

Fostering food innovations: Resources and experts

University of California students, faculty and staff are addressing some of the toughest challenges in food and agriculture. Here are examples and resources from UC and its Global Food Initiative.

FOSTERING STUDENT FELLOWSHIPS

The UC President's Global Food Initiative Student Fellowship Program has funded projects for nearly 100 students in the first two years. The fellows – undergraduate and graduate students representing all 10 UC campuses, UC ANR and Berkeley Lab – are working on projects ranging from food access to food policy to reducing food waste. GFI also has expanded a fellowship program with the U.S. Agency for International Development that addresses pressing agricultural development issues around the globe, with UC graduate student fellows spending two to six months helping partner organizations solve scientific, technological, organizational and business challenges.

More information:

www.ucop.edu/global-food-initiative/student-involvement

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NURTURING STUDENT INNOVATION

GFI has championed student innovation contests like Big Ideas@Berkeley's new Food Systems category, CITRIS Mobile App Challenge's food-related projects and the Apps for Ag Hackathon at UC Davis and UC ANR. These contests address difficult problems with social impact, such as increasing access to food and clean water for crops.

More information:

<http://bigideas.berkeley.edu>, <http://mobileappchallenge.org>, <http://universityofcalifornia.edu/news/hackers-compete-best-ag-app>

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MAKING A GLOBAL IMPACT

A GFI subcommittee is compiling overviews of global food-related work by UC researchers. UC ANR alone has collaborators in more than 130 countries working to help solve agricultural problems. UC Blum Centers are coming together as a federation with support from UCOP to enhance teaching and research collaboration on global poverty, economic and social justice, and democracy, including convening a global food summit.

More information:

http://ucanr.edu/sites/news/UC_ANR_academics_and_the_world, <http://universityofcalifornia.edu/press-room/uc-s-blum-federation-tackle-global-poverty>, <http://blumcenter.uci.edu/gfs>

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SHARING SUSTAINABLE AG RESOURCES

A GFI subcommittee has compiled summaries of key sustainable agriculture and food system practices and strategies, highlighting UC contributions and resources. The online catalogue includes a directory of UC programs that are addressing sustainable agriculture and food systems issues, and a knowledge network map documenting communication networks among people working in sustainable agriculture and food systems within and beyond UC.

More information:

<http://asi.ucdavis.edu>; <http://casfs.ucsc.edu>

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IMPROVING CROPS

UC Davis and UC Riverside researchers have developed flood-tolerant rice, which millions of subsistence farmers in South Asia have now grown. UC Davis and UC Riverside researchers also are working to develop drought-tolerant crops. Meanwhile, UC ANR's pioneering Integrated Pest Management program has brought research, education and training to growers and pest management professionals since 1979. Through UC's leadership in the IPM approach, California growers can keep their eyes on the long-term benefits of a healthy environment without sacrificing production.

More information:

<http://universityofcalifornia.edu/news/qa-pam-ronald-uc-davis-plant-geneticist>, <http://promise.ucr.edu/profile-sustainability-bailey-serres.html>, <http://promise.ucr.edu/profile-sustainability-cutler.html>, <http://ipm.ucanr.edu>

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ENSURING SUSTAINABLE FISHERIES

How do we fix overexploited fisheries and capitalize on the potential for aquaculture to play a key role in future food production – and do it all sustainably? A GFI subcommittee tackled those topics at a Food From the Sea Summit that focused on the role of fisheries and aquaculture in global food systems. For example, Fish Forever, a partnership of the Environmental Defense Fund, Rare and UC Santa Barbara, works to empower coastal communities in developing tropical countries to restore their small-scale fisheries.

More information:

<http://universityofcalifornia.edu/news/food-sea>, www.fishforever.org

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PRACTICING CLIMATE-SMART AGRICULTURE

How do we ensure food security in a changing climate? A GFI subcommittee is working to mine, synthesize and analyze existing data on the impact of changing climate conditions on California agriculture productivity and sustainability. Also, UC's California Agriculture journal dedicated an edition to climate-smart ag. UC Davis is a founding member of the Global Alliance for Climate-Smart Agriculture, and has a climate-smart collaboration with Wageningen University in the Netherlands.

More information:

<http://esd.lbl.gov/projects/predictive-agriculture-initiative>, <http://californiaagriculture.ucanr.edu/archive.cfm?volume=70>, <http://universityofcalifornia.edu/news/uc-davis-and-europes-leading-agricultural-university-join-forces-food>

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RELATED REPORTS

Read more about best practices, case studies and lessons learned in GFI working group reports on experiential learning and leveraging research for food and agriculture policy.

www.ucop.edu/global-food-initiative/best-practices/index.html