

PhD position in trans-disciplinary Team-TERRA training program at UConn

Building Resilient Landscapes for Food, Energy, Water, and Ecosystem Services in America's Original Megalopolis

The University of Connecticut is looking for Ph.D. candidates to begin Fall 2021 in a newly funded transdisciplinary training program. We will use the northeastern US megalopolis stretching from Boston to Washington, D.C. as a living laboratory to understand, predict, manage, and communicate risks to food, energy, water, and ecosystems in the face of global change. As part of the training program, trainees will work in diverse teams to predict and solve the wicked problems of the future in regions that are urbanizing and stretched to both provide the essentials for human wellbeing while maintaining the many benefits of biodiversity and natural ecosystems. We seek collaborative, driven, and creative students trained broadly in the environmental sciences for this National Science Foundation funded training program. We are especially interested in applicants from groups historically underrepresented in STEM, and/or whose life experiences or academic history will contribute to environmental justice perspectives in student teams.

Students should seek admission into a relevant department at UConn and apply simultaneously to the Team-TERRA program. A partial list of potential departments includes:

- [Civil & Environmental Engineering](#)
- [Computer Science & Engineering](#)
- [Ecology & Evolutionary Biology](#)
- [Economics](#)
- [Geography](#)
- [Geosciences](#)
- [Natural Resources & Environment](#)
- [Statistics](#)

The training program consists of a 2-year sequence of coursework, teamwork, a real-world internship, and associated workshops. Successful students will learn highly sought-after skills in risk analysis, management, and communication; landscape analysis and decision support tools embedded in geographic information systems; and how to lead and collaborate with diverse stakeholders. The trainees will independently complete and work toward departmental and university dissertation requirements. Funding is available for 1-year stipends, travel, and research, in addition to departmental funding opportunities.

Candidates should have an excellent GPA (>3.5) and relevant research experience. Preference will be given to students with proven research records, published scientific articles, external funding, a Master's degree, or demonstrable research experience.

As a first application step, send a cover letter detailing your research interests and experience as well as a resume or curriculum vita, including current GPA, to the professor representing the program of your choice. For more information about the program or for advice on pertinent

departments or potential advisors, please contact Mark Urban mark.urban@uconn.edu. Further application instructions will be provided from individual faculty members.

List of associated faculty members (associated with program, but applications are welcome to any faculty member in a department), departments, and interest areas:

Faculty member	Department	Interest areas
Mark Urban	Ecology & Evolutionary Biology (TERRA Lead Investigator)	Eco-evolution in cities; climate change; aquatic ecology and resources
Chris Elphick	Ecology & Evolutionary Biology (Graduate Program Chair)	Biodiversity protection and management; conservation planning; coastal resilience; agroecology
Lisa Park-Boush	Geosciences (Associate Dean)	Risks to aquatic ecosystems and water resources from hurricanes and climate change
Margaret Rubega	Ecology & Evolutionary Biology (TERRA Co-PI)	Functional ecology of birds in degrading habitats; Science Communication.
Kathleen Segerson	Economics (Associate Dean)	Agriculture and natural resource economics; incentive effects of alternative policy instruments
Guiling Wang	Civil and Environmental Engineering, Center for Environmental Science and Engineering	Risks of climate-land interactions to agriculture, ecosystems, and water resources
Michael Willig	Ecology & Evolutionary Biology, Center for Environmental Science and Engineering (Director, Institute of the Environment)	Resistance, resilience, and vulnerability of ecosystem services and biodiversity
Chuanrong Zhang	Geography, Center for Environmental Science and Engineering (co-PI)	CyberGIS and spatial data science for risk analysis of food-energy-water-ecosystems nexus