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:

- Study the intricate cell cycle regulatory mechanisms of *Plasmodium falciparum* using advanced omics techniques, including single cell transciptomics, reverse genetics and proteomics. Specifically these techniques will be applied on a timecourse fashion to the different stages of schizogony and gametogenesis.
- Integrate multi-omics data to gain comprehensive insights into parasite biology
- 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 cell cycle biology and/or parasitology
- 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 *P. falciparum* research,
- Expertise in one or more omics techniques (e.g. RNA-seq, phophoproteomics)
- Familiarity in bioinformatics and data analysis

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_PF_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/