**Sunday  October 8, 2017  Day 1**

**4:00-6:00PM** Registration

**6:00-7:00PM** Dinner

**7:00-9:10PM** Session I  
Chair  
*Michael Graner, University of Colorado Denver*

7:00-7:10PM  
*Michael Graner, co-organizer, ASEMV2016*  
Opening Remarks

7:10-8:10PM  
*Takahiro Ochiya, National Cancer Center, Japan*  
Abstract # 
Extracellular vesicles as a novel therapeutic target for cancer metastasis

8:10-8:40PM  
*Christie D. Fowler, UC Irvine*  
Abstract # 
Extracellular microRNAs released during nicotine self-administration

8:40-9:10PM  
*Janos Zempleni, U Nebraska*  
Abstract # 
Delivery and alterations of microbial signals by bovine milk exosomes in non- bovine species

**9:10-11:00PM** Welcome Reception

**Monday  October 9, 2017  Day 2**

**8:30AM-12:00PM** Session II  
Chair  
*Christie Fowler, UC Irvine*

8:30-8:50AM  
*Tom Gingeras, CSHL*  
Abstract # 
Tailoring of Extracellular RNAs

8:50-9:10AM  
*Harmeet Malhi, Mayo Clinic*  
Abstract # 
STARD11-mediated ceramide transport is necessary for release of lipotoxic extracellular vesicles

9:10-9:30AM  
*Rienk Nieuwland, AMC Amsterdam, The Netherlands*  
Prediction of venous thromboembolism in cancer patients

9:30-9:50AM  
*Shilpa Buch, U. Nebraska*  
Abstract #
Exosomal miRNA-mediated loss of pericyte coverage at the blood-brain barrier: Implications for morphine-mediated potentiation of neurodegeneration

9:50-10:10AM  
*Chulhee Choi, KAIST Daejeon, Korea* (8)
Engineered exosomes loaded with super repressor IkB, a potent inhibitor of NF-κB pathway, for treatment of septic shock syndrome

**10:10-10:30AM**  
**Break Monday AM Oct. 9**

10:30-10:45AM  
*Florencia Menay, Buenos Aires University, Argentina* (9)
Exosomes isolated from ascites of T-cell lymphoma-bearing mice induce a tumor-specific immune response

10:45-11:00AM  
*Jing-Hung Wang, Stanford University* (10)
High affinity anti-HER2 scFv-directed extracellular vesicle-mediated mRNA-based gene delivery inhibits growth of HER2-overexpressing human breast tumor xenografts by prodrug activation

11:00-11:15AM  
*Masamitsu Kanada, Michigan State University* (11)
Microvesicle-mediated delivery of minicircle DNA encoding prodrug-converting enzymes for cancer therapy

11:15-11:30AM  
*Joshua Hood, University of Louisville* (12)
Cyclical Electrical Field Flow Fractionation of Melanoma Exosomes

11:30-11:45AM  
*Biao Lu, Santa Clara University* (13)
Sequential deletion of CD63 reveals critical domains for exosome targeting and surface engineering

11:45AM-12:00PM  
*Indrani Das, Harvard* (14)
"Exosomal microRNA-124a: Novel Translational Reactive Astrocyte Repair in vitro"
*Winning Project of the 2017 Regeneron Science Talent Search*

**12:00-1:00PM**  
**Lunch**
## Session III
**Monday PM Oct 9**

### 1:00-1:15PM
**Swetha Srinivasan, Abbvie**
Abstract # (15)
Utilizing extracellular vesicles from patient plasma to identify biomarkers of autoimmune disease

### 1:15-1:30PM
**Gareth Willis, Harvard Medical School**
Abstract # (16)
Mesenchymal stem/Stromal Cell Exosomes Ameliorate Experimental Bronchopulmonary Dysplasia and Restore Lung Function through Macrophage Immunomodulation

### 1:30-1:45PM
**Travis Antes, Cedars Sinai Medical Center**
Abstract # (17)
New targeting methods that manipulate the surface of EVs for enhanced tissue delivery

### 1:45-2:00PM
**Victoria Marsh Durban, ReNeuron**
Abstract # (18)
Neural Stem Cell-derived exosomes induce senescence and apoptosis in cancer cell lines

### 2:00-2:15PM
**Jan Lötaval, U. of Gothenburg, Sweden & Codiak**
Abstract # (19)
Regenerative Properties of Exosomes Derived from Mesenchymal Stem Cells

### 2:15-2:30PM
**Break**

### 2:30-2:45PM
**Peter DeHoff, UCSD**
Abstract # (20)
Lack of Correlation Between Maternal Serum and Placental miRNA Expression

### 2:45-3:00PM
**Janice Braun, University of Calgary**
Abstract # (21)
Understanding the CSP-EV export pathway

### 3:00-3:20PM
**Carla Beckham, University of Rochester**
Abstract # (22)
HOTAIR affects epithelial-to-mesenchyme transition and extracellular vesicle content and function

### 3:20-3:40PM
**Suraj Bhat, UCLA**
Abstract # (23)
The Small Heat Shock Protein αB-crystallin is Essential for Exosome Biogenesis in Human Retinal Pigment Epithelial Cells in Culture: A Specific Interaction with Rab GTPase27b

### 3:40-4:00PM
**Siyang Zheng, Pennsylvania State University**
Abstract # (24)
Rapid isolation of extracellular vesicles using lipid nanoprobes
4:00-4:15PM  Ane Salvador, Massachusetts General Hospital (25)  
MicroRNA-30d is a biomarker for heart failure and plays a functional role in cardiac remodeling

4:15-4:30PM  George Daaboul, nanoView Diagnostics (26)  
High-Throughput Characterization of Single Exosomes and Extracellular Vesicles

4:30-6:00PM  Poster session A

7:00PM-9:00PM  Session IV  Monday Evening Oct 9  
Chair  Carla Beckham, University of Rochester  
Abstract #

7:00-7:30PM  Maxence Nachury, Stanford (27)  
Molecular mechanisms and functional significance of extracellular vesicle secretion by primary cilia

7:30-8:00PM  Hiroshi Shiku, Mie University, Japan (28)  
Activated CD8+ T cells interrupt tumor invasion and metastasis in exosome-dependent manners

8:00-8:30PM  Alissa Weaver, Vanderbilt University (29)  
Role of cortical actin in MVB docking and secretion

8:30-9:00PM  Janusz Rak, McGill University (30)  
Oncogenes as organizers of extracellular vesicle communication

9:00-9:15PM  Radhika Pochampally, University of Mississippi (31)  
Polycomb group protein Suz12 is regulated by a novel miRNA-like small RNA

9:15-11:00PM  Reception/Poster session A

Tuesday  October 10, 2017  Day 3

8:30AM-12:00PM  Session V  
Chair  Claudia Mongini, Buenos Aires University, Argentina  
Abstract #

Caris Discovery Lecture  
8:30-9:30AM  Alain Brisson, University of Bordeaux France (32)
Methods of imaging, quantification and isolation of exosomes/EVs
9:30-9:50AM In-San Kim, KIST Korea
Exosomes as a Carrier for Membrane Protein Therapeutics

9:50-10:10AM Suresh Mathivanin, LaTrobe University, Australia
Exosomes from bovine milk reduces the tumor burden and attenuates cancer cachexia

10:10-10:30AM Dirk Dittmer, UNC Chapel Hill
Exosomes from a virus-driven tumor exert paracrine effects leading to endothelial cell reprogramming

10:30-10:45AM Break Tuesday AM Oct. 10

10:45-11:00AM Chun-Mei Hu, GRC Academica Sinica, Taiwan
The role of pancreatic cancer-derived exosomes in cancer-mediated cachexia

11:00-11:15AM David Lubman, University of Michigan
Proteomic Analysis of Exosomes from Patient Serum Samples

11:15-11:30AM Alexander Pfeifer, University of Bonn, Germany
Exosomal miRNAs as potential biomarkers for energy expenditure by human brown adipose tissue

11:30-11:45AM Antonio De Maio, UCSD
Isolation and glycoprotein characterization of human urine extracellular vesicles

11:45AM-12:00PM Victoria Portnoy, SBI
Fluorescent NTA for Next-Gen, Highly Accurate Quantitation of Extracellular Vesicles

12:00-1:00PM Lunch
1:00PM-4:00PM Break
4:00-6:00PM Poster session B
6:00-7:00PM Dinner

7:00PM-9:00PM Session VI Tuesday Evening Oct. 10
Chair Louise Laurent, UCSD

7:00-7:20PM Michiel Pegtel, VU University, The Netherlands
Quantifying MVB-PM fusion in single living cells to unravel exosomes release dynamics
7:20-7:40PM  Morayma, Temoche-Diaz, UC Berkeley
Mechanisms of small RNA sorting into extracellular vesicles secreted by human breast cancer cells

7:40-8:00PM  Imre Mager, University of Oxford
RNA Binding Proteins and Small RNA Transcriptome of Extracellular Vesicles

8:00-8:20PM  Ken Witwer, Johns Hopkins University
Detection and Characterization of Large Oncosomes in Thyroid Cancer

8:20-8:40PM  Huiping Liu, Northwestern University
Unveiling the role of exosomes in breast cancer development

8:40-9:00PM  Muller Fabbri, Children's Hospital Los Angeles
Role of NK-derived exosomal microRNAs in cancer therapy and immunoscape

9:00-9:20PM  Michael Olin, University of Minnesota
Tumor derived Extracellular Vesicles Modulate CD200-induced Immunosuppression

9:00-11:00PM  Reception/Poster session B

Wednesday  October 11, 2017  Day 4

8:30AM-12:00PM  Session VII
Chair  Robert Raffai, UCSF

8:30-8:50AM  Ivan Vechetti, University of Kentucky
Exercise-induced exosomal myomiR regulation of adipocyte metabolism

8:50-9:10AM  Andries Zijlstra, Vanderbilt University
EVs in Tumor Cell Invasion, Dissemination and Metastatic Success

9:10-9:30AM  Rachel DeRita, Thomas Jefferson University
The Role of Exosomal β1 Integrin/Src pathway in the Radiation Therapy Response

9:30-9:50AM  Andrew Hill, LaTrobe University, Australia
The role of extracellular vesicles in neurodegenerative diseases
9:50-10:10AM  
**Kristopher Genschmer, Univ. of Alabama, Birmingham**  (52)
Exosomes from activated human neutrophils contain active neutrophil elastase that can degrade lung extracellular matrix.

10:10-10:30AM  **Break**  
**Wednesday AM Oct. 11**

10:30-10:45AM  
**Randy Carney, UC Davis**  (53)
Vibrational spectroscopy as a tool for fingerprinting tumor exosomes

10:45-11:00AM  
**John Lewis, University of Alberta Canada**  (54)
Extracellular vesicle blood fingerprinting to distinguish between patients with indolent and aggressive prostate cancer at diagnosis

11:00-11:15AM  
**Andrew Hoffman, Tufts University**  (55)
Wharton’s Jelly mesenchymal stem cells exert TGF-B1 and monocyte dependent T cell suppression through extracellular vesicles

11:15-11:30AM  
**Vasiliy Chernyshev, Skoltech & MIPT, Russia**  (56)
Can size exclusion chromatography become a standard technique for extracellular vesicle isolation?

11:30-11:45AM  
**Ashley Russell, West Virginia University**  (57)
TNF-α, exosomes, and microRNAs: Contributions to neuroinflammation

11:45AM-12:00PM  
**Heather O’Neill, Caris**  (58)
Adaptive Dynamic Artificial Poly-ligand Targeting™ (ADAPT) identifies aptamers involved in exosome biogenesis that discriminate between two prostate cancer cell lines

12:00-1:00PM  **Lunch**

1:00PM-4:25PM  **Session VIII**  
**Wednesday PM Oct. 11**
Chair  
**Xandra Breakefield, MGH**

1:00-1:15PM  
**Shivani Sharma, UCLA**  (59)
Exo-nano-metrics: nanoscale structure and bio-molecular heterogeneity of single vesicles

1:15-1:30PM  
**Ikuhiko Nakase, Osaka Prefecture University**  (60)
Exosome-based intracellular delivery system using artificial leucine-zipper peptides for receptor recognition and activation
1:30-1:45PM  
Chioma Okeoma, Stony Brook University  
The intricacies of exosomes in varied biological systems

1:45-2:00PM  
Jiacong Guo, University of Southern California  
PRAS40 is a pivotal regulator during microenvironmental stress signaling to exosome-mediated secretion

2:00-2:15  
Pasquale Sansone, Cornell University Medical School  
Packaging of DNA:RNA hybrids in extracellular vesicles and their horizontal transfer in cancer

2:15-2:30PM  
Break  
Wednesday PM Oct. 11

2:30-2:50PM  
Dolores Di Vizio, Cedars Sinai Medical Center  
Not all EVs are the Same: from Function to Biomarker

2:50-3:10PM  
Marc Antonyak, Cornell University  
Examining the roles of EVs in cancer progression

3:10-3:25PM  
Bong Hwan Sung, Vanderbilt University  
Chemotaxis and directionally persistent migration of cancer cells is promoted by exosome secretion

3:25-3:40PM  
Elizabeth Hutchins, TGen  
Profiling extracellular circular RNA expression in biofluids

3:40-3:55PM  
Martin Schlumpberger, Qiagen  
New Workflows Enabling Cancer RNA Biomarker Detection from Exosomes and other Extracellular Vesicles (EVs)

3:55-4:10PM  
Ting-Wen Lo, University of Michigan  
Microfluidic technologies for the isolation and characterization of circulating extracellular vesicles and evaluation of their functional role in amyotrophic lateral sclerosis

4:10-4:25  
Hui-Ling Chiang, Pennsylvania State University  
Endocytosis and trafficking of exosomes to lysosomes

4:25-6:00PM  
Break

6:00-7:00PM  
Dinner
7:00PM-9:00PM **Session IX** **Wednesday Evening Oct. 11**

**Chair**
Chioma Okeoma, Stony Brook University

7:00-7:20PM  **Xandra Breakefield, Massachusetts General Hospital** (71)
**Extracellular Vesicles as EVocators in Brain Tumors**

7:20-7:40PM  **Michael Graner, University of Colorado** (72)
Glioma Extracellular Vesicles and Astrocytes: Conversion to the Dark Side

7:40-8:00PM  **Robert Raffai, UCSF** (73)

8:00-8:20PM  **Jennifer Jones, NCI/NIH** (74)
Development of a Multiplex-To-Single Exosome Analysis (MT-SEA) Pipeline to Characterize Exosomes Associated with Tumor Progression and Responses to Treatment

8:20-8:40PM  **Susanne Gabrielsson, Karolinska Institute, Sweden** (75)
Exosomes as immunotherapy for cancer

8:40-9:00PM  **Louise Laurent, UCSD** (76)
Placenta-specific miRNAs are carried by a distinct population of EVs in maternal serum

9:00-11:00PM **Reception**

**Thursday**  
**October 12, 2017**  
**Day 5**

9:00-12:00AM **Session X**

**Chair**
Raghu Kalluri, MD Anderson

8:30-8:50AM  **Raghu Kalluri, MD Anderson** (77)
Exploiting exosomes for treatment of cancer

8:50-9:10AM  **Prashanth Vallabhajosyula, University of Pennsylvania** (78)
Exosomes in transplant tolerance and rejection

9:10-9:30AM  **Fatah Kashanchi, George Mason University** (79)
Effect of exosomes on cART HIV-1 infected latent model
9:30-9:50AM  
David Meckes, Florida State University  
Ceramide- and CD63-dependent trafficking of Epstein-Barr virus LMP1 to extracellular vesicles

9:50-10:10AM  
Masafumi Ito, TMIG, Japan (Tokyo Metropolitan Institute of Gerontology)  
Promotion of angiogenesis by exosomes expressing carbonic anhydrase 9

10:10-10:30AM  
Break

10:30-10:50AM  
Wei Seong Toh, National University (NUS), Singapore  
Exosome-based cartilage regeneration therapy

10:50-11:10AM  
Sang-Soo Lee, KAIST Korea  
Multi-dimensional characterization of extracellular vesicles in ultra-centrifugal fractions

11:10-11:30AM  
Pieter Vader, UMC Utrecht, The Netherlands  
Improved isolation and hydrogel-based controlled release of cardiac progenitor cell-derived extracellular vesicles for cardiac repair

11:30-11:45AM  
Jiujiu Yu, University of Nebraska  
Inhibitory effects of ginger exosomes on NLRP3 inflammasome activation

11:45AM-12:00PM  
Geoffrey de Couto, Cedars Sinai Medical Center  
Macrophages preferentially endocytose systemically-delivered exosomes at steady state or during acute inflammation

12:00-1:00PM  
Lunch

1:00PM-4:00PM  
Session XI  
Thursday PM Oct. 12

Chair  
Stephen Gould, Johns Hopkins University

1:00-1:20PM  
Jason Howitt, Florey Institute, Australia  
Investigating the in vivo trafficking and function of exosomes

1:20-1:40PM  
Richard Van Krieken, McMaster University Canada  
SREBP-1 is a novel regulator of the TBRI through exosomal secretion
1:40-2:00PM  
Mikhail Skliar, University of Utah  
Membrane Proteins Significantly Restrict Exosome Mobility

2:00-2:20PM  
Julie Saugstad, Oregon Health & Science University  
MicroRNA Biomarkers for Alzheimer's Disease in Human Cerebrospinal Fluid

2:20-2:40PM  
Break

2:40-3:00PM  
Francis Fordjour, Johns Hopkins University  
Exosome biogenesis in the absence of CD63, CD81, and CD9

3:00-3:15PM  
Li Fang Yang, Eastern Virginia Medical School  
New Insights into Prostate Cancer Metastatic Biomarkers from Exosomal Proteome Analysis

3:15-3:30PM  
Derek Russell, University of Alabama at Birmingham  
A passive mechanism of protein loading onto exosomes: the activated neutrophil exosome and neutrophil elastase

3:30-3:45PM  
Robert Kitchen, Exosome Diagnostics  
Sequencing of exosomal mRNA and IncRNA across 4 biofluids reveals distinct abundance profiles and biomarker opportunities

3:45-4:00PM  
Stephen J. Gould, Johns Hopkins University  
ExoMap-1 and exoMap-2 mice: models for studying tissue specific exosome biogenesis, composition, and trafficking in vivo

4:00PM  
Meeting Close