Position Title: Postdoctoral Researcher Location: LPHI, Montpellier France Application Deadline: 01.11.2024

Position Start Date: January 2025 (flexible)

Duration: 3 years

About the position:

We are seeking a highly motivated postdoctoral researcher to join our team at LPHI in Montpellier, France. The successful candidate will lead an exciting <u>ERC-funded project</u> investigating the cell cycle of malaria parasites using cutting-edge genetics and omics techniques.

Research Focus:

The postdoctoral researcher will:

- Optimise and perform the first genome wide reverse genetics screen with single cell resolution in a malaria parasite using *P.berghei* asexual blood stages as model.
- Integrate multi-omics data to gain comprehensive insights into parasite biology
- Follow up of screening candiates using reverse genetics and dissect the intricate cell cycle regulatory mechanisms of *Plasmodium berghei*.
- Collaborate with other lab members on interdisciplinary projects to enhance our understanding of malaria biology
- Mentor and train graduate and undergraduate students in experimental techniques and/or data analysis

Qualifications:

- Ph.D. in Molecular Biology or Parasitology
- Strong background in genome wide screening approaches
- Excellent problem-solving skills and ability to lead a challenging research project
- Excellent written and verbal communication skills in English
- Ability to work independently and as part of a collaborative team
- Commitment to diversity, equity, and inclusion in the research environment.

Preferred skills:

- Experience in parasitology research
- Expertise in technology development
- Familiarity in bioinformatics and data analysis
- Holder of a FELASA rodents animal license

What We Offer

- Cutting-edge research facilities and resources
- Collaborative and stimulating work environment
- Opportunities for professional development and networking
- Salary adjusted to experience level

Our team

We study different aspects of the cell cycle of malaria parasites. We are especially interested in understanding the regulatory network orchestrating the original cell cycle that characterises malaria parasites and how checkpoint like decisions are made throughout schizogony. For that we use cell and molecular biology, genetics, proteomics and advanced transcriptomics. We combine the strenghts of two different models: *Plasmodium falciparum* and *Plasmodium berghei* to perform either *in vivo* or *in vitro* large scale studies.

About the institute: LPHI is a French Unité Mixte de Recherche CNRS (UMR 5294) – INSERM (UA 15) – Université de Montpellier, dedicated to the study of infectious microbes and host immune response. Research at LPHI aims at gaining a deeper understanding of how microbial pathogens develop and interact with their host, in order to identify new potential targets for therapeutics. The institute is part of a campus that has state of the art facilities including microscopy, flow cytometry, proteomics, sequencing and a high-performance computing cluster.

The LPHI is involved in several local, national and international networks like the University of Montpellier BioHealth Department, the Eurobiomed competitiveness cluster, the Infectiopôle Sud Foundation, the Parafrap Laboratory of Excellence, the FHU-TIE (Fédération Hospitalo-Universitaire -Triangulation between the host, Infectious agents and the Environment) or the INFLANET European Training Network.

We strive to create an environment where all individuals are valued, respected, and supported.

How to Apply: Interested candidates should submit the following documents:

- A cover letter detailing your research interests and experience.
- Curriculum vitae (CV) including a list of publications.
- · Contact information for two references.
- Documents should be submitted as a single file named "ERC Pb yourname"

Please submit your application materials to Ana Rita Gomes ana-rita.batista-gomes@cnrs.fr

For more info:

https://lphi.umontpellier.fr/research-teams/molecular-approaches-to-new-antimalarial-strategies/gomes/