

## **Computational Post-doctoral Associate Opening at Yale School of Medicine, Department of Psychiatry**

### **Job Description**

The Yale School of Medicine, Department of Psychiatry, is recruiting one highly motivated and successful computational postdoctoral associate to begin November, 2025, who aspires to become an independent academic researcher in the areas of translational addiction genomics/epigenetics, computational psychiatry, and aging.

The postdoctoral associate will work primarily with Dr. Ke Xu, Professor of Psychiatry, on NIH-funded studies identifying epigenetic alterations associated with substance uses in humans. The Postdoctoral Associate will be responsible for co-developing and conducting research projects, writing peer-reviewed articles, and formulating new research questions for future analysis. We are looking for individuals with a background in genetics/epigenetics, biomedical informatics, biostatistics, or closely related fields.

### **Key Responsibilities**

Through post-doctoral research the scientist will:

- Independently develop or apply tools to analyze high throughput multiomic data, including DNA methylation sequencing, single cell DNA methylation, and single cell transcriptome
- Perform machine learning/deep learning analyses; and delivering analytical results.
- Develop workflows for multiple platforms
- Publish research papers in 1-2 peer-reviewed journals and present at conferences every year
- Collaborate with other members inside and outside of the lab and deliver research results
- assisting with grant writing, collaborating with other investigators, and attending professional conferences.
- Develop and submit K99/R00 proposals or equivalent under Dr. Xu's mentorship

### **Qualifications**

- A doctoral degree in genetics/epigenetics, statistical genetics, computer science and bioinformatics, or other relevant areas at the time the position begins
- Excellent organization and project management skills
- Excellent verbal and writing communication skills.
- Excellent programming skills (R or Python, Linux shell scripting)
- Experience with high performance computing in Linux environment is required.
- Ability to multitask

**Applicant Instructions:**

To apply, please send a single PDF documenting the following to [ke.xu@yale.edu](mailto:ke.xu@yale.edu):

- 1) Cover letter detailing previous research experience, interests, and career goals
- 2) Updated resume
- 3) Short (500 - 1,000 words) proposal about the area research project you would like to develop at the Dr. Xu's lab, indicating the research questions, the working hypothesis, and the approach.
- 4) Names and contact information of three academic references