

## **Postdoctoral Positions Available – Liu Lab, UT Southwestern Medical Center**

Two postdoctoral fellow positions are available in the laboratory of Chen Liu, Ph.D., in the Departments of Neuroscience and Internal Medicine at UT Southwestern Medical Center. These positions have become available as recent trainees from the lab move on to independent tenure-track faculty positions.

The Liu Lab is supported by multiple NIH grants and focuses on fundamental questions at the intersection of neuroscience, metabolism, and medicine. Our major research directions include:

1. **Neural circuits controlling feeding behavior and metabolism:** We study brain circuits that regulate appetitive behaviors (e.g., Park et al., *Nature Neuroscience*; Li et al., *Journal of Experimental Medicine*), with the goal of developing new therapeutic strategies for obesity and diabetes.
2. **Hypothalamic neurodevelopment and genetic obesity:** We investigate the developmental and transcriptional mechanisms underlying severe early-onset obesity (e.g., Xu et al., *Neuron*; Xu et al., *Science Translational Medicine*).
3. **Antipsychotic drug-induced metabolic syndrome:** We examine how antipsychotic medications disrupt metabolic regulation (e.g., Lord et al., *Journal of Clinical Investigation*; Li et al., *Nature Communications*), a major clinical challenge affecting millions of patients.

We offer training across **a broad range of experimental approaches**. Our work integrates modern neuroscience techniques, including circuitry mapping, optogenetic and chemogenetic manipulation, *in vivo* calcium imaging, and rodent behavioral assays. We also perform comprehensive metabolic phenotyping, including metabolic chamber studies. In addition, the lab develops and applies next-generation sequencing approaches (e.g., Li & Xu et al., *STAR Protocols*), including single-cell and single-nucleus multiome sequencing, ChIP-seq, CUT&RUN, and spatial transcriptomics. The lab has extensive experience generating novel mouse models using CRISPR-based genome editing, with more than 40 lines developed over the past eight years. For more information, please visit: [www.chenliulab.us](http://www.chenliulab.us)

Postdoctoral training in our lab places **strong emphasis on career development**. Fellows receive mentorship in scientific communication, grant writing, and networking. Trainees are encouraged to attend national and international conferences annually and to apply for independent fellowships/grants. Lab members have a strong track record of success, including awards at Keystone Symposia and Gordon Research Conferences, as well as competitive fellowships such as the AHA Postdoctoral Fellowship and Career Development Awards.

**Dallas–Fort Worth** is one of the largest metropolitan areas in the United States and offers a vibrant, diverse community. The cost of living is relatively affordable compared to other major U.S. cities. Dallas/Fort Worth International Airport serves as a major global hub, offering nonstop flights and convenient connections worldwide.

### **Qualifications**

Candidates must hold a recent Ph.D. (within the past two years). A background in neuroscience, molecular biology, metabolism, or developmental biology is preferred.

### **Application Instructions**

Interested applicants should send a CV and contact information for three references to:

Chen Liu, Ph.D.

Email: [chen.liu@utsouthwestern.edu](mailto:chen.liu@utsouthwestern.edu)