



Cross-Organism Communication by Extracellular Vesicles: Hosts, Microbes, Parasites

November - 24th to 25th

Preceded by an Educational Event, November 23rd, 13:00-20:00

Golden Tulip Paulista Plaza -Alameda Santos, 85 - Jardim Paulista, São Paulo -
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Website: www.goldentulippaulistaplaza.com/pt-br

Organizers:

Local board - São Paulo: Rodrigo Pedro Soares, Patrícia Xander, Maria Julia Manso Alves and Walter Colli

ISEV board: Ana Claudia Torrecilhas, Andrew Hill, Kenneth Witwer, Marca Wauben and Yong Song Gho



**Your name here! Inquire about remaining sponsor opportunities:
kwitwer1@gmail.com**

November 23 Education Day

Note: Talk titles to follow

13:00-14:00– Registration

14:00-14:10– João Alexandrino (Academic Director – UNIFESP)

14:10-14:30 - Maria Julia Manso Alves “*Trypanosoma cruzi* x EVs”

14:30-15:30 EV Isolation, characterization and analysis

Chairperson: Sergio Schenkman

Kenneth Witwer

Vilma Regina Martins

Marca Wauben

15:30-16:30 Networking and Coffee Break

Introductions around the room: Name/Institute/Project description **then coffee**

16:30-17:50 Pathogens x Host #1 (Viruses, bacteria and fungi)

Chairperson: Maria Julia Manso Alves

Luis Lamberti

Esther Nolte-'t Hoen

Yong Song Gho

Rosana Puccia

17:50-19:10 Pathogens x Host # 2 (Parasites - protozoa and helminths)

Chairperson: Patrícia Xander

Hernando Del Portillo

Antonio Marcilla

Peter Nejsum

Martin Olivier

19:10-20:00 “Brainstorm - Project and Results”

(5 min flash presentations by post docs and students)

Chairperson: Vera Lucia Pereira-Chioccola

Camilla Vasconcellos

Katia Otaguiri

Andre Cronemberge Andrade

Larissa Gonçalves Machado

Juliana Monte Real

Kleber Ribeiro

Farah Fátima

Valéria Oliveira Silva

Cross-Organism Communication by Extracellular Vesicles: Hosts, Microbes, Parasites



PROGRAM

November 24

7:00-8:00: Registration

8:00-8:25: Welcome to the Seminar and outline

Ana Claudia Torrecilhas and Rodrigo Soares

Opportunities for Research Grants in São Paulo

Walter Colli

8:25-8:40: *ISEV* research seminars and their output

Marca Wauben (*ISEV*) and Kenneth Witwer (*ISEV*)

TOPIC# 1: EVs in Parasite-Host Interactions

Chairperson: Ana Claudia Torrecilhas

8:40-9:05 Antonio Marcilla

Overview: Characterization of EVs from parasitic trematodes as tools in disease control

9:05-9:30 Hernando Del Portillo

Overview: Host-parasite interactions mediated by exosomes in malaria

Intestinal Protozoa

9:30-9:45 Ingrid Evans-Osses

Does Microvesicles (MVs) releasing from *Giardia intestinalis* trophozoites modulate host cell interaction?

9:45-10:00 Adriana Oliveira Costa

Extracellular vesicles produced by potentially pathogenic free-living amoeba of the genus *Acanthamoeba* and their role in the innate immune response

10:00-10:30 Coffee Break

Helminths

10:30-10:45 Eline Palm Hansen

Extracellular vesicles of parasitic nematodes in pigs: An examination of contents and uptake in host cells.

10:45-11:00 Maria Eugenia Ancarola

Cestode parasites secrete microRNAs packaged in extracellular vesicles

Protozoa

11:00-11:15 Martin Olivier

Vector transmitted Leishmania exosomes

11:15-11:30 Armando de Menezes-Neto

The lipophosphoglycan (LPG) is also present in Leishmania-derived vesicles

11:30-11:45 Paula Monalisa Nogueira

Infection by *T. cruzi* induces a complex immune response that involves effectors and regulatory mechanisms

11:45-12:00 Marcel Ramirez

Microvesicles release during *Trypanosoma cruzi* infection

12:00-13:00 Lunch Break

TOPIC #2: Bacteria, hosts and EVs

Chairperson: Yong Song Gho; **Co-Chairperson:** Ana Claudia Torrecilhas

13:00-13:30 Yong Song Gho

Overview: Gram-negative and gram-positive extracellular vesicles

13:30-13:45 Hanne Winther-Larsen

Bacterial membrane vesicle secretion and host interaction

13:45-14:00 Kristian Riesbeck

Outer membrane vesicles released by respiratory pathogens

14:00-14:15 Jeff Schorey

The importance of extracellular vesicles in promoting a T cell response during a natural *Mycobacterium tuberculosis* infection

14:15-14:30 Joelle Fritz

The extracellular RNA complement of *Salmonella enterica serovar typhimurium* and its possible role in mediating host-microbe interactions

14:30-14:45 Reidun Øvstebø

Micro particle-associated tissue factor activity correlates with plasma levels of bacterial lipopolysaccharides in meningococcal septic shock

14:45-15:00 Michael Pfaffl

How the microbiome & food communicate with the host

15:00-15:30 Coffee Break

15:30-17:30 Roundtable # 1: EVs in Parasite-Host Interactions

Moderators: Hernando Del Portillo and Peter Nejsum

Recording: Armando de Menezes-Neto, Paula Monalisa Nogueira and Ana Claudia Torrecilhas

15:30-17:30 Roundtable # 2: Bacteria, hosts and EVs

Moderators: Yong Song Gho and Jeff Schorey

Recording: Munira Baqui, Patrícia Xander and Rodrigo Soares

17:30-17:45 Short break

17:45-18:15 Sponsored talks

Geisi Rojas Barreto – PensaBio – Brazil Malvern

Extra time held for additional sponsor(s)

18:15-19:00 Wrap up presentations of the roundtable discussions

19:00 Networking Event – Cocktail or Dinner

November 25

TOPIC #3: Viruses, Fungi and Hosts

Chairperson: Luis Lamberti

Viruses

8:00-8:20 Kenneth Witwer

Overview: Viruses and EVs

8:20-8:35 Sharon Martins

Characterization of dendritic cell derived extracellular vesicles during dengue virus infection

8:35-8:50 Esther Nolte-'t Hoen

Assessing the release of naked virus, EV, and EV-associated virus in early stage picornavirus infection

8:50-9:05 Miriã Criado

Modulation of viral infection by *T. cruzi* vesicles

9:05-9:25 Coffee Break

Fungi

9:25-9:45 Rosana Puccia

Overview: Fungal EVs

9:45-10:00 Juliana Aparecida Rizzo Balancin

Role of fungal extracellular vesicles in cell wall formation and communication with host cells: study of *Aspergillus fumigatus* protoplasts

10:00-10:15 Lysangela Alves

Fungal extracellular vesicles: RNA content characterization

10:15-11:00 Karen Spadari Ferreira

Extracellular vesicles released from *Sporothrix brasiliensis* modulate macrophages and dendritic cells and induce an increase in fungal burden

TOPIC #4: EV isolation and characterization in lesser studied organisms and systems

Chairperson: Marca Wauben

11:00-11:30 Lorena Martin-Jaular

Overview: Diversity of vesicles and rigor in isolation (tentative)

11:30-12:00 Laura de la Canal

Overview: Lessons from plants and fungi (tentative)

12:00-13:00 Lunch Break

13:00-13:15 Vilma Regina Martins

The regulation of exosome secretion

13:15-13:30 Paolo Bergese

The colloidal side of microbial extracellular vesicles

13:30-13:45 André Vettore

Content analysis of the extracellular vesicles present in the plasma of patients (identification of molecular markers to treatment response)

13:45-14:00 Joel Rozowsky

Ex-ex RNA: Taxonomic analysis of exogenous exRNAs using the ERCC exceRpt pipeline

14:00-14:15 Allan Stensballe

Proteome analysis of non-eukaryotic EVs

14:15-16:15 Roundtable # 3: Viruses, Fungi and Hosts

Moderators: Rosana Puccia and Esther Nolte-‘t Hoen

Recording: Armando Menezes, Miriã Criado and Walter Colli

14:15-16:15 Roundtable # 4: EV isolation and characterization

Moderators: Laura de la Canal and Kenneth Witwer

Recording: André Vettore, Ana Claudia Torrecilhas and Maria Julia Manso Alves

16:15-16:45 Coffee Break

16:45-18:15 Wrap up presentations of roundtable discussions

18:15-18:45 Announcement: Brazilian Society for Extracellular Vesicles - BSEV

1. Rodrigo Pedro Soares, Patrícia Xander and Ana Claudia Torrecilhas

2. Marca Wauben, Kenneth Witwer and Yong Song Gho – ISEV

3. Hernando Del Portillo and Antonio Marcilla - Grupo Español de investigación en Vesículas Extracelulares (<http://geivex.org/>)

18:45 Concluding remarks – Marca Wauben and Ana Claudia Torrecilhas

Free Evening