

2024 Science Fellowship Program Application Announcement

Los Angeles Center for Urban Natural Resources Sustainability | El Pueblo de Los Angeles, 125 Paseo de la Plaza, Los Angeles, CA 90012 | Submit your application by Friday, July 26th, 2024 at 5:00 PM PT via this link: 2024 Science Fellowship Program Application

About the LA Urban Center

The Los Angeles Center for Urban Natural Resources Sustainability ("LA Urban Center") operates through a partnership among the USDA Forest Service and the City of Los Angeles. Joining in this collaboration are the many Federal, State, and local government partners as well as academia, industry, private, and non-profit organizations concerned with urban natural resources and socioecological resilience. The LA Urban Center's mission is to serve as a "Research and Information Destination Hub" where environmental, urban ecosystem, and urban natural resource studies will enhance urban forests, urban wildlife, and lives throughout the Los Angeles metropolitan area. The LA Urban Center is a physical place to focus research activities and communication as well as a hub in the network of relationships among a growing community of scholars, policy makers, cooperators and their facilities focused on urban natural resources sustainability.

Purpose of the Fellowship

The LA Urban Center's Science Fellowship Program provides research and science-delivery opportunities for graduate students from diverse academic disciplines and sociodemographic backgrounds. Selected Fellows will have the option to conduct a one- or two-year project that contributes to the core mission and vision of the LA Urban Center. Selected proposals will receive non-renewable funding of \$12,500 for one-year projects or \$25,000 for two-year projects and are required to present main findings or showcase a developed product to researchers, practitioners, and general audiences. These materials may be displayed in the LA Urban Center office, or during seminars or outreach events hosted by the Center. In this call for proposals, we are seeking to fill several fellowship slots, addressing key priority proposal areas.

Priority Proposal Areas

Proposals must focus on one or both of the priority proposal areas (Community Forest Management, Nursery Management) for a one-year or two-year project. Proposals that focus on one or more of the items in the bulleted list of potential projects under each proposal area will be prioritized; applicants may propose other projects not on the list, but the proposed project must have strong relevance to one or both proposal areas.

Proposal Area: Community Forest Management

The urban forest is an essential component of a healthy ecosystem when distributed equitably and supported by urban greening efforts. A well-managed urban forest can enhance biodiversity, soil health, and overall community well-being through heat mitigation, energy conservation, and encouraging outdoor recreation. To address this need, Los Angeles County's first Community Forest Management Plan (CFMP) offers a practical, long-term strategy for tree management within Los Angeles' unincorporated communities. The CFMP will be adopted in fall 2024 and provides information and guidance relevant to the entire LA region to ensure the benefits of trees are afforded to current and future generations. Potential projects are listed below.

- Determine what it would take to make connected pathways and clusters of native trees for connectivity of native wildlife, birds, and insects
 - Determine recommendations for tree species and location throughout the city/county/region, based on animal species that need trees for connectivity (e.g. where oaks should be planted to create corridors for acorn woodpeckers to get between "patches")
 - o Develop an indicator to track biodiversity benefits of the community forest
- Develop way to track any change over time in the extent and location of oak trees and/or oak tree canopy cover, including in urban areas
- Analyze high risk areas for tree pest infestation
 - Specifically tree asset value (i.e. where would infestations be most damaging/most costly); infestation susceptibility (i.e. where might new infestations be most likely); and areas of connectivity concern (i.e. areas where infestations could make a jump between major ecosystem areas, or between municipal areas)
 - Determine the potential of using aerial imagery to detect tree pest infestations as separate from other causes of tree mortality
- Apply the evidence-based prioritization framework developed by the <u>LA Urban Forest Equity</u>
 <u>Collective</u> to unincorporated county areas to guide County investment, as described in *section 3* (Neighborhood Selection Process) of the report *Los Angeles Urban Forest Equity: Assessment, Tools, and Recommendations*
- Devise policy strategies for protecting trees from development activities in greenfield and infill applications

Proposal Area: Nursery Management

In relation to urban forests, examples of management issues nurseries face include ensuring the quality and health of trees, selecting appropriate species for local conditions, promoting genetic diversity, and controlling pests and diseases. Managing supply chain shortages, upholding sustainable practices, and developing a well-trained workforce are also essential for producing high-quality trees and supporting urban forest health. Addressing these challenges is crucial for the successful establishment and longevity of urban trees. Potential projects are listed below.

- Assess barriers and pain-points for tree growers with particular reference to California native species
- Identify new and diverse trees to grow in Mediterranean climates
- Assess where to obtain appropriate plant/tree seeds for future localized propagation
- Determine the practical aspects of growing new trees to maturity and simultaneously exploring new models of nursery trees being grown out (i.e. the benefits of community-driven nursery endeavors and how these could work and/or be incentivized through a local certification system)
- Conduct a needs assessment to identify gaps in nursery management and production
- Develop a local network of sharing resources to know who is growing trees and what type of trees they are growing, and create a web-based database that allows people to access these data
- Identify best management and monitoring practices to ensure nursery stock is ready for planting (i.e. root quality, structural integrity, etc.)
- Identify best management and monitoring practices to maximize overall tree health

Expectations for Fellows

• **Exploring** – Each Fellow is expected to conduct and provide a literature review *or* annotated bibliography related to their project.

- **Researching** The selected Fellows will propose projects related to the specific topic parameters provided in the Priority Proposal Areas section above. Fellows are invited to submit an applied project or propose a novel product that augments or supports a proposal area.
- Contributing Each Fellow is expected to closely work with a project mentor and spend time working with them on project preparation and professional development. This may vary considerably for each project, but Fellows should expect to commit time to meet with their mentors and to work on their project. These interactions will serve as an opportunity for Fellows to develop relationships with researchers and practitioners in their area of interest. More than one mentor may be of help depending on the complexity of the work proposed, or the breadth across topics. Suggested mentors include, but are not limited to, graduate student advisors, professors at the graduate student's university, or an industry expert at a non-profit or organization that has appropriate expertise for the proposed work. Anticipated end users of the proposed project might provide supportive input. Mentors are essential to the proposal development, and thus need to be identified and engaged early in the process. As a part of this expectation of engaging with mentors, the Fellow is also required to meet a minimum of three times with an assigned mentor from the USFS, Pacific Southwest Research Station. Meetings will be one hour in length and will occur seasonally one in late summer (before initiating the project or product development), early fall, early winter, and then early spring. The final meeting is in preparation for the Spring seminar.
- Sharing Listed are the project product requirements:
 At the end of the project period, each Fellow must develop 3 <u>unique</u> deliverables to showcase their proposal findings to 3 separate audiences: researchers, practitioners, and general audiences. *Examples include:
 - 1. Present project (oral and visual) in the Spring of 2025 and/or 2026 as part of the LA Urban Center's Fellows Seminar
 - Seminar presentations will be recorded and posted to the LA Urban Center's website
 - 2. Present project (oral and visual) at regional conferences (i.e. Western Chapter International Society of Arboriculture, etc.), California ReLeaf Retreat, or other opportunities (webinars, etc.)
 - 3. Share project with a general audience:
 - Write a press release (in layman's terms) to be shared on LA Urban Center and other partner organizations' websites describing project findings
 - Develop a communication campaign to convey project topic(s), updates, and findings through public outlets (i.e. social media)
 - Develop a translatable product of the project work (i.e. <u>StoryMap</u>, <u>video</u>, brochure, etc.)
 - Attend and/or host one community engagement event (i.e. Gateway to Nature tabling, EOT organization event tabling, Descanso Gardens tree-themed art exhibit, etc.)

Disclaimer: Any product developed will be considered free and in the public domain and shall be used for the purposes of the USDA Forest Service, LA Urban Center, and City Plants.

^{*}Note that Fellows may also identify additional methods for disseminating their project findings not listed above.

What can fellows expect from the fellowship?

- **Duration** One-year fellowships are from September 2024 to June 2025. Two-year fellowships are from September 2024 to June 2026.
- **Funding** Fellows will receive non-renewable funding of \$12,500 or \$25,000 through LA Urban Center's partner City Plants. Payments are for completed phases of the selected project, in keeping with the written agreement between the selected Fellow and City Plants.
- **Mentoring** Mentorship will be provided from the Fellow's mentor(s) and the USFS' PSW assigned mentor, who will assist with networking and support from industry partners, enhancing project visibility and career development.
- **Linking & Network Weaving** Access to local organizations, community groups, and industry practitioners.

Application Requirements

Applicants must be currently enrolled in an accredited graduate degree program and must submit the following online via this link: <u>2024 Science Fellowship Program Application</u>

- 1. **2-page statement of interest** describing (1) your proposed project topic, including proposed approach (methods) and a timeline of deliverables justifying why you believe the project will require one year or two years, (2) background/motivation on why your proposed topic is important, (3) what you hope to learn from this fellowship/how this fellowship fits into your professional or academic goals, and (4) how this project will connect with the next generation and/or advance practical outcomes related to environmental equity and justice (single spaced, Times New Roman, 12 point font, 1 inch margins);
- 2. CV or resume;
- 3. **Two letters of recommendation** (one of which should be from a faculty member at your institution who will be able to provide guidance as a mentor during this fellowship and within their letter of recommendation, they must provide a **statement of support** that indicates their expressed commitment to work with you throughout the duration of this project if awarded); and
- 4. **Current unofficial transcript** as proof of current enrollment, focal areas, and progress in your graduate studies.

It is important to ensure that your submitted project is the one you wish to be evaluated on. We are unable to accept revisions or modifications to the proposal once submitted. Further, if selected as a finalist, during your interview we will expect you to focus on the work as proposed in your submission. Although the committee may make suggestions towards augmenting the proposed work, the focus of the proposal must remain the same. Please note that in this round of Fellows we have no possibility for extensions of projects, thus, your application indicates you are able to complete the proposed work in full during the stated time period. Withdrawing post-selection will likely impact any future applications for funding you may wish to submit to the LA Urban Center. Former and or current fellows may apply, however, priority consideration is given to new applicants.

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Questions? Please email Michelle Carr at michelle.carr@usda.gov