







# **Postdoctoral position in Evolutionary Epigenomics**

The Molaro Lab - <u>Evolutionary Epigenomics and Genetic Conflicts</u> - is seeking postdoctoral fellows to investigate the functional consequences of epigenome evolutionary diversification in mammals.

ERC-funded for 3 years.

## Who we are

Our team studies how genetic conflicts shape the evolution and function of the epigenome. We combine phylogenetic approaches with *in vivo* epigenome profiling to identify genetic innovations in chromatin pathways and characterize their function (e.g., see Mordier *et al.*, *BioRxiv*, 2024; Molaro *et al.*, *Genome Research*, 2018; *Mol. Biol. Evol.*, 2020). We study these questions in normal and pathological contexts, using mouse models and mammalian tissue culture (e.g., see Molaro *et al.*, *PLoS Biology*, 2020; Chew *et al.*, Nature Comm., 2021).

## **Proposed project**

Through an ERC-funded project, postdoctoral fellows will investigate the functions of germline chromatin pathways subject to diversifying selection in primates and rodents. These pathways include histones proteins with novel parental-effects during reproduction, and nucleosome interacting enzymes with currently uncharacterized rapidly evolving functions. Fellows will develop original comparative cross-species epigenome profiling approaches in mouse models or tissue culture. We provide a secured 3-year salary with full benefits. We also provide career development and training programs throughout the contract.

#### **Host institute**

Our lab is located at the <u>Institute of Genetics</u>, <u>Reproduction and Development</u> (iGReD), in <u>Clermont-Ferrand</u>, <u>France</u>. The iGReD is a highly collaborative and inclusive environment with state-of-the-art platforms. We have a vibrant scientific community, and host weekly internal and external seminars. We are supported by the CNRS, INSERM and the Université Clermont-Auvergne.



#### **Candidate profile**

- Ph.D. in one of the following fields: molecular biology, chromatin biology, genomics or epigenomics.
- Skills recommended in high throughput sequencing, tissue culture and/or mouse genetics.
- Scientific interests: evolution and epigenomics
- The candidate will be encouraged to apply for independent funding

## **Application details:**

- Reviewing applications until **October 2025** for a start date as early as possible.
- Please contact Dr. Antoine Molaro <u>antoine.molaro@uca.fr</u> with the following:
  - o CV
  - Cover letter/e-mail (1 page)
  - Contact details of 2 professional references

The iGReD is an equal opportunity employer, we encourage applications from all backgrounds and genders.