Natural Capital Project

Postdoctoral Associate

Understanding and modeling urban ecosystem services

The Natural Capital Project at Stanford seeks a creative and independent researcher to support the development of models, tools, and approaches to assess urban ecosystem services. The postdoc will lead the technical development of the models and their application in case studies in the U.S. and internationally.

The position will be based with The Natural Capital Project at Stanford University, in the lab of Prof. Gretchen Daily (Biology; Natural Capital Project founder and faculty mentor), and will be co-supervised by project lead Dr. Perrine Hamel and Prof. David Freyberg (Professor in Civil and Environmental Engineering and project advisor).

The Natural Capital Project (NatCap) is developing practical tools and approaches to account for nature's contributions to society, and mainstreaming these into policy, finance, and management. NatCap is a partnership among Stanford University, the University of Minnesota's Institute on the Environment, The Nature Conservancy, World Wildlife Fund, and the Chinese Academy of Sciences. We are a team of academics, software engineers, and practitioners with the optimism, commitment, and humility to work together. Our common quest is to shine a light on the intimate connections between people and nature, and to reveal, test, and scale ways of securing the well-being of both.

Responsibilities:

The postdoc will be responsible for: i) improving existing ecosystem services models and developing new models to expand the InVEST (Integrated Valuation of Ecosystem Services and Tradeoffs) software suite for applicability in urban environments, working closely with software engineers; ii) leading the application of these tools to conduct ecosystem services assessments in pilot cities in China, the U.S., and elsewhere; and iii) maintaining and expanding our academic network to collaborate with leading groups in the field of urban ecosystem services, particularly through a working group of experts we are convening to develop and test these models. The initial focus of model development will be on stormwater retention, urban heat mitigation, and urban recreation services.

The position is funded for 12 months, with potential to extend the appointment depending on funding and performance. The post-doctoral researcher will be encouraged to collaborate on grants and pursue additional partnerships and funding opportunities through the Natural Capital Project and its partners.

Qualifications:

Required Qualifications:

PhD in urban ecology or hydrology, microclimate science, environmental engineering, or related field
Experience with environmental modeling in the urban environment
Interest in producing impactful and decision-relevant work
Demonstrated excellence in written and oral communications skills

Preferred Qualifications:
Experience working internationally and with diverse non-academic audiences
Experience with ArcGIS or other GIS software and/or processing remotely sensed products
Experience developing models in engineering, hydrology, or climate science
Experience with programming languages or applications (MatLab, R, python)
Experience supervising interns or undergraduate research assistants
International travel experience and foreign language skills

Start date: December 2017, negotiable
Duration: 12 months, with possibility of extension
Compensation: Stanford offers a competitive postdoc salary and benefits package, commensurate with experience

How to apply:
Email your CV and a cover letter describing your experience and interest to perrine.hamel@stanford.edu with URBAN POSTDOC in the subject. Applications will be reviewed as they are received, and we expect to make a decision by Nov 20.

Stanford University is committed to equal opportunity through affirmative action in employment and we are especially eager to identify minority persons and women with appropriate qualifications. More information on the project can be found at www.naturalcapitalproject.org.