opening Remarks*
Co-chairs: Olimpia Meucci, MD, PhD, and Tricia Burdo, PhD

12:50 PM Alexander Allen, PhD Candidate, T32 trainee
Department of Microbiology and Immunology, Drexel University College of Medicine, Philadelphia, PA
*Broad-spectrum gRNAs abolish HIV-1 LTR-mediated transcription in cells that receive CRISPR/Cas9 therapy*

1:05 PM Shadan Yarandi, PhD Candidate, T32 trainee
Department of Neuroscience, Lewis Katz School of Medicine, Temple University, Philadelphia, PA
*Role of extracellular vesicles carrying HIV-1 nef in development of CNS dysfunction*
1:20 PM Megan Meuser, PhD Candidate, T32 Trainee
Department of Biochemistry, Drexel University College of Medicine,
Philadelphia, PA

Field-based affinity optimization of a novel azabicyclohexane scaffold HIV-1 entry inhibitor

1:35 PM Michael Duggan, PhD Candidate, T32 trainee
Department of Neuroscience, Lewis Katz School of Medicine, Temple University,
Philadelphia, PA

Converging modulation of PQC by H\textsubscript{2}O\textsubscript{2} and Tat: Insights from primary rat neuronal culture

1:50 PM Emily Nickoloff, PhD Candidate, T32 trainee
Department of Pharmacology and Physiology, Drexel University College of Medicine, Philadelphia, PA

Dopamine increases HIV entry into macrophages via an alternative, calcium dependent pathway

2:05 PM Bahareh Torkzaban, PhD Candidate
Department of Neuroscience, Lewis Katz School of Medicine, Temple University,
Philadelphia, PA

The lncRNA LOC102549805 (U1) modulates neurotoxicity of HIV-1 Tat protein

2:20 PM Break
Snack provided

SESSION 3: City-wide NeuroHIV Discussion Group

2:40 PM Opening Remarks

Kamel Khalili, PhD
Laura H. Carnell Professor and Chair, Department of Neuroscience,
Director, Center for Neurovirology
Director, Comprehensive NeuroAIDS Center
Lewis Katz School of Medicine, Temple University

Organizers:
Tricia Burdo Michael Nonnemacher
Jennifer Gordon Brian Wigdahl
Kamel Khalili

Co-chairs: Michael Nonnemacher, PhD, and Hassen Wollebo, PhD

2:45 PM George Pavlakis, MD, PhD
Chief, Human Retrovirus Section, Vaccine Branch, Center for Cancer Research,
National Cancer Institute

Protection against SHIV challenge upon same site administration of DNA+protein vaccine in macaques
3:20 PM  **Ilker Sariyer, DVM, PhD**  
Associate Professor, Department of Neuroscience and Center for Neurovirology, Lewis Katz School of Medicine, Temple University, Philadelphia, PA  
*Suppression of Zika virus infection in brain by the antiretroviral drug Rilpivirine*

3:45 PM  **Yoelvis Garcia-Mesa, PhD**  
Research Associate, Department of Neurology, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA  
*Evolving regional brain injury and recovery in SIV-infected rhesus macaques associate with regional heme oxygenase enzyme isoform expression*

4:10 PM  **Jacqueline Barker, PhD**  
Assistant Professor, Department of Pharmacology and Physiology, Drexel University College of Medicine, Philadelphia, PA  
*Accumbens glutamate signaling in behavioral flexibility: Implications for NeuroHIV*

4:35 PM  **Natarajaseenivasan Kalimuthusamy, PhD**  
Postdoctoral Fellow Research Associate, Department of Neuroscience and Center for Neurovirology, Lewis Katz School of Medicine, Temple University, Philadelphia, PA  
*Transcellular mitochondrial transfer in neurodegeneration*