



Internship proposition
One page max
M2 OHNU 2026-27



Lab: CIRCINA Nantes

team: Signaling in Oncogenesis, Angiogenesis, and Permeability (Team 6)

Name and position of the supervisor: Julie Gavard, Team leader

Email of the supervisor: Julie.gavard@inserm.fr

Candidate:

Title of the internship: Evaluation of therapeutical targeting in glioblastoma models

Summary of the internship proposal:

The internship project focused on the identification of new therapeutic strategies for Glioblastoma (GBM), the most aggressive primary brain tumor in adults. Despite the current standard treatment combining surgery, radiotherapy, and chemotherapy, GBM remains incurable and is characterized by systematic relapse and poor patient survival. The development of innovative targeted therapies is therefore a major challenge in neuro-oncology.

This project aims to investigate the role of the Apelin/APLNR signaling pathway in glioblastoma stem-like cells (GSCs), a population involved in tumor initiation, progression and resistance. Previous work from the laboratory demonstrated that inhibition of this pathway reduces tumor cell growth. The internship will combine molecular and cellular biology approaches with translational analyses to evaluate the therapeutic potential of blocking antibodies targeting APLNR. The student will participate in *in vitro* experiments, signaling pathway analyses, and preclinical studies using GBM patient-derived cell models, as well as the exploration of clinical and transcriptomic datasets.

This project will provide training in cancer biology, molecular and cellular signaling, and translational research.

References from the lab:

Harford-Wright et al., Brain 2017

Trillet et al., J Cell Biol 2021

Rosinska et al., Cell Reports 2025

Option(s) linked to the project:

Hematology Immunology-Cancerology

Oncology Nuclear Medicine

Option(s) linked to the profile:

Clinical Research Profile

Data Analyst Profile

Experimental Biology Profile