Postdoctoral Fellowship in Spatiotemporal Geostatistics Methods Development

The Spatiotemporal Health Analytics Group is seeking a postdoctoral fellow for methods development in spatiotemporal geostatistics with applications in geospatial exposure science. The project includes development in either of the following areas: error-in-variable penalized regression with Gaussian processes or causal methods in covariate selection for spatiotemporal models. Additional topics may be proposed by the candidate within the theme. The candidate is expected to author publications in top statistics, applied-statistics, or environmental health journals. The candidate’s primary mentor will be Dr. Kyle P Messier and have the opportunity for secondary mentorship and collaboration with other scientists at NIEHS such as the Biostatistics and Computational Biology Branch.

The required skills and expertise for this position are (1) competency in statistical methods development, (2) an eagerness to learn new scientific and statistical skills in the environmental health sciences, and (3) demonstrated and on-going ability to contribute to an interdisciplinary and inclusive research group. Preferences will be given to candidates with demonstrated experience in one or more of the following areas:

- Spatial and spatiotemporal methods such as Gaussian processes/Kriging
- Land-use regression
- Coding in R and/or Julia languages
- GIS software such as QGIS
- Code version control using Git
- Linux and high-performance computing cluster environments
- Experience with large, geospatial datasets
- Data wrangling
- LaTeX/Overleaf

Applicants must have a PhD or equivalent degree in statistics, biostatistics, environmental science, public health or another related field. Application interviews will begin by at least July 14, 2022 and will be considered until the position is filled. Expected salary is available at https://www.niehs.nih.gov/careers/research/fellows/working/benefits/salary. The position is located at the NIEHS campus in Research Triangle Park, North Carolina. Flexible telework is an option, but the primary work location will be on-site. The position is open to all U.S. citizens and visa-eligible foreign citizens.

The NIH is dedicated to building a diverse community in its training and employment programs and encourages the application and nomination of qualified women, minorities, and individuals with disabilities. As a condition of employment, all federal employees must be fully vaccinated against COVID-19. If selected, you must provide proof of vaccination. An official job offer and continued employment is contingent on this requirement. For more information on this requirement, visit the Safer Federal Workforce page on vaccines. If you need a COVID-19 vaccine, please visit Vaccines.gov.

To apply:
Applicants should submit the following materials to niehs-spatial-apps@nih.gov with the subject line “Spatiotemporal Geostatistics Methods Development”:

- Research statement (1-2 pages)
- Curriculum Vitae
- 1-2 recent peer-reviewed publications
- 1-2 code examples
- Contact information for 3 references

Questions may be sent to kyle.messier@nih.gov. The official announcement for this posting is available on the Office of Intramural Training and Education website: https://www.training.nih.gov/postdoc_jobs_nih/view/_31/9666/SGMD_05242022. A related postdoctoral fellowship in climate change exposure and health is also available. Please see the announcement on the posting website or contact Dr. Kyle Messier for more details.