Postdoctoral Position: Resilience of Coupled-Infrastructure Networks

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 (ASU Wrigley Institute) is seeking a postdoctoral fellow to take a leadership role in the modeling interacting networks of water, power and roads to evaluate the resilience of coupled infrastructure systems. The position is part of an innovative NSF-funded project on Resilience Simulation for Water, Power & Road Networks.

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 for two years (beginning August 2015).

Essential Duties

The postdoctoral fellow's primary duties entail: 1) the development of analytical and computational models of coupled infrastructure systems; 2) working with other team members to integrate information from empirical cases from physical infrastructure networks and governance protocols into the modeling project; and 3) implementing a stylized model of coupled infrastructure systems to analyze resilience for various types of scenarios.

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, engineering, or social sciences that focuses on systems analysis. He/she must demonstrate extensive experience in analytical and computational modeling, network analysis, and/or systems 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 resilience theory and complex adaptive systems.

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. It's 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 has a number of complexity related research centers such as the ASU-SFI Center for Biosocial Complex Systems, Center for Behavior, Institutions and the Environment, and the Center for Social Dynamics and Complexity.

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. Marty Anderies (m.anderies@asu.edu).

Application Close Date

Application deadline is July 7, 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.