

**Position Title: Postdoctoral Researcher**

**Location: The Le Roch Lab, the University of California, Riverside, USA**

**Application Deadline: When position is filled**

**Position Start Date: January 2025 (flexible)**

**Duration: 2+3 years**

**About UCR:** The University of California Riverside is a world-class research university dedicated to advancing scientific knowledge and improving human health. UCR is a member institution of the American Association of Universities (AAU) as well as the Alliance of Hispanic Serving Research Universities (HRSU). Its mission is explicitly linked to providing routes to educational success for all students and post-doc.

**About the Le Roch lab:** The Le Roch Lab is a multidisciplinary and diverse team of researchers that studies apicomplexan parasites with a particular interest for *Plasmodium*, the cause of malaria; *Toxoplasma gondii*, an opportunistic pathogen of immunocompromised patients; and *Babesia* that causes hemolytic disease in human or cattle. Some of these parasites are still amongst the deadliest infectious agents in the world. Understanding the molecular mechanisms that control development, replication and transmission of these pathogens is key to developing novel therapeutic strategies that will break their continuous infectious cycles.

The lab uses advanced cell and molecular biology as well as Systems Biology approaches to better understand host-pathogen interaction and gene regulation in these apicomplexan parasites. We are especially interested in the identification of the molecular factors that control chromatin organization, epigenetics and gene regulation in *P. falciparum* with a specific focus on long non-coding RNAs (lncRNAs). Our goal is to elucidate the importance of lncRNAs in parasite development, virulence, and sexual differentiation, and determine whether they can be targeted by novel therapeutic intervention. The team consists of 1 lab manager, 1-2 postdocs, 4 PhD students and one master student.

**Position Overview:** We are seeking a highly motivated and talented Postdoctoral Researcher to join a NIH-funded project on the role of non-coding RNAs in human malaria parasites development and survival. The candidate will develop projects to uncover the complex interactions between lncRNAs, DNA and proteins that regulate parasite survival ex-vivo. Candidates with experience in parasitology, RNA biology, including systems biology and data analysis across multiple areas of RNA biology are encouraged to apply.

The successful candidate will have the opportunity to lead innovative research in a supportive environment; have access to state-of-the-art facilities and resources; and collaborate on multiple multidisciplinary research projects. The position will synergize with the growing multidisciplinary Center for RNA Biology and Medicine as well as the Center for Infectious Disease and Vector Research at UCR and will build on existing campus strengths in genomics, proteomics, epigenetics and biochemical regulation in model organisms and humans. The NIH salary scales will be adjusted to experience level.

**Key Responsibilities:**

The successful candidate will determine the mechanisms the parasite use to regulate gene expression using an array of molecular, cellular and genome-wide approaches including but not limited to Hi-C, ChIP-seq, ATAC-seq, RNA-seq, scRNA-seq, ChIRP-seq and CRISPR-cas9/cas13. The candidate is also expected to lead a multidisciplinary team of researchers, including biologists and computational scientists. He/she/they will also be responsible for the preparation of manuscripts. Mentoring graduate students will also be expected.

**Required Qualifications:**

A PhD or MD in life science or related disciplines including molecular biology, genomics or parasitology. Preferred qualifications for this position include evidence of high-quality independent research such as publications, embrace data-driven research and strong written and verbal communication skills.

**Desirable Qualifications:**

Experience in parasitology, malaria research, single cell sequencing and basic data analysis methods for single cell sequencing are desirable but not required.

**How to apply:**

Interested candidates should submit the following documents:

1. Cover Letter - Short cover letter describing background and interests (1-page maximum)
2. Curriculum Vitae including a list of all publications
3. Statement of Research/Scholarly Activities (2-page maximum)
4. Two Letters of Recommendation- At time of submission, applicants should provide contact information and request letters of recommendation from 2 references to be submitted via email to [karinel@ucr.edu](mailto:karinel@ucr.edu).
5. Up to three selected reprints

Please submit your application materials to Prof. Karine Le Roch at [karinel@ucr.edu](mailto:karinel@ucr.edu). Feel free to contact Prof. Le Roch for any additional information.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age or protected veteran status.

For the University of California's Affirmative Action Policy please visit: <https://policy.ucop.edu/doc/4010393/PPSM-20>.

For the University of California's Anti-Discrimination Policy, please visit: <https://policy.ucop.edu/doc/1001004/Anti-Discrimination>.