

## **Post-Doctoral Research Associate – Statistics / Spatial Analysis**

### **Description**

The Department of Geography & Sustainability at the University of Tennessee is seeking a postdoctoral research scholar to join our research team. This position is funded by the U.S. Forest Service and focuses on developing new techniques for generating reliable forest statistics in areas with limited sample sizes. The researcher will work in collaboration with Professor and Department Head Nicholas Nagle and scientists from the U.S. Forest Service to develop and test new statistical approaches that combine remote sensing, spatial data processing, and small-sample survey data to estimate forest attributes for small areas at regional and national scales. The researcher will also theoretically and empirically explore the properties of model-assisted survey estimators that use endogenous models, as well as contribute to the development of techniques for large, multivariate small area estimation problems.

### **Responsibilities**

- Conduct scientific research to advance the theory and application of national forest inventory (NFI)-based small area estimation (SAE) techniques
- Design and implement studies, analyze data, and author peer-reviewed publications
- Collaborate with a large, interdisciplinary network of researchers
- Communicate research findings to a variety of audiences, including academic peers, government researchers and staff, and practitioners
- Mentor and train graduate and undergraduate students in research methods and techniques
- Participate in grant proposal writing and other fundraising efforts

### **Qualifications**

- A PhD in statistics, geography/GIS, or a related field (degree must have been completed in the last five years)
- Demonstrated publication record
- Experience in one or more of: statistical analysis of complex surveys, mathematical statistics, spatial data science, R Shiny app development
- Proficiency in data analysis in the R statistical environment. Experience with data analysis in Python is desirable.
- Strong written and verbal communication skills
- Ability to work both independently and collaboratively with group members
- Demonstrated organizational skills and attention to detail

### **Salary**

The salary range for this position is \$55,000-\$60,000 depending on the successful applicant's experience and qualifications. This is a regular, full-time, 12-month, non-tenure-track staff position with full benefits. The position is for two years, conditional on satisfactory performance after one year.

**Location**

The University of Tennessee in Knoxville is the flagship educational institution in the State of Tennessee. The Department of Geography & Sustainability has its own modern building at the heart of campus, with an office for the post-doctoral scholar. The city of Knoxville is a hidden gem with a beautiful and walkable downtown, a diverse music scene, active neighborhoods, unique restaurants, and a robust offering of outdoor and cultural activities. Knoxville is located within easy driving distance to Asheville, Nashville, Atlanta and the Great Smoky Mountains. Knoxville has a metropolitan population of 850,000 people, and the region houses many leading science agencies, including Oak Ridge National Laboratory, the Tennessee Valley Authority, and the U.S. Forest Service Southern Research Station.

**How to Apply**

Interested candidates can apply at

[https://ut.taleo.net/careersection/ut\\_system/jobdetail.ftl?job=23000001FZ](https://ut.taleo.net/careersection/ut_system/jobdetail.ftl?job=23000001FZ)

Applicants must submit a letter of interest, curriculum vita, sample published manuscript, and contact information for three (3) academic references who can provide information about the applicant's research skills and experiences. Review of applications will begin July 21, 2023, and will continue until the position is filled. For questions, contact Dr. Nicholas Nagle at [nnagle@utk.edu](mailto:nnagle@utk.edu)

**Proposed Start Date:** September 1, 2023 or as soon as possible.