
INTERNATIONAL SOCIETY FOR
EXTRACELLULAR VESICLES
Annual Meeting – ISEV2017
Toronto, Canada
18–21 May 2017
www.isev.org

Table of Contents

Letter from the International Organizing Committee Chair

Dear Colleagues:

It is my pleasure to welcome you to the annual meeting of the International Society for Extracellular Vesicles (ISEV2017) and to Toronto, Canada. ISEV2017 offers an unparalleled opportunity to network with and learn from the preeminent leaders in extracellular vesicle (EV) research. **The overall theme of ISEV2017 is "Diversity of EV Composition and Function and Their Role in Disease Diagnosis and Therapeutics."**

The scope and quality of the scientific exchange make ISEV2017 the largest and the premier meeting in EV research in the world. This event features five days of the best in vesicle science covering all aspects of basic, clinical and translational research. The research theme includes diverse areas of science encompassing rare and neglected diseases, infectious disease, coagulation, cancer, neuroscience, cardiovascular, immunology, regenerative medicine, virology, parasitology and more.

Key features of ISEV2017:

- ISEV2017 is the only global meeting with over 900 EV scientists presenting over 600 abstracts. Be a part of the largest EV research community!
- Dedicated programming with 29 tracks covering several aspects of EV research
- Satellite and special sessions on Flow Cytometry (with ISAC and ISTH), EV-HIV, EV-Omics in RNA, protein and lipids and EV isolation and characterization
- Opportunities for interactive learning and stimulated panel discussions on Education Day plus Meet-the-Expert and Experts Workshop Sessions.
- Diversity is Synergistic! New focus areas added including 'Quorum Sensing', special session on 'EVTherapeutics' and joint sessions with EV-related professional international societies

Again, welcome and I hope you enjoy the meeting!

Sincerely,

Susmita Sahoo
Chair IOC

Letter from the President

Dear Colleagues,

On behalf of the International Society for Extracellular Vesicles (ISEV) Board of Directors and the International Organising Committee (IOC), it is a pleasure to welcome you to ISEV2017.

This year we will host a record number of attendees at the annual ISEV meeting and this reflects the growing recognition of the field and the numbers of researchers now working on extracellular vesicles. ISEV2017 features plenary sessions from leaders in the field and covers oral and poster presentations covering all aspects of EV research – from basic science to clinical and translational research. There are nearly 30 symposia and three days of poster sessions programmed from the submitted abstracts.

We start ISEV2017 with the Education Day, covering two tracks in "Biology and Technology" and "EVs in Health and Disease". The main meeting features again this year the 'Meet the Experts' and 'Experts Workshops' sessions in addition to the national societies session – all aimed at increasing networking amongst our international community. There are satellite sessions of the ISEV-ISAC-ISTH EV flow cytometry workgroup, Meet the National EV societies and the role of EVs in HIV.

I would like to thank the members of the IOC, led by Susmita Sahoo, for their efforts in making ISEV2017 possible. Also, thanks to the ISEV Board of Directors for their continued commitments to growing and supporting ISEV and serving the community of EV researchers. On behalf of ISEV, we also acknowledge and thank our corporate sponsors who provide essential support for the meeting.

Don't forget to attend the not-to-be-missed Networking Event on Saturday 20th May from 8pm – a great opportunity to network and socialize with attendees of the meeting. This year the networking event is free for all attendees registered for the meeting so please do make sure you make it to this fun evening!

I hope you enjoy all that ISEV2017 has to offer and wish you all the best with your EV research that follows!

Regards,

Andrew Hill
President ISEV 2017

PRIME MINISTER · PREMIER MINISTRE

May 18–21, 2017

Dear Friends:

I am pleased to extend my warmest greetings to everyone attending the 2017 conference of the International Society for Extracellular Vesicles.

This event brings together researchers, scientists, and students involved in the study of microvesicles and exosomes. I am sure that delegates will benefit from the feature presentations and discussions planned for this year's conference.

I would like to commend the event organizers for putting together a varied and stimulating program. I would also like to commend everyone in attendance for their dedication to advancing extracellular vesicle research globally.

Please accept my best wishes for an informative and enjoyable meeting.

Sincerely,

The Rt. Hon. Justin P.J. Trudeau, P.C., M.P.
Prime Minister of Canada

Premier of Ontario - Première ministre de l'Ontario

May 18 – 21, 2017

A Personal Message from the Premier

On behalf of the Government of Ontario, I am delighted to welcome all delegates to ISEV2017, the premier international conference of extracellular vesicle research.

Ontario is a place where people and ideas come together. I commend the International Society for Extracellular Vesicles for hosting this gathering of the some of the best minds in the field. Events such as this strengthen our province's position as an innovation and biotechnology hub — and set the stage for the discussion of innovative ideas and partnerships.

Please accept my best wishes for a productive and inspiring conference.

Kathleen Wynne
Premier

CITY OF TORONTO

Message from the Mayor

It is my pleasure to extend greetings and a warm welcome to everyone attending International Society for Extracellular Vesicles Convention.

This year's convention will be an opportunity for conference attendees to discuss matters of mutual interest in a setting designed for professional development.

I wish to welcome everyone to our city and encourage you to enjoy Toronto at this time of year as well as learn about our vibrant neighbourhoods.

On behalf of Toronto City Council, please accept my best wishes for an informative and enjoyable convention.

Yours truly,

John Tory
Mayor of Toronto

About the International Society for Extracellular Vesicles

ISEV is a global society of researchers and scientists studying exosomes and microvesicles. With over 1,000 members, ISEV is the leading advocate and guide of extracellular vesicle research with a mission of advancing extracellular vesicle research globally.

ISEV Executive Board and Board of Directors 2016-2017

President

Andrew Hill, PhD
La Trobe University
Melbourne, Australia

Secretary General

Kenneth Witwer, PhD
Johns Hopkins University School of Medicine
Baltimore, United States

Treasurer

Chris Gardiner, PhD
University College London
London, United Kingdom

Executive Chair Science/Meetings

Marca Wauben, PhD
Utrecht University
Utrecht, The Netherlands

Executive Chair Education

Edit Buzas, PhD
Semmelweis University
Budapest, Hungary

Executive Chair Communications

Dolores Di Vizio, MD, PhD
Cedars-Sinai Medical Center and UCLA
Los Angeles, United States

Past President

Jan Lötvall, MD, PhD
University of Gothenburg
Gothenburg, Sweden

Chair International Organizing Committee

Susmita Sahoo, PhD
Icahn School of Medicine at Mt. Sinai
New York, United States

Members at Large

Rienk Nieuwland, PhD
University of Amsterdam
Amsterdam, The Netherlands

Juan M Falcon Perez, PhD
CIC bioGUNE, CIBERehd
Bizkaia, Spain

Carolina Soekmadji, PhD
QIMR Berghofer Medical Research Institute
Brisbane, Australia

Hidetoshi Tahara, PhD
Hiroshima University
Hiroshima, Japan

Ana Claudia Torrecilhas, PhD
Universidade Federal de São Paulo
Sao Paulo, Brazil

Alissa Weaver, MD, PhD
Vanderbilt University School of Medicine
Nashville, United States

Hubert Yin, PhD
University of Colorado
Boulder, United States

Lei Zheng, MD
Nanfang Hospital, Southern Medical University
Guangzhou, China

ISEV2017 International Organizing Committee

Susmita Sahoo, PhD
IOC Chair
Icahn School of Medicine at Mount Sinai
New York, USA

Eric Boilard, PhD
Université Laval, Quebec City, Canada

Edit Buzas, PhD
Semmelweis University
Budapest, Hungary

Dave Carter
Oxford Brookes University, Oxford, UK

Dolores Di Vizio, MD, PhD
Cedars-Sinai Medical Center and UCLA
Los Angeles, USA

Uta Erdbrügger, MD
University of Virginia Health System
Charlottesville, USA

Andy Hill, PhD
La Trobe University, Melbourne Australia

Thomas Kislinger, PhD
University of Toronto, Toronto, Canada

Suresh Mathivanan, PhD
La Trobe University, Melbourne, Australia

Matias Ostrowski
Instituto de Investigaciones Biomédicas en
Retrovirus y SIDA, Buenos Aires, Argentina

Janus Rak, MD, PhD
McGill University, Montreal, Canada

Olga Volpert, PhD
Northwestern University Feinberg School
of Medicine, Chicago, USA

Marca Wauben PhD
Utrecht University, Utrecht, The Netherlands

Kenneth W. Witwer, PhD
Johns Hopkins University School of Medicine
Baltimore, USA

National Institutes of Health

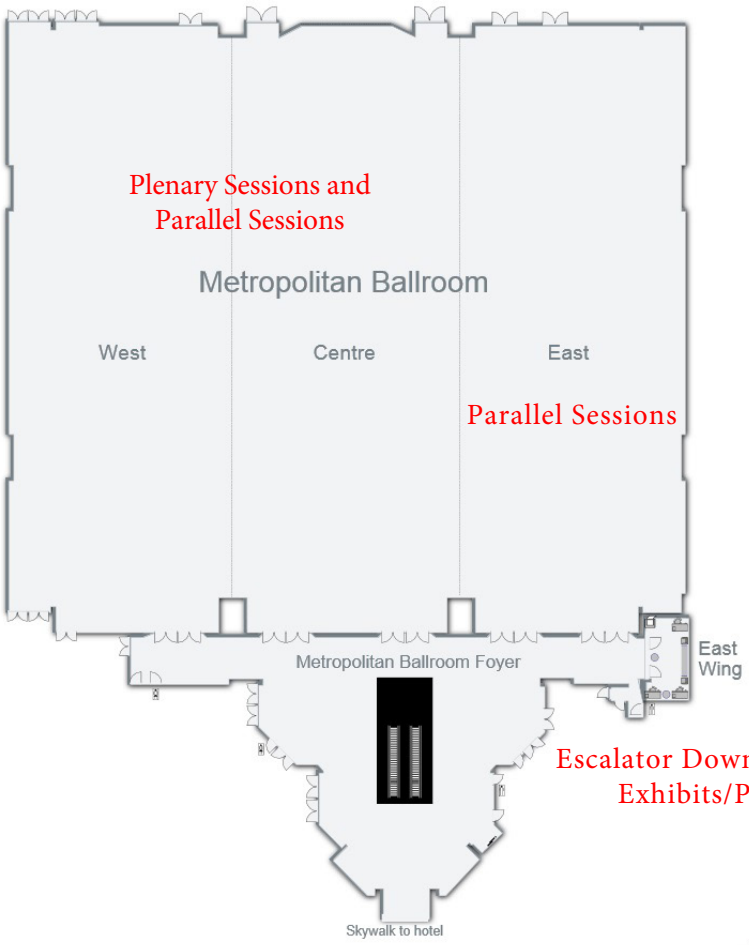
Conference Grant Support

Funding for this conference was made possible (in part) by Grant Number 1R13TR002213-01 from the National Center for Advancing Translational Sciences NCATS).

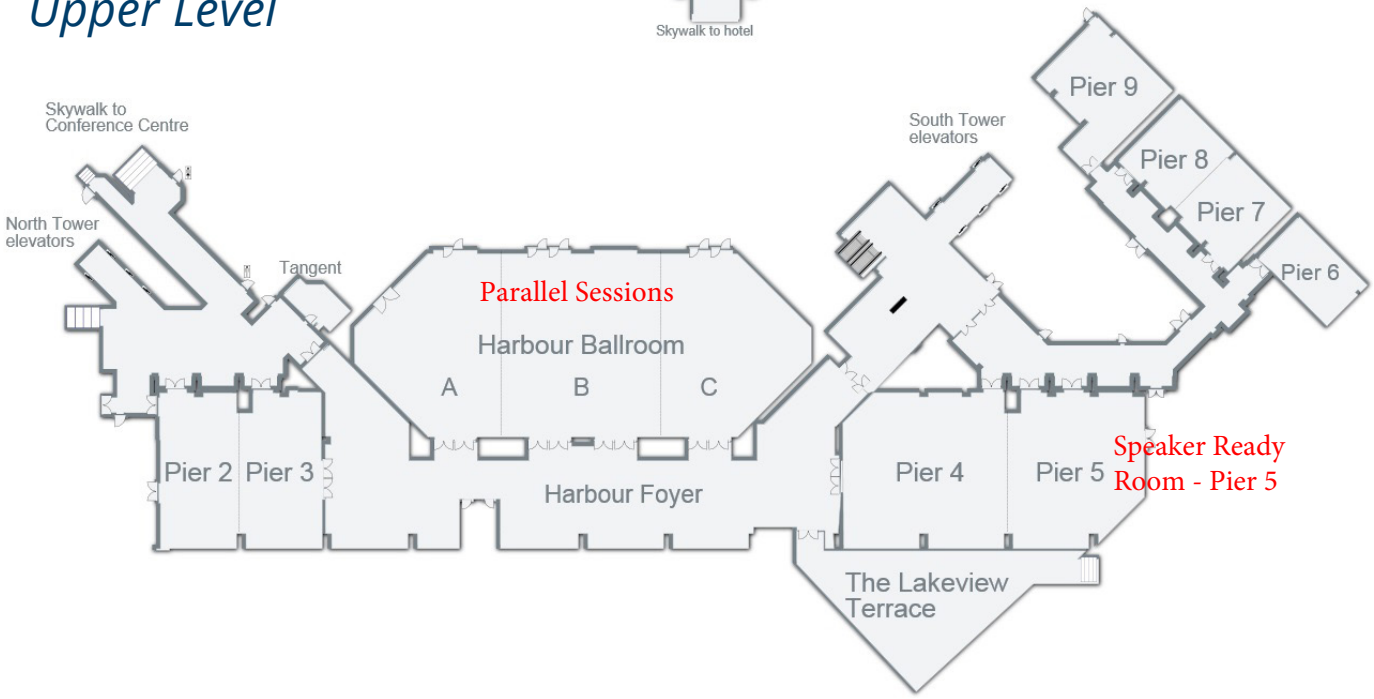
NIH National Center for Advancing Translational Sciences

Westin Castle Harbour Floor Plan

Convention Level



Upper Level



Acknowledgements

ISEV gratefully acknowledges the support of the 2017 Annual Conference from our Sponsors:

GOLD

iZON

SILVER

Malvern

ONI Oxford Nanoimaging

Particle Metrix

ThermoFisher SCIENTIFIC

BRONZE

AcouSort

APOGEE FLOW SYSTEMS

BD Advancing the world of health

Beckman Coulter Life Sciences

CELL guidance systems

Cosmo Bio

evox THERAPEUTICS

HansaBioMed

Hitachi Chemical HITACHI

MBL International Corporation

NORGEN BIOTEK CORP.

sysmex

SBI System Biosciences

Wako

LANYARD SPONSOR

CODIAK

EDUCATION DAY SPONSOR

BioCytex

FRIEND OF ISEV

Mount Sinai Heart

General Information

Abstracts

Abstracts for plenary and symposia sessions are included in the Abstract Book, which is available for download from the conference website: http://www.isev.org/page/ISEV2017

ISEV General Assembly

Members are strongly encouraged to attend the General Assembly on Saturday, 21 May, from 11:30 am - 12:30 pm in the Metropolitan Ballroom West.

Conference Registration / Information Desk

The ISEV Annual Meeting Registration/Information Desk, located in the Frontenac Ballroom Foyer, will be open and staffed as follows:

Tuesday, 16 May	4:30 pm – 6:30 pm
Wednesday, 17 May	7:00 am – 6:00 pm
Thursday, 18 May	7:00 am – 5:30 pm
Friday, 19 May	7:00 am – 5:30 pm
Saturday, 20 May	7:00 am – 5:30 pm
Sunday, 21 May	7:00 am – 12:30 pm

Evaluations

At the end of each day, during the ISEV 2017 Annual Meeting, you will receive and email link to complete the daily evaluation.

Shortly after the meeting, ISEV will email a link to the overall evaluation. ISEV values your feedback and you are strongly encouraged to complete the evaluations as this will assist in developing future conferences.

Exhibits

Educational and informational exhibits will be available for viewing during the Annual Meeting and representatives will be on hand to answer questions. Please visit our sponsors and their exhibits, in the Frontenac, Queens Quay, and Bay Rooms, as they are an integral part of the meeting.

Thursday, 18 May	8:30 am – 8:00 pm
Friday, 19 May	10:00 am – 8:00 pm
Saturday, 20 May	10:00 am – 8:00 pm
Sunday, 21 May	10:00 am – 12:00 pm

Meeting App

ISEV is pleased to announce the 2017 Annual Meeting App! The App is exclusively available for registered attendees. To download the App onto your mobile device, search for the ISEV2017 Annual Meeting in your respective App store. Download the App, enter the password ISEV2017 create your account, and start using the App!

Name Badges

Your badge serves as your admission to all meeting events. During the events, you name badge must be worn at all times. For security reasons, persons without badges will not be permitted to attend events.

Photography

Any photography, filming, taping, recording or reproduction in any medium including the use of tripod-based equipment of any of the programs and/or posters presented at the Annual Meeting without the express written consent of ISEV is strictly prohibited. Exceptions to this policy include non-flash photography and audiotape recording - using hand-held equipment for strictly personal use, are permitted if not disruptive.

General Information

Poster Presentations

ISEV invites you to meet the authors of the accepted posters during the scheduled poster sessions which will be held in the Frontenac, Queens Quay and Bay Room.

Authors/Presenters' please note: ISEV will not be responsible for removing and/or returning posters. All posters not removed by 8:30 pm on the day of your poster presentation.

Social Programme

You are cordially invited to join the ISEV and International Organizing Committee at the following event:

Networking EVent

Saturday, 20 May 8:15 pm – 11:00 pm
Harbour Ballroom

The ISEV2017 Networking EVent provides a great opportunity to meet the leaders and young researchers in the field of Extracellular Vesicles while both strengthening existing and initiating new collaborations. Expand your circle of colleagues and discover the latest news and insights into the research of your peers! This event will also feature, food stations, beverages, and great music!

Social Media

Find out what is happening live at the meeting by following the ISEV2017 twitter team @ISEVOrg. We want to hear from you so join in on the conversation by tagging your tweets with #ISEV2017. If you are sitting in one session and wondering what you're missing in another why not tweet about it?

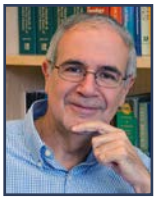
Speaker Ready Room

To insure your presentation is uploaded and correct, please visit the Speaker Ready Room, located in the Pier 5 Room, at least two hours prior to your presentation. The Speaker Ready Room will be open and staffed during the following times:

Wednesday, 17 May	7:00 am – 5:00 pm
Thursday, 18 May	7:00 am – 5:00 pm
Friday, 19 May	7:00 am – 5:00 pm
Saturday, 20 May	7:00 am – 5:00 pm
Sunday, 21 May	7:00 am – 11:00 am

Plenary Speakers

ISEV is honored to present the list of esteemed speakers:



Juan S. Bonifacino, PhD
NIH Distinguished Investigator
National Institutes of Health (NIH)
Bethesda, MD USA

After receiving his PhD in biochemistry from the University of Buenos Aires, Argentina, Dr. Bonifacino moved to the US to work at the NIH. Since the early 1990s, Dr. Bonifacino's group at the NIH has been conducting research on signals and adaptors that mediate the sorting of proteins to endosomes, lysosomes, lysosome-related organelles such as melanosomes, and different domains of the plasma membrane in polarized cells such as neurons. His group discovered new sorting signals and adaptor proteins, and applied this knowledge to the elucidation of the causes of various disease conditions. In addition, Dr. Bonifacino's group identified novel components of the molecular machinery involved in retrograde transport from endosomes to the trans-Golgi network (TGN), and in recycling from endosomes to the plasma membrane. Dr. Bonifacino is currently investigating the molecular mechanisms that control the movement of endosomes and lysosomes in non-neuronal and neuronal cells, and the connection of these mechanisms to neurodevelopmental and neurodegenerative disorders.

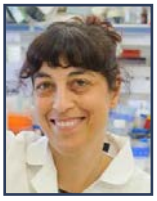
Dr. Bonifacino is presenting in Plenary Session 2 - Plasma Membrane and Cellular Vesicles, on Thursday, May 19, 2017, at 10:30 am.

Steve Lindow, PhD
Professor of Plant Pathology
Department of Plant and Microbial Biology,
University of California, Berkeley
Berkeley, California USA

The Lindow lab focuses on the ecology and molecular biology of bacteria that live in and on plants. Bacterial adaptations that distinguish epiphytic bacteria that live on the surface of plants such as quorum sensing mechanisms leading to bacterial aggregations that along with other phenotypes such as plant hormone and biosurfactant production lead to modifications of the microhabitats in which bacteria live on leaves are a focus of a variety of studies. We also are investigating cell density -dependent behaviors of the vascular plant pathogen Xylella fastidiosa with special reference to a fatty acid-based quorum sensing system that modulates its interaction with both the plant as well as insect vectors. Quorum sensing-dependent release of outer membrane vesicles that inhibit the attachment of cells of this pathogen to surfaces are important virulence factors, enabling the efficient movement of the pathogen between xylem vessels within plants. Plant disease control strategies based on "pathogen confusion" whereby fatty acid signaling molecules are artificially increased in plants are being developed.

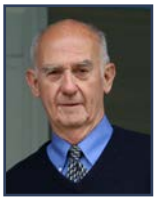
Dr. Lindow is presenting in Plenary Session 3 - From Extracellular Vesicles to Coordinated Behaviour of Cellular Populations, on Saturday, May 20, 2017, at 10:30 am.

Plenary Speakers



Neta Regev-Rudzki, PhD
Weizmann Institute of Science
Rehovot, Israel

Dr. Neta Regev-Rudzki completed a BSc in chemistry, an MSc in biochemistry, and a PhD in microbiology and cell biology (2010), all at the Hebrew University in Jerusalem. During her postdoctoral training at the Walter and Eliza Hall Institute of Medical Research (WEHI) in Melbourne, Australia, she became interested in parasitology and turned her attention to malaria. While working as a postdoctoral researcher, she discovered that malaria parasites, which live inside red blood cells, transfer episomal genes between them via exosome-like vesicles. Dr. Regev-Rudzki joined the faculty of the Department of Biomolecular Sciences at the Weizmann Institute of Science (Israel) in October 2014. Dr Regev-Rudzki's lab is focused on studying modes of cell-cell communication developed by one of the most lethal human pathogens, malaria parasites.



Philip Stahl, PhD
Edward Mallinckrodt Jr Professor Emeritus
Cell Biology and Physiology
Washington University School of Medicine
St. Louis, MO USA

Dr. Stahl's research spans nearly 5 decades at Washington University in St. Louis. Initially focused on lysosomal enzymes and lysosome biogenesis, the Stahl Laboratory and its many students have made a number of seminal contributions to our understanding of endocytosis, membrane trafficking and cell signaling. These include (i) the discovery of a sugar-specific lysosomal enzyme clearance pathway (in vivo) and the isolation and molecular cloning of the mannose receptor, the first member of a new family of sugar-specific pattern recognition receptors now considered components of the innate immune system; (ii) key advances in our understanding of Rab5 and Arf6, GTPases that orchestrate and regulate endosome fusion, endocytosis and receptor recycling and especially growth factor receptor signaling and trafficking (iii) the cell biology of TBC1D3, a unique hominoid-specific gene that is highly multi-copied in thehuman genome. TBC1D3 regulates growth factor receptor ubiquitination thereby altering receptor trafficking and signaling. The influence of hominoid- and human specific genes on the human condition represents an unexplored frontier in cell biology. Lastly, (iv) the discovery of the "exosome secretion pathway" and the demonstration that multivesicular bodies release intraluminal vesicles to the extracellular compartment by fusing directly with the plasma membrane.

Dr. Stahl is presenting in the Opening Plenary Session - The Rise of an Extracellular Vesicle Paradigm of Cellular Communication: A Road to the Future, on Thursday, May 18, 2017, at 09:00.

Plenary Speakers

Clotilde Théry, PhD
Research Director
Cell Biology and Physiology
Institut Curie
Paris, France

After a PhD in France, and a first post-doc in UK and USA on developmental biology of the nervous system, Clotilde Théry switched to the cell biology of immune responses when joining the Institut Curie, in Paris, France, in 1996. She soon started studying the nature and functions of exosomes secreted by immune and tumor cells, at a time where these entities were considered by a majority of scientists as uninteresting artifacts! She performed and published the first proteomic studies of exosomes secreted by immune dendritic cells (J Cell Biol 1999; J Immunol 2001), and went on to demonstrate how these cells can spread MHC-peptides complexes through exosomes, and thus help initiate immune responses (Nature Immmunol 2002; Blood 2005; J Immunol 2007). Since 2007, she has been leading a team entitled « Exosomes and tumor growth » at Institut Curie, Paris, France, in the "Immunity and Cancer" INSERM department. Her team focuses on unraveling the in vivo physiological or pathological functions of exosomes, and more recently of the other extracellular vesicles, by continuously going from cell biology approaches of their modes of formation to application of this knowledge to in vivo situations (Cancer Res 2008; Nature Cell Biol 2010, Cancer Res 2012; J Cell Sci 2013; PNAS 2016). Over the years, she has been invited to write several comprehensive reviews and opinion articles on the subject of exosomes, EVs, their immune and cancer-related functions and their biogenesis (Nature Rev Immunol 2009; Traffic 2011; Curr Op Cell Biol 2014, Annual Rev Cell Dev Biol 2014, Cell 2016). After organizing the first international workshop on exosomes in 2011 in Paris, C. Théry became co-founder and Secretary General of the International Society for Extracellular Vesicles (ISEV) from 2012 until 2016, and is co-editor in chief of the Journal of Extracellular Vesicles, since its creation in 2012.

Dr. Théry is presenting in Plenary Session 2 - Plasma Membrane and Cellular Vesicles, on Thursday, May 19, 2017, at 10:30 am.

Thomas Thum, MD, PhD
Hannover Medical School
Institute for Molecular and Translational Therapeutic Strategies
Hannover, Germany

Thomas Thum is Professor and Director of the Institute of Molecular and Translational Therapeutic Strategies at Hannover Medical School in Germany. Recently, he joined Imperial College as Visiting Professor to strengthen collaborative research activities.

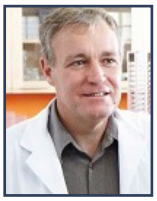
Professor Thum studied Medicine at the Hannover Medical School and received a PhD from the Imperial College London and as a clinician is specialized in Internal Medicine and Cardiology. His major translational interests are to uncover the roles of regulatory RNA molecules, such as microRNAs and long-non-coding RNAs in cardiovascular and transplantation medicine. He is particularly interested into heart failure and performed landmark studies to show the therapeutic and diagnostic potential of microRNAs and respective antagonists. Prof. Thum published over 150 papers in leading scientific journals such as Nature, Nature Genetics, Nature Communication, Lancet, JACC and Circulation. He is member of the Editorial Board of many journals such as Circulation Research, ATVB or the Journal of Molecular and Cellular Cardiology. Prof. Thum is active member of many task forces and nuclei of cardiovascular societies including those of the European

Plenary Speakers

Thomas Thum, MD, PhD (continued)

Society of Cardiology and the International Society of Heart Research. Prof. Thum is recipient of many national and international awards, e.g. the Outstanding Achievement Award from the European Society of Cardiology. He is coordinator and co-coordinator of several international consortia, e.g. for an intercontinental grant obtained from the Fondation Leducq or the European Union.

Professor Thum is presenting in Plenary Session 1 - Extracellular Vesicles in Pathology of Complex Tissues Communication: A Road to the Future, on Thursday, May 18, 2017, at 9:30 am.



Jeff Wrana, PhD

The Lunenfeld-Tanenbaum Research Institute
Mount Sinai Hospital
Toronto, Ontario Canada

Dr. Wrana's research aims to expose the mechanisms involved in the development of these networks and to reveal new targets for treatments that would attack the entire disease network, not just individual hubs. Dr. Wrana's research program involves the application of high-throughput, robotics-based technologies that perform thousands of tests at a time and enable studies of gene function on a genome-wide scale. With his special expertise and phenomenal success securing support from granting agencies, he has established a Robotics Facility at the Lunenfeld-Tanenbaum Research Institute. The expertise and advanced technology available in the facility extends the research capacity of scientists throughout the Lunenfeld and beyond. Dr. Wrana has made significant discoveries in breast, colorectal and other cancers. In particular,he is interested in mechanisms of metastasis. Insights into this little-understood process have the potential to make a significant impact on survival rates for breast and other cancers.

Dr. Wrana is presenting in Plenary Session 1 - Extracellular Vesicles in Pathology of Complex Tissues Communication: A Road to the Future, on Thursday, May 18, 2017, at 9:30 am.

Program

WEDNESDAY, 17 MAY 2017
Education Day

The Pre-meeting Education Day is a successful tradition of the annual ISEV meetings. Focusing on particular topics within the extracellular vesicle field, select experts provide deep insight into certain basic aspects of extracellular vesicles. These educational presentations collectively illuminate burning questions and provide a comprehensive insight into the topic.

8:30 am – 5:00 pm
PARALLEL SESSIONS

Room	*Metropolitan Ballroom East*	*Harbour Ballroom*
	TRACK A: EV Biology and Technology	**TRACK B: EVs in Health and Disease**
8:30 am	Welcome address – *Susmita Sahoo*	Welcome address – *Janusz Rak*
8:35 am	The rise of extracellular vesicle paradigm of cellular regulation – *Clotilde Thery*	Introduction to EVs as biomarkers and therapeutics: Clinical advancements in EV – *Edith Buzas*
9:00 AM - 10:30 AM	**SESSION 1: Biology of EVs** *Session Chair: Alissa Weaver*	**SESSION 1: Introduction to EV Analysis in Clinical Laboratory Settings** *Session Chair: Dolores Di Vizio*
9:00 AM	Biogenesis of EVs and cargo selection: ESCRT-dependent and independent mechanisms – *Stephen J. Gould*	EV Isolation for clincial application: How to handle body fluids, tissues and conditioned media – *Louise Laurent*
9:20 AM	Uptake: interaction of EVs with recipient cells, membrane proteins – *Dave Carter*	Cell and tissue-specific EVs and EV sub-populations – *Dolores Di Vizio*
9:40 AM	EV lipids and lipidomics – *Juan M. Falcon-Perez*	Production of EVs for therapeutic applications – *Mario Gimona*
10:00 AM	*Chaired Q and A discussion session with all three speakers*	*Chaired Q and A discussion session with all three speakers*
10:30 AM - 10:50 AM	Mid-morning Break	Mid-morning Break
10:50 AM - 12:20 PM	**SESSION 2: Isolation and Quantification: Methods and Challenges** *Session Chair: Rienk Nieuwland*	**SESSION 2: EVs in Cancer** *Session Chair: Janusz Rak*
10:50 AM	The Impact of Isolation Methods on Downstream EV Analysis – *Jan Van Deun*	EVs in cancer establishment and progression – *Xandra Breakefield*
11:10 AM	Microfluidics/size exclusion- Quality of isolation – *Hyungsoon Im*	EVs in metastatic and tumour microenvironment – *Andries Zijlstra*
11:30 AM	Standardization of nanopartcle measurements: NTA/qNano/DLS – *Chris Gardiner*	EVs as biomarkers and mediators of hemostasis and thrombosis – *Nigel Mackman*
11:50 AM	*Chaired Q and A discussion session with all three speakers*	*Chaired Q and A discussion session with all three speakers*

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

WEDNESDAY, 17 MAY 2017

Room	Metropolitan Ballroom East	Harbour Ballroom
	TRACK A: EV Biology and Technology	**TRACK B: EVs in Health and Disease**
12:20 PM - 1:20 PM	Lunch break (box lunches provided)	Lunch break (box lunches provided)
1:20 PM - 3:10 PM	**SESSION 3: Characterisation and Phenotyping** *Session Chair: Alain Brisson*	**SESSION 3: Biomarkers and Pathological Mechanisms** *Session Chair: Dave Carter*
1:20 PM	High resolution flow cytometry *– Joanne Lannigan*	Overview of EV-driven pathological mechanisms *– Vicky Yang*
1:40 PM	Surface molecules and vesicle cargo transfer *– Alissa Weaver*	Dietary EVs in Cross-species Regulation *– Suresh Mathivanan*
2:00 PM	In vitro and in vivo labeling and trafficking: New techniques *– Charles Lai*	Where is the RNA in blood? Vesicles or free swimming? *– Lesley Cheng*
2:20 PM	EV imaging: TEM/AFM/confocal/super resolution *– Alain Brisson*	EVs, Glycoproteins, and Innate Immunity in Chagas Disease *– Ana Claudia Torrecilhas*
2:40 PM	*Chaired Q and A discussion session with all three speakers*	*Chaired Q and A discussion session with all three speakers*
3:10 PM - 3:30 PM	Mid-Afternoon Break	Mid-Afternoon Break
3:30 PM - 5:20 PM	**SESSION 4: Advances in Profiling EV Content** *Session Chair: Marca Wauben*	**SESSION 4: EVs in the Clinics: Challenges and Progress** *Session Chair: Uta Erdbrügger*
3:30 PM	Proteomics: EV-enriched and non-EV-enriched proteins *– Simona Principe*	Overview: Past, present, future of therapeutic EVs *– Jan Lötvall*
3:50 PM	RNA Seq: mRNA and small non-coding RNA *– Esther Nolte-t Hoen*	Stem cell-derived EVs in regenerative medicine: Functional studies *– Michael E. Davis*
4:10 PM	Computational deconvolution of EV cargo *– Aleksandar Milosavljevic*	EVs in Neurodegeneration *– Andrew Hill*
4:30 PM	Carriers of extracellular nucleic acids *– Julie Saugstad*	EVs in Cardiovascular Diseases: What can we Learn from Clinical Samples? *– Chantal Boulanger*
4:50 PM	*Chaired Q and A discussion session with all three speakers*	*Chaired Q and A discussion session with all three speakers*
5:20 PM - 5:30 PM	Wrap up	Wrap up

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

WEDNESDAY, 17 MAY 2017

6:00 pm – 8:00 pm **SATELLITE SESSION:** *Harbour Ballroom*

Emerging Trends in HIV, NeuroAIDS, Drug Abuse and EVs

Session Chairs: Shilpa Buch; Fatah Kashanchi

6:00 pm **Opening Remarks by ISEV President**

Andrew Hill, PhD, Director, La Trobe Institute for Molecular Sciences, Director, RFA Understanding Disease, Department of Biochemistry and Genetics, La Trobe University, Melbourne

6:10 pm **Tat and Opiates Modulate HAND: Role of Astrocyte Derived Exosomes**

Shilpa Buch, PhD, Professor and Vice Chair for Research, Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center

6:20 pm **Effect of Anti-retroviral Drugs on Exosome Production**

Fatah Kashanchi, PhD, Professor, Laboratory of Molecular Virology, George Mason University; Director of Research, NCBID, School of Systems Biology

6:30 pm **EVs, Cigarettes, and HIV Infection**

Kenneth W. Witwer, PhD, Assistant Professor, Department of Molecular and Comparative Pathobiology, Johns Hopkins University

6:40 pm **Coffee Break**

6:50 pm **Plasma Neural-derived Exosomes as Biomarkers of Cognitive Impairment in HIV**

Lynn Pulliam, MS, PhD, Professor, Chief, Microbiology (VAMC) Laboratory Medicine, Departments of Pathology & Laboratory Medicine, University of California, San Francisco

7:00 pm **Deconstruction of Neural Networks by HIV-Associated Modifications in Exosome Cargo**

Norman Haughey, PhD, Professor and Vice Chair for Research, Department of Neurology, Johns Hopkins University

7:10 pm **HIV-1 Pathogenesis Hallmarks are Modulated by the Nef Secretion Modification Region**

Vincent C. Bond, PhD, Professor and Chair of Microbiology, Biochemistry & Immunology, Morehouse School of Medicine; Director, Research Center in Minority Institutions (RCMI)

7:20 pm **Panel Discussion**

Moderators: Guoku Hu; Sowmya Yelamanchili

7:50 pm **Wrap Up**

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

THURSDAY, 18 MAY 2017
ISEV2017 Annual Meeting

7:00 am – 5:00 pm	**Registration/Information Desk**	*Frontenac Ballroom Foyer*
8:00 am – 9:00 am	**Welcome Coffee**	*Frontenac/Queens Quay/Bay Rooms*
9:00 am – 9:10 am	**Welcome Remarks and Plenary Session** *Session Chairs: Andrew Hill; Susmita Sahoo*	*Metropolitan Ballroom West*
9:10 am – 9:30 am	**OPENING PLENARY:** **The Rise of an Extracellular Vesicle Paradigm of Cellular Communication: A Road to the Future** The Exosome Paradigm of Intercellular Communication *Philip Stahl, PhD*	
9:30 am – 10:30 am	**PLENARY SESSION 1:** **The Rise of an Extracellular Vesicle Paradigm of Cellular Communication: A Road to the Future** *Session Chairs: Andrew Hill; Susmita Sahoo*	
9:30 am – 10:00 am	Non-coding RNA and Microvesicles in Cardiovascular Homeostasis and Disease *Thomas Thum, MD, PhD* The Role of Exosomes in Planar Cell Polarity in Pathological Cell Migration *Jeffrey Wrana, PhD*	
10:30 am – 11:30 am	**Networking Coffee Break and Exhibits**	*Frontenac/Queens Quay/Bay Rooms*

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

THURSDAY, 18 MAY 2017

11:00 am – 12:30 pm **PARALLEL SESSIONS**

Room	*Metropolitan Ballroom West*	*Metropolitan Ballroom East*	*Harbour Ballroom*
	SYMPOSIUM SESSION 1: **Therapeutic Applications of EVs** *Session Chairs:* *Jan Lötvall; Peter Quesenberry*	**SYMPOSIUM SESSION 2:** **Platelets, Coagulation, and Inflammation** *Session Chairs:* *Eric Boilard; Rienk Nieuwland*	**SYMPOSIUM SESSION 3:** **EVs in Neurologic Diseases** *Session Chairs:* *Lynn Pulliam; Laura Vella*
11:00 am	**OT1.01** Therapeutic potential for Spodoptera-derived microvesicle delivery of the membrane transport proteins cystinosin, sialin and CFTR *– Jess Thoene*	**OT02.01** Extracellular vesicles from activated platelets: a quantitative cryo-electron microscopy and immuno-gold labeling study *– Alain Brisson*	**OT03.01** Microglia release distinct extracellular vesicle populations in response to different pathological stimuli *– Metka Lenassi*
11:15 am	**OT1.02** Exosome-mediated delivery of CFTR protein to human bronchial epithelia as a novel therapeutic strategy to treat Cystic Fibrosis *– Inna Uliyakina*	**OT02.02** – Morphological pathways involved in the release of extracellular vesicles from TRAP-activated platelets *– Oumsalama Elhelu*	**OT03.02** – Serum miRNA exosomal biomarkers associated with Alzheimer's disease are also detected in brain derived exosomes from Alzheimer's human post-mortem tissue *– Lesley Cheng*
11:30 am	**OT1.03** Bio-inspired synthetic exosomes carrying microRNA let-7b for post-ischemic vascular regeneration *– Sezin Aday*	**OT02.03** – Salivary EV: A new link between platelets and coagulation *– Yuanjie Yu*	**OT03.03** Neurons export extracellular vesicles enriched in molecular chaperones and misfolded proteins *– Janice Braun*
11:45 am	**OT1.04** Scalable, cGMP-compatible purification of EV enriched with heterodimeric interleukin-15 *– Dionysios Watson*	**OT02.04** – Pregnancy-associated circulating extracellular vesicles induce different phenotype changes in monocyte and trophoblast cell lines *– Árpád Ferenc Kovács*	**OT03.04** – Exosomal microRNAs in cerebrospinal fluid of patients with genetic frontotemporal dementia in the Genetic Frontotemporal dementia Initiative – a biomarker study *– Raphael Schneider*
12:00 pm	**OT01.05** – Exosome-SIRPalpha, a CD47 blockade increases cancer cell phagocytosis *– Yoosoo Yang*	**OT02.05** – Interaction of microvesicles with immune cells in lipopolysaccharide-stimulated whole blood *– Rene Weiss*	**OT03.05** – The novel long non-coding RNA TALNEC2 regulates the stemness and mesenchymal transformation of glioma stem cells and their exosome-mediated interaction with microglia cells *– Shlomit Brodie*
12:15 pm	**OT01.06** – Novel therapeutic strategies against cancer metastasis by targeting extracellular vesicles by specific antibodies *– Nao Nishida-Aoki*	**OT02.06** – Lymph as a vector of microparticles during rheumatoid arthritis *– Nicolas Tessandier*	**OT03.06** – Neuronal Exophers: a novel large vesicle that functions in the removal of neurotoxic cytoplasm components *– Ilija Melentijevic*

12:30 pm – 1:30 pm **Lunch** *(Box lunches will be served)* *Frontenac/Queens Quay/Bay Rooms*

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

THURSDAY, 18 MAY 2017

1:30 pm – 2:15 pm **PARALLEL SESSIONS**

Room	*Metropolitan Ballroom West*	*Metropolitan Ballroom East*	*Harbour Ballroom*
	SYMPOSIUM SESSION 4: **EV Biogenesis** *Session Chairs:* *Crislyn D'Souza Schorey;* *Matias Ostrowski*	**SYMPOSIUM SESSION 5:** **EVs in Tumor Biology** *Session Chairs:* *Carolina Soekmadji; Michael Freeman*	**SYMPOSIUM SESSION 6:** **EVs in Inflammatory Diseases** *Session Chairs:* *Edit Buzas; Rienk Nieuwland*
1:30 pm	**OT04.01** Terminal complement components are critical in the release of cellular RNA in circulation *– Virginia Camacho*	**OT05.01** NAPG can regulate tumor-specific EV secretion *– Yusuke Yoshioka*	**OT06.01** Annexin-A5 is Targeted by Heme during Hemolysis and Fails to Block Externalized Phosphatidylserine in Extracellular Vesicles during Sickle Cell Disease *– Sihem Sadoudi*
1:45 pm	**OT04.02** Physical coherence and network analysis reveals NEDD4 as novel regulator of exosomal biogenesis *– Sushma Anand*	**OT05.02** – Intercellular communication between melanoma and stroma cells induce PD-1 overexpression and tumor progression *– Edina Gyukity-Sebestyen*	**OT06.02** Impact of aging on plasma extracellular vesicle concentration, protein profile and internalization by leukocytes *– Nicole Noren Hooten*
2:00 pm	**OT04.03** The EBV LMP1 interactome contains ESCRT-dependent and -independent extracellular vesicle sorting proteins *– David Meckes*	**OT05.03** – Zebrafish: A new animal model to study tumor EVs in vivo *– Vincent Hyenne*	**OT06.03** Age-related changes in miRNA expression profiles in extracellular vesicles in the murine post traumatic OA model *– Ok Hee Jeon*

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

THURSDAY, 18 MAY 2017

2:20 pm – 3:00 pm **PARALLEL SESSIONS**

Room	Metropolitan Ballroom West	Metropolitan Ballroom East	Harbour Ballroom
	ORAL WITH POSTER SESSION 1 *Session Chair:* *Thomas Kislinger*	**ORAL WITH POSTER SESSION 2** *Session Chair:* *Uta Erdbrügger*	**ORAL WITH POSTER SESSION 3** *Session Chair:* *Eric Boilard*
2:20 pm	**OPT01.01** Amoeboid cancer cells shed extracellular vesicles enriched with nuclear derived material *– Mariana Reis Sobreiro*	**OPT02.01** Protective role of extracellular vesicles in diabetic microangiopathy *– Chiara Gai*	**OPT03.01** Cryogenic-temperature electron microscopy imaging of extracellular vesicles shedding *– Naama Koifman*
2:25 pm	**OPT01.02** Extracellular vesicles derived from cancer-associated fibroblasts may have a role in oral cancer invasion *– Mauricio Dourado*	**OPT02.03** In vivo analysis of the potential of exosomes isolated from menstrual blood-derived mesenchymal stem cells in regeneration of insulin-producing cells in diabetic type 1 animal model *– Elahe Mahdipour*	**OPT03.02** Easy extracellular vesicle detection on a surface-functionalized power-free microchip *– Ryo Ishihara*
2:30 pm	**OPT01.03** Identification of noninvasive prostate cancer biomarkers by miRNA deep sequencing analysis of urinary extracellular vesicles *– Marta Rodriguez-Moreno*	**OPT02.04** Stroke extracellular vesicles express inflammatory markers and induce macrophage activation *– Yvonne Couch*	**OPT03.03** Sweating the small stuff: Extracellular vesicles from sweat *Prateek Singh*
2:35 pm	**OPT01.04** Pancreatic cancer ExoNet *– Carolina de Freitas Ruivo*	**OPT02.05** Proteomic profiling reveal Src as a novel microvesicle-associated biomarker for myocardial infarction *– Olof Gidlöf*	**LBO.03** Monitoring standardised treatment efficacy of multiple sclerosis in molecular level *– Saeideh Ebrahimkhani*
2:40 pm	**OPT01.05** Enzymatic exosomes with GPI-anchored hyaluronidase for enhanced tumor penetration and anti-tumor efficacy *– Yeon-Sun Hong*	**LBO.02** – Cross talk between monocyte and endothelial cells via inflammatory extracellular vesicles in cardiovascular disease *– Baharak Hosseinkhani*	**LBO.04** Metastatic efficiency is dependent on cell volume loss due to extracellular vesicle release during cancer cell extravasation *– Yohan Kim*
2:45 pm	**LBO.01** Mesenchymal stem cell derived exosomes mediate neurovascular protection *– Johnathon Anderson*		**LBO.05** Exosomal microRNA signatures in multiple sclerosis reflect disease status *– Saeideh Ebrahimkhani*

3:00 pm – 3:30 pm **Networking Break and Exhibits** *Frontenac/Queens Quay/Bay Rooms*

3:30 pm – 3:45 pm **BioTech Sponsored Session** *Metropolitan Ballroom West*

IP.02 Development of an integrated methodology for extracellular vesicle purification, characterization and linking biophysical properties to biological function
– Anoop Pal

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

THURSDAY, 18 MAY 2017

3:30 pm – 5:15 pm **PARALLEL SESSIONS**

Room	*Metropolitan Ballroom West*	*Metropolitan Ballroom East*	*Harbour Ballroom*
	SYMPOSIUM SESSION 7: **Emerging Technologies in EV Characterization** *Session Chairs:* *John Nolan; Hubert Yin*	**SYMPOSIUM SESSION 8:** **EV Interactions with Cellular Targets** *Session Chairs:* *Dolores Di Vizio; Janusz Rak*	**SYMPOSIUM SESSION 9:** **EV Mediated Communication in Cancer I** *Session Chairs:* *Peter Kurre; Olga Volpert*
3:30 pm	*See Biotech Sponsored Session listed on page 24.*	**LBO.06** Human adipose stem cells originated exosomes improving survival rate of rats with acute liver failure probably by releasing lncRNA H19 *– Yinpeng Jin*	**LBO.07** HER2-targeted drug-resistance is associated with immune evasion in cancer cells and their derived extracellular vesicles *– Lorraine O'Driscoll*
3:45 pm	**OT07.01** Flow cytometric analysis of extracellular vesicle subsets in body fluids: Impact of coincidence and swarm by particles of non-interest *– Sten Libregts*	**OT08.01** Inspired by nature: Characterization of mechanisms of extracellular vesicle uptake *– Pieter Vader*	**OT09.01** Intercellular communication mediated by exosomes as a new therapeutic target for pancreatic cancer *– Nuno Bastos*
4:00 pm	**OT07.02** Confounding factors in extracellular vesicle ultrafiltration and protein analysis *– Glenn Vergauwen*	**OT08.02** Live imaging and biodistribution of 89Zr-labeled extracellular vesicles in rodents following intravenous, intraperitoneal, intrathecal, and intra-cisterna magna administration *– Nikki Ross*	**OT09.02** Exosomes from bovine milk reduces the tumour burden and attenuates cancer cachexia *– Suresh Mathivanan*
4:15 pm	**OT07.03** RNA profiling limits for nanoFACS-sorted extracellular vesicles *– Aizea Morales-Kastresana*	**OT08.03** Determining the fate of extracellular vesicles in C. elegans: trafficking of the released organelle, the post-mitotic midbody *– Gholamreza Fazeli*	**OT09.03** Oligodendroglioma cells communicate with neighboring tumour and normal neural cells via extracellular vesicles *– Lata Adnani*
4:30 pm	**OT07.04** Morphological plasticity of EVs – do some EVs have motility? *– Aleksander Cvjetkovic*	**OT08.04** Arginine-rich cell-penetrating peptide-modified extracellular vesicles for improved intracellular drug delivery *– Ikuhiko Nakase*	**OT09.04** HOTAIR affects bladder cancer epithelial-to-mesenchyme transition through both the Canonical WNT-pathway and extracellular vesicles *– Carla Beckham*
4:45 pm	**OT07.05** Microflow cytometry: The Apogee A50 is a sensitive standard tool for extracellular vesicle analyses in liquid biopsies. *– Desmond Pink*	**OT08.05** Surface glycosylation of extracellular vesicles and implications on their interaction with target cells *– Joana Gomes*	**OT09.05** Oncolytic adenoviruses encapsulated into the extracellular vesicles as carriers for targeted drug delivery *– Mariangela Garofalo*
5:00 pm	**OT07.06** Shotgun proteomic analysis of plasma-derived extracellular vesicles isolated by novel Vn96 peptide, size exclusion chromatography and centrifugation demonstrates the possibility of isolating distinct vesicle subpopulations *– Anne Borup*	**OT08.06** The Amnis imaging stream flow cytometer platform allows discrimination of different vesicles types in mesenchymal stem cell-derived supernatants *– Bernd Giebel*	**OT09.06** TGFBR2-dependent alterations of exosomal cargo and functions in DNA mismatch repair-deficient colorectal cancers *– Fabia Fricke*

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

THURSDAY, 18 MAY 2017

5:15 pm – 6:30 pm **Thursday Poster Session** *Frontenac/Queens Quay/Bay Rooms*

Poster Session T01
From Biogenesis to Targeting
Session Chairs: Vandhana Muralidharan-Chari; Frederik Verweij

Poster Session T02
EV Isolation
Session Chairs: Cecilia Lasser; Jan van Deun

Poster Session T03
EVs in Tissue Protection and Repair
Session Chairs: Uta Erdbrügger; Nanveet Dogra

Poster Session T04
EVs in Cancer Therapy and Drug Resistance
Session Chairs: Mary Bebawy; Jun Chung

Poster Session T05
Novel Developments in EV Characterization
Session Chairs: Matias Ostrowski; Sten Libregts

Poster Session T06
Non-Cancer EV Biomarkers
Session Chairs: Luca Masante; Julie Saugstad

Poster Session T07
EV Proteomics and Lipidomics
Session Chairs: Alicia Llorente; Suresh Mathivanan

Poster Session T08
EVs in Viral and Bacterial Infections
Session Chairs: Cherie Blenkiron; Metka Lenassi

Poster Session T09
EVs in Diseases of the Central Nervous System
Session Chairs: Lesley Cheng; Alissa Weaver

Poster Session T10
EVs in Tumor Metastasis and Angiogenesis
Session Chairs: Takahiro Ochiya; Simone Principe

Poster Session T11
EVs and the Immune System
Session Chairs: Susanne Gabrielsson; Susanne van der Grein

6:30 pm – 8:00 pm **Satellite EVent** *Metropolitan Ballroom West*

Meet the National and International Societies: This event will provide an opportunity for scientific networks and consortia focusing on extracellular vesicles to introduce themselves to the ISEV community.

FRIDAY, 19 MAY 2017

7:00 am – 6:00 pm **Registration/Information Desk** *Frontenac Ballroom Foyer*

7:30 am – 9:00 am **Morning Coffee** *Frontenac/Queens Quay/Bay Rooms*

7:45 am – 8:45 am **Meet the Experts Sessions**

Meet the Experts Session 1 *Metropolitan Ballroom West*
EV Mediated Functional Delivery of Protein and Nucleic Acids
Session Chair: Lucia Languino
Speakers: Raghu Kalluri; Janusz Rak

Meet the Experts Session 2 *Metropolitan Ballroom East*
EV Lipids and Lipidomics
Session Chair: Yong Song Gho
Speakers: Alicia Llorente; Hang Hubert Yin

Meet the Experts Session 3 *Harbour Ballroom*
Rigor and Reproducibility in EV Analysis
Session *Chair: Chris Gardiner*
Speakers: An Hendrix; Andreas Moller

Program

FRIDAY, 19 MAY 2017

9:00 am – 10:00 am **PARALLEL SESSIONS**

Room	*Metropolitan Ballroom West*	*Metropolitan Ballroom East*	*Harbour Ballroom*
	SYMPOSIUM SESSION 10: **Novel Developments in EV Isolation** *Session Chairs:* *Alain Brisson; Dylan Burger*	**SYMPOSIUM SESSION 11:** **EVs in Tumor Metastasis** *Session Chairs:* *Lei Zheng; Yves DeClerck*	**SYMPOSIUM SESSION 12:** **EVs in Viral Infections** *Session Chairs:* *Caroline Gilbert;* *Marc-Andre Langlois*
9:00 am	**OF10.01** Study exosome therapeutic and diagnostic roles via microfluidic on-demand analysis and harvesting – *Mei He*	**OF11.01** Oncosomes as a novel liquid biopsy biomarker for quantifying metastatic cancer dynamics in real-time – *Florence Deng*	**OF12.01** Communication via extracellular vesicles enhances viral infection of a cosmopolitan alga – *Daniella Schatz*
9:15 am	**OF10.02** Sequential size exclusion chromatography and density gradient separation of human circulating extracellular vesicles from lipoproteins – *Cecilia Lässer*	**OF11.02** – Malignant extracellular vesicles carrying MMP1 mRNA facilitate peritoneal dissemination in ovarian cancer – *Akira Yokoi*	**OF12.02** Apoptotic bodies: A novel trojan horse for Influenza A virus – *Georgia Atkin-Smith*
9:30 am	**OF10.03** Isolating neuron exosomes using cell-type specific protein markers – *Emma Kowal*	**OF11.03** – Cancer stem cell exosomal tetraspanins network regulate pancreatic cancer metastasis – *Shijing Yue*	**OF12.03** Extracellular vesicles released by HIV-infected CD4+ T cells promote the secretion of proinflammatory cytokines by uninfected bystander lymphocytes: Role of hypoxia inducible factor 1 alpha – *Matias Ostrowski*
9:45 am	**OF10.04** Liquid Biopsy on a Chip: Isolation of exosomes and detection of surface biomarkers for early diagnosis of cancer – *Navneet Dogra*	**OF11.04** – Comprehensive EV proteomics revealed EV-driven intercellular communications in gastric cancer microenvironment and macroenvironment – *Koji Ueda*	**OF12.04** Extracellular vesicles carry HIV Env and facilitate HIV infection of human lymphoid tissue – *Leonid Margolis*

10:00 am – 10:30 am **Networking Break and Exhibits** *Frontenac/Queens Quay/Bay Rooms*

10:30 am – 11:30 am **PLENARY SESSION 2:** *Metropolitan Ballroom West*

Plasma Membrane and Cellular Vesicles

Session Chairs: Xandra Breakefield; Alissa Weaver

Pathways and Mechanisms of Extracellular Vesicle Formation
Clotilde Thery, PhD

Mechanisms and Functions of Lysosome Positioning
Juan Bonifacino, PhD

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

FRIDAY, 19 MAY 2017

11:30 am – 12:30 pm **Featured Abstracts** *Metropolitan Ballroom West*
Session Chairs: Xandra Breakefield; Alissa Weaver

11:30 am LBO-08 Real-time quantification of multivesicular body-plasma membrane fusion reveals modulation of exosome release by G protein-coupled receptor signaling
Maarten Bebelman

11:45 am FFA-01 Analysis of tumor-infiltrating innate immune cells after uptake of glioblastoma-derived extracellular vesicles in vivo
Erik Abels

12:00 pm FFA-02 Impaired angiogenesis and cancer metastasis by exosomes in Tspan8 deficient mice
Shijing Yue

12:15 pm FFA-03 Presence of Glypican-1 on extracellular vesicles fails to discern pancreatic cancer from benign pancreatic diseases
Fabrice Lucien

12:30 pm – 1:30 pm **Lunch** *(Box lunches will be served)* *Frontenac/Queens Quay/Bay Rooms*

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

FRIDAY, 19 MAY 2017

1:30 pm – 3:00 pm **PARALLEL SESSIONS**

Room	*Metropolitan Ballroom West*	*Metropolitan Ballroom East*	*Harbour Ballroom*
	SYMPOSIUM SESSION 13: Novel Technologies in EV Characterization *Session Chairs: Joanne Lannigan; Rienk Nieuwland*	**SYMPOSIUM SESSION 14:** EVs in Cardiovascular Disorders *Session Chairs: Chantal Boulanger; Mike Davis*	**SYMPOSIUM SESSION 15:** EV RNAs as Cancer Biomarkers *Session Chairs: Andrew Hill; Kendall Jensen*
1:30 pm	**OF13.01** Extracellular vesicles isolated in evaporating droplets – *Hwapyeong Jeong*	**OF14.01** The pericardial fluid exosomes as new cell-to-cell communicators worsening ischaemic heart disease in diabetes – *Costanza Emanueli*	**OF15.01** miR-145 in urinary extracellular vesicles as biomarkers for prostate cancer – *Lei Zheng*
1:45 pm	**OF13.02** Single cell analysis revealed cell-to-cell variations in physiologic state influence EV secretion – *Valya Ramakrishnan*	**OF14.02** Endothelial cell-derived extracellular vesicles in acute myocardial infarction – *Naveed Akbar*	**OF15.02** Novel platform for extracellular vesicle mRNA characterization and mutation detection in cancer patient blood – *Zhaogang Yang*
2:00 pm	**OF13.03** Time-resolved surface enhanced raman spectroscopy for characterizing extracellular vesicles – *Tatu Rojalin*	**OF14.03** Hypoxic pre-conditioning on human CD34+ stem cells enhances exosome therapeutics of ischemic tissue repair through ETS-1-regulated pathway – *Yaxuan Liang*	**OF15.04** Extracellular RNA is promising biomarker for early detection of cancers – *Hidetoshi Tahara*
2:15 pm	**OF13.04** Raman spectroscopy for the label-free identification of the source-related biochemical fingerprint of extracellular vesicles – *Alice Gualerzi*	**OF14.04** Circulating exosomes correlate with metabolic syndrome severity and evoke changes of mitochondrial dynamic which are associated with endothelial dysfunction – *Ramaroson Andriantsitohaina*	**OF15.05** Extracellular vesicle mRNA and miRNA characterization in ovarian cancer ascites and peritoneal fluid – *Cindy Yamamoto*
2:30 pm	**OF13.05** EV-TRACK: Transparent reporting and centralizing knowledge in extracellular vesicle research – *Jan Van Deun*	**OF14.05** Fibronectin regulates exosome secretion by human vascular smooth muscle cells role of exosomes in mesenchymal stem cell mediated enhancement of cardiac contractility – *Alexander Kapustin*	**OF15.06** Characterization of exosomes and exosomal circular rna from pancreatic ductal adenocarcinoma carcinoma cell lines – *Jessica Kalra*
2:45 pm	**OF13.06** Size and concentration determination of extracellular vesicles as small as 50 nm in diameter at a rate beyond 10,000 EV/s – *Jean-Luc Fraikin*	**OS20.03** Mesenchymal stem cells and their secreted exosomes exert therapeutic effects in Duchenne muscular dystrophy – *Chaya Brodie*	**OF15.03** In vivo characterization of EV miRNA secretion into cerebrospinal fluid (CSF) by glioblastoma – *Valya Ramakrishnan*

3:00 pm – 3:30 pm **Networking Break and Exhibits** *Frontenac/Queens Quay/Bay Rooms*

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

FRIDAY, 19 MAY 2017

3:30 pm – 5:15 pm PARALLEL SESSIONS

Room	Metropolitan Ballroom West	Metropolitan Ballroom East	Harbour Ballroom
	SYMPOSIUM SESSION 16: **EV Omics** *Session Chairs:* *Juan Falcon-Perez; Suresh Mathivanan*	**SYMPOSIUM SESSION 17:** **EVs in Tissue Repair and Inflammation** *Session Chairs:* *Shilpa Buch; Chris Gardiner*	**SYMPOSIUM SESSION 18:** **Biogenesis and EVs and Viruses** *Session Chairs:* *Jennifer Jones; Leonid Margolis*
3:30 pm	**LBO.09** Extracellular vesicles containing Chs3 and Fks1 rescue cell wall defective yeast and protect from antifungal agents *– Kening Zhao*	**LBO.10** The role of platelet-derived extracellular vesicles in the GPIb-dependent adhesion of monocytes in models of thrombo-inflammation *– Aigli Evryviadou*	**LBO.11** Host exosomes released during infection with Rift Valley fever virus play a protective role by destroying the virus cell reservoirs and by inhibiting viral replication and release *– Ramin Hakami*
3:45 pm	**OF16.01** Differences and similarities in full-length and fragmented non-coding RNA biotypes in EV from differentially stimulated dendritic cells *– Tom Driedonks*	**OF17.01** Osteoblast-derived extracellular vesicles represent a novel and highly potent method for stimulating bone formation *– Owen Davies*	**OF18.01** Virosomes: The interplay between viral infection and exosome production *– Fatah Kashanchi*
4:00 pm	**OF16.02** CD63, MHC class 1, and CD47 identify subsets of extracellular vesicles containing distinct populations of micro-RNA *– Sukhbir Kaur*	**OF17.02** Myofibroblast-derived extracellular vesicles promote epithelial cell senescence in idiopathic pulmonary fibrosis *– Tsukasa Kadota*	**OF18.02** Attempts to re-define cellular components specifically incorporated in HIV as compared to sEVs and exosomes secreted by infected cells *– Lorena Martin-Jaular*
4:15 pm	**OF16.03** miRNAs enclosed in small extracellular vesicles are selectively secreted and retained in cellular senescence and modulate keratinocyte functionality *– Lucia Terlecki Zaniewicz*	**OF17.03** Intranasal A1-exosomes decrease inflammation and preserve neurogenesis in the hippocampus as well as prevent memory dysfunction after status epilepticus *– Ashok Shetty*	**OF18.03** Picornavirus infection induces the release of distinct EV populations containing infectious virus and altered host-derived contents *– Susanne van der Grein*
4:30 pm	**OF16.04** Molecular lipidomics of urinary exosomes: Can molecular lipid species serve as cancer biomarkers? *– Alicia Llorente*	**OF17.04** PDGF enhances the pro-regenerative properties of EVs released form adipose stem cells *– Tatiana Lopatina*	**OF18.05** Extracellular vesicle cargo delivery through membrane fusion: Regulation by factors that promote and restrict enveloped virus – cell entry *– Michael Hantak*
4:45 pm	**OF16.05** Mining the new human reference interactome to investigate interaction-mediated protein sorting into extracellular vesicles *– Dae-Kyum Kim*	**OF17.05** VEGF-induced damage of glomerular endothelial cells in Alport syndrome: effect of amniotic fluid stem cell-derived extracellular vesicles *– Benedetta Bussolati*	**OF18.06** Extracellular vesicles and lipoproteins influence cellular response to HIV-1 infection *– Lisa Learman*
5:00 pm	**OF16.06** In-depth proteomics of cancer-associated fibroblasts secretome and role of exosomes in tongue cancer progression *– Simona Principe*	**OF17.06** Mesenchymal stem cell-derived exosomes promote neurologic recovery in experimental autoimmune encephalomyelitis model of multiple sclerosis *– Milad Riazifar*	

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

FRIDAY, 19 MAY 2017

5:15 pm – 6:30 pm **Friday Poster Session** *Frontenac/Queens Quay/Bay Rooms*

Poster Session F01
EV-Based Cancer Biomarkers
Session Chairs: Malene Jorgensen; Kwang-Pyo Kim

Poster Session F02
EV Isolation: Developments
Session Chairs: Charles Lai; Luca Musante

Poster Session F03
Bodyfluid Biomarkers of Cancer
Session Chairs: Maija Puhka; TBA

Poster Session F04
EVs in the Tumor Microenvironment
Session Chairs: Jason Webber; Carolina Soekmadji

Poster Session F05
Inflammatory Disorders, Tissue Injury, and Coagulation
Session Chairs: Eric Boilard; Rienk Nieuwland

Poster Session F06
EVs and Stem Cells I
Session Chairs: Bernd Giebel; Sai-Kim Lim

Poster Session F07
EVs in the Central Nervous System
Session Chair: Dave Carter; Paula Saá

Poster Session F08
Intercellular and Inter-Organismal Crosstalk
Session Chairs: Agnieszka Bronisz; Patricia Xander

Poster Session F09
EVs in Parasitic Diseases
Session Chairs: Amy Buck; Rodrigo Soares

Poster Session F10
EVs as Mediators of Cancer Cell Signaling
Session Chairs: Valbona Luga; Ryan Pink

Poster Session F11
EVs and the Immune System
Session Chairs: Johnathon Anderson; Edit Buzas

Poster Session F12
Inflammation and the Immune System
Session Chairs: Alissa Weaver; Nicolas Tessandier

6:30 pm – 8:00 pm **Satellite Event** *Metropolitan Ballroom West*

ISEV-ISAC-ISTH EV-Flow Cytometry Workgroup: This satellite event will provide insight into the scientific interaction of three big international societies, and will also give opportunity for young researchers to present the first results of this collaboration.

SATURDAY, 20 MAY 2017

7:00 am – 6:00 pm **Registration/Information Desk** *Frontenac Ballroom Foyer*

7:30 am – 9:00 am **Morning Coffee** *Frontenac/Queens Quay/Bay Rooms*

7:45 am – 8:45 am **Meet the Experts Sessions**

Meet the Experts Session 4 *Metropolitan Ballroom West*
In Vivo Imaging-based Analysis of EV-biological Activity
Session *Chair: Eva-Maria Albers*
Speakers: Charles Lai; Takahiro Ochiya

Meet the Experts Session 5 *Metropolitan Ballroom East*
Vesicular and Non-vesicular Pathways of Extracellular RNA Release
Session Chair: Esther Nolte-t Hoen
Speakers: Muneesh Tewari; Alissa Weaver

Meet the Experts Session 6 *Harbour Ballroom*
EV-mediated Parasite-host Interactions
Session *Chair: Ana Claudia Torrecilhas*
Speakers: Martin Oliver; Rodrigo Soares

Program

SATURDAY, 20 MAY 2017

9:00 am – 10:00 am **PARALLEL SESSIONS**

Room	Metropolitan Ballroom West	Metropolitan Ballroom East	Harbour Ballroom
	SYMPOSIUM SESSION 19: EVs in Tumor Immunity and Angiogenesis *Session Chairs: Carole Parent; Janusz Rak*	**SYMPOSIUM SESSION 20:** EVs in Stem Cell and Cardiovascular Biology *Session Chairs: Costanza Emanueli; Uta Erdbrügger*	**SYMPOSIUM SESSION 21:** Milk EV's *Session Chairs: Martijn van Herwijnen; Patrick Provost*
9:00 am	OS19.01 Release of endothelial cell-associated VEGFR2 during TGF-beta modulated angiogenesis in vitro – *Alicia Viloria-Petit*	OS20.01 Exosomes as a vector for Wnt7a systemic treatment in Duchenne Muscular Dystrophy – *Uxia Gurriaran*	OS21.01 Milk exosomes enhance anti-proliferative and anti-cancer activities of berry anthocyanidins against multiple human cancers – *Ramesh Gupta*
9:15 am	OS19.02 Mutant p53 cancers reprogram tumor associated macrophages via exosomal miR-1246 – *Tomer Cooks*	OS20.02 Angiogenic Mechanisms of Human CD34+ Stem Cell Exosomes in the Repair of Ischemic Hindlimb – *Yaxuan Liang*	OS21.02 Characterization of extracellular vesicles with milk fat globule membrane-like properties that carry most microRNAs in commercial dairy cow milk – *Benmoussa Abderrahim*
9:30 am	OS19.03 Determining the role of key regulators of apoptotic cell disassembly in cell clearance – *Rochelle Tixeira*	OF14.06 The role of exosomes in mesenchymal stem cell mediated enhancement of cardiac contractility – *Joshua Mayourian*	OS21.03 Tracing Cellular Origin of Human Exosomes Using Multiplex Proximity Extension – *Susanne Gabrielsson*
9:45 am	OS19.04 Proteomic analysis of exosomes derived from serum and cells in non–small cell lung cancer – *Lei Zheng*	OS20.04 Exosomes and microparticles released by mesenchymal stem cells exert a chondroprotective effect in osteoarthritis – *Daniele Noel*	OS21.04 Biological activities of extracellular vesicles and their cargos from bovine milk in non-bovine species – *Janos Zempleni*

10:00 am – 10:30 am **Networking Break and Exhibits** *Frontenac/Queens Quay/Bay Rooms*

10:30 am – 11:30 am **PLENARY SESSION 3:** *Metropolitan Ballroom West*

From Extracellular Vesicles to Coordinated Behaviour of Cellular Populations

Session Chairs: Marca Wauben; Ken Witwer

Novel Role of Quorum Sensing-regulated Extracellular Vesicles in Intercellular Movement and Virulence in the Plant Pathogenic Bacterium Xylella Fastidiosa
Steven Lindow, PhD

Malaria parasites regulate secretion of exosomes carrying distinct cargo
Neta Regev-Rudzki

11:30 am – 12:30 pm **ISEV General Assembly** *Metropolitan Ballroom West*

12:30 pm – 1:30 pm **Lunch** *(Box lunches will be served)* *Frontenac/Queens Quay/Bay Rooms*

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

SATURDAY, 20 MAY 2017

1:30 pm – 3:00 pm **PARALLEL SESSIONS**

Room	Harbour Ballroom	Metropolitan Ballroom West	Metropolitan Ballroom East
	SYMPOSIUM SESSION 22: **EV-Mediated Communication Between Host and Microorganisms** *Session Chairs:* *Ana Claudia Torrecilhas;* *Patrica Xander*	**SYMPOSIUM SESSION 23:** **EV-Based Cancer Biomarkers** *Session Chairs:* *Aled Clayton; Lorraine O'Driscoll*	**SYMPOSIUM SESSION 24:** **EV Functions in Inflammation** *Session Chairs:* *Saara Laitinen; Takahiro Ochiya*
1:30 pm	**OS22.01** The role of extracellular vesicles (MalaEx) from the commensal yeast Malassezia sympodialis in atopic eczema *– Helen Vallhov*	**OS23.01** A Novel Biochip for Capture and Characterization of Extracellular Vesicle Subgroups in Cancer Patient Plasma *– Kwang Kwak*	**OS24.01** Extracellular vesicles from adipose-derived mesenchymal stem cells promote autophagy in human osteoarthritic chondrocytes *– Miguel Tofiño-Vian*
1:45 pm	**OS22.02** Vesicle-mediated cross species RNA interference between the gastrointestinal nematode Heligmosomoides polygyrus and its mouse host *– Amy Buck*	**OS23.02** Circulating microparticles as predictive biomarkers of severe complications of radiotherapy for prostate adenocarcinoma *– Alexandre Ribault*	**OS24.02** Therapeutic control of systemic inflammation & atherosclerosis with apoe-polarized macrophage exosomes *– Robert Raffai*
2:00 pm	**OS22.03** Membrane vesicles from Piscirickettsia salmonis induce protective immunity and reduced disease development in an adult zebrafish model *– Julia Tandberg*	**OS23.03** Using machine learning of extracellular vesicle flow cytometry to build predictive fingerprints for prostate cancer diagnosis *– Robert Paproski*	**OS24.03** Apoptotic-cell derived extracellular vesicles are rich in enzymatically-derived active lipid mediators and can modulate immune responses *– Ivana Milic*
2:15 pm	**OS22.04** Extracellular vesicles released by M. tuberculosis-infected macrophages contain mycobacterial rnas and induce Type I interferon expression in uninfected cells *– Yong Cheng*	**OS23.04** TGFβ3 expression level in extracellular vesicles present in the plasma of patients with head and neck squamous cell carcinoma is a marker for treatment response *– Dorival Mendes Rodrigues*	**OS24.04** Histone flow: From nucleus to extracellular vesicles *– Rohini Ravindran Nair*
2:30 pm	**OS22.06** Dysregulation of nutritional immunity during respiratory virus infection enhances pseudomonas aeruginosa biofilm growth *– Jennifer Bomberger*	**OS23.05** EV-associated MMP9 in high grade serous ovarian cancer is preferentially localized to Annexin V-binding EVs *– Agnes Reiner*	**OS24.05** Chondrocytes derived from mesenchymal stem cells differentiated in the presence of plasma-derived extracellular vesicles from osteoarthritic patients express disease-related genes *– Bartijn Pieters*
2:45 pm		**OS23.06** Proteome-wide profiling of viable tissue-derived extracellular vesicles for development of early diagnostic biomarkers for colorectal cancer *– Satoshi Muraoka*	**OS24.06** Role of exosomes in the immunopathogenesis of sarcoidosis *– Abhay Kumar*

3:00 pm – 3:30 pm **Networking Break and Exhibits** *Frontenac/Queens Quay/Bay Rooms*

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

SATURDAY, 20 MAY 2017

3:30 pm – 5:15 pm **PARALLEL SESSIONS**

Room	*Metropolitan Ballroom West*	*Metropolitan Ballroom East*	*Harbour Ballroom*
	SYMPOSIUM SESSION 25: **EV-Mediated Communication in Cancer II** *Session Chairs:* *Dave Carter; Louise Laurent*	**SYMPOSIUM SESSION 26:** **EVs as Epigenetic Regulators** *Session Chairs:* *Hidetoshi Tahara; Marca Wauben*	**SYMPOSIUM SESSION 27:** **EVs in Cancer Progression and Therapy** *Session Chairs:* *Peter Quesenberry; Clotilde Thery*
3:30 pm	**LBO.12** Circulating tumor-associated microparticles in hepatocellular carcinoma and cholangiocarcinoma – *Sabine Urban*	**LBO.16** On-disc isolation and analysis of extracellular vesicles from biological samples – *Vijaya Sunkara*	**LBO.22** Ghost nanovesicles for targeted delivery of chemotherapeutics – *Gyeongyun Go*
3:45 pm	**LBO.13** Pre-metastatic cancer exosomes induce immune surveillance by patrolling monocytes at the pre-metastatic niche – *Michael Plebanek*	**LBO.17** High resolution size exclusion chromatography allows detailed study of exosome heterogeneity – *Eduard Willms*	**LBO.21** Idiotypic-specific peptides as tool for tumor progression monitoring via tumor-derived exosomes targeting – *Enrico Iaccino*
4:00 pm	**LBO.14** An extracellular vesicle blood fingerprint distinguishes between patients with indolent and aggressive prostate cancer at diagnosis – *John Lewis*	**LBO.18** EVQuant: Combined quantification and phenotypic analysis of individual extracellular vesicles in experimental and clinical samples – *Thomas Hartjes*	**OF17.06** Effect of stem cell-derived extracellular vesicles on tumor angiogenesis – *Benedetta Bussolati*
4:15 pm	**LBO.15** Molecular subtypes of glioma stem cells as determinants of tumour vesiculome and extracellular vesicle mediated intercellular communication – *Cristiana Spinelli*	**LBO.19** High sensitivity, quantitative epitope analysis of plasma EVs by flow cytometry – *Jennifer Jones*	**LBO.23** Identification of cancer-derived large oncosomes in urine samples of prostate cancer patients – *Tatyana Vagner*
4:30 pm	**OS25.01** Insights into the mechanisms of neratinib-resistance: investigating a possible role for extracellular vesicles in HER2-overexpressing breast cancer – *Michelle Lowry*	**OS26.01** Extracellular vesicle and miRNA profiling of the primate cervicovaginal compartment reveal possible anti-HIV defenses – *Zezhou Zhao*	**OS27.01** RAB7 and prion protein modulate the secretion of extracellular vesicles and show a prognostic value in head and neck squamous cell carcinoma – *Vilma Regina Martins*
4:45 pm	**OS25.02** The role of extracellular vesicle transfer in the heterogeneity of glioblastoma – *Agnieszka Bronisz*	**OS26.02** Inflammatory glia alter synapse stability via the transfer of extracellular vesicle-associated miRNAs – *Ilaria Prada*	**OS27.02** Epigenetic dysregulation of hematopoietic stem cell function by extracellular vesicle (EV) trafficking in the leukemia microenvironment – *Sherif Abdelhamed*
5:00 pm	**OS25.03** Adipose tissue endothelial cell derived microparticles are a potential link between obesity and prostate cancer – *Anka Dobrian*	**OS26.03** Stressing out the neighbors: Stressed exosomes ("SexOsomes"?) passage stress phenotypes to recipient cells – *Michael Graner*	**OS27.03** Acute myeloid leukemia transforms the bone marrow niche into a leukemia-permissive microenvironment through exosome secretion – *Ching-Cheng Chen*

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

SATURDAY, 20 MAY 2017

5:15 pm – 6:30 pm **Saturday Poster Session** *Frontenac/Queens Quay/Bay Rooms*

Poster Session S1
EVs and Stem Cells II
Session Chairs: Yaxuan Liang; Uta Erdbrügger

Poster Session S2
EVs for Therapeutic Applications
Session Chairs: Andre Gorgens; Mario Gimona

Poster Session S3
EVs in Biofluids
Session Chairs: An Hendrix; Matias Ostrowski

Poster Session S4
Isolation, Characterization, and Detection of EVs
Session Chairs: Nicole Noren Hooten; Aizea Morales

Poster Session IP (Industry Posters)

Poster Session S5
EVs in Cardiovascular Disease
Session Chairs: Ramaroson Andraintsitohaina; Costanza Emanueli

Poster Session S6
EVs in Cancer Biology and Progression
Session Chairs: Lucia Languino; Suresh Mathivanan

Poster Session S7
Cancer
Session Chair: Vilma Regina Martins; Olga Volpert

Poster Session S8
Viruses, Bacteria, Fungi, and Parasites
Session Chairs: Vincent Bond; Linda Coughlan

8:15 pm – 11:00 pm **Networking EVent** *Harbour Ballroom*

The ISEV2017 Networking EVent provides a great opportunity to meet the leaders and young researchers in the field of Extracellular Vesicles while both strengthening existing and initiating new collaborations. Expand your circle of colleagues and discover the latest news and insights into the research of your peers!

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

SUNDAY, 20 MAY 2017

7:00 am – 12:30 pm **Registration/Information Desk** *Frontenac Ballroom Foyer*

7:30 am – 9:00 am **Morning Coffee** *Frontenac/Queens Quay/Bay Rooms*

7:45 am – 8:45 am **Experts Workshop Sessions**

Experts Workshop Session 1
Metropolitan Ballroom West

Workshop on exRNA Biology and the Analytical Methods
Organized by ERCC, NIH
Moderator: Louise Laurent
Session Description: This session will be an opportunity for investigators to discuss in an open forum current trends and challenges in exRNA biology, including the state of current analytical methods and needs for novel methods

- Focus on exRNA biogenesis and function
  – *Jeff Franklin*
- Focus on exRNA sequencing and biomarker development
  – *Kendall Jensen*
- Focus on computational analysis and interpretation of exRNA sequencing data
  – *Aleksander Milosalvjevic*

Experts Workshop Session 2
Metropolitan Ballroom East

EV Track
Co-moderators: An Hendrix; Kenneth Witwer
Session Description: EV-TRACK (http://evtrack.org), a crowdsourcing knowledge base that centralizes EV biology and methodology: introduction, implementation and future directions.

Experts Workshop Session 3
Harbour Ballroom

Demonstration Workshop Data Analysis with FunRich
Co-moderators: Suresh Mathivanan; Martijn JC. van Herwijnen
Session Description: Learn how to analyse your EV OMICS with ease!

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Program

SUNDAY, 20 MAY 2017

9:00 am – 10:00 am **PARALLEL SESSIONS**

Room	Metropolitan Ballroom West	Metropolitan Ballroom East	Harbour Ballroom
	SYMPOSIUM SESSION 28: EVs in Cardiovascular Diseases and Vascular Disorders *Session Chairs: Jason Fish; Stefan Janssens*	**SYMPOSIUM SESSION 29:** EVs in Immune System and Inflammation *Session Chairs: Eric Boilard; Clotilde Thery*	**SYMPOSIUM SESSION 30:** Novel Developments in EV Biogenesis and Characterization *Session Chairs: Jeff Franklin; An Hendrix*
9:00 am	**LBO.24** Synthetic stem cell microparticles for heart repair – *Ke Cheng*	**LBO.28** Exosomes as key regulators of signal relay during chemotaxis – *Carole Parent*	**LBO.32** Neutral sphingomyelinases control Extracellular Vesicles budding from the plasma membrane – *Julia Gross*
9:15 am	**LBO.25** Calpain carried by platelet-derived microparticles cleaves the protease-activated receptor 1 on endothelial cells and initiates vascular inflammation during diabetes – *Anastasia Kyselova*	**LBO.29** Anti-tumor effect of bacterial outer membrane vesicles mediated by interferon-γ – *Hyun Taek Park*	**LBO.33** Live-cell imaging for neural stem cells-derived exosomes during neurogenesis by exosomal microRNA using a microfluidic device – *Hyun Jeong Oh*
9:30 am	**LBO.26** Role of RBC-derived EVs in mediating intercellular communication in murine cardiovascular disease models – *Saumya Das*	**LBO.30** The particular pathology of systemic lupus erythematosus – *Niels H. H. Heegaard*	**LBO.34** Importance of choroid plexus-mediated extracellular vesicle secretion in the propagation of Alzheimer's disease – *Roosmarijn Vandenbroucke*
9:45 am	**LBO.27** Extracellular vesicles released by induced pluripotent stem cells induce cardiac repair in a model of myocardial infarction/ reperfusion – *Marta Adamiak*	**LBO.31** Presence of diabetes autoantigens in extracellular vesicles derived from human islets – *Craig Hasilo*	**LBO.35** Rapid isolation of extracellular vesicles using lipid nanoprobes for cancer diagnosis in NSCLC patients – *Siyang Zheng*

10:00 am – 10:30 am **Networking Break and Exhibits** *Frontenac/Queens Quay/Bay Rooms*

10:30 am – 11:15 am **Featured Abstracts** *Metropolitan Ballroom West*

Session Chairs: Andrew Hill; Susmita Sahoo

10:30 am **SFA-01** Milk-derived extracellular vesicles from non-allergic and allergic mothers differ in T cell modulatory capacity and have a distinct protein composition
Martijn van Herwijnen

10:45 am **SFA-02** Characterizing extracellular RNA inside and outside of vesicles
Dmitry Ter-Ovanesyan

11:00 am **LBO.36** Live tracking of endogenous exosome communication in vivo
Frederik Verweij

11:20 am – 11:50 am **Wrap Up Sessions** *Metropolitan Ballroom West*

- Clinical – *Uta Erdbrügger*
- Basic Science – *Eric Boilard*

11:50 am – 12:15 pm **Scholarships, Outstanding Oral and Poster Awards, Featured Abstract Awards, and Closing Remarks** *Metropolitan Ballroom West*

To accommodate author/presenter requests and/or cancellations, the presentation numbering may be out of sequence.

Abstract Directory

Alpha	L Name	F Name	Pres. Number	Presentation Title
A	Ah Kim	Jeong	PF01.09	Detection of exosomal microRNA using molecular beacon for cancer diagnosis
	Ahmad	Samar	PF07.06	Role of exosomes in axon outgrowth
	Albanese	Manuel	PT08.01	Role of Circulating Epstein-Barr Virus-Encoded microRNAs in Immune Evasion
	Alexis Lefebre	Fabio	LBP.57	Comparative analysis of EV gene products to subcellular fractions in a K-562 human lymphoblast cell model
	Alharbi	Mona	PF10.03	Effect of hypoxia on the exosome release and migration activity of a panel of ovarian tumour cell lines that mimic different stages of the tumour
	Alharbi	Mona	PT10.05	Ovarian Cancer Exosomes Have the Capacity to Mediate the Epithelial to Mesenchymal Transition in Target Cells
	Andriantsitohaina	Ramaroson	PS01.01	PPARα carried by microparticles restores the failed differentiation and functionality of bone marrow-derived cells induced by high-fat diet
	Antounians	Lina	LBP.43	A comparison of exosome isolation methods from conditioned media of amniotic fluid stem cells
	Aqil	Farrukh	PT04.05	Exosomal Delivery of Small Molecules for the Management of Ovarian Cancer
	Arita	Tomohiro	PT10.09	Tumor exosome-mediated promotion of adhesion to mesothelial cells in gastric cancer cells
	Arntz	Onno	PF05.08	IgM rheumatoid factor present on circulating extracellular vesicles obtained from rheumatoid arthritis patients can result in false positive immunoassays
B	Baek	Rikke	PS03.08	The phenotypical changes of plasma EVs over time in healthy donors
	Bajo-Santos	Cristina	PF03.11	Characterization of small RNA content in urinary and plasma EVs and matching prostate cancer tissues
	Ban	Changill	PT07.07	Proteomic Analysis of Extracellular Vesicles Derived from Propionibacterium acnes
	Bart	Geneviève	PS03.09	Purification, molecular characterization and initial functional characterization of the EVs derived from Renal Cell Carcinoma (RCC) and Human Sweat
	Bartel	Sabine	PF05.07	Characterization of microRNA-containing extracellular vesicles secreted by bronchial epithelial cells in allergic airway inflammation
	Bartos	Adam	PT11.11	Suppression of inflammatory markers and exosome formationin human lung epithelial cells by near-infrared photobiomodulation
	Bathini	Srinivas	PF02.02	Plasmonic detection of Extracellular vesicles in a microfluidic environment using synthetic-peptide (Vn96) based affinity capture
	Batista	Patricia	PF09.03	B-1 cells infected with Leishmania amazonensis promastigotes release extracellular vesicles that act as a novel mediator of macrophages activation
	Batista	Patricia	PF09.02	Characterization of extracellular vesicles released by Leishmania amazonensis and its role on macrophages activation
	Bebawy	Mary	PT04.07	Extracellular vesicles confer a complex multidrug resistance and survival profile in cancer through the transfer of drug efflux capacity, drug sequestration, metastasis, altered tissue biomechanics and immune evasion .
	Behera	Jyotirmaya	PF04.10	Exosomes –derived from Mesenchymal Stem Cells Promotes Bone Regeneration in Hyperhomocysteinemia Mice
	Beit-Yannai	Elie	LBP.61	How much exosomes will mimic physiological response in in-vitro experiment? Learning from Extracellular vesicles mediate signaling in ocular system
	Berezin	Alexander	PS05.08	The signature of apoptotic endothelial cell-derived microparticles in patients with different phenotypes of chronic heart failure
	Bergamini	Giorgio	PF07.11	Extracellular vesicles as mediators of periphery-to-brain communication: relevance for stress-induced neuropsychiatric disorders
	Bermúdez	Jose	LBP.70	Heligmosomoides polygyrus vesicle-derived small RNAs inside mouse cells: detection and targets
	Bewicke-Copley	Findlay	PF04.12	Extracellular vesicles released following heat stress induce bystander effects in unstressed populations.
	Bihl	Ji	PF07.08	Exosomes derived from ACE2-overexpressing endothelial progenitor cells protect neurons from hemolysate-induced apoptosis and inflammation
	Bister	Nea	PT09.05	Extracellular vesicles as regulators of inflammation in ischemic stroke
	Bjørnetrø	Tonje	LBP.32	Extracellular vesicles derived from monocytic THP-1 and SW480 colon cancer cells induce proinflammatory response in human primary monocytes
	Bobbili	Madhusudhan	PF11.09	Transfer of extracellular vesicles between fibroblasts and keratinocytes in cellular senescence

Abstract Directory

Alpha	L Name	F Name	Pres. Number	Presentation Title
	Bobis-Wozowicz	Sylwia	PS01.10	Enhanced cardiomyogenic and angiogenic potential of extracellular vesicles derived from genetically modified stem cells expressing selected micro RNAs
	Borosch	Sebastian	PS05.14	Preconditioning affects the miRNA composition of cardiac cell-derived EVs
	Botha	Jaco	PT05.14	Flow cytometers dedicated to the analysis of small particles: A powerful tool for EV characterization
	Boulanger	Chantal	PS05.06	Intra-cardiac release of extracellular vesicles governs infiltrating monocyte activation following myocardial infarction
	Bouriche	Tarik	PS03.13	Phospholipid influence prompts the need for an anti-TF antibody to specifically measure tissue factor activity on microvesicles
	Brisson	Alain	PF01.03	Phenotype analysis of extracellular vesicles secreted by pancreatic cancer cell lines: exposition of EpCAM, Glypican-1 or Phosphatidylserine
	Brooke	Miles	LBP.37	Rapamycin-loaded Exosomes: A strategy to enhance drug-delivery to Insulin-producing beta-cells.
	Brown	Eoin	PT09.08	Cell-type specific exosome signaling and disease propagation in ALS
	Bryl-Gorecka	Paulina	PS05.07	Acoustic trapping of microparticles and its application in measuring the effect of bilberry powder consumption on plasma microparticles in patients with myocardial infarction
	Burger	Dylan	PF05.01	Human podocyte microparticles impair proliferation of proximal tubule epithelial cells
C	Cadwell	John	IP.08	Clinical Scale Production and Wound Healing Activity of Human Adipose Derived Mesenchymal Stem Cell Extracellular Vesicles from a Hollow Fiber Bioreactor
	Canbazoglu	Ahmet	PS06.09	Extracellular vesicle treatment of cholangiocarcinoma cells affects genes of epithelial-mesenchymal transition and cell survival
	Carceller	Carmen	PS01.06	Extracellular vesicles from adipose-derived mesenchymal stem cells increase the phagocytic activity in peritoneal macrophages
	Caruso	Sarah	PT11.07	The role of apoptotic cell disassembly in immunogenic cell death and antigen presentation
	Cassinela	Edson	PT04.04	Transference of resistance phenotype mediated by Extracellular Vesicles in Gastric Cancers
	Ceroi	Adam	LBP.35	Microvesicles, an anti-inflammatory player, compromised in asthmatic patients
	Ceroi	Adam	LBP.34	Platelet derived-microparticles as modulator of plasmacytoid dendritic cell inflammatory response
	Cesi	Giulia	PF10.06	Detection, characterization and function of extracellular vesicles in resistant melanoma
	Chang	Vanessa	PS04.11	Characterization of Mycobacterial Membrane Vesicles
	Changjin	Lee	LBP.01	Extracellular Vesicles Isolated from The Liver Accelerate Recovery of Carbon Tetrachloride-Induced Hepatic Necrosis
	Charoenviriyakul	Chonlada	PS03.12	Yield, physicochemical properties, and pharmacokinetics of exosomes derived from mouse cell lines
	Cheerathodi	Mujeeb	PT08.08	Proteomic analysis of the CD63 interaction network reveals important functions of CD63 in LMP1-dependent protein trafficking
	Chen	Li	PF05.05	Circulating exosomes attenuate hepatic stellate cell activation and are anti-fibrotic in vivo
	Cheng	Anastasia	PT11.06	Soluble Factors, Not Extracellular Vesicles, are Key Determinants of MSC:T Cell Suppression
	Chiang	Dapi	IP.06	EXÖBead: a glycan recognition method of isolating exosomes from small sample volumes without ultracentrifugation
	Ching Lim	Hooi	PF02.04	Acoustic trapping of extracellular vesicles in biological fluids
	Cho	Young-Eun	PT06.05	Characterization and mechanism of increased exosomal CYP2E1 and other P450 isoforms in alcoholic patients and alcohol-exposed rodents
	Choi	Byeonghyeon	PS06.01	Significant increase of blood exosomes in pulmonary vein as potential prognostic biomarker for lung cancer patients
	Choi	Chulhee	PS02.03	Efficient delivery of glucocerebrosidase lysosomal enzyme via EXPLOR technology for treatment of Gaucher disease
	Choi	Dong-Sic	PT07.11	The impact of oncogenic EGFRvIII on the proteome of extracellular vesicles released from glioblastoma cells
	Choi	Kyungsun	PS02.08	Efficient delivery of super repressor IκB via EXPLOR technology for treatment of chronic inflammatory diseases

Abstract Directory

Alpha	L Name	F Name	Pres. Number	Presentation Title
	Chul Jang	Su	LBP.50	Enrichment of mitochondrial proteins on tumor tissue-derived extracellular vesicles – presence in melanoma patient circulation
	Chun Chan	Mun	LBP.46	miR-193 is released by cardiomyocytes in response to stress and inhibit fibroblast proliferation and activation
	Clancy	James	PF10.08	Antagonistic GTPase signaling regulates the shedding of invasive tumor microvesicles
	Clerici	Stefano	LBP.52	Could LMWPTP be a novel player in extracellular vesicles secretion in colorectal cancer cells?
	Coakley	Gillian	PF09.06	Extracellular vesicles derived from Heligmosomoides polygyrus represent a novel target for vaccine-induced immunity
	Colosetti	Pascal	PF03.06	Analysis of extracellular vesicles from plasma of advanced (IIIc or IV stages) melanoma patients during kinase inhibitor and/or immunotherapy treatments
	Colosetti	Pascal	PF08.12	Orange juice contain two types of extracellular vesicles with biological activities
	Connolly	Katherine	PT02.04	The importance of isolation technique when analysing adipocyte markers in plasma-derived extracellular vesicles
	Corso	Giulia	PF02.09	Fast and reproducible purification of extracellular vesicles using combined size exclusion and bind-elute chromatography
	Coticchia	Christine	IP.09	Urine exosome proteins CXCL9 and CXCL10 are predictors of kidney transplant rejection
	Couch	Yvonne	PF07.01	Stroke extracellular vesicles express inflammatory markers and induce macrophage activation
	Craig Ayre	D.	PT07.04	Advancement of multi-parametric profiling of extracellular vesicles: comparison of protein extraction by Laemmli and Trizol reagents using nanoLC-MS/MS.
	Craig Ayre	D.	PT11.02	The CD24 receptor induces changes to the surface protein composition of B cell microvesicles with variable effects on RNA and protein cargo
	Crain	Sarah	LBP.41	Wharton's Jelly mesenchymal stem-stromal cell suppression of T helper cell division by exosomes is mediated by membrane bound TGFβ
	Cunha	Raquel	PT11.13	Uncovering the immunomodulatory potential of mesenchymal stromal cells-derived extracellular vesicles
	Czystowska-Kuzmicz	Malgorzata	PF04.07	Ovarian tumor cells suppress antitumor immune response through the release of arginase-1-containing exosomes
D	D'Asti	Esterina	PF10.04	Impact of the oncogenic C19MC microRNA cluster on the vesiculation of human pediatric embryonal brain tumour cells- ETMR as a paradigm
	D'Asti	Esterina	PF10.05	Impact of WNT signaling on the vesiculation of human medulloblastoma cells
	da Silva Lira Filho	Alonso	PF09.01	Impact of GP63 enrichment in leishmania-derived exosomes in the development of cutaneous leishmaniasis
	Daaboul	George	IP.01	Direct from Sample Surface Marker Based Single Exosome Counting and Characterization
	Dalirfardouei	Razieh	PS01.03	Promising effects of menstrual blood mesenchymal stromal cell exosomes on inflamation in wound healing process of diabetic mice
	Dauros-Singorenko	Priscila	PT08.14	Membrane vesicle subpopulations in Escherichia coli UPEC: a methodological comparison
	Dayarathna	Thamara	PT01.02	Shuttle mechanisms of extracellular vesicle-enclosed bioactive molecules in ex-vivo and in-vivo systems
	DeClerck	Yves	PF04.13	Galectin-3 binding protein present at the surface of tumor exosomes contributes to their capture by stromal cells
	DeCorwin-Martin	Philippe	PS04.06	Nanoarray Platform for High-Throughput Single Exosome Proteomic Characterization
	Degosserie	Jonathan	PT01.01	Role of extracellular vesicles in thyroid folliculogenesis
	Dinh	Nhung	LBP.40	Outer membrane vesicles derived from Escherichia coli mediate neutrophil infiltration into the lungs via IL-8 release from endothelial cells
	Diniz Atayde	Vanessa	PF09.04	Unraveling the exosome pathway in the human pathogen Leishmania
	Dogra	Navneet	PF02.10	On-chip liquid biopsy: Progress in isolation of exosomes for early diagnosis of cancer
	Dourado	Mauricio	PF04.01	Extracellular vesicles derived from cancer-associated fibroblasts may have a role in oral cancer invasion
	Draebing	Thomas	PF06.05	Extracellular vesicles modulate BMP signaling during early embryogenesis
	Drożdż	Anna	PT06.08	Circulating Tie2+ microvesicles as potential indicators of diabetic retinopathy progression

Abstract Directory

Alpha	L Name	F Name	Pres. Number	Presentation Title
	Drożdż	Anna	PF11.02	Hyperglycemia induced microvesicles control endothelial cell migration
	Drożdż	Anna	PF05.06	Interplay of RANTES chemokine and CCR5+ bearing microvesicles in diabetic retinopathy
	Dugan	Aisling	LBP.59	Exosome involvement in JC Polyomavirus Infection
	Duncan	Heather	PF06.03	Characterization of Extracellular Vesicle Production During Leukemic Differentiation
	Dutta	Suman	PT10.01	Cholangiocarcinoma Exosomes: Proteomic Insights and Plausible Role in Carcinogenesis
E	Ebrahimkhani	Saeideh	PT09.01	Serum exosome miRNA profiles have the potentials to diagnose and predict disease stage in multiple sclerosis
	El Bekkouri	Naoufal	PF01.06	Analysis of extracellular vesicle-derived RNAs isolated with the Vn96 peptide from human renal and bladder cancer cell lines
	Esfandiari	Leilei	LBP.12	A dielectrophoretic-nanopore device with spatiotemporal resolution for microvesicles entrapment and quantification near living cells
F	Faict	Sylvia	PF04.03	Immunotherapy in Multiple Myeloma using alfa-galactosylceramide loaded sEVs from dendritic cells to stimulate NKT activity
	Farber	Debora	PF11.01	Human embryonic stem cell-released extracellular vesicles: effects on cultured retinal Müller glial cells and NMDA-damaged mouse retinas, in vivo
	Fatima	Farah	PT08.09	The inflammatory and immunological roles of S. aureus derived exosome-like vesicles in septic arthritis
	Felldin	Ulrika	PT02.11	Evaluation and Optimization of a Hollow Fiber Bioreactor System for Standardisation of Large Scale Production of Extracellular Vesicles
	Ferdin	Jana	PT08.03	Nef-exosomes as putative biomarkers for inadequate treatment regimen of HIV-1 infected individuals
	Fierabracci	Alessandra	IP.07	Activity assays for evaluation of clinical grade MSC-EV anti-inflammatory properties for use in treatment of drug-resistant epilepsy in children.
	Fleming	Viktor	LBP.30	Role of tumor-derived exosomes in immunosuppression in malignant melanoma
	Florez	Catalina	PT01.07	The Pseudomonas Quinolone Signal Drives Outer Membrane Vesicle Biogenesis in Pseudomonas aeruginosa
	Forterre	Alexis	PS02.10	Improving extracellular vesicles-mediated mRNA delivery specifically to HER2+ve cancer for effective CNOB/hChrR6 gene-delivered (GDEPT) therapy
	Freezor	Roberta	LBP.04	Identifying immune related miRNAs, studying the differences between erythrocyte and human rhinovirus infected HeLa cells derived microvesicles, a profiling using Firefly particle technology.
	Freezor	Roberta	LBP.13	Membrane markers profilling: Comparative analysis of microvesicles derived from erythrocyte and HeLa cells infected with Human Rhinovirus type 16
	Friis	Kristina	PS06.08	Packaging of specific mRNA into extracellular vesicles using human endogenous retroviral elements
	Fuhrmann	Gregor	PS04.08	Best before – lyophilisation as novel storage alternative for extracellular vesicles
G	Gai	Chiara	PT03.01	Protective role of Extracellular Vesicles in Diabetic Microangiopathy
	Garcia-Contreras	Marta	LBP.38	Exosomes released by Insulin-secreting cells and human islets under stress conditions reveal an altered microRNA profile: Implications for Monitoring Islet transplantation.
	Garnier	Delphine	PS01.02	Divergence of glioblastoma stem cell phenotypes during in vivo development of resistance to temozolomide is reflected by cargo of extracellular vesicles
	Garofalo	Mariangela	LBP.51	Extracellular vesicles as drug delivery vehicles for oncolytic adenovirus and paclitaxel
	Gavrilova	Julia	IP.13	Size Exclusion Chromatography applications: EV isolation from large sample volume
	Gebraad	Arjen	PF06.02	Stimulation of Adipose Tissue-derived Mesenchymal Stem Cells by Monocyte- and Osteoclast-derived Extracellular Vesicles
	Ghelfi	Elisa	PF07.13	Proteome analysis of cochlear pericyte-derived exosomes in normoxic and hypoxic condition
	Ghosh	Anirban	PF02.01	Evolution of next generation affinity-based extracellular vesicle isolation technologies for liquid biopsy and therapeutic purposes
	Gidlöf	Olof	PS05.01	Proteomic profiling reveal Src as a novel microvesicle-associated biomarker for myocardial infarction

Abstract Directory

Alpha	L Name	F Name	Pres. Number	Presentation Title
	Gillet	Virginie	LBP.28	Placenta-specific microRNAs in circulating exosomes showed different levels in pregnancies complicated by preeclampsia.
	Gillet	Virginie	PF08.07	Plasma exosomes miRNAs profile and placental dimensions in the first trimester in gestational diabetes mellitus
	Giricz	Zoltan	PT02.02	Isolation of exosomes from large volumes of cell culture media by ultrafiltration is superior to ultracentrifugation for the analysis of exosomal RNA
	Gomes	Janice	PT05.11	Non-linearities in Nanoscale Flow Cytometry of Extracellular Vesicles and Standards
	González-López	Olga	LBP.66	Role of Nedd4-family members in assembly and release of quasi-enveloped hepatitis A virus (eHAV)
	Gool	Elmar	PS04.10	Large extracellular vesicles dominate the results of immunosorbent assays
	Görgens	André	PT05.12	Using Flow Cytometry and Imaging Flow Cytometry to Resolve the Heterogeneity of Extracellular Vesicles including Exosomes
	Griffiths	Steven	PF10.02	Proteomic Profiling of Extracellular Vesicles Reveals Differences in Glucose Metabolism Reflecting Cancer Invasiveness
	Griffiths	Steven	PS04.12	The use of Fluorescent Metabolites for the Detection of Exosomes from Cancer Cells
	Groenewegen	Nils	LBP.08	MicroRNA biogenesis and heterogeneous miRNA distribution in cancer EVs
	Guan	Xiaobing	LBP.48	Characterization of saliva exosomes and exosomal microRNAs in patients with oral leukoplakia
	Guerreiro	Eduarda	PT02.06	Increasing the isolation yield of EVs from oral cancer cells in culture
	Guo	Peixuan	PS02.15	In vitro insertion of ligands to extracellular vesicles for efficient in vivo cancer targeting and regression with little liver accumulation
	Guryev	Oleg	IP.04	Application of liposomes for study of biological microvesicles.
H	Hakami	Ramin	PT08.11	The Art of War: Exosomes as Carrier Pigeons of the Cell to Protect from Bacterial Spread during Infection with Yersinia pestis
	Hamuro	Junji	LBP.29	Evaluation of a Profile of Exosomes and MiRs Playing Roles in the Pathogenesis of Human Corneal Endothelial Dysfunctions.
	Han	Chungmin	PS01.11	Cell-engineered nanovesicle as a surrogate inducer for contact-dependent stimuli
	Han Jung	Jik	PT02.03	Isolation of serum exosomes by optimized size-exclusion chromatography
	Hao	Siguo	PF04.05	TGF-β1-silenced leukemia cell-derived exosome-targeted dendritic cells induce stronger anti-leukemic immunity
	Härkönen	Kai	PT01.09	Kinetics of extracellular vesicle secretion in relation to hyaluronan synthesis
	Hean	Justin	PS02.05	Intein mediated enrichment of soluble proteins into exosomes
	Heath	Nikki	IP.12	Identification of a one-step scalable method for isolation of extracellular vesicles.
	Heinzelmann	Joana	PF03.08	Diagnostic and prognostic potential of miRNA alterations in blood based extracellular vesicles from clear cell renal cell carcinoma patients
	Héliot	Amélie	PT11.08	Fine Particulate Matter (PM2.5) exposure consequences on macrophages polarization and released Extracelllular Vesicles (EVs)
	Héliot	Amélie	PF08.10	Smoker Extracellular Vesicles influence status of Human Bronchial Epithelial Cells
	Helmbrecht	Clemens	IP.14	NANOPARTICLE TRACKING (NTA) Quantification of Fluorescent Nanoparticles
	Henderson	Jeremy	PT01.10	Fractionation of discrete extracellular vesicle sub-populations reveals distinct RNA profiles and distinct mechanisms of sorting
	Her	Jin	LBP.15	Lipidomic Analysis of Extracellular Vesicles Derived from Propionibacterium acnes
	Hian Tan	Kok	PF08.03	Extracellular vesicle-associated TIMP-1 and PAI-1 significantly enhanced pre-eclampsia predictive value of plasma placental growth factor in low risk population
	Hjuler Nielsen	Morten	PS05.12	Small EVs related to T-cell-mediated inflammation and vascular function are increased in familial hypercholesterolemia
	Holm	Mea	PF07.05	Nogo-A as an extracellular vesicle-associated ligand in the central nervous system
	Hong	Jihye	PT07.10	Proteomic analysis of Exosomes derived from Acute Myeloid Leukemia as maturation
	Hong	Yeon-Sun	PS02.02	Enzymatic exosomes with GPI-anchored hyaluronidase for enhanced tumor penetration and anti-tumor efficacy

Abstract Directory

Alpha	L Name	F Name	Pres. Number	Presentation Title
	Hu	Guoku	PF07.07	Exosomal miRNA-induced lincRNA regulates microglial phagocytosis: Implications for morphine-mediated potentiation of neurodegeneration
	Hubert	Audrey	LBP.65	Extracellular Vesicle-Associated miR-155 May Contribute to HIV-1 Pathogenesis
	Hüls	Corinna	PT08.02	Recombinant extracellular vesicles (EVs) are a tool to study the function of packaged viral RNAs from Epstein-Barr-Virus (EBV)
	Hurwitz	Stephanie	PF01.08	Novel tissue- and cancer-specific markers identified by proteomic profiling of extracellular vesicle cargo
	Hwa Lee	Ryang	PT11.03	Mesenchymal Stem/Stromal Cell-derived Extracellular Vesicles Attenuate Immune Responses in Two Murine Models of Autoimmune Diseases: Type 1 Diabetes and Uveoretinitis
I	Ichiki	Takanori	PS04.04	Evaluation of individual exosomes down to 10 nm in microfluidic devices
	Ioshida	Camilla	PF09.05	The protozoan parasite Trypanosoma cruzi viability is required for the release of extracellular vesicles
	Irobi	Joy	LBP.20	Neuroprotective mechanisms of extracellular small heat shock proteins (HSPB1 and HSPB8): The role of HSPB in transcellular EV signaling in neuroinflammation
	Irobi	Joy	PT09.04	Neuroprotective mechanisms of extracellular small heat shock proteins in neuroinflammation
	Ishihara	Ryo	PS04.01	Easy Extracellular Vesicle Detection on a Surface-Functionalized Power-Free Microchip
	Ito	Masafumi	PF01.01	Gamma-glutamyltransferase activity in exosomes as a marker for prostate and renal cell cancers
	Ivanova	Alena	PS01.05	Mechanisms of exosomal secretion of Wnt proteins
J	Jankowska-Gan	Ewa	PT11.05	IL35-coated exosomes facilitate an expanded impact of regulatory T cells-mediated suppression
	Jay	Dan	PF10.01	A novel role for extracellular Hsp90 in exosome traffic from cancer cells
	Jayachandran	Muthuvel	PT06.01	Specific types of miRNAs from urinary extracellular vesicles identify pathogenesis of kidney stones and Randall's plaque in humans
	Jayachandran	Muthuvel	PT06.04	Specific types of urinary extracellular vesicles differentiate type 1 primary hyperoxaluria patients without and with nephrocalcinosis or kidney stones
	Jayachandran	Muthuvel	PT06.03	Urinary extracellular vesicles carrying markers of kidney injury and renal stem cells differ between women and men and with age in living kidney donors
	Jeong	Hyesun	LBP.56	A potential exosome biomarker for non-small cell lung cancer by proteomics analysis
	Jeyaram	Anjana	PF11.07	Co-delivery of multiple miRNA cargos to enhance therapeutic vascularization bioactivity of extracellular vesicles
	Jiang	Lanzhou	PT05.09	Monitoring the progression of cell death and detailed characterization of apoptotic bodies by flow cytometry
	Jimenez	Lizandra	PT07.03	Quantitative comparison between small and large extracellular vesicles reveals enrichment of adhesion proteins in small extracellular vesicles
	Jin	Yinpeng	PT03.02	Significant Improvement of Survival of Rats with Acute Liver Failure by High Concentration Exosome of Human Adipose-Derived Stem Cells
	Jin Choi	Yeo	PF11.06	Exosomes Secreted by Human Adipose-derived Stem Cells Regulate the Expression of Collagen Synthesis-Related Genes in Human Dermal Fibroblasts
	Jingushi	Kentaro	PS06.13	Glycosylation promotes azurocidin sorting into EVs in clear cell renal cell carcinoma cells.
	Johnson	Jennifer	PT03.10	Biodistribution and efficacy of extracellular vesicles from Cardiosphere-Derived Cells
	Jong Rhee	Won	PF01.10	Multiplexed detection of exosome microRNAs using molecular beacons
	Jung	Stephanie	LBP.60	Extracellular vesicles in the immune response to Hepatitis-Virus infections
	Just	Jesper	PS03.05	Differentially expressed Exosome miRNAs induced by Blood Flow Restricted Exercise - possible effectors of endogenous organ protection and muscle hypertrophy
K	Kalargyrou	Aikaterini	PF07.10	Primary culture photoreceptors release functional extracellular vesicles
	Karttunen	Jenni	PT09.09	Increased miR-124 cargo in circulating extracellular vesicles after experimental traumatic brain injury
	Kawamura	Yumi	PS06.06	Characterization of DNA from cancer cell-derived extracellular vesicles
	Kenyon	Oliver	IP.03	Particle Size and Refractive Index derived from Three Dimensional Light Scatter Data

Abstract Directory

Alpha	L Name	F Name	Pres. Number	Presentation Title
	Kim	Dong-Ki	PT09.10	Adherent Proteins May Account for Some of the Bioactivity of Small Extracellular Vesicles (Exosomes) Secreted by Mesenchymal Stem/Stromal Cells (MSCs)
	Kim	Heegon	PS02.14	Extracellular Vesicle-Mediated Delivery of Synthetic Receptors for Enhanced Tumor Penetration of Targeted Agents
	Kirchner	Benedikt	PT02.09	Influence of commercially available, exosomal isolation kits on holistic small RNA expression profiles of serum in healthy and critically ill individuals
	Koifman	Naama	PT05.05	Cryogenic-Temperature Electron Microscopy Imaging of Extracellular Vesicles Shedding
	Koifman	Naama	PT05.08	Immunogold Labeling of Extracellular Vesicles and Liposomes in the Liquid Phase
	Komaki	Motohiro	PF06.01	Mesenchymal stem cell-derived extracellular vesicles alter differentiation competence of fibroblasts
	Koniusz	Sylwia	LBP.07	Visualization of extracellular vesicles derived from human bone marrow mesenchymal stem cells using fluorescent and magnetic labels; in vitro and in vivo studies
	Kooijmans	Sander	PT02.08	Purification method affects biological functionality of stem cell-derived EVs
	Kornilov	Roman	PT02.05	Filtration based method to deplete bovine extracellular vesicles from fetal bovine serum
	Kotmakçı	Mustafa	PT04.02	EVs in cisplatin resistance and transmitting resistance in calu1 non-small cell lung cancer cells
	Kotrbová	Anna	PT05.07	Detection and characterization of exosomes in TEM images using ExosomeAnalyzer: A novel software tool
	Kruglik	Sergei	PT05.01	Raman tweezers microspectroscopy of single extracellular vesicles: towards measuring the relative content of proteins, lipids, and nucleic acids
	Krupova	Zuzana	PT08.15	Qualitative Changes in the Proteome of Milk-derived Extracellular Vesicles during Induced Staphylococcus aureus Mastitis
	Kumada	Yoichi	PF02.12	Identification and characterization of single-chain Fv antibodies specific to CD9 for high efficient recovery of exosomal vesicles
	Kumar Agrawal	Ashish	PT04.03	Paclitaxel-loaded milk exosomes overcome immunotoxicity following oral administration
	Kurimoto	Ayako	LBP.09	Analysis of coat and whole proteins from exosomes using MS compatible surfactants
	Kuypers	Sören	LBP.05	Aptamer-based isolation of extracellular vesicles subpopulations: Finding the needle in a haystack
L	La Saliva	Sabrina	LBP.23	Fast or slow moving in ALS patients : Role of immune MVs in Neuroinflammation
	La Salvia	Sabrina	PF07.12	Misfolded proteins are carried by leukocyte derived microvesicles in Amiothrophic Lateral Sclerosis
	Lagos	Leidy	LBP.64	Fish MVs: A diagnostic tool?
	Lakhter	Alexander	PT06.07	Elevations in Circulating Extracellular Vesicle miR-21 as a Biomarker of Developing Type 1 Diabetes Mellitus.
	Langlete	Petter	PF08.11	Genetic content of EVs from fish pathogens
	Lannigan	Joanne	PT05.13	The use of a violet laser (405nm) for scatter detection of EVs on an ImagestreamX MKII imaging flow cytometer
	Larssen	Pia	PS02.11	MHC mismatch in exosomal cancer immunotherapy – paving the way for allogeneic exosome treatment?
	Lässer	Cecilia	PT07.08	Proteomic analysis of mouse lung tissue-derived vesicles, a comparison of ultracentrifugation and density flotation isolation
	Lázaro-Ibáñez	Elisa	PS06.12	Uptake and functionality of prostate cancer extracellular vesicles depends on the metastatic stage of the parental cells
	Le Lay	Soazig	PS05.02	Quantification of the circulating vesicle-bound pools of adipocytokines reveals that MFG-E8 and MIF are conveyed by plasmatic EVs
	Lee	Chan-Hyeong	PF03.10	Diagnosis of prostate cancer using serum PSA and Del-1 positive exosomes in plasma
	Lehtinen	Laura	PS06.03	Isolation and characterisation of extracellular vesicles from patient-derived primary high-grade serous ovarian cancer cells
	Lema	Diego	PT11.10	Chimerism-related allotolerance is induce by extra-cellular vesicle acquisition and reprogramming of host dendritic cells
	Leszczynska	Aleksandra	LBP.02	Role of human corneal keratocyte-derived extracellular vesicles in corneal wound healing.

Abstract Directory

Alpha	L Name	F Name	Pres. Number	Presentation Title
	Lipton	Nechama	PF06.14	Extracellular Vesicles Derived from Human Umbilical Cord Perivascular Cells (HUCPVCs): A Potential Non-Cell Source for Regenerative Therapy
	Liu	Huiping	PF06.12	A rapid microflow analysis of cancer stem cell surface proteins in circulating exosomes from breast cancer patients
	Liu	Tingjiao	PT10.06	Exosomes derived from carcinoma-associated fibroblasts induce pre-metastatic niche formation in lung
	Lombard	Catherine	PF06.09	Contribution of extracellular vesicles from Adult-derived human liver stem cells to the correction of Urea Cycle Disorders
	Luciano-Chadee	Julia	IP.16	To the Standardization of Exosome Isolation and Characterization
	Lugini	Luana	PF04.08	Natural Killer Extracellular Vesicles: a functionally relevant and measurable surrogate of the Natural Killer activity in cancer patients
	Lunavat	Taral	PF10.07	Mutant BRAF inhibition changes the expression of exosomal coding and non-coding RNAs released by melanoma cells
M	M. Falcón-Pérez	Juan	PS05.03	Hepatocyte-secreted extracellular vesicles modify endothelial function by an arginase-dependent mechanism
	M. Falcón-Pérez	Juan	PF03.05	Metabolomics Analysis of urinary exosomes reveals novel candidate biomarkers of prostate cancer
	Maerte	Melanie	PS05.13	Exosomal miRNA Profiles in Patients with Coronary Artery Disease
	Maha Nugraha Setyawan	Erif	LBP.26	Porcine in vitro maturation co-cultured with different donor age of human adipose derived stem cell followed by parthenogenetic activation
	Mahdipour	Elahe	PT11.01	In vivo analysis of the potential of exosomes isolated from menstrual blood-derived mesenchymal stem cells in regeneration of insulin-producing cells in diabetic type 1 animal model
	Margutti	Paola	PF07.09	Proteomic analysis of microvesicles from CSF of multiple sclerosis patients
	Markowska	Anna	IP.10	Many Standard Urine Extracellular Vesicle Preparations Contain Significant Cellular Biomolecule Contamination
	Matsubara	Daiki	PS06.02	The effect of Erythrocyte-derived microvesicles on the malignant potential of gastric and colorectal cancer
	Matsumoto	Akihiro	PS06.05	Analysis of biodistribution and cellular uptake of B16BL6-derived exosomes in relation to their biological effects on tumor progression.
	McVey	Mark	PS04.07	Improved resolution in extracellular vesicle populations using 405 instead of 488 nanometer wavelength side scatter
	Menezes-Neto	Armando	PF09.09	Leishmania-derived extracellular vesicles express lipophosphoglycan (LPG) on their surface
	Mertens	Inge	PF03.03	Purification and characterization of plasma derived EVs for early cancer diagnosis
	Mighty	Jason	PS03.10	Characterization of Extracellular Vesicles Released from Adult Mouse Retina
	Milosavljevic	Aleksandar	PS03.02	ExRNA Atlas resource for sharing extracellular RNA data and for analyzing it in the context of exRNA pathway knowledge
	Milosavljevic	Aleksandar	PS03.11	The exRNA virtual biorepository: a biospecimen catalog service for sharing biofluid and tissue samples
	Mohammadipoor	Arezoo	PF05.04	Effects of human and porcine mesenchymal stem cell-derived conditioned media on coagulation and T-cell function
	Morgan	Terry	PF08.02	Novel Multiparametric High Resolution Flow Cytometry to Sort Cell-Specific and Size-Specific Extracellular Vesicles
	Morhayim	Jess	PF06.10	Osteoblast-secreted extracellular vesicles stimulate the expansion of CD34+ human umbilical cord blood cells
	Morking	Patricia	PT07.06	Proteomic Analysis of Extracellular Vesicles Obtained from Toxoplasma gondii and Toxoplasma-Infected Cells
	Munuswamy	Revathy	LBP.31	The diagnostic potential of sentinel extracellular vesicles in early inflammation.
	Muralidharan-Chari	Vandhana	PT04.09	Analysis of the fate of chemotherapeutic drugs expelled by pancreatic cancer cells into microvesicles
	Musante	Luca	PS03.07	Minimal volume of urine for microvesicles detection
N	Naito	Yutaka	PT10.02	Functional roles of CaF-derived extracellular vesicles in scirrhous type gastric cancer.
	Najrana	Tanbir	PF06.07	Mechanical Force Accelerates Lung Development via Release of Extracellular Vesicles
	Nakayama Howley	Aki	LBP.13	Two dimensional electrophoresis-based proteomic analysis for urinary extracellular vesicles
	Nautiyal	Manisha	PT06.06	Hepatocyte-derived exosome enrichment and cell culture methods optimization for the identification of novel DILI biomarkers

Abstract Directory

Alpha	L Name	F Name	Pres. Number	Presentation Title
	Nawaz	Muhammad	PT08.12	Secretion of Toll-like receptor mRNAs via exosomes: a possible way of communicating messages against pathogens
	Neri	Christian	PT09.02	Systems-modeling and biological evidence for alteration of extracellular vesicles in Huntington's disease
	Njock	Makon-Sébastien	PT10.10	Tumor microenvironment affects the composition of endothelial cell-derived extracellular vesicles: impact in tumor progression
	Nkosi	Dingani	PT08.07	Epstein-Barr virus LMP1 extracellular vesicle sorting is mediated by the N-terminus and Transmembrane domains
O	Oeyen	Eline	PF03.07	Isolation and characterization of urinary exosomes
	Ofield	Mark	PF04.02	Oral cancer EVs contain miRNA capable of promoting protumourigenic fibroblast activation
	Osteikoetxea	Xabier	LBP.19	Acoustic Electrospray Mass Spectrometry of Extracellular Vesicle Lipids
P	Pablo Martinez Rojas	Pedro	PT11.12	Tetraspanin CD63 in exosomes derived from human monocytes participates as co-stimulatory molecule in the immunological synapse during dengue virus infection
	Pal	Anoop	IP.02	Development of an integrated methodology for extracellular vesicle purification, characterization and linking biophysical properties to biological function.
	Pállinger	Éva	PF08.04	Identification of embryo competence by flow cytometric analysis of nucleic acid-containing MVs in embryo culture media
	Palm Hansen	Eline	LBP.69	Characterization of extracellular vesicles released from parasitic nematodes with different host adaptation
	Palviainen	Mari	PT07.02	Non-targeted metabolite profiling reveals differences in the lipid composition of extracellular vesicles derived from prostate cells grown in traditional 2D cultures versus in 3D bioreactor
	Paolini	Lucia	PT05.03	Probing nanosized extracellular vesicle (EV) populations by surface enhanced Raman spectroscopy (SERS)
	Park	Kyong-Su	PF05.09	Outer membrane vesicles from Escherichia coli can contribute to cardiac dysfunction in sepsis
	Patel	Divya	PT02.10	Assessing cell culture parameters for enhanced bioactive extracellular vesicle production
	Paulaitis	Michael	LBP.16	Role of exosomal miRNAs in RPE cell mitochondrial dysfunction in AMD
	Penfornis	Patrice	PS01.08	Role the central carbon metabolism pathway in tumor stromal support – a study using extracellular vesicles of mesenchymal stem cells from normal and osteosarcoma participants.
	Pereira	Mandy	LBP.17	Salivary EV expression in traumatic brain injury
	Picciolini	Silvia	PT05.04	Multiplexing characterization of neuronal exosomes from human plasma by Surface Plasmon Resonance imaging
	Pink	Ryan	LBP.03	EVucation: Freely available interactive public engagement tools for scientists to communicate the role Extracellular Vesicles in the body and healthcare.
	Piontek	Melissa	PT05.06	Membrane vesicles – Examination of biophysical properties with atomic force microscopy
	Plattfaut	Corinna	PT03.11	Characterization of extracellular vesicles from different tumor cell lines
	Pokarel	Deep	PT04.07	Extracellular vesicles confer a complex multidrug resistance and survival profile in cancer through the transfer of drug efflux capacity, drug sequestration, metastasis, altered tissue biomechanics and immune evasion .
	Polakovicova	Iva	PT10.03	MicroRNA-335-5p is expressed in gastric cancer derived extracellular vesicles and modulates the invasiveness of gastric cancer cells
	Power	Jennifer	PT04.06	Evaluation of drug resistance transfer via extracellular vesicles in human ovarian cancer cells
	Pugsley	Haley	PT11.09	Identifying exosome binding and internalization in blood cell subsets by multispectral imaging flow cytometry
	Puhka	Maija	PF03.02	Development and testing of EV- and prostate cancer specific monoclonal antibodies
	Puhka	Maija	PT06.09	Urine extracellular vesicles transcriptome in diabetic kidney disease
	Pulliam	Lynn	PF07.02	Activated monocyte-derived exosomes stimulate adhesion molecules and cytokines in human brain endothelial cells: Role of exosomes in monocyte brain migration
	Pulliam	Lynn	LBP.62	Blood neuron-derived exosomes as biomarkers of cognitive impairment in HIV infection

Abstract Directory

Alpha	L Name	F Name	Pres. Number	Presentation Title
	Pyo Kim	Kwang	PT10.08	Quantitative proteomics of exosome derived from isogenic metastatic and non-metastatic breast cancer in mouse model reveal differential expression of intravasation factors
R	Reiner	Agnes	PT05.02	Magnetic nanoparticle-enhanced surface plasmon resonance biosensor for extracellular vesicle analysis
	Reis Sobreiro	Mariana	PT01.04	Amoeboid cancer cells shed extracellular vesicles enriched with nuclear derived material
	Reithmair	Marlene	PF05.10	Characterization of Exosomal miRNA Profiles in Patients with Sepsis and Septic Shock
	Renner	Tyler	PT08.04	Single-Particle Characterization: Discriminating Enveloped Viruses and Extracellular Vesicles by Flow Virometry
	Ribault	Alexandre	PT03.07	Exosomes derived from human Mesenchymal stem cell accelerate wound healing in a mouse model of radiation-induced injury
	Rodrigues	Dorival	PF03.04	Plasma extracellular vesicles as source of biomarkers for treatment response of patients with head and neck squamous cell carcinoma
	Rodriguez-Moreno	Marta	PF03.01	Identification of noninvasive prostate cancer biomarkers by miRNA deep sequencing analysis of urinary extracellular vesicles
	Roh	Tae-Young	PF01.02	Isolation and characterization of small RNAs in the extracellular vesicles from washed stool samples for colorectal cancer diagnosis
	Ruivo	Carolina	PF06.08	Pancreatic cancer ExoNet
S	Saá	Paula	LBP.58	Characterization of extracellular vesicle (EV) concentration and size distribution following pathogen inactivation treatment of platelet components
	Saari	Heikki	PS02.13	Extracellular vesicle-encapsulated oncolytic adenoviruses for enhanced therapeutic effect
	Sagaradze	Georgy	PT03.04	Evaluation of the Contribution of Extracellular Vesicles Secreted by Multipotent Mesenchymal Stromal Cells in MSC-mediated Regenerative Effects
	Sanchez	Vanesa	PF01.12	Chloride intracellular channel protein 4 (CLIC4) is a serological cancer biomarker released from tumor epithelial cells via extracellular vesicles
	Sánchez	Catherine	PF03.09	The content of circulating exosomes changes according to malignancy of prostate cancer and trigger phenotypical changes that may promote cancer progression and metastasis
	Sanden	Mathilde	PT05.10	Novel triggering threshold strategy for discovery of rare microvesicle phenotypes on flow cytometers dedicated to small particle analysis
	Sandhu	Jagdeep	LBP.49	Metabolomic analysis of glioblastoma cell-derived extracellular vesicles
	Sanwald	Julia	PT08.05	Characterization of extracellular vesicles purified from HIV-1 Nef overexpressing HEK293 cell supernatants
	Saugstad	Julie	LBP.18	ExRNAs in Human Cerebrospinal Fluid are Biomarkers for Alzheimer's Disease
	Schedin	Troy	PS06.04	Extracellular vesicles have a functional role in the aggressive behavior of young women's and postpartum breast cancer
	Schuldner	Maximiliane	PT01.08	BAG6 regulates the release of a subgroup of endosomal-derived extracellular vesicles
	Seale	Tessa	LBP.55	Detection and Characterization of Large Oncosomes in Thyroid Cancer Cell lines
	Sedgwick	Alanna	PS04.13	Identification of a novel population of lipid-rich extracellular vesicles
	Shaffer	Jonathan	IP.05	Rapid isolation and miRNA profiling of intact exosomes in colorectal-cancer patients
	Shearn	Andrew	PS04.02	Methodological considerations for Nanoparticle Tracking Analysis (NTA) of neat biofluids obtained from cardiac surgery
	Shelke	Ganesh	LBP.45	Recipient cell organelle separation for EV uptake studies: Tracking of extracellular vesicles
	Shiba	Kiyotaka	PF02.06	Capturing EpCAM-positive extracellular vesicles by programmable bio-surface
	Shimoda	Asako	PF06.06	Glycan profiling analysis of extracellular vesicles from mesenchymal stem cells (MSCs) and osteogenic MSCs
	Shin	Sangeon	LBP.54	Extracellular Vesicle Derived from Propionibacterium acnes Is a Possible Causative Agent of Prostate Cancer via Over-expression of Androgen Receptor.
	Siljander	Pia	PS04.09	EV core – the world's first technology platform dedicated to extracellular vesicle isolation and analytics

Abstract Directory

Alpha	L Name	F Name	Pres. Number	Presentation Title
	Silverman	Judith	PF07.04	CNS-Derived Extracellular Vesicles are Heterogeneous and Adaptive to Age and Tissue of Origin
	Simon	Thomas	PT04.08	Direct effects of anti-angiogenic therapies on glioblastoma cells interactions with astrocytes via extracellular vesicles
	Singh	Prateek	LBP.47	Matrix stiffness and extracellular vesicle release
	Singh	Prateek	LBP.10	Nanocellulose filters for extracellular vesicle purification
	Singh	Prateek	PS03.01	Sweating the small stuff: Extracellular Vesicles from Sweat
	Siupa	Agnieszka	IP.15	Evaluating Limit of Detection for Fluorescence NTA measurements: Experiments With Model Systems and Fluorophores
	Smit	Kyra	PF01.05	miRNA profiling in uveal melanoma exosomes as a metastatic risk biomarker
	Smith	Rachel	PS05.15	Characterisation of inside-out erythrocyte microvesicles in sickle cell blood
	Snoek	Susanne	PS02.06	Delivery of membrane-bound CD39/CD73 by extracellular vesicles (EVs) for treatment of inflammatory disease
	Soares	Rodrigo	PF09.08	Extracellular vesicles releades by strains of Leishmania enriettii with different degrees of pathogenicity: extraction, purification and preliminary characterization
	Soekmadji	Carolina	PS06.11	The role of extracellular vesicles in advanced prostate cancer progression
	Soendergaard	Evo	PF04.06	Phenotyping and quantification of cascade-primed immune cells (CAPRI) and their EVs
	Somiya	Masaharu	LBP.44	Bioavailability of bovine milk-derived EVs for drug delivery application
	Sork	Helena	PT07.05	Comparative analysis of extracellular vesicle proteome and small RNA transcriptome reveals global abundance of RNA binding proteins but the relative depletion of miRNA related proteins and transcripts
	Soukup	Jakub	PT09.06	Flow cytometry analysis of blood microvesicles in patients with multiple sclerosis
	Suzuki	Shintaro	PF05.11	Functional properties of lung-tissue derived extracellular vesicles in a model of asthma
	Syed	Parvez	PF01.04	Surface Glycosylation Profiling of EVs Using Lectin-Nanoparticles
	Szvicsek	Zsuzsanna	LBP.53	Characterizing the extracellular vesicle production of stromal fibroblasts in colorectal cancer
T	Tachibana	Nobuhiko	PF06.04	PTEN controls exportation of membrane-bounded proteins including DSCAM and Megf10 via regulating exosome secretion pathway
	Tadokoro	Hiroko	LBP.39	Metabolomic profiling of breast cancer-derived extracellular vesicles : metabolic reprograming by interferon -gamma
	Takenaka	Tomoya	PS02.01	Evaluation of cellular uptake of exosomes during cancer treatment with gefitinib
	Taylor	Catherine	PS04.03	An Affinity-Based Method For Efficient Recovery Of Tumour-Derived EVs From Conditioned Media And Human Plasma That Can Be Used For Detection Of Actionable Mutations In Liquid Biopsy Applications
	Taylor	Jack	PT01.05	Discrete biogenic vesiculation pathways reside malignant and non-malignant breast cells
	Theng Lock	Lye	PS01.12	Economics and Quality Attributes of hMSC Production in Xeno-Free Bioprocessing Media
	Thom	Stephen	PF05.02	Carbon dioxide-induced oxidative stress: Microparticle production and inflammasome activation by neutrophils are linked
	Thom	Stephen	PF11.08	NOS1AP coded protein, capon, is required for leukocyte microparticle production and inflammasome activation in response to hyperglycemia
	Thomas	Rhodri	PT09.07	Enrichment of non-coding RNA-species in exosomes: potential biomarkers for Alzheimer's disease
	Totoń-Żurańska	Justyna	LBP.33	Exosomal miRNA in Hep2G cells stimulated by proinflammatory cytokines
	Toudic	Caroline	PF08.08	Role of the endogenous retroviral envelope glycoprotein Syncytin-2 in the uptake of placental exosomes by trophoblast and endothelial cells
	Turner	Maddison	PT07.12	Diabetic microenvironment alters circulating microparticle protein composition.
U	Umezu	Tomohiro	PT10.11	A role of exosomal miR-10a in bone marrow stromal cells obtained from patients with multiple myeloma
	Underhill	Ainsley	PT10.04	High-throughput screening to investigate mechanisms of exosome-driven planar cell polarity signaling
V	Vago	Riccardo	PF08.05	Embryo-endometrium cross-talk: characterization of extracellular vesicles from in vitro cultured human embryos
	Vago	Riccardo	PF08.01	Human seminal plasma exosomes carry key proteins for spermatozoa capacitation

Abstract Directory

Alpha	L Name	F Name	Pres. Number	Presentation Title
	Vaiselbuh	Sarah	PF01.07	Exosomes as Biomarkers in Pediatric Acute Lymphocytic Leukemia
	Vaiselbuh	Sarah	PF10.09	Leukemic-derived Exosomes Induce Paracrine and Autocrine Cell Proliferation in Pediatric Acute Lymphocytic Leukemia
	Valkonen	Sami	PT07.13	Compositional changes in aging platelet concentrate
	van Balkom	Bas	PF11.05	Mesenchymal stem cells from chronic kidney disease patients produce extracellular vesicles with increased angiogenic potential
	van der Meel	Roy	PS02.07	Synthetic lipid nanoparticles for combination treatment of prostate cancer
	Vargas	Amandine	PF05.12	Altered miRNA expression in neutrophil derived-exosomes in severe asthma
	Vazirisani	Forugh	PT08.13	Extracellular vesicles from Staphylococcus aureus and Staphylococcus epidermidis are associated with small RNA
	Veitch	Shawn	PS05.05	Diabetes affects extracellular vesicle content and function
	Vella	Laura	PT02.01	A rigorous method for exosome isolation from tissue.
W	Wadey	Rebecca	PS05.04	Adipocyte extracellular vesicles increase leukocyte attachment to vascular endothelial cells
	Walravens	Ann-Sophie	PS01.09	Cardiosphere-Derived Cell and Mesenchymal Stem Cell Extracellular Vesicles Contain Distinct RNA Cargo
	Walters	Patrick	PT01.03	In vivo biodistribution of CTX human neural stem cell derived exosomes delivered by various routes of administration
	Wang	Dekun	PT06.02	Proteomic identification of exosomal VDAC1: A potential urinary biomarker for detecting early renal fibrosis
	Webb	Robin	PF06.13	Benefits of human neural stem cell derived extracellular vesicles surpass those of mesenchymal stem cell derived vesicles in a murine embolic stroke model
	Webber	Jason	PF04.09	Heparan Sulphate Proteoglycans as regulators of exosome-induced stromal cell differentiation.
	Weber	Gerhard	LBP.06	Free Flow Electrophoresis allows preparation of EV fractions with high recovery and purity rates
	Wei	Jia	LBP.27	Placental trophoblast debris mediated feto-maternal signalling via small RNA delivery: implications for preeclampsia
	Weisshaar	Maria	PT11.04	Exosomes derived from human Autologous Conditioned Serum are nanocarriers for IL-6 and TNF-alfa
	Wen	Sicheng	PT07.01	Lipidomic profiles of exosomes and microvesicles from human mesenchymal stem cell
	Wibowo	Arief	PS05.09	Identification and Characterization of Exosomes derived from Blood Outgrowth Endothelial cells in oxidative stress conditions.
	Witczak	Justyna	PS05.11	Extracellular vesicles-associated and plasma Fatty Acid Binding Protein 4 (FABP4) fluctuations following bariatric surgery
	Won Hwang	Do	PS01.04	Convective exosome-tracing microfluidics for analysis of cell-non-autonomous neurogenesis
	Wyse	Brandon	PF08.06	Human Follicular Fluid-Derived Exosome (Folliculosome) Non-Coding RNA content is Associated with Ovarian Reserve
X	Xiang	Qinqin	PF05.03	Exosomal miR-185-5p modulates ADAMTS13 transcription in liver fibrosis
	Xu	Jing	PS06.07	Investigating the Involvement of Macroautophagy in Exosome Production
	Xu	Meifeng	PT03.03	Exosomes derived from GATA-4 overexpressing mesenchymal stem cells rejuvenate cardiomyocytes through transfer miRNAs to regulate the related signaling pathway
	Xu	Meifeng	PS05.10	Paracrine effect of GATA-4-modified mesenchymal stem cells on the angiogenesis is mediated by the transfer of miRs via exosomes
Y	Yagi	Yohsuke	LBP.24	Cerebrospinal fluid exosomal small RNA profiling by next-generation sequencing.
	Yang	Lifang	PT02.07	Exosome Isolation with Carbonate Treatment from Cell Culture Supernatant and Human Serum
	Yang	Lu	LBP.22	REACTIVE ASTROCYTES-DERIVED EXOSOMES PROMOTE NEUROGENESIS THROUGH WNT SIGNALING: IMPLICATION FOR PARKINSON'S DISEASE THERAPY
	Yang	Yoosoo	PS02.12	Virus-mimetic Fusogenic Exosomes for Direct Delivery of Integral Membrane Proteins to Target Cell Membranes
	Yeung	Vincent	PT01.06	Identifying intrinsic components that regulate the secretion of stroma-activating exosomes in prostate cancer
	Yong Park	Ho	PF01.11	Del-1 promotes the proliferation and migration of tamoxifen-resistant MCF7 cells

Abstract Directory

Alpha	L Name	F Name	Pres. Number	Presentation Title
	Yong Park	Ho	PF03.12	Exosomal Del-1 as a potent diagnostic marker for breast cancer: A prospective cohort study
	Yoon Kang	Ji	PT09.03	THE RATIO BETWEEN OLIGOMER TO MONOMER AMYLOID BETA IN NEURONAL EXOSOME EXTRACTED FROM PLASMA DISCRIMINATES ALZHEIMR'S PATIENT FROM NORMAL CONTROL
	York	Sara	PT08.06	Ceramide- and CD63-dependent trafficking of Epstein-Barr virus LMP1 to extracellular vesicles
	Yu	Ryan	LBP.67	Blueberry fruit nano vesicles
Z	Zhang	Liang	PT02.12	Purifying and molecular profiling extracellular vesicles (EVs) from various biological specimens
	Zhang	Qin	PF04.11	Exosomes from mutant KRAS colorectal cancer cells reprogram the metabolic state of recipient cells
	Zhang	Wei	PS04.05	High throughput qualitative and quantitative analysis of plasma-bound microvesicles
	Zhang	Xu	PF04.04	Exosomes derived from gastric cancer cells activate NF-κB pathway in macrophages to promote cancer progression
	Zhang	Yong-Liang	LBP.71	Ginseng polysaccharide changes level of immune-related miRNAs both in sow milk and piglet serum
	Zhang	Yong-Liang	PS03.04	Serum miRNAs level is affected by feeding bovine and porcine milk in newborn piglets
	Zhao	Kening	PF11.04	Novel cell wall remodelling functions of extracellular vesicles secreted by Saccharomyces cerevisiae
	Zheng	Lei	PT08.10	Differential diagnosis of pulmonary tuberculosis and lung cancer by microRNAs in serum extracellular vesicles
	Zheng	Lei	PT10.07	Exosomal miRNAs derived from mesenchymal phenotype lung cancer cells promote epithelial–mesenchymal transition and serve as potential biomarkers for lung cancer
	Zhong	Wenwan	LBP.11	Porous nanomaterials for exosome capture and in situ processing
	Zhong	Zhenyu	PF02.07	Plasma Microvesicles/Exosome enrichment and purification by a block-copolymer based method
	Zhou	Yu	PT03.05	Neural stem cell-derived exosomes protect the enteric nervous system and promote intestinal motility after necrotizing enterocolitis

ISEV Sponsor Directory

AcouSort AB — Tabletop #09

+46722032534
mikael.evander@acousort.com

AcouSort provides solutions for automated sample preparations using acoustic forces. The company has developed a platform technology utilizing Acoustophoresis, a novel contact-free method for performing separation, enrichment and washing of biological cells, vesicles, bacteria or other particles. AcouSort develops benchtop research instruments and proprietary bioanalytical/clinical applications based on acoustophoresis.

Apogee Flow Systems Ltd — Tabletop #02

Unit 7 Grovelands
Boundary Way
Hemel Hempstead
+44 208 123 6831
info@apogeeflow.com

Flow cytometers for small particle applications. The new 'Micro-PLUS' flow cytometer is capable of measuring weakly fluorescent particles and particles which scatter 1000x less than 200nm latex beads. The amount of scattered light falls rapidly with particle size so exceptional performance is required for extracellular vesicle and virus applications.

BD — Tabletop #16

Becton, Dickinson and Company
1 Becton Drive
Franklin Lakes
07417-1880, New Jersey
(201) 847-6800

BD is a global medical technology company that is advancing the world of health by improving medical discovery, diagnostics and the delivery of care. BD's associates work with customers to help enhance outcomes, lower health care delivery costs, increase efficiencies, improve health care safety and expand access to health.

Beckman Coulter Life Sciences — Tabletop #12

5350 Lakeview Parkway S Drive
Indianapolis, IN 46268
(800) 742-2345

Beckman Coulter develops, manufactures and markets products that simplify, automate and innovate complex biomedical testing. Our products have been making a difference in peoples' lives by improving the productivity of scientists, supplying critical information for improving patient health and dellvering trusted solutions for research and discovery. Beckman.com/home

BioCytex — Tabletop #21

140 Chemin de l'Armée d'Afrique
Marseille
+33 4 96 12 20 40
http://www.biocytex.fr
lisa.vigneron@biocytex.fr

BioCytex is specialized in standardized and quantitative flow cytometry technology. Our domain of expertise is platelets as well as microparticles (Megamix-Plus reagents & MP-Count Beads).

Cell Guidance Systems — Tabletop #03

Moneta Building
Babraham Research Campus
Cambridge, England CB22 3AT
01223967316
michael.jones@cellgs.com

Cell Guidance Systems is leading the way in the development and manufacture of reagents for microvesicle research. The company introduced its popular Exo-Spin size exclusion column kits in 2013. We now offer technologies to detect (TRIFic, antibodies), track (ExoFLARE) and count (ZetaView) microvesicles.

Codiak BioSciences — Lanyard Sponsor *not exhibiting

19 Presidential Way, Suite 204
Woburn, MA 01801
(617) 949-4100

Codiak BioSciences is developing a proprietary pipeline of novel, targeted medicines for diseases with unmet medical need. We are building a novel delivery platform by expanding upon natural exosome tropism, and capitalizing on the unique ability of exosomes to deliver nucleic acids, proteins, lipids, and small molecules across biological membranes.

Cosmo Bio Co. Ltd — Tabletop #20

2-20, Toyo 2-chome, Koto-ku,
Toyo-Ekimae Bldg.
Tokyo, Tokyo 135-0016
+81-3-5632-9617
export@cosmobio.co.jp

Cosmo Bio Japan offer you a wide range of research reagents and research instruments. We have been supporting and inspiring the life science research community for over 30 years. We introduce unique antibodies which are suitable for isolation of exosome specifically detect CD9, CD63 and CD81.

ISEV Sponsor Directory

Evox Therapeutics Limited — Tabletop #08

King Charles House
Park End Street
Oxford, England OX1 1JD
02038412631
enquiries@evoxtherapeutics.com

Evox is harnessing and engineering the natural delivery capabilities of extracellular vesicles to develop an entirely novel class of biotherapeutics. By combining groundbreaking exosome technology from Oxford University and the Karolinska Institute we aim to revolutionise treatments for a broad range of severe diseases, with profound implications for human health.

HansaBioMed Life Sciences — Tabletop #19

Akadeemia Tee 15A
Tallinn
+372 6561996
info@hansabiomed.eu

HansaBioMed Life-Sciences LLC is a leading Company entirely dedicated to research and development of products in the field of Extracellular Vesicle Sciences. Unique HansaBioMed products are our Lyophlized Exosome Standards and the ExoTEST kit, a double sandwich ELISA for exosome quantification from human biofluids or cell media.

Hitachi Chemical Diagnostics, Inc. — Tabletop #04

630 Clyde Court
Mountain View, California 94043-2239
(800) 233-6278
info@hcdiagnostics.com

Hitachi Chemical Diagnostics, headquartered in Mountain View, CA, is a global leader of FDA-cleared and CE marked multiplex in vitro allergy diagnostic systems and pioneering advancements in the healthcare industry as recently launched ExoComplete, a complete system for exosome collection to mRNA purification, a "Research Use Only" product.

Icahn School of Medicine at Mount Sinai, Cardiovascular Research Center (CVRC) — Friend of ISEV *not exhibiting

1 Gustave L. Levy Place, Box 1030
New York, NY 10128
212-824-8904
Julie.lambert@mssm.edu
http://icahn.mssm.edu/

The Cardiovascular Research Center (CVRC), housed in 25,000 square feet of space in the Leon and Norma Hess Center for Science and Medicine, is located at the Icahn School of Medicine at Mount Sinai. The Center provides an interactive environment for scientists and physician-scientists pursuing research elucidating molecular mechanisms of heart failure and ventricular dysfunction. The Center currently comprises 15 principal investigators and more that 70 postdoctoral fellows, research scientists, technicians and students. Collectively, their laboratories cover a broad range of research interests such as gene therapy, regenerative medicine, tissue engineering, novel vector design, electrophysiology, exosomes, and translational research. The faculty has a broad range of interests which they pursue in state-of-the- art facilities. We have taken a leadership position in gene therapy for cardiovascular diseases by putting together a team with expertise in vector development, relevant pre-clinical models and clinical trials geared to seamlessly move therapeutic targets into clinical trials.

IZON Science Ltd — Tabletop #06

8c Homersham Place
Burnside
Christchurch, Canterbury 8053
+1-617-945-5936
enquiries@izon.com

Izon Science is the world leading manufacturer of EV separation and characterisation tools. Its qEV systems using SEC columns have rapidly become the EV separation method favoured by experts. Izon's TRPS measurement system is the only accurate, standardisable and practical method of measuring complex nano-bio particles, particularly EVs.

Malvern Instruments — Tabletop #07

117 Flanders Road
Westborough, Massachusetts 01581
(508) 768-6400
sales.us@malvern.com

Malvern's materials and biophysical characterization technology and expertise enables scientists and engineers to investigate, understand and control the properties of dispersed systems. Used in research, development and manufacturing, Malvern's instruments provide information that helps accelerate research and product development, enhance and maintain product quality and optimize process efficiency.

MBL International — Tabletop #10

(800) 200-5459
sales@mblintl.com

Established in 1993, MBL International Corporation is a leading life science company focused on providing high quality, innovative, solutions-based products for both life science research and clinical diagnostics. Our products are used widely in academic research institutions, pharmaceutical and biotechnology companies, government agencies as well as hospital and reference laboratories.

ISEV Sponsor Directory

Norgen Biotek Corp. — Tabletop #14

3430 Schmon Parkway
Thorold, Ontario L2V 4Y6
(905) 227-8848
info@norgenbiotek.com

Norgen Biotek provides researchers with innovative kits for Sample Collection/Preservation [cf-DNA from Blood/Plasma/Serum, Urine, Saliva], Molecular Diagnostics (MDx), and microRNA/RNA/DNA/Protein Purification. Our kits feature exceptional quality, ease-of-use and sensitivity. Norgen provides researchers worldwide with the tools to address any sample preservation and preparation challenge.

Oxford Nanoimaging Ltd — Tabletop #01

King Charles House(2nd Floor)
Park End St
OXFORD, England OX1 1JD
020 3319 2170
contact@oxfordni.com

Oxford Nanoimaging manufacture and sell the latest generation of single molecule microscopes, capable of super-resolution imaging through localisation techniques.

Particle Metrix Inc — Tabletop #05

PMX Inc
Mebane, North Carolina 27302
(919) 667-6960
linz@particle-metrix.com

Particle Metrix offers the most versatile instrument to measure the size, concentration, and zeta potential of EMV in the range of 40-1000 nm. We offer statistically significant data, interrogating up to 400 times the volume in 30-second measurement versus our closest competitor. Two second videos and 11-position scanning.

Sysmex Corporation — Tabletop #18

4-4-4 Takatsukadai, Nishi-ku
Kobe, Hyogo 651-2271
+81-78-992-6040

Sysmex supports human health. We are an integrated company, developing and manufacturing the instruments, reagents and software that are needed for in vitro diagnostics, along with the necessary sales and support networks.

System Biosciences (SBI) — Tabletop #15

2438 Embarcadero Way
Palo Alto, CA 94303
+1-650-968-2200

System Biosciences (SBI) provides novel technologies for Exosome Research. Our flagship ExoQuick and ExoQuick-TC have over 300 publications, and we recently released ExoQuick PLUS and ExoMAX Opti Enhancer for high yield, high purity isolation. We offer innovative exosome quantitation and engineering tools, and popular NGS, Mass Spec and Nanosight services.

Thermo Fisher Scientific — Tabletop#11

(800) 955-6288

Thermo Fisher Scientific is the world leader in serving science. Our mission is to enable our customers to make the world healthier, cleaner and safer. Through our Invitrogen and Gibco brands, we help customers accelerate innovation and enhance productivity.

Wako Chemicals USA — Tabletop #17

1600 Bellwood Road
Richmond, Virginia 23237
(877) 714-1920
labchem@wakousa.com

Wako Chemicals USA is a wholly owned subsidiary of Wako Pure Chemical Industries, Ltd., Osaka, Japan. The Laboratory Chemicals Division strives to supply new and unique reagents to scientists in all fields of research. Following over nine decades of tradition, we supply high quality reagents for your life's research.

Exhibit Hall Floor Plan

Frontenac Room