



*This newsletter, created to promote spreading of information on EVs, is yours! Do not hesitate to **send any information you wish to see there or any request to newsletter@fsev.fr***

June 2020

Dear members,

We hope that the recovery in your laboratories after this long period of teleworking goes well and that the summer will be favorable for scientific results.

As you know, we are not organizing a physical meeting this year. Instead, we will organize a video-conference in order to continue to inform our community about the latest scientific discoveries and to hold our General Assembly which will validate the accounts of the FSEV, our actions throughout this year, and will allow everyone to express their wishes for future actions. So keep an eye on our website and on future newsletters.

Also, don't forget to register for the ISEV 2020 meeting to be held in Visio. Its organization required a lot of work. The registration price has been reduced and may allow more people to participate.

The FSEV board wishes you all a good summer!

NEWS FROM FSEV SOCIETY:

@ FSEV Virtual meeting for young investigators 2020

03/12/2020, Save the date for one day of live content with short oral presentations, sponsor session and opportunities to connect with attendees, followed by our traditional general assembly. More information will come soon!

FSEV EVENTS:

@ Next meeting of the Grand-Ouest EV network (GO-EV)

Journées Scientifiques de l'Université de Nantes, cité des congrès, Nantes, on **30/11/2020**. **"Grand-Ouest Extracellular Vesicle Network: Innovations for Health"**. Registration will be free but mandatory (limited to 80 participants). Abstracts for poster and/or oral communications are welcome (deadline **29/09/2020**).

Please visit the website: <https://js.univ-nantes.fr/colloques/grand-ouest-extracellular-vesicle-network-innovations-for-health-2564694.kjsp?RH=1486401620746>

Keynote speakers: Gwennan André-Grégoire (Nantes); Juan Manuel Falcon-Perez (Spain); Estefania Lozano Andres (Netherlands); Jean-Sébastien Silvestre (Paris).

For more information, please contact: laetitia.guevel@univ-nantes.fr

@ SFNano-FSEV joint summer school

The French Society for Nanomedicine (SFNano) and the French Society for Extracellular Vesicles (FSEV) are pleased to announce an **EV Summer School** that will take place in La Grande Motte, France, on **26-28/10/2020**. This Summer School will focus on fundamental, technological, clinical and industrial aspects related to extracellular vesicles for therapy and diagnosis. More information and list of speakers at: <http://www.sfnano.fr/en/2019/11/22/summer-school-2020/>

@ Survey to identify partners for nanometrology/nanocharacterization of EVs

Our colleague Céline Élie-Caille (FEMTO-ST Institute, Besançon) is conducting a survey to identify people interested in participating in the standardization of nanometrology/nanocharacterization of EVs through an intercomparative interlaboratory study. For FSEV members interested in such an initiative, please complete the following survey:

https://docs.google.com/forms/d/e/1FAIpQLSfhRmclPETaQ__Q2RxFD32JO-YKBQQ8bE1tAlAgZqliW8YKWA/viewform?usp=pp_url

This initiative will be introduced during the SFNano-FSEV joint summer school (see above). For more information, please contact: celine.caille@femto-st.fr

ISEV (International Society for EVs) EVENTS:

@ ISEV Annual Meeting 2020 a fully virtual event on 20-22/07/2020.

Program: <https://www.isev.org/mpage/2020Program>

Numerous **French scientists** will present their work among sessions:

Education Day

-*Session 1:* EV Position Papers. Clotilde Théry (Paris) “ISEV guidelines on EV studies (MISEV2018) and standardization initiatives”

-*Session 2:* EV Methods and Techniques. Guillaume van Niel (Paris) “EV imaging TEM”

-*Session 5:* EV Biology: Pascale Zimmermann (Marseille) “EV biogenesis and release”

Symposium

-*Session 04:* Cellular Uptake and Fusion. Grégory Lavieu (Paris) “Quantitative characterization of Extracellular Vesicle Uptake and Content Delivery within Mammalian Cells”

-*Session 08:* Bacterial and Fungal EVs. Émilie Layre (Toulouse) “Vesicles released during Mycobacterium tuberculosis infection: immunomodulatory (glyco)lipids and role in host-pathogen interactions”

-*Session 11:* Viruses. Lorena Martin-Jaular (Paris) “Unbiased quantitative proteomic analysis identifies novel cellular components specifically incorporated into endogenous EV subtypes, HIV-1 particles and virus-modified EVs”

-*Session 12:* Biodistribution & Antiviral Defense. Olivier Blanc-Brude (Paris) “EV biodistribution studies with a novel non-invasive, dynamic in vivo imaging method reveal diverse organ reactions to circulating EV : No EV retention, EV retention, and active EV recruitment”.

Late Breaking

-LBS01: *Cancer Biology and Biomarkers*

Anthony Lefevre (Lille) "Nasopharyngeal Carcinoma Exosomes Modify the Metabolism Status of Human Dendritic Cells and Favour their Recruitment through the CCL20 Chemokine"

Martha Baydoun (Lille) "Photodynamic Therapy using a New Folate-targeted Photosensitizer on Peritoneal Ovarian Cancer Cells Induces the Release of Extra-cellular Vesicles with Immunoactivating Properties"

-LBS03: *Specific Cell Derived EVs*. Balasubramaniam Namasivayam (Besançon) "Differential characterization of extracellular vesicles in neuroprotective human platelet lysate preparations"

Panel

-Panel 4-*In vivo approaches to understanding EV function*. Guillaume van Niel (Paris) "Live tracking of EVs' life cycle in vivo"

Thursday Poster Session

-PT05: *Advance in EV Quantitation*

Elena Khomyakova (Paris) "Theoretical model of EV losses due to adsorption on the tube walls. Application for immunomagnetic detection of the vesicles"

Romain Sausset (Paris) "Videodrop by Myriade : The use of interferometric microscopy to quantify vesicles in complex samples such as fecal filtrates"

Friday Poster Session

-PF01: *EVs in Metabolism and Metabolic Disease*. Sophie Rome (Lyon) "Nanovesicles from orange juice restore the intestinal functions altered during diet-induced obesity in mice"

-PF06: *EVs in Reproduction and Pregnancy*. Celia Ravel (Rennes) "A new type of nanovesicles in seminal plasma: the myelinosomes"

Featured Abstract

-Session 1. Shima Ghoroghi (Strasbourg) "Ral GTPases promote metastasis by controlling biogenesis and organotropism of extracellular vesicles"

@ ISEV Workshop "Imaging EVs *in vivo*", Paris, IPNP, on **10-11 September 2020**.

Please refer to the link below for more information:

<https://www.isev.org/events/EventDetails.aspx?id=1232987&group=>

Unfortunately, due to the COVID situation, the morning sessions can no longer be opened to a large audience. The workshop will be then restricted to the selected speakers and poster presenters.

Co-organized by FSEV members: Guillaume van Niel (chair, Paris), Frederik Verweij (Paris), Vincent Hyenne (Strasbourg), Xavier Loyer (Paris), Gisela d'Angelo (Paris).

OTHER EV EVENTS:

Virtual events, Conferences and Courses

@ **WebEVTalk**: Program to support networking and to push the science forward in the field of Extracellular Vesicles, by providing regular Webtalks. Organized by Carolina Soekmadji (Australia), with Jan Lötvall (Sweden) and Dolores Di Vizio (USA).

Conferences **every Monday evening** (midnight French time) **and Thursday morning** (9:00 am or 10 am French time).

Announced a few days before each in the Facebook page:

<https://www.facebook.com/groups/518888602152396/>

FSEV speaker: Clotilde Théry on July 9th at 9am.

Several **recorded conferences** are posted in the **Youtube** channel:

https://www.youtube.com/channel/UCvN_HxVQW8MQRLrDcNfMT6w

@ Jan Lötvall: launched his own youtube channel, with numerous **interviews of experts** to discuss about the Extracellular Vesicle topic with him.

Please refer to: <https://www.youtube.com/user/janlot56/featured> for more information.

@ Netherlands Society for Extracellular Vesicles, NLSEV 2020 Annual meeting, Amsterdam, Netherlands. **26/10/2020.** www.nlsev.nl 2020@nlsev.nl

FSEV member invited speakers: Clotilde Théry (Paris).

@ Formation Continue "Vésicules Extracellulaires (VE) de la préparation à la caractérisation", Lyon, France. **16-20/11/2020** or **15-19/03/2021.**

For more information, please follow the link: http://offre-de-formations.univ-lyon1.fr/InsertPro/20200626_FORM_779_Formation_Vesicules_extracellulaires_form_2021.pdf

PhD Defense

@ Nettie van Meteren: *Les vésicules extracellulaires dans l'hépatotoxicité des hydrocarbures aromatiques polycycliques : biomarqueurs et/ou vecteurs?*

30/09/2020 (2 pm, Rennes).

Supervisors: Odile Sergent and Eric Le Ferrec (Institut de recherche en santé, environnement et travail, Dominique Lagadic-Gossmann's Team "Stress, membrane et signalisation", Université de Rennes 1)

JOB OPPORTUNITIES:

@ Post-doc position for 2 years in the team 3 of IRSET UMR INSERM 1085, at the University of Rennes 1, France, under the supervision of Professor Lydie Sparfel and Dr Eric Le Ferrec. To work on the "Impact of polycyclic aromatic hydrocarbons on extracellular vesicles-mediated delivery of microRNAs from human blood circulating cells – study of paracrine effects to endothelial and hepatic cells", **starting 01/09/2020.**

Please email your detailed CV, including a complete list of your publications, a cover letter of motivation explaining your interest for the chosen position, a short statement on career planning, and 2 letters of references to Professor Lydie SPARFEL (lydie.sparfel@univ-rennes1.fr) before **01/08/2020.**

@ PhD offer for 3 years in the group BH2N (Bio-Hybrid Nanoparticles & Nanostructures) of the Nanosciences department from the laboratory ICB (laboratoire Interdisciplinaire Carnot de Bourgogne), under the supervision of the group head Dr Nadine Millot and Wilfrid Boileau (FEMTO-ST Institute, Besançon). To work on "Synthesis of hybrid nanoparticles targeting extracellular vesicles", **starting early October 2020.** Please

follow the link below for more information: https://icb.u-bourgogne.fr/wp-content/uploads/2020/06/Sujet_Th%C3%A8se-EUR-NPs_EVs_NMillot.pdf

RECENT publications from the french FSEV community

SEND US YOUR ACCEPTED PAPERS and those presented in BioRxiv

@ Review

- Bailly C, Vergoten G. Proposed mechanisms for the extracellular release of PD-L1 by the anticancer saponin platycodin D. *Int Immunopharmacol.* 2020 Jun 9;85:106675. doi: 10.1016/j.intimp.2020.106675. Epub ahead of print. PMID: 32531711.
- Eslami-S Z, Cortés-Hernández LE, Cayrefourcq L, Alix-Panabières C. The Different Facets of Liquid Biopsy: A Kaleidoscopic View. *Cold Spring Harb Perspect Med.* 2020 Jun 1;10(6):a037333. doi: 10.1101/cshperspect.a037333. PMID: 31548226; PMCID: PMC7263091.
- Saleh J, Peyssonnaud C, Singh KK, Edeas M. Mitochondria and Microbiota dysfunction in COVID-19 pathogenesis. *Mitochondrion.* 2020 Jun 20:S1567-7249(20)30138-0. doi: 10.1016/j.mito.2020.06.008. Epub ahead of print. PMID: 32574708.

@ Brain

- Yu Z, Shi M, Stewart T, Fernagut PO, Huang Y, Tian C, Dehay B, Atik A, Yang D, De Giorgi F, Ichas F, Canon MH, Ceravolo R, Frosini D, Kim HJ, Feng T, Meissner WG, Zhang J. Reduced oligodendrocyte exosome secretion in multiple system atrophy involves SNARE dysfunction. *Brain.* 2020 Jun 1;143(6):1780-1797. doi: 10.1093/brain/awaa110. PMID: 32428221; PMCID: PMC7296853.

@ Blood & Immune response

- Larabi A, Dalmaso G, Delmas J, Barnich N, Nguyen HTT. Exosomes transfer miRNAs from cell-to-cell to inhibit autophagy during infection with Crohn's disease-associated adherent-invasive *E. coli*. *Gut Microbes.* 2020 Jun 25:1-18. doi: 10.1080/19490976.2020.1771985. Epub ahead of print. PMID: 32583714.

@ Cancer

- de Camargo LCB, Guaddachi F, Bergerat D, Ourari N, Coillard L, Parietti V, Le Bras M, Lehmann-Che J, Jauliac S. Extracellular vesicles produced by NFAT3-expressing cells hinder tumor growth and metastatic dissemination. *Sci Rep.* 2020 Jun 2;10(1):8964. doi: 10.1038/s41598-020-65844-x. PMID: 32488182; PMCID: PMC7265394.
- Duhamel M, Rose M, Rodet F, Murgoci AN, Zografidou L, Régnier-Vigouroux A, Abeele FV, Kobeissy F, Nataf S, Pays L, Wisztorski M, Cizkova D, Fournier I, Salzet M. Paclitaxel Treatment and Proprotein Convertase 1/3 (PC1/3) Knockdown in Macrophages is a Promising Antiglioma Strategy as Revealed by Proteomics and Cytotoxicity Studies. *Mol Cell Proteomics.* 2018 Jun;17(6):1126-1143. doi: 10.1074/mcp.RA117.000443. Epub 2018 Mar 12. PMID: 29531019; PMCID: PMC5986247.
- Le Rhun E, Seoane J, Salzet M, Soffietti R, Weller M. Liquid biopsies for diagnosing and monitoring primary tumors of the central nervous system. *Cancer Lett.* 2020 Jun 28;480:24-28. doi: 10.1016/j.canlet.2020.03.021. Epub 2020 Mar 27. PMID: 32229189.

@ Heart, Lungs & Vessels

- Alkoussa S, Hulo S, Courcot D, Billet S, Martin PJ. Extracellular vesicles as actors in the air pollution related cardiopulmonary diseases. *Crit Rev Toxicol.* 2020 Jun 5:1-22. doi: 10.1080/10408444.2020.1763252. Epub ahead of print. PMID: 32500824 Ghaleh B, Thireau J, Cazorla O, Soleti R, Scheuermann V, Bizé A, Sambin L, Roubille F, Andriantsitohaina R, Martinez MC, Lacampagne A. Cardioprotective effect of sonic hedgehog ligand in pig models of ischemia reperfusion. *Theranostics.* 2020 Mar 4;10(9):4006-4016. doi: 10.7150/thno.40461. PMID: 32226535; PMCID: PMC7086352.
- Perdomo L, Vidal-Gomez X, Soleti R, Vergori L, Duluc L, Chwastyniak M, Bissierier M, Le Lay S, Villard A, Simard G, Meilhac O, Lezoualc'h F, Khantaline I, Veerapen R, Dubois S, Boursier J, Henni S, Gagnadoux F, Pinet F, Andriantsitohaina R, Martinez MC. Large Extracellular Vesicle-Associated Rap1 Accumulates in Atherosclerotic Plaques, Correlates with Vascular Risks and Is Involved in Atherosclerosis. *Circ Res.* 2020 Jun 16. doi: 10.1161/CIRCRESAHA.120.317086. Epub ahead of print. PMID: 32539601.

@ Microbiology

- Andriantsitohaina R, Papon N. Extracellular Vesicles: New Bullets to Fight Fungal Infections. Trends Cell Biol. 2020 Jun 18:S0962-8924(20)30105-7. doi: 10.1016/j.tcb.2020.05.008. Epub ahead of print. PMID: 32563622.

@ Technology

- Montis C, Salvatore A, Valle F, Paolini L, Carlà F, Bergese P, Berti D. Biogenic supported lipid bilayers as a tool to investigate nano-bio interfaces. J Colloid Interface Sci. 2020 Jun 15;570:340-349. doi: 10.1016/j.jcis.2020.03.014. Epub 2020 Mar 5. PMID: 32171928.

@ BioRxiv pre-prints (<https://www.biorxiv.org/>)

- Rocher C, Vernale A, Fierro Constain L, Sejourne N, Chenesseau S, Marschal C, Le Golf E, Dutilleul M, Matthews C, Marschal F, Brouilly N, Massey Harroche D, Ereskovsky A, Le Bivic A, Borchiellini C, Renard E. The buds of *Oscarella lobularis* (Porifera): a new convenient model for sponge cell and developmental biology. bioRxiv 2020.06.23.167296; doi: <https://doi.org/10.1101/2020.06.23.167296>

- Sens P Stick-Slip model for actin-driven cell protrusions, cell polarisation and crawling. doi: <https://doi.org/10.1101/2020.05.29.124438>

- Ghoshal B, Bertrand E, Bhattacharyya S. Non-Canonical Ago Loading of EV-Derived Exogenous miRNA Generates Foreign miRNPs on Endosomes to Arbitrate Gene Expression in Recipient Cells. doi: <https://doi.org/10.1101/2020.05.26.115899>

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