

Program

Extracellular Vesicles Thematic School

La Grande Motte, France September 13-15th 2021



Sept 13th afternoon:

- 13:30 Registration @ Palais de Congrès
 - 14:30 Introduction

EV engineering and drug delivery

chaired by Bernard Lebleu, Université Montpellier, sponsored by Oligonucleotide Therapeutics Society

0	14:45	Guillaume Van Niel , <i>INSERM Paris</i> Extracellular vesicles: Basics and challenges for their use as therapeutics.
0	15:15	Samir El Andaloussi, Karolinska Institutet, Stockholm, Sweden
		Engineered extracellular vesicles for delivery of biotherapeutics
0	16:00	Post production modified murine mesenchymal stem cells (mMSC) derived EV: interesting bioinspired nanocarriers for protein intracellular delivery? Marie MORILLE, Institut Charles Gerhardt Montpellier, Univ Montpellier, ENSCM, CNRS, Montpellier, France
0	16:15	Coffee Break
Ō	16:45	Reka Haraszti, University of Tubingen, Germany
		Composition-function relationship of EVs: a path to artificial EVs for RNA delivery
0	17:30	Improvements to the Quantification of Nanoparticles and Extracellular Vesicles Michael Olszowy, Sartorius
0	17:45	Pieter Vader, University Medical Center Utrecht, The Netherlands
		Extracellular vesicle-mediated RNA delivery: from mechanistic insights to therapeutic applications
0	18:30	IBANE ABASOLO VHIR, Barcelona, Spain
		EV engineering for enzyme replacement therapy
0	19:30	Get together and dinner @ Hotel Mercure

Sep. 14th morning:

EV and biogenic vesicles: from characterization to in vivo models

chaired by ESNAM - Simo Schwarz and Ibane Abasolo

0	9:00	Introduction of the European Society of Nanomedicine (ESNAM) – Simo Schwarz
•	9:10	Antoine Monsel, Pitié-Salpêtrière Hospital, France MSC EVs for the therapy of the acute respiratory distress syndrome
•	9:55	A novel role for Caveolae in small EV secretion and uptake under mechanical stress, Cristian Saquel, Institut Curie UMR3666 INSERM U1143
•	10:10	Rapid, Accurate Isolation and Quantification of Extracellular Vesicles, Stephane Mazlan, IZON
•	10:25	Molecular and functional signatures of distinct subpopulations of extracellular vesicles: implications for autoimmunity, Steffi Bosch <i>IECM</i> , <i>ONIRIS</i> , <i>INRA</i> , <i>USC1383</i> , <i>Nantes</i>
•	10:40	Coffee Break
9	11:10	Proteogenomic analysis of adrenocortical cancer cell-derived exosomes reveals their potential pro-angiogenic and oncogenic functions, Soha Reda El Sayed , Univ. Grenoble Alpes, INSERM, CEA, IRIG, Biology of Cancer and Infection Laboratory UMR_S 1036, F-38000 Grenoble
9	11:25	Role of small extracellular vesicles in the non-targeted bystander effects of targeted radiotherapy. Jihad Karam, IRCM, Inserm U1194, ICM, Université de Montpellier
þ	11:40	Fractionation and characterization of size, particle count and composition of EV's using FFF-MALS, Stéphanie Terme Ferrari , <i>Wyatt</i>
•	11:55	Daniele Noël , University of Montpellier, France The potential of EVs in the therapy of joint diseases: a focus on osteoarthritis
0	12:40	Lunch Break @ Palais de Congres





European Research Council



Sep 14th afternoon: Towards EV clinical translation

chaired by ECELLFrance - Daniele Noel and Meary Center – Guillaume Churlaud

0	14:00	Bernd Giebel , Uniklinik Essen, Germany Clinical potential of MSC-EVs and translational challenges
D	14:45	Solutions and advances for extracellular vesicles characterization, Nathalie Vollmer, HORIBA
0	15:00	GMP production of EVs for clinical trials phase 1 and 2 in France : Feedback from the MEARY cell and gene therapy center (AP-HP Paris hospitals), Guillaume Churlaud, <i>Plateforme de production de MTI, centre MEARY, Hopital St Louis</i>
0	15:15	Eva Rohde , <i>Paracelsus Medical University, Austria</i> Stromal cell derived extracellular vesicles as novel therapeutics (and regulatory needs for their clinical evaluation)
0	16:00	Coffee Break
0	16:30	Philippe Menasché , Hopital Européen Georges Pompidou, France EV for cardiac repair: Rationale and Translational Roadblocks
0	17:15	Pure preparations, proven reagents and accurate characterizations – update 2021 on BEC LS solutions supporting Exosomes & Extracellular Vesicles research, Anis Larbi, Beckmann and Coulter
9	17:30	TFF improves EV hPL depletion allowing large, xenobiotic-free, clinical grade- compatible, production of human cell-derived extracellular vesicles, Bileyle Lorenzini , INSERM UMR-MD-1197, Villejuif, France
0	17:45	Sébastien Banzet , Institut de Recherche Biomédicale des Armées, Clamart, France French EV clinical translation group
0	18:00	Work meeting of the French group on EV-based therapy – optional for interested people
0	20:00	Banquet @ Yacht Club







SVIDULE

Sep 15th morning:EV imaging and diagnosischaired by IVETh core facility Florence Gazeau

8:30	Guillaume Van Niel , Inserm Paris Fundamental aspects and therapeutic applications of in vivo Imaging of EVs
9:15	Interlaboratory project for a complementary and an intercomparative analytical study of extracellular vesicles in biological fluids Celine Elie-Caille , Institut FEMTO-ST, UMR6174 CNRS
9:30	Extracellular vescicle from liquid biopsies as biomarker for breast cancer metastasis follow-up, Laetitia Guével, Team SOAP, CRCINA, INSERM, CNRS, Universités de Nantes et Angers
9:45	Synthesis of hybrid Nanoparticles to target and sort Extracellular Vesicles as a diagnostic tool, Melanie Romain, Université de Bourgogne
0 10:00	Fluorescent Labelling of membranes and analysis by Malvern Panalytical Fluo-NTA, Aymeric Audfray, MALVERN
0 10:10	Coffee Break
0 10:45	Pierre-Emmanuel Rautou , <i>Bichat Hospital, Paris</i> EVs in liver diseases: on the way from research to the medical analysis laboratory
• 11:30	Blood contains circulating cell-free respiratory competent mitochondria, Alain Thierry, Institute of Cancer Research of Montpellier, INSERM U1194.
0 11:45	Development of a DLD-based microfluidic device for bio-targeted sorting of extracellular vesicles, Marie Gaillard, CEA, Leti, Grenoble
• 12:00	Michiel Pegtel, Amsterdam University Medical Center, The Netherlands Turning exosomes as dynamic drivers of oncogenesis into a promising liquid biopsy source
12:45	Lunch Break @ Palais de Congres

	Sep 15 ^{tl}	afternoon: EV industrial aspects
		chaired by Medicen – Valerie Brunner and EVOLVE-France – Sébastien Banzet
0	14:00	Amanda Silva / Thibaut Fourniols / Hadrien Lanvin, Université de Paris / Everzom / Evora Bioscience EV production, administration and therapeutic application: from academic research to spin-off companies
0	14:45	Turbulence in spinner flasks increases extracellular vesicle release from non-adherent cells, Alice Grangier, Université de Paris
0	15:00	Production, biochemical and biophysical characterizations of prokaryotic and eukaryotic extracellular vesicles, Annie Frelet-Barrand, FEMTO-ST Institute, UBFC, UMR6174 CNRS, Besançon
0	15:15	Robert Mamoun , CILOA, Montpellier, France Industrial aspects related to extracellular vesicles for therapy
0	16:00	Concluding remarks and Young Researcher prize-giving











