Peter O'Donnell Jr. School of Public Health
UT Southwestern Medical Center
5323 Harry Hines Blvd, Dallas, TX 75390
Job posting – Postdoctoral Researcher

Area of Research: Spatial epidemiology; cloud computing; web Geographic Information System (GIS); Bayesian spatial statistics; geographical and racial/ethnic disparities in HIV/AIDS; social determinants of health

Position Title: Postdoctoral Researcher

Supervisor: Dr. Hui (Henry) Luan, O'Donnell School of Public Health, UT Southwestern Medical Center

Expected start date: As soon as possible

Salary: $65,000-70,000/year

Term: This position is funded for four years

Position Summary: The **Luan Lab** in the O'Donnell School of Public Health at UT Southwestern Medical Center invites applications for a Postdoctoral Researcher position focused on spatial epidemiology, Web GIS, and cloud computing. This position will involve developing a web tool that implements Bayesian spatial and spatiotemporal statistical modeling and advanced GIS methods over the cloud, and assessing the acceptability and feasibility of the tool in HIV research and practice.

The successful candidate will play a key role in a four-year NIMH R01 project that leverages extensive social determinants data and spatial data science to help reduce HIV incidence in the counties prioritized by the *Ending the HIV Epidemic in the United States* initiative.

Description of Duties and Responsibilities:
- Develop and maintain a cloud computing-based web tool that implements Bayesian spatial and spatiotemporal statistical modeling and advanced GIS methods (Note: code for Bayesian model implementation will be provided by Dr. Luan).
- Collaborate with the MPIs, co-I's, postdocs, consultants, and other stakeholders to assess the acceptability and feasibility of the web tool.
- Prepare manuscripts for peer-reviewed journals and present research at academic conferences.
- Assist and develop new grant proposals on related topics for submission to funding agencies.
- Mentor graduate students in the research team.

Required Qualifications:
- A Ph.D. in Geography, Public Health, Computer Science, Geospatial Data Science, Statistics, or a related field.
- Strong background in cloud computing and Web GIS.

- Strong R or Python programming skills.
- Proven ability to publish in high-impact academic journals.
- Strong written and oral communication skills.

Preferred Qualifications
- Knowledge of spatial epidemiology and/or the HIV epidemic in the United States
- Knowledge of Bayesian spatial statistics
- Experience with machine learning/deep learning/Geospatial Artificial Intelligence

Application Instructions: To apply for this position, please submit the following materials to Dr. Luan via hui.luan@utsouthwestern.edu with the subject line Postdoctoral Researcher Application – [Your Name]. All the materials should be submitted as a single PDF file. The review of applications will begin immediately. Applications will be accepted until the position is filled.

1. A cover letter detailing their research interests, relevant experience, and fit for this position.
2. Curriculum vitae (CV).
3. Two representative publications.
4. Contact information for three references.