# INSTITUT DE PHARMACOLOGIE MOLÉCULAIRE ET CELLULAIRE



## **Master 2 Internship Position**

Institute: IPMC - Institut de Pharmacologie Moléculaire et Cellulaire, Université Côte d'Azur, Valbonne, France

Laboratory: Epigenetics and Metabolism (Head Dr. Romain Barrès)

Duration: 6 months (January-June 2026)

Stipend: According to French Master 2 regulations (659.76 €/month)

# **Project Summary**

The project aims to improve sperm quality for assisted reproduction by stimulating olfactory receptors (ORs) expressed at the surface of human spermatozoa. Certain odorant molecules enhance sperm motility, potentially increasing the success rate of *in vitro* fertilization (IVF). This internship will focus on developing a compound screening assay to test how various molecules binding to ORs may influence sperm motility.

## Internship Tasks - Wet Lab Focus

You will be fully integrated into our research team and responsible for

- Preparing human sperm samples collected via our partnership with CHU Nice (CECOS)
- Performing swim-up assays to isolate motile spermatozoa
- Conducting compound stimulation experiments using selected odorants and controls
- Using video microscopy and sperm tracking systems to monitor changes in motility
- Analyzing sperm behavior (progressive vs. non-progressive motility) before and after compound exposure
- Contributing to data collection, result interpretation, and lab meetings

No animal work is involved. All experiments use human sperm samples under approved ethical frameworks.

#### **Profile of the Ideal Candidate**

We are looking for a Master student (M2) in

- Cell Biology
- Reproductive Biology / Physiology / Pharmacology
- Biomedical Sciences or a related field

## Desired skills

- Curiosity about sperm physiology and reproductive health
- Interest in assay development and microscopy
- Ability to work with clinical-grade human samples
- Basic experience in cell handling or microscopy is appreciated but not required
- Good organizational and communication skills
- Willing to work in an interdisciplinary and collaborative environment
- · Capacity to communicate in English (team is multilingual)

#### What We Offer

- Hands-on training in advanced sperm functional assays
- Exposure to translational fertility research and clinical applications
- A multidisciplinary research team
- Possibility to contribute to a high-impact project with translational potential
- Possibility of continuing to PhD

#### How to Apply

Send your CV and a short motivation letter (1 page max) to: barres@ipmc.cnrs.fr Subject: Wet Lab Internship Application – Your Name

Applications are reviewed on a rolling basis. Early applications are encouraged.



