Postdoctoral Research Scholar

University of California, San Diego

Disciplinary Specialty of Research

Data Science, Statistics, Spatial Epidemiology, Environmental Health, GIScience

Description of Position

We are currently seeking a post-doctoral researcher with specialization in data science, geographic, and statistical methods, as well as domain knowledge in public health applications, to join our team in working on a diverse array of research projects. The research fellow will work with PIs Marta Jankowska from the UCSD Qualcomm Institute, Tarik Benmarhnia from the Scripps Institution of Oceanography and School of Public Health at UCSD, and Loki Natarajan from the Division of Biostatistics and Bioinformatics in the Department of Family Medicine and Public Health at UCSD. The primary project seeks to develop methods for understanding minute-level predictors of physical activity, sleep, eating behaviors or metabolic related diseases as influenced by environmental contextual factors such as green spaces, noise, or air pollution. Additional projects focus on development of advanced methods for dynamic environmental exposure estimation using GPS and accelerometer sensors, development of novel environmental measures through use of machine learning as applied to satellite imagery, and data integration of omics, sensor, biological, and social determinants of health data. The successful candidate will have freedom to explore their own research interests within the areas of mHealth, advanced data science applications to health, GIScience and public health, environmental exposure science, health behavioral science, and metabolic related diseases. Opportunities for the fellow to apply for independent funding will be available and encouraged. The position will include leading data analysis and manuscript writing in collaboration with the research team. Additional funding will be available for attending scientific conferences, workshops, and trainings.

Qualifications Required/Academic Background

Applicants should possess a Ph.D. in a quantitative field such as Environmental Health, GIScience, Computer Science, Epidemiology or Biostatistics with ample experience working with large and complex data sets. Applicants who do not have a completed Ph.D. at the time of application must include a letter from their Ph.D. supervisor specifying the date of their dissertation defense. Domain application in public health and/or geography is desired. The successful candidate must have strong statistical modeling skills in a programming language such as R or Python. In addition, candidates should have excellent scientific writing and strong oral communication skills, as well as the ability to work effectively, collaboratively, and collegially with colleagues from different disciplines.

Application Procedure

Review of applications will begin August 1st, 2020. Start data is flexible with preferred start by September 1st, 2020. Initial appointment is for 2 years, with possibility of extension. Salary to be set according to standard UCSD pay scales and experience. Submit CV, a cover letter describing research interests and interest in the position, 2-3 samples of scholarly writing (published, under review, or in preparation), and contact information for two references to Marta Jankowska (<u>majankowska@eng.ucsd.edu</u>).