



*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***

January 2020

NEWS FROM FSEV SOCIETY:

@ FSEV offers 4 travel grants of 1000€ for Junior scientists presenting oral communications at ISEV-2020. Please send your application to admin@fsev.fr as a single pdf including

- 1) the abstract submitted to ISEV-2020,
- 2) the email from ISEV notifying of its selection for oral presentation,
- 3) ½ page motivation to attend ISEV-2020,
- 4) 1 page CV including full affiliation, status (PhD student with date of 1st year,

Post-doc with date of PhD defence), publications (oral or poster communications, articles: accepted or submitted).

Deadline for application: **20/02/2020**

(abstract notification of ISEV expected 14/02/2020).

Results expected **28/02/2020**

(deadline for ISEV-2020 registration of oral presenters is 02/03/2020).

Possible re-opening of the call for late-breaking abstracts, if remaining fellowships available.

FSEV EVENTS:

@ SFNano-FSEV joined 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 **10-12/06/2020**. 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/>

Registration and abstract submission at <https://evsummerschool.sciencesconf.org>

Abstract submission deadline (short oral presentation) **31/01/2020**

Registration deadline **29/02/2020**

A tentative theme issue at Advanced Drug Delivery Reviews (Impact factor 15.5) about Technological and translational challenges for EVs in therapy and diagnosis will include a limited number of articles from participants. If you intend to participate to the Summer school and if you are willing to contribute to this theme issue (submission dead-line: end 2020), please send a provisional title to guillaume.van-niel@inserm.fr and amanda.silva@univ-paris-diderot.fr by **31/01/2020**.

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

-05/02/2020, 7th GO-EV meeting, Rennes. Theme: "Functions and activities of EVs". Contact: eric.guedon@inra.fr

-29/05/2020, Journées Scientifiques de l'Université de Nantes, cité des congrès, Nantes. "Grand-Ouest Extracellular Vesicle Network: Innovations for Health". Registration will be free but mandatory. Information at: <https://js.univ-nantes.fr/>. Contact: laetitia.guevel@univ-nantes.fr

@ Thematic group on EV therapeutics

S. Banzet and A. Silva-Brun have decided to launch a thematic group to gather the French actors interested in EV therapeutics. The goal is to create an active network to share experience and skills in, for instance: optimisation of the clinical grade EV production, product qualifying, quality control, potency assays, as well as stability/conservation and regulatory questions. This project will be presented during the SFNano/FSEV Summer School of June 2020.

For FSEV members interested in such an initiative, please contact:

Sébastien Banzet (MD, PhD), UMR-1197, Institut de Recherche Biomédicale des Armées, Clamart. sebastien.banzet@inserm.fr

Amanda Brun (PharmD, PhD), UMR 7057, Laboratoire Matière et Systèmes Complexes, Paris. amanda.brun@univ-paris-diderot.fr

ISEV (International Society for EVs) EVENTS:

@ ISEV Annual Meeting 2020, Philadelphia, USA, **21-24/05/2020**, Education Day **20/05/2020**. <https://www.isev.org/mpage/2020home>.

Abstract submission deadline 17/01/2020.

Presenting Author registration deadline: 02/03/2020.

Early registration deadline 13/03/2020.

@ ISEV Workshop "EVs in immunology", Buenos Aires, Argentina 05-06/03/2020.

Plus free Education day on **04 March 2020**.

<https://www.isev.org/events/EventDetails.aspx?id=1232985&group=>

FSEV members presenters at Education Day: Mercedes Tkach, Lorena Martin-Jaular (Paris).

@ ISEV Workshop "Imaging EVs in vivo", Paris, IPNP, 19-20/03/2020

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

Morning presentations of **19 and 20/03/2020** are open to max 200 attendees. Afternoon sessions are limited to previously accepted applicants.

Registration to morning sessions is free but mandatory at surveyMonkey.com/r/JP758J6

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

@ The second Open Access course (MOOC 2) on EVs in health and Disease has been launched by ISEV in **October 2019**.

<https://www.coursera.org/learn/extracellular-vesicles-health-disease>

MOOC 2 is designed for intermediate learners, and prepared by team of 54 well known International EV scientists. It covers 19 topics on the roles of EVs in humans. MOOC 2 expands on the learnings from MOOC 1 and aims to provide current understanding about EVs and their role in health and disease.

FSEV members involved in preparing courses of MOOC 2 include: R Lacroix (Marseille, coagulation), R Andriantsitohaina and C Martinez (Angers, metabolism), C Théry and M

Tkach (Paris, tumour and immune system interaction), C Boulanger (Paris, cardiovascular diseases).

OTHER EV EVENTS:

Conferences and Courses

@ **Hatter Cardiovascular Institute** Scientific Meeting on exosomes from engineering to application, **31/01/2020**, London, UK.

<https://www.hatter-cardiovascular-institute.co.uk/events/>

FSEV members invited speakers: Chantal Boulanger, Philippe Ménasché, Clotilde Théry (Paris).

@ Two "**Fusion Conferences**" in Nassau Bahamas:

2nd Immuno-Metabolic Mechanisms of Atherosclerosis conference, 01-04/03/2020.

Deadline Poster submission and registration: 20/01/2020.

One session on EVs. <https://www.fusion-conferences.com/conference/103>

FSEV member invited speaker: Clotilde Théry (Paris)

Exosomes in Human Infectious Diseases conference, 05-07/03/2020.

Deadline Poster submission and registration: 20/01/2020.

<https://www.fusion-conferences.com/conference/105>

FSEV member Co-organizer: Graça Raposo (Paris), Invited speakers: Guillaume van Niel (Paris), Clotilde Théry (Paris)

@ **ISCT (International Society for Cell Therapy) 2020 Annual meeting, 27-30/05/2020, Paris.**

Abstract submission deadline **17/01/2020**. Early registration deadline **24/02/2020**.

<http://www.isct2020.com/>

Session "Basics and translational potential of extracellular vesicles including exosomes", Saturday 30/05/2020 1:30-3pm.

FSEV member invited speakers: Clotilde Théry (Paris).

@ **Gordon Research Conference "Understanding EV Biogenesis and composition for detection and treatment of diseases", 26-31/07/2020**, Sunday River, MA, USA.

Application open until **28/06/2020** at

<https://www.grc.org/extracellular-vesicles-conference/2020/>

FSEV member invited speakers: Clotilde Théry (Paris), Jacky Goetz (Strasbourg)

PhD Defenses

@ **Khem Raj GIRI: "Role of Extracellular Vesicles in Type 1 Diabetes". 31/01/2020**, Oniris, Salle 103, Nantes.

Thèse co-dirigée par Steffi Bösch, Jean-Marie Bach et Peter van Endert.

HDR Defense

@ **Romarc LACROIX: "Rôle des microvésicules dans l'hémostase: nouveaux concepts et applications". 13/02/2020, 14h**, Université Aix-Marseille, Faculté de Pharmacie, La Timone, Marseille.

Invited Speakers on EVs in France

@ **Invited speakers: Clotilde Théry and Lorena Martin-Jaular** (Institut Curie/INSERM U932, Paris): "*Exosomes and other extracellular vesicles in cancer and HIV infection*". **06/02/2020, 11h**, Centre de Recherche INRA, Jouy-en-Josas.

Invited by Isabelle Schwartz, Unité Virologie et Immunologie Moléculaire, INRA.

JOB OPPORTUNITIES:

@ PhD position at the Institut de Biologie Structurale de Grenoble (CNRS/ CEA / University Grenoble-Alpes), directed by Rémi Sadoul, in the team of W. Weissenhorn, to work on the molecular mechanisms allowing the intercellular transfer of biologically active molecules via exosomes.

Send application before **20/03/2020** in a single pdf file including CV, motivation letter, Bachelor and Master transcripts to Professor Remy Sadoul (remy.sadoul@univ-grenoble-alpes.fr)

@ Early post-doc/engineer position at the Signaling in Oncogenesis, Angiogenesis and Permeability Lab, CRCINA, Nantes (INSERM/CNRS/Université de Nantes), in the team of Julie Gavard, to work on the impact of extracellular vesicles in the brain tumor microenvironment.

Please send your application before **01/06/2020** including CV, motivation letter and two references to Julie Gavard (Julie.gavard@inserm.fr).

@ Engineer position for 30 months at the Endosomal dynamic in neuropathies lab, IPNP, Paris (INSERM/Université de Paris. <https://ipnp.paris5.inserm.fr/research/teams-and-projects/17-equipe-van-niel>), to work on the impact of extracellular vesicles in the brain tumor microenvironment in vivo.

Please send your application before **01/06/2020** including CV, motivation letter and two references to Guillaume van Niel (guillaume.van-niel@inserm.fr).

RECENT publications from the french FSEV community

SEND US YOUR ACCEPTED PAPERS and those presented in BioRxiv

@ Launching of a special issue in “Sensors Journal” dealing with the Nanobiosensing of EVs in biofluids.

In this Special Issue are welcome position paper, reviews and original research papers describing the development and validation of EVs biosensors in any biological fluids. For further information, please visit mdpi.com/si/26108. The submission process is opened from **april 2019 to march 2020**.

Guest Editors: Dr. Wilfrid Boireau (wilfrid.boireau@femto-st.fr) and Dr. Yu-Jui Fan (ray.yj.fan@tmu.edu.tw)

@ Reviews

-Vincent D, Rafiqi M, Job D. The Multiple Facets of Plant-Fungal Interactions Revealed Through Plant and Fungal Secretomics. *Front Plant Sci.* 2020 Jan 8;10:1626. doi: 10.3389/fpls.2019.01626. eCollection 2019. Review. PubMed PMID: 31969889; PubMed Central PMCID: PMC6960344.

-Cizkova D, Murgoci AN, Cubinkova V, Humenik F, Mojzisova Z, Maloveska M, Cizek M, Fournier I, Salzet M. Spinal Cord Injury: Animal Models, Imaging Tools and the Treatment Strategies. *Neurochem Res.* 2020 Jan;45(1):134-143. doi: 10.1007/s11064-019-02800-w. Epub 2019 Apr 20. PubMed PMID: 31006093.

-Gaillard M, Thuairé A, Nonglaton G, Agache V, Roupioz Y, Raillon C. Biosensing extracellular vesicles: contribution of biomolecules in affinity-based methods for detection and isolation. *Analyst.* 2020 Jan 21. doi: 10.1039/c9an01949a. [Epub ahead of print] PubMed PMID: 31960838.

@ Blood extracellular vesicles

-Gasecka A, Nieuwland R, Budnik M, Dignat-George F, Eyileten C, Harrison P, Huczek Z, Kapłon-Cieślicka A, Lacroix R, Opolski G, Pluta K, van der Pol E, Postuła M, Leroyer A, Siljander P, Sturk A, Filipiak KJ. Randomized controlled trial protocol to investigate the antiplatelet therapy effect on extracellular vesicles (AFFECT EV) in acute myocardial infarction. *Platelets.* 2020;31(1):26-32. doi: 10.1080/09537104.2018.1557616. Epub 2018 Dec 26. PubMed PMID: 30585111.

@ Bone metabolism and osteoarthritis

-Ruiz M, Toupet K, Maumus M, Rozier P, Jorgensen C, Noël D. TGFBI secreted by mesenchymal stromal cells ameliorates osteoarthritis and is detected in extracellular vesicles. *Biomaterials*. 2020 Jan;226:119544. doi: 10.1016/j.biomaterials.2019.119544. Epub 2019 Oct 11. PubMed PMID: 31648137.

- Minamizaki T, Nakao Y, Irie Y, Ahmed F, Itoh S, Sarmin N, Yoshioka H, Nobukiyo A, Fujimoto C, Niida S, Sotomaru Y, Tanimoto K, Kozai K, Sugiyama T, Bonnelye E, Takei Y, Yoshiko Y. The matrix vesicle cargo miR-125b accumulates in the bone matrix, inhibiting bone resorption in mice. *Commun Biol*. 2020 Jan 16;3(1):30. doi: 10.1038/s42003-020-0754-2. PubMed PMID: 31949279; PubMed Central PMCID: PMC6965124.

- Ruiz M, Toupet K, Maumus M, Rozier P, Jorgensen C, Noël D. TGFBI secreted by mesenchymal stromal cells ameliorates osteoarthritis and is detected in extracellular vesicles. *Biomaterials*. 2020 Jan;226:119544. doi: 10.1016/j.biomaterials.2019.119544. Epub 2019 Oct 11. PubMed PMID: 31648137.

@ Cancer

-Clement E, Lazar I, Attané C, Carrié L, Dauvillier S, Ducoux-Petit M, Esteve D, Menneteau T, Moutahir M, Le Gonidec S, Dalle S, Valet P, Burlet-Schiltz O, Muller C, Nieto L. Adipocyte extracellular vesicles carry enzymes and fatty acids that stimulate mitochondrial metabolism and remodeling in tumor cells. *EMBO J*. 2020 Jan 10:e102525. doi: 10.15252/embj.2019102525. [Epub ahead of print] PubMed PMID: 31919869.

-Plantureux L, Mège D, Crescence L, Carminita E, Robert S, Cointe S, Brouilly N, Ezzedine W, Dignat-George F, Dubois C, Panicot-Dubois L. The Interaction of Platelets with Colorectal Cancer Cells Inhibits Tumor Growth but Promotes Metastasis. *Cancer Res*. 2020 Jan 15;80(2):291-303. doi: 10.1158/0008-5472.CAN-19-1181. Epub 2019 Nov 14. PubMed PMID: 31727628.

-Carvalho AS, Baeta H, Silva BC, Moraes MCS, Bodo C, Beck HC, Rodriguez MS, Saraswat M, Pandey A, Matthiesen R. Extra-cellular vesicles carry proteome of cancer hallmarks. *Front Biosci (Landmark Ed)*. 2020 Jan 1;25:398-436. PubMed PMID: 31585894.

@ Virology

-Handala L, Blanchard E, Raynal PI, Roingard P, Morel V, Descamps V, Castelain S, Francois C, Duverlie G, Brochot E, Helle F. BK polyomavirus hijacks extracellular vesicles for en bloc transmission. *J Virol*. 2020 Jan 2. pii: JVI.01834-19. doi: 10.1128/JVI.01834-19. [Epub ahead of print] PubMed PMID: 31896595.

@ Immune response

-Lagrange J, Lacolley P, Wahl D, Peyrin-Biroulet L, Regnault V. Shedding Light on Hemostasis in Patients With Inflammatory Bowel Diseases. *Clin Gastroenterol Hepatol*. 2020 Jan 20. pii: S1542-3565(20)30056-2. doi: 10.1016/j.cgh.2019.12.043. [Epub ahead of print] Review. PubMed PMID: 31972287.

-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. PubMed PMID: 29531019; PubMed Central PMCID: PMC5986247.

@ Cell biology/Imaging

-Lin YC, Chipot C, Scheuring S. Annexin-V stabilizes membrane defects by inducing lipid phase transition. *Nat Commun*. 2020 Jan 13;11(1):230. doi: 10.1038/s41467-019-14045-w. PubMed PMID: 31932647; PubMed Central PMCID: PMC6957514.

-Bebelman MP, Bun P, Huvencers S, van Niel G, Pegtel DM, Verweij FJ. Real-time imaging of multivesicular body-plasma membrane fusion to quantify exosome release from single cells. *Nat Protoc*. 2020 Jan;15(1):102-121. doi: 10.1038/s41596-019-0245-4. Epub 2019 Dec 13. PubMed PMID: 31836866.

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

-Oligodendrocyte-derived exosomes promote axonal transport and axonal long-term maintenance. Carsten Frühbeis, Wen Ping Kuo-Elsner, Kerstin Barth, Leticia Peris, Stefan Tenzer, Wiebke Möbius, Hauke B. Werner, Klaus-Armin Nave, Dominik Fröhlich, Eva-Maria Krämer-Albers. <https://doi.org/10.1101/2019.12.20.884171>

-The Flemmingsome reveals an ESCRT-to-membrane coupling required for completion of cytokinesis. Cyril Addi, Adrien Presle, Stéphane Frémont, Frédérique Cuvelier, Murielle Rocancourt, Florine Milin, Sandrine Schmutz, Julia Chamot-Rooke, Thibaut Douché, Magalie Duchateau, Quentin Gai Gianetto,

Hervé Ménager, Mariette Matondo, Pascale Zimmermann, Neetu Gupta-Rossi, Arnaud Echard.
<https://doi.org/10.1101/2020.01.15.907857>

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