



*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 2022

Dear FSEVer,

Summer is coming and we are all looking forward to a few days of rest after an intensive year that culminated in the ISEV 2022 conference in Lyon. The conference was a success thanks to the commitment of the ISEV members and our former president Sophie Rome. Before dipping your toes in the sand, the FSEV board is actively preparing the next FSEV meeting in collaboration with AFC and the participation of 9 outstanding speakers. We hope to see you all at this meeting in Paris on October 19-21.

In the meantime, put your ultracentrifuge tubes in the drawer and enjoy a well-deserved vacation!

Best regards,
The FSEV board

NEWS FROM FSEV SOCIETY:

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

@ FSEV needs YOU ! Help is wanted to **join FSEV communication team**. The new FSEV board members invite you to take an active part in our society by improving its visibility and its network. If you're willing to contribute to the FSEV website or any social media, please do not hesitate to send your application to the following address: calls@fsev.fr

@ FSEV 5th meeting (FSEV 2022) in person at the Asiem in Paris, **19-21/10/2022**. **"Save the date!"** for a selected set of presentations, PhD award 2021 ceremony, and opportunities to connect with attendees. This meeting provides a unique forum to discuss advances in basic and translational research on extracellular vesicles. The first day will be dedicated to a workshop about flow cytometry and EVs co-organized with AFC (Association Française de Cytométrie).

Full program and registration info will be available soon at <https://www.fsev.fr/>

@ **FSEV 2022 General Assembly** will be held during the FSEV 5th meeting, **21/10/2022** (see above). It will validate the accounts of the FSEV and its actions throughout the year and will allow our members to express their wishes for future actions.

@ **MOVE European Mobility Fellowships 2022**

EV societies across Europe has got together to form **MOVE (MObility for Vesicles research in Europe)** and their 1st project is to give early stage scientists the opportunity to work in a different European lab.

MOVE European Mobility Fellowship aims to foster collaboration 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 (≤ 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?usp=sharing&oid=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 from the list below.

@ **Call for FSEV PhD award 2021 postponed** due to the COVID-19 situation

The FSEV will offer 500€ awards for PhD theses defended **in France** from 2021 to **31/08/2022** with outstanding contributions in the field of EVs

To apply, please send a single pdf file including your CV, a summary of the work using a graphical abstract, a short motivation letter (≤ 1 page), the reports of the PhD defense to calls@fsev.fr

Deadline for application: **16/09/2022**

ISEV (International Society for EVs) EVENTS:

@ **Focus on ISEV 2022 annual meeting** in Lyon, 25-29 May. This event was **co-organized by FSEV!**

The ISEV meeting in Lyon showed how EV research is an increasingly attractive field. Thanks to the local organization committee including several members of the FSEV Board and Sophie Rome (former president of the FSEV), the congress was also able to

show the excellence of French research on EVs with an important participation of FSEV members in the education day, numerous talks and posters of French researchers.

FSEV especially congratulates its current president, Guillaume van Niel, for being awarded the ISEV Special Achievement Award. Through this award, ISEV recognized his sustained efforts for education on EVs (EMBO course co-organization) and for pioneering approaches and models for *in vivo* imaging of EVs.

@ **Upcoming ISEV activities open only to ISEV members**, for which ISEV will communicate in early 2022 include:

- Participation in the **MISEV2018 update**

@ **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:

Virtual events, Conferences and Courses

@ **Gordon Research Conference "Extracellular vesicles": 24-29/07/2022**, Grand Summit Hotel, Sunday River, Newry, USA.

<https://www.grc.org/extracellular-vesicles-conference/2022/>

FSEV member **Speakers**: Clotilde Théry, Jacky Goetz

@ **Keystone symposia: "Exosomes, Microvesicles and Other Extracellular Vesicles"** Rescheduled from February 2022 to **October 30 - November 02, 2022**. Santa Fe, New Mexico, United States.

More information at: <https://www.keystonesymposia.org/conferences/conference-listing/meeting?eventid=6951>

FSEV member **Organizer**: Clotilde Théry

FSEV member **Speaker**: Chantal Boulanger, Christian Néri, Clotilde Théry, Pascale Zimmerman

@ **GERLI**, Groupe d'Etude et de Recherche en Lipidomique, 17^{ème} congrès **06-09/11/2022** (Hôtel Delcloy à Saint Jean-Cap-Ferrat) avec une session "Exotic organelles and lipid signaling". For more information, please see <https://www.gerli.com>

FSEV member **Speaker**: Soazig Le Lay

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

If you wish to present your work, you can send an email to Carolina Soekmadji (Carolina.Soekmadji@qimrberghofer.edu.au)

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

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

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!

@ ATER spécialisé en microbiologie (phototrophe et hétérotrophe) au Muséum national d'Histoire naturelle de Paris, France, date limite pour postuler **30 juillet**.

L'équipe « Cyanobactéries, cyanotoxines et environnement » (CCE) (UMR 7245 MCAM), développe des approches pluridisciplinaires afin de décrire la diversité génotypique, métabolique et fonctionnelle des cyanobactéries, les dynamiques de leurs populations dans les écosystèmes lacustres eutrophisés et les facteurs biotiques qui les régulent. Parmi ces facteurs, des bactéries hétérotrophes constituant la "phycosphère", semblent interagir avec les cyanobactéries et jouer un rôle dans leur croissance et le développement d'efflorescences toxigènes. Mais les mécanismes qui soutiennent ces associations sont peu caractérisés.

Très étudiées dans d'autres phyla bactériens, les vésicules extracellulaires (VEs) semblent impliquées dans de nombreux mécanismes (e.g. communication intra et inter-espèces, transport de biens communs). Si les cyanobactéries synthétisent de grandes quantités de VEs, leurs rôles biologiques restent cependant méconnus.

L'ATER s'impliquera dans un programme de recherche portant sur la caractérisation des VEs et des fonctions biologiques associées chez les cyanobactéries (50% du temps), sur des systèmes modèles déjà en place dans CCE. Il/elle s'appuiera sur le service commun de phycologie de l'unité MCAM et les plateaux techniques de spectrométrie de masse bio-organique, de microscopie électronique et optique du Muséum. L'ATER consacrera également 50% de son temps aux enseignements sur la biodiversité des procaryotes et eucaryotes et leurs rôles fonctionnels dans le Master BEE du Muséum.

Contacts: sebastien.duperron@mnhn.fr et sebastien.halary@mnhn.fr

@ Research assistant position in molecular and cellular neurobiology at Brain-C Lab, CNRS UMR8256, Paris, France, **immediately available**.

This 1-2 year research assistant (IE) position is available to characterize and stimulate cell-autonomous and non-cell- autonomous neuronal survival mechanisms in Huntington's disease. Established hands-on experience in cell biology, cellular imaging, and molecular biology is mandatory. Established experience with the differentiation and transduction of human induced pluripotent stem cells (iPSC) or with establishing and transducing mouse primary neurons, or both, will be a plus. Interested candidates should hold a Master (M2) in Cell Biology or a closely related field, obtained not more than 4 years ago, and they should have no more than a 2-year history of academic contracts

@ Technicien en immunologie et biologie cutanée à l'IRS2/Laboratoire d'immunodermatologie Hôtel Dieu (INCIT UMR Inserm 1302), Nantes.

Les missions du poste sont les suivantes : activité de recherche et développement en biologie cutanée dans le cadre du développement du pansement biologique pour les brûlures du second degré, le composant biologique étant un sécrétome constitué de protéines sécrétées dans un milieu de culture par des banques cellulaires de fibroblastes et kératinocytes fœtaux.

15 projets de recherche ont obtenu un soutien financier dans le cadre du 4^{ème} appel à projets de « Recherche Hospitalo-Universitaire en santé » (RHU) du programme d'investissement d'avenir, dont l'opérateur est l'ANR. Parmi eux, le projet SUccESS, mené par le Pr Brigitte Dréno du CHU de Nantes qui est l'établissement coordinateur, prévoit de développer un pansement régénératif constitué d'un sécrétome protégé par une matrice pour les grands brûlés. Pour avoir plus d'informations sur la candidature, contacter: brigitte.dreno@atlanmed.fr

@ Post-doctorat en immunologie et biologie cutanée à l'IRS2/Laboratoire d'immunodermatologie Hôtel Dieu (INCIT UMR Inserm 1302), Nantes.

La personne recrutée aura les fonctions suivantes : recherche translationnelle, développement et transfert vers la clinique dans le domaine de la peau et de la régénération cutanée, production et caractérisation de vésicules extracellulaires à partir d'un sécrétome.

15 projets de recherche ont obtenu un soutien financier dans le cadre du 4^{ème} appel à projets de « Recherche Hospitalo-Universitaire en santé » (RHU) du programme d'investissement d'avenir, dont l'opérateur est l'ANR. Une équipe Inserm : équipe 2 (recherche clinique et translationnelle cutanée) au sein d'INCIT UMR 1302 a obtenu un programme de recherche hospitalo-universitaire (RHU SUccESS; coordinatrice Pr B. Dréno) dans l'axe cicatrisation cutanée. L'objectif est de produire un pansement régénératif pour des brûlures du 2^{ème} degré. Cette équipe, travaille en collaboration avec l'Unité de Thérapie Cellulaire et Génique du CHU de Nantes pour la création de ce pansement. Pour avoir plus d'informations sur la candidature, contacter: brigitte.dreno@atlanmed.fr

AWARD:

@Quentin Sabbagh from Team SOAP (Signaling in Oncogenesis Angiogenesis and Permeability, CRCINA, Inserm, CNRS, Université de Nantes, France) was granted the annual prize from the National Academy of Medicine for his work on circulating extracellular vesicles in Glioblastoma.

For more information, please read the following articles:

-Sabbagh *et al.* Oncogene. 2020 Sep;39(38):6043-6052. doi: 10.1038/s41388-020-01420-x. Epub 2020 Aug 14. PMID: 32801336.

-Sabbagh *et al.*, Sci Rep. 2021 Nov 23;11(1):22792. doi: 10.1038/s41598-021-02254-7. PMID: 34815502.

RECENT publications from the french FSEV community:

SEND US YOUR ACCEPTED PAPERS

@ Review

- Buonanno M, Gonon G, Pandey BN, Azzam EI. The intercellular communications mediating radiation-induced bystander effects and their relevance to environmental, occupational, and therapeutic exposures. *Int J Radiat Biol.* 2022 May 27;1-19. doi: 10.1080/09553002.2022.2078006. Epub ahead of print. PMID: 35559659.
- Jerabkova-Roda K, Dupas A, Osmani N, Hyenne V, Goetz JG. Circulating extracellular vesicles and tumor cells: sticky partners in metastasis. *Trends Cancer.* 2022 May 26;S2405-8033(22)00113-3. doi: 10.1016/j.trecan.2022.05.002. Epub ahead of print. PMID: 35644773.
- Matta A, Nader V, Lebrin M, Gross F, Prats AC, Cussac D, Galinier M, Roncalli J. Pre-Conditioning Methods and Novel Approaches with Mesenchymal Stem Cells Therapy in Cardiovascular Disease. *Cells.* 2022 May 12;11(10):1620. doi:10.3390/cells11101620. PMID: 35626657.
- Nebie O, Buée L, Blum D, Burnouf T. Can the administration of platelet lysates to the brain help treat neurological disorders? *Cell Mol Life Sci.* 2022 Jun 24;79(7):379. doi: 10.1007/s00018-022-04397-w. PMID: 35750991.
- Thuault S, Ghossoub R, David G, Zimmermann P. A Journey on Extracellular Vesicles for Matrix Metalloproteinases: A Mechanistic Perspective. *Front Cell Dev Biol.* 2022 May 20;10:886381. doi: 10.3389/fcell.2022.886381. PMID:35669514.
- Six I, Guillaume N, Jacob V, Mentaverri R, Kamel S, Boullier A, Slama M. The Endothelium and COVID-19: An Increasingly Clear Link Brief Title: Endotheliopathy in COVID-19. *Int J Mol Sci.* 2022 May 31;23(11):6196. doi:10.3390/ijms23116196. PMID: 35682871.
- van Niel G, Carter DRF, Clayton A, Lambert DW, Raposo G, Vader P. Challenges and directions in studying cell-cell communication by extracellular vesicles. *Nat Rev Mol Cell Biol.* 2022 May;23(5):369-382. doi: 10.1038/s41580-022-00460-3. Epub 2022 Mar 8. PMID: 35260831.

@ Blood

- Glémain A, Néel M, Néel A, André-Grégoire G, Gavard J, Martinet B, Le Bloas R, Riquin K, Hamidou M, Fakhouri F, Bruneau S. Neutrophil-derived extracellular vesicles induce endothelial inflammation and damage through the transfer of miRNAs. *J Autoimmun.* 2022 May;129:102826. doi: 10.1016/j.jaut.2022.102826. Epub 2022 Apr 1. PMID: 35378380.
- Puhm F, Allaey I, Lacasse E, Dubuc I, Galipeau Y, Zaid Y, Khalki L, Belleanne C, Durocher Y, Brisson AR, Wolberg AS, Langlois MA, Flamand L, Boilard E. Platelet activation by SARS-CoV-2 implicates the release of active tissue factor by infected cells. *Blood Adv.* 2022 Jun 28;6(12):3593-3605. doi: 10.1182/bloodadvances.2022007444. PMID:35443030.
- Riffo-Campos AL, Perez-Hernandez J, Martinez-Arroyo O, Ortega A, Flores-Chova A, Redon J, Cortes R. Biofluid Specificity of Long Non-Coding RNA Profile in Hypertension: Relevance of Exosomal Fraction. *Int J Mol Sci.* 2022 May 6;23(9):5199. doi: 10.3390/ijms23095199. PMID: 35563588; PMCID: PMC9101961.

@ Cancer

- Almeida A, Gabriel M, Firlej V, Martin-Jaular L, Lejars M, Cipolla R, Petit F, Vogt N, San-Roman M, Dingli F, Loew D, Destouches D, Vacherot F, de la Taille A, Théry C, Morillon A. Urinary extracellular vesicles contain mature transcriptome enriched in circular and long noncoding RNAs with functional significance in prostate cancer. *J Extracell Vesicles.* 2022 May;11(5):e12210. doi: 10.1002/jev2.12210. PMID: 35527349.
- Biagini V, Busi F, Anelli V, Kerschbamer E, Baghini M, Gurrieri E, Notarangelo M, Pesce I, van Niel G, D'Agostino VG, Mione M. Zebrafish Melanoma-Derived Interstitial EVs Are Carriers of ncRNAs That Induce Inflammation. *Int J Mol Sci.* 2022 May 14;23(10):5510. doi: 10.3390/ijms23105510. PMID: 35628321.
- Chiantore MV, Iuliano M, Mongiò RM, Dutta S, Tommasino M, Di Bonito P, Accardi L, Mangino G, Romeo G. The E6 and E7 proteins of beta3 human papillomavirus 49 can deregulate both cellular and extracellular vesicles-carried microRNAs. *Infect Agent Cancer.* 2022 Jun 15;17(1):29. doi: 10.1186/s13027-022-00445-z. PMID: 35705991.
- Elmallah MIY, Ortega-Deballon P, Hermite L, Pais-De-Barros JP, Gobbo J, Garrido C. Lipidomic profiling of exosomes from colorectal cancer cells and patients reveals potential biomarkers. *Mol Oncol.* 2022 May 6. doi: 10.1002/1878-0261.13223. Epub ahead of print. PMID: 35524452.
- Hinestrosa JP, Kurzrock R, Lewis JM, Schork NJ, Schroeder G, Kamat AM, Lowy AM, Eskander RN, Perrera O, Searson D, Rastegar K, Hughes JR, Ortiz V, Clark I, Balcer HI, Arakelyan L, Turner R, Billings PR, Adler MJ, Lippman SM, Krishnan R. Early-stage multi-cancer detection using an extracellular vesicle protein-based blood test. *Commun Med (Lond).* 2022 Mar 17;2:29. doi: 10.1038/s43856-022-00088-6. PMID: 35603292.

-Zanella A, Vautrot V, Aubin F, Avoscan L, Samimi M, Garrido C, Gobbo J, Nardin C. PD-L1 in circulating exosomes of Merkel cell carcinoma. *Exp Dermatol.* 2022 Jun;31(6):869-877. doi: 10.1111/exd.14520. Epub 2022 Jan 27. PMID:34994009.

@ Liver

-Ryaboshapkina M, Saitoski K, Hamza GM, Jarnuczak AF, Pechberty S, Berthault C, Sengupta K, Rye Underwood C, Andersson S, Scharfmann R. Characterization of the secretome, transcriptome and proteome of human β cell line EndoC- β H1. *Mol Cell Proteomics.* 2022 May;21(5):100229. doi: 10.1016/j.mcpro.2022.100229. Epub 2022 Apr 2. PMID: 35378291.

@ Methods

-Chazot-Franguiadakis L, Eid J, Socol M, Molcrette B, Guégan P, Mougél M, Salvetti A, Montel F. Optical Quantification by Nanopores of Viruses, Extracellular Vesicles, and Nanoparticles. *Nano Lett.* 2022 May 11;22(9):3651-3658. doi: 10.1021/acs.nanolett.2c00253. Epub 2022 Apr 27. PMID: 35475610.

-Di Felice V, Barone R, Trovato E, D'Amico D, Macaluso F, Campanella C, Marino Gammazza A, Muccilli V, Cunsolo V, Cancemi P, Multhoff G, Coletti D, Adamo S, Farina F, Cappello F. Physiactosome: A New Nanovesicle Drug Containing Heat Shock Protein 60 for Treating Muscle Wasting and Cachexia. *Cells.* 2022 Apr 21;11(9):1406. doi:10.3390/cells11091406. PMID: 35563712.

-Mazouzi Y, Sallem F, Farina F, Loiseau A, Tartaglia NR, Fontaine M, Parikh A, Salmain M, Neri C, Boujday S. Biosensing Extracellular Vesicle Subpopulations in Neurodegenerative Disease Conditions. *ACS Sens.* 2022 Jun 24;7(6):1657-1665. doi: 10.1021/acssensors.1c02658. Epub 2022 Apr 21. PMID: 35446554.

-Morani M, Taverna M, Krupova Z, Alexandre L, Defrenaix P, Mai TD. Development of a microfluidic droplet platform with an antibody-free magnetic-bead-based strategy for high through-put and efficient EVs isolation. *Talanta.* 2022 May 30;249:123625. doi: 10.1016/j.talanta.2022.123625. Epub ahead of print. PMID: 35688075.

@ Microbiology

-Hogrel G, Marino-Puertas L, Laurent S, Ibrahim Z, Covès J, Girard E, Gabel F, Fenel D, Daugeron MC, Clouet-d'Orval B, Basta T, Flament D, Franzetti B. Characterization of a small tRNA-binding protein that interacts with the archaeal proteasome complex. *Mol Microbiol.* 2022 May 26. doi: 10.1111/mmi.14948. Epub ahead of print. PMID: 35615908.

@ Pathogens

-Rutter BD, Chu TT, Dallery JF, Zajt KK, O'Connell RJ, Innes RW. The development of extracellular vesicle markers for the fungal phytopathogen *Colletotrichum higginsianum*. *J Extracell Vesicles.* 2022 May;11(5):e12216. doi:10.1002/jev2.12216. PMID: 35524440.

@ Stem cells

-Benderitter M, Herrera-Reyes E, Tamarat R. Mesenchymal stromal cells in the regeneration of radiation-induced organ sequelae: will they make the difference? *J Radiol Prot.* 2022 Jun 14;42(2). doi: 10.1088/1361-6498/ac6dd8. PMID: 35532367.

-Chouaib B, Cuisinier F, Collart-Dutilleul PY. Dental stem cell-conditioned medium for tissue regeneration: Optimization of production and storage. *World J Stem Cells.* 2022 Apr 26;14(4):287-302. doi:10.4252/wjsc.v14.i4.287. PMID: 35662860

-Contentin R, Jammes M, Bourdon B, Cassé F, Bianchi A, Audigié F, Branly T, Velot É, Galéra P. Bone Marrow MSC Secretome Increases Equine Articular Chondrocyte Collagen Accumulation and Their Migratory Capacities. *Int J Mol Sci.* 2022 May 21;23(10):5795. doi: 10.3390/ijms23105795. PMID: 35628604.

-Zhu YG, Shi MM, Monsel A, Dai CX, Dong X, Shen H, Li SK, Chang J, Xu CL, Li P, Wang J, Shen MP, Ren CJ, Chen DC, Qu JM. Nebulized exosomes derived from allogenic adipose tissue mesenchymal stromal cells in patients with severe COVID-19: a pilot study. *Stem Cell Res Ther.* 2022 May 26;13(1):220. doi: 10.1186/s13287-022-02900-5. PMID: 35619189.

@ Trafficking

-Campisi D, Desrues L, Dembélé KP, Mutel A, Parment R, Gandolfo P, Castel H, Morin F. Chemotactic cell migration: the core autophagy protein ATG9A is at the leading edge. *Autophagy.* 2022 Apr 29:1-3. doi: 10.1080/15548627.2022.2069903. Online ahead of print. PMID: 35468023.

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