

Fact sheet: University of California, Davis

UC DAVIS IS A FOOD AND AGRICULTURE RESEARCH POWERHOUSE

Since our founding as “the University Farm” more than a century ago, UC Davis has grown to become the world’s top-ranked agricultural research and teaching institution. Its research strengths now extend from the plant and animal sciences to food and nutrition to agricultural engineering, agricultural economics, environmental sciences, veterinary medicine and public policy. As it continues its commitment to growing California’s agriculture industry, UC Davis also is recognized for its global contributions of new knowledge and technologies.

As the largest UC campus, with more than 3,000 acres specifically devoted to agricultural research and teaching, UC Davis is addressing the pressing food and agricultural challenges that face California, the nation and the world.

- More than 335 faculty are focused on food issues, and more than 6,000 undergraduate and 1,000 graduate students are enrolled in agricultural, environmental and food-related degree programs.
- The UC Davis World Food Center, established in 2013, aims to increase the impact of research — from economic benefits to shaping national and international policy and practice — by convening innovators and leaders from industry, academia, government and nongovernmental organizations to tackle food-related challenges.
- In addition to the World Food Center, UC Davis hosts 26 centers with a significant emphasis on agriculture and food, including the UC Agricultural Issues Center, Agricultural Sustainability Institute, Center for Produce Safety, Foods for Health Institute, Seed Biotechnology Center, Postharvest Technology Center, Plant Breeding Center, Giannini Foundation of Agricultural Economics, Center for Food Animal Health, and Robert Mondavi Institute for Wine and Food Science.

PARTICULAR STRENGTHS:

- UC Davis’ many revolutionary achievements include development of the protective rollover bar for tractors, the first mechanical tomato harvester and accompanying processing tomato variety, disease- and pest-resistant grape rootstocks and irrigation systems that markedly reduce water use in agriculture.
- UC Davis research on precision agriculture technologies — including global positioning, wireless networks and innovative sensors — is making farming more productive, efficient and sustainable.
- At UC Davis’ Russell Ranch Sustainable Agriculture Facility, researchers and students are field-testing innovative agricultural practices to see how they contribute to the long-term viability of the food system.
- UC Davis nutrition research is delving into the heart of the Central Valley and elsewhere to tackle childhood obesity and poor nutrition while also reaching outward with partners like the Bill and Melinda Gates Foundation to develop affordable nutritional supplements that improve the health of infants, children and women in impoverished nations.
- And genome research on important crops such as rice, tomatoes, beans and wheat is identifying genetic markers that will help plant breeders develop crop varieties that are healthier, more productive and better adapted to climate change – thus improving global food security.

STUDENT PERSPECTIVE

- For 37 years, the UC Davis Student Farm has offered hands-on opportunities for students to practice the many aspects of farming and sustainable agriculture, and now includes a market garden that provides the campus and surrounding community with fresh produce.
- UC Davis offers a Sustainable Agriculture and Food Systems major, providing students with a wide range of knowledge and skills needed to serve in food- and farming-related positions in production agriculture, food companies, government agencies and nonprofit organizations.
- And where else can the best and brightest students still take a class in tractor driving, milk a cow, deliver a foal, and harvest and crush wine grapes?

SUSTAINABILITY BEGINS ON CAMPUS

- In April, UC Davis unveiled the largest anaerobic biodigester on a college campus, using technology invented by one of its engineering professors to turn organic waste into renewable energy. The system, now in commercial use, is designed to daily convert 50 tons of organic waste to 12,000 kWh of renewable electricity, diverting 20,000 tons of waste from local landfills each year.
- UC Davis' teaching and research winery is the first winery in the world to receive LEED platinum certification, the highest rating for environmental design and construction awarded by the U.S. Green Building Council. When the adjacent Jess S. Jackson Sustainable Winery Building is fully equipped, the winery will be self-supporting in energy and water use and have the potential to achieve levels of sustainable operation never before seen in a commercial or research winery.
- Through its Climate Action Plan, UC Davis has reduced greenhouse gas emissions below year 2000 levels and expects to reach year 1990 levels by 2020. And aggressive recycling, composting and reuse efforts prevent more than 63 percent of campus waste from entering landfills annually.

IN SERVICE TO CALIFORNIA AND THE WORLD

- Helping to protect California against diseases among livestock and poultry, the UC Davis School of Veterinary Medicine provides veterinary diagnostic services through the California Animal Health and Food Safety laboratory system, which it operates for the California Department of Food and Agriculture with labs in Davis, Turlock, Tulare and San Bernardino.
- The veterinary school also operates the largest animal-disease surveillance network in the nation and participates in federal emergency-response networks designed to provide early warnings of livestock-disease emergencies.
- Cooperative Extension specialists in the College of Agricultural and Environmental Sciences work with growers and ranchers throughout California to improve agricultural production practices, stimulate the economy and steward environmental resources. They also work on health, nutrition and family well-being programs such as 4-H in rural and urban California communities.