

October 2022

Welcome to the Department of Plant Science and Landscape Architecture at University of Connecticut. We are an energetic community of researchers working at the intersection of design, climate, justice, governance, and socio-ecological systems. We are committed to imagining a better planet for human and non-human constituents and we are seeking graduate students to help us with these endeavors across our four labs.

#### INTRODUCING THE LABS

The Climate Adaptive Design (CAD) Lab, run by Dr. Mariana Fragomeni, conducts research and outreach in topics focused on climate adaptation and urban design. The lab focuses primarily on applied research at the intersection of design and urban climatology to reduce climate vulnerability. The lab is interested in collaborative and interdisciplinary approaches that support landscape design as an integral element for climate adaptation and improving the quality of life in urban environments.

### The CAD Lab has two open positions for Fall 2023:

- 1. Master's in Science level USDA/NIFA/NNF Fellow position: The student selected for this position will be a part of a cohort of six (6) students within the Plant Science and Landscape Architecture graduate program, and will receive training in leadership and extension, as part of their Master's in Science degree. Funding will be provided for a full-time student interested in developing a research thesis on a topic related to climate adaptation and landscape architecture. This position is funded by the USDA NNF program, and only US citizens are eligible for this funding source.
- 2. <u>Master's in Science or Ph.D. level:</u> The student selected for this position will receive funding for 2 years to focus on ongoing research developed by the CAD lab team at the intersection of landscape design and urban heat island mitigation. This is a research-oriented position, and the candidate will be expected to develop a research thesis (MS) or dissertation (Ph.D.).

Strong candidates for both positions will have experience with some or all of the following: Microsoft Word, Excel, GIS, Google Earth Engine, Envi-Met, AutoCAD, and the Adobe Suite.

Please inquire at mariana.fragomeni@uconn.edu

The Climate Justice Design Lab (CJDL), directed by Professor Jill Desimini, focuses on developing design frameworks, tools, and collaborations to support local climate advocates, activists, public agents, and organizations. The research looks at the critical intersection of social and climatic threats over time, to identify potentials for land reform to spread wealth and enable reciprocal human and non-human relationships. On-going projects address abandoned landscapes and devalued property, land-banking, wildness in cities, climate adaptation, alternative narratives and data generation, long histories, non-linear models of time, and cartographic methods.

# The CJDL has one open position for Fall 2023:

1. Master's in Science or Ph.D. level: The student selected for this position will receive funding for 2 years to focus on ongoing research developed by the CJDL on land abandonment, urban wilds, forest cover, and climate justice. This is a research-oriented position, and the candidate will be expected to develop a design-based or written research thesis (MS) or dissertation (Ph.D.). Relevant backgrounds include landscape architecture, urban design, urban ecology, environmental studies, and urban studies. Strong candidates will have excellent writing, graphic, communication, and organization skills with a knowledge some or all of the following programs: Python, GIS, AutoCAD/Rhinoceros, and the Adobe Suite. Experience with advocacy, activism, and community organizing is desired.

Please inquire at <u>jill.desimini@uconn.edu</u>

The Managed Landscapes Design Lab (MLDL), run by Dr. Julia Smachylo, engages with the entangled relations of nature and society, with particular attention given to the changing contours of our institutions and environment. Working between local and regional scales the research investigates the co-evolution of new schemes for governance that raise important questions about the individual and aggregate impacts between land conservation and processes of urbanization, as well as the changing scales and agents involved in environmental management. Set within a design research framework, the Lab is currently conducting research on the themes of landscape life cycle analysis, post-capitalism and fallowness, incentivized stewardship, and design methods.

#### The MLDL has one open position for Fall 2023:

1. <u>Master's in Science or Ph.D. level:</u> The student selected for this position will receive funding for 2 years to work on on-going research that integrates urban planning and design theory and practice, investigating the themes of landscape life cycle analysis, post-capitalism and fallowness, incentivized stewardship, and design methods.

Position Description: At the master's level students are welcome to pursue either a design-based or written dissertation. At the Ph.D. level this is a research-oriented position, and the candidate will be expected to develop a written research thesis. Alongside their own research project, candidates will work with Dr. Smachylo to conduct literature reviews, case study analysis, survey analysis, mapping, and design-based research. Students can expect both inperson and remote working options and are expected to work reliably at least part-time on campus in a dedicated lab space. Students should be interested in furthering research in the design disciplines, and have excellent written, organizational, and graphic communication skills. Strong candidates will have experience with some or all the following: Microsoft Word, Excel, GIS, Rhino/AutoCAD and the Adobe Suite.

Please inquire at julia.smachylo@uconn.edu

The Sustainable Urban Planning and Ecology Research (SUPER) Lab, run by Dr. Sohyun Park, conducts research, innovates, and engages with communities to enhance our understandings of urban sustainability and community resilience through a lens of socio-ecological systems. The primary areas of research are at the intersection of urban and landscape ecology and environmental and community planning with the overarching goals to build, manage, and restore natural and built environments that are healthy, resilient, biodiverse, and equitable. The lab studies cities and landscapes at various scales and contexts as a unifying theme to understand holistic socio-ecological systems that encompass pattern, process, complexities, and justice issues. The lab also explores, develops, and executes innovative methodology and emerging technologies to address interdisciplinary and complex research agenda. Current research topics studied in SUPER lab include the relationship between planetary and human health and well-being, urban forestry in vacant lots, urban biodiversity framework, human perception of nature, urban morphology, sustainability and nature-based solutions, land and place-based education, and equitable access to nature.

The SUPER Lab does not anticipate having funding for new students in Fall 2023 but is open to discussions with strong candidates who have clear research ideas and who are seeking independent research funding (e.g., NSF GRFP).

1. Master's in Science level: The student will primarily be involved in a community-based research project that aims to assess the public benefits of biodiversity and green space availability in blighted urban blocks. This position will offer a cross-disciplinary research opportunity through collaboration with university researchers, urban planners, community stakeholders, and non-profit organizations including municipal land banks. Key responsibilities and opportunities include: (a) Conduct research on issues relating to urban vacancy, local habitat/biodiversity, urban blight, and socio-ecological justice; (b) Conduct the analysis of residential properties in

distressed communities, develop design solutions for ecological improvement, and assist with monitoring and evaluation; (c) Gain experiences in community engagement, urban revitalization, and green infrastructure and biodiversity implementation plan. Qualifications include: (a) Earned Bachelor's degree in landscape architecture, urban design, environmental planning, environmental studies, public policy, or related fields; (b) Knowledge and experience with urban ecology, urban forest, novel ecosystems, land use planning, urban ecosystem services; (c) Community-based design experience for green infrastructure, nature-based solutions, and pollination gardens. Potential source of funding is the Capacity Hatch multistate grant.

2. Ph.D. level: The student will primarily be involved in a new Urban Socio-Ecological Biodiversity Network (USE-Bionet) to holistically address the ecological, social, and technical challenges in the urban socio-ecological systems of Southern New England. This position will offer a transdisciplinary research opportunity through collaboration with scientists, researchers and educators across multiple disciplines and professions as well as community members, civic organizations, indigenous groups, and diaspora communities. Key responsibilities and opportunities include: (a) Test and scale up nature-based approaches to building resilient socioecological systems and retaining biodiversity in urban, rural and coastal areas; (b) Foster an open network that engages scientists, practitioners, educators and the broader community in cooperative science, data collection, land use planning, and nature-based exploration with a focus on ecological justice and equitable access to nature for marginalized communities; (c) Research and apply integrated natural and social science approaches to address land use decision making and urban biodiversity; (d) Train and supervise undergraduate research assistants. Qualifications include: (a) Earned (or anticipated graduation before the start date) Master's degree in urban ecology, environmental studies, urban planning, landscape architecture, or related field; (b) Knowledge and experience with urban biodiversity, land use planning, biodiversity governance, and coupled socio-ecological systems; (c) Experience with participating in, managing, or assisting transdisciplinary research projects/networks; (d) Experience with grant proposal writing. Potential source of funding is the NSF DISES RCN grant.

Please inquire at sohvun.park@uconn.edu

## **How to Apply:**

Please begin the application process by sending an email to the relevant investigator listed above, attaching the following items in one PDF document:

- 1. Letter of Intent (personal statement describing relevant experience and research interests)
- 2. Curriculum Vitae
- 3. Contact Information for three (3) Academic References

Applications are rolling and should be submitted by **April 01, 2023,** to receive full consideration.

After initial screening of applicants, candidates will be asked to <u>submit an online application</u> to the UConn Graduate School by **June 01, 2023**.