

PROGRAM OVERVIEW

The UC Davis College of Agricultural and Environmental Sciences' (CA&ES) Agricultural Sustainability Institute (ASI) provides leadership for research, teaching and extension efforts in sustainable agriculture and food systems at the Davis Campus and throughout the UC system.

ASI provides a hub that links initiatives and education in sustainable agriculture and food systems across all divisions of CA&ES and the University of California, and with other partners across the state. ASI units include:

- UC ANR Sustainable Agriculture Research & Education Program (SAREP)
- Russell Ranch Sustainable Agriculture Facility
- Student Farm

VISION FOR ASI

ASI brings together a statewide network of experts to develop innovative research and produce practical solutions. We work with a wide range of stakeholders, helping people navigate complex issues and identify opportunities for new connections and partnerships.

Building on the strength of UC Davis and with the support of our partners, the Agricultural Sustainability Institute will be a:

- **Convenor:** bringing diverse perspectives together
- **Clearinghouse:** synthesizing, translating and communicating useful information
- **Think Tank:** being the thought leader for interdisciplinary research
- **Action Tank:** linking science with action for sustainable solutions
- **Pioneer:** taking early action on major issues
- **Incubator:** nurturing the next generation of agricultural leaders

ASI TEAM AND ASSOCIATES

- **Director:** Thomas P. Tomich
- **Deputy Director:** Kate Scow
- 19 full and part-time staff from various programs and projects
- 7 postgraduate fellows, 5 graduate student researchers, 3 undergraduate assistantships
- 9 new ASI-affiliated professorships in agroecology, sustainability science, sustainability and society, economics of sustainability, plant disease management/soil microbiology, soil science, pollination ecology, invertebrate community ecology, and sustainable animal systems
- External advisory board of 21 leaders, representing diverse stakeholder interests
- Expanding network of other partners, including UC Davis Students for Sustainable Agriculture, UC Cooperative Extension specialists and farm advisors

ASI & Affiliated Units Contact Information

Agricultural Sustainability Institute

University of California
One Shields Avenue, 143 Robbins Hall
Davis, California 95616
(530) 752-3915 asi@ucdavis.edu

UC Sustainable Agriculture Research & Education Program

University of California
One Shields Ave, DANR Building Hopkins Road
Davis, CA 95616
(530) 752-7556 sarep@ucdavis.edu

UC Davis Student Farm

University of California
One Shields Ave
Davis, CA 95616
(530) 752-7645 mxvanhorn@ucdavis.edu

UC Davis Russell Ranch Sustainable Agriculture Facility

University of California
One Shields Ave.
Davis, CA 95616
(530) 757-3162 kmscow@ucdavis.edu

AGRICULTURAL SUSTAINABILITY INSTITUTE at UCDAVIS

*Science for stewardship
and human well-being*



Kent Britton photo

UCDAVIS
COLLEGE OF AGRICULTURAL
& ENVIRONMENTAL SCIENCES

UNIVERSITY OF CALIFORNIA

AGRICULTURE, RESOURCES AND THE ENVIRONMENT

We help farmers, ranchers, other land managers and communities manage resources and production systems in ways that are profitable, environmentally sound, and socially just. Development of science-based information for these audiences and for policymakers is a key role for ASI. Current initiatives include:

Responding to Climate Change

California's 'Global Warming Solutions Act' (AB32) will require new technologies to reduce greenhouse gas emissions and sequester carbon. Farm fields offer different options for carbon storage in trees, hedgerows, and the soil. Over a longer-time frame, adaptation to higher temperatures, intermittent drought, and climate variation likely will be necessary. Initially, an interdisciplinary research team is evaluating potential mitigation and adaptation to climate change in Yolo County.

Improving Nitrogen Management

ASI has launched a new interdisciplinary initiative to assess the tradeoffs involved in agricultural nitrogen (N) management in California agroecosystems. ASI will collaborate with a diverse set of institutions and stakeholders to assess trends in N usage in California, evaluate priorities for research, policy, and action, and develop tools and information useful to a wide range of stakeholders.



Dennis Bryant photo

FOOD AND SOCIETY

We enhance understanding of the system of growing, distributing, processing and marketing food. Projects are envisioned to address key needs in the areas of human nutrition, food accessibility, energy use, and improved opportunities for all working in the food system. Current initiatives include:

Connecting Farms to Institutions

A growing demand for local, sustainable and organic food has opened up new institutional markets for small- and mid-scale farmers. We are seeking ways for schools and hospitals to buy more food locally. These farm-to-institution programs strengthen relationships between farmers and the community and help children develop healthy eating habits.

Climate Smart Food System

The entire food system—for example, from tilling tomato fields to preparing tomato paste at a cannery to using that product in our kitchens—involves energy use. We are studying energy use throughout the food system, from “farm to fork,” in order to identify the technologies, methods, and consumer food choices that can improve energy efficiency and reduce greenhouse gas emissions.

SUSTAINABILITY BENCHMARKS FOR CALIFORNIA'S FOOD SYSTEM

A crosscutting activity to produce scientifically-validated indicators to benchmark trends in sustainability of California's agriculture and food systems. Creation of this set of indicators will build our capacity to monitor changes, assess risks, and anticipate emerging sustainability challenges and opportunities.

EDUCATION AND LEADERSHIP

Our programs raise awareness and understanding of sustainable agriculture and food systems, not only for students here at UC Davis, but also for children and youth, their teachers, professionals, and the public. Current initiatives include:

Investing in Children and Youth

Our “Kids in the Garden” tours raise awareness of agriculture and the food system with hands-on experiences at our Student Farm. Through direct education, development of resource materials, training for K-12 educators and partnership building, we enhance the agricultural literacy of children and the adults who teach them. We encourage children to eat fresh fruits and vegetables in our schools by training school personnel, offering garden-enhanced nutrition education, and by visits to local farms.

New Undergraduate Major

Students have been learning about sustainable agriculture through internships, field experiments and courses at the Student Farm for over 30 years. Now, ASI and faculty from several departments have joined to develop an interdisciplinary undergraduate major in Sustainable Agriculture and Food Systems. Students will gain the knowledge and skills needed to address the complex issues of agriculture, food and what it means to be “sustainable.”



Damian Parr photo