



## INTERNATIONAL SOCIETY FOR EXTRACELLULAR VESICLES

ISEV Research Seminar  
**EV-associated RNA: Is there a purpose?**  
September 24-25 2015 in Utrecht University  
Botanical Gardens, The Netherlands.

### Program

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### September 24

8.00 -9.00: *Coffee/tea and Registration at the Glasshouse in the Botanical Gardens*

9.00 -9.10 : *Welcome to the Seminar and outline*

9.10-9.30 : *ISEV's view on research seminars and their output in JEV*

Marca Wauben

Clotilde Thery

#### **Session 1: Tracing Functional transfer of EV-RNA**

9.30-10.00     **Stefan Momma**

*Tracing extracellular vesicle-mediated transfer of functional RNA in vivo using the Cre/LoxP System*

10:00-10.30     **Jacco van Rheenen**

*In vivo imaging reveals extracellular vesicle-mediated phenocopying of metastatic behavior*

10.30-10.45 **Niek Maas**

*Visualization and tracking of extracellular vesicle delivery and RNA translation using multiplexed reporters*

**10.45-11.15 Coffee/tea Break**

**Session 2: Analysis of EV-RNA diversity and purity**

11.15-11.30 **Kendall van Keuren-Jensen**

*Title??*

11.30-11.45 **Andrew Hill**

*Title??*

11.45-12.00 **Emma Kowal**

*Title??*

12.00-12.15 **Imre Mäger**

*Title??*

**Sponsored talk**

12.15-12.30 **Axl Neurater (ThermoFisher)**

*Exosome isolation and monitoring: from cell culture to clinically relevant research samples*

**12.30-13.30 Lunch**

**Session 3 : Nucleic acid shuttling into EV: RNA-binding proteins and sorting mechanisms**

13.30-14.00 **Suvendra Bhattacharyya**

*Intercellular transfer of miR-122 and reciprocal anti-miR-122 signal: Tug of war for proliferation and growth arrest between hepatic cells*

14.00-14.15 **Juan Pablo Tosar**

*Title??*

14.15-14.30 **Italia di Liegro**

*Melanoma cells release extracellular vesicles which contain RNA-binding proteins able to bind the mRNA encoding histone H1°*

14.30-14.45 **Matthew Shurtleff**

*Title??*

**14.45-15.00 Coffee/tea break**

**15.00-17.00 Round table Discussion Topics 1+4**

1) The diversity of nucleic acid species in EV and their protein binding partners

4) Assessing functional transfer of EV-RNA (tracking EV-RNA targeting in vitro and in vivo, functional reporter systems, physiological read-out systems, transfer within and across species barriers)

**17:00 Welcome by dean Wouter Derth of the Veterinary Faculty of Utrecht University  
start drinks & bites; preparation of wrap-up presentations**

**18:00-19:00 dinner**

**19:00-20:00 plenary session: wrap-up presentations of the round table discussions and plenary discussion**

## September 25

8.00 Venue opens

### **Session 4 : How different EV RNA species affect cell function in various organ systems**

8.30-9.00 **Emily Wang**

*Metabolic adaptation of cancer-hosting niche by exosomal miRNA*

9.00-9.15 **Claudia Bang**

*Cardiac fibroblast-derived microRNA passenger strand-enriched exosomes mediate cardiomyocyte hypertrophy*

9.15-9.30 **Linda Cambier**

*Y RNA fragments enriched in exosomes from cardiosphere-derived cells mediate cardioprotection and macrophage polarization*

9.30-9.45 **Silvia Fischer**

*Title??*

9.45-10.00 **Paola de Candia**

*Title??*

**10.00-10.30 Coffee Break**

### **Session 5 : EV-RNA in host-pathogen interactions and cross-species communication**

10.30-11.00 **Marlene Dreux**

*Title??*

11.00-11.15 **Ken Witwer**

*Title??*

11.15-11.30 **Carla Perez-Cruz**

*RNA in Gram-negative membrane vesicles*

11.30-11:45 **Franklin Wang-Ngai Chow**

*Title??*

11.45-12:00 **Robert Kitchen**

*Title??*

Sponsored talk

12.00-12.15 **Hans van der Voorn (Izon)**

**12.15-13.30 Lunch**

### **Session 6: Functional delivery of EV-RNA**

13.30-14.00 **Michiel Pegtel**

*Separating fact from fiction in functional miRNA transfer via extracellular vesicles*

14.00-14.15 **Bogdan Mateescu**

*Title??*

14.15-14.30 **Stephan Stremersch**

*A comparative analysis between extracellular vesicles and liposomes as delivery vehicle for small interfering RNAs*

Sponsored talk

14.30-14.45 **Raymond Schifflers (JSR Life Sciences)**

*Comparing RNA-delivery efficiency of extracellular vesicles and synthetic delivery systems*

**14.45-15.00 Coffee break**

**15.00-17.00 Round table Discussion Topics 2+3**

2) DNA and RNA shuttling into EV: sorting mechanisms

3) Purification of EV (subsets) for nucleic acid analysis and functional characterization: complications, considerations, and standardization

**17:00-18:00 Plenary session: wrap-up presentations of the round table discussions on topics....  
And plenary discussion**

**18:00-18:15 Concluding remarks**

**19:30 dinner in Utrecht city center (for those who would like to join...)**