

Uncover the developmental basis of neural circuits underlying sex-dimorphisms in adaptive behavior



4 year full-time funded PhD position - Institute of Neuroscience CSIC-UMH

THE QUESTION

- Sex is a major source of individual variability in brain function and behaviour, yet the developmental and circuit-level origins of these differences remain poorly understood.

Join **the DIFFER project** to investigate how neuromodulatory circuits are wired differently in males and females, from developmental programs to adult behaviour.

THE APPROACH

- Mouse genetics & viral circuit tracing
- In vivo fiber photometry & optogenetics
- Transcriptomics & bioinformatic analysis
- Ex vivo electrophysiology (optogenetics + patch-clamp)
- Behavioural phenotyping with sex as a biological variable

THE ENVIRONMENT

The Institute of Neurosciences (CSIC-UMH) is one of Europe's leading neuroscience research centres and a Severo Ochoa Centre of Excellence, with state-of-the-art circuit-tracing, in vivo imaging and electrophysiology facilities in a vibrant international environment.

WHO ARE WE LOOKING FOR?

A highly motivated candidate with a genuine commitment to developing expertise in both wet-lab and dry-lab approaches, combined with discipline, a strong work ethic and a collaborative, team-oriented attitude.

Required:

- ☑ Master's degree in Neuroscience, Biology, Biomedicine or a related field
- ☑ Strong academic record
- ☑ Good written and spoken English

Valued: prior experience in molecular biology, computational analysis of omics data, or electrophysiology.

APPLY : ipino@umh.es

CV + brief motivation letter + contact of 2 references

Contact: Isabel del Pino, PhD - Instituto de Neurociencias UMH - CSIC, Alicante, Spain

Application Deadline: October 31 st , 2026

