

Postdoctoral Position: Cross-scalar adaptation to socio-hydrological risks in the Mexico City Basin

The Julie Ann Wrigley Global Institute of Sustainability at Arizona State University

Job Description

The Julie Ann Wrigley Global Institute of Sustainability at Arizona State University is seeking a postdoctoral fellow to take a leadership role in the development of an agent-based model for an innovative NSF-funded project on urbanization, climate change adaptation and social-hydrological risk in the Basin of Mexico. The candidate will be encouraged to develop his/her own research program within the broad aims of the project, and will be given the opportunity to gain experience in project management, teaching and student mentoring. The position is initially for two years (beginning May 2015), with the potential for an additional year. The fellow will be based at ASU, with frequent travel to Mexico City. She/he will interact with a diverse community of specialists at ASU and the Laboratorio Nacional de Ciencias de la Sustentabilidad (LANCIS) at the Universidad Nacional Autonoma de México (UNAM) who apply complex adaptive system modeling, institutional analysis and agent based modeling tools to sustainability challenges.

Essential Duties

The fellows primary duties entail: 1) the development of an multi-agent model of the interactions between household units, public agencies and civil society organizations on land use and infrastructure decisions in the Mexico City basin; 2) assisting in the development of an innovative decision-tool, in which the agent-based model will be integrated into an spatially-explicit multi-criteria decision-analysis framework to assess the dynamics of vulnerability to flood, water scarcity and related health risks in the Basin; and 3) assisting in the analysis of household survey data on risk perception, coping strategies and land use decisions.

Minimum Qualifications

At the time of appointment, the successful candidate must have earned doctorate in an interdisciplinary human-environment program, or in a field in the natural sciences or social sciences that focuses on human-environmental theory, processes and relationships at the time of appointment. He/she must demonstrate extensive experience in agent based modeling, preferably applied to land use change and/or vulnerability analysis. He/she must demonstrate a strong record of scholarly achievement; strong communication skills; and an ability to work effectively in interdisciplinary research teams.

Desired Qualifications

The candidate should ideally be familiar with the theory and practice of institutional analysis and vulnerability assessment. Proficiency in Spanish is highly desirable.

Department and Project Information

The Julie Ann Wrigley Global Institute of Sustainability (<https://sustainability.asu.edu/>) is the hub of Arizona State University's sustainability initiatives. The ASU Wrigley Institute advances research, education, and business practices for an urbanizing world. Its School of Sustainability

(<https://sustainability.asu.edu/education/school-of-sustainability.php>) the first of its kind in the U.S., offers transdisciplinary degree programs focused on finding practical solutions to environmental, economic, and social challenges. ASU also hosts the Agent Based Modeling Consortium at ASU (<https://shesc.asu.edu/research/projects/open-agent-based-modeling-consortium>) among other institutes and centers (e.g. Decision Center for a Desert City, Center for the Study of Institutional Diversity).

Instructions to Apply

Applicants must submit: 1) a cover letter explaining how prior experience and qualifications are appropriate to the job activities; 2) a Curriculum Vitae; 3) a statement of research accomplishments, interdisciplinary experience, and goals; 4) a sample of scholarly writing (i.e., a published article, dissertation chapter); and 5) the name, phone number, address, and e-mail address of three references. Only electronic applications will be accepted. Please submit all materials to: giosjobs@asu.edu

Inquiries about this position can be made to Dr. Marco Janssen (marco.janssen@asu.edu) and/or Dr. Hallie Eakin (hallie.eakin@asu.edu).

Application Close Date

Application deadline is February 15, 2015.

Background Check Statement

ASU conducts pre-employment screening for all positions which includes a criminal background check, verification of work history, academic credentials, licenses, and certifications.

Arizona State University is an Equal Opportunity/Affirmative Action employer. The Global Institute of Sustainability actively encourages diversity among its applicants and workforce.