The Losonczy laboratory at the Zuckerman Mind Brain Behavior Institute of Columbia University has an opening for a full-time Research Staff Assistant to assist with behavioral and neurophysiological research studying the organization of neural networks in the mammalian hippocampus and how they encode spatial and episodic memories, both in the healthy brain and in models of neuropsychiatric disease. The Losonczy lab has been at the forefront of developing and implementing cutting-edge experimental and analytical approaches to study learning and memory-related neural circuit dynamics in the behaving mouse [1-6].

Key responsibilities:
- Maintaining laboratory infrastructure, including experimental recording apparatus and computer/server infrastructure
- Assisting with imaging hardware and software development
- Assisting with functional microscopy and animal behavioral experiments.

In addition, there will be opportunities to participate in specific research project efforts utilizing live imaging and manipulation of neural circuit function in awake, behaving mice using advanced techniques (e.g., in vivo multiphoton microscopy, optogenetics, chemogenetics) under the supervision of postdoctoral scientists and graduate students in the lab, with co-authorship on resulting publications based on level of contribution.

Qualifications:
- Highly motivated, ambitious and goal-driven
- Strong organizational and interpersonal skills are necessary
- Programming/coding skills (e.g., Matlab, Python, or other OOPs) are necessary
- Background in physics, optics, optical/electrical engineering, mathematics/statistics or computer science are highly desirable
- Laboratory experience, prior study in the biological sciences are advantageous but not required

This position is particularly ideal for a graduating senior who wishes to gain valuable laboratory and research experience before pursuing a PhD and/or MD in the future. The lab has a highly successful track record with past members securing positions in these areas upon completing their tenure as laboratory technicians.

This position is intended to last for a minimum of two years.

References: