



INTERNATIONAL SOCIETY FOR  
EXTRACELLULAR VESICLES

# ANNUAL MEETING ISEV 2019

Miyakomesse  
Kyoto, Japan

Education Day April 24  
Meeting April 25-28

[ISEV.org](http://ISEV.org)

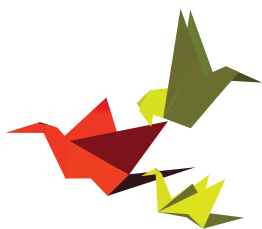
FINAL PROGRAM





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## WELCOME FROM ISEV PRESIDENT

Dear ISEV2019 Attendees,

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 ISEV2019. For the very first time, the ISEV annual meeting is being held in the Asia-Pacific region and we are proud to hold this in the beautiful city of Kyoto, Japan. The ISEV2019 IOC has worked hard to prepare an interesting and dynamic program that includes educational sessions, along with the latest advances of the field - representing both fundamental and clinical aspects.

In 2019, we had a record number of abstract submissions for the annual ISEV meeting and this reflects the growing recognition of the field and the numbers of researchers now working on extracellular vesicles.

ISEV2019 begins with the Education Day, covering major topics in EV research and a chance to hear from experts reviewing these. The main meeting features outstanding plenary speakers presenting on major topics of interest for EV researchers. The program has been extended to four concurrent sessions on two days of the meeting to accommodate further oral presentations. As with previous ISEV annual meetings we continue to provide coffee and lunches to encourage networking between participants.

I would like to thank the members of the IOC, led by Hidetoshi Tahara, for their efforts in making ISEV2019 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. The support of Talley Management Group is also acknowledged, and we also 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 27th April at 19:00 which is always a great opportunity to network and socialize with attendees of the meeting.

I hope you enjoy all that ISEV2019 has to offer and wish you all the best with your EV research that follows!

Regards,



Andy Hill  
President, ISEV

## WELCOME FROM INTERNATIONAL ORGANIZING COMMITTEE CHAIR

Dear Colleagues,

Welcome to the 8th Congress of the International Society for Extracellular Vesicles (ISEV2019) in Kyoto, Japan. This annual meeting is the first meeting held in the Asian-Pacific region. It is an exciting opportunity to be a part of an annual meeting that has proven to be a valuable resource for colleagues and scientists from around the world that gather together for the most unique educational experience in Extracellular Vesicles. The congress will cover all basic biological aspects of exosomes, microvesicles, apoptotic bodies and synthetic vesicles, as well as clinical and translational research. It is a unique occasion to interact with experts and top-researchers, to get new ideas, but also, to contribute in the development of this growing and passionate field with opportunities to impact in different socio-economical areas including the food industry, environment and, importantly, clinics.

In collaboration with the international organizing committee and the ISEV Board of Directors, we have built an effective and dynamic program that includes educational sessions for beginners, along with the latest advances of the field touching both fundamental and clinical aspects. The program offers ample opportunities to engage speakers and colleagues in both large and small settings, appealing to every learning style and the customized education you want. Our speakers present the latest research and advances, coupled with their expert interpretation of how this information applies to your own research and practice. The Exhibition is an opportunity to interact closely with companies leading the development of new tools for studying Extracellular Vesicles.

This year, we have more than 700 abstracts including late-breaking abstracts and more than 40 sponsorships, the best ever. I greatly appreciate your contributions. We are also planning an exciting Networking event with Japanese OMOTENASHI feelings. We hope you enjoy the annual meeting in Kyoto.

The congress is being held in a convention centre in Kyoto, one of Japan's largest cities. Several temples, shrines and other historical structures offer a rare link between modern life in the city and its ancient past. Kyoto offers a sensational cultural experience with the chance to see Geishas, Sumo Wrestling, and sublime Zen gardens.

Your participation means a lot to me, to your colleagues and to the ISEV community. Thank you for your continued support, and I welcome you to Kyoto.

Sincerely yours,



Hidetoshi Tahara  
ISEV2019 International Organizing Committee Chair



**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**

*President*



Andrew Hill  
*Australia*

*Treasurer*



Uta Erdbruegger  
*United States*

*Executive Chair,  
Education*



Edit Buzas  
*Hungary*

*Past President*



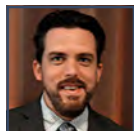
Jan Lötvall  
*Sweden*

*Secretary General*



Marca Wauben  
*The Netherlands*

*Executive Chair,  
Science/Meetings*



Kenneth Witwer  
*United States*

*Executive Chair,  
Communications*



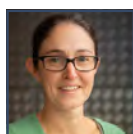
Susmita Sahoo  
*United States*

*Chair International  
Organizing Committee*



Hidetoshi Tahara  
*Japan*

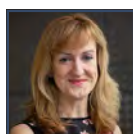
**MEMBERS AT LARGE**



Cherie Blenkiron  
*New Zealand*



Raghu Kalluri  
*United States*



Lorraine O'Driscoll  
*Ireland*



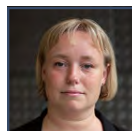
Alissa Weaver  
*United States*



Lei Zheng  
*China*



Juan Falcón Pérez  
*Spain*



Malene Møller  
Jørgensen  
*Denmark*



Ana Claudia  
Torrecilhas  
*Brazil*



Hang Hubert Yin  
*China*

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Rienk Nieuwland  
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Dolores Di Vizio  
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Carolina Soekmadji  
*Australia*



## 2019 INTERNATIONAL ORGANIZING COMMITTEE MEMBERS

*Chair*



**Hidetoshi Tahara**  
*Hiroshima University Institute of  
Biomedical & Health Sciences  
Japan*



**Hang Hubert Yin, PhD**  
*Tsinghua University  
China*



**Marca Wauben, PhD**  
*Utrecht University  
The Netherlands*



**Susmita Sahoo, PhD**  
*Mount Sinai School of Medicine  
United States*



**Andrew Hill, PhD**  
*La Trobe University  
Australia*



**Juan Falcón Pérez, PhD**  
*CIC bioGUNE  
Spain*



**Mariko Ikuo, PhD**  
*Graduate School of  
Biomedical Sciences  
Japan*



**Takahiro Ochiya, PhD**  
*National Cancer Center  
Research Institute  
Japan*



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



**Kazunari Akiyoshi, PhD**  
*Kyoto University  
Japan*



**Masahiko Kuroda, PhD**  
*Tokyo Medical University  
Japan*



**Tang-Long Shen, PhD**  
*National Taiwan University  
Taiwan*



**Cherie Blenkiron, PhD**  
*University of Auckland  
New Zealand*



**Kenneth W. Witwer, PhD**  
*Johns Hopkins University  
United States*



**Nobuyoshi Kosaka, PhD**  
*National Cancer Center  
Research Institute  
Japan*



**Yong Song Gho, PhD**  
*POSTECH  
Korea*



**Edit Buzas, PhD**  
*Semmelweis University  
Budapest, Hungary*



**Kyoko Hida, PhD**  
*Hokkaido University  
Japan*



**Ryou-u Takahashi, PhD**  
*Hiroshima University  
Japan*



**Yoshinobu Takakura, PhD**  
*Kyoto University  
Japan*



**Lei Zheng**  
*Southern Medical University  
China*

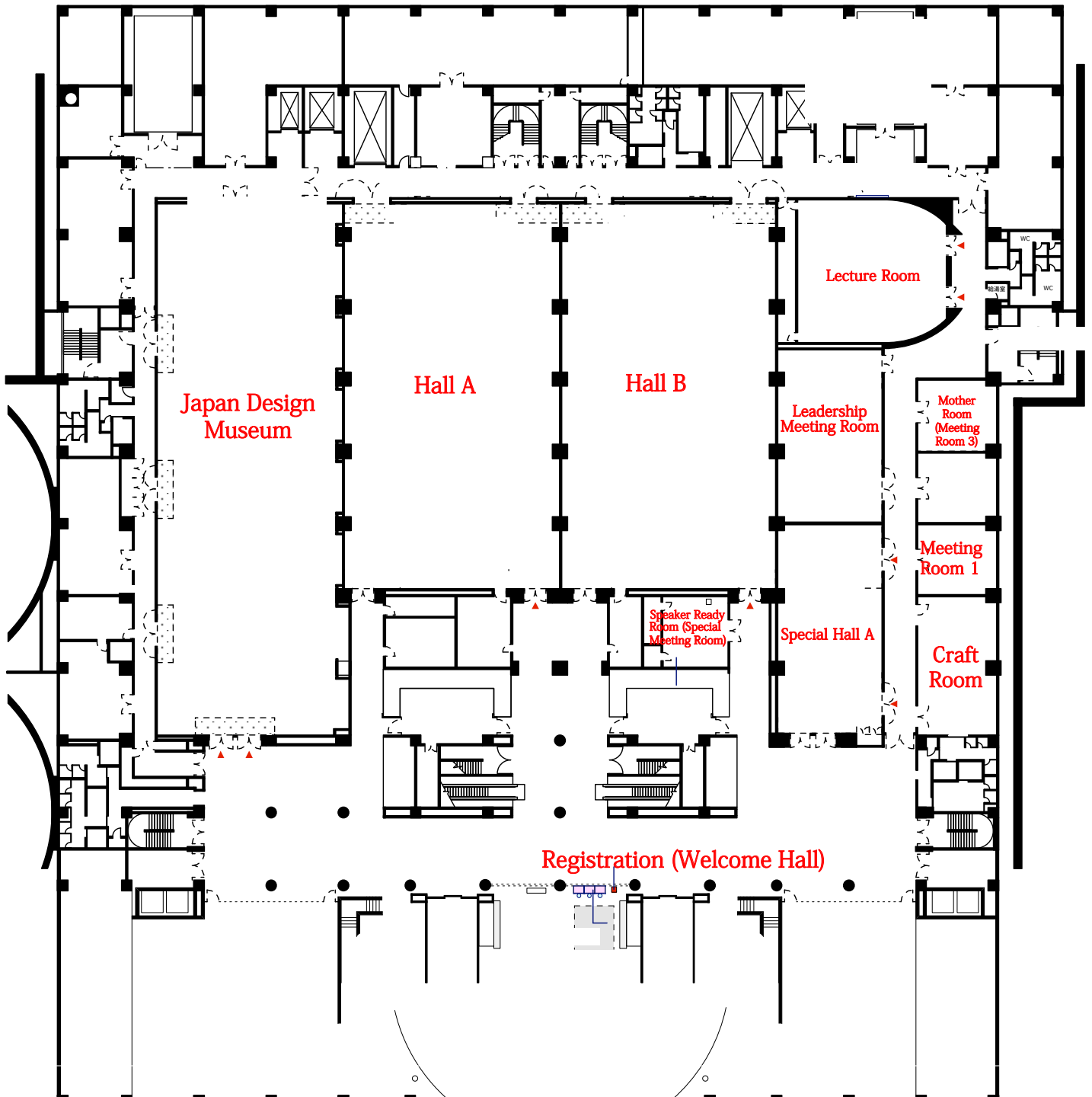


**Sai-Kiang Lim, PhD**  
*A\* STAR Singapore  
Singapore*



# MIYAKOMESSE FLOOR PLAN

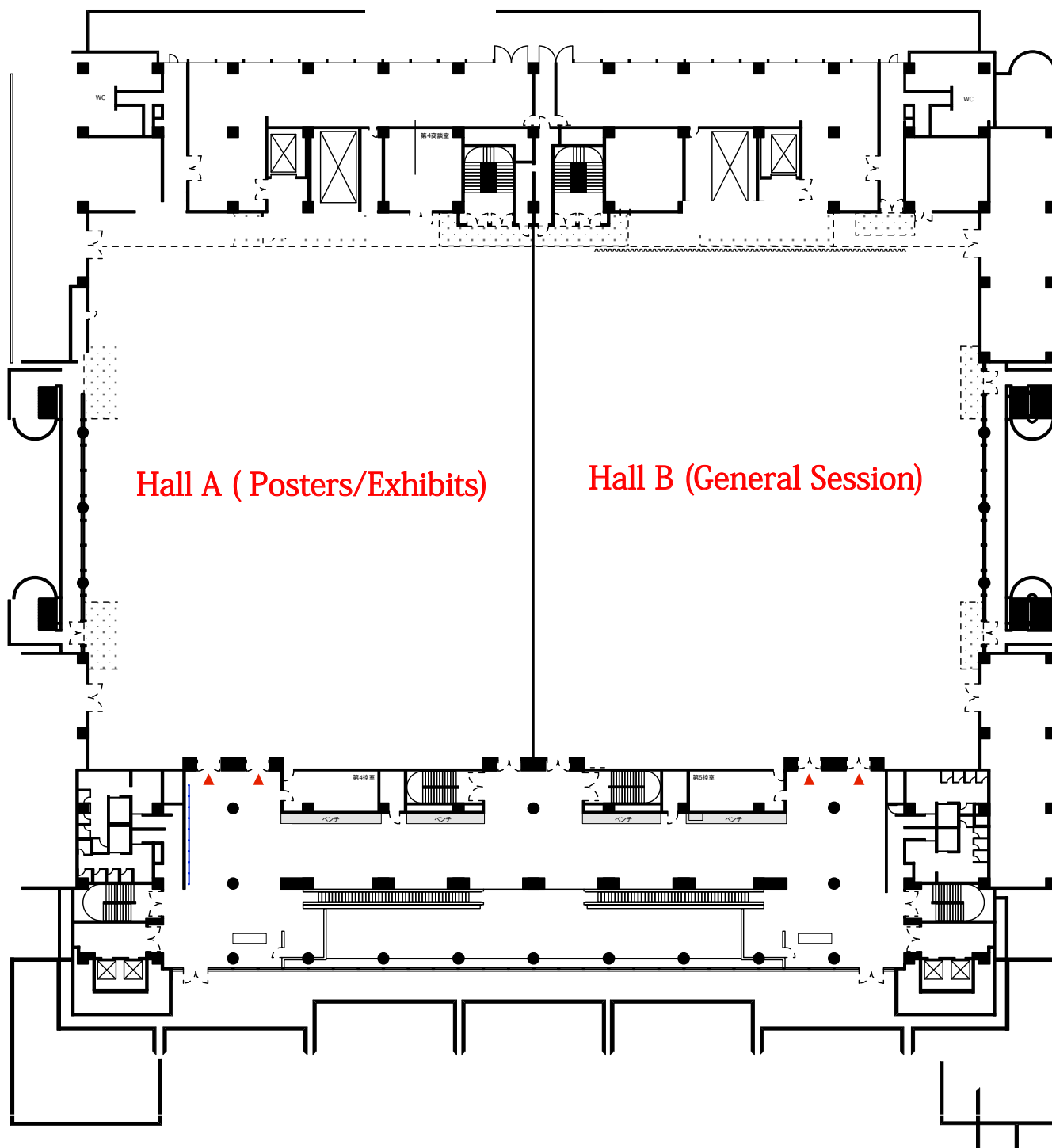
Level B1 (Lower Level)





# MIYAKOMESSE FLOOR PLAN

Miyako Messe Floor Plan  
Level 3 (Upper Level)







# ACKNOWLEDGEMENTS

ISEV gratefully acknowledges the support of the 2019 Annual Conference from our Sponsors:

## PLATINUM



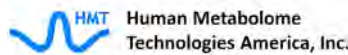
## GOLD



## SILVER



## BRONZE



## EXHIBITORS



## LANYARD SPONSOR



## MUGS & PENS SPONSOR



## TOTE BAG SPONSOR



# GENERAL INFORMATION

## ABSTRACTS

Abstracts for plenary, parallel, and poster sessions are included in the Abstract Book, which is available for download from the conference website:  
<https://www.isev.org/page/ISEV2019>.

## ISEV GENERAL ASSEMBLY

Members are strongly encouraged to attend the General Assembly on Saturday 27 April from 8:30-9:30 in Level 3, Hall B.

## CONFERENCE REGISTRATION / INFORMATION DESK

The ISEV Annual Meeting Registration/Information Desk, located on Level B1, Welcome Hall, will be open and staffed as follows:

Wednesday 24 April	7:30 - 17:30
Thursday 25 April	8:00 - 18:00
Friday 26 April	8:00 - 18:00
Saturday 27 April	8:00 - 17:00
Sunday 28 April	8:00 - 12:45

## EVALUATIONS

At the end of the ISEV Annual Meeting, you will receive a notification to complete an evaluation through our Meeting App. ISEV values your feedback and you are strongly encouraged to complete the evaluation as this will assist in developing future conferences.

## WIFI INFORMATION

COMMON AREAS:	EXHIBITION HALL:
ID: <b>Miyakomesse</b> No password	ID: <b>isev</b> Password: <b>isev2019</b>

## 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, on Level 3, Hall A, as they are an integral part of the meeting.

Thursday 25 April	9:30 - 18:30
Friday 26 April	9:30 - 18:30
Saturday 27 April	9:30 - 18:30

## MEETING APP

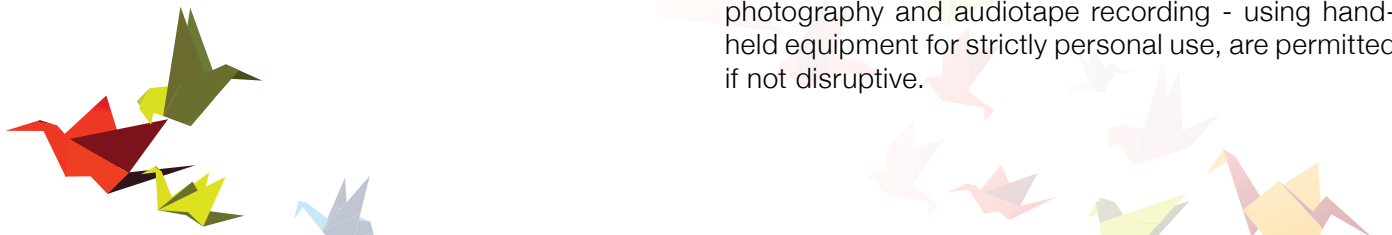
ISEV is pleased to announce the 2019 Annual Meeting App! The App is exclusively available for registered attendees. To add the App to your mobile device, search for "ISEV Events" from iTunes or Google Play. Click on ISEV2019. Click create account, and enter ISEV2019 for your event code. Enter your first name, last name, and email address to create your account. You will be e-mailed a password in the case that you need to log back in.

## NAME BADGES

Your badge serves as your admission to all meeting events. During the events, your name badge must be worn at all times. For security reasons, persons without badges will not be permitted to attend events. Please do not forget to wear your name badge to the Networking Reception, taking place at the Westin on Saturday night.

## 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 Level 3, Hall A.

Authors/Presenters' please note: ISEV will not be responsible for removing and/or returning posters. Poster Presenters must remove their posters by 17:00 on Saturday 27 April.

### NETWORKING EVENT

The ISEV2019 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!

The Networking Reception will take place on Saturday 27 April starting at 19:00 in the Ballroom at the Westin Miyako Kyoto. Your badge will be your ticket into the event, so be sure to wear it to the Westin!

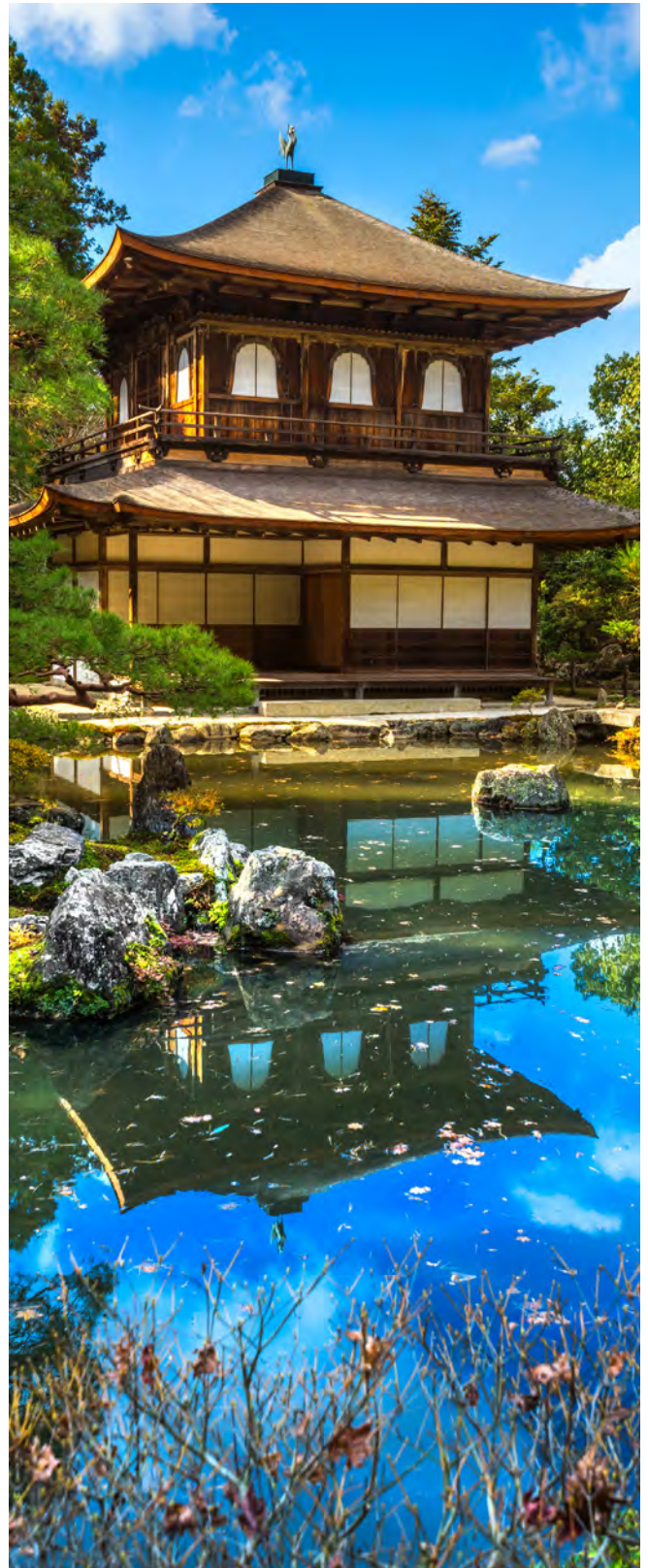
### SOCIAL MEDIA

Find out what is happening live at the meeting by following the ISEV2019 twitter team @ISEV.org. We want to hear from you so join in on the conversation by tagging your tweets with #ISEV2019. If you are sitting in one session and wondering what you're missing in another why not tweet about it?

### SPEAKER READY ROOM

To avoid any delays in presentations, speakers are required to check in to the Speaker Ready Room at least two hours prior to their presentation. The room is located on Level B1, Special Meeting Room. The Speaker Ready room will be available during these hours:

Wednesday 24 April	7:30 - 17:00
Thursday 25 April	8:00 - 17:00
Friday 26 April	8:00 - 17:00
Saturday 27 April	8:00 - 17:00
Sunday 28 April	8:00 - 11:00



## PLENARY SPEAKERS



**Yong Song Gho, PhD**

Yong Song Gho, PhD is a full professor at the Department of Life Sciences, POSTECH, Pohang, South Korea. After his B.S. and M.S. in the Department of Chemistry at Seoul National University, South Korea, he got his Ph. D. from Department of Biochemistry and Biophysics, University of North Carolina, Chapel Hill, USA. He has worked in the field of 'Extracellular Vesicles and Exosomes' since year 2,000 and has 81 extracellular vesicles-related publications and more than 53 registered patents. He was 'Founding Board Members of ISEV and former ISEV 'Executive Chair of Education', and has served as 'Editors-in-Chief of Journal of Extracellular Vesicles' since 2012. In 2009, he found KSEV (Korean Society for Extracellular Vesicles) and is the president of KSEV. His group ran EVpedia: community web-portal of extracellular vesicles research-more than 20 million accesses from worldwide 2,384 EVpedia community members.



**Kazunori Kataoka, PhD**

Kazunori Kataoka, PhD is a Professor at the Policy Alternatives Research Institute, The University of Tokyo, and the Director General of the Innovation Center of NanoMedicine (iCONM) at the Kawasaki Institute of Industrial Promotion. He obtained his PhD degree in polymer chemistry in 1979 from The University of Tokyo. He was an Assistant Professor from 1979 to 1988, and an Associate Professor from 1988 to 1989, at The Institute of Biomedical Engineering, Tokyo Women's Medical College. In 1989, he became Associate Professor at the Department of Materials Engineering in the Tokyo University of Science until 1994, when he was promoted to Professor. From 1998 to 2016, Dr. Kataoka was Professor of Biomaterials at the Graduate School of Engineering, The University of Tokyo, and from 2004 to 2016, he was also appointed Professor of the Division of Clinical Biotechnology at the Center for Disease Biology and Integrative Medicine in the Graduate School of Medicine of The University of Tokyo. In 2016, he took mandatory retirement from the Graduate School of Engineering/Graduate School of Medicine, The University of Tokyo, and moved to the current position. He has been appointed as Adjunct Professor at Eshelman School of Pharmacy, the University of North Carolina Chapel Hill since 2015, and as the Director, Biomedical Institute for Convergence at SKKU (BICS) at Sungyunkwan University, Korea since 2016. Dr. Kataoka has been recipient of several awards, such as the Humboldt Research Award and the Leo Esaki Prize. In 2017, he was elected to a Foreign Member of the National Academy of Engineering, U.S.A., and in 2018, a Fellow of the National Academy of Inventors, U.S.A.. His research aims are to develop functional polymeric nanosystems for controlling cellular functions in a desirable manner through the delivery of therapeutic agents, such as drugs and genes.



## PLENARY SPEAKERS



**Sai-Kiang Lim, PhD**

Sai-Kiang Lim, PhD graduated with B.Sc (Hons in Biochemistry) from National University of Singapore in 1985. She did her PhD thesis on the metabolism of thalassemic mRNA under Prof Lynne Maquat (Dept. of Human Genetics, Roswell Park Cancer Institute), and was awarded the Most Meritorious Student Research Award by Sigma Xi Society in 1989, NY State Predoctoral Fellowship (1989-91) and a PhD (Molecular Biology) from SUNY at Buffalo in 1992. In 1992, she started postdoctoral training on erythroid differentiation with Prof Frank Constantini (Dept. of Genetics and Development College of Physicians & Surgeons, Columbia University) first as a Cooley's Anemia Foundation Research Fellow (1992-94) and then a Leukemia Society of America Special Fellow (1994-96). After postdoctoral training, she led independent research groups at NUMI, NUS (1996-2001), Genome Institute of Singapore (2002-2007) and then Institute of Medical Biology (2007). Her research focus has always been disease-related with emphasis on the elucidation of the underlying molecular and cellular mechanisms in diseases and development of therapies. Her current major research interests are derivation of clinically useful cell types such as mesenchymal stem cells and insulin-producing cell lines from either human or mouse embryonic stem cells and the use of these cells or their products to treat or better understand human diseases.



**Takahiro Ochiya, PhD**

Takahiro Ochiya, PhD carried a councilor of Japanese Cancer Association. After he got Ph.D. in 1988 in Osaka University and then went to do a post-doc at La Jolla Cancer Research (SF Burnham Institute for Medical Research), CA, USA. Dr. Ochiya's lab focuses the development of novel animal models, methods, and strategies to study cancer development and metastasis. Especially, current focuses are siRNA- and microRNA-based therapy and exosome-mediated tumor metastasis. Dr. Ochiya has authored more than 330 peer-reviewed publications including 43 review articles, holds 26 Japan and 14 U.S. & Europe patents, and contributed to several books on stem cells, Extracellular vesicles, and RNAi medicine. Dr. Ochiya is a chief scientist of current Japan project of the Development of Diagnostic Technology for Detection of miRNA in Body Fluids (supported by NEDO/AMED).

**Mikiko C. Siomi, PhD**



Mikiko C. Siomi, PhD is one of the few female professors at University of Tokyo. At present, she takes lead for piRNA research on life science disciplines. She received her doctoral degrees in agricultural chemistry and medical sciences from Kyoto University and the University of Tokushima, respectively. Since 2012, she has been full professor at the Graduate School of Biological Sciences at the University of Tokyo. Her study lately mainly focuses on piRNA-mediated gene silencing occurring in *Drosophila* gonads. Currently she serves as the President of the RNA Society of Japan (2014–), and is a member of the Science Council of Japan (2015–).



# PROGRAM

WEDNESDAY 24 APRIL 2019

Education Day

Level B1, Hall A

- 09:00 – 09:10**      **Opening Remarks and Welcome**  
– *Edit Buzás*
- 09:10 – 09:15**      **MOOC II**  
– *Carolina Soekmadji*
- 09:15 – 10:35**      **Session 1: Isolation and Characterization of EVs**  
*Chair: Dave Carter*
- 09:15**      **Best Practise in EV Research: MISEV, Position Papers and EV Platforms**  
– *Kenneth Witwer*
- 09:35**      **Isolation of EVs**  
– *Cecilia Lässer*
- 09:55**      **EV Flow Cytometry: Do's and Don'ts**  
– *John Nolan*
- 10:15**      **Q and A**
- 10:35 – 10:55**      **Coffee Break**
- 10:55 – 12:15**      **Session 2: Biogenesis, Targeting, and Uptake of EVs**  
*Chair: Cecilia Lässer*
- 10:55**      **Biogenesis of EVs**  
– *Clotilde Théry*
- 11:15**      **Labeling, Targeting, and Update of EVs**  
– *Dave Carter*
- 11:35**      **In vivo Update of EVs**  
– *Pieter Vader*
- 11:55**      **Q and A**
- 12:15 - 13:45**      **Lunch**
- 13:45-15:05**      **Session 3: EV Biomarkers**  
*Chair: Juan Faclon Perez*
- 13:45**      **Protein-based EV Biomarkers**  
– *Marta Prieto-Vila*
- 14:05**      **RNA-based Biomarkers**  
– *Masahiko Koroda*
- 14:25**      **Glycomics, Lipidomics, and Metabolomics of EVs**  
– *Juan Falcon Perez*
- 14:45**      **Q and A**
- 15:05 – 15:25**      **Coffee Break**

Level B1, Japan Design Museum  
Room



# PROGRAM

WEDNESDAY 24 APRIL 2019

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<b>15:25 - 17:25</b>	<b>Session 4: Therapeutics Application of EVs</b> <i>Chair: Raghu Kalluri</i>
<b>15:25</b>	<b>Clinical Application of Stem Cell EVs</b> <i>– Mario Gimona</i>
<b>15:45</b>	<b>Bacterial EV-based Vaccines</b> <i>– Maria Kaparakis Liaskos</i>
<b>16:05</b>	<b>Engineering Exosomes for Therapy of Cancer</b> <i>– Raghu Kalluri</i>
<b>16:25</b>	<b>Therapeutic Application of Plant-based EVs –</b> <i>– Antonella Bongiovanni</i>
<b>16:45</b>	<b>Therapeutic Potential of Milk EVs</b> <i>– Martijn van Herwijnen</i>
<b>17:05</b>	<b>Q and A</b>
<b>17:25 - 17:30</b>	<b>Closing Remarks</b>

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



# PROGRAM

## THURSDAY 25 APRIL 2019 ISEV2019 Annual Meeting

08:00 – 09:00	<b>Registration</b>	<i>Level B1, Welcome Hall</i>		
09:00 – 09:45	<b>Welcome Remarks/Opening Ceremony</b>	<i>Level 3, Hall B</i>		
9:00	Welcome to ISEV2019			
9:18	Standardisation – Ken Witwer and Clotilde Théry			
09:45 – 10:30	<b>PLENARY SESSION 1: Welcome and Standardisation</b>	<i>Level 3, Hall B</i>		
	<i>Session Chairs: Andrew Hill; Hidetoshi Tahara</i>			
9:48	NanoCosmos: Extracellular Vesicles as Nano-sized Extracellular Organelles Delivering the Complex Messages between Cells and Organisms – Yong Song Gho			
10:30 – 10:45	<b>Networking Coffee Break</b>	<i>Level 3, Hall A</i>		
11:00 – 12:30	<b>PARALLEL SESSIONS</b>			
<i>Level B1, Hall B</i>	<i>Level B1, Lecture Room</i>	<i>Level 3, Hall B</i>	<i>Level B1, Hall A</i>	
<b>SYMPOSIUM SESSION 1: Cardiovascular Disease</b> <i>Session Chairs: J. Brian Byrd; Pia Siljander</i>	<b>SYMPOSIUM SESSION 2: Nucleic Acid Biomarkers in Human Disease</b> <i>Session Chairs: Robert Kitchen; Louise Laurent</i>	<b>SYMPOSIUM SESSION 3: EVs in Cancer Metastasis and Angiogenesis</b> <i>Session Chairs: Kyoko Hida; Alissa Weaver</i>	<b>SYMPOSIUM SESSION 4: EV Biogenesis I</b> <i>Session Chairs: Nobuyoshi Kosaka; Clotilde Théry</i>	
<b>OT01.01</b> – Extracellular Vesicles Mediate Neutrophil Cell Deployment from the Spleen Following Acute Myocardial Infarction – Naveed Akbar	<b>OT02.01</b> – miRNA exosomal biomarkers in brain derived and serum exosomes associated with neurodegenerative diseases – Lesley Cheng	<b>OT03.01</b> – Stem cell-derived extracellular vesicles increase cancer stem cell sensitivity to tyrosine kinase inhibitors through Akt/mTOR/PTEN combined modulation – Benedetta Bussolati	<b>OT04.01</b> – Linking the trafficking of CD63 and CD9 to their secretion mechanisms into extracellular vesicles – Mathilde Mathieu	
<b>OT01.02</b> – In vivo characterisation of endogenous cardiovascular extracellular vesicles and their response to ischaemic injury – Aaron Scott	<b>OT02.02</b> – Brain-derived extracellular vesicle microRNA signatures associated with in utero and postnatal oxycodone exposure: Implications for altered synaptogenesis – Gurudutt Pendyala	<b>OT03.02</b> – Exosomal nidogen 1 drives liver cancer metastasis by inducing secretion of tumor necrosis factor receptor 1 from activated lung fibroblasts – Judy Yam	<b>OT04.02</b> – Interdependency of the multiple endosomal sorting mechanisms influencing exosome biogenesis – Roberta Palmulli	
<b>OT01.03</b> – Enhanced fibrinolysis and altered extracellular vesicles after remote ischaemic preconditioning in non-diabetic coronary artery disease patients – Caroline Reddel	<b>OT02.03</b> – Development of a high-performance urine exosomal-mRNA signature for identification of bladder cancer – Sudipto Chakraborty	<b>OT03.03</b> – Cancer extracellular vesicles create functional heterogeneity of cancer-associated fibroblasts in gastric cancer – Yutaka Naito	<b>OT04.03</b> – A bright, versatile live cell reporter of exosome secretion and uptake – Bong Hwan Sung	

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





# PROGRAM

THURSDAY 25 APRIL 2019

<i>Level B1, Hall B</i>	<i>Level B1, Lecture Room</i>	<i>Level 3, Hall B</i>	<i>Level B1, Hall A</i>
<b>OT01.04</b> – Urinary Extracellular Vesicle Concentration, microRNA-155 Expression and Inflammatory Surface Marker Expression are Altered in Patients with Symptomatic Coronary Artery Disease – <i>Stephen Fitzsimons</i>	<b>OT02.04</b> – Genome-wide methylation profiling of extracellular vesicle DNA allows brain tumor classification – <i>Franz Ricklefs</i>	<b>OT03.04</b> – Extracellular vesicles from obese human adipose tissue alter the invasive and proliferative properties of prostate cancer cells – <i>Anca Dobrian</i>	<b>OT04.04</b> – An Explanation for ‘PS-Negative’ Extracellular Vesicles: Endogenous Annexin-A5 from the Cytosol Cover Externalized Phosphatidylserines on Plasma Membranes – <i>Olivier Blanc-brude</i>
<b>OT01.05</b> – Circulating extracellular vesicle-associated microRNAs as predictive biomarkers of cardiovascular complications in end-stage renal disease – <i>Dakota Gustafson</i>	<b>OT02.05</b> – Methamphetamine Use Disorder Alters Plasma Extracellular Vesicle Characteristics and MicroRNA Expression – <i>John Nolan</i>	<b>OT03.05</b> – Novel Vesicular Mediators of Peritoneal Metastases – <i>Shelly Loewenstein</i>	<b>OT04.05</b> – Identification of EV secretion associated gene involved in melanoma progression by microRNA-based screening – <i>Nobuyoshi Kosaka</i>
<b>OT01.06</b> – Live Tracking System for Endogenous Exosomes – <i>Jiang Chang</i>	<b>OT02.06</b> – Use of extracellular vesicles purified from lymphatic exudative seroma as surrogate markers of melanoma residual disease – <i>Susana García Silva</i>	<b>OT03.06</b> – Non-SUMOylated Cx43 changes the recruitment of cellular components into exosomes switching the role of these vesicles in metastatic melanoma – <i>María D. Mayán Santos</i>	<b>OT04.06</b> – Distinct mechanisms of microRNA sorting into cancer cell-derived extracellular vesicle subtypes – <i>Morayma Temoche-Diaz</i>

12:30 – 13:30

**Lunch**

*Level B1, Japan Design Museum*

**Posters/Exhibits**

*Level 3, Hall A*

## SPONSORED PRESENTATIONS:

15:30 - 15:45

**MiRTeL – Practical application of microRNA biomarker in Japan**  
– *Hidetoshi Tahara*

*Level B1, Craft Room*

16:00 - 16:15

**NeurExoSciences – TBD Title**  
– *Presenter TBD*

*Level B1, Craft Room*



**Arashiyama Bamboo Grove, Kyoto**

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



# PROGRAM

THURSDAY 25 APRIL 2019

13:30 – 15:00				
PARALLEL SESSIONS				
Level B1, Hall B 13:30 – 15:00	Level B1, Lecture Room 13:30 – 15:00	Level B1, Hall A 13:30 – 14:15	Level B1, Hall A 14:15 – 15:00	Level 3, Hall B 13:30 – 15:00
<b>ORAL WITH POSTER SESSION 1</b> <i>Session Chairs: Uta Erdbrügger; Kenneth Witwer</i>	<b>ORAL WITH POSTER SESSION 2</b> <i>Session Chairs: Kazunari Akiyoshi; Muller Fabbri</i>	<b>ORAL WITH POSTER SESSION 3</b> <i>Session Chairs: Michael Pfaffl; Ryuichi Ono</i>	<b>SYMPOSIUM SESSION 5: EVs in Infectious Diseases</b> <i>Session Chairs: Shilpa Buch; Vera Tang</i>	<b>SYMPOSIUM SESSION 6: EV Engineering I</b> <i>Session Chairs: Hang Hubert Yin; Siyang Zheng</i>
<b>OWP1.01</b> – miR-1227 Alters Extracellular Vesicle Shedding – <i>Andrew Chin</i>	<b>OWP2.01</b> – Identification of common EV markers in plasma using high-resolution Flow Cytometry – <i>Anders Askeland</i>	<b>OWP3.01</b> – Using plasma to identify neural biomarker for antidepressant response in a treatment resistant cohort – <i>Corina Nagy</i>	<b>OT05.01</b> – Extracellular vesicles provide a capsid-free vector for oncolytic adenoviral DNA delivery – <i>Heikki Saari</i>	<b>OT06.01</b> – Designed EVs for Intracellular Delivery of Therapeutic Antibodies – <i>Oscar Wiklander</i>
<b>OWP1.02</b> – MSC exosome works through a multi-faceted mechanism of action in joint repair – <i>Shipin Zhang</i>	<b>OWP2.02</b> – Software to automate calibration and processing of flow cytometry data in clinical studies – <i>Edwin van der Pol</i>	<b>OWP3.02</b> – Immunocapturing of tumor-derived extracellular vesicles on micropatterned and antibody-conjugated surfaces for individual correlative light, probe and electron measurements – <i>Pepijn Beekman</i>	<b>OT05.02</b> – Bacterial growth stage regulates the size, composition and biological functions of membrane vesicles. – <i>Maria Kaparakis-Liaskos</i>	<b>OT06.02</b> – Extracellular vesicles derived from AT-MSCs mediated miR-424 delivery promote apoptosis via the PD-L1/PD-1 pathway in TNBC – <i>Yueyuan Zhou</i>
<b>OWP1.03</b> – Identification of extracellular vesicles as biomarkers for myocardial infarction by flow cytometry and automated data processing – <i>Aleksandra Gasecka</i>	<b>OWP2.03</b> – Conventional, high-resolution and imaging flow cytometry: Potentials, pitfalls and solutions for EV characterisation – <i>Jaco Botha</i>	<b>OWP3.03</b> – The development of a scalable extracellular vesicle subset characterisation pipeline. – <i>Joshua Welsh</i>	<b>OT05.03</b> – Can Exosomes Be Used to Predict Where Patients Are on the Tuberculosis Disease Spectrum? – <i>Nicole Kruh-Garcia</i>	<b>OT06.03</b> – Exosomal delivery of NF-κB repressor delays LPS induced preterm birth in mouse models – <i>Samantha Sheller-Miller</i>
<b>OWP1.04</b> – Exosome Mediated Enhancement of Cellular Therapy in Acute Myelogenous Leukemia (AML) – <i>Theo Borgovan</i>	<b>OWP2.04</b> – Convolutional Neural Networks for Classification of Tumor Derived Extracellular Vesicles – <i>Wooje Lee</i>	<b>OWP3.04</b> – An integrated microfluidic device for selective exosome isolation from human plasma – <i>Kyung-A Hyun</i>		<b>OT06.04</b> – Technologies for loading RNA-based therapeutics into extracellular vesicles for drug delivery – <i>Olga Shatnyeva</i>
<b>OWP1.05</b> – Extracellular vesicles derived from amniotic fluid stem cells rescue impaired fetal lung development via the release of microRNAs – <i>Lina Antounians</i>	<b>OWP2.05</b> – Microfluidic electrochemical aptasensor for detection of breast cancer-derived exosomes in biofluids – <i>Hyo-Il Jung</i>	<b>OWP3.05</b> – Aqueous two-phase system to isolate extracellular vesicles for prostate cancer diagnosis – <i>Hyunwoo Shin</i>		<b>OT06.05</b> – Engineering designer exosomes produced efficiently by mammalian cells in situ and their application for the therapy of Parkinson's disease – <i>Ryosuke Kojima</i>

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# PROGRAM

THURSDAY 25 APRIL 2019

Level B1, Hall B	Level B1, Lecture Room	Level B1, Hall A	Level B1, Hall A	Level 3, Hall B
<b>OWP1.06</b> – Extracellular vesicles from Fat-laden hypoxic hepatocytes activates pro-fibrogenic signals in Hepatic Stellate Cells – <i>Alejandra Hernandez</i>	<b>OWP2.06</b> – A software suite allowing standardized analysis and reporting of fluorescent and scatter measurements from flow cytometers – <i>Joshua Welsh</i>	<b>OWP3.06</b> – In vitro and in vivo investigation of extracellular vesicles (EVs) as biomarker carriers in the diagnosis of early Alzheimer's disease – <i>Soraya Moradi-Bachiller</i>		<b>OT06.06</b> – Protein engineering for loading of Extracellular Vesicles – <i>Xabier Osteikoetxea</i>
<b>OWP1.07</b> – Exploration of the surface modification of outer membrane vesicles – <i>Maximilian Richter</i>	<b>OWP2.07</b> – Biogenesis of JC polyomavirus associated extracellular vesicles depends on neutral sphingomyelinase 2 – <i>Jenna Morris-Love</i>	<b>OWP3.07</b> – Shed microvesicles released from human primary and metastatic colorectal cancer cell lines contain key cancer progression proteins and RNA species – <i>Wittaya Suwakulsiri</i>		<b>OT06.07</b> – Engineered Extracellular Vesicles for drug delivery – <i>Niek Dekker</i>
<b>OWP1.08</b> – Isolation of neuron-specific extracellular vesicles – <i>Dimitry Ter-Ovanesyan</i>	<b>OWP2.08</b> – Exosomes mediate the anti-viral activity of interferon- $\beta$ against Zika virus infection – <i>Shuang Li</i>	<b>OWP3.08</b> – Mass spectrometry analysis of small extracellular vesicles isolated from ovarian cancer ascites – <i>Anna Kotrbová</i>		
<b>OWP1.09</b> – Coagulation influences properties of extracellular vesicles isolated from autologous blood derived products – <i>Andrea De Luna</i>	<b>OWP2.09</b> – Deciphering the role of extracellular vesicles on the blood-brain barrier during zika virus infection – <i>Antonios Fikatas</i>	<b>OWP3.09</b> – Identification of single tumor-derived extracellular vesicles by means of optical tweezers and Raman spectroscopy – <i>Agustin Enciso- Martinez</i>		
<b>OWP1.10</b> – Type-2 transglutaminase affects calcium homeostasis in neurons and is released in association with astrocytes-derived exosomes – <i>Elisa Tonoli</i>	<b>OWP2.10</b> – HIV-specific antibody mediated targeting of ENV+ tissues by exosomes – <i>Zou Xue</i>			
<b>OWP1.11</b> – EV-Avogadro project: Towards a liposomal concentration standard for extracellular vesicle research – <i>Zoltan Varga</i>	<b>OWP2.11</b> – In vivo testing of OMV-based vaccine prototypes against Gallibacterium anatis – <i>Fabio Antenucci</i>			
<b>OWP1.12</b> – Plasma exosomes regulate proliferation and migration of vascular smooth muscle cells – <i>Kosuke Otani</i>	<b>OWP2.12</b> – Identification of a protein that presumably controls bacterial vesiculation in response to the extracellular environments – <i>Fumiaki Yokoyama</i>			



# PROGRAM

THURSDAY 25 APRIL 2019

Level B1, Hall B	Level B1, Lecture Room		
<b>OWP1.13</b> – Cancer proteomics group, Cancer Precision Medicine Research Center, Japanese Foundation for Cancer Research – <i>Atsushi Ikeda</i>	<b>OWP2.13</b> – Prokaryotic BAR domain-like protein BdpA promotes outer membrane extensions – <i>Daniel Phillips</i>		
<b>OWP1.14</b> – Annexin V binding modulates the response of macrophages to mesenchymal stromal cell-derived extracellular vesicles – <i>Michele Grassi</i>	<b>OWP2.14</b> – Isolation of Extracellular Vesicles from Extracellular Matrix Based Hydrogel 3D Cell Cultures – <i>Jens Luoto</i>		
<b>OWP1.15</b> – Membrane-radiolabelled Exosomes for Comparative Biodistribution Analysis in Immunocompetent and Immunodeficient Mice – A Novel and Universal Approach – <i>Khuloud Al-Jamal</i>	<b>OWP2.15</b> – Diagnostic microRNA biomarkers from circulating extracellular vesicles for early detection of pneumonia and severe secondary complications – <i>Stefanie Hermann</i>		

15:00 – 15:30

## Networking Coffee and Posters

Level 3, Hall A

15:30 – 16:30

## Thursday Poster Session (PT)

Level 3, Hall A

**PT01:** Cellular and Organ Targeting

Session Chairs: *Charles Lai; Ikuhiko Nakase*

**PT02:** EVs in Reproduction and Pregnancy

Session Chairs: *TBD; Qi Chen*

**PT03:** EV Nucleic Acid Biomarkers

Session Chairs: *Louise Laurent; Guoku Hu*

**PT04:** EV Nucleic Acid Cancer Biomarkers

Session Chairs: *Christian Preußner; Harry Holthofer*

**PT05:** EV Biogenesis

Session Chairs: *Imre Mager, Hollis Cline*

**PT06:** EV Cancer Immunology

Session Chairs: *Jason Webber; Koichi Furukawa*

**PT07:** EVs in Acute and Chronic Inflammatory Disorders

Session Chairs: *Eric Boilard; Aleksandra Gasecka*

**PT08:** EVs in Metabolism and Metabolic Diseases

Session Chairs: *Sophie Rome; Alena Ivanova*

**PT09:** Advances in EV Quantification and Characterization

Session Chairs: *Randy Carney; Edwin van der Pol*

**PT10:** EVs and Stem Cells

Session Chairs: *Takashi Asada; Myung-Shin Lee*

**PT11:** EV Based Cancer Therapeutics

Session Chairs: *AC Matin; Eva Rhode*

**PT12:** EV Based Therapeutics

Session Chairs: *Mario Gimona; Saara Laitinen*

**LBT01:** Late Breaking- Technological advances

Session Chairs: *M. Selim Ünlü; Olga Shatnyeva*

**LBT02:** Late Breaking- EV biomarkers

Session Chairs: *Maja Mustapic; Dakota Gustafson*

**LBT03:** Late Breaking- EVs and stem cells

Session Chairs: *Sicheng Wen; Hiroaki Tateno*

16:30 – 17:00

## Biotech Sponsored Sessions

**SESSION 1: Particle Matrix - Multi-Fluorescence NTA – Next Generation EV Characterization with ZetaView**

– *Dr. Clemens Helmbrecht, Technical Director Particle Matrix GmbH*

Level B1, Lecture Hall

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



# PROGRAM

THURSDAY 25 APRIL 2019

**SESSION 2:** Beckman Coulter K.K. - New Perspective for Rapid Label-free Analysis and Characterization of Mesoscopic Size Range Bio-particles, EVs, Macromolecules, Cellular Structures, and Pathogens with Optical Polarized Scatter Technology  
- Aliaksandr Kachynski, PhD, Staff Optical Engineer, Beckman Coulter Life

Level B1, Hall A

**SESSION 3:** Fuji Wako - High purity isolation and sensitive quantification of extracellular vesicles using affinity to TIM4.  
- Rikinari Hanayama, Professor, WPI Nano Life Science Institute (NanoLSI), Kanazawa University

Level B1, Hall B

**SESSION 4:** ONI - Where Do We Come From? What Are We? Where Are We Going? Resolving EV existential questions one molecule at a time.  
- Dr. Mariya Georgieva

Level B1, Special Hall A

**SESSION 5:** NanoView - ExoView™: A Single Vesicle Analysis Platform for Biomarker Colocalization, Sizing, and Counting  
- George Daaboul, CSO

Level B1, Craft Room

17:00 – 18:00

## PARALLEL SESSIONS

Level B1, Hall A	Level 3, Hall B	Level B1, Hall B	Level B1, Lecture Room
<b>SYMPOSIUM SESSION 7:</b> Advances in EV Isolation in Cancer Session Chairs: Mariko Ikuo; Johan Skog	<b>SYMPOSIUM SESSION 8:</b> Mechanisms of EV Delivery Session Chairs: Lorraine O'Driscoll; Carlos Salomon	<b>SYMPOSIUM SESSION 9:</b> EV Biogenesis II Session Chairs: Bong Hwan Sung; Graca Raposo	<b>SYMPOSIUM SESSION 10:</b> EVs in Blood and Blood Disorders Session Chairs: Ai Kotani; Rienk Nieuwland
<b>OT07.01</b> – Aggregation-Induced Emission Probe/ Graphene Oxide Aptasensor for Label-Free and “Turn-On” Fluorescent Aptasensor for Cancerous Exosomes - Bo Li	<b>OT08.01</b> – Magnetically-navigated Intracellular Delivery of Extracellular Vesicles using Nanogels - Yoshihiro Sasaki	<b>OT09.01</b> – Different exosome subtypes have distinct ESCRT-associated biology and control tumour cell adaptation in vivo - Deborah Goberdhan	<b>OT10.01</b> – Different ATT isoforms are associated to EVs from ATT type II deficient patients - Annalisa Radeghieri
<b>OT07.02</b> – Single extracellular vesicle (EV) profiling and EV subpopulation analysis of cancer related EVs in human plasma - Yanling Cai	<b>OT08.02</b> – Tissue distribution of extracellular vesicle-binding proteins after in vivo gene transfer into mice - Yoshihiko Shimazawa	<b>OT09.02</b> – Emerging role of L-type calcium channel-mediated calcium influx in regulating apoptotic bodies formation - Thanh Kha Phan	<b>OT10.02</b> – Search for EV signature in Sickle Cell Disease - Alain Brisson
<b>OT07.03</b> – miRNA signature derived from GBM plasma exosomes as a diagnostic biomarker - Luz Cumba Garcia	<b>OT08.03</b> – Capabilities of HEK293T Cell-Exosomes as a Non-Invasive Delivery Tool for Mammalian Sperm - Teresa Vilanova	<b>OT09.03</b> – A novel UBL3 modification influences protein sorting to small extracellular vesicles - Hiroshi Ageta	<b>OT10.03</b> – Surface protein cargo of extracellular vesicles in blood plasma; the effect of an inflammatory disease on the vesicle surface protein interactome - Eszter Tóth
<b>OT07.05</b> – Isolation of extracellular vesicles by nanoDLD lab-on-a-chip technology for clinical applications - Stacey Gifford	<b>OT08.04</b> – Extracellular vesicles from de-differentiated human adipose tissue endothelial cells have potential to disseminate angiostatic signals in human obesity - Anca Dobrian	<b>OT09.04</b> – Stringent small extracellular vesicle purification and ligation-independent small RNA-seq: new insights into released RNA populations - Yiyao Huang	<b>OT10.04</b> – Oxidized LDL stimulates production of inflammatory extracellular vesicles by platelets - Pia Siljander

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# PROGRAM

## FRIDAY 26 APRIL 2019 ISEV2019 Annual Meeting

<b>08:00 – 08:30</b>	<b>Registration</b>			<i>Level B1, Welcome Hall</i>
<b>08:30 – 10:00</b>	<b>PARALLEL SESSIONS</b>			
<i>Level B1, Hall B</i>	<i>Level B1, Lecture Room</i>	<i>Level 3, Hall B</i>	<i>Level B1, Hall A</i>	
<b>SYMPOSIUM SESSION 11:</b> EV Therapeutics I <i>Session Chairs:</i> <i>Andre Gorgens; Sai Kiang Lim</i>	<b>SYMPOSIUM SESSION 12:</b> Protein Biomarkers in Human Disease <i>Session Chairs:</i> <i>Malene Møller Jørgensen;</i> <i>Koji Ueda</i>	<b>SYMPOSIUM SESSION 13:</b> Stem Cell Derived EVs <i>Session Chairs:</i> <i>Qingling Fu; Tatiana Lopatina</i>	<b>SYMPOSIUM SESSION 14:</b> Parasite and Bacterial EVs <i>Session Chairs:</i> <i>Yong Song Gho; Mariko Ikuo</i>	
<b>OF11.01</b> – Exosomes from cerebral endothelial cells suppress chemotherapy-induced peripheral neuropathy and sensitize anti-tumor effects of platinum drugs – <i>Zheng Gang Zhang</i>	<b>OF12.01</b> – Biomarkers of peritoneal membrane alteration in dialysis efflux-extracellular vesicles: a longitudinal study in patients under peritoneal dialysis treatment – <i>Laura Carreras-Planella</i>	<b>OF13.01</b> – Extracellular vesicles confer DNA damage on residual long-term HSC in the AML niche – <i>Peter Kurre</i>	<b>OF14.01</b> – Macrophage-derived exosomes encapsulate Salmonella antigens and stimulate the activation of Type 1 T-helper cells in vivo – <i>Winnie Hui</i>	
<b>OF11.02</b> – EV-mediated in vitro transcribed (IVT) mRNA-based gene delivery for specific prodrug activation in the tumor treats breast cancer in mice with no offsite toxicity – <i>Ac Matin</i>	<b>OF12.02</b> – Proteomics of urine-derived extracellular vesicles to identify biomarkers of prostate cancer risk groups – <i>Amanda Khoo</i>	<b>OF13.02</b> – Extracellular vesicles contribute to the development of ionizing radiation-induced late bone marrow pathologies – <i>Katalin Lumniczky</i>	<b>OF14.02</b> – Extracellular vesicles from Leishmania donovani infected macrophages contain infection-specific cargo that contribute to lesion development – <i>Anna Gioseffi</i>	
<b>OF11.03</b> – High yield hMSC derived mechanically-induced xenografted extracellular vesicles are well tolerated and induce potent regenerative effect in vivo in local or IV injection in a model of chronic heart failure – <i>Amanda Brun-silva</i>	<b>OF12.03</b> – Extracellular Vesicle Biomarkers Predict Alzheimer’s Disease in the Baltimore Longitudinal Study of Aging – <i>Maja Mustapic</i>	<b>OF13.03</b> – Myeloid derived extracellular vesicular WNT induces rectal stem cell regeneration – <i>Subhrajit Saha</i>	<b>OF14.03</b> – The role of extracellular vesicles in neurophysiological changes induced by chronic Toxoplasma gondii infection – <i>Ellie Tedford</i>	
<b>OF11.04</b> – Prolongation of allograft survival via donor MHC chimerism induced by extracellular vesicles – <i>Bruno Adonai Gonzalez Nolasco</i>	<b>OF12.04</b> – CD315 (PTGFRN) - a new biomarker for tumor-derived extracellular vesicles – <i>Kathrin Gärtner</i>	<b>OF13.04</b> – Glycome analysis of extracellular vesicles derived from stem cells using lectin microarray – <i>Hiroaki Tateno</i>	<b>OF14.04</b> – Bacterial membrane vesicles as vaccines in aquaculture – <i>Hanne Winther-Larsen</i>	

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# PROGRAM

FRIDAY 26 APRIL 2019

Level B1, Hall B	Level B1, Lecture Room	Level 3, Hall B	Level B1, Hall A
<p><b>OF11.05</b> – Proteomic and transcriptomic characterization of exosomes-mimetic nanovesicles reveals their relevance as a therapeutic delivery system – <i>Amirmohammad Nasiri Kenari</i></p>	<p><b>OF12.05</b> – Analysis of urinary extracellular vesicles auto fluorescence in imaging flow cytometry, and spectral flow cytometry. – <i>Uta Erdbruegger</i></p>	<p><b>OF13.05</b> – Exosomes derived from human MSC mediate monocyte mobilization to orchestrate neovascularization in radiation-induced skin injury. – <i>Radia Tamarat</i></p>	<p><b>OF14.05</b> – Bacterial membrane vesicles enter polarised epithelial cells and deliver their protein cargo to exosomes – <i>Richard Ferrero</i></p>
<p><b>OF11.06</b> – Exosomes from periodontal ligament-derived cells promote cutaneous wound healing and topical application is superior to local injection – <i>Sebastian Sjoqvist</i></p>	<p><b>OF12.06</b> – Serum vs plasma: A comparative study in EV composition – <i>Cecilia Lasser</i></p>		<p><b>OF14.06</b> – Bacterial Extracellular Vesicles: intercellular package or intracellular garbage? The example of RNAs associated to Salmonella enterica EVs – <i>Antoine Malabirade</i></p>
10:00 – 10:30	<b>Networking Coffee</b>		<i>Level 3, Hall A</i>
10:30 – 11:55	<b>PLENARY SESSION 2: Therapeutics</b> <i>Session Chairs: Edit Buzás; Uta Erdbrügger</i>		<i>Level 3, Hall B</i>
10:30	Introduction		
10:35	Self-Assembled Supramolecular Nanosystems for Smart Diagnosis and Targeted Therapy of Intractable Diseases – <i>Kazunori Kataoka</i>		
11:15	MSC-sEV translation: back to basics – <i>Sai Kiang Lim</i>		
11:55 – 12:30	<b>Featured Abstract Session 1</b>		<i>Level 3, Hall B</i>
11:50	<b>Introduction</b>		
	<b>FA1.01</b> – Molecular basis for contradictive roles of melanoma-derived EVs in metastasis – <i>Maximiliane Schuldner</i>		
12:10	<b>Introduction</b>		
	<b>FA1.02</b> – Development of a live-cell imaging technique for secretion activity of extracellular vesicles of individual cells – <i>Yoshitaka Shirasaki</i>		
12:30 – 13:30	<b>Lunch</b>		<i>Level B1, Japan Design Museum</i>
	<b>Posters/Exhibits</b>		<i>Level 3, Hall A</i>
	<b>ISEV-ISCT “Unproven Therapies”</b>		<i>Level B1, Lecture Hall</i>



# PROGRAM

FRIDAY 26 APRIL 2019

13:30 – 15:00

## PARALLEL SESSIONS

<i>Level 3, Hall B</i>	<i>Level B1, Hall A</i>	<i>Level B1, Hall B</i>	<i>Level B1, Lecture Room</i>
<p><b>SYMPOSIUM SESSION 15:</b> EVs in Cancer <i>Session Chairs:</i> <i>Takahiro Ochiya;</i> <i>Carolina Soekmadji</i></p>	<p><b>SYMPOSIUM SESSION 16:</b> Central Nervous System EVs <i>Session Chairs:</i> <i>Lesley Cheng;</i> <i>Dimitrios Kapogiannis</i></p>	<p><b>SYMPOSIUM SESSION 17:</b> EVs in Tissue Injury and Repair <i>Session Chairs:</i> <i>Benedetta Bussolati;</i> <i>Dominique de Kleijn</i></p>	<p><b>SYMPOSIUM SESSION 18:</b> EV Function in Health and Disease <i>Session Chairs:</i> <i>David Carter; Jacky Goetz</i></p>
<p><b>OF15.01</b> – Transfer of Functional Cargo in Exomeres – <i>Qin Zhang</i></p>	<p><b>OF16.01</b> – Brain tissue-derived extracellular vesicles of Alzheimer’s disease patients with different apolipoprotein E genotypes – <i>Yiyao Huang</i></p>	<p><b>OF17.01</b> – Mesenchymal stem cell derived extracellular vesicles restore the engraftment capacity of stem cells in radiation exposed mice – <i>Sicheng Wen</i></p>	<p><b>OF18.01</b> – Increased levels of systemic LPS-positive bacterial extracellular vesicles in patients with intestinal barrier dysfunction – <i>Joeri Tulkens</i></p>
<p><b>OF15.02</b> – Exosomes secreted from senescent cells provoke chromosomal instability. – <i>Akiko Takahashi</i></p>	<p><b>OF16.02</b> – Murine CNS-Derived extracellular vesicles mice originate from astrocytes and neurons and carry misfolded proteins – <i>Judith Silverman</i></p>	<p><b>OF17.02</b> – Connexin43-positive exosomes released by osteoarthritic chondrocytes favours osteoarthritis progression by spreading senescence and inflammatory mediators to nearby tissues – <i>María D. Mayán Santos</i></p>	<p><b>OF18.02</b> – Milk exosomes accumulate in the intestinal mucosa and peripheral tissues in wild-type pups nursed by exosome and cargo tracking dams – <i>Janos Zempleni</i></p>
<p><b>OF15.03</b> – Orthotopic neuroblastoma tumor model generating GFP-labeled extracellular vesicles (EV) reveals specific capture of GFP EV by monocytes/macrophages and mesenchymal cells in liver and bone marrow – <i>Yves DeClerck</i></p>	<p><b>OF16.03</b> – Investigating Microvesicle motion on neuron surface through optical tweezers – <i>Giulia D’Arrigo</i></p>	<p><b>OF17.03</b> – Extracellular vesicles in ageing: from skin to bone – <i>Johannes Grillari</i></p>	<p><b>OF18.03</b> – Deciphering Extracellular Vesicle Mediated Host-Pathogen Interaction in <i>Streptococcus pneumoniae</i> – <i>Saigopalakrishna Yerneni</i></p>
<p><b>OF15.04</b> – ExoBow - A transgenic strategy to study CD63+ extracellular vesicles in vivo – <i>Sónia Melo</i></p>	<p><b>OF16.04</b> – P2RX7 Inhibitor suppresses tau pathology and improves hippocampal memory function in tauopathy mouse model – <i>Seiko Ikezu</i></p>	<p><b>OF17.04</b> – Human embryonic stem cells derived exosomes promote tissue regeneration in aged mice by rejuvenating senescent endothelial cells – <i>Liangzhi Gong</i></p>	<p><b>OF18.04</b> – Calpain carried by platelet-derived microparticles mediates protease-activated receptor 1-dependent vascular inflammation in diabetes. – <i>Voahanginirina Randriamboavonjy</i></p>
<p><b>OF15.05</b> – BMP2-dependent osteoblast differentiation is suppressed by multiple myeloma-derived extracellular vesicles – <i>Mariko Ikuo</i></p>	<p><b>OF16.05</b> – Astrocyte-derived extracellular vesicles shed in response to IL-1beta up-regulate amyloidogenic processing in neurons – <i>Zhigang Li</i></p>	<p><b>OF17.05</b> – Schwann cell derived exosomes regulate Schwann cell activation and neuropathic pain related behaviors – <i>Wendy Campana</i></p>	<p><b>OF18.05</b> – Plasma-derived extracellular vesicles from <i>P. vivax</i> patients increase ICAM-1 expression of human spleen fibroblasts facilitating adherence of infected reticulocytes – <i>Haruka Toda</i></p>
<p><b>OF15.06</b> – Tumor-derived extracellular vesicles require <math>\beta</math>1 integrins to promote anchorage-independent growth – <i>Lucia Languino</i></p>	<p><b>OF16.06</b> – The role of human choroid plexus-derived extracellular vesicles in viral neuroinvasion – <i>Bethany O’Hara</i></p>	<p><b>OF17.06</b> – Urinary extracellular vesicles improve the recovery of renal function in an Acute Tubular Injury model restoring Klotho levels – <i>Benedetta Bussolati</i></p>	<p><b>OF18.06</b> – Oxidative stress alert by extracellular vesicles, in-vitro study in ocular drainage system – <i>Elie Beit-Yannai</i></p>

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# PROGRAM

FRIDAY 26 APRIL 2019

15:00 – 16:15

**NIH ERCC Session**

*Level B1, Lecture Hall*

## SPONSORED PRESENTATIONS:

15:30 - 15:45

**ThermoFisher Scientific - Exosomes and ctDNA:  
the journey from fundamental research towards liquid biopsy**  
– Alexander Vlassov

*Level B1, Craft Room*

16:00 - 16:15

**Luminex - High Sensitivity Flow Cytometry Enables  
Extracellular Vesicle Immunophenotyping**  
– Haley Pugsley

*Level B1, Craft Room*

15:30 – 16:30

**Friday Poster Session (PF)**

*Level 3, Hall A*

**PF01:** EVs Immune System

*Session Chairs: Wilfrid Boireau; Saara Laitinen*

**PF02:** EVs in the Central and Peripheral Nervous System

*Session Chairs: Andrew Hill; Elena Batrakova*

**PF03:** EVs Cancer Metastasis

*Session Chairs: Ryou-u Takahashi; Irina Nazarenko*

**PF04:** EV-mediated inter-organism communication

*Session Chairs: Chitose Oneyama; Kyoko Hida*

**PF05:** EVs in Infectious Diseases and Vaccines

*Session Chairs: Tsuneya Ikezu; Maja Mustapic*

**PF06:** Advances in EV Quantification and Characterization

*Session Chairs: Estefanía Lozano-Andrés; Ken Witwer*

**PF07:** Biogenesis II

*Session Chairs: Mathilde Mathieu; Hang Hubert Yin*

**PF08:** EVs in Tissue Injury and Repair

*Session Chairs: Johannes Grillari; Bas van Balkom*

**PF09:** Detection of EV-based Biomarkers

*Session Chairs: Fabia Fricke; Shinichi Kano*

**PF10:** Advances in EV separation and concentration

*Session Chairs: Stacey Gifford; Fuquan Yang*

**PF11:** EV-Based Therapeutics II

*Session Chairs: Yasnouri Fujita; Xue Zou*

**PF12:** Advances in EV Cargo Profiling

*Session Chairs: Leonid Margolis; Yutaka Naito*

**LBF01:** Late Breaking- EVs and cancer

*Session Chairs: Sonia Melo; Golnaz Morad*

**LBF02:** Late Breaking- EVs and physiology

*Session Chairs: Elie Beit-Yannai; Benedikt Kirchner*

16:30 – 18:00

**PARALLEL SESSIONS**

*Level B1, Lecture Room*

*Level B1, Hall B*

*Level 3, Hall B*

*Level B1, Hall A*

**SYMPOSIUM SESSION 19:**

**EV Cargo Profiling**

*Session Chairs:*

*Tang-Long Shen, Lei Zheng*

**SYMPOSIUM SESSION 20:**

**EV Therapeutics II**

*Session Chairs:*

*Minh Le; Lucia Languino*

**SYMPOSIUM SESSION 21:**

**EVs in Migration and Cancer**

*Session Chairs:*

*Akiko Takahashi;  
Yoshinobu Takakura*

**SYMPOSIUM SESSION 22:**

**Novel Methods of**

**EV Analysis**

*Session Chairs:*

*An Hendrix; John Nolan*

**OF19.01** – Distinct extracellular RNA cargo types associate with specific vesicular and non-vesicular RNA carriers across human biofluids  
– Aleksandar Milosavljevic

**OF20.01** – Nano-Ghosts: mesenchymal stem cells derived nanoparticles as a novel approach for cartilage regeneration.  
– Domenico D'Atri

**OF21.01** – Targeting Rab27a in Pancreatic Cancer  
– Nuno Bastos

**OF22.01** – Biolayer interferometry - extracellular vesicles (BLIEV) platform for liquid biopsy of ovarian cancer  
– Randy Carney

**OF19.02** – Heparan sulphate glycosaminoglycans on the extracellular vesicle surface bind a variety of proteins  
– Sara Veiga

**OF20.02** – Combining virus-based therapeutics and EV therapy for the treatment of pancreatic cancer  
– Marie-Ève Wedge

**OF21.02** – Roles of lysyl oxidase like 2 (LOXL2) in exosomal fraction on lymph node metastasis of head and neck squamous cell carcinoma  
– Hajime Yano

**OF22.02** – Enhanced Detection and Visualization of Exosomes with Interferometric Reflectance Imaging  
– M. Selim Ünlü



# PROGRAM

FRIDAY 26 APRIL 2019

<i>Level B1, Lecture Room</i>	<i>Level B1, Hall B</i>	<i>Level 3, Hall B</i>	<i>Level B1, Hall A</i>
<b>OF19.03</b> – Membrane lipid saturation modifies the lipid signature of extracellular vesicles released by HuH7 hepatocarcinoma cells – <i>Eva Costanzi</i>	<b>OF20.03</b> – CD47, a “don’t eat me signal” expression in ovarian cancer cells were regulated by circulating exosomes – the therapeutic potential of targeting exosomes by inhibiting immune evasion – <i>Aasa Shimizu</i>	<b>OF21.03</b> – Growing old disgracefully – a novel role of extracellular vesicles in bone invasion – <i>Areeg Elmusrati</i>	<b>OF22.03</b> – Proximity Assays for Detection and Characterization of Exosomes – <i>Masood Kamali-Moghaddam</i>
<b>OF19.04</b> – Deconvolution analysis of small RNAseq data from exRNAs isolated using different methods reveals multiple carrier subclasses and identifies optimal methods for isolation of total and EV-specific exRNA – <i>Srimeenakshi Srinivasan</i>	<b>OF20.04</b> – The impact of in vitro aging on the release of extracellular vesicles from human mesenchymal stem cells – <i>Xiaoqin Wang</i>	<b>OF21.04</b> – The multifaceted role of breast cancer-derived extracellular vesicles in brain metastasis – <i>Golnaz Morad</i>	<b>OF22.04</b> – A 96 well plate format lipid quantification assay with improved sensitivity for standardization of experiments with extracellular vesicles – <i>Tamas Visnovitz</i>
<b>OF19.05</b> – Novel angiogenic extracellular vesicles induced by StemRegenin1 – <i>Yen-Michael Sheng Hsu</i>	<b>OF20.05</b> – Novel role of BCR-ABL-containing leukemic extracellular vesicles in controlling the function of regulatory T cells – <i>Julian Swatler</i>	<b>OF21.05</b> – Exposed aminophospholipids enriched in a subtype of small extracellular vesicles from tumor cell lines – <i>Sachiko Matsumura</i>	<b>OF22.05</b> – Characterization of Exosomes based on their unique dielectric properties by a novel electrical impedance measurement system – <i>Leyla Esfandiari</i>
<b>OF19.06</b> – Evaluation of circulating extracellular vesicles derived miRNAs as biomarkers of early colon cancer: a comparison with plasma total miRNAs – <i>Li Min</i>	<b>OF20.06</b> – Immunomodulatory Function of Human Mesenchymal Stromal Cells (MSC)-Derived Extracellular Vesicles (EVs) on Type-I Interferon Response in Human Plasmacytoid Dendritic Cells (PDCs) and its Therapeutic Effect on Murine Lupus Model – <i>Lin Kui</i>	<b>OF21.06</b> – Mesenchymal stem cells -derived exosomes present natural migration and homing abilities to specific neuropathological areas – <i>Yona Geffen</i>	<b>OF22.06</b> – A snorkel-tag based method for in vivo isolation of recombinant extracellular vesicles – <i>Madhusudhan Reddy Bobbili</i>



*Fushimi Inari Taisha Shrine, Kyoto*

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# PROGRAM

## SATURDAY 27 APRIL 2019 ISEV2019 Annual Meeting

08:00 – 08:30	<b>Registration</b>	<i>Level B1, Welcome Hall</i>	
08:30 – 09:30	<b>General Assembly</b>	<i>Level 3, Hall B</i>	
09:30 – 10:00	<b>Networking Coffee</b>	<i>Level 3, Hall A</i>	
10:00 – 11:20	<b>PLENARY SESSION 3: RNA</b> <i>Session Chairs: Jan Lötvall; Marca Wauben</i>	<i>Level 3, Hall B</i>	
10:00	Introduction		
10:05	piRNA biogenesis and functions in Drosophila – <i>Mikiko Siomi</i>		
10:45	EV as a novel therapeutic target for cancer metastasis – <i>Takahiro Ochiya</i>		
11:20 – 12:00	<b>Featured Abstract Session 2</b>	<i>Level 3, Hall B</i>	
11:20	<b>Introduction</b> <b>FA2.01</b> – A novel CRISPR/Cas9-based reporter system enables detection of EV-mediated functional transfer of RNAs on a single-cell level – <i>Olivier de Jong</i>		
11:40	<b>Introduction</b> <b>FA2.02</b> – From Nanoscale to Organisms: A Multi-resolution Imaging System of Endogenously Released Extracellular Vesicles with Bioluminescence Resonance Energy Transfer – <i>Anthony Wu</i>		
12:00 – 13:00	<b>Lunch</b>	<i>Level B1, Japan Design Museum</i>	
	<b>Posters/Exhibits</b>	<i>Level 3, Hall A</i>	
13:00 – 14:30	<b>PARALLEL SESSIONS</b>		
	<i>Level 3, Hall B</i>	<i>Level B1, Hall B</i>	<i>Level B1, Hall A</i>
	<b>SYMPOSIUM SESSION 23: EV Engineering II</b> <i>Session Chairs: Cherie Blenkiron; Thomas Kislinger</i>	<b>SYMPOSIUM SESSION 24: Mechanisms of EV Delivery</b> <i>Session Chairs: Pieter Vader; Hang Hubert Yin</i>	<b>SYMPOSIUM SESSION 25: EVs in Neurological Diseases</b> <i>Session Chairs: Andrew Hill; Yiyao Huang</i>
	<b>OS23.01</b> – exoTOPE: Loading bioactive molecules into exosomes using a short peptide fusion – <i>Russell McConnell</i>	<b>OS24.01</b> – State of the art microscopy for live cell study of the extracellular vesicle-mediated drug delivery – <i>Ekaterina Lisitsyna</i>	<b>OS25.01</b> – Circulating Extracellular Vesicles of astrocytic origin carry neurotoxic complement in Alzheimer's disease – <i>Dimitrios Kapogiannis</i>
	<b>OS23.02</b> – Retrograde Dicer-Independent AGO-Loading of Extracellular Single Stranded miRNA in Recipient Human Cells – <i>Suvendra Bhattacharyya</i>	<b>OS24.02</b> – Fusion of extracellular vesicles (EVs) and delivery of internal EV cargos to host cells is dependent upon circulating or endogenous viral envelope proteins – <i>Zach Troyer</i>	<b>OS25.02</b> – Platelet extracellular vesicles as first liquid biopsy biomarkers to diagnose acute ischaemic stroke – <i>Aleksandra Gasecka</i>

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# PROGRAM

SATURDAY 27 APRIL 2019

Level 3, Hall B	Level B1, Hall B	Level B1, Hall A
<b>OS23.03</b> – Engineering of extracellular vesicles for surface display of targeting ligands – <i>Elisa Lázaro-Ibáñez</i>	<b>OS24.03</b> – Preferential accumulation of copper-free click chemistry-modified exosomes to own pancreatic xenograft in vivo – <i>Lizhou Xu</i>	<b>OS25.03</b> – Circulating extracellular vesicles as a novel source of biomarkers for diagnosis and monitoring of neurological diseases – <i>Silvia Picciolini</i>
<b>OS23.04</b> – Endogenous drug loading of extracellular vesicles using microbubble-assisted ultrasound – <i>Yuana Yuana</i>	<b>OS24.04</b> – Specific transfer of hollow gold nanoparticles within exosomes is determined by the exosome origin – <i>Pilar Martin-Duque</i>	<b>OS25.04</b> – Extracellular vesicles of Alzheimer's disease patients as a biomarker for disease progression – <i>Anat Aharon</i>
<b>OS23.05</b> – Extracellular Vesicles for new Molecular Insight to Biomolecular Interactions – <i>Tamas Beke-Somfai</i>	<b>OS24.05</b> – A high-throughput screen for functional extracellular vesicles – <i>Shu Liu</i>	<b>OS25.05</b> – Novel Blood-derived Extracellular Vesicle-based Biomarkers in Alzheimer's Disease by the Proximity Extension Assay – <i>Jonas Nielsen</i>
		<b>OS25.06</b> – Proteomic and Transcriptomic profiling of extracellular vesicles isolated from immune-stimulated human primary astrocytes – <i>Tsuneya Ikezu</i>

14:30 – 15:00

## Networking Coffee and Posters

Level 3, Hall A

14:30 – 15:45

## ISEV ISAC ISTH EV Flow Cytometry Work Group

Level B1, Lecture Hall

During this satellite event of the three international scientific societies overarching EV Flow cytometry Work Group we will provide insight into our collaborative efforts to improve robust and reproducible EV Flow cytometry research. Special emphasis will be on the presentation of a reporting framework proposed by this Work group.

15:00 – 16:00

## Saturday Poster Session (PS)

Level 3, Hall A

- PS01:** Engineering and Loading EVs  
*Session Chairs: Hang Hubert Yin; Antonella Bongiovanni*
- PS02:** EVs in Infectious Diseases and Vaccines II  
*Session Chairs: Norman Haughey; Ryosuke Kojima*
- PS03:** EVs in Cardiovascular Disease  
*Session Chairs: Oh Youn Kim; Caroline Reddel*
- PS04:** Affinity and Microfluidic Separation  
*Session Chairs: Kazunari Akiyoshi; Yanling Cai*
- PS05:** EV Protein Biomarkers  
*Session Chairs: Seiko Ikezu; Yusuke Yoshioka*
- PS06:** Advancing EV Studies in Biological Samples  
*Session Chairs: Peter Kurre; J. Bryan Byrd*
- PS07:** Cellular Uptake of EVs and Membrane Function  
*Session Chairs: Quan Lu; Nobuyoshi Kosaka*

- PS08:** Advances in EV Quantification and Characterization II  
*Session Chairs: Cecilia Lässer; Li Min*
- PS09:** EV Cancer Pathogenesis  
*Session Chairs: Marta Prieto Vila; Judy Yam*
- PS10:** EV Cancer Pathogenesis II  
*Session Chairs: Hiroshi Ageta; Ming Jer Tang*
- PS11:** Stem Cells  
*Session Chairs: Kyoko Hida; Noriko Watanbe*
- LBS01:** Late Breaking- EV therapeutics  
*Session Chairs: Xabier Osteikoetxea; Akiko Takahashi*
- LBS02:** Late Breaking- EVs in intercellular and interorganism communication  
*Session Chairs: Hanne Winther-Larsen; Kallen Sullivan*
- LBS03:** Late Breaking- EV biogenesis, loading, and uptake  
*Session Chairs: Samarjit Das; Wang Jiang*

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# PROGRAM

SATURDAY 27 APRIL 2019

16:00 – 17:00

## PARALLEL SESSIONS

*Level 3, Hall B*

*Level B1, Hall B*

*Level B1, Hall A*

<b>SYMPOSIUM SESSION 26:</b> Flow Cytometric Analysis of EVs <i>Session Chairs:</i> <i>Xiaomei Yan; Joshua Welsh</i>	<b>SYMPOSIUM SESSION 27:</b> Non-mammalian EVs <i>Session Chairs:</i> <i>Richard Ferrero; J. Max Silverman</i>	<b>SYMPOSIUM SESSION 28:</b> EVs in Kidney and Urological Diseases <i>Session Chairs:</i> <i>Uta Erdbrügger; Juan Falcon-Perez</i>
<b>OS26.01</b> – Influence of lipoprotein particles in extracellular vesicle analysis by single particle flow cytometry – <i>Estefania Lozano-Andrés</i>	<b>OS27.01</b> – Extracellular vesicles released by commensal Lactobacillus suppress HIV-1 infection – <i>Rogers Nahui Palomino</i>	<b>OS28.01</b> – Single MSC EV analysis for characterizing a subpopulation having therapeutic effects in AKI model – <i>Hyejin Kang</i>
<b>OS26.02</b> – Single-particle analysis of exosome DNA/RNA abundance, identity and location via a laboratory-built nano-flow cytometer – <i>Xiaomei Yan</i>	<b>OS27.02</b> – Extracellular vesicles of the human gut microbiota: Do you hear me host? – <i>Anna Kaisanlahti</i>	<b>OS28.02</b> – Urinary microvesicular biomarkers for delayed graft function and overall outcome after living donor kidney transplantation – <i>Fabian Braun</i>
<b>OS26.03</b> – Using a combination of bead-based flow cytometry and imaging flow cytometry to understand Extracellular Vesicle Heterogeneity – <i>André Görgens</i>	<b>OS27.03</b> – Preparation, characterization, and cellular interaction of edible plant-derived nanoparticles – <i>Daisuke Sasaki</i>	<b>OS28.03</b> – Exosomal miRNA-19b-3p of tubular epithelial cell promotes M1 macrophage activation in kidney injury – <i>Ye Feng</i>
	<b>OS27.04</b> – Biophysical and electrochemical characterization of redox-active extracellular vesicles from <i>Shewanella oneidensis</i> – <i>Lori Zacharoff</i>	<b>OS28.04</b> – A urine exosome RNA signature for prediction of high-grade prostate cancer: clinical validation in over 1,000 biopsy naïve patients – <i>Robert Kitchen</i>

19:00 – 23:00

## Networking Reception

*Westin Miyako Kyoto*

SUNDAY 28 APRIL 2019

# ISEV2019 Annual Meeting

08:00 – 08:30

## Registration

*Level B1, Welcome Hall*

08:30 – 09:30

## PARALLEL SESSIONS

*Level B1, Lecture Room*

*Level B1, Hall B*

*Level B1, Hall A*

<b>SYMPOSIUM SESSION 29:</b> Late Breaking- EV Therapeutics <i>Session Chairs:</i> <i>Masahiko Kuroda; Carolina Soekmadji</i>	<b>SYMPOSIUM SESSION 30:</b> Late Breaking- EVs and Cancer <i>Session Chairs:</i> <i>Suvendra Bhattacharyya; Vincent Hyenne</i>	<b>SYMPOSIUM SESSION 31:</b> Late Breaking- EV Biomarkers <i>Session Chairs:</i> <i>Johannes Grillari; Mariko Ikuo</i>
<b>LB01.01</b> – First-in-human application of umbilical cord mesenchymal stromal cell-derived exosomes for the prevention of fibrosis following cochlear implant surgery – <i>Mario Gimona</i>	<b>LB02.01</b> – Extremely-large extracellular vesicles (ELEVs) aid invasiveness of RasV12 tumor cell dissemination – <i>Jiae Lee</i>	<b>LB03.02</b> – Assessing the value of extracellular vesicles' DNA and proteins as biomarkers in metastatic breast cancer – <i>Mercedes Tkach</i>



# PROGRAM

SUNDAY 28 APRIL 2019

<i>Level B1, Lecture Room</i>	<i>Level B1, Hall B</i>	<i>Level B1, Hall A</i>
<b>LB01.03</b> – Engineering of ARMMs for Efficient Delivery of Cas9 Genome Editors – <i>Quan Lu</i>	<b>LB02.02</b> – House dust extracellular vesicles promote tumor metastasis to the lungs by inducing tumor necrosis factor- $\alpha$ – <i>Nhung Dinh</i>	<b>LB03.03</b> – A novel strategy for early detection of clinically significant prostate cancer by high-throughput palmitoyl-proteomics of extracellular vesicles – <i>Dolores Di Vizio</i>
<b>LB01.04</b> – Microvesicle-mediated delivery of minicircle DNA results in effective gene-directed enzyme prodrug cancer therapy – <i>Masamitsu Kanada</i>	<b>LB02.03</b> – Modeling tumor: key issues of cell communication by mean of EVs in a three-dimensional environment and the impact on biomarker discovery – <i>Irina Nazarenko</i>	<b>LB03.04</b> – Circulating exosomal PD-L1 as a marker for the follow up of melanoma patients – <i>Jessica Gobbo</i>
	<b>LB02.04</b> – Secretion mechanisms of Wnt proteins – <i>Alena Ivanova</i>	

09:30 – 10:15

## PARALLEL SESSIONS

<i>Level B1, Lecture Room</i>	<i>Level B1, Hall B</i>	<i>Level B1, Hall A</i>
<b>SYMPOSIUM SESSION 32:</b> Late Breaking- EV Labeling, Separation, and Detection <i>Session Chairs:</i> <i>Elisa Lazaro-Ibanez; Ryou-u Takahashi</i>	<b>SYMPOSIUM SESSION 33:</b> Late Breaking- From Biogenesis to Uptake <i>Session Chairs:</i> <i>Yutaka Naito; Ganesh Shelke</i>	<b>SYMPOSIUM SESSION 34:</b> Late Breaking- EV signatures and function <i>Session Chairs:</i> <i>Ter-Ovanesyan; Yusuke Yoshioka</i>
<b>LB04.01</b> – A microfluidic device with nanoscale surface topology and functionalized with lipid nanoprobe for extracellular vesicle isolation and clinical cancer diagnosis – <i>Siyang Zheng</i>	<b>LB05.01</b> – Reassessment of Exosome Composition – <i>Dennis Jeppesen</i>	<b>LB06.01</b> – Proteomic and miRNA transcriptome analysis revealed an association between circulating exosomal miRNAs and insulin sensitivity in gestational diabetes mellitus during gestation – <i>Carlos Salomon</i>
<b>LB04.02</b> – Asparagine-linked glycosylation amplifies the heterogeneity of tumor extracellular vesicles – <i>Yoichiro Harada</i>	<b>LB05.02</b> – Biofunctional peptide-modified extracellular vesicles for targeted intracellular delivery – <i>Ikuhiko Nakase</i>	<b>LB06.02</b> – Extracellular vesicles from induced neurons trigger epigenetic silencing of a brain neurotransmitter – <i>Glenn McConkey</i>
<b>LB04.03</b> – Characterization of Fluorescent Plasma EVs Following 5-ALA use in Malignant Gliomas. – <i>Leonora Balaj</i>	<b>LB05.03</b> – Virus protein pX facilitates naked particles of hepatitis A virus to acquire an exosome-derived membrane by interacting with ESCRT-associated protein ALIX – <i>Wang Jiang</i>	<b>LB06.03</b> – Extracellular Vesicles from human iPS-derived cardiovascular progenitors do not trigger an immune response in the infarcted heart – <i>Bruna Lima Correa</i>

10:15 – 10:45

### Coffee Break

*Level B1, Welcome Hall*

10:45 – 12:00

### Wrap Up Sessions, Awards Ceremony, and Closing Remarks

*Level B1, Hall A*

10:45	Basic Wrap-Up – <i>Tang Long Shen</i>
10:55	Clinic Wrap-Up – <i>Kyoko Hida</i>
11:05	Awards Ceremony
11:25	Recognition of ISEV2019 IOC
11:30	ISEV2020 Presentation
11:35	Closing Remarks



# ABSTRACT DIRECTORY

Alpha	Last Name	First Name	Poster #	Poster Title
<b>A</b>	Ahn	Gna	LBS01.10	Application of milk exosome for leaping cosmeceutical materials.
	Alberro	Ainhoa	PF01.01	From adults to centenarians: characterization of T cell immunosenescence markers on plasma extracellular vesicles and their influence on T cell activation, viability and interleukin secretion
	Al-Jamal	Khuloud	PT10.01	3D culture of dental pulp pluripotent-like stem cells (DPPSC) improves their pluripotency and provides a serum-free culture condition for exosome production
	Al-Jamal	Khuloud	PT11.10	Exosome-mediated RNAi of PAK4 prolongs survival of pancreatic cancer mouse model after loco-regional treatment
	AL-Jamal	Wafa	PS01.01	Targeting prostate cancer via PSMA-peptide decorated exosome-mimetics
	Al-Jamal	Khuloud	LBS03.01	Membrane-radiolabelled Exosomes for Comparative Biodistribution Analysis in Immunocompetent and Immunodeficient Mice – A Novel and Universal Approach
	An	Taixue	PS05.03	Caveolin-1 reduces in extracellular vesicles derived from lung cancer tissue and plasma and associates with cancer cell migration
	An	Sunjin	PT06.07	Outer Membrane Vesicles of Tannenella forsythia Induce Inflammatory Response in Periodontal Tissue Cells
	Antenucci	Fabio	PS02.10	In vivo testing of OMV-based vaccine prototypes against Gallibacterium anatis
	Antounians	Lina	PF11.02	Amniotic fluid stem cell extracellular vesicles derived from different species contain evolutionarily conserved microRNAs: valuable resources for regenerative medicine.
	Antounians	Lina	PF12.09	Extracellular vesicles derived from amniotic fluid stem cells rescue impaired fetal lung development via the release of microRNAs
	Arai	Yoshie	LBT03.06	Bile acids hybrid extracellular vesicles derived from mesenchymal stem cells for cartilage tissue regeneration
	Artuyants	Anastasiia	PF04.01	Preferential packaging of tRNA fragments into extracellular vesicles released by protozoan parasite Trichomonas vaginalis
	Askeland	Anders	PS08.08	Identification of common EV markers in plasma using high-resolution Flow Cytometry
	Ayupova	Deanna	PS07.06	Unrevealed mystery of cell dust: extracellular vesicles and tumour derived exosomes
<b>B</b>	Bachurski	Daniel	LBT01.07	Extracellular vesicle measurements with nanoparticle tracking analysis - An accuracy and repeatability comparison between NanoSight NS300 and ZetaView
	Bae	Ju-Hyun	PS05.09	Optimization of exosome isolation and ELISA method for identification of novel cancer biomarkers
	Bae	Seoyoon	LBS03.08	The role of glycogen synthase kinase 3 beta in the biogenesis of extracellular vesicles by modulating microtubule dynamics
	Banzet	Sébastien	LBT03.08	Interferon-gamma priming, but not hypoxia, modifies the miRNA landscape of human mesenchymal stromal cells (MSC) extracellular vesicles (EV).
	Banzet	Sébastien	LBS01.08	Extracellular Vesicles from Mesenchymal Stromal Cells for the Treatment of radiological burns
	Barilani	Mario	PF01.04	Air pollution effects on the clinical course of autoimmune diseases: the role of extracellular vesicles
	Barilani	Mario	PT08.05	Effects of an acute exercise on circulating extracellular vesicles: tissue-, gender- and BMI-related differences
	Barilani	Mario	PF09.04	Extracellular vesicles as graft biomarkers to address lung transplantation outcome
	Barilani	Mario	PF01.09	Extracellular vesicles in systemic sclerosis as potential mediator for pulmonary vascular disease
	Barnett	Michelle	PF02.08	A pilot study to evaluate serum miRNA from extracellular vesicles of neural origin for insight into neurological disorders
	Barreiro	Karina	PT08.04	Transcriptome and proteome of extracellular vesicles derived from cellular targets of diabetic kidney disease
	Bart	Genevieve	PF12.04	Characterization of Sweat Extracellular Vesicles
	Batarseh	Amani	LBT01.06	Enhancing extracellular vesicle isolation of human plasma verified by high resolution lipidomics
	Batarseh	Amani	LBF02.08	Lipidomics profiles of plasma microvesicles differ in experimental cerebral malaria, compared to malaria without neurological complications
	Beekman	Pepijn	PS08.04	Electrochemical quantification of EVs at physiological concentrations

# ABSTRACT DIRECTORY

Alpha	Last Name	First Name	Poster #	Poster Title
	Beekman	Pepijn	PT09.13	Immunocapturing of tumor-derived extracellular vesicles on micropatterned and antibody-conjugated surfaces for individual correlative light, probe and electron measurements
	Berardi	Anna Concetta	PF04.05	A mathematical model for extracellular vesicles, as a communication tool between cells.
	Bergen	Karin	PT08.01	Elevated levels of platelet and endothelial extracellular vesicles in type 1 diabetes, a cohort study of 236 patients
	Bihl	Ji	PF04.04	UVB induced-release of bioactive microvesicle particles in keratinocytes carry platelet-activating factor
	Boireau	Wilfrid	PT09.02	The Nanobioanalytical Platform, a tuneable tool for a sensitive detection & characterization of extracellular vesicles subsets from biological samples
	Borgovan	Theo	PF11.15	Exosome Mediated Enhancement of Cellular Therapy in Acute Myelogenous Leukemia (AML)
	Botha	Jaco	PS08.10	Conventional, high-resolution and imaging flow cytometry: Potentials, pitfalls and solutions for EV characterisation
	Braun	Fabian	PF08.05	Urinary CRK1 positive vesicles yield novel insight into microvesicular signaling of the kidney
	Brittain	George	PF06.02	Characterizing the Light-Scatter Sensitivity of the CytoFLEX Flow Cytometer
	Brittain	George	PF06.03	Preparing a CytoFLEX for Nanoscale Flow Cytometry
	Buch	Shilpa	PT07.06	Opioid-mediated release of astrocytic EV miR-23 induces Pericyte migration and Blood-Brain Barrier breach
	Bukrinsky	Michael	LBF02.03	Exosomes containing HIV protein Nef reorganize lipid rafts inducing inflammatory responses of immune cells and increasing their susceptibility to HIV infection
	Buschmann	Dominik	PF03.04	Anesthesia-dependent changes in vesicular miRNA profiles during colorectal cancer surgery
	Butler	John	PS10.05	Extracellular vesicle-mediated transmission of bone morphogenic proteins in Acute Myelogenous Leukemia
<b>C</b>	Calogero	Raffaele	PS09.07	Whole transcriptome and miRNome profiling of plasma-derived extracellular vesicles cargo in hematological malignancies.
	Carney	Randy	PS08.03	Hybrid plasmonic biomaterial nanofilter scaffold for cancer EV diagnostics based on surface-enhanced Raman scattering (SERS)
	Chabu	Yves	PF07.04	Ras Tumor Microvesicles Biogenesis and Signaling in Drosophila
	Chaudhury	Mousumi	LBF01.14	Morphology of tissue disruption at the sites of high-grade tumor
	Chen	Yi-Hsun	PS04.12	Capture and release of extracellular vesicles in tens of $\mu$ L samples for ocular neuroprotection studies
	Chen	Shi	PS04.02	Extracellular vesicle-associated microRNAs show stronger correlations with cardiovascular disease protein biomarkers than cell-free microRNAs in human plasma
	Chen	Ruying	PF01.11	Isolation and characterization of serum exosomes from Cystic Fibrosis patients receiving lung transplant
	Chen	Qi	PT02.01	Placenta Extracellular Vesicles: A potential protective role against oxidative damage
	Chen	Yi-Sin	PT09.05	Quantification of circulating extracellular vesicles from human plasma by utilizing a membrane-based microfluidic system
	Chen	Qi	PF10.05	The stability of placental extracellular vesicles in different short-term storage conditions
	Cheng	Fang	PF08.01	The role of adipocyte-derived extracellular vesicles in vimentin mediated fibrosis
	Cheng	Fang	LBS01.03	Exosomal PD-L1 embedded with thermoresponsive gel promotes wound healing
	Cheng	Fang	LBS02.02	PD-L1/CTLA-4 nanovesicles have an immunosuppressive effect on a mouse skin graft model
	Chiang	Dapi	PS03.05	Exosomal low-density lipoprotein receptor (LDLR) as a potential biomarker in patients with coronary artery disease
	Chin	Andrew	PS10.10	miR-1227 Alters Extracellular Vesicle Shedding
	Chiu	Hui-Wen	LBS02.07	Crosstalk between endoplasmic reticulum stress and autophagy in kidney diseases
	Cho	Yeon Hee	PT10.06	Proteomic Analysis of Extracellular Vesicles from MSC cultured with stroke serum
	Choi	Eun Wook	PF08.02	Effect of exosomes from human adipose-derived stem cells on hair growth





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	Choi	Yeseong	PS08.02	Electrical characterization of individual exosomes secreted from amyloid beta-treated neuroblastoma cells via electrostatic force microscopy
	Choi	Byeonghyeon	LBF01.05	Lung cancer exosome specific protein 1 (LESP-1) is increased in the plasma of non-small cell lung cancer patients
	Chou	Szu-Yi	LBT02.05	The identification of extracellular vesicles proteins in glioblastoma diagnosis
	Chouw	Angliana	LBT03.03	Changes in Amino Acid Concentration of Umbilical Cord Mesenchymal Stem Cell Culture Medium
	Chwae	Yong Joon	PF07.06	Modulation of Sphingosine-1-phosphate lyase and its implication in release of apoptotic exosome-like vesicle
	Ciardello	Chiara	LBS03.07	Targeting mevalonate pathway with low doses of valproic acid reduces large EVs shedding in different solid tumors
	Cordeiro Freezor	Roberta	LBT01.11	Heterogeneity of erythrocytes derived microvesicles: their size and concentration
	Cordeiro Freezor	Roberta	LBS03.05	The effect of Rhinovirus Type 16 derived microvesicles on the growth of HeLa cells
	Coticchia	Christine	PT04.08	Cancer-derived exosomes enriched from patient plasma strongly mirror parent tumor and enable subtyping of early stage breast cancer via liquid biopsy
	Couch	Yvonne	PF02.05	Neuronal EVs and Microglial Activation in Hypoxia
	Crasta	Karen	PS09.09	Exosomes from mitotic slippage-induced senescent cells stimulate inflammatory response
	Cretich	Marina	PS04.04	A microfluidic module for Extracellular Vesicle separation coupled to microarray based phenotyping
	Criscuoli	Mattia	PF09.02	Evaluation of non-invasive biomarkers for monitoring functional status of endometrium
	Cusimano	Antonella	PF11.05	VES4US: Extracellular vesicles from a natural source for tailor-made nanomaterials
	Cvjetkovic	Aleksander	PF09.12	Determination of the protein cargo of colon cancer tissue-derived extracellular vesicles
<b>D</b>	Daaboul	George	PS05.01	Development of Pancreatic Cancer Screening Assay on the ExoView™ Platform
	Daaboul	George	PT09.04	Multi-Parametric Single Vesicle Analysis using an Interferometric Imaging Platform
	Das	Samarjit	PT08.07	Role of exosomal miR-15a in diabetic retinopathy
	De Luna	Andrea	LBT01.01	Coagulation influences properties of extracellular vesicles isolated from autologous blood derived products
	Deep	Gagan	PS09.11	Carnitine palmitoyltransferase 1 regulates proliferation of prostate cancer cells under hypoxia via extracellular vesicles-mediated removal of oxidized proteins
	Dekker	Mirthe	PS03.10	CystatinC and CD14 in plasma extracellular vesicles are associated with both renal dysfunction and heart failure in patients presenting with dyspnoea
	Delila	Liling	PF11.03	Extra-cellular vesicles in human platelet lysates for clinical use and human cell in vitro propagation
	Deng	Libin	LBF02.07	Syntenin regulates Hepatitis C virus sensitivity to neutralizing antibody by promoting E2 secretion through exosomes
	Dooley	Kevin	PS01.04	Development of a platform for exosome engineering using a novel and selective scaffold protein for surface display
	Drożdż	Anna	LBT01.10	Optimization and characterization of low vacuum filtration procedure - novel method for the isolation of extracellular vesicles
	Dwyer	Róisín	PT11.01	Cellular and Secreted Extracellular vesicles-encapsulated miRNAs in the 4T1 murine model of Breast Cancer.
	Dwyer	Róisín	PT04.06	Circulating Extracellular vesicle (EV)-encapsulated microRNAs as a biomarker of breast cancer
<b>E</b>	Edo	Naoki	PS05.10	Thyrotropin receptor-positive exosomes alleviate autoantibody-mediated stimulation of cAMP production
	Enciso-Martinez	Agustin	PT09.12	Identification of single tumor-derived extracellular vesicles by means of optical tweezers and Raman spectroscopy
<b>F</b>	Fagerlund	Riku	PF05.04	HIV-1 Nef mediated Hck kinase activation triggers loading of TACE into EVs in a ceramide-dependent manner
	Falcon-Perez	Juan Manuel	PF02.06	Comprehensive study of vesicular and non-vesicular associated miRNAs from a volume of cerebrospinal fluid compatible with the clinical practice
	Fan	Hongkuan	PT12.04	Extracellular vesicles from endothelial progenitor cells improve outcomes of the lipopolysaccharide-induced acute lung injury



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	Fei	Xuefeng	PT06.09	Specific decrease of CD19+ extracellular vesicles enhances post-chemotherapeutic CD8+ T cell responses
	Feng	Ye	PF08.13	Rab27a dependent exosome secretion from tubular epithelial cell promotes albumin-induced tubulointerstitial inflammation
	Fikatas	Antonios	PS02.09	Deciphering the role of extracellular vesicles on the blood-brain barrier during zika virus infection
	Flores-Bellver	Miguel	PT10.04	Extracellular vesicles released from human iPSC-derived 3D retinas contain small RNAs with roles in development and differentiation
	Fraikin	Jean-Luc	PS08.05	The Importance of Orthogonal Techniques in EV Quantification
	Fraser	Mhoyra	PT03.01	Circulating exosomal miRNAs as potential biomarkers for evaluation of preterm brain injury
	Fraser	Mhoyra	PT03.07	Circumventing qPCR inhibition to improve amplification of exosomal miRNAs in preterm fetal sheep heparinised plasma
	Fricke	Fabia	PF12.01	Tumor driver TGFBR2-dependent microRNA profiles in colorectal cancer cells and their EVs
	Fu	Qingling	PT10.10	Anion exchange chromatographic isolation of iPSC-MSC derived extracellular vesicles ameliorated allergic asthma in mice
	Fujita	Yasunori	PT07.04	Detection of CD11b-expressing exosomes in plasma of mice with sepsis
	Fujita	Daichi	PF06.09	Regulatory effect of apple-derived nanoparticle on intestinal organic anion transporting polypeptide (OATP) 2B1
	Furukawa	Koichi	PS09.01	Extracellular vesicles secreted from ganglioside GD3-expressing cancer cell lines contain high levels of integrins: Roles of lipid rafts
	Fusco	Pina	PF03.05	The role of hypoxia-derived exosomes in determining Neuroblastoma dissemination and aggressiveness
<b>G</b>	Gargiulo	Ernesto	PT06.04	Chronic Lymphocytic Leukaemia-derived small extracellular vesicles: A potential strategy for immune escape
	Gasecka	Aleksandra	PS03.11	Identification of extracellular vesicles as biomarkers for myocardial infraction by flow cytometry and automated data processing
	Gaspar	Diana	PT11.06	Design of an exosome-based drug delivery system transporting anticancer peptides for targeting breast metastases in the brain
	Gebara	Natalia	PF09.01	Extracellular vesicle (EV) extraction and characterisation in amniotic fluid (AF)
	Geffen	Yona	LBF02.04	Exosomes Derived from Human Mesenchymal Stem Cells Ameliorates Autistic-like Behaviors in BTBR and Shank3 Mice Models of Autism
	Giannasi	Chiara	PT10.07	Adipose-derived Stem/Stromal Cell secretome, containing both soluble factors and extracellular vesicles, exerts chondroprotective effects in vitro
	Giloteaux	Ludovic	PF01.06	Cytokine and miRNA profiling of plasma extracellular vesicles in individuals with Myalgic Encephalomyelitis/Chronic Fatigue Syndrome
	Go	Gyeongyun	PF12.03	Quantitative proteomic analysis of trypsin-treated extracellular vesicles to evaluate the real-vesicular proteins
	Godakumara	Kasun	PT02.04	Deciphering embryo-maternal communication; The dynamics of first contact between progenitor and progeny
	Goddard	Nicola	LBS01.11	Control of neural stem cell differentiation to generate defined exosome populations
	Goes	Adriely	PT12.12	Biocompatible myxobacteria-derived outer membrane vesicles show inherent antibacterial activity against gram-negative and gram-positive microbes
	Goo	Jiyoung	LBS03.11	Comparison of exosomes and ferritin protein nanocages for the delivery of membrane protein therapeutics
	Grassi	Michele	LBS02.01	Annexin V binding modulates the response of macrophages to mesenchymal stromal cell-derived extracellular vesicles
	Grillari	Regina	PS01.10	Human telomerized cells for production of extracellular vesicles
	Gue	Anne-Marie	PS04.09	TOWARDS ON-CHIP EVs SEPARATION: A LAB ON CHIP APPROACH
	Gupta	Archana	PT11.09	Surface Engineering of Exosomes to Block HIV Infection
	Gustafson	Dakota	PS03.07	Role of Extracellular Vesicles in Cardiovascular Toxicity Induced by BCR-ABL Tyrosine Kinase Inhibitors
<b>H</b>	Hady	Thomas	PF01.08	Immunomodulatory Exosomal Signaling Mediated by Porous Templated Scaffolds



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	Hamuro	Junji	PF08.04	Cell to Cell Interactions Orchestrated by Exosomal MiRNAs between Pathogenic- and Non-pathogenic Corneal Endothelial Cells
	Han	Bohoon	PS04.01	Isolation of extracellular vesicles from small volume of plasma by microfluidic aqueous two phase system
	Harada	Masako	PS01.08	Development of an in vivo Extracellular Vesicle Based peptide library screening tool
	Hata	Naoki	PF06.01	Exosome quantification by ELISA and Flowcytometry using anti-CD9 antibody
	Hayasaka	Ryosuke	PS07.04	Metabolome analysis of pancreatic cancer-derived extracellular vesicles
	Hendrix	An	PF10.09	Generating, characterizing and testing recombinant extracellular vesicles as biological reference material
	Henrich	Stephen	PF03.07	Nanoparticle mediated inhibition of intercellular communication between enzalutamide resistant prostate cancer cells and myeloid cells
	Heo	Youhee	PF02.01	The Effect of Exosome Purification Method on the Detection of Amyloid $\beta$ in exosomes with Photooxidation-Induced Fluorescence Amplification (PIFA)
	Hermann	Stefanie	PT07.07	Diagnostic microRNA biomarkers from circulating extracellular vesicles for early detection of pneumonia and severe secondary complications
	Hernandez	Alejandra	PS01.11	Extracellular vesicles from Fat-laden hypoxic hepatocytes activates pro-fibrogenic signals in Hepatic Stellate Cells
	Hiraga	Chiho	LBT01.12	Pentapartite fractionation of particles in oral fluids by differential centrifugation
	Hisey	Colin	LBS03.12	Cell-specific Growth Surface Topography Optimisation for Extracellular Vesicle Studies
	Hong	Chien Tai	PT12.02	Exosomes from adipocyte-derived stem cells reduce the oxidative stress through the mitochondrial uncoupling in pantothenate kinase 2 mutation in vitro models
	Hu	Guoku	PF02.03	HIV-1 Tat-induced Astrocytic Extracellular Vesicle miR-7 Impairs Synaptic Architecture
	Huang	Daniel	PS09.02	Amniotic Epithelial Exosomes Result In Reversal of Epithelial to Mesenchymal Transition in Hepatocellular Carcinoma Cell Lines
	Huang	Chun-Chieh	PF08.07	Natural and synthetic biomaterial mediated delivery of Mesenchymal Stem Cell derived exosomes
	Huang	Wei-Lun	PS09.06	Potential roles of cancer derived extracellular vesicles in lung cancer metastasis and progression
	Huang	Ching-Po	PF01.05	The immunomodulatory effects of human umbilical cord perivascular cell-derived extracellular vesicles on T lymphocyte differentiation
	Hyenne	Vincent	LBS03.02	RalA and RalB finely tune EVs biogenesis and promote metastasis
	Hyun	Kyung-A	PS04.13	An integrated microfluidic device for selective exosome isolation from human plasma
I	Ichikawa	Yuki	PF05.07	Circulating MiR-122 and let-7a may predict progression to hepatocellular carcinoma in patients with chronic hepatitis C virus infection
	Ichiki	Takanori	PT09.06	Electrophoretic separation of EVs using a microfluidic platform
	Ikeda	Atsushi	LBF01.02	Colorectal cancer cell-derived exosome enhances microenvironmental angiogenesis through modulation of intracellular metabolism
	Iki	Yoichi	PS06.02	Microvesicles are absorbed on the surface of extracorporeal membrane oxygenation circuit tubing
	Impola	Ulla	LBS03.04	New products from donated blood – unravelling the potential of blood cell derived EVs
	Ishikawa	Raga	LBS03.13	Development of engineered extracellular vesicles expressing immune checkpoint protein PD-1 by fusion with liposomes
	Itoh	Tomohiro	PT01.05	The exosome that are released from mechanical stress-stimulated osteocyte induces osteoclastogenesis
	Izquierdo	Elena	PF01.12	Loss of TP53 modifies the quantity and protein load of extracellular vesicles in leukemic B-cells
	Izumi	Hirohisa	PF12.06	Comparative analysis of stool extracellular vesicles between germ free, bifidobacteria-associated and SPF mice
J	Jaimes	Yarua	LBS01.01	Mesenchymal stromal cells derived- extracellular vesicles effect on microglia cells
	Jeon	Hyungtaek	PF05.01	Extracellular vesicles from KSHV-infected cells stimulate antiviral immune response through mitochondrial DNA
	Jevtić	Marijana	PF09.13	Characterization of small extracellular vesicles secreted by dermal fibroblasts



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	Ji	Cheng	PF08.09	hucMSC exosomes delayed diabetic kidney diseases by transported kinase ubiquitin system promoted YAP ubiquitination degradation
	Jinhye	Oh	PF03.09	Activated glial cells stimulated by breast cancer-derived exosomes enhance proliferation of brain metastatic breast cancer cells
	Johnson	Patricia	PS02.01	Host:pathogen interactions and host cell internalization of Trichomonas vaginalis exosomes
	Ju Hun	Yeon	PS10.07	Cancer-associated fibroblast accelerate cancer metastasis through exosomes
	Ju Hun	Yeon	PF11.01	Therapeutic effect of plant sap-derived nanovesicles on cancer cells
	Juan	Hsueh-Fen	PF03.03	Ectopic ATP synthase induces extracellular vesicle release for cell-to-cell communications
	Juhun	Yeon	PT12.10	Anti-melanogenic effect screening for natural plant-derived exosome-like nanovesicles
	Jun	Yein	PT07.05	Systemic inflammatory activity and proteome analysis of extracellular vesicles from feces
	Jung	Hyo-Il	PS08.12	Microfluidic electrochemical aptasensor for detection of breast cancer-derived exosomes in biofluids
<b>K</b>	Kano	Shinichi	PT01.01	Role of circulating extracellular vesicles in brain function and behavior
	Kato	Sumie	PS11.08	Simvastatin regulates the exosome synthesis and secretion in ovarian cancer initiating cells.
	Kato	Noritoshi	PF04.02	The endothelial PIGF is upregulated by exosomes from activated kidney fibroblast
	Katoch	Parul	LBS03.14	Carcinogenesis and Exosome Packaging
	Kawaaminami	Mitsumori	PT05.02	Augmentation by GnRH of ectosome containing annexin A5 formation by blebbing of pituitary gonadotropes and its biological effect
	Kelwick	Richard	PT09.10	Protease biomarker detection using functionalised bioplastic-based biosensors
	Kim	Mi Hyun	PS02.05	Different protein profile and host immune response induced by extracellular vesicles from Enterococcus faecium cultured with or without antibiotics
	Kim	Hyejin	PF11.04	EV-mediated delivery of enzymatically fabricated size-controllable functional DNA/RNA microstructures for therapeutic applications
	Kim	Yoon Kyoung	PT11.08	Exosome as a Vehicle for Delivery of Membrane Protein Therapeutics, PH20, for Enhanced Tumor Penetration and Antitumor Efficacy
	Kim	Jihye	PF10.10	ExtraSome: Method for exosome Isolation based on Polyethylene Glycol
	Kim	Se Yeon	PS02.07	Host immune response induced by outer membrane vesicles derived from Burkholderia cepacia cultured with different antibiotics
	Kim	Sehee	PF08.06	Human Adipose Stem Cells-derived Vesicles Improve Pain and Reduce Cartilage Destruction in an Osteoarthritis Rat Model
	Kim	Jong-In	PT11.04	Identification of exosome secretion inhibitor for cancer therapy
	Kim	Youngeun	PF07.07	Super-repressor-IkB-loaded exosome improves survival in a mouse model of sepsis and attenuates sepsis-induced inflammation
	Kim	Sang soo	LBS02.04	Comparative studies on in vitro and in vivo inflammatory activities of extracellular vesicles and soluble factors derived from bacteria
	Kirchner	Benedikt	LBT02.06	Universal reference transcripts for miRNA normalization – a meta-analysis on human blood extracellular vesicle RNA sequencing data sets
	Kmiotek-Wasylewska	Katarzyna	PS03.08	Extracellular vesicles derived from genetically modified human induced pluripotent stem cells enhance cardiomyogenesis and angiogenesis in vitro and in vivo
	Kogure	Akinori	PS06.03	Measurement of Physical Properties of Exosome by Atomic Force Microscope
	Kogure	Akiko	PF03.10	The glycosylation status affects the biodistribution of cancer extracellular vesicles
	Kojima	Ryo	PS01.05	Leptin-loaded macrophage-derived exosome: high-efficiency loading method and its properties
	Konishi	Makoto	LBT02.08	Quantitative proteomic profiling of tissue-exudative EVs identified a novel diagnostic antigen for early detection of colorectal cancer
	Kooijmans	Sander	PS04.07	A novel capture-and-release platform to isolate extracellular vesicle subpopulations reveals functional heterogeneity among EVs with different surface markers
	Kornilov	Roman	PT10.08	Epigenetic alterations in mesenchymal stem cells by osteosarcoma derived extracellular vesicles



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	Kotani	Ai	PF05.03	Multi organ association mediated by extracellular vesicles secreted from HBV positive hepatocyte
	Kotrbová	Anna	PF12.08	Mass spectrometry analysis of small extracellular vesicles isolated from ovarian cancer ascites
	Koyama	Yoshiyuki	PT06.06	Mechanism of antitumor immunity activation by 'artificial neoantigen'-presenting exosomes
	Kubo	Takuya	PS04.03	Effective separation of exosomes based on its surface sugar chains using a macroporous spongy monolith
	Kumari	Manju	PT03.05	Micro RNA- 451 -5p in urinary exosomes for non-invasive monitoring of reno-protective response
	Kuo	Wen-Hung	PS10.09	The miR-27b in breast cancer exosomes
	Kuo	Shang-Che	PT04.01	Unveiling of extracellular exosomal miRNA profiles of breast cancer
	Kupcova Skalnikova	Helena	LBT02.07	Small extracellular vesicle content in porcine blood plasma, cerebrospinal fluid and seminal plasma for proteomic analyses in biomarker discovery
	Kurimoto	Ayako	PS04.11	Proteomic and miRNA analysis of highly purified extracellular vesicles recovery using immunoaffinity purification and ultracentrifugation from serum, plasma and urine
	Kuypers	Sören	LBS02.10	Extracellular vesicles subpopulations: Who are the key players in vascular inflammation?
<b>L</b>	Langlois	Marc-André	PF01.02	Profiling Tetraspanin Expression Patterns on the Surface of Retroviruses and Extracellular Vesicles by Nanoscale Flow Cytometry
	Laurent	Louise	PT02.02	Maternal serum miRNA biomarkers for detection of placenta accreta
	Le	Minh	PS09.10	Extracellular vesicles from breast cancer cells deliver microRNA-125b to activate cancer-associated fibroblasts
	Lee	Eunji	PF11.11	Protective Effect of Extracellular Vesicles Released from The Neural Stem Cells on 6-hydroxydopamine Induced Pathological Condition of Parkinson's Disease
	Lee	Myung-Shin	PS11.02	Bacterial endotoxin-preconditioned periodontal ligament stem cells induce M1 polarization of macrophage through extracellular vesicles
	Lee	Wooje	PS08.11	Convolutional Neural Networks for Classification of Tumor Derived Extracellular Vesicles
	Lee	So Hee	PF07.01	Proteomic profiling of outer membrane vesicles derived from MicA, a small RNA from Escherichia coli
	Lee	Mi young	LBF01.07	Comparative proteomic analysis of exosomes and whole cells from NSCLC cell lines: focus on gefitinib resistance
	Lee	Meng-Jen	LBF02.09	Compound extracted from Cinnamomum osmophloeum leaves reduced exosomes release from hepG2 cells
	Lee	Jaemin	LBS02.05	Gram-negative bacterial extracellular vesicles promote angiogenesis by inducing interleukin-6
	Li	Anita	PT06.03	Apoptotic neuroblastoma derived extracellular vesicles can prime mesenchymal Stem Cells to decrease regulatory T cells differentiation
	Li	Bo	PS05.04	DNA Assembly assisting Magnetic Fluorescence Nanosensor based on Aggregation-Induced Emission Probe/Graphene Oxide for Cancerous Exosome Analysis
	Li	Rong	PT04.10	Exosomal sorting of circRNA promotes cancer progression and serves as a novel biomarker for gastric cancer
	Li	Zhuo	PF09.08	Exosome-encapsulated miRNA in urine as a non-invasive biomarker for prostate cancer
	Li	Shuang	PF05.09	Exosomes mediate the anti-viral activity of interferon-β against Zika virus infection
	Li	Xia	PT09.11	Single Exosome Size Analysis Using Super Resolution Microscopy
	Lim	Younggap	PF01.03	Isolation of EVs derived from human oral keratinocytes
	Lin	Chien-Chung	PS09.04	Extracellular vesicles miRNA in mediating EGFR-TKI sensitivity in heterogeneous EGFR-mutant NSCLC
	Liu	Xianshuang	PT10.09	Comprehensive proteomics and microRNA analyses of adult neural stem cell derived exosomes after stroke
	Liu	Wen	PT06.01	Development of CD40L-modified small extracellular vesicles for the effective induction of anti-tumor immune response
	Liu	Yu	PF05.02	Exosomes secreted by platelets infected with Hepatitis E virus can mediate transmission of HEV



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	Liu	Haisheng	PS05.05	Quantitative multiparameter analysis of individual urinary extracellular vesicles via a laboratory-built nano-flow cytometer
	Lopatina	Tatiana	PS09.08	The mechanism of non-metastatic contagious carcinogenesis
	Lopatina	Tatiana	LBT03.01	Regenerative potential of extracellular vesicles-derived from mesenchymal stem cells on epithelial wound healing
	Lu	Cheng-Hsiu	PS01.06	Characterization and in vivo imaging of mesenchymal stem cells derived extracellular vesicle
	Luoto	Jens	PF07.10	Isolation of Extracellular Vesicles from Extracellular Matrix Based Hydrogel 3D Cell Cultures
<b>M</b>	Mannerström	Bettina	PS06.09	Questioning the purity of the media - Extracellular small non-coding RNA contaminants in fetal bovine serum and serum-free media
	Marciano	David	PS03.06	Therapeutic EV Rescue a Deficient Hypoxic Response in Pulmonary Arterial Hypertension
	Margolis	Leonid	PF01.10	Extracellular vesicles-associated cytokines in human pathologies
	Martin-Duque	Pilar	PT12.13	Placental MSCs and their exosomes as vehicles for the Na/I symporter (hNIS): A new theragnostic agent
	Mauduit	Philippe	PS11.06	Production and use of extracellular vesicles-depleted human platelet lysate to improve large, clinical grade-compatible production of therapeutic human cell-derived extracellular vesicles
	Mazlan	Stephane	PS03.04	Intracardiac Extracellular Vesicle Release in Post-Infarction Diabetic Hearts
	Melero	Raquel	LBS03.09	Post-translational modifications affects trafficking of hyaluronan synthase 2 and the release of extracellular vesicles
	Meng	Fanyin	LBT03.07	Role of stem cell derived extracellular vesicles and their enriched microRNAs during alcoholic liver injury
	Mercurio	Vincenzo	PF05.06	Extracellular vesicle-associated cytokines in HIV infected human lymphoid tissue ex vivo
	Mi Yeon	Kim	PT03.09	A particle-based multiplex RT-qPCR for measuring circadian rhythm-associated genes
	Midekessa	Getnet	PS08.14	The effect of antibody binding on the zeta potential of extracellular vesicles secreted by cultured human choriocarcinoma cells
	Minakawa	Tomohiro	PS11.07	Synchronized cell differentiation via exosomes
	Minani Bertolino	Giuliana	PS11.09	Effects of mesenchymal stromal cells licensing on profile of extracellular vesicles
	Mizuno	Hiroki	LBS03.03	In vivo visualization of extracellular vesicles released from mature osteoblasts by intravital multiphoton microscopy
	Mizutani	Kosuke	PS02.04	Akt and CD9 in urine exosomes as potential markers for urinary tract infection
	Mladenović	Danilo	PF10.04	Effects of lipoprotein destabilization on isolation and analysis of plasma-derived extracellular vesicles
	Molika	Piyatida	PS07.02	Uptake of EVs derived from cervical cancer patients with precancerous induces HeLa cell proliferation
	Moradi-Bachiller	Soraya	PS05.11	In vitro and in vivo investigation of extracellular vesicles (EVs) as biomarker carriers in the diagnosis of early Alzheimer's disease
	Morgan	Rebecca	PT05.01	Uncovering the role of heparan sulphate proteoglycans in extracellular vesicle biogenesis: potential tools for improved therapies
	Morimoto	Masahiro	PF03.01	Promotion of metastasis via alteration of vascular endothelium by tumor exosome miRNA
	Morozumi	Mai	PF10.08	Comparison of isolating method for obtaining extracellular vesicles from cow's milk
	Morris-Love	Jenna	PF05.08	Biogenesis of JC polyomavirus associated extracellular vesicles depends on neutral sphingomyelinase 2
	Mukai	Atsushi	PT07.02	Innate/ inflammatory cross talk between macrophages (Mps) and RPE cells are mediated by exosomes secreted by RPE cells: Proposal of new trait for the pathogenesis of age-related macular degeneration (AMD)
	Mussack	Veronika	PF09.03	Unveiling autologous blood doping: comparative analysis of different purification strategies for urinary extracellular vesicles pioneering miRNA biomarker research
<b>N</b>	Nagy	Corina	LBT02.02	Using plasma to identify neural biomarker for antidepressant response in a treatment resistant cohort
	Nakagawa	Naoki	PT06.02	Development of Interferon $\gamma$ -loaded tumor cell-derived extracellular vesicles applicable to cancer vaccine therapy



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	Nakamura	Hidehiro	PS07.03	Optimized protocol for the quantification of amino acid concentrations in exosomes
	Nakamura	Takahisa	PT08.02	Role of extracellular vesicles in the regulation of inflammation and metabolism in obesity
	Nakase	Ikuhiko	PT12.03	Extracellular vesicle-secretion system based on agarose gel encapsulation of cells for cell therapy
	Nakayama	Sayaka	PT10.02	Increased exosome secretion is essential for myeloma stem cells to survive in hypoxic condition
	Nam	Sung-Wook	PS04.08	Nanopillar and nanochannel fabrication via mixed lithography
	Nam	Hyangsu	LBS03.06	A Highly Efficient Cell-Free Protein Synthesis System from Plasmid DNA.
	Neri	Christian	PF02.02	Bioinformatic and biochemical evidence for extracellular vesicle remodeling in Huntington's disease
	Nishiyama	Yukie	PS06.05	The factor affecting to the accuracy of extracellular small non-coding RNA biomarkers
	Nolan	John	LBT01.03	Standards for EV Research
	Nolan	John	LBT01.04	Cell-specific EV Tetraspanin Expression
	Noppen	Sam	PT01.03	In vivo tracking and monitoring of extracellular vesicles with a new non-lipophilic dye
	Nordmeier	Senny	PS01.07	EVs as siRNA delivery vehicles for functional knockdown in cells
	Nowocin	Anna	PS06.06	Generation of reference material for Flow Cytometric detection of Extracellular Vesicles
<b>O</b>	Ogawa	Yuko	PS06.04	Stability of human salivary extracellular vesicles under gastrointestinal tract conditions
	Oh	Mi Jeong	PT03.04	Identification and Verification of Differentially Expressed MicroRNAs in the plasma Microvesicles for the Diagnosis of Moyamoya Disease
	Ohmi	Yuhsuke	PS10.03	Functional analysis of exosomes in cancer metastasis
	O'Loughlen	Ana	PF08.12	Role of small extracellular vesicles in ageing
	Oneyama	Chitose	PF07.05	Src in endosomal membranes promotes exosome secretion and cancer progression
	Ono	Ryuichi	LBS02.03	Exosome-mediated horizontal gene transfer: a possible driving force behind mammalian genome evolution & a new risk for genome editing
	Osteikoetxea	Xabier	PF11.13	Endosomal escape enhancing compounds facilitate functional delivery of EV cargo
	Otahal	Alexander	PF10.01	Efficient clearance of lipoproteins from anti-coagulated and native blood-derived products to yield pure extracellular vesicle preparations
	Otani	Kosuke	LBF02.02	Plasma exosomes regulate proliferation and migration of vascular smooth muscle cells
<b>P</b>	Packirisamy	Muthukumaran	PS04.05	Comparison of Extracellular vesicles detection by microfluidic plasmonics of gold nano-island and nanocomposite platforms
	Palma	Carlos	LBF02.10	Placental cells function as environmental sensors that respond to changes in the extracellular milieu via extracellular vesicles
	Paolini	Lucia	PS08.06	Fourier-transform Infrared Spectroscopy (FT-IR) to fingerprint EV subpopulations as a whole
	Paolini	Lucia	PS08.01	Taxonomy of individual EVs by nanomechanics
	Park	Hye Sun	LBF01.10	In vivo imaging of natural killer cells labeled with fluorophore-loaded extracellular vesicle mimetics
	Park	Kyong-Su	LBF02.05	The use of artificially produced bacterial vesicles as an immunotherapeutic vaccine against Pseudomonas aeruginosa pneumonia
	Perets	Nisim	LBS01.05	Intranasal delivery of mesenchymal stem cell derived exosomes loaded with PTEN siRNA repairs complete spinal cord injury
	Perrin	Priscillia	PS07.01	A tunable system to visualize retrofusion, a major pathway for exosome uptake
	Petkevich	Alisa	PT04.09	Exosomes: the same team for hepatocellular carcinoma development on the background of HCV and ergotism?
	Phelps	Jolene	PS11.03	Hypoxia enhances the angiogenic properties of adipose stem cell-derived extracellular vesicles in culture
	Phillips	Daniel	PT05.05	Prokaryotic BAR domain-like protein BdpA promotes outer membrane extensions
	Pocsfalvi	Gabriella	PS07.08	Tomato fruit-derived vesicles: isolation, biocargo characterization and the dissection of different vesicle types
	Pomatto	Margherita	PS01.02	Improved loading of plasma derived-extracellular vesicles to encapsulate antitumor miRNAs



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Alpha	Last Name	First Name	Poster #	Poster Title
	Preußner	Christian	PF07.09	Sequence-specific release of EV-associated RNAs
	Preußner	Christian	PS02.06	The RNA profile of extracellular vesicles released from <i>Trypanosoma brucei</i>
	Prieto Vila	Marta	PF03.08	High-Grade Bladder Cancer Cells Secrete Extracellular Vesicles Containing MiRNA-146a-5p and Promotes Angiogenesis.
<b>R</b>	Rahman	Md. Matiur	PF10.07	Evaluation of the effects of acidification on isolation of extracellular vesicles from bovine milk
	Rasmussen	Rikke Wehner	PF06.05	Lipoprotein particles can be detected by high-resolution flow cytometry and potentially interfere with EV characterisation
	Real	Juliana	PT07.01	Circulating microvesicles as potential biomarkers of Acute Respiratory Distress Syndrome in Sepsis
	Rhim	Won-Kyu	LBS01.12	Engineered stem cell membrane-cloaked gold nanorods for efficient cancer therapy
	Richter	Robert	PS02.02	Coating filter membranes with bacterial derived vesicles to study the permeation of anti-infectives across the Gram-negative cell envelope
	Richter	Maximilian	PS08.07	Exploration of the surface modification of outer membrane vesicles
	Rikkert	Linda	PF10.03	A centrifugation model to predict the behaviour of tumor biomarkers in liquid biopsies
	Rogers	Nicholas	PF06.07	Evaluating the Surface Charge of Yeast Extracellular Vesicles as a Function of Environmental Parameters
	Roh	Tae-Young	PF12.02	Orthologous grouping and comparison of prokaryotic and eukaryotic EV proteomes
	Rowley	Jon	PT10.05	Xeno-Free Manufacturing of MSC-EVs in Scalable Bioreactor Culture
	Ryu	Yong-Sang	PS04.06	Dielectrophoretic Nanovesicle Sorter
	Ryu	Kyung Ju	PT04.03	Hypoxia may promote tumor aggressiveness and extracellular vesicle-mediated cell to cell communication in multiple myeloma
	Ryu	Kyung Ju	PT04.07	Role of exosomal microRNA as a biomarker for extranodal NK/T-cell lymphoma
<b>S</b>	Salomon	Carlos	PS10.06	Exosomes derived from differentially invasive ovarian cancer cells modulate tumour growth and metastasis in vivo
	Salomon	Carlos	PS10.02	Novel Exosomal miRNAs-891-5p as an Indicator of Chemoresistance in Ovarian Cancer
	Salomon	Carlos	LBF02.11	Association of cytokines with circulating populations of extracellular vesicles at early gestation
	Sanchez	Vanesa	LBF01.06	Chloride intracellular channel protein 4 (CLIC4) is a serological cancer biomarker released from tumor epithelial cells via extracellular vesicles and required for metastasis
	Sasaki	Ryo	LBF01.11	Comparison of MMP-13-containing extracellular vesicles with metastatic ability in human osteosarcoma cells
	Sato	Shinya	PF03.06	HNSCC exosomes drive tumor angiogenesis via ephrin reverse signaling
	Sawada	Shin-ichi	PS01.09	The construction of nanogel/exosome hybrid by exosome surface polymer engineering
	Sell	Henrike	PT08.03	Characterization of exosomal proteins derived from contracting skeletal muscle as potential mediators of beneficial metabolic effects of exercise
	Seo	Naohiro	PF10.06	Only a portion of the T cell-released exosomes has a capacity to destruct mesenchymal tumor stroma
	Shao	Pei-Lin	LBT03.05	Adipose-derived mesenchymal stem cell-derived exosomes alleviate overwhelming systemic inflammatory reaction and organ damage and improve outcome in rat sepsis syndrome
	Sharma	Shayna	PT04.05	Exosomal miRNAs and proteins signature as prognostic biomarkers for early stage epithelial ovarian cancer
	Sharma	Shayna	PS10.04	Profiling of circulating exosomal content across epithelial ovarian cancer and the role of exosomes in tumour progression
	Sharma	Rajni	PS05.06	Proteomic profiling of urinary exosomes for potential predictors of albuminuria in subjects with diabetes
	Shelke	Ganesh	LBS02.08	Extracellular Vesicle-induced protein phosphorylation: Rapid activation of epithelial-mesenchymal transition pathways in lung epithelial cell.
	Shibuta	Tatsuki	PT06.05	Interaction via exosome miRNAs between myelodysplastic cell and normal Treg.
	Shimasaki	Takeo	PT09.09	Analysis of intracellular dynamics of exosomes and changes of surface markers





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	Shimizu	Yuta	PT10.11	Characterization and miRNA expression profiles of exosomes from HLA homozygous haplotype dental pulp cells and iPS cells
	Shimoda	Asako	PS07.07	Surface glycan profiling of extracellular vesicles by lectin array system for biomarker discovery
	Shin	Hyunwoo	PF10.11	Aqueous two-phase system to isolate extracellular vesicles for prostate cancer diagnosis
	Shin	Eun Kyoung	PS06.08	Evaluation of stability maintenance of extracellular vesicles upon storage temperature and period
	Shin	Sol	PT12.08	Human adipose tissue-derived mesenchymal stem cell exosomes for the treatment of liver fibrosis
	Silvis	Max	PF11.07	Therapeutic effects of mesenchymal stem cell exosomes in myocardial ischemia/reperfusion injury in a porcine model
	Situ	Bo	LBT02.04	Labeling and Tracking Extracellular Vesicles Using a RNA-targeting AIE Fluorogen
	Son	Joo Hee	PS02.08	Thymol suppresses the inflammatory responses induced by Staphylococcus aureus-derived extracellular vesicles in cultured keratinocytes
	Song	Yonghee	PF07.08	Efficient Delivery of Glucocerebrosidase Lysosomal Enzyme via EXPLOR Technology for Treatment of Gaucher's Disease
	Song	Kang-Moon	PT12.07	Embryonic stem cell-derived extracellular vesicle-mimetic nanovesicles rescue erectile function by enhancing penile neurovascular regeneration in the streptozotocin-induced diabetic mouse
	Sosanya	Natasha	PF02.07	Identifying plasma-derived extracellular vesicle (EV) contained biomarkers in the development of chronic neuropathic pain
	Sun	Yuchen	LBT01.05	Characterization of lipid profile of extracellular vesicles and lipoproteins in human plasma and serum
	Sung	Ji Hee	PF11.08	The therapeutic potential of MSC-derived extracellular vesicles for stroke
	Sung	Mi Sook	LBT02.09	Single-Molecule co-Immunoprecipitation Reveals Functional Inheritance of Epidermal Growth Factor Receptors in Extracellular Vesicles
	Suwakulsiri	Wittaya	PF12.07	Shed microvesicles released from human primary and metastatic colorectal cancer cell lines contain key cancer progression proteins and RNA species
	Swift	Simon	PS02.03	Quality markers for microbial EVs
	Szatmári	Tünde	PF04.03	The effect of in vivo irradiation on the extracellular vesicle's cargo and uptake
<b>T</b>	Taatizadeh	Erfan	PS04.10	Acoustophoretic-based microfluidic platform for sorting extracellular vesicles
	Takada	Yukichi	PT03.06	Circulating miR-451a is a useful biomarker for hemolysis
	Takanashi	Masakatsu	LBS02.06	Dendritic cell derived-exosomes activate immune systems by transferring exosome involved factors to T cell.
	Takeuchi	Toshihide	PF07.02	Dysfunction in an autophagy-lysosome degradation pathway promotes secretion of ubiquitinated proteins via extracellular vesicles
	Takov	Kaloyan	PS03.09	Cardioprotective and proangiogenic potential of small extracellular vesicles secreted from amniotic fluid stem cells
	Tang	Vera	PF06.10	Fluorescent Retroviruses as Reference Particles for Nanoscale Flow Cytometry
	Tang	Kai D	PF09.09	Unlocking the secret of salivary exosomes derived from HPV-driven oropharyngeal cancer
	Tang	Ming Jer	LBF01.03	Augmentation of Exosome secretion in Ha-RasV12-induced cell softening and multilayer cellular aggregates in Madin-Darby canine kidney cells
	Tao	Shi-Cong	PT12.05	Hsa_circ_0000077-Overexpressing Extracellular Vesicle: A New Tool to Prevent Cartilage Degeneration
	Tashiro	Kensuke	PT12.06	Lymphangiogenesis induced by exosomes derived from adipose-derived mesenchymal stem cells
	Ter-Ovanesyan	Dmitry	LBT02.03	Isolation of neuron-specific extracellular vesicles
	Tey	Sze Keong	PF03.02	Patient-derived circulating exosomes enhance cancer and stemness properties through polymeric immunoglobulin receptor in liver cancer
	Thomas	Bethan	PF08.11	Neutrophil extracellular vesicles protect from joint breakdown in inflammatory arthritis
	Tian	Ye	PF06.06	Analysis of fluorescent labeling efficiency of extracellular vesicles derived from different kingdoms of life with lipid-binding dyes via nano-flow cytometry

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Alpha	Last Name	First Name	Poster #	Poster Title
	Tian	Xinyu	LBF01.09	Exosomal long noncoding RNA NBR2 facilitates the immunosuppression of MDSCs by enhancing the phosphorylation of signal transducers and activators of transcription 3
	Toda	Yuki	PT01.04	Exosomal lipids applicable to cancer targeting
	Tonoli	Elisa	LBF02.01	Type-2 transglutaminase affects calcium homeostasis in neurons and is released in association with astrocytes-derived exosomes
	Tsai	May-Jywan	LBF02.12	Mesenchymal stem cell-derived exosomes attenuate inflammation and protect ischemic neuronal damage
	Tugizov	Sharof	LBF02.06	Herpesvirus infection of infant tonsil mucosal epithelia containing intravesicular Human Immunodeficiency Virus induces release of HIV from epithelial cells
<b>U</b>	Umezu	Tomohiro	LBF01.08	Extracellular vesicles derived from bone marrow stromal cells promote evasion of multiple myeloma cells from natural killer cell anti-tumor activity
	Urabe	Fumihiko	PS10.01	Prostate cancer cells promote bone metastasis through extracellular vesicles
<b>V</b>	van Balkom	Bas	PF08.03	Paracrine regenerative function of mesenchymal stem cells is not affected by chronic kidney disease
	van Balkom	Bas	PF12.05	Proteomic signature of mesenchymal stromal cell-derived small extracellular vesicles.
	van der Pol	Edwin	PF06.04	Improved scatter sensitivity of a flow cytometer for detection of extracellular vesicles
	van der Pol	Edwin	PS08.09	Software to automate calibration and processing of flow cytometry data in clinical studies
	Varga	Zoltan	PT09.01	Extracellular vesicle concentrations in human plasma and serum as revealed by microfluidic resistive pulse sensing and size exclusion chromatography coupled with on-line fluorescence detection
	Varga	Zoltan	PT09.07	Size distribution of extracellular vesicles by microfluidic resistive pulse sensing and small-angle neutron scattering
	Varga	Zoltan	LBT01.02	EV-Avogadro project: Towards a liposomal concentration standard for extracellular vesicle research
	Vogt	Stefan	LBS03.10	Improving the stability of the large extracellular loop of human tetraspanin CD81
<b>W</b>	Wang	Yanqing	PT04.04	Deep sequencing identified serum exosomal miR-181a-5p as an indicator for bone-metastatic prostate cancer
	Wang	Julie	PT02.03	Effects of medium term storage on placental extracellular vesicles
	Wang	Yang	PF11.10	Exosomes from human urine-derived stem cells promote neurogenesis via histone deacetylase6 regulation in ischemic stroke
	Wang	Daming	PF09.05	Expression profile analysis of miRNAs in serum exosomes as sensitive biomarkers before and after hematopoietic stem cell transplantation
	Wang	Haobin	LBT02.01	Cancer stem cell-derived exosomes potential for early detection in pancreatic cancer
	Wang	Ting	LBF01.13	Exosomal long noncoding RNA NBR2 induces the autophagy of lung cancer cells by interacting with high-mobility group box 1
	Welsh	Joshua	PS08.13	A software suite allowing standardized analysis and reporting of fluorescent and scatter measurements from flow cytometers.
	Welsh	Joshua	PT09.14	The development of a scalable extracellular vesicle subset characterisation pipeline.
	Whittaker	David	PT04.11	Development of Non-Invasive Tests for Prostate Cancer
	Wong	Man Sze	PF11.12	The function of Extracellular Vesicles Secreted by Human-induced Pluripotent Stem Cell-derived Mesenchymal Stem Cells on a Cellular Ischemic Stroke model
	Woo	Hyun-Kyung	PS06.01	AR-V7 in urinary EVs of patients with prostate cancer
	Woo	Hyun-Kyung	LBT01.09	Exodisc for fast and robust isolation of extracellular vesicles from whole-blood
	Wu	Peipei	PT12.09	HucMSC Exosome Confer Protection Against Ultraviolet Radiation Induced Acute Photodamage via Modulation of SIRT1 Pathway
	Wu	Duojia	PS05.07	Identification of exosomal biomarkers in urine for human prostate cancer
	Wu	Yunjie	PT05.03	Investigation into a novel role for the prolyl isomerase cyclophilin A during Extracellular vesicle signaling in cancer
	Wu	Yu-Wen	PT11.05	Platelet-derived microparticles as an oriented bullet for cancer treatment
	Wu	Shun-Cheng	LBT03.02	Intravenous administration of xenogenic adipose-derived mesenchymal stem cells (ADMSC) and ADMSC-derived exosomes markedly reduced brain infarct volume and preserved neurological function in rat after acute ischemic stroke



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	Wu	Shun-Cheng	LBT03.04	Combination of adipose-derived mesenchymal stem cells (ADMSC) and ADMSC-derived exosomes for protecting kidney from acute ischemia-reperfusion injury
	Wu	Shun-Cheng	LBS01.09	Adipose-derived stem cells enhance chondrogenesis and cartilaginous matrix synthesis of articular chondrocytes is mediated by extracellular vesicles
X	Xue	Zou	PF12.10	HIV-specific antibody mediated targeting of ENV+ tissues by exosomes
Y	Yamada	Mitsuhiro	LBS02.09	Serum extracellular vesicular miR-21-5p is a predictor of the prognosis in idiopathic pulmonary fibrosis
	Yamamoto	Tomofumi	PF07.03	Identifying the miRNAs Associated with EV Secretion from Cancer Cell Lines
	Yamamoto	Yuki	PF06.08	Isolation and characterization of bovine milk-derived EVs.
	Yang	Yunlong	PT11.07	Embryonic Stem Cells-derived Exosomes Endowed with Targeting Properties as Chemotherapeutics Delivery Vehicles for Glioblastoma Therapy
	Yang	Chia-Yu	PS05.02	Exosomal surface biomarkers discovery of breast cancer early detection
	Yang	Fuquan	PF10.02	Proteomic and Lipidomic Analysis of Extracellular Vesicles from Human Plasma and Urine Purified by Asymmetrical Flow Field-Flow Fractionation
	Yano	Kimiyoshi	PS09.05	Senescent cells-derived extracellular vesicles repress tumor growth by transferring miR-127-3p and miR-134-5p.
	Ye	Yun	PS07.05	Exosomal miR-141-3p regulates osteoblast activity to promotethe osteoblastic metastasis of prostate cancer
	Ye	Yun	LBF01.01	Exosomes from LNCaP cells promote the activity of osteoblasts through the transfer of miR-375
	Yelamanchili	Sowmya	PF05.05	Role of Extracellular Vesicles in HIV and Methamphetamine induced neurotoxicity
	Yi	Yong Weon	LBS01.06	ASC-EXOSOME as a potential therapeutic for atopic dermatitis
	Yin	Guonan	PF02.04	The pericytes-derived extracellular vesicle-mimetic nanovesicles rescues erectile function by enhancing penile neurovascular regeneration in a mouse model of cavernous nerve injury.
	Yokoyama	Fumiaki	PT05.04	Identification of a protein that presumably controls bacterial vesiculation in response to the extracellular environments
	Yoshida	Kaya	PT08.08	The effects of outer membrane vesicles delived from Porphyromonas gingivalis on hepatic glucose metabolisms
	Yoshioka	Yusuke	PF09.07	Circulating cancer-associated extracellular vesicles as early detection and recurrence biomarkers for pancreatic ductal adenocarcinoma
	Yu	Xiaoli	LBT01.13	Heat Shock Protein-Accessorized Exosomes: Presence in States of Danger, Disease, and Disruption
	Yun	Ye eun	PF08.08	Exosomes secreted during chondrogenic differentiation of human adipose-derived stem cells for osteoarthritis treatment
Z	Zhang	Xiaoman	PS06.07	Comparison of serum and plasma as a source of blood extracellular vesicles reveals possible contamination of serum with platelet-derived particles produced during coagulation
	Zhang	Yuefei	PT07.03	Epithelial exosomes regulated by phosphatase Shp2 promote macrophage activation
	Zhang	Shipin	PF11.14	MSC exosome works through a multi-faceted mechanism of action in joint repair
	Zhang	Huina	PS03.01	Serum exosome mediates chronic intermittent hypoxia-associated endothelial dysfunction through regulating miR-144, -27a/Nrf2 pathway
	Zhang	Yong-Liang	LBS01.02	Porcine milk exosomes protect intestine against deoxynivalenol damage
	Zhang	Yong-Liang	LBS01.07	Porcine milk exosome miRNAs attenuate lipopolysaccharide-induced apoptosis by inhibiting TLR4/NF-κB and P53 pathways
	Zhao	Weian	PT12.11	Stem cell extracellular vesicles as therapeutics for autoimmunity
	Zhiyang	Il	PT01.06	A label-free aptasensor for electrochemical detection of gastric cancer exosomes
	Zhou	Ying Qiu	PS03.03	Changes in Exosome Release in Aging: A Pilot Study in a Human Model of Ischemia Reperfusion
	Zhou	Yu	PT11.03	Delivery of miR-185 enriched EVs from MSCs inhibits the progression of OPMD
	Zhou	Ruihan	PS03.02	Influence of cardiovascular risk markers on numbers and characterisation of circulating extracellular vesicles
	Zivko	Cristina	PT08.06	Profiling of extracellular vesicles from human hepatic stellate cells



# ISEV SPONSOR DIRECTORY

## AGC Asahi Glass

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EriVan Bio offers exosomes for research purposes and the biopharmaceutical industry. We offer several types of exosomes dispatched in different supply scales to meet research and manufacturing needs. Quality optimization is our top priority. Quality, quantity, and fitness differentiate our products. The quality of exosomes is assured in a GLP compliant laboratory. With the wealth of knowledge amassed in the R&D department, the exact features for any purpose is guaranteed by quality control tests.

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FiberCell Systems provides 3-D hollow fiber bioreactors for the production of secreted exosomes at high concentrations. Hollow fiber bioreactors provide in vivo like cell culture conditions and can support the continuous production of exosomes at clinically relevant scale, using protein free medium. The systems are compact, single use, cGMP compliant and can produce exosomes on a continuous basis. Gram quantities of exosomes can be produced using current technology.

## FUJIFILM Wako Pure Chemical Corporation

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FUJIFILM Wako Pure Chemical Corporation is a world-renowned supplier of high purity laboratory chemicals for research and development based in Japan. Our comprehensive product portfolio includes analytical reagents, fine chemicals and life science products. We focus on creating new value for our customers and are continuously engaged in developing new technologies. In ISEV2019, we introduce PS Affinity method for isolating and detecting extracellular vesicles. It enables easy isolation of high purity and high yield EVs.

## HansaBioMed Life Sciences

Booth 17-18

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HansaBioMed LS is the oldest company entirely dedicated to the R&D of products in Extracellular Vesicles field. We develop and commercialize proprietary platforms for EV research, collaborating with leading research groups to develop future technologies. Exosomics envisions a world where a blood draw is sufficient for early diagnosis, monitoring and better patient outcomes. We develop and commercialize new generation of tests for cancer screening and liquid biopsy based on EVs, suitable for research and diagnostics.

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We are a subsidiary of HMT that provides metabolome analysis. We release an exosome purification kit named ExoIntact™. ExoIntact™ can easily purify exosomes and other extracellular vesicles (EVs) with high purity using peptides that have high affinity for phospholipids such as phosphatidylinositol and phosphatidylserine with magnetic beads.

## Ichimaru

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Ichimaru Pharcos is a Leading JAPANESE company for Natural cosmetic Ingredients and Food Ingredients. We are located in the Motosu city of Gifu Prefecture. One of our key research areas is to understand the plant or animal origin exosomal effect on beauty and health.



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

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## Luminex Corporation

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*Luminex Corporation develops, manufactures and markets biological testing technologies in the clinical diagnostic and life science industries. Luminex's mission is to empower labs to obtain reliable, timely, and actionable answers, ultimately advancing health. Luminex offers a wide range of solutions applicable in diverse markets including clinical diagnostics, pharmaceutical drug discovery, biomedical research, genomic and proteomic research, and food safety.*

## Malvern Instruments

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*Leading innovations of technologies and services for the greater benefit of society, in collaboration with Miraca Group's subsidiaries, as well as with other notable domestic and international companies and research institutions; Licensing research results to the Miraca Group's subsidiaries to expand businesses; Launching new businesses to make the most of research results, leveraging the strength of subsidiaries.*

## MiRTeL

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*MiRTeL provides consulting services regarding research to companies, healthcare facilities, and universities, etc.*

## NanoFCM INC.

Booth 13-14

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Park for Overseas Chinese Scholars  
Xiamen, Fujian China 361006  
+86 5922091013  
info@nanofcm.com

*NanoFCM has developed a next-generation EV analysis platform based on nano-flow cytometry, to perform the comprehensive measurement of extracellular vesicles (size, concentration and phenotyping). The Flow NanoAnalyzer allows multiparameter analysis at single-particle level with unparalleled lower limit of detection for a flow cytometer (30-40 nm). Nanoflow-cytometry offers the flexibility to screen for standard EV proteins and lipids, as well as for unique biomarkers of diseases, becoming an indispensable tool of any EV-focused research group.*



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NanoView Biosciences Inc has developed a unique technology that represents a step forward in EV characterization capabilities. The technology has removed the biases associated with sample purification, by removing the need to purify entirely. The fully automated ExoView™ R100 platform provides multi-level and comprehensive EV measurements for particle size analysis, EV count, EV phenotype, and biomarker colocalization. The ExoView™ platform provides previously unattainable information in a single, bias and purification free sample workflow.

## NeuroExo Sciences

Booth 23

2655 Northwinds Parkway  
Alpharetta, Georgia 30009  
(888) 451-4955  
jc.saltiel@neurotraumasciences.com

NeuroTrauma Sciences (NTS) is a biopharmaceutical company focused on developing neuroprotective and neurorestorative agents to treat brain injury including stroke, concussion, and the complications of traumatic brain injury (TBI).

## Nova Biomedical K.K.

Booth 11

13-16 Mita 3-chome  
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m.narita@novabiomedical.co.jp

Incorporated in 1976 and based in Waltham, MA, Nova Biomedical is a world leader in the development and manufacturing of state-of-the-art, whole blood, point-of-care and critical care analyzers, as well as providing the biotechnology industry with the most advanced instruments for cell culture monitoring. Nova's biotechnology-specific BioProfile line has pioneered comprehensive cell culture testing, providing over 20 critical cell culture tests with over 12 unique instrument offerings for broad range of cell culture applications.

## ONI Limited

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## Particle Metrix GmbH

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Booth 28

2438 Embarcadero Way  
Palo Alto, California 94303  
(650) 968-2200  
info@systembio.com

System Biosciences is a leading provider of innovative products and services for Exosome Research. Our exosome portfolio, with our flagship ExoQuick line, enables basic and translational researchers to better investigate exosomes and discover disease biomarkers. We also offer exosome quantitation and engineering tools, plus NGS, Mass Spec and NTA services.

## ThermoFisher Scientific

Booth 24

5823 Newton Dr.  
Carlsbad, California 92008  
(760) 201-6311  
sean.harrington@thermofisher.com

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. We help our customers accelerate life sciences research, solve complex analytical challenges, improve patient diagnostics, deliver medicines to market and increase laboratory productivity. The Sample Preparation team, we work to be industry leaders in sample prep technology with instrument systems such as the KingFisher and reagents with brands like Dynabeads.



# ISEV SPONSOR DIRECTORY

## Macrogen

Booth 3

+82-2-2180-7000

raphael30@macrogen.com

*Macrogen is a global precision medicine company that predicts diseases through big data integrated with genomic information. We provide services in sequencing analysis (CES, NGS), microarray, oligo synthesis, GEM (Genetically Engineered Mouse) and bioinformatics.*

*Join us at the Macrogen booth and meet our exRNA sequencing experts to discuss your research.*

## Zurich

Booth 27

81-3-6832-2111

*Our strategy to deliver long-term competitive advantage focuses on continuing to increase profitability and consolidating our position as a leading global underwriter for property and casualty, and life insurance. We aim to expand customer relationships, simplify the business and significantly reduce costs. At the operating level, Zurich will continue to reduce complexity and improve accountability. We will enhance technical excellence and strengthen our ties to commercial customers. We will also seek to enhance our offerings to individuals by monitoring and aiming to increase customer satisfaction and retention.*



Daigoji Temple, Kyoto

Launch at  
ISEV 2019



# ZetaView® QUATT

1 sample

5 NTA channels

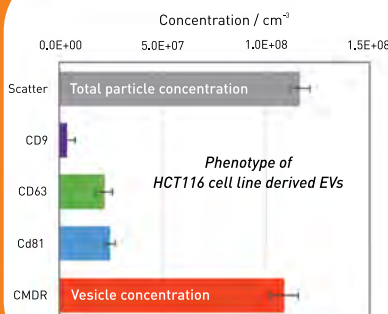
automated laser and filter selection

Ex: 405 nm  
Violet channel

Scatter  
Total particle concentration

Ex: 488 nm  
Blue channel

Ex: 520 nm  
Green channel



Ex: 640 nm  
Red channel

[www.particle-matrix.com](http://www.particle-matrix.com)



# Extracellular Vesicles Research Products

## FUJIFILM Wako Solutions for Isolation, Detection, and Analysis of Extracellular Vesicles

On the basis of PS Affinity, PhosphatidylSerine (PS) affinity-based method, FUJIFILM Wako has created effective tools for extracellular vesicles research and it delivers High-Quality Purification, High-Sensitive Detection, and High Reproducibility.

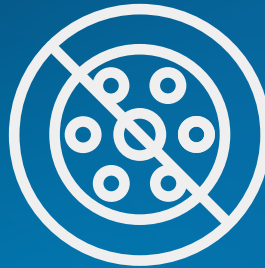
- **MagCapture™ Exosome Isolation Kit PS** can easily isolate intact and high purity exosomes and other extracellular vesicles from cell culture medium and body fluids at high yield without ultracentrifugation
- **PS Capture™ Exosome ELISA Kit (Streptavidin HRP)** can easily detect surface marker proteins of extracellular vesicles with 50 to 1,000 times higher sensitivity than Western blot
- **PS Capture™ Exosome Flow Cytometry Kit** can detect surface marker proteins at a high sensitivity by flow cytometry and realize direct qualitative analysis of surface marker proteins without purification of extracellular vesicles
- **EV-Save™ Extracellular Vesicle Blocking Reagent** can strongly suppresses adsorption of extracellular vesicles to laboratory tools and save valuable extracellular vesicles from loss
- **Exosomal Antibodies:** High quality antibodies are developed by DNA immunization. These antibodies introduce high sensitivity and high specificity.



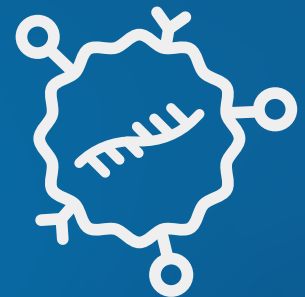
Key features of  
**EXOVIEW™**



Single vesicle analysis:  
Size and Count



Purification not  
required - direct from  
plasma and culture



Colocalization of  
4 surface markers  
on single EVs

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