

Exosomes, Microvesicles, and Infectious Disease Schedule

Friday May 31st

10:00 – 1:00pm **Registration: Franklin Building**

11:00 – 12:30pm **Lunch: Osgood Building**

12:30 – 12:45pm **Opening Remarks (Drs. Kashanchi, Margolis, and Gould)**

RNA and DNA Viral Infections (Franklin Building, Room 3)

Moderator: Fatah Kashanchi

12:45 – 1:15pm **Dr. Nihal Altan-Bonnet**, National Institutes of Health

Extracellular Vesicles: vehicles of en block viral transmission

1:15 – 1:45pm **Dr. Travis Thomson**, University of Massachusetts Medical School

TBD

1:45 – 2:00pm **Dr. Pooja Jain**, Drexel University College of Medicine

Secreted cell-free Tax protein of HTLV-1 maintains its biological and immunomodulatory activities

2:00 – 2:15pm **Dr. Walter Atwood**, Brown University

JC polyomavirus uses Extracellular Vesicles to Infect Target Cells

2:15 – 2:30pm **Dr. Maria Kalamvoki**, University of Kansas Medical Center

Mechanism of biogenesis of extracellular vesicles during herpes simplex virus 1 infection

2:30 – 2:45pm **Coffee Break**

HIV (Franklin Building, Room 3)

Moderator: Leonid Margolis

2:45 – 3:00pm **Shadan Yarandi**, Lewis Katz School of Medicine at Temple University

Role of exosomes in HIV-1 Nef release from glial cells infected with HIV-1 contributing to the development of HAND

3:00 – 3:15pm **Dr. Zachary Klase**, University of the Sciences

Morphine and HIV-1 Tat synergistically alter cellular and exosomal miRNA from astrocytes

3:15 – 3:30pm **Dr. Shilpa Buch**, University of Nebraska Medical Center

Astrocyte-derived Extracellular Vesicles mediate HIV-1 Tat and opioid-induced pericyte loss and blood-brain-barrier breach

3:30 – 3:45pm **Dr. Prasun Datta**, Lewis Katz School of Medicine at Temple University

EVs released from Tat-treated microglia modulate glucose metabolism in astrocytes

3:45 – 4:00pm **Coffee Break**

Vector-borne Diseases (Franklin Building, Room 3)

Moderator: Zachary Klase

4:00 – 4:15pm **Dr. Igor Almedia**, University of Texas at El Paso

*Isolation and Characterization of α -Gal-Containing Extracellular Vesicles from Three Major Genotypes of *Trypanosoma cruzi*: Potential Biomarkers and Vaccine Candidates for Chagas Disease*

4:15 – 4:30pm **Dr. Hameeda Sultana**, Old Dominion University

Targeting Vector-Borne Viral diseases using Arthropod exosomes; are we there yet?

4:30 – 4:45pm **Dr. Girish Neelakanta**, Old Dominion University

Fibrinogenolytic activity by tick exosomal HSP70

4:45 – 5:00pm **Dr. Joao Pedra**, University of Maryland School of Medicine

Transkingdom intercommunication at the vector-pathogen-host interface

5:00 – 5:15pm **Coffee Break**

Bacterial Infections (Franklin Building, Room 3)

Moderator: Hameeda Sultana

5:15 – 5:30pm **Dr. Ramin Hakami**, George Mason University

Mechanisms of Protective Functions of Exosomes Derived from Cells Infected with Pathogenic Agents

5:30 – 5:45pm **Dr. Monique Van Hoek**, George Mason University

*Infection-relevant micro-RNAs in Host-derived exosomes from *Francisella* infected cells*

5:45 – 6:00pm **Dr. Roger Palomino**, National Institutes of Health

*Extracellular vesicles from symbiotic *Lactobacillus* inhibit HIV-1 infection*

- 6:00 – 6:15pm **Dr. Alexandra Ortiz**, National Institutes of Health
Fecal exosomes differentially influence translocating bacterial taxa after SIV infection
- 6:15 – 6:30pm **Group Picture**
- 6:30 – 8:00pm **Dinner on your own—Please see the list of onsite and offsite restaurants on page 48**
- 8:00 – 10:00pm **Poster session and vendors: Hotel Check-In Building, Overland Room**

Saturday June 1st

8:00 – 9:00am **Continental Breakfast: Franklin Building**

Inflammatory Diseases (Franklin Building, Room 3)

Moderator: Girish Neelakanta

- 8:30 – 9:00am **Dr. Lance Liotta**, George Mason University
Extracellular EVs with autophagosome properties drive cancer progression
- 9:00 – 9:15am **Dr. Leonid Margolis**, National Institutes of Health
Extracellular vesicle-associated cytokines in HIV infected human ex vivo tonsils
- 9:15 – 9:30am **Dr. Lucia Vojtech**, University of Washington
Extracellular vesicles in human semen inhibit Zika virus infection in the female genital tract
- 9:30 – 9:45am **Daniel Pinto**, George Mason University
HTLV-1 Extracellular Vesicles Promote Cell-to-Cell Contact
- 9:45 – 10:00am **Dr. Kacoli Sen**, University of Florida
Breast cancer cells under mild hyperthermic stress release exosomes with immunogenic potential stimulating pro-inflammatory phenotype in vitro in macrophages
- 10:00 – 10:15am **Coffee Break**

CNS (Franklin Building, Room 3)

Moderator: Norm Haughey

- 10:15 – 10:30am **Dr. Nazira El-Hage**, Florida International University
Role of extracellular vesicles and secretory autophagy in Zika virus trafficking and neuropathogenesis across the blood brain barrier
- 10:30 – 10:45am **Dr. Lynn Pulliam**, University of California, San Francisco
Neuron-derived Exosomes Identify Cognitive Impairment and Gender Differences in HIV
- 10:45 – 11:00am **Dr. Shilpa Buch**, University of Nebraska Medical Center
Astrocyte-derived EVs mediate blood brain barrier breake: Implications for HIV-1 and opioid mediated neuroinflammation
- 11:00 – 11:15am **Dr. Guoku Hu**, University of Nebraska Medical Center
HIV-1 Tat-induced Astrocytic Extracellular Vesicle miR-7 Impairs Synaptic Architecture
- 11:15 – 11:30pm **Rutuja Kulkarni**, Harvard Medical School
Cocaine Mediated Modulation of Extracellular Vesicle Biogenesis and Effects on HIV-1 pathobiology
- 11:30 – 11:45am **Coffee Break**

Technologies (Franklin Building, Room 3)

Moderator: Shilpa Buch

- 11:45 – 12:00pm **Heather Branscome**, American Type Culture Collection
Stem Cell Extracellular Vesicles and Their Potential to Contribute to the Repair of Damaged CNS Cells
- 12:00 – 12:15pm **Dr. Ryan McNamara**, University of North Carolina at Chapel Hill School of Medicine
Large-scale isolation of functional and pure extracellular vesicles for downstream applications
- 12:15 – 12:30pm **Dr. Roger Alexander**, Pacific Northwest Research Institute
A new stage in extracellular RNA communication research
- 12:30 – 1:00pm **Closing Remarks and Awards Ceremony**
- 1:00 – 2:00pm **Lunch: Osgood Building**