Research Technician – Zuker Lab, Columbia University

Job Description

We are currently seeking an enthusiastic, self-motivated Research Technician to join our Howard Hughes Medical Institute laboratory located at the Zuckerman Mind Brain Behavior Institute.

The Zuker Lab is interested in the mechanisms underlying signal processing and information transfer in sensory systems. Using the mammalian taste system as a model, we wish to understand how detection is transformed into perception, and the how outside world is represented in the brain. We ask: how do brain circuits utilize sensory information, internal state signals, memory, experience, and multisensory integration, to explore and sample the world.

Our work utilizes state-of-the art technologies in brain imaging, molecular biology, physiology, behavior, opto- and chemogenetics, and Crispr-Cas9 engineering of genetically modified animals to help reveal the brain circuits guiding perception, actions and behaviors. The candidate will be exposed to the full repertoire of approaches and technologies. For details on our recent published work please visit zukerlab.com.

Principal Responsibilities

- Perform behavioral, genetic, and physiological experiments with various mouse strains.
- Use various viral and nonviral systems to introduce genes into neurons, including experiments with chemogenetics and optogenetics. Perform mouse survival surgeries including stereotaxic manipulations.
- Utilize antibodies, RNA probes and the techniques of molecular biology to label and isolate genes of interest. May assist in the creation and verification of knock-out and knock-in Crispr-Cas9 mouse lines.
- Process tissue for histology, and quantification of various markers.
- Participate in weekly group meetings and regular discussions with lab members and PI.

Requirements

- A bachelor’s degree in neuroscience or the biological sciences.
- Previous hands-on experience working as a technician or research assistant in a laboratory, both independently and as part of a team preferred.
- Prior hands-on experience working in a research environment.
- Prior experience with standard biological techniques (immunostaining, in-situ hybridization, PCR, and gel electrophoresis) preferred.
- Prior experience handling and utilizing rodent models preferred.
- Excellent verbal and written communication skills. Ability to train others in specialized tasks and communicate scientific results.
- Strong enthusiasm to learn new techniques and expand your scientific knowledge.
Seniors graduating in December 2022 are also welcome to apply if they are able to start this summer and transition into a full-time position after graduation.

Contact If interested, please email lr2653@columbia.edu and introduce yourself!