Research Assistant

VAZIRI LAB

Laboratory of Neurotechnology and Biophysics

The Rockefeller University, New York, NY

https://vaziri.rockefeller.edu/

Neurobiological discoveries have been fueled in recent years by rapid development of optical imaging tools. Over the last decade the Laboratory of Neurotechnology and Biophysics has developed a wide portfolio of advanced optical neurotechnologies that allow for large-scale optical interrogation of neuronal population activity at high spatiotemporal resolution across model systems. These capabilities have opened up new opportunities for understanding the fundamental principles of how brain-wide neurocomputation emerges dynamic interaction of vast and highly distributed neuronal populations in the mammalian brain which represent a major focus of the lab in the coming years which has the potential to transform our understanding underlying principle of some of the most fundamental questions about the brain: How does the brain integrates sensory information with internal states to generate flexible and adaptive behavior? What are the neuro computational principles underlying generation such behavior?

Position Summary

The Research Assistant will play a crucial role in facilitating and being responsible for all aspects related to *in vivo* animal related work required to characterize and apply the above optical technologies. They will work independently and collaboratively with other lab members including postdocs graduate students and engineers in the lab on data acquisition and analysis while independently managing and owning areas related to *in vivo* animal related work. As the success of multiple projects is highly dependent on the quality on their work, the successful candidate will a be highly organized, detail oriented and self-motivated individual. They will join an intellectually stimulating high-end scientific research environment closely with a small interdisciplinary team of highly driven and passionate scientists. Candidates intending to apply to a graduate school are expected to commit for at least the duration of two years to this position. Prior experience with working with rodents, basic knowledge of molecular and neurobiology and hand-on experience with preforming *in vivo* surgeries in rodents is required.

Responsibilities

The Research Assistant will be responsible for all aspects related to *in vivo* animal related work. These include, testing and characterization of various fluorescent reporters of neuroactivity, management of the animal colony, performance of *in vivo* cranial windows surgeries, stereotactic virus injections, development of animal training protocols and apparatus for behavioral training and monitoring supported by technical staff as well as preforming *in vivo* experiments dementedly or collaboratively with other lab members using the advanced microscopy portfolio in the lab. The Research Assistant will also be responsible for utilizing and as needed expanding the existing data processing pipeline and post-acquisition data analysis, documentation, compiling reports or manuscript sections.

Required Qualifications

- Bachelor's or Master's degree in **neuroscience**, biology, or related field
- Must be **highly organized**, detail-oriented and self-motivated with excellent time management and be able to manage multiple tasks
- Excellent communication skills
- Must have basic knowledge of rodent neuroanatomy and previous hands-on experience with rodent handing including stereotactic injections and/or **cranial window surgery**
- Basic knowledge of molecular biology tools including mouse genetics, cloning, plasmid design, sequencing and work with viral vectors is required

Preferred Qualifications

- PhD in **neuroscience** or related field is not required but candidates with a PhD would be considered
- Previous experience with rodent **cranial window surgery is highly preferred**
- Experience with rodent behavior or managing a colony is desirable
- Experience with two-photon *in vivo* microscopy or confocal microscopy as well as data analysis is desirable

How to apply
Interested candidates should submit their application material, including a letter of motivation, CV including list of publications and the contact information of at least two references to vaziri[at]rockefeller[dot]edu and in parallel apply via https://careers.rockefeller.edu/jobs/2054?lang=en-us For more information on our work please visit our website at https://vaziri.rockefeller.edu/

Salary
The salary of the finalist selected for this role will be set based on various factors, including but not limited to organizational budgets, qualifications, experience, education, licenses, specialty, and training. The hiring range provided represents The Rockefeller University's good faith and reasonable estimate of the range of possible compensation at the time of posting.
Compensation Range: Min USD $50,000/Yr
Compensation Range: Max USD $55,000/Yr

The Rockefeller University is an equal opportunity employer – veterans/individuals with disabilities. Qualified applicants will receive consideration for employment without regard to characteristics protected by applicable local, state or federal law, including but not limited to disability and protected veteran status. The salary of the finalist selected for this role will be set based on various factors, including but not limited to organizational budgets, qualifications, experience, education, licenses, specialty, and training. The hiring range provided represents The Rockefeller University's good faith and reasonable estimate of the range of possible compensation at the time of posting.