Postdoc for Research on Plant and Soil Dynamics in Urban Green Infrastructure

Temple University has an open position for a Postdoctoral Associate who will participate in research on plant and soil functionality in urban green infrastructure (GI) systems such as rain gardens and bioswales. The successful candidate will take part in applied research on experimental GI installations adjacent to Interstate 95 in Philadelphia, Pennsylvania, both implementing existing research plans and carrying out their own studies. They will work most closely with Drs. Joshua Caplan and Sasha Eisenman, who are environmental plant biologists from the Department of Architecture and Environmental Design. However, the postdoc will also be part of a larger team that includes hydrologists, geophysicists, and environmental engineers from Temple and Villanova Universities. Planned research includes the following:

- Determining how a variety of salt-tolerant plants perform in GI basins.
- Evaluating how biochar and iron oxide soil amendments affect plant health and soil hydraulic properties.
- Comparing rates of evapotranspiration from GI basins to those from unmanaged vegetation adjacent to the roadway.
- Assessing the fate of potentially toxic elements in GI plants and soils.

Candidates with expertise in one or more of the following areas will be the most likely to advance: plant physiology, ecohydrology, soil hydraulics, and/or heavy metal chemistry in plants or soils. Minimum requirements for this position include the following:

- PhD in plant biology/ecology, environmental science, soil science, or a related field.
- A record of scientific publication in peer-reviewed journals.
- Experience conducting research in field and lab settings.
- Demonstrated organizational skills with the ability to handle multiple tasks.
- Ability to manage data sets and conduct statistical analyses.
- Excellent written, oral, and interpersonal communication skills.
- Ability to interact with a diverse population of students, faculty, and staff.
- Ability to prioritize and focus on completing tasks while under the stress of a demanding work schedule.

Funding is available for two years (see salary schedule), although the initial contract will be for one year. Renewal is contingent on satisfactory progress being made in year one.

Applicants should submit a cover letter, a statement of research interests and experience (2 pages), a current CV, and contact information for three professional references via email to: Dr. Sasha Eisenman (eisenman@temple.edu), Associate Professor of Horticulture and Chair of the Department of Architecture and Environmental Design. Finalists should be prepared to submit letters of reference and official transcripts. The position involves substantial work in the field and lab, so the successful candidate must live in the Philadelphia area. Please address your ability to relocate, if needed, in your cover letter. Review of applications will begin on March 1, 2022. The target start date is May 1, 2022 but this is somewhat flexible.

Temple University is an equal opportunity, equal access, affirmative action employer committed to increasing diversity in both its community and its curricula. Women, people of color, and other candidates who can contribute to this goal are strongly encouraged to apply. COVID-19 vaccinations are required for employment at Temple University, unless granted a religious or medical exemption.