

## Fact sheet: University of California, Merced

### CURRICULUM

“**Local Harvest, Global Industry: History of the Production and Consumption of Food**” (history) looks at various ways to understand the complex role of food in society; issues of food production and consumption; and how our relationship to food contributes to the political and social structures that we live with.

“**Earth Resources**” (Earth system sciences) discusses the materials and resources our planet supplies to societies, and the environmental consequences that result from consumption. Students will examine the origin and use of food, water, energy and mineral resources, and consider challenges to management and sustainability.

“**Global and International Public Health**” (public health) provides an overview of the dynamic factors that produce global health challenges, including food production and distribution, demographic changes, conflict, human rights abuses, migration, travel water resources, and market forces and economic factors.

### OPERATIONS

UC Merced Dining runs the campus’s **zero-waste take-out system**, which uses recyclable plastic containers. The OZZI system includes machines on campus where students can return the containers.

Dining is also establishing a **nutritional facts platform** that will be presented to customers via smartphone applications, QR codes on station sneeze guards and on the Internet.

UC Merced has a new Student Health Services Department with an in-house **registered dietitian** who provides nutrition therapy for a variety of nutrition-related health issues including wellness, weight management, sports nutrition, diabetes, heart disease, eating disorders and gastro-intestinal disturbances among other medical issues.

### RESEARCH

Sierra Nevada Research Institute Director and engineering Professor **Roger Bales** is studying the snowpack, which also serves as California’s water tower. Given the severe drought, accurately predicting water availability is crucial information for state policymakers and Central Valley farmers. A recent report Bales coauthored suggested runoff from the Sierra Nevada could be enhanced by thinning forests to historical conditions.

UC Merced CITRIS Director **Joshua Viers** focuses on environmental sustainability including direct links to agricultural production and agroecology. For example, he initiated the “vinecology” scientific movement that focuses on improving biodiversity conservation in vineyards of the New World Mediterranean (California, Chile, South Africa, Australia).

Engineering Professor **Thomas Harmon** is studying climate change in the San Joaquin River basin, and how that will impact hydrology and water resources timing and storage.

Public Health Professor **A. Susana Ramirez** and her students this summer will interview with customers at a mobile farmer’s market that travels to different parts of Merced County to better understand food access issues facing Merced County residents, and the relationship between access to healthy foods and obesity.

School of Engineering Dean **Dan Hirleman’s** current research focuses on food safety via rapid detection of foodborne pathogens.

A grant from Wells Fargo supports **engineering research by students in water, energy and food**, which is presented and judged at the annual Innovate to Grow event.

#### **POLICY**

UC Merced is working to form a **Farmers Consortium** to promote the campus's interest in doing business with local farmers, in addition to direct communication with local farms.

Professor **Roger Bales** has advocated for a real-time intelligent water information system for the entire Sierra Nevada. It would allow researchers to accurately map the entire Sierra Nevada water cycle, including snowpack and daily snowmelt, temperature, relative humidity, precipitation falling as rain or snow, solar radiation, soil moisture, evaporation and water use by vegetation, groundwater and runoff.

#### **SERVICE**

UC Merced's 400-square-foot **community garden** was developed on campus in spring 2014 by Engineers for a Sustainable World. Fruit and vegetables harvested will be donated to local food banks. The site will eventually be used for education and outreach.

The campus's Early Childhood Education Center serves as a delivery point for Rancho Piccolo, a **community-supported agriculture**. Many faculty and staff are members and are able to get local, fresh fruit and vegetables every week.

In a partnership with the USDA and the Merced Food Bank, UC Merced offers a monthly **food assistance program** to students, faculty and staff members who have a need for additional assistance.