

PhD Research Assistantship, University of South Florida, Department of Civil and Environmental Engineering, and/or Department of Environmental and Occupational Health.

A highly motivated PhD Research Assistant is sought for study of the multi-scale interactions between air pollution, urban growth, and environmental equity in the Tampa, FL metropolitan area. This position is supported through a new National Science Foundation CAREER grant. The overall research plan includes air pollution modeling at multiple scales using chemical transport and dispersion models, local passive sampling and analysis for pollutant concentrations, urban growth modeling, and geospatial analyses. The selected candidate's research topic will focus on air pollution modeling for alternative growth scenarios and related equity analyses. The candidate will also be involved in collaboration with a nearby children's science museum to develop an educational exhibit related to the project research. The Ph.D. assistantship will include an annual stipend of \$20,000, a tuition waiver, and a health insurance contribution.

The selected candidate is expected to begin fall 2009 in a PhD program in either the Department of Civil and Environmental Engineering or the Department of Environmental and Occupational Health, working with Dr. Amy Stuart. The selected candidate will be part of a dynamic team of students and faculty at USF involved in cross-college research and teaching on issues related to the environment and sustainability. Students in Dr. Stuart's group are encouraged to pursue dual-degree programs and interdisciplinary learning. Group members are involved in research and learning involving collaborations between public health, engineering, geography, anthropology, the Center for Urban Transportation Research, the Dr. Kiran C. Patel Center for Global Solutions, and the new USF Master's International Program in Civil and Environmental Engineering.

The selected candidate will have an undergraduate or master's degree in a substantially quantitative field (e.g. engineering, computer science, chemistry, mathematics, statistics, or quantitative health sciences). College-level coursework or experience in computer programming, chemistry, and calculus are required qualifications. Coursework in differential equations and/or linear algebra is preferred. Strong English writing skills and self-motivation are also necessary. Candidates with an earned master's degree are preferred, but exceptional candidates with bachelor's degrees will be considered.

Applicants should submit a cover letter describing your interest in this opportunity and background, a C.V. (or resume), GRE/TOEFL test scores, unofficial copies of undergraduate and graduate transcripts, and the names and contact information of three references. The information should be submitted via email to Dr. Stuart at astuart@hsc.usf.edu by March 1, 2009 for full consideration. If a match is determined to be likely, a formal application through the selected department process will be required (but expedited).