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Name: SERRANO

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A. Education & Trainings:

- *PhD student* | Centre For Taste and Feeding Behavior – France | Eye & Nutrition Team – Sensory Perception, Glia/Neuron Interactions Team | 2021/10 – 2024/10 (3 years)
 - Subject: Importance of cholesterol elimination pathways in the visual system and neuron-glia interactions.
 - Trainings: Research ethics and scientific integrity, Microscopy (confocal microscopy, transmission electron microscopy, scanning electron microscopy, flow cytometry, animal experimentation designer levels)
- *Master's degree 2nd year student in Cellular and Molecular Signaling Research* | Université de Bourgogne – France | 2020 – 2021 (1 year)
 - Fields: Neurobiology; Lipids; Immunobiology
- *Master's degree 1st year student in Neurosciences* | Université Claude Bernard Lyon 1 – France | 2019-2020 (1 year)
 - Fields: Physiology and Integrative neurosciences, Physiopathology, From molecules to memory, Campus competition experience: creating a virtual company; Neurosignalling

B. Positions and Honors

INSTITUTE, LOCATION & MENTOR	DEGREE	DATE	FIELD OF STUDY (keywords)	EXPERIMENTS
CERVO Brain Research Centre – CAN - Mentor: Dr. C.F.SEPHTON	Postdoctoral Fellow	01/25 - actual	Neurosciences (ALS, Lipid, glia- neuron interactions)	Cortex dissection - Cell Culture experiments Molecular biology experiments Immunostainings Kit experiments

Centre For Taste and Feeding Behavior –FR - Mentors: Dr. ACAR; Dr. MASSON & Dr. ALVES	Ph.D student	10/21 - 12/24	Cell Biology & Biochemistry (Glaucoma, Cholesterol, glia-neuron interactions)	<i>Drosophila</i> /Mouse retina dissection, Cell Culture experiments Molecular biology experiments Immunostainings Kit experiments bases on flux cytometry, kit experiments (BCA, Amplex Red Cholesterol assay)
Centre For Taste and Feeding Behavior –FR - Mentor: Pr. MANIERE	Master's degree internship	01/21 – 06/21	Neurosciences (Amino-acid transporter, glia-neuron interactions, courtship)	<i>Drosophila</i> brain dissection, Molecular biology experiments Immunostainings Courtship experiments
Lyon Neuroscience Research Center –FR - Mentors: Dr COUREAUD & Dr. DUCHAMP-VIRET	Master's degree internship	01/20 – 02/20	Neurosciences (Olfactory learning, peripheral plasticity, newborn rabbit)	Electro-olfactogram in newborn rabbits Conditioning behaviors

Teaching assistant:

- Supervision of the practical work of 1st year students of license degree in Animal Biology (40h) 01/22 – 04/22
- Supervision of the practical work of 2nd year students of license degree in Animal Biology (36h) 10/22 – 12/22

C. Professional Activities and AwardsPublic outreach:

- *Science outreach* with EXPERIMENTARIUM – France | 10/22 – 12/24 - As a young researcher, I have explained my research work to elementary school children and adults at different public events.

Awards:

- *2nd place award* for Ph.D project presentation at the laboratory's doctoral students' day - France | 2022

D. Peer-reviewed Publications

- Masson EAY, Serrano J, Leger-Charnay E and Acar N (2024) Cholesterol and oxysterols in retinal neuron- glia interactions: relevance for glaucoma. *Front. Ophthalmol.* 3:1303649.
 - My contribution: *My contribution: writing–original draft.*
- Serrano J, Martine L, Grosjean Y, Acar N, Alves G, Masson EAY. The importance of choosing the appropriate cholesterol quantification method: enzymatic assay versus gas chromatography. *J Lipid Res.* 2024 Jun;65(6):100561. doi: 10.1016/j.jlr.2024.100561. *Journal of Lipid Research Methods.*
 - *My contribution: conceptualization, formal analysis, investigation, visualization, writing–original draft, writing–review & editing.*
- Coureaud G, Hjeij M.S, Serrano J, Thévenet M, Garcia S, Heydel J-M, Duchamp-Viret P. Odour learning concentration influences olfactory sensitivity and concentration range of conditioned response in newborn rabbits. **Submitted in Scientific Reports, April 2025.**
 - *My contribution: formal analysis, investigation, visualization, writing–review & editing.*
- Pelaez, MC#, Marcadet L#, Desmeules A, Serrano J, Kennedy J, Soliz J, Troakes C, Vance C, Heather D, Durham HD, Dutchak, PA, Sephton CF. Targeting Lipid Dysregulation and Fatty Acid β -Oxidation Defects in ALS-FUS Ameliorates Lipid Droplet Accumulation in Neurons and Astrocytes. **Under resubmission to Brain, March 2025**
 - *My contribution: investigations for the resubmission version, expertise and critical suggestions for the study*
- Serrano J, Leclere L, Martine L, Buteau B, Grosjean Y, Acar N, Alves G and Masson EAY. The 27-hydroxycholesterol, a regulator of cholesterol metabolism of Müller cells. **In prep. to be submitted in Glia.**
 - *My contribution: conceptualization, formal analysis, investigation, visualization, writing–original draft, writing–review & editing.*
- Serrano J, Martine L, Grosjean Y, Acar N, Masson EAY and Alves G. Expression of cyp12c1 in photoreceptors is required for retinal integrity in *Drosophila*. **In prep. to be submitted in Cell Report.**
 - *My contribution: conceptualization, formal analysis, investigation, visualization, writing–original draft, writing–review & editing.*

E. Poster/Oral Presentations

- *International Society for the Study of Fatty Acid and Lipids* - Quebec (Canada) | 2025 (Poster) – in coming
- *The Association for Research in Vision and Ophthalmology* - Seattle (USA) | 2024 (Poster)
- *European Drosophila Research Conference* - Lyon (France) | 2023 (Poster)
- *Neurofly* - Saint-Malo (France) | 2022 (Poster)
- *Invertebrate Neurobiology Club* - Montpellier (France) | 2022 (Oral)