

POST-DOCTORAL TRAINING FELLOWSHIP IN ENVIRONMENTAL OMICS

The Keck School of Medicine of the University of Southern California is seeking postdoctoral fellows in our training program in “Environmental Genomics,” supported by the National Institute of Environmental Health Sciences. The aim of this program is to provide multidisciplinary training in epidemiology, genomics and other -omics, biostatistics, bioinformatics, and computational biology to future researchers aiming to study environmental and genetic risk factors of disease and other complex human traits. Applications from a broad range of disciplinary backgrounds will be considered, including epidemiology (e.g. cancer, respiratory disease, obesity, metabolic disease, neuroepidemiology, etc.), exposure assessment, biostatistics (e.g. statistical genetics, spatial statistics, gene-environment interaction, etc.), and other fields (e.g. bioinformatics, precision medicine, and data science). Administratively based at the Department of Preventive Medicine, this training program supports advanced training and career development of post-doctoral scientists from multiple disciplines and academic departments.

The Department of Preventive Medicine has leading research programs in epidemiology and biostatistics, particularly with strengths in environmental health, cancer and chronic disease genetics, and the development of novel statistical methods and related software. The USC Health Sciences Campus is home to several world-class research laboratories studying complex human diseases including cancers, cardiorespiratory diseases, neuro-developmental and neurodegenerative disorders, and psychiatric diseases.

In addition to individual mentorship in their research area, fellows will have the opportunity for advanced multidisciplinary training through coursework from the Department’s graduate programs in Epidemiology (with tracks in molecular epidemiology and environmental health) or Biostatistics (with tracks in statistical genetics, environmental biostatistics, bioinformatics, and data science), or from other departments at USC. Fellows will also have numerous opportunities for collaboration, various enrichment activities, and experience in guiding pre-doctoral trainees and medical/undergraduate students.

Post-doctoral fellows must have completed a Ph.D. in a relevant field (epidemiology, biostatistics, environmental health sciences, genetics, bioinformatics, molecular or computational biology, computer science etc.) and have a demonstrated interest in both environmental and “omic” (genomic, epigenomic, transcriptomic, metabolomic, adductomic, exposomic) aspects of disease and/or the development of relevant methodology. Fellows will be expected to pursue a multidisciplinary approach to their training under the mentorship of one of the program’s senior faculty. We are particularly seeking individuals looking for training relevant to NIEHS’s core mission related to the health effects of external environmental exposures along with host factors (e.g. genetics) that modify these effects.

Only U.S. citizens or permanent residents (green card holders) are eligible to be supported by this grant. Applications from underrepresented minorities are particularly encouraged.

Interested candidates should submit a letter outlining their research and training objectives (one page), CV with prior academic record, reprints of any relevant publications, and names of three references. Address applications to Drs. Jim Gauderman and Rob McConnell at E-GT32@usc.edu. Applications will be accepted until all positions are filled.

