

11:00am – 12:30pm	Registration / Lunch
12:30pm – 12:45pm	Opening Remarks – Dr. Fatah Kashanchi
NIH Workshop/Pre-Program Moderators: Drs. Shilpa Buch and Theresa Whiteside	
12:45pm – 12:55pm	NIH/NCATS – Program Officer – Dr. Christine Happel <i>NIH funding in the exRNA space</i>
12:55pm – 1:05pm	NIH/NIBIB – Program Officer – Dr. Nichole Darringer <i>Funding Landscape and Opportunities at NIBIB</i>
1:05pm – 1:15pm	NIH/NCI – Program Officer – Dr. Konstantin Salnikow <i>NCI Mission and Funding Research</i>
1:15pm – 1:25pm	Q&A Discussion/NIH PO
Session Title: Reviews of EV field Moderators: Dr. Michael Graner and Elena Batrakova	
1:25pm – 1:40pm	Speaker – Drs. Shilpa Buch, Julie Saugstad <i>Review of EV/CNS Field</i>
1:40pm – 1:55pm	Speaker – Drs. Lucia Languino, Janusz Rak <i>Review of EV/Cancer Field</i>
1:55pm – 2:10pm	Speaker – Drs. Olivier Loudig, Daniel Chiu, and Ursula Sandau <i>Review of EV/Diagnostics Field</i>
2:10pm – 2:25pm	Break – Coffee Break
2:25pm – 2:40pm	Speaker – Drs. Fatah Kashanchi, Leonid Margolis, Ramin Hakami <i>Review of EV/Infectious Disease Field</i>
2:40pm – 2:55pm	Speaker – Drs. Elena Batakova, Heather Branscome <i>Review of EV/Therapeutics Field</i>
2:55pm – 3:10pm	Q&A Discussion
Session Title: Junior Faculty Talks Moderators: Drs. My Mahoney and Louise Laurent	
3:10pm – 3:25pm	Speaker – Dr. Suvendra Bhattacharyya – University of Nebraska Medical Center <i>miRNA export from mammalian cells: Importance of a Syntaxin Protein</i>
3:25pm – 3:40pm	Speaker – Dr. Lillian Skeiky - Uniformed Services University of the Health Sciences <i>Assessing the Relationship Between Proinflammatory Cytokines and Sleep Physiology Following Total Sleep Deprivation in Plasma and Extracellular Vesicles</i>
3:40pm – 3:55pm	Speaker – Dr. Yohei Nose - Icahn School of Medicine, Mt. Sinai <i>Comparative Analysis Reveals No Significant Difference Between Extracellular Vesicular Particles Proteo-Transcriptome from Fresh or Frozen Tissues</i>
3:55pm – 4:05pm	Speaker – Dr. Monique Anderson – Harvard University <i>Mutations in VPS37A are associated with changes in extracellular vesicle export</i>
4:05pm – 4:20pm	Speaker – Dr. Mý Mahoney – Thomas Jefferson University <i>Extracellular vesicles derived from intravenous immunoglobulin replacement therapy serving as decoys to suppress immune response</i>
4:20pm – 4:30pm	Sponsor – Dr. Kevin Dolan – Particle Metrix
4:30pm – 4:45pm	Q&A Discussion
5:00pm – 6:30pm	Dinner

Thursday Evening Session Session Title: EV and Biogenesis Moderators: Drs. Aurelio Lorico and Sabita Roy	
6:30pm – 7:00pm	Keynote Speaker – Dr. Alissa Weaver - Vanderbilt School of Medicine <i>Biogenesis and characterization of RNA-containing extracellular vesicles</i>
7:00pm – 7:15pm	Speaker – Dr. Kevin Morris - Queensland University of Technology <i>RNA-Exosome Therapeutics to Treat Viral Infections</i>
7:15pm – 7:30pm	Speaker – Dr. Louise Laurent - University of California - San Diego <i>Characterization of placental exRNA carrier heterogeneity using multi-modal molecular profiling and single-vesicle analysis</i>
7:30pm – 7:45pm	Speaker – Dr. Robert Fullem - Baylor College of Medicine <i>ExRNA Atlas v3 map of extracellular RNA in human biofluids sheds light on the exRNA “dark matter” beyond previously annotated genomic regions</i>
7:45pm – 8:00pm	Speaker – Dr. Aurelio Lorico - Touro University Nevada <i>Transport of the POMC pro-hormone by blood plasma extracellular vesicles</i>
8:00pm – 8:10pm	Sponsor – Dr. Giacomo Vacca – Kinetic River <i>Paving the Way Toward a Urine-Based Assay for Early Diagnosis of Kidney Disease</i>
8:10pm – 8:30pm	Q&A Discussion

Friday Morning Session Session title: EVs and Infection Moderator: Drs. Ramin Hakami and Gerardo Kaplan	
7:00am – 8:15am	Breakfast
8:15am – 8:30am	Speaker – Dr. Robert Molestina - ATCC <i>Role of Babesia Secreted Extracellular Vesicles in the Modulation of the Immune Response</i>
8:30am – 8:45am	Speaker – Dr. Sabita Roy - University of Miami Health System <i>Bacterial Extracellular vesicles in opioid associated co-morbidities</i>
8:45am – 9:00am	Speaker – Dr. Ramin Hakami – George Mason University <i>Characterization of sEV-associated RNA Species that Activate Innate Immune Response during Infection with Cytoplasmic RNA Viruses</i>
9:00am – 9:15am	Speaker – Dr. Pallavi Singh – Yale University <i>Parasite-Derived Vesicles in Pathogenesis and Immunity</i>
9:15am – 9:30am	Q&A Discussion
9:30am – 9:45am	Break
9:45am – 10:00am	Speaker – Dr. Md Habibur Rahman – Johns Hopkins School of Medicine <i>Neuroinflammation drives fentanyl addiction and relapse by a mechanism that involves the release of extracellular vesicles with modified miRNA cargo from astrocytes</i>
10:00am – 10:15am	Speaker – Dr. Gerardo Kaplan - FDA <i>Production dynamics of infectious exosome and viral particle during in vivo and in vitro hepatitis A virus (HAV) infection</i>
10:15am – 10:30am	Speaker – Dr. Xuesong Chen - University of North Dakota <i>Role of Endolysosomes in SARS-CoV-2 Spike-Induced Cellular Senescence in Astrocytes</i>
10:30am – 10:40am	Sponsor – Dr. Lew Brown - Spectradyne
10:40am – 10:55am	Q&A Discussion
10:55am – 11:15am	Break – Coffee Break
Friday Morning Session Session Title: EVs and CNS #1 Moderator: Drs. Ashley Russell and Catherine DeMarino	
11:15am – 11:30am	Speaker – Dr. Prasun Datta – Tulane University School of Medicine <i>Dysregulation of mitochondrial function in neurons by Extracellular Vesicles from HIV-1 infected macrophages.</i>
11:30am – 11:45am	Speaker – Dr. Partha Chandra - Tulane University School of Medicine <i>Circulating plasma extracellular vesicles indicate dysregulation of synaptic signaling in SHIV-infected rhesus macaques</i>
11:45am – 12:00pm	Speaker – Dr. Catherine DeMarino – NIH/NINDS <i>HIV-1 RNA in extracellular vesicles is associated with neurocognitive outcomes</i>
12:00pm – 12:15pm	Speaker – Dr. Seema Singh - University of Nebraska Medical Center <i>Regulation of HIV Tat-mediated release of ferroptosis cargoes in microglia-derived extracellular vesicles involves microglial ferritinophagy</i>
12:15pm – 12:30pm	Q&A Discussion
12:30pm – 2:00pm	Lunch/Afternoon Break
1:00pm – 2:00pm	NIH Grant Writing – with Dr. Fatah Kashanchi

Friday Afternoon Session Session Title: EVs and CNS #2 Moderator: Drs. Piul Rabbani and Suvendra Bhattacharyya	
2:00pm – 2:15pm	Speaker – Sarah C. Baker - Oregon Health & Science University <i>The effect of Niemann Pick Disease Type C on extracellular vesicle concentration and cargo</i>
2:15pm – 2:30pm	Speaker – Dr. Ursula Sandau - Oregon Health & Science University <i>Cerebrospinal fluid extracellular vesicle miRNAs identify synaptic alterations in human Alzheimer's disease brain</i>
2:30pm – 2:45pm	Speaker – Dr. Ashley Russell - Penn State Erie, The Behrend College <i>Myelin associated protein expression and extracellular vesicle composition are altered by endoplasmic reticulum stress in oligodendrocytes</i>
2:45pm – 3:00pm	Speaker – Dr. Candice Brown - West Virginia University <i>Experimental ischemic stroke in mice with an endothelial cell deletion of tissue-nonspecific alkaline phosphatase generates circulating extracellular vesicles that impair brain endothelial cell function</i>
3:00pm – 3:15pm	Q&A Discussion
3:15pm – 3:30pm	Break – Coffee Break
Friday Afternoon Session Session Title: EVs and Cancer Moderator: Drs. Lucia Languino and Mark Santos	
3:30pm – 4:00pm	Keynote Speaker – Dr. Wei Guo - University of Pennsylvania <i>Extracellular Vesicles in Immune Suppression and Tumor Progression</i>
4:00pm – 4:15pm	Speaker – Dr. Lance Liotta - George Mason University <i>Mitophagy-associated EVs mediate cancer cell survival by exporting damaged mitochondria components bound to tumor suppressor proteins, offering new mechanistic strategies for cancer prevention and therapy</i>
4:15pm – 4:30pm	Speaker – Dr. Nykia Walker - University of Maryland Baltimore County <i>Tumor-Derived Extracellular Vesicles Systemically Reprogram Naive Mammary Stroma for Breast Cancer Metastasis Through Let-7 miR Suppression</i>
4:30pm – 4:45pm	Speaker – Camila Bach – Thomas Jefferson University <i>A Novel Sialylation Pathway Mediated by Extracellular Vesicles in Aggressive Prostate Cancer</i>
4:45pm – 5:00pm	Speaker – Dr. Theresa Whiteside - University of Pittsburgh <i>Melanoma-derived exosomes induce intrinsic apoptosis of activated T cells by early transcriptional activation of cellular stress response genes</i>
5:00pm – 5:15pm	Q&A Discussion
5:30pm	Group Picture (Outside?)
5:35pm – 7:00pm	Dinner
Friday Evening Poster/Vendor Session	
7:00pm – 8:30pm	Poster Session – Cash Bar

Saturday Morning Session Session Title : EVs and Technology Moderator: Drs. Heather Branscome and Daniel Chiu	
7:00am – 8:15am	Breakfast
8:15am – 8:30am	Speaker – Daniel Chiu <i>High-resolution analysis of single extracellular vesicles and particles with digital flow cytometry and super-resolution imaging</i>
8:30am – 8:45am	Speaker – Dr. Piul Rabbani <i>Topically delivered exosomes modulate innate immune components for diabetic wound closure</i>
8:45am – 9:00am	Sponsor – Dr. Matt Kremer - Univercells Technologies <i>Scale-X Bioreactors for Adherent Cell Culture Applications</i>
9:00am – 9:15am	Q&A Discussion
9:15am – 9:45am	NIH Roundtable (PO, SBIR/STTR) Dr. Stephanie Fertig – NIH/OD Dr. Danny Gossett - NIH/NIDDK Dr. Ian Nova – NIH/NHGRI Dr. Xibin Wang - NIH/NIAMS Dr. Taryn Aubrecht - NIH/NIDA Dr. Stephanie Davis - NIH/NHLBI
9:45am – 10:00am	Q&A Discussion
10:00am – 10:15am	Break - Coffee Break
Saturday Morning Session Title Session : Moderator: Drs. Julie Saugstad and Nicole Noren Hooten	
10:15am – 10:30am	Speaker – Dr. Javari Munir - University of Nebraska - Lincoln <i>Immortalized Mammary Alveolar Cells (MAC-T) as a tool for designing organ-specific targeting exosomes via genetics and click-chemistry approach</i>
10:30am – 10:45am	Speaker – Dr. Olivier Loudig - Hackensack University Medical Center <i>Developing tools and animal models for non-invasive detection of exhaled lung tumor extracellular vesicle biomarkers</i>
10:45am – 11:00am	Speaker – Dr. Jennifer Jones/ Michelle Pleet – NIH/NINDS <i>Systematic Analysis of EV Subset Changes with Radiation Therapy</i>
11:00am – 11:15am	Speaker – Dr. Duaa Dakhallah - West Virginia University <i>Targeting the Epigenetic Modifications in Vascular Endothelial Cells During Sepsis Via Circulating Extracellular Vesicle</i>
11:15am – 11:30am	Speaker – Dr. Nicole Noren Hooten – NIH/NIA <i>Exploring extracellular vesicle mitochondrial DNA levels with chronic kidney disease and mitochondrial haplogroup in obese individuals</i>
11:30am – 11:40am	Sponsor – Dr. Jason Lowery - Beckman
11:40am – 11:55am	Q&A Discussion
12:00pm – 12:15pm	Awards for best 3 talks and best 3 posters
12:15pm – 12:30pm	Closing Remarks + New Officer Announcements
Closing Remarks	
12:30pm – 2:00pm	Lunch