



## Palermo, 6-8 November 2019 - 1<sup>st</sup> EVIta Symposium

### PROGRAM

Nov 6 <sup>th</sup>	18:00	Registration to the 1 <sup>st</sup> EVIta Symposium
	18:30	Opening remarks Institutional welcome Welcome by the Local Organizing Committee
	19:00-19:30	Opening Lecture: <i>Dolores Di Vizio</i> <i>CEDARS-Sinai Medical Center, USA</i> "Cancer-Derived Extracellular vesicles and Large Oncosomes: From Biology to Biomarkers" <b>Chairs:</b> <i>Riccardo Alessandro</i> - University of Palermo, Italy <i>Antonella Bongiovanni</i> – IRIB, CNR, Italy
	19:30	Welcome Cocktail
	21:00	Jazz Time
Nov 7 <sup>th</sup>	08:00-8:45	Registration to the 1 <sup>st</sup> EVIta Symposium
	08:45-9:00	Welcome Remarks <i>Benedetta Bussolati</i> , EVIta President <i>University of Turin, Italy</i>
	09:00-10:15	Session I - EVs as Therapeutics (I)

**Chairs:**

**Lorenza Lazzari** - Policlinico of Milan, Italy

**Lucio Barile** - Cardiocentro Ticino Foundation,  
Switzerland

**09:00-09:15**

**Roberta Tasso**, *University of Genoa*

“Mesenchymal stromal cell-derived extracellular vesicles (EVs) as mediators of anti-inflammatory effects: endorsement of macrophage polarization”.

**09:15-09:30**

**Elia Bari**, *University of Padua*

“MSC extracellular vesicles for treatment of alpha-1-antitrypsin deficiency pulmonary diseases”.

**09:30-09:45**

**Papadimitriou Elli**, *University of Turin*

“Urinary extracellular vesicles carrying klotho improve the recovery of renal function in acute tubular injury model”.

**09:45-10:00**

**Giorgia Adamo**, *IRIB, CNR, Palermo*

VES4US, a Horizon 2020-Future and Emerging Technology project: Selection and characterization of natural source derived extracellular vesicles (EVs).

**10:00-10:15**

**Federica Collino**, *University of Padua*

“Extracellular vesicles from adipose mesenchymal stromal cells promote cardio-renal protection in DOCA-salt hypertensive model”.

**10:15-10:45**

**Morning Lecture: Kenneth Witwer**, *ISEV Board Member*

*Johns Hopkins University, USA*

“Direct from the source: can we separate tissue EVs to inform the biomarker search?”

**Chairs:**

**Benedetta Bussolati** - *University of Turin, Italy*

**Dolores Di Vizio** - *CEDARS-Sinai Medical Center, USA*

**10:45-11:00**

**Coffee break**

**11:00-13:15**

**Session II – EVs as Biomarkers**

**Chairs:**

**Massimiliano Bonafè** - *University of Bologna, Italy*

**Italia Di Liegro** - *University of Palermo, Italy*

**11:00-11:15**

**Chiara Castellani**, *University of Padua*

“Extracellular vesicles surface protein profile as biomarkers to characterize allograft rejection in heart transplanted patients”.

**11:15-11:30**

**Celeste Caruso Bavisotto**, *University of Palermo*

“Exosomal HSP60 levels and related miRNAs in brain tumors”.

**11:30-11:45**

**Silvia Picciolini**, *Don Gnocchi Foundation, Milan*

- “Biophotonics-based biosensor for the detection of circulating extracellular vesicles as biomarkers in personalized neurorehabilitation”.
- 11:45-12:00** **Emanuela Mensà**, *Marche Polytechnic University, Ancona*  
“MicroRNA signatures loaded on small vesicles spread some features of senescent phenotype from senescent to younger endothelial cells”.
- 12:00-12:15** **Vito D'Agostino**, *CIBIO - University of Trento*  
“Quantitative assessment of RNA targets on NBI-isolated extracellular vesicles from the blood of metastatic colorectal cancer patients”.
- 12:15-12:30** **Laura Cantone**, *University of Milan*  
“Maternal-placental messaging through extracellular vesicles is influenced by particulate air pollution exposure”
- 12:30-12:45** **Burrello Jacopo**, *University of Turin*  
“Circulating extracellular vesicles as biomarkers in patients after ST-segment elevation myocardial infarction”.
- 12:45-13:00** **Federica Anastasi**, *Scuola Normale Superiore, Pisa*  
“Microproteomics workflow for exosome biomarker discovery: enabling single mouse analysis on longitudinal models”.
- 13:00-13:15** **Daniele D'Arrigo**, *Ente Ospedaliero Cantonale, Bellinzona*  
“Characterization of the whole profile of extracellular vesicles isolated from synovial fluid from different load-bearing joints”.
- 13:15-14:30** **Light Lunch and Poster Sessions:**  
“EVs as Therapeutics” and “EVs as Biomarkers”
- 14:30-15:00** **Biotech Sponsored Session I**  
**Chairs:**  
**Marina Cretich** – *Scitec (ICRM), CNR, Italy*  
**Francesco Valle** - *University of Bologna, Italy*  
**Alfatest**  
**Nanoview**  
**Beckman Coulter**
- 15:00-15:30** **Afternoon Lecture: Selim Ünlü**  
*University of Boston, USA*  
“High-throughput, high-resolution interferometric light microscopy of biological nanoparticles”.  
**Chair:**  
**Marcella Chiari** - *Scitec (ICRM), CNR, Italy*
- 15:30-18:00** **Session III – EV Biology and Tools**  
**Chairs:**

**Maria Felice Brizzi** - *University of Turin, Italy*

**Marco Tripodi** - *University of Rome, Italy*

**15:30-15:45**

**Felice Maria Accattatis**, *DISFEB - University of Milan*

“Size-dependent Extracellular Vesicles lipid composition. In vitro studies from a lymph-node metastatic melanoma cell line”.

**15:45-16:00**

**Italia di Liegro**, *Bi.N.D., University of Palermo*

“Potential roles of extracellular vesicles in brain cell-to-cell communication”.

**16:00-16:15**

**Mauro Manno**, *IBF, CNR, Palermo*

“VES4US, a Horizon 2020 Future and Emerging Technology project: Biophysical experimental tools for EVs structural characterization”.

**16:15-16:30**

**Paolo Bergese**, *DMMT, University of Brescia*

“Projecting extracellular vesicles in two dimensions”.

**16:30-16:45**

**Marina Cretich**, *IGM, CNR, Milan*

“Membrane sensing peptide microarrays for Extracellular Vesicles”.

**16:45-17:00**

**Serena Maggio**, *University of Urbino*

“The Possible role of Extracellular Vesicles in Neuromuscular Junction pre-patterning”.

**17:00-17:15**

**Marta Brambilla**, *Centro Cardiologico Monzino IRCCS, Milan*

“Differential contribution of microvesicles derived from platelets and monocytes of coronary artery disease patients to endothelial dysfunction”.

**17:15-17:30**

**Cecilia Battistelli**, *Sapienza, University of Rome*

“RNA binding proteins (RBPs) control sequence-specific miRNAs sorting in extracellular vesicles (EVs)”

**17:30-17:45**

**Christopher Stanly**, *IBBR, CNR, Naples*

“Preparative and Analytical ultracentrifugation of EVs”.

**17:45-18:00**

**Marco Brucale**, *ISMN, CNR, Rome*

“Nanomechanics of individual extracellular vesicles”.

**20:00**

**Gala Dinner at Massimo Theatre Bistro**

Nov 8<sup>th</sup>

**08:15-09:45 Session IV - EVs as Therapeutics (II)**

**Chairs:**

**Anna Berardi** - *Santo Spirito Hospital of Pescara, Italy*

**Simona Fontana** - *University of Palermo, Italy*

**08:15-08:30**

**Chiara Gai**, *University of Turin*

“Improved loading of plasma-derived extracellular vesicles to encapsulate antitumour miRNAs”.

**08:30-08:45**

**Roberta Angioni**, *University of Padua*

“CD73+ extracellular vesicles inhibit angiogenesis through adenosine A2B receptor signaling”.

**08:45-09:00**

**Valentina Di Felice**, *University of Palermo*

“Physiactisome: a new drug from engineered muscle cells that mimics physical exercise”.

**09:00-09:15**

**Mario Barilani**, *IRCCS Foundation, Milan*

“Pluripotent EV as carriers of regenerative prompts in aged cells”

**09:15-09:30**

**Carolina Balbi**, *Cardiocentro Ticino Foundation, Lugano*

“Cardiac progenitor cell exosome-associated periostin triggers reentry of cardiomyocytes into cell cycle”.

**09:30-09:45**

**Cansu Gorgun**, *University of Genoa*

“Mesenchymal stromal cell secretory activity: the role of extracellular vesicles in angiogenesis”.

**09:45-10:15 Morning Lecture: Peter Nejsum**

*University of Aarhus, Denmark*

“A new level of complexity in host-parasite interaction – extracellular vesicles”.

**Chairs:**

**Paolo Bergese** - *University of Brescia, Italy*

**Annalisa Radeghieri** - *University of Brescia, Italy*

**10:15-10:30**

**Coffee break**

**10:30-11:00 Biotech Sponsored Session II**

**Chairs:**

**Mauro Manno** - *IBF, CNR, Italy*

**Stefania Bruno** - *University of Turin, Italy*

**Izon**

**NanoFCM**

**Particle Metrix GmbH**

**11:00-13:00 Session V - EVs in pathogenesis of diseases (I)**

**Chairs:**

**Roberta Tasso** - University of Genoa, Italy

**Claudia Verderio** - IN, CNR, Italy

- 11:00-11:15** **Goffredo Arena**, McGill University, Montreal  
“Cancer EVs convey metastatic traits through horizontal gene transfer”
- 11:15-11:30** **Vanessa Biemmi**, Cardiocentro Ticino Foundation, Lugano  
“Cardiac dysfunction after myocardial infarction: role of pro-inflammatory extracellular vesicles”.
- 11:30-11:45** **Manuela Basso**, University of Trento  
“Intercellular miscommunication in the brain and periphery: characterization of extracellular vesicle in Amyotrophic Lateral Sclerosis”.
- 11:45-12:00** **Stefania Raimondo**, University of Palermo  
“Role of multiple myeloma exosomal miRNAs in the inhibition of osteoblast differentiation”.
- 12:00-12:15** **Alessia Brossa**, University of Turin  
“Extracellular vesicles from liver stem cells inhibit renal cancer stem cell-derived tumor growth in vitro and in vivo”.
- 12:15-12:30** **Pina Fusco**, University of Padua  
“Microscale technologies to decode the role of hypoxia-derived exosomes in determining Neuroblastoma dissemination and aggressiveness”.
- 12:30-12:45** **Chiara Ciardiello**, IRCCS, G. Pascale Foundation, Naples  
“Large Oncosomes detection in diverse solid tumors showed a priming effect on tumor engraftment *in vivo*”.
- 12:45-13:00** **Valentina Zappulli**, BCA Department, University of Padua  
“Glioma-derived miRNA-containing extracellular vesicles induce angiogenesis by reprogramming brain endothelial cells”.
- 13:00-14:15** **Light Lunch and Poster Sessions:**  
“EV Biology and Tools” and “EVs in pathogenesis of diseases”
- 14:15-16:00** **Session VI - EVs in pathogenesis of diseases (II)**  
**Chairs:**  
**Goffredo Arena** - McGill University, Canada  
**Marina Camera** - University of Milan, Italy
- 14:15-14:30** **Domenica Giannandrea**, University of Milan  
“Targeting extracellular vesicles in multiple myeloma: a new role for the Notch pathway”.
- 14:30-14:45** **Andrea Caccioppo**, DMS, University of Turin

- 14:45-15:00 **Alessandra De Feo**, *Sapienza, University of Rome*  
“Role of exosomes in Acute Coronary Syndrome”.  
“Exosomes enriched for miR-199a-3p reverse tumor malignancy in Ewing sarcoma cells”
- 15:00-15:15 **Verderio Claudia**, *IN, CNR, Pisa*  
“Glial microvesicles in motion at the neuron surface: implication in Alzheimer’s disease”.
- 15:15-15:30 **Daisy Sproviero**, *IRCCS Mondino Foundation, Padua*  
“Distinct microRNA signature in exosomes of neurodegenerative diseases”.
- 15:30-15:45 **Donatella Lucchetti**, *Cattolica, University of Rome*  
“CD147 promotes cell exosome release during colon cancer stem cells differentiation and triggers cellular changes in recipient cells”.
- 15:45-16:00 **Leggio Loredana**, *BIOMETEC, University of Catania*  
“Ultrastructural and molecular characterization of astrocyte-derived extracellular vesicles from nigrostriatal brain regions: implications for dopaminergic neuroprotection”.
- 16:00-16:30 Afternoon Lecture: Stefano Pluchino**  
*University of Cambridge, UK*  
“Signaling Properties of Stem Cells and their Cargo Vesicles”.  
**Chairs:**  
**Francesco Cappello** - *University of Palermo, Italy*  
**Valentina Di Felice** - *University of Palermo, Italy*
- 16:30-17:00 **Closing Remarks and Awards**  
**Vincenza Dolo**, *EVIta Vice-President*  
*University of L’Aquila, Italy*
- 18:00-19:30 **EVIta Annual Assembly with closing cocktail at Ridotto dello Spasimo-Blue Brass (Chiesa di Santa Maria dello Spasimo)**