Roger's Community Garden/ Urban FarmLab Tour



Friday May 17, 2019 10am-11:30am

Participants:

Roger's Community Garden Students; Urban Farmlab Bioregional Center, Urban Studies and Planning Program UC Global Food Initiative Fellows, Getting EQUIPPED partners Global Action Research Center, Non-Profit

Roger's Community Garden/Urban FarmLab occupies a one-quarter acre site on the UC San Diego campus (see map below). This tour will provide an on-site introduction to the student-led transdisciplinary research, sustainability projects and discovery happening at Roger's Community Garden/Urban FarmLab. Together with faculty mentors as well as industry and community partners, the diverse group of students active at Roger's Community Garden and Urban Food Forest are creating a living lab for hands on experiments, project monitoring, assessment and experiential learning. The Roger's site features integrated water, soil, food and energy systems designed to help our UC San Diego campus become carbon neutral, 0-waste, and resource conserving. The ensemble of projects operates at a prototypical "nanogrid" scale (i.e., as a localized food-energy-water-soil security system including green infrastructure designed for regenerative sustainability, resilience, equity and economic efficiency). Nanogrids are useful at the scale of a campus, neighborhood, business park or other similar sized unit.

The science and technology emanating from Roger's Urban FarmLab is shared with neighborhoods in Southeast San Diego; and now we would like to extend this sharing across the border with communities in Mexico. This sharing is done in mutually reinforcing ways that embrace the value and importance of bi-directional community-university leaning. The Roger's site is a platform from which students, faculty, staff and community partners can facilitate what we call the Rooted University transition. That is: a campus evolution toward stronger place-based, university-community ties and joint ventures; a transition toward more use-inspired, problem-solving, solutions-oriented research that bridges disciplinary silos, epistemic cultures, and public-private-nonprofit sectors.

Efforts underway at Roger's Community Garden are supported by UC San Diego's Bioregional Center for Sustainability Research, Planning and Design (aka the BRC). The BRC provides mentorship, resources and skill-building (including collaborative grant writing and business model development) focused on integrating food waste-to-soil processes with renewable energy systems and food production.

The BRC's role at the Roger's Community Garden/ Urban FoodLab, and beyond, is to support collaboration among diverse students, faculty, staff and a wide range of partners on and off campus, to meet the following "Rooted University" objectives:

- (1) <u>Generate new knowledge and know-how useful for improving natural sinks for carbon</u> (e.g., afforestation, establishing food forests on and off the UC San Diego Campus, restoration of soil organic carbon using bio-digested food waste),
- (2) <u>Innovate new methods of producing renewable energy</u> (from solar and microbial action) by recovering energy (and water) from food waste and other organic matter.
- (3) Integrate plant and microbial sources of energy into a replicable, neighborhood-scale bioenergy ecosystem (a microgrid composed of photovoltaics, aquaponics, anaerobic biodigester, community garden, food forest, composting infrastructure, greenhouse, real-time sensors and other digital measuring and monitoring technology).
- (4) Advance the Rooted University Story (a transition narrative) to foster a culture shift that helps us understand and improve: (a) how research universities link knowledge-to- action, science-to-society; (b) the role of the *demos* in scientific and technological agenda-setting/decision-making and investment; (c) the values of diversity, equity and inclusion in a new kind of experiential, civically engaged research and learning; and (d) the cross-fertilizing innovation and excellence that takes place when the arts and humanities, social, physical, life and earth sciences, planning and professional development comingle giving rise to new critically thoughtful frameworks, perspectives and outlooks as well as new approaches to solutions-oriented problem-solving.