

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** 

# October 2023

# Dear FSEVers,

The vivid community of the younger members of the FSEV is looking forward meeting you for the FSEV 2023 on line meeting. The program is centered on students and will be soon available. During this event we will renew the board of the FSEV. We are pleased to announce 17 applications for the FSEV board renewal (available on the FSEV website (*https://www.fsev.fr/board-renewal.html*).

Please check your mail box (and spams! (2)) to participate to the election of the 12 new members. The election is organized using the online Balotilo polling system. **Votes will be opened until November 10**<sup>th</sup>! For a smooth transition, the joint meeting of the outgoing and incoming board will be held following the General Assembly on November 14<sup>th</sup>.

Several founding members will leave the board: Guillaume Van Niel (president), Steffi Bosch (treasurer) and Olivier Blanc-Brude (secretary). Their tireless contribution shaped the FSEV teamwork and achievement, which deserve all our gratitude.

Happy HalloweEVs!

Best wishes, The FSEV board

#### **NEWS:**

@ Your news: You've got some piece of news? Please send us what to cover in our next newsletter at *admin@fsev.fr* 

@ FSEV Congress 2023 will be hold on 14/11/2023. Save the date for this online event! This young researchers-led conference will highligh early-carreer researchers and cutting-edge research from keynote speakers, Lorena Martin Jaular (Institut Curie, Paris) and Julien Pompon (IRD, Montpellier) FSEV Congress 2023 will also validate the accounts of the FSEV and its actions throughout the year, will allow our members to express their wishes for future actions, and will elect the new board for 2024-2026

# @ Call for FSEV PhD award 2023

The FSEV will award 500€ awards for one (or more?) PhD laureate with outstanding contributions in the field of EVs (theses should have been defended in French University from **01/09/2022 to the 31/08/2023**).

To apply, please send a single pdf file including your CV, a summary of the work using a graphical abstract, a short motivation letter ( $\leq$  1 page), the reports of the PhD defense, and a recommendation letter from your PhD supervisor to *calls@fsev.fr* 

Deadline for application: **31/10/2023** 

# @ Workshop FSEV-AFC 2024

Workshop "hands-on" (JFP-Journée de formation Pratique) on **single EV analysis**. 60 participants will have the opportunity to manipulate directly up to 4 various devices among the tens present on site (nanocytometer, single particle tracking, sup-resolution microscopy) to analyze provided referenced samples. The practical session day will be preceded by an afternoon presentation of the state of the art by experts in the field and followed by a morning of analysis of the results. **The afternoon presentation is open to all but registration is mandatory.** 

Event co-organized with AFC (Association Française de Cytométrie) and held at FIAP Jean Monnet in Paris (France), **07-09/02/2024** 

Registration and more information at *https://www.alphavisa.com/afc-fsev/2024/index.php* 

Registration deadline: 07/12/2023

@ FSEV Congress 2024 will be hold in Strasbourg. Do not hesitate to contact us at *calls@fsev.fr* to participate in the organization of the meeting, particularly if you are located in the East

@ LinkedIn: also remember to follow us at https://www.linkedin.com/company/frenchsociety-for-extracellular-vesicles-fsev/?viewAsMember=true

# @ MOVE European Mobility Fellowships 2024

EV societies across Europe has got together to form **MOVE (MObility for Vesicles research in Europe)** on order to is to give early-stage scientists the opportunity to work in a different European lab in 2024

**The MOVE European Mobility Fellowship** aims to foster collaborations between the members of different European EV Societies and Networks. The Fellowship will enable Early Career Researchers (the applicants) to travel to another lab in Europe (the hosts) to develop both their technical skills and enlarge their own professional networks

The Fellowship is intended for technicians, PhD students and early-stage postdoctoral researchers ( $\leq$  5 years, excluding career breaks). There may be some exceptions. This will be at the discretion of each national society

FSEV will offer two Fellowships to cover travel and subsistence (but not bench fees) to work within a host lab at an academic institution in a different European country for 1-3 months, to a maximum value of €2000.

Process: https://www.ukev.org.uk/move-mobility-ev-europe/

- Look up host labs registered with the project on:

https://docs.google.com/spreadsheets/d/19y7JppcAJLyTlaV21A5YCpyAfhtivkUh/edit?u sp=sharing&ouid=106664164426554744978&rtpof=true&sd=true

# Applications are now open to study abroad!

- Contact the host lab directly to discuss your proposed project

- Apply for the placement through the specific forms and process of your society This is a rolling application and different societies will have different times to apply and rules, so contact them directly.

# **ISEV (International Society for EVs) EVENTS:**

# @ 1<sup>st</sup> ISEV Symposium on Extracellular Vesicles in Nervous Systems, Check the program update now including invited talks and short talks selected from abstracts! +100 posters will be showcased! Late breaking abstract submission (for posters only) is now open until 7 November, 2023 !

A first-of-its-kind symposium organized by the ISEV **Special Interest Group (SIG) "EVINS"**. Christian Neri (FSEV vice-president) and Julie Saugstad (USA), the symposium co-chairs, are inviting you to join the first ISEV symposium "EVs in Nervous Systems"

This in-person meeting will be held in Rome, Italy, December 6-8. The meeting will feature talks by leading experts in the field, several short talks selected from abstracts, poster sessions, panel discussions, and general assembly of the SIG EVINS for a comprehensive update on EVs and nervous systems. Do not miss this event!

Updated information at https://www.isev.org/evs-in-nervous-system

@ ISEV2023, Workshop: "EV-based biomarkers: Commercialisation and Clinical Implementation", **12-14/10/23**, Aalborg, Denmark

Jessica Gobbo (INSERM1231, CGFL, Dijon): FSEV member invited speakers and chair, session on the feasibility and discovery of EV biomarkers

# @ Special Interest Group (SIG) on Genitourinary System EVs – GUSEV

GUSEV has evolved from the ISEV Rigor and Standardization Urine Task Force. While this task force continues to monitor and foster reproducibility in urinary EV research, GUSEV will focus on education, cross-disciplinary and cross-society collaboration and professional networking beyond the scope of rigor and standardization

More information at https://isev.memberclicks.net/SIGGUSEV

@ ISEV2024 Annual Meeting: Save the date! 08-12/05/24, Melbourne, Australia (Education day: 08/05/24 and Annual meeting: 09-12/05/24)

Abstract submission will open in the coming weeks and closes on 11/12/23

Registration will begin in October 2023

Visit the ISEV2024 Website for updates https://www.isev.org/isev2024

@ METVES II – Standardisation of concentration measurements of extracellular vesicles for medical diagnoses, Workshop 24/11/23. More information at: https://isev.memberclicks.net/index.php?option=com\_jevents&task=icalrepeat.detail& evid=159&Itemid=115&year=2022&month=11&day=24&title=metves-ii-workshop&uid=625feed43f802b90b76ae309644f1a4a

@ Extracellular Vesicle Club, virtual, weekly on Wednesdays (generally 6pm)

Organized by **Ken Witwer**, ISEV Chair of Science and Meetings, Johns Hopkins Med U, Bethesda, USA.

You can sign up for the email list to receive the weekly program and link at: https://www.surveymonkey.com/r/L25KDWB or subscribe to the YouTube Channel for past events https://www.youtube.com/c/ExtracellularVesicleClub

You can also submit suggestions of topics for a future EVClub: https://www.surveymonkey.com/r/DC5MY9X

# **OTHER EV EVENTS:**

#### HDR Defense:

#### **@** Julien Saint-Pol:

*Communications cellule-cellule par vésicules extracellulaires dans le complexe neurovasculaire: preuves de concept et perspectives.* 

01/12/2023 (UFR Sciences, Université d'Artois, Lens)

# Ø Julie Constanzo:

*Effets non-ciblés de la radiothérapie interne vectorisée: implication des vésicules extracellulaires.* 

**15/11/2023** (Faculté de médecine IRCM, INSERM U1194, Université de Montpellier, Montpellier)

# **JOB OPPORTUNITIES:**

For more details, please see FSEV website (https://www.fsev.fr/jobs.html)

In order to keep the job offers up to date, we ask employers to indicate monthly (before the last week of the current month), whether the offer is still open.

If no update information is provided, the announcement will be deleted from this section. Thank you for your understanding!

@ 2 positions in An Hendrix's group to work on extracellular vesicles and cancer funded by an ERC grant (Gent, Belgium).

**One PhD position**, apply by sending application through email:

https://www.ugent.be/en/work/scientific/phd-student-51

**One Postdoctoral research scientist**, apply by submitting application online:

https://jobs.ugent.be/job/Ghent-Post-doctoraal-medewerker-9000/779009202/

@ 2 positions on Therapeutic EVs at Icahn School of Medicine at Mount Sinai, New York (*https://icahn.mssm.edu/research/cardiovascular*)

**One Postdoctoral research scientist** to lead the EV-AAV research project funded by Evox Therapeutics (*https://www.evoxtherapeutics.com/*). The project involves AAV and EV-AAV isolation and characterization, therapeutic testing in vitro and in mice and investigating the cardiotropic mechanisms.

**One Research Associate (RA) position** to be involved in isolation of AAVs, EVs, and several molecular techniques associated with the projects.

The positions will involve processing human, swine and rodent tissue specimens, contributing to several laboratory activities and working with other members of the team. More information about the lab and researchers can be found here:

http://labs.icahn.mssm.edu/sahoolab/

http://labs.icahn.mssm.edu/sahoolab/job-openings/

To apply, please send a CV containing a summary of past accomplishments, a statement of future objectives and names of professional referees by e-mail to *susmita.sahoo@mssm.edu* 

@ 18-month Postdoctoral position starting as soon as possible in Physiopathology of Nutritional Adaptations (UMR PhAN-1280), Nantes Hospital Hôtel-Dieu, Medical University of Nantes, France

We are looking for a rigorous candidate with creative and collaborative spirit. PhD in Microbiology, Experience/Knowledge in EVs, Scientific English speaking and writing are required. Knowledge in microbiota is recommended. Good communication skills (oral and written) and the ability to work in a team are essential

The main objective of this project is to investige the bacterial extracellular vesicles (BEVs) from indole-producing bacteria frequently found in newborn gut microbiota. The study will include the analyses of samples for BEVs production from in vitro bacterial cultures and in vivo experimentations on preclinical models in controlled conditions. BEVs will be characterized by physical and biological assessments after extraction and purification. Biological functions of the BEVs derived from indole-producing bacteria and synthetic gut communities will be determined using our expertise on specific stem cell lines and ex vivo electrophysiological analyses on brain slides

To apply, please send a CV h a short statement for research interests, scientific production and the contact details of two referees via e-mail to: *odile.tresse@inrae.fr* 

@ Engineer position opened by the French "Laboratoire d'Excellence" LipSTIC (Lipoprotéines et Santé: prévention et traitement des maladies inflammatoires et du cancer, also see http://www.labex-lipstic.fr)

He/she will carry out a translational research activity within the "HSP-pathies" (Dr C Garrido, DRCE) team of the INSERM 1231 and the anti-cancer center Georges-François Leclerc (CGFL), Dijon

We are looking for a motivated candidate to fill the position of engineer responsible for the management of a project focus on tumor-derived extracellular vesicles (EVs) and biomarkers discovery. The candidate will carry out experiments to purify and moleculary characterize EVs and their subpopulations from cell lines and human clinical samples. He/she will be responsible to design experiments in concert with the scientific staff, and coordinating the follow-up of the projects and interaction with the different externals' collaborators. The engineer will also manage the financials, including requests for funding and manage the equipment. The ideal candidate should possess excellent organizational and problem-solving skills, be familiar with project management and, have expertise in the 'Extracellular Vesicle'-field. Fluency in both French and English is a must. This engineer position is funded by Labex for one year. The successful candidate should start no later than November 2023.

To apply, please send a motivation letter, your CV, and the contact details of two referees via e-mail to *jgobbo@cgfl.fr* and *Cgarrido@u-bourgogne.fr* 

# **@** Communication Manager position opened by the Grand-Ouest Network on Extracellular Vesicles, Nantes.

The position is opened under the auspices of INSERM, to coordinate the communication and interactions with the technological platforms in Bretagne and Pays-de-la-Loire regions. She/he will be located at CRCl<sup>2</sup>NA, Nantes with possible missions in Nantes, Angers, and Rennes.

The coordinator will be in charge of maintaining up-to-date information about GO-EV lab members, developing communication tools for the network, and ensuring standardized procedures are followed across labs and platforms.

The position is open to candidates with post-bac experiences (up to MSc) in sciences and/or communication. Please contact *julie.gavard@inserm.fr* 

# **RECENT publications from the french FSEV community:**

# SEND US YOUR ACCEPTED PAPERS

#### @ Review

-Andriantsitohaina R, Martinez MC. 'Yapping' with extracellular vesicles in fatty liver metastasis. Trends Cell Biol. 2023 Sep;33(9):729-731. doi: 10.1016/j.tcb.2023.07.001. Epub 2023 Jul 18. PMID: 37468354.

-Bertolino GM, Maumus M, Jorgensen C, Noël D. Therapeutic potential in rheumatic diseases of extracellular vesicles derived from mesenchymal stromal cells. Nat Rev Rheumatol. 2023 Sep 4. doi: 10.1038/s41584-023-01010-7. Epub ahead of print. PMID: 37666995.

-Boussios S, Devo P, Goodall ICA, Sirlantzis K, Ghose A, Shinde SD,

Papadopoulos V, Sanchez E, Rassy E, Ovsepian SV. Exosomes in the Diagnosis and Treatment of Renal Cell Cancer. Int J Mol Sci. 2023 Sep 20;24(18):14356. doi: 10.3390/ijms241814356. PMID: 37762660.

-Chou ML, Babamale AO, Walker TL, Cognasse F, Blum D, Burnouf T. Blood-brain crosstalk: the roles of neutrophils, platelets, and neutrophil extracellular traps in neuropathologies. Trends Neurosci. 2023 Sep;46(9):764-779. doi: 10.1016/j.tins.2023.06.005. Epub 2023 Jul 25. PMID: 37500363.

-Martin C, Ligat G, Malnou CE. The Yin and the Yang of extracellular vesicles during viral infections. Biomed J. 2023 Sep 8:100659. doi: 10.1016/j.bj.2023.100659. Epub ahead of print. PMID: 37690583.

-Rodrigues ML, May RC, Janbon G. The multiple frontiers in the study of extracellular vesicles produced by fungi. Microbes Infect. 2023 Oct 5:105233. doi: 10.1016/j.micinf.2023.105233. Epub ahead of print. PMID: 37805124.

# @ Position paper

-Ikonomou L, Cuende N, Forte M, Grilley BJ, Levine AD, Munsie M, Rasko JEJ, Turner L, Bidkhori HR, Ciccocioppo R, Grignon F, Srivastava A, Weiss DJ, Zettler P, Levine BL; ISCT Committee on the Ethics of

Cell and Gene Therapy (ECGT). International Society for Cell & Gene Therapy Position Paper: Key considerations to support evidence-based cell and gene therapies and oppose marketing of unproven products. Cytotherapy. 2023 Sep;25(9):920-929. doi: 10.1016/j.jcyt.2023.03.002. PMID: 37517865.

# @ Meeting presentation

-Menasché P. Surgical Delivery of Embryonic Cells and Products. Tex Heart Inst J. 2023 Oct 10;50(5):e238263. doi: 10.14503/THIJ-23-8263. PMID: 37824589.

#### @ Biomarkers

-Elkrief L, Ganne-Carrié N, Manceau H, Tanguy M, Valainathan SR, Riescher-Tuczkiewicz A, Biquard L, Barget N, Chaffaut C, Louvet A, Paradis V, Ziol M, Bæk R, Jørgensen MM, Van Niel G, Coly PM, Hammoutène A, Dujardin F, Peoc'h K, Poynard T, Chevret S, Rautou PE; CIRRAL group. Hepatocyte-derived biomarkers predict liver-related events at 2 years in Child-Pugh class A alcohol-related cirrhosis. J Hepatol. 2023 Oct;79(4):910-923. doi: 10.1016/j.jhep.2023.05.025. Epub 2023 Jun 9. PMID: 37302582.

#### @ Blood

-Barocas A, Savard P, Carlo A, Lecompte T, de Maistre E. How to assess hypercoagulability in heparininduced thrombocytopenia? Biomarkers of potential value to support therapeutic intensity of nonheparin anticoagulation. Thromb J. 2023 Sep 19;21(1):100. doi: 10.1186/s12959-023-00546-8. PMID:37726772.

# @ Cancer

-Hinestrosa JP, Sears RC, Dhani H, Lewis JM, Schroeder G, Balcer HI, Keith D, Sheppard BC, Kurzrock R, Billings PR. Development of a blood-based extracellular vesicle classifier for detection of early-stage pancreatic ductal adenocarcinoma. Commun Med (Lond). 2023 Oct 19;3(1):146. doi: 10.1038/s43856-023-00351-4. PMID: 37857666.

-Proestler E, Donzelli J, Nevermann S, Breitwieser K, Koch LF, Best T, Fauth M, Wickström M, Harter PN, Kogner P, Lavieu G, Larsson K, Saul MJ. The multiple functions of miR-574-5p in the neuroblastoma tumor microenvironment. Front Pharmacol. 2023 Sep 4;14:1183720. doi: 10.3389/fphar.2023.1183720. PMID: 37731742.

#### @ Inflammation

-Jammes M, Cassé F, Velot E, Bianchi A, Audigié F, Contentin R, Galéra P. Pro-Inflammatory Cytokine Priming and Purification Method Modulate the Impact of Exosomes Derived from Equine Bone Marrow Mesenchymal Stromal Cells on Equine Articular Chondrocytes. Int J Mol Sci. 2023 Sep 16;24(18):14169. doi: 10.3390/ijms241814169. PMID: 37762473.

-Payet T, Valmori M, Astier J, Svilar L, Sicard F, Tardivel C, Ghossoub R, Martin JC, Landrier JF, Mounien L. Vitamin D Modulates Lipid Composition of Adipocyte-Derived Extracellular Vesicles Under Inflammatory Conditions. Mol Nutr Food Res. 2023 Sep 15:e2300374. doi: 10.1002/mnfr.202300374. Epub ahead of print. PMID: 37712099.

# @ Methods

-Cappe B, Vadi M, Sack E, Wacheul L, Verstraeten B, Dufour S, Franck J, Xie W, Impens F, Hendrix A, Lafontaine DLJ, Vandenabeele P, Riquet FB. Systematic compositional analysis of exosomal extracellular vesicles produced by cells undergoing apoptosis, necroptosis and ferroptosis. J Extracell Vesicles. 2023 Oct;12(10):e12365. doi: 10.1002/jev2.12365. PMID: 37807017.

-Smirnova A, Jeandard D, Smirnov A. Controlled Level of Contamination Coupled to Deep Sequencing (CoLoC-seq) Probes the Global Localisation Topology of Organelle Transcriptomes. Bio Protoc. 2023 Sep 20;13(18):e4820. doi: 10.21769/BioProtoc.4820. PMID: 37753469.

#### @ Pathogens

-Cros MP, Mir-Pedrol J, Toloza L, Knödlseder N, Maruotti J, Zouboulis CC, Güell M, Fábrega MJ. New insights into the role of Cutibacterium acnes-derived extracellular vesicles in inflammatory skin disorders. Sci Rep. 2023 Sep 25;13(1):16058. doi: 10.1038/s41598-023-43354-w. PMID: 37749255.

#### **@** Reproduction

-Maugrion E, Shedova EN, Uzbekov R, Teixeira-Gomes AP, Labas V, Tomas D, Banliat C, Singina GN, Uzbekova S. Extracellular Vesicles Contribute to the Difference in Lipid Composition between Ovarian Follicles of Different Size Revealed by Mass Spectrometry Imaging. Metabolites. 2023 Sep 9;13(9):1001. doi: 10.3390/metabo13091001. PMID: 37755281.

#### **@ Traffick**

-Castro-Cruz M, Hyka L, Daaboul G, Leblanc R, Meeussen S, Lembo F, Oris A, Van Herck L, Granjeaud S, David G, Zimmermann P. PDZ scaffolds regulate extracellular vesicle production, composition, and uptake. Proc Natl Acad Sci U S A. 2023 Sep 19;120(38):e2310914120. doi: 10.1073/pnas.2310914120. Epub 2023 Sep 11. PMID: 37695903.

#### @ Wound healing

-Dedier M, Magne B, Nivet M, Banzet S, Trouillas M. Anti-inflammatory effect of interleukin-6 highly enriched in secretome of two clinically relevant sources of mesenchymal stromal cells. Front Cell Dev Biol. 2023 Sep 7;11:1244120. doi: 10.3389/fcell.2023.1244120. PMID: 37745306.

-Hao PC, Burnouf T, Chiang CW, Jheng PR, Szunerits S, Yang JC, Chuang EY. Enhanced diabetic wound healing using platelet-derived extracellular vesicles and reduced graphene oxide in polymer-coordinated hydrogels. J Nanobiotechnology. 2023 Sep 4;21(1):318. doi: 10.1186/s12951-023-02068-x. PMID:37667248.

# @ BioRxiv pre-prints (https://www.biorxiv.org/

-M1-derived extracellular vesicles polarize recipient macrophages into M2 and alter skeletal muscle homeostasis in a hyper-glucose environment

Stefano Tacconi, Francesco Vari, Carolina Sbarigia, Diana Vardanyan, Serena Longo, Francesco Mura, Federica Angilè, Audrey Jalabart, Daniele Vergara, Francesco Paolo Fanizzi, Marco Rossi, Elizabeth Errazuriz-Cerda, Christel Cassin, Rienk Nieuwland, Anna Maria Giudetti, Sophie Rome, Luciana Dini

doi: https://doi.org/10.1101/2023.10.03.560690

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 FSEV declares that all information is provided in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.