



January 2019

NEWS FROM FSEV SOCIETY:

@ The interim Board of FSEV (Sophie Rome, Soazig Le Lay, Dan Elgrabli, Steffi Bosch, Clotilde Théry, Guillaume van Niel, Xavier Loyer) **wishes you all the VERY BEST especially for your EV research in 2019!**

@ This newsletter, created to promote spreading of information on EVs, is yours! Do not hesitate to **send any information you wish to see there to admin@fsev.fr** (examples: invited EV speakers or PhD defences in your Institute, meetings/workshop you are organising on EVs, your recently published article(s) on EV, prizes obtained for EV work, job openings and requests for collaborations).

FSEV EVENTS:

@ FSEV-2019: ENSA, Nantes, France, October 14-15th, 2019.

Registration and abstract submission opened on January 15th! Deadline abstract and early registration: 15/06/2019. <https://symposium.inra.fr/fsev2019>.

@ Grand-Ouest EV (GO-EV): 5th meeting, Nantes **08/02/2019** on "Imaging of Extracellular Vesicles". **Contact: steffi.bosch@oniris.fr**

OTHER EV EVENTS:

@ Club exo-endo, Mandelieu-la-Napoule, France, **April 3-6 2019.**

Membrane biophysics of Exo-Endocytosis: from model systems to Cells. Several EV presentations likely.

<http://biophee-19.fr/>. **Deadline for abstract and GEM scholarships 18/01/2019.**

@ Neurofrance 2019 (Société des Neurosciences), Marseille, France, **May 22-24 2019.** Symposium "Exocytosis and extracellular vesicle signalling in brain development, maintenance and diseases" 23/05/2019.

Deadline for abstract (oral) 25/01/2019 and (poster) 15/02/2019.

<https://www.neurosciences.asso.fr/V2/colloques/SN19/>.

@ ISEV-2019: Kyoto, Japan, **April 24-28th, 2019.** www.isev.org.

Deadline for early rate registration 31/01/2019.

Late breaking abstracts open 08-22/02/2019. www.isev.org/page/ISEV2019Reg

see list of abstracts submitted by French laboratories at the end of this letter

@ New York Academy of Science Meeting on "EVs in Diagnostics and Therapeutics". New York, USA, **19/02/2019**. Registration at nyas.org/EV2019.

@ ISEV mini workshop of "EV targeting to specific cells/tissues". Philadelphia, USA, **27/02/2019**. Very few seats available but webcast attendance possible. <https://www.isev.org/events/EventDetails.aspx?id=1181190&group=>

@ Invited speaker in France:

Eva-Maria Krämer-Albers. invited by G. van Niel (guillaume.van-niel@inserm.fr), *Exosomes as mediators of neuron-glia communication and neuronal homeostasis*. **15/02/2019**, 12h00. Institut de Psychiatrie et de Neurosciences de Paris (IPNP), 102-108 rue de la Santé, 75014 Paris.

@ Thesis in France:

Tanina ARAB. *Caractérisation de vésicules extracellulaires d'origine microgliale et mise en évidence de leur effet neurotrophique*. **18/01/2019**. Univ Lille. Directeurs Pierre-Eric SAUTIERE et M. Jacopo VIZIOLI.

JOB OPPORTUNITIES:

@ Post-doc starting in 2019: team of R Gaudin, Montpellier, France. Characterization of a new subpopulation of EVs: ART-EVs. Full adv available at www.fsev.fr/jobs.html. Contact: raphael.gaudin@irim.cnrs.fr

@ 2 Post-docs starting in 2019: teams of P Zimmermann (Marseille) and of E Rubinstein (Paris), in collaboration with team C Théry (Paris). Mechanisms controlling the molecular and functional heterogeneity of Extracellular Vesicles. Full adv available at www.fsev.fr/jobs.html. Contact: eric.rubinstein@inserm.fr; pascale.zimmermann@inserm.fr

@ IE, CDD 1 an starting April 1st 2019. Joined project between laboratories SOPAM (INSERM/UA) and BIA (INRA) in Nantes, Angers and Rennes. Optimisation de la production d'exosomes chargés en polyphénols. Full adv available at www.fsev.fr/jobs.html. Contact: ramaroson.andriantsitohaina@univ-angers.fr; marie-helene.ropers@inra.fr; sebastien.marze@inra.fr

COLLABORATIONS and/or INSTRUMENT ACCESS and/or ADVICE requests

RECENT EV publications (from FSEV members)

@ **MISEV2018 guidelines** are fully accessible on Pubmed:

<https://www.ncbi.nlm.nih.gov/gate2.inist.fr/pubmed/?term=misev2018>

Théry C*, Witwer KWW* et al. (2018). "Minimal information for studies of extracellular vesicles 2018 (MISEV2018): a position statement of the International Society for Extracellular Vesicles and update of the MISEV2014 guidelines." *J Extracell Vesicles* **7**(1): 1535750.

@ Articles from the french FSEV community

Bueno-Betí B, Novella S, Soleti R, Mompeón A, Vergori L, Sanchís J, Andriantsitohaina R, Martínez MC, Hermenegildo C. Microparticles harboring sonic hedgehog morphogen improve the vasculogenesis capacity of endothelial progenitor cells derived from myocardial infarction patients. *Cardiovascular Research*, Volume 115, Issue 2, 1 February 2019, Pages 409–418. Pubmed PMID: 30124781

Kruglik SG, Royo F, Guigner JM, Palomo L, Seksek O, Turpin PY, Tatischeff I, Falcón-Pérez JM. Raman tweezers microspectroscopy of circa 100 nm extracellular vesicles. *Nanoscale*. 2019 Jan 8. doi: 10.1039/c8nr04677h. PubMed PMID: 30620023.

Mathieu M, Martin-Jaular L, Lavieu G, Théry C. Specificities of secretion and uptake of exosomes and other extracellular vesicles for cell-to-cell communication. *Nat Cell Biol*. 2019 Jan;21(1):9-17. doi: 10.1038/s41556-018-0250-9. Epub 2019 Jan 2. Review. PubMed PMID: 30602770.

Fan Y, Herr F, Vernochet A, Mennesson B, Oberlin E, Durrbach A. Human Fetal Liver Mesenchymal Stem Cell-Derived Exosomes Impair Natural Killer Cell Function. *Stem Cells Dev*. 2019 Jan 1;28(1):44-55. doi: 10.1089/scd.2018.0015. PubMed PMID: 30328799.

Raffo-Romero A, Arab T, Al-Amri IS, Le Marrec-Croq F, Van Camp C, Lemaire Q, Salzet M, Vizioli J, Sautiere PE, Lefebvre C. Medicinal Leech CNS as a Model for Exosome Studies in the Crosstalk between Microglia and Neurons. *Int J Mol Sci*. 2018 Dec 19;19(12). pii: E4124. doi: 10.3390/ijms19124124. PubMed PMID: 30572617; PubMed Central PMCID: PMC6321190.

Amosse J, Durcin M, Mallocci M, Vergori L, Fleury A, Gagnadoux F, Dubois S, Simard G, Boursier J, Hue O, Martinez MC, Andriantsitohaina R, Le Lay S. Phenotyping of circulating extracellular vesicles (EVs) in obesity identifies large EVs as functional conveyors of Macrophage Migration Inhibitory Factor. *Mol Metab*. 2018 Dec;18:134-142. doi: 10.1016/j.molmet.2018.10.001. Epub 2018 Oct 9. PubMed PMID: 30473096; PubMed Central PMCID: PMC6309717.

Beuzelin D, Kaeffer B. Exosomes and miRNA-Loaded Biomimetic Nanovehicles, a Focus on Their Potentials Preventing Type-2 Diabetes Linked to Metabolic Syndrome. *Front Immunol*. 2018 Nov 21;9:2711. doi: 10.3389/fimmu.2018.02711. eCollection 2018. Review. PubMed PMID: 30519245; PubMed Central PMCID: PMC6258775.

Bouyssou JM, Liu CJ, Bustoros M, Sklavenitis-Pistofidis R, Aljawai Y, Manier S, Yosef A, Sacco A, Kokubun K, Tsukamoto S, Perilla Glen A, Huynh D, Castillo JJ, Treon SP, Leblond V, Hermine O, Rocco AM, Ghobrial IM, Capelletti M. Profiling of circulating exosomal miRNAs in patients with Waldenström Macroglobulinemia. *PLoS One*. 2018 Oct 4;13(10):e0204589. doi: 10.1371/journal.pone.0204589. eCollection 2018. PubMed PMID: 30286096; PubMed Central PMCID: PMC6171840.

Guay C, Kruit JK, Rome S, Menoud V, Mulder NL, Jurdzinski A, Mancarella F, Sebastiani G, Donda A, Gonzalez BJ, Jandus C, Bouzakri K, Pinget M, Boitard C, Romero P, Dotta F, Regazzi R. Lymphocyte-Derived Exosomal MicroRNAs Promote Pancreatic β Cell Death and May Contribute to Type 1 Diabetes Development. *Cell Metab*. 2018 Oct 5. pii: S1550-4131(18)30576-X. doi: 10.1016/j.cmet.2018.09.011. PubMed PMID: 30318337.

Prabu P, Rome S, Sathishkumar C, Gastebois C, Meugnier E, Mohan V, Balasubramanyam M. MicroRNAs from urinary extracellular vesicles are non-invasive early biomarkers of diabetic nephropathy in type 2 diabetes patients with the 'Asian Indian phenotype'. *Diabetes Metab.* 2018 Aug 27. pii: S1262-3636(18)30161-7. doi: 10.1016/j.diabet.2018.08.004. PubMed PMID: 30165157.

@ Abstracts of French laboratories presented at ISEV-2019 Kyoto

If you want it listed in the next FSEV newsletter, PLEASE SEND US all info about your abstract at events@fsev.fr (title of message: abstract ISEV2019)

Oral:

Alain R Brisson ... Stéphane Mornet, Univ Bordeaux UMR-5248-CBMN, Bordeaux.

Search for EV signature in Sickle Cell Disease.

A Khiat ... CM Boulanger, O Blanc-Brude. PaRCC, INSERM UMRs970, Paris.

An explanation for 'PS-negative' extracellular vesicles: endogenous annexin-A5 from the cytosol cover externalized phosphatidylserine on plasma membranes.

Mathilde Mathieu ... Clotilde Théry, Institut Curie, INSERM U932, Paris.

Linking the trafficking of CD63 and CD9 to their secretion mechanisms into EVs.

Roberta Palmulli ... Graça Raposo, Guillaume van Niel, Institut Curie CNRS UMR144 and IPNP, Paris.

Interdependency of the multiple endosomal sorting mechanisms influencing exosomes biogenesis.

Poster:

Francesca Farina .. Christian Néri, IBPS, CNRS UMR 8256, Paris.

Bioinformatic and biochemical evidence for EV remodelling in Huntington's disease.

Philippe Mauduit, ... Georges Uzan*, INSERM UMR-MD-1197, Hôpital Paul-Brousse, Villejuif.

Production and use of extracellular vesicles-depleted human platelet lysate to improve large, clinical grade-compatible production of therapeutic human cell-derived extracellular vesicles

Marie Maumus .. Danièle Noël, IRMB, University Montpellier, Hôpital Lapeyronie, Clinical immunology and osteoarticular diseases Therapeutic Unit, Montpellier, France. *Differential expression of lncRNA in extracellular vesicles from mesenchymal stem cells*

Stephane Mazlan^{a,b}, ... Xavier Loyer^{a,b}, Chantal M. Boulanger^{a,b}. ^aPARCC - INSERM U970, ^bParis Descartes University, USPC, UMR-S970, Paris, France.

Extracellular Vesicles in Post-Infarction Diabetic Hearts

Balasubramaniam Namasivayam¹, Liling Delila², Yu-Wen Wu², Annie Frelet-Barrand¹, Thierry Burnouf², Céline Elie-Caille¹, Wilfrid Boireau¹. ¹FEMTO-ST Institute, UMR6174 CNRS Besançon. ²College of Biomedical Engineering, Taipei Medical University, Taipei, Taiwan.

The Nanobioanalytical Platform, a tuneable tool for a sensitive detection & characterization of extracellular vesicles subsets from biological samples

Lyne Pillemont¹, Daniel Guneyasu², Celine Elie-Caille², Wilfrid Boireau² and Anne-Marie Gué^{1*}. ¹LAAS-CNRS, Toulouse, ²FEMTO-ST Institute, UMR6174 CNRS Besançon. *TOWARDS ON-CHIP EVs SEPARATION: A LAB ON CHIP APPROACH*

@ For any request or information, contact us at : admin@fsev.fr

