

Postdoctoral Scholar in Environmental Epidemiology

Position description. The Department of Population and Public Health Sciences at the USC Keck School of Medicine (KSOM) is seeking a motivated postdoctoral scholar in environmental epidemiology to join a multidisciplinary team of researchers investigating environmental risk factors for respiratory disease and mortality. Climate change-related exposures is an active area of research for the group. Examples of ongoing research projects include quantifying health impacts of temperature and air pollution co-exposure in the context of climate change, assessing differential heat/pollution effects across communities with varying vulnerabilities, and using causal inference methods to estimate health effects of hypothetical policy interventions. The postdoctoral scholar will participate in scientific activities including all aspects of study design, analysis, manuscript preparation, and development of research proposals.

Key responsibilities include:

1. Conduct statistical analyses independently for studies of air pollution, temperature, and other environmental exposures in various study design settings, including cohort, case-control, case-crossover, and time-series
2. Write manuscripts for publications in scientific journals
3. Present scientific results at meetings, seminars, and conferences
4. Collaborate with multidisciplinary research teams and subject-specific working groups
5. Contribute to the development of research proposals

Training environment. The Department of Population and Public Health Sciences (formerly Preventive Medicine) at KSOM has one of the nation's leading research programs in epidemiology and biostatistics with strengths in environmental health, cancer and chronic disease, genetics, and the development of novel statistical methods. The growing USC Health Sciences Campus is home to several world-class environmental health centers including the Southern California Environmental Health Sciences Center (SC-EHSC), the Maternal And Developmental Risks from Environmental and Social Stressors (MADRES) Center, the Life Course Approach to Developmental Repercussions of Environmental Agents on Metabolic and Respiratory Health (LA DREAMERs), and the Center for Translational Research on Environmental Health (R-TEN). The Department has a strong track record of supporting postdoctoral scholars in developing successful NIH K Awards and preparing them to be competitive candidates for faculty positions at leading universities as well as for positions in government and industry.

Training opportunities. Successful candidates will receive research training in environmental epidemiology, including use of advanced research methodologies. In addition to individual mentorship in their research areas, postdoctoral scholars have the opportunity for advanced multidisciplinary training through coursework in any of the Department's graduate programs including epidemiology (has an environmental epidemiology track) and biostatistics (has an environmental biostatistics track) as well as other departments at USC. They will also have numerous opportunities for career development training through meetings, seminars, and workshops hosted by the KSOM. The enriched career development program will help early investigators develop essential skills for an independent research career, including grant and manuscript writing, scientific presentation, and collaboration with multidisciplinary teams. Postdoctoral scholars will also have numerous opportunities for collaboration, various enrichment activities, and experience in guiding pre-doctoral trainees and medical and undergraduate students.

Position qualifications. Postdoctoral scholars must have a doctoral degree in a relevant field (epidemiology, environmental health sciences, biostatistics, or related field), and have demonstrated interest in environmental health, preferably with experience in air pollution or climate change research. Intermediate to advanced skills with at least one statistical and/or programming software is required (e.g., SAS, R, or Python).

Application instructions. Submit a letter describing research interests, curriculum vitae, copies of one or two recent publications, if applicable, and contact information for three references who are familiar with your academic accomplishments. Address applications to Dr. Erika Garcia at garc991@usc.edu.