The Keck School of Medicine (KSOM) of the University of Southern California (USC) is seeking a postdoctoral research associate in environmental epidemiology to join multidisciplinary studies investigating **environmental risk factors for adverse birth outcomes, metabolic and respiratory diseases**. Successful candidates will receive research training relevant to the NIEHS's core mission of the **effects of external environmental exposures** (air pollution and endocrine disrupting chemicals) and host factors (e.g. metabolome and genome) that modify and/or mediate health outcomes.

The Department of Preventive Medicine at KSOM has one of the nation’s leading research programs in environmental epidemiology and biostatistics with strengths in investigating early-life environmental risk factors and children's health. The growing USC Health Sciences Campus is a home to several world-class environmental health centers including the Southern California Environmental Health Sciences Center (SC-EHSC), the Southern California Children’s Environmental Health Center (SC-CEHC), the Maternal And Developmental Risks from Environmental and Social Stressors (MADRES) Center, and the Life Course Approach to Developmental Repercussions of Environmental Agents on Metabolic and Respiratory Health (LA DREAMERs).

In addition to individual mentorship in respective research areas, postdoctoral fellows will have the opportunity for advanced multidisciplinary training through coursework in the Department’s graduate programs including Epidemiology and Biostatistics as well as other departments at USC. Fellows 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.

Key responsibilities include:
1. Perform statistical analysis independently in studies of air pollution, environmental chemical exposures, big data (metabolomics and epigenetics) and birth cohorts.
2. Write manuscripts for publications in scientific journals
3. Make scientific presentations at meetings, seminars and conferences
4. Collaborate with multidisciplinary teams and coordinate working groups
5. Help to develop research proposals

Postdoctoral fellows must have a Doctoral degree in a relevant field (epidemiology, environmental and occupational health, environmental toxicology, genetics, biostatistics, molecular or computational biology, etc.), and have demonstrated interest in environmental health and disease prevention. Candidates with a strong track record of big data analysis, longitudinal and time series data analysis will be preferred. Intermediate to advanced skills with at least one statistical and/or programming software is required, e.g., R, SAS and Python. Interested candidates should submit a letter outlining their research and training objectives, CV, and reprints of any relevant publications. Address applications to Dr. Zhanghua Chen at (zhanghuc@usc.edu).