

Curriculum vitae

Bachelor's degree in Biotechnology (October 2019) and master's degree in Pharmaceutical Biotechnology at University of Perugia (February 2022) with 110/110 with honors. Soon after the master's degree, I won a research scholarship at the Veterinary Medicine Department of University of Perugia and funded by the Swedish company Cellavos AB (part of Takura AB) from September 2022 to October 2024. On August 2024, I won a "Medicine and Experimental Therapies" PhD position at the Medicine and Surgery Department of University of Perugia, which I will attend from November 2024 to October 2027.

Laboratory expertise

I performed my bachelor's degree experimental thesis period at the Biochemistry section of the Medicine and Surgery department, during which I worked on microRNA Let7b and prostate cancer cells-derived extracellular vesicles. Here, I gained my first expertise in cell cultures management, Western Blotting and Real-Time PCR techniques. My master's degree experimental thesis period was held at the Pharmacology section of the Medicine and Surgery department. Here, I worked on nuclear receptor NR2F6 characterization in murine immune cells and I have learned new techniques such as mouse genotyping and primary immune cells isolation from bone marrow, spleen and lymph nodes. During my research scholarship, I have initially worked on horse Mesenchymal Stromal Cells-derived Extracellular Vesicles (EVs). I tried to identify a panel of antibodies for EVs characterization through Western Blotting and performed MTT, Wound Healing and Tube formation assays to test their potential therapeutic activity. Later on, I worked with dog adipose tissue-derived Mesenchymal Stromal Cells (MSCs) with the aim of developing a cell-based product for the treatment of a dog eye disease. During this period, I have learned how to isolate MSCs from adipose tissue and worked on cell culture and storage optimization. I have tested different cell seeding densities and cryopreservation media, evaluating post-thaw viability and recovery. I have also gained expertise in SOPs writing and experiments weekly report discussion with the company.