



ASEMV2018
October 20-24 2018
Baltimore Waterfront Marriott

Dear Colleagues,

Welcome to ASEM V2018, the 8th annual meeting of the American Society for Exosomes and Microvesicles. ASEM V2018 continues our society's tradition of a single-track, closed program, with numerous short talks covering the breadth of the field, in sessions that juxtapose divergent areas of the field. This format has many advantages, but will only work if we all embrace the following guidelines:

Speakers: It is critical that talks fit within the allotted time frame. Please avoid lengthy introductions, and assume that most of the audience has a working understanding of the exosome field. For those giving 15 minute talks, please use no more than 11-12 slides, and plan on speaking only 11-12 minutes, leaving 3-4 minutes for questions.

For those giving evening talks (20 minutes total time), we recommend that you use no more than 15-16 slides, speak only 15-16 minutes, and leave 4-5 minutes for questions.

Finally, when responding to questions, please keep your answers as brief and direct as possible, deferring the longer conversations to the break times, meals, and receptions.

Questioners: If you have a question, make your way to the microphone stands prior to the end of the talk so that questions can be begin immediately upon its conclusion. Please state your question as concisely as possible. While a little back-and-forth with the speaker may in some cases be appropriate, try to reserve those more detailed interactions for the breaks.

Chairs: With more than 100 talks on the program, the Chairs are expected to be politely ruthless in maintaining the speaker schedule.

Posters: Mount posters for session A at 7AM on Sunday, October 21, and take them down at 5PM on Monday, October 22. Mount posters for session B at 5PM on Monday October 22 and take them down on Wednesday October 24.

Locations:

Session 1 will be held in the **Waterview** rooms on the first floor, behind the bar/restaurant area.

Saturday evening reception will be held in **Ballroom B**.

Sessions II-XI will be held in **Ballroom A/B on the fourth floor**.

Exhibits, posters, coffee breaks, breakfasts, lunches and receptions will be held in **Ballroom C/D/E on the fourth floor**.

ASEMV2018 Sponsors

ASEMV2018 was made possible by generous support from:



ASEMV2018 Overview

Registration	Sat. Oct. 20 Sun.-Tue.	5:00PM-7:00PM 7:00AM-8:30AM 12:00PM-1:00PM	Waterview (1st floor) Ballroom C/D/E (4 th floor)
Exhibits	Sun.-Wed.	all day	Ballroom C/D/E (4 th floor)
Session I Reception	Sat. Oct. 20 Sat. Oct. 20	7:00PM-9:00PM 9:00PM-11:00PM	Waterview (1st floor) Ballroom B (4th floor)
Breakfast	Sun. Oct. 21	7:00AM-8:30AM	Ballroom C/D/E (4 th floor)
Session II	Sun. Oct. 21	8:30AM-12:00PM	Ballroom A/B (4th floor)
Lunch	Sun. Oct. 21	12:00PM-1:30PM	Ballroom C/D/E
Session III	Sun. Oct. 21	1:30PM-5:00PM	Ballroom A/B
Dinner	Sun. Oct. 21	5:00PM-7:30PM	-open-
Session IV	Sun. Oct. 21	7:30PM-9:30PM	Ballroom A/B
Poster A	Sun. Oct. 21	9:30PM-11:30PM	Ballroom C/D/E
Breakfast	Mon. Oct. 22	7:00AM-8:30AM	Ballroom C/D/E
Session V	Mon. Oct. 22	8:30AM-12:00PM	Ballroom A/B
Lunch	Mon. Oct. 22	12:00PM-1:30PM	Ballroom C/D/E
Breaktime	Mon. Oct. 22	1:30PM-7:30PM	-open-
Session VI	Mon. Oct. 22	7:30PM-9:30PM	Ballroom A/B
Poster B	Mon. Oct. 22	9:30PM-11:30PM	Ballroom C/D/E
Breakfast	Tue. Oct. 23	7:00AM-8:30AM	Ballroom C/D/E
Session VII	Tue. Oct. 23	8:30AM-12:00PM	Ballroom A/B
Lunch	Tue. Oct. 23	12:00PM-1:30PM	Ballroom C/D/E
Session VIII	Tue. Oct. 23	1:30PM-5:00PM	Ballroom A/B
Dinner	Tue. Oct. 23	5:00PM-7:30PM	-open-
Session IX	Tue. Oct. 23	7:30PM-9:30PM	Ballroom A/B
Reception	Tue. Oct. 23	9:30PM-11:30PM	Ballroom A/B
Breakfast	Wed. Oct. 24	7:00AM-8:30AM	Ballroom C/D/E
Session X	Wed. Oct. 24	8:30AM-12:00PM	Ballroom A/B
Lunch	Wed. Oct. 24	12:00PM-1:30PM	Ballroom C/D/E
Session XI	Wed. Oct. 24	1:30PM-4:00PM	Ballroom A/B

Session I **Saturday October 20** **7:00-9:00PM**

	<u>Location:</u> Waterview, first floor	
<i>Chair:</i>	<i>Michael Graner, University of Colorado, Denver, USA</i>	
7:00-7:10PM	Welcome	
	<i>Michael Graner University of Colorado, Denver, USA</i>	
7:10-7:20PM	ASEMV: events, working groups, review rosters, etc.	
	<i>Stephen Gould Johns Hopkins University, Baltimore, USA</i>	
		<u>Abstract #</u>
7:20-7:40PM	Expanding the repertoire of peripheral coding and non-coding RNA biomarkers for brain tumors	
	<i>Anna Krichevsky BWH/Harvard, Boston, USA</i>	(1)
7:40-8:00PM	Comparison of exRNA and EV isolation techniques reveals exRNA carrier subtypes	
	<i>Louise Laurent UC San Diego, La Jolla, USA</i>	(2)
8:00-8:20PM	The impact of assays and analysis on exRNA diversity	
	<i>Kendall van Keuren Jensen TGen, Phoenix, USA</i>	(3)
8:20-8:40PM	Vesicle-cloaked virus clusters are the optimal units for inter-organismal viral transmission	
	<i>Marianita Santiana NHLBI/NIH, Washington DC, USA</i>	(4)
8:40-9:00PM	Latest findings on exosomes from viral infections with specific zip codes	
	<i>Fatah Kashanchi George Mason University, Manassas, USA</i>	(5)
9:00-11:00PM	Reception	

Session II **Sunday October 21** **8:30AM-12:00PM**

	<u>Location:</u> Ballroom A/B, fourth floor	
<i>Chair:</i>	<i>Stephen Gould, Johns Hopkins University, Baltimore, USA</i>	
		<u>Abstract #</u>
8:30-8:45AM	Extracellular vesicles in the evolution of glioma initiating cells	
	<i>Janusz Rak McGill University, Montreal, Canada</i>	(6)
8:45-9:00AM	Bacterial outer membrane vesicles: from membrane blebs to medical solutions	
	<i>Lisa Morici Tulane University, New Orleans, USA</i>	(7)
9:00-9:15AM	Tick exosomal microRNAs manipulate vertebrate host gene expression	
	<i>Michail Kotsyfakis CAS, Budweis, Czech Republic</i>	(8)
9:15-9:30AM	Interferometry for vesicle analysis	
	<i>Selim Unlu Boston University, Boston, USA</i>	(9)
9:30-9:45AM	Development of a broad use interferometry platform for exosome analysis	
	<i>George Daaboul NanoView, Boston, USA</i>	(10)
9:45-10:00AM	HIV and opioid mediated impairment of microglial functioning involves astrocyte derived EVs	
	<i>Shilpa Buch University of Nebraska, Lincoln, USA</i>	(11)
10:00-10:30AM	Break	Ballroom C/D/E
10:30-10:45AM	High-throughput electrochemical sensor for clinical EV analyses	
	<i>Hakho Lee MGH/Harvard, Boston, USA</i>	(12)
10:45-11:00AM	Cytokines in EVs: A hidden system of intercellular communication	
	<i>Leonid Margolis NICHD/NIH, Washington, DC, USA</i>	(13)
11:00-11:15AM	Aggregatibacter actinomycetemcomitans outer membrane vesicle heterogeneity is growth phase-dependent	

	<i>Justin Nice</i>	<i>Lehigh University, Bethlehem (PA), USA</i>	(14)
11:15-11:30AM	Exosomes and extracellular RNAs: from biomarkers to signaling in heart disease		
	<i>Saumya Das</i>	<i>MGH/Harvard, Boston, USA</i>	(15)
11:30-11:45AM	Quantification of cancer EV populations using super-resolution microscopy		
	<i>Tijana Talisman</i>	<i>City of Hope, Duarte, USA</i>	(16)
11:45AM-12:00PM	Comparative and integrative proteomics of blood and semen identifies tissue-specific extracellular markers enriched in healthy and disease states		
	<i>Chioma Okeoma</i>	<i>Stony Brook University, Stony Brook, USA</i>	(17)

12:00PM-1:30PM Lunch

Session III Sunday October 21 1:30PM-5:00PM

Chair: *Tushar Patel, Mayo Clinic, Jacksonville, USA*

			<u>Abstract #</u>
1:30-1:45PM	Nanoscopy approach to image and quantify diverse extracellular vesicles		
	<i>Shivani Sharma</i>	<i>UCLA, Los Angeles, USA</i>	(18)
1:45-2:00PM	Zika virus exploits extracellular vesicle pathways		
	<i>David Meckes</i>	<i>Florida State University, Tallahassee, USA</i>	(19)
2:00-2:15PM	Exosomes: regenerative medicine without the cells		
	<i>Linda Marban</i>	<i>Capricor, Los Angeles, USA</i>	(20)
2:15-2:30PM	<i>Listeria monocytogenes</i> virulence factors are secreted in biologically active extracellular vesicles		
	<i>Carolina Coelho</i>	<i>Johns Hopkins University, Baltimore, USA</i>	(21)
2:30-2:45PM	Mechanism and application of ARMMs		
	<i>Quan Lu</i>	<i>Harvard School of Public Health, Boston, USA</i>	(22)
2:45-3:00PM	Proteolytic neutrophil exosomes transfer COPD from humans to mice		
	<i>Derek Russell</i>	<i>University of Alabama, Birmingham, USA</i>	(23)

3:00-3:30PM Break

3:30-3:45PM	Extracellular vesicles in the immunopathology of infectious diseases		
	<i>Georges Grau</i>	<i>University of Sydney, Sydney, Australia</i>	(24)
3:45-4:00PM	Development of software tools for the development of a multiplex-to-single extracellular vesicle characterisation pipeline.		
	<i>Joshua Welsh</i>	<i>NCI/NIH, Washington DC, USA</i>	(25)
4:00-4:15PM	ExRNA Atlas resource reveals distinct extracellular RNA cargo types present across human body fluids		
	<i>Matt Roth</i>	<i>Baylor College of Medicine, Houston, USA</i>	(26)
4:15-4:30PM	Light scattering tools for rapid screening and deep characterization of therapeutic nanoparticles		
	<i>John Champagne</i>	<i>Wyatt Technologies, Santa Barbara, USA</i>	(27)
4:30-4:45PM	Exosome biogenesis at plasma and endosome membranes		
	<i>Francis Fordjour</i>	<i>Johns Hopkins University, Baltimore, USA</i>	(28)
4:45-5:00PM	Designed exosomes for cancer immunotherapy		
	<i>In-San Kim</i>	<i>KIST, Seoul, South Korea</i>	(29)

5:00-7:30PM Dinner

Session IV**Sunday October 21****7:30PM-9:30PM**

Chair:

*Tijana Talisman, City of Hope, Duarte, USA*Abstract #

7:30-7:50PM	ARC; before exosomes <i>Paul Worley</i> <i>Johns Hopkins University, Baltimore, USA</i> (30)
7:50-8:10PM	RNA transfer across synaptic boutons using extracellular vesicles and a viral-like mechanism <i>Travis Thomson</i> <i>University of Massachusetts, Worcester, USA</i> (31)
8:10-8:30PM	Virus-like mechanisms of neuronal extracellular vesicle biogenesis <i>Jason Shepherd</i> <i>University of Utah, Salt Lake City, USA</i> (32)
8:30-8:50PM	Drugs of abuse alter the release of extracellular vesicles in the brain <i>Christie Fowler</i> <i>UC Irvine, Irvine, USA</i> (33)
8:50-9:10PMs	Exosomal proteins: mechanistic insights and biomarker potential <i>Ayuko Hoshino</i> <i>Weill Cornell Medicine, New York, USA</i> (34)
9:10-9:30PM	Arthropod exosomes as slingshots for arboviral transmission <i>Hameeda Sultana</i> <i>Old Dominion University, Norfolk, USA</i> (35)

9:30-11:30PM**Poster Session A & Reception****Session V****Monday October 22****8:30AM-12:00PM**

Chair:

*Michael Olin, University of Minnesota, St. Paul, USA*Abstract #

8:30-8:45AM	ALIX regulates tumour-mediated immunosuppression by controlling EGFR activity and PD-L1 presentation <i>James Monypenny</i> <i>King's College London, London, UK</i> (36)
8:45-9:00AM	Melanoma-derived exosomes in checkpoint-mediated immune suppression <i>Wei Guo</i> <i>University of Pennsylvania, Philadelphia, USA</i> (37)
9:00-9:15AM	Control of oligodendrocyte precursor proliferation: a role for regulated release of CNTFRa <i>Shanthini Sockanathan</i> <i>Johns Hopkins University, Baltimore, USA</i> (38)
9:15-9:30AM	Milk exosomes accumulate in the intestinal mucosa and peripheral tissues in wild-type pups nursed by exosome and cargo tracking dams <i>Janos Zempleni</i> <i>University of Nebraska, Lincoln, USA</i> (39)
9:30-9:45AM	Dual promise of extracellular microRNAs in the diagnosis and pathology of Alzheimer's disease <i>Julie Saugstad</i> <i>Oregon Health and Science University, Portland, USA</i> (40)
9:45-10:00AM	Exosome trafficking in yeast and zebrafish <i>Hui-Ling Chiang</i> <i>Penn State University, Hershey (PA) USA</i> (41)

10:00-10:30AM**Break**

10:30-10:45AM	Extracellular vesicles from virus-infected cells lead to long-term endothelial cell reprogramming <i>Dirk Dittmer</i> <i>University of North Carolina, Chapel Hill, USA</i> (42)
10:45-11:00AM	Stimulus dependent cargo inclusion regulates the neuronal response to astrocyte derived extracellular vesicles <i>Norm Haughey</i> <i>Johns Hopkins University, Baltimore, USA</i> (43)
11:00-11:15AM	Macrophage-exosomes in atherosclerosis cardiovascular disease <i>Robert Raffai</i> <i>VA/UCSF, San Francisco, USA</i> (44)
11:15-11:30AM	Extracellular vesicles as epigenetic mediators of systemic communication in

murine experimental sepsis

- 11:30-11:45AM **Clinical scale production and wound healing activity of human adipose derived mesenchymal stem cell extracellular vesicles from a hollow fiber bioreactor**
Candice Brown West Virginia University, Morgantown, USA (45)
John Cadwell FiberCell Systems, Frederick, USA (46)
- 11:45AM-12:00PM **A platform for cell-engineered exosome therapies**
Chulhee Choi KAIST, Daejeon, South Korea (47)

12:00PM-7:30PM Lunch - Open - Dinner**Session VI Monday October 22 7:30PM-9:30PM**

- Chair: Leonora Balaj, MGH/Harvard, Boston, USA*
- 7:30-7:50PM **RANK-containing regulatory EVs released by osteoclasts**
L. Shannon Holliday University of Florida, Gainesville, USA (48)
- 7:50-8:10PM **Osteoblastic RANKL acts as an osteogenic signal acceptor recognizing vesicular RANK secreted from osteoclasts**
Masashi Honma University of Tokyo, Tokyo, Japan (49)
- 8:10-8:30PM **Physical coherence and network analysis to decode the biogenesis of exosomes**
Suresh Mathivanan La Trobe University, Melbourne, Australia (50)
- 8:30-8:50PM **Molecular and functional heterogeneity of extracellular vesicles**
Dolores Di Vizio Cedars Sinai, Los Angeles, USA (51)
- 8:50-9:10PM **The last dance of a dying cell**
Ivan Poon La Trobe University, Melbourne, Australia (52)
- 9:10-9:30PM **Engineering of EVs**
Samir El-Andaloussi Karolinska Institute, Stockholm, Sweden (53)

9:30-11:30PM Poster Session B & Reception**Session VII Tuesday October 23 8:30AM-12:00PM**

- Chair: ` Christie Fowler, UC Irvine, Irvine, USA*
- Abstract #*
- 8:30-8:45AM **Circulating extracellular vesicles are biomarkers and mediators of alcoholic liver disease**
Gyongyi Szabo University of Massachusetts, Worcester, USA (54)
- 8:45-9:00AM **Extracellular vesicle biomarkers for preclinical prediction of Alzheimer's disease**
Dimitrios Kappogianis NIA/NIH, Baltimore, USA (55)
- 9:00-9:15AM **Placental exosomes in maternal-placental-fetal communication & viral resistance**
Yoel Sadovsky Pittsburgh University, Pittsburgh, USA (56)
- 9:15-9:30AM **The molecular interaction between exosomal ceramide and beta amyloid reveals a role for ceramide in A β aggregation & toxicity**
Ahmed Elsherbini University of Kentucky, Lexington (KY) USA (57)
- 9:30-9:45AM **Investigating the role of fibulin-3 and exosomes in macular degeneration**
Jasmine Geathers Penn State University, Hershey, USA (58)
- 9:45-10:00AM **Immortalised human neural stem cell platform for the production of exosome-based therapeutics**
Randolph Corteling ReNeuron, Cardiff, UK (59)
- 10:00-10:30AM **Break**

		<u>Abstract #</u>
10:30-10:45AM	Blood based assays for the diagnosis and stratification of glioma patients <i>Leonora Balaj</i> MGH/Harvard, Boston, USA	(60)
10:45-11:00AM	Phospholipids within extracellular vesicles may contribute to the activation of target cells <i>Antonio de Maio</i> UCSD, San Diego, USA	(61)
11:00-11:15AM	Metabolic control of outer membrane vesicle production in <i>Francisella spp.</i> <i>Vinaya Sampath</i> Long Island University-Post, Brookville, USA	(62)
11:15-11:30AM	Characterization of microvesicles for cancer diagnostics <i>John Semmes</i> EVMS, Norfolk, USA	(63)
11:30-11:45AM	Evaluation of a microvesicle-based poly-ligand opt-out assay for screening plasma samples from men at risk for prostate cancer <i>Heather O'Neill</i> CARIS Life Sciences, Phoenix, USA	(64)
11:45AM-12:00PM	Role of exosomal miRNAs as a biomarker for mitochondrial dysfunction <i>Michael Paulaitis</i> Johns Hopkins University, Baltimore, USA	(65)

12:00PM-1:30PM **Lunch**

Session VIII **Tuesday October 23** **1:30PM-5:00PM**

Chair: *Andries Zijlstra, Vanderbilt University, Nashville, USA*

		<u>Abstract #</u>
1:30-1:45PM	Extracellular vesicles from embryonic stem cells potentially induce pluripotency <i>Marc Antonyak</i> Cornell University, Ithaca, USA	(66)
1:45-2:00PM	Preamplification steps enabling optimal exosome based liquid biopsy in cancer <i>Antonio Chiesi</i> Exosomics/HansaBioMed/Lonza, Sienna, Italy	(67)
2:00-2:15PM	Exosomes from pancreatic cancer stem cells mediate intra tumor communication and facilitate Hippo pathway regulation <i>Sonia Melo</i> University of Porto, Porto, Portugal	(68)
2:15-2:30PM	Effect of exosomes on macrophage polarization state <i>Joshua Hood</i> University of Louisville, Louisville, USA	(69)
2:30-2:45PM	Liquid biopsy: circulating tumor exosomes' lineage traced back to their cell and tissue of origin <i>Navneet Dogra</i> IBM, New York, USA	(70)
2:45-3:00PM	miRNA profiling from EVs utilizing FirePlex technology <i>Brendan Collins</i> Abcam, Cambridge, USA	(71)

3:00-3:30PM **Break**

3:30-3:45PM	Detection of an EV-based metastasis signature in clinical biofluids <i>John Lewis</i> University of Alberta, Alberta, Canada	(72)
3:45-4:00PM	Monitoring binding and internalization of EVs in blood cell subsets <i>Sherree Friend</i> MilliporeSigma (Amnis), Seattle, USA	(73)
4:00-4:15PM	Host exosomes: the molecular shuttle hijacked by human Cytomegalovirus? <i>Rommel Mathias</i> Monash University, Melbourne, Australia	(74)
4:15-4:30PM	An efficient and high-purity method for EV isolation from urine samples <i>Gayatri Premasekharan</i> System Biosciences, Palo Alto, USA	(75)
4:30-4:45PM	Isolation of molecularly homogeneous subpopulations of exosomes <i>Mikhail Skliar</i> University of Utah, Salt Lake City, USA	(76)
4:45-5:00PM	Exosomes promote cancer progression by regulating the anti-tumor immune response <i>Mauro Poggio</i> UCSF, San Francisco, USA	(77)

Session IX Tuesday October 23 7:30PM-9:30PMChair: *Xandra Breakefield, MGH/Harvard, Boston, USA*Abstract #

- 7:30-7:50PM Biological nanoparticles as therapeutic agents**
Tushar Patel Mayo Clinic, Jacksonville, USA (78)
- 7:50-8:10PM Leveraging machine-learning assisted histopathology to assess large oncosome biogenesis in tissue**
Andries Zijlstra Vanderbilt University, Nashville, USA (79)
- 8:10-8:30PM Hitchhiking extracellular vesicles to jump: Extracellular vesicles serve as delivery vehicles for LINE-1 retrotransposons**
Yumi Kawamura National Cancer Center, Tokyo, Japan (80)
- 8:30-8:50PM Tools for live-monitoring of exosomes release from single cells**
Maarten Bebelman VU University, Amsterdam, The Netherlands (81)
- 8:50-9:10PM Detection of mutant KRAS and TP53 DNA in circulating exosomes from healthy individuals and patients with pancreatic cancer**
Pedro Correa de Sampaio MD Anderson Cancer Center, Houston, USA (82)
- 9:10-9:30PM Virosomes: How an infected cell tolerates its viral pathogen using the exosomal pathway**
Catherine DeMarino George Mason University, Manassas, USA (83)

Session X Wednesday October 24 8:30AM-12:00PMChair: *Dolores Di Vizio, Cedars Sinai, Los Angeles, USA*Abstract #******ASEMV Discovery Lecture******

- **8:30-9:00AM EV-mediated RNA transfer in glioblastoma**
Xandra Breakefield MGH/Harvard, Boston, USA (84)
- 9:00-9:15AM Diabetes mellitus alters extracellular vesicle concentration, cargo and function**
Nicole Noren Hooten NIA/NIH, Baltimore, USA (85)
- 9:15-9:30AM Carboxypeptidase E-shRNA loaded exosomes as a potential therapeutic agent for suppression of tumor growth and metastasis**
Peng Loh NICHD/NIH, Washington DC, USA (86)
- 9:30-9:45AM The $\alpha 5 \beta 1$ integrin is crucial for prostate cancer exosome tumorigenic function**
Rachel DeRita Thomas Jefferson University, Philadelphia, USA (87)
- 9:45-10:00AM Extracellular vesicles in oncogenic signaling and autophagy**
Stephanie Hurwitz Florida State University, Tallahassee, USA (88)
- 10:00-10:30AM Break**
- 10:30-10:45AM Transkingdom intercommunication at the vector-pathogen-host interface**
Joao H.F. Pedra University of Maryland, Baltimore, USA (89)
- 10:45-11:00AM Characteristics of PS-affinity method for isolation & detection of EVs: advantages clarified from comparison with conventional methods**
Sadamu Ozaki FUJIFILM ako Pure Chemical Corporation, Osaka, Japan (90)
- 11:00-11:15AM Where's my peak?: separating truth from fiction in label-free measurements of EVs**
Jean-Luc Fraikin Spectradyne, Inc., Torrance, USA (91)
- 11:15-11:30AM An optimized UC method versus SEC for isolation of exosomes from serum**
David Lubman University of Michigan, Ann Arbor, USA (92)
- 11:30-11:45AM Exosome DNA from cancer cells is methylated and reflects the methylation**

patterns of cells of origin

Jena Tavormina MD Anderson Cancer Center, Houston, USA (93)

11:45AM-12:00PM**Profiling the vesicular and non-vesicular miRNA secretome**

Imre Mager University of Oxford, Oxford, UK (94)

12:00PM-1:30PM**Lunch****Session XI****Wednesday October 24****1:30PM-4:15PM***Chair:**Norm Haughey, Johns Hopkins University, Baltimore, USA*Abstract #**1:30-1:45PM****A bright, versatile reporter to track exosome secretion**

Bong Hwan Sung Vanderbilt University, Nashville, USA (95)

1:45-2:00PM**Cancer-derived large oncosomes reprogram bone marrow mesenchymal stem cells**

Blandine Victor Cedars Sinai, Los Angeles, USA (169)

2:00-2:15PM**Therapeutic efficacy of mesenchymal stem cell-derived exosomes & microvesicles in preclinical models: A systematic review protocol**

Alvin Tieu OHRI, Ottawa, Canada (97)

2:15-2:30PM**Automated and rapid labelling of vesicles using acoustic trapping**

Mikael Evander Acousort, Lund, Sweden (98)

2:30-2:45PM**Characterization and validation of a new microfluidic cytometry instrument for exosome sorting**

Steven McClellan USA Mitchell Cancer Institute, Mobile, Alabama (99)

2:45-3:00PM**Understanding exosome biogenesis in hypothalamic cells through studying of protein dynamic using pulsed-silac**

Chee Fan Tan NTU, Singapore (100)

3:00-3:15PM**Identifying membrane labels compatible with bead-based assays**

Julia Kepley NCI/NIH, Washington DC, USA (101)

3:15-3:30PM**Increased secretion of miR-193a-3p by cardiomyocytes under stress inhibits proliferation and activation of cardiac fibroblasts**

Rodosthenis Rodosthenous MGH/Harvard, Boston, USA (102)

3:30-3:45PM**EVs released from HIV-1 infected macrophages and Tat treated microglia inhibit glutamate transporter EAAT2 expression in astrocytes.**

Prasun Datta Temple University, Philadelphia, USA (103)

3:45-4:00PM**Meeting close**

Stephen Gould Johns Hopkins University, Baltimore, USA