

ANR competitive grants fund 15 projects

ANR's 2013 competitive grants program will fund 15 projects, for a total of approximately \$3.5 million over 5 years. The awards range from \$5,500 to nearly \$350,000. Last year ANR funded 16 projects with \$3.67 million over 5 years.

The 15 projects, chosen from 65 full proposals, are as follows:

- A Peach and Nectarine Orchard for the Future: An Experiment to Integrate, Test, Train, and Transfer Pomological Technology, **Kevin Day**, principal investigator
- Baseline Assessment for Bed Bug Impact and Control, and Demonstration of Bed Bug IPM for Multiple-occupancy Housing Situations in California, **Dong-Hwan Choe**, principal investigator
- Enhancing Conservation Practices and Supporting Emerging Markets for Niche Hog Production in the SF Bay Area and Northern San Joaquin Valley, **Theresa Becchetti**, principal investigator
- Evaluating and Extending the Use of Small, Multi-rotor Unmanned Aerial Vehicles (UAV's) as a Crop Monitoring Tool, **David Doll**, principal investigator
- Groundwater Banking: An Agricultural Systems Approach for Water Security in California, **Helen Dahlke**, principal investigator
- Improving Irrigation and Nitrogen Management of Coastal Vegetable and Berry Crop, **Michael Cahn**, principal investigator
- Integrating Urban Agriculture with Youth Development through Community Tours, **Gail Feenstra**, principal investigator
- Intervention of an Emerging Zoonotic Disease: Urban Crow Roosts and the Introduction, Amplification, and Overwinter Persistence of West Nile Virus, **Andrea Townsend**, principal investigator
- Managing California Rangelands for Multiple Ecosystem Services: Understanding Tradeoffs Among Production and Conservation-based Goals, **Kenneth Tate**, principal investigator
- Mapping Sustainable Agriculture Knowledge Networks in California, **Mark Lubell**, principal investigator
- Measuring the Impact of Local Food Marketing on the Local Economy, **Shermain Hardesty**, principal investigator
- Mitigating Zoonotic and Animal Disease Risks in 4-H Animal Science Projects through Coordinated Education and Research, **Martin Smith**, principal investigator
- Quantifying Ecological Effects of Land Use and Climate Change Using Historical Collections, **Kipling Will**, principal investigator
- Subsurface Drip Irrigation for Alfalfa to Improve WUE and Protect Water Quality, **Daniel Putnam**, principal investigator
- Sustainable Production of Agronomic Crops in California - Agronomy Research and Information Center, **Daniel Putnam**, principal investigator

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A list of the funded projects with project summaries, collaborators, funding amounts and funding sources is posted at <http://ucanr.edu/2013cg>.

The purpose of ANR's competitive grants program is to invest in research, education and outreach projects that support high-priority issues that are consistent with the Strategic Vision; encourage collaboration among academics; support short-term, high-impact projects; strengthen the research-extension network; and contribute policy-relevant outcomes that address significant agricultural, economic, environmental and social issues in California. ANR is committed to providing as much support as feasible to address high-priority issues.

Employment Opportunities

Vice Provost

ANR is seeking a vice provost for county-based Cooperative Extension to guide all county-based academic programs. The incumbent will ensure coordinated administration and coordinated program planning, development and delivery to fulfill Divisionwide priorities and local needs. This leader of county-based Cooperative Extension will integrate planning and delivery of programs at the statewide level and represent ANR regionally and nationally as delegated.

The vice provost will provide leadership in the selection, training, disciplinary actions, merits, promotions and evaluation processes of academic personnel and will chair the ANR Peer Review Committee. The directors of the county-based UCCE programs report to this position, as does the executive director, ANR Academic Personnel.

Based in the ANR building in Davis, the vice provost will serve on the ANR Program Council and report to the associate vice president.

A minimum of a Ph.D. or other terminal degree is required in disciplines such as agriculture, natural resources or related human resources programs. A minimum of five years of experience managing multidisciplinary academic programs and the ability to analyze and interpret UC and Division policies and procedures are desirable. Experience in UC Cooperative Extension or a similar UC structure is desirable. Skills to communicate effectively in a second language are desirable. Demonstrated organizational and management skills with abilities to facilitate and conduct group process are required. Ability to supervise and evaluate academics and staff is required. Excellent written, oral and interpersonal communication skills are required.

To ensure full consideration, application packets must be received by March 31 (open until filled). For the complete position description, visit http://ucanr.edu/Jobs/Jobs_990/.

UCCE viticulture specialist

ANR is seeking an assistant UCCE specialist to focus on winegrape production. The position is based in the Department of Viticulture and Enology at UC Davis and located at the UC Davis Oakville Station.

The specialist will coordinate applied research related to winegrape production, and conduct and publish the results of applied research or other creative activities designed to resolve management and production problems. The specialist will also emphasize environmentally sound, integrated approaches to grape growing.

In this position, the incumbent is expected to provide leadership as a liaison between campus-based researchers, Cooperative Extension academics, and clientele groups such as growers, county advisors, pest control advisers and other agricultural industry professionals. This will include providing information to clientele through print publications, web-based resources and in-person presentations, and serving as a resource for other CE academics.

Specific areas of research may include vineyard mechanization, nutrient status and utilization, water use minimization and reclaimed water use, water status sensing and sensor development.

A Ph.D. in viticulture or a closely allied discipline is required and the successful candidate must have published research in peer-reviewed journals.

The position will remain open until filled, but to ensure consideration, applications should be received by March 24. For the complete position description, visit http://ucanr.edu/Jobs/Jobs_990/.

Kings, Fresno and Tulare counties: 4-H youth development advisor

ANR is seeking a UCCE area 4-H Youth Development (YD) advisor. The advisor will conduct a multi-county-based extension, education and applied research program to build the capacity of youth and adults to ensure successful growth of youth

development programs in Kings, Fresno and Tulare counties. The position is based in Hanford.

A minimum of a master's degree is required, though other advanced degrees are encouraged. Excellent written, oral, presentation, and interpersonal communication skills are required. Extension experience, especially in youth development programming and volunteer education, is desirable.

To view the full job description for position AP#13-15 and application instructions, visit http://ucanr.edu/Jobs/Jobs_990/. Position closes March 21.

San Joaquin and Stanislaus counties: 4-H youth development advisor

ANR is seeking a UCCE 4-H Youth Development academic advisor for San Joaquin and Stanislaus counties. This position will commit 50 percent time serving San Joaquin County and 50 percent time serving Stanislaus County.

A minimum of a master's degree is required, though other advanced degrees are encouraged, in disciplines such as youth or human development, child development education, or a closely related field. Excellent written, oral and interpersonal communication skills are required. Extension experience, especially in grant writing and resource development and working with diverse groups of stakeholders is desirable. Expertise in non-formal education, education development, science literacy, youth program development, volunteer development, program design and research are highly desirable. Skills to communicate effectively in a second language are desirable.

To view the full job description for position AP#13-24, visit http://ucanr.edu/Jobs/Jobs_990/?jobnum=563 or contact Julie Woodworth at (530) 750-1282 or ANRacademicsearch@ucop.edu. The position closes March 21.

Desert REC calls for proposals

The Desert Research & Extension Center (DREC) is soliciting proposals for new and continuing research and demonstration projects for the period July 1, 2014, through June 30, 2015. Located on 255 acres in the Imperial Valley, DREC's primary research areas are desert agriculture, bio-energy crops, vegetable crops, field crops, alfalfa breeding, livestock environmental and feedlot management, irrigation and drainage management, plant nutrition and pest management.

The center has 5 acres of organic ground available for organic research.

The center provides labor, equipment, research facilities, and technical and management support to UC academics and personnel from cooperating non-UC organizations, such as USDA. Approximately 12,500 hours of labor will be awarded to support approved projects.

The center's Research Advisory Committee will evaluate the proposed research for scientific merit and regional need. Main topics of research interest at the center include bio-energy, variety development; weed, insect, and disease control; irrigation management; plant nutrition; and agriculture and wildlife interactions. Approved projects will be eligible for center-provided support (land, labor, technical assistance, equipment and facilities). Researchers will be notified of project approval by June 30, 2014.

Submit forms electronically, via the "Universal Review System" accessed through your UC ANR Portal by May 9, 2014.

Follow these simple steps:

1. Log into your portal, <https://my.ucanr.edu>.
2. Click on "Login to Universal Review System."
3. Select "DESERT REC CALL FOR RESEARCH PROPOSALS 2014-2015" on the "active" list.

Follow the link below for further instructions on filling out the necessary research project forms: http://ucanr.edu/sites/rec/Research_Proposal_Forms

For help with submitting your proposal, contact Debra Driskill, dldriskill@ucanr.edu. For questions regarding research activity, contact Fernando Miramontes, center superintendent, at fmiramontes@ucanr.edu.

Names in the News

Ritchie to lead Nutrition Policy Institute

Lorrene Ritchie has been named the inaugural director of the Nutrition Policy Institute (NPI) and a UC Cooperative Extension specialist, effective Feb. 18.

NPI is a new institute within UC ANR, with the mission of improving nutrition and reducing obesity, hunger and chronic disease risk in children and their families in diverse settings. As NPI director, Ritchie will provide statewide nutrition policy leadership for ANR's research and education activities and will work in synergy with research and outreach efforts being conducted in Davis and Berkeley campus departments and colleges and throughout the UC system.

"Ritchie brings to this new position her vast experience in applying research to policy and working with UC Cooperative Extension advisors and specialists, UC faculty and others involved in nutrition-related research and education," said VP Barbara Allen-Diaz. "With her years of applied research being recognized for having a high evaluation standard and policy implications at state and national levels, she is highly respected in the nutrition field. She has testified before state and federal legislatures with the ability to translate complex issues into realistic and necessary solutions for decision makers."

Since 2005, Ritchie has served as associate researcher and director of research at the Dr. Robert C. and Veronica Atkins Center for Weight and Health at UC Berkeley. She provided leadership and coordinated research efforts at the center, collaborating with an extensive network of multidisciplinary researchers, program delivery experts and policy advocates to support evidence-based policy and practice initiatives in nutrition and obesity prevention. As a principal investigator, she directed research projects funded at approximately \$4 million and supervised many concurrent research project teams.

From 2000 to 2005, Ritchie worked as assistant researcher and project director for the center, preparing grant proposals and conducting research. She prepared more than 50 grant proposals to federal and private funding sources at the center. She has held teaching positions including adjunct assistant professor for two years at Samuel Merritt College's Intercollegiate Nursing Program, and lecturer for five years at UC Berkeley in the Department of Nutritional Sciences and Toxicology.

Ritchie earned a B.S. in chemistry from San Jose State University and an M.S. and Ph.D. in nutritional sciences, both from UC Berkeley. She is also a registered dietitian.

Ritchie is based in Oakland, and be reached at (510) 987-0523 and lorrene.ritchie@ucop.edu.



Lorrene Ritchie

Lightle named orchard systems advisor

Dani Lightle joined UCCE on Feb. 10 as an area orchard systems advisor for Glenn, Butte and Tehama counties.

Lightle earned a Ph.D. in entomology from Oregon State University. Her research focused on developing a sustainable management plan for an aphid virus-vector in red raspberry through incorporation of varying aspects of the raspberry cropping system, including aphid and natural enemy phenology, aphid interactions with plant viruses, and host plant resistance. She also earned a B.A. in biology from The College of Wooster in Ohio.



Dani Lightle

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Names in the News

Prior to joining UCCE, Lightle worked as a postdoctoral scholar for the Oregon Wine Research Institute, where she researched genomic variation and insect transmission of Grapevine Red Blotch Disease. From 2009 to 2013, she worked as a graduate research assistant at Oregon State University where she electronically monitored feeding behavior of aphids on resistant and susceptible cultivars to develop disease management approaches for raspberry growers. From 2008 to 2009, she was a biological technician for USDA-ARS Horticultural Crops Research Laboratory where she researched the effects of sugar on the physiology, olfactory preferences, and reproductive output of a parasitic wasp. Prior to 2008, Lightle worked as a technician in entomology and plant pathology labs at The Ohio State University, where she studied movement of fungal pathogens and ecological effects of the invasive emerald ash borer.

Lightle is based in Orland and can be reached at dmlightle@ucanr.edu and (530) 865-1153.

Martin to lead IPM communications

Tunyalee Martin is the UC IPM associate director for communications, effective Jan. 17. She leads communications activities and works with ANR experts to help them extend their IPM research and information. She succeeds Joyce Strand, who retired in January. Before accepting her current position, Martin had been UC IPM's content development supervisor since 2008, managing the team of writers and editors who develop the content for print products and the website. She has played a role in publishing *Field Fumigation*, *IPM for Rice*, the *Pest Management Guidelines* and UC IPM's annual reports, and developing content for <http://ipm.ucanr.edu>.



Tunyalee Martin

Prior to joining ANR, Martin worked for Multicampus Research Programs in UC Office of the President, worked for The Nature Conservancy's Invasive Species Team, and was a research fellow studying the physiological control of insect molting at San Francisco State University. She also assisted the editors at the *Journal of the American Mosquito Control Association*, researched IPM practices for greenhouse flower pests, and was a scientific aide for CDFA's Biological Control Program.

Martin earned Ph.D., M.S. and B.S. degrees in entomology, all from UC Davis. She is located in the ANR building in Davis and can be reached at (530) 750-1243 and tlamartin@ucanr.edu.

Harmsworth joins BOC-D

Sally Harmsworth joined the ANR Business Operations Center in Davis as the associate director of Business Operations on Feb. 18. She will be leading BOC-D, which provides business and financial services to the ANR statewide programs and other support units based in Davis.

Before joining ANR, Harmsworth worked on the UC Davis campus for 12 years, most recently as chief administrative



Sally Harmsworth

officer of the School of Medicine's Department of Medical Microbiology & Immunology. From 2002 to 2009, she worked in the College of Engineering Department of Medical Microbiology, initially as their contracts and grants analyst, then as department manager in 2007.

Harmsworth is located in the ANR Second Street building in Davis and can be reached at (530) 750-1372 and sharmsworth@ucanr.edu.

Hedgerow and walnut projects win IPM awards

Four ANR members have received the California Department of Pesticide Regulation's 2013 Integrated Pest Management Innovator Award, which is the department's highest environmental honor. UC Cooperative Extension, UC Berkeley, Yolo County Resource Conservation District and Hedgerow Farms and the California Walnut Board's Production Research Advisory Council Entomology Working Group received the award Jan. 24 at a ceremony in Sacramento.



Rachael Long accepts the award from Brian Leahy, with John Anderson of Hedgerow Farms and Jeanette Wyrnski of Yolo County Resource Conservation District.

For the last 20 years, Rachael Long, UCCE advisor in Yolo County, and Claire Kremen, professor in the Department of Environmental Science, Policy and Management at UC Berkeley, have partnered with Yolo County Resource Conservation District and Hedgerow Farms to study the benefits of hedgerows and promote those benefits to landowners. Studies conducted by the partnership provide a scientific and economic basis for recommending hedgerows as a component of modern agricultural IPM systems.

"We're all really excited about this award because it shows that CA-DPR values hedgerows as a tool for IPM on farms," said Long. "Hopefully more growers will adopt this practice because hedgerows also enhance biodiversity on farmlands without taking land out of production."

Hedgerows provide food and habitat for natural enemies of arthropod pests and for pollinators, replace weedy field edges, which can harbor crop diseases, and outcompete invasive weeds, effectively making crop ecosystems less favorable for pests and potentially reducing the need for pesticides. In addition, hedgerows serve as windbreaks to reduce pesticide drift and filter sediment and pesticides from field runoff.

According to USDA Natural Resources Conservation Service statistics, 202 miles of hedgerows were planted nationwide from 2010 to 2013, of which 49 miles (25 percent) were

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Names in the News



From left, Carolyn Pickel, emeritus UCCE area advisor for Sacramento Valley, Joe Grant, Hal Crain and Dennis Balint, California Walnut Board executive director.

planted in California. "The partnership has demonstrated outstanding leadership and has positively affected the promotion and adoption of hedgerows both in California and nationally," said Brian Leahy, director of CA-DPR.

The California Walnut Board's Production Research

Advisory Council (PRAC) Entomology Working Group is part of a comprehensive, long-term effort to continually improve walnut production practices.

"The walnut industry's long-time leadership in IPM innovation and clear demonstration of results make the California Walnut Board's PRAC Entomology Working Group worthy of this recognition," said Leahy.

"The successful use of biological methods to control the codling moth is a major area of progress and achievement for the PRAC," said Joe Grant, UCCE advisor in San Joaquin County and co-chair of the working group.

As a result of the working group's efforts, growers have used pheromone mating disruption to reduce codling moth populations to the point where supplemental insecticide applications have been eliminated, in many instances, within two to four sequential seasons of use.

"The innovative structure of the group has led to tangible benefits for walnut growers that could only be accomplished by combining our collective time, talents and resources for the benefit of the broader industry," said Hal Crain, owner of Crain Ranch and co-chair of the working group.

Hanson wins weed society awards

Brad Hanson, UCCE specialist in the Department of Plant Science at UC Davis, has received national and statewide recognition by his peers. He was named Outstanding Early Career Weed Scientist by the Weed Science Society of America. The award is reserved for scientists who have held their terminal degree no more than 10 years and have demonstrated originality and creativity, have made a notable contribution to weed science and have potential for continued excellence. Hanson was presented the award on Feb. 3 in Vancouver, Canada, during the organization's annual meeting.



Brad Hanson

"Dr. Brad Hanson's research and outreach program has made significant contributions to finding and transferring technically and economically viable alternatives to methyl bromide soil fumigation, developing management strategies for herbicide-resistant weeds, and evaluating effective

weed management options in tree and vine crops," said Joe DiTomaso, UCCE specialist in the Department of Plant Science at UC Davis, who nominated Hanson. "He has assumed a national leadership role in his research that is both highly multi-disciplinary and critical for the economic viability of several high-value commodities in California."

Hanson also received the California Weed Science Society's 2014 Award of Excellence at the society's annual conference in January in Monterey. The award is given annually to recognize a long track record of accomplishments in weed science or management.

George honored by range managers



Mel George

Mel George, UCCE specialist emeritus in the Department of Plant Sciences at UC Davis, received the 2014 Chapline Land Stewardship Award at the International Society for Range Management (SRM) annual meeting in Orlando on Feb. 10.

During his 37-year career, George significantly improved extension education programs and science-based technical advice to ranchers, public agencies, and industry associations.

"At UC Davis, Mel developed numerous range-related outreach programs in grazing management," said Doug Johnson, who nominated George for the honor. "A unique water quality research and education short course for rangeland owners that he developed assisted more than 1,000 ranchers to develop and implement water quality plans on more than 2 million acres of privately owned rangeland. He has received several prestigious awards for his work."

George, an active member of SRM for 45 years, served as the CalPac Section president for two terms and has served on several SRM committees.

"Mel was extremely effective at establishing numerous collaborative programs with many farm advisors, land managers, conservation groups and ranchers throughout the state," Johnson said.

George was director of the California Rangeland Research and Information Center, chair of ANR's Rangeland Watershed Program and served on several advisory committees. "In these capacities, Mel influenced the management and wise stewardship of millions of acres of rangeland," Johnson said.

Recognized nationally and internationally, George has conducted rangeland education programs in Morocco, Tunisia, New Zealand, Ireland, China and Albania. He developed a web-based grazing management course and a virtual exploration of the world's rangelands that have been used by students in the U.S., Canada, Mongolia, Afghanistan and Yemen.

Names in the News

Hammock wins drug research award

Bruce Hammock, professor in the Department of Entomology and Nematology at UC Davis and the UC Davis Comprehensive Cancer Center, will receive the biennial Bernard B. Brodie Award in Drug Metabolism, sponsored by American Society for Pharmacology and Experimental Therapeutics (ASPET).



Bruce Hammock

The award consists of a \$2,000 honorarium and a commemorative medal. His work will be published in the journal *Drug Metabolism and Disposition*.

The award recognizes Hammock's outstanding original research contributions to the understanding of human drug metabolism and transport and the continued impact of his research in the area of drug discovery and development.

In selecting Hammock, ASPET acknowledged Hammock's collaborative studies in drug metabolism and metabolomics. The society also noted his tradition of sharing reagents for research to enable investigators in both the private and public sectors to make substantial advances for the development of potentially useful therapeutic compounds to treat stroke, atherosclerosis, heart failure, renal failure, inflammation and neuropathic pain.

Hammock directs the campuswide Superfund Research Program, National Institutes of Health Biotechnology Training Program, and the National Institute of Environmental Health Sciences (NIEHS) Combined Analytical Laboratory.

He will receive the award April 28 during the joint annual meeting of the ASPET and the Chinese Pharmacological Society, set for April 26–30 in San Diego.

Farm Smart welcomes its 100,000th visitor

UC Desert Research and Extension Center's Farm Smart welcomed its 100,000th visitor on Feb. 13. Larry Mallory of Burley, Idaho, was named the 100,000th visitor and his wife, Sheryll, the 100,001st. The couple are "snowbirds," spending their winters in the mild California desert while their home is buried in snow.

The guests of honor were surprised with confetti, balloons, a commemorative bag and a refund of their admission fee. At the event, Desert REC also celebrated the many contributions of staff and volunteers to the educational outreach program.

Farm Smart was started by Nancy Caywood-Robertson, Desert REC educational outreach coordinator who retired in June. It was initially designed for school children, but it blossomed into a destination for school field trips and winter visitors. More than 8,000 take part in the program every year. In January Sam Urie became the Farm Smart manager. See more photos at www.facebook.com/UCfarmsmart or www.ucanr.edu/sites/desertresearch/Farm_Smart.



Nancy Caywood-Robertson celebrates Farm Smart's 100,000th visitor.



Farm Smart's 100,000th visitor Larry Mallory and his wife Sheryll.

'Plants and the Changing Environment' symposium set for June

Scientists from 25 countries will gather on the Monterey Peninsula to discuss "Plants and the Changing Environment" in June. The 9th Air Pollution and Global Change Symposium will be held June 8-12 at the Asilomar Conference Center in Pacific Grove.

The goal of the series is to consider interactions of air pollution and global change and their impacts on vegetation.

"The symposium is unique in dealing with effects at all levels from molecular and cellular mechanisms, whole plant and crop impacts, all the way up to models of ecosystem and regional impacts," said David A. Grantz, UCCE specialist in the Department of Botany & Plant Sciences at UC Riverside.

The symposia are held every few years in different countries, the last in Groningen, The Netherlands in 2011. The event in California is being organized by Grantz and Kent O. Burkey, USDA-ARS plant physiologist and North Carolina State University professor of crop science and botany.

UC scientists and students engaged in research on the interactions of plant function, metabolism and communities with environmental pollution and global change are encouraged to attend.

"This is an important opportunity for U.S. scientists because the last time this symposium was held in the U.S. was in 1992," said Grantz. "This is a great chance to catch up on the physiological ecology and modeling efforts underway in Europe and Asia."

The confirmed keynote speakers include

- Dennis Baldocchi, UC Berkeley
- Lisa Emberson, Stockholm Environment Institute and University of York, U.K.
- Lisa Ainsworth, USDA-ARS and University of Illinois
- Koike Takayoshi, Hokkaido University, Japan
- Harry Harmens, Centre for Ecology and Hydrology, Environment Centre Wales, U.K.
- Allen Lefohn, ASL and Associates, USA
- Atul Jain, University of Illinois
- Rainer Matyssek, Technische Universitat Munchen, Germany

The deadline for abstracts, registration and lodging is March 31. The agenda, registration and housing information can be found at WWW.APGC.EU.

National eXtension to meet in Sacramento in March

The National eXtension Conference and the National Extension Directors and Administrators will meet March 24-27 at the Hyatt Regency in Sacramento. This will be the first time these two meetings are joined and is intended to enhance Cooperative Extension professional development, networking and interaction.

These national eXtension conferences provide face-to-face and virtual professional development to Cooperative Extension professionals on working differently, technology use and adaptation, and content development for new audiences and new technologies.

Registration for eXtension participants is \$350 until March 7.

To register or to find more information about the conferences, visit <http://muconf.missouri.edu/NeXC-NEDA2014/>

Bioeconomy Conference to be held March 26-27 at UC Berkeley

The 2014 Bioeconomy Conference will be held March 26 and 27 at the UC Berkeley Alumni House and highlight economic and policy issues related to biofuel and various biotechnologies in agriculture.

Sessions will address biofuel policies and their implications, in particular the future of biofuel policies, the economics of alternative forms of biofuel, and the role of biofuel within a more diverse renewable energy portfolio. Speakers will emphasize the impacts of biofuel and biofuel policies on the environment and on the poor and the conference will feature sessions on the political economy of biofuel policies and biofuel in Brazil.

In the area of biotechnology, speakers will present results on the economic and environmental impacts of biotechnology and biofuel regulation as well as results on the political economy of biotechnology. They will emphasize the adoption and future of biofuel and biotechnology in Africa and the impacts of technology transfer and intellectual-technology arrangements on the dynamics of both technologies.

The two-day conference is sponsored by the College of Natural Resources, Department of Agricultural and Resource Economics and Energy Biosciences Institute at UC Berkeley and the Giannini Foundation.

To register or for more information, visit <http://www.berkeleybioeconomy.com>.

UCCE celebrates 100th anniversary at WAE

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UC Cooperative Extension

A Celebration of Science and Service

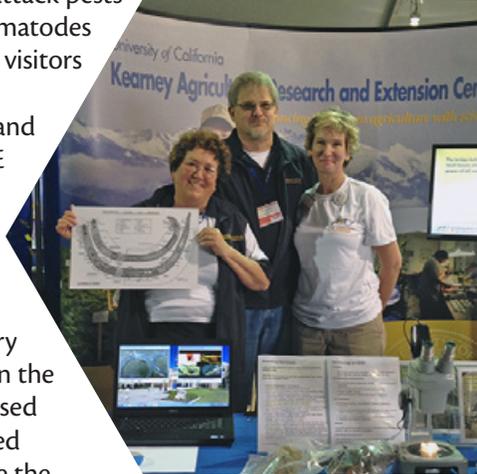
To mark the 100th anniversary of UC Cooperative Extension, ANR greeted thousands of visitors from all over the world with educational activities at the World Ag Expo, Feb. 11-13, in Tulare.

At the Lindcove REC booth, visitors peered through microscopes to watch beneficial insects attack pests on oranges. They examined root knot nematodes under Kearney REC's microscopes. Other visitors could spin the UCCE Tulare County prize wheel while their friends viewed a video and photos depicting a retrospective of UCCE people and projects in the county.

ANR hosted a speakers series with a different theme for each day: "The good, the bad and the ugly: Species in California," "Wholesome food for a hungry planet" and "Sustainable is attainable." On the second day, VP Barbara Allen-Diaz discussed "Building on UC ANR research to help feed the world." Between speakers, guests rode the smoothie bike and chatted with UCCE nutrition educators, who were dressed in vegetable costumes.

To see the list of speakers and their topics, visit <http://ucanr.edu/?blogpost=12421&blogasset=60503>.

"It was an amazing event," Allen-Diaz said later, while thanking ANR staff for contributing to the successful World Ag Expo exhibits.



Lettuce farmers from Salinas enjoyed fruit smoothies with the UCCE Tulare County nutrition educators.

En route to the event, drivers may have seen ANR's billboards touting the UCCE centennial.



In memoriam

Kenneth R. Farrell

Kenneth R. Farrell, former University of California vice president for Agriculture and Natural Resources, died following a brief illness in Walnut Creek on Jan. 24. He was 87.

Farrell was born Jan. 17, 1927, in South Mountain, Ontario, Canada, and grew up on a small farm. After graduating from high school, he became a high school teacher in a one-room school in Ontario, before enrolling in college at University of Toronto-Ontario Agricultural College at Guelph, where he earned a bachelor's degree in agricultural economics. He went on to earn his master's degree and Ph.D., both in agricultural economics, from Iowa State University.

In 1957, Farrell joined UC Cooperative Extension, working on agricultural marketing and agricultural policy at UC Berkeley. He also undertook a variety of administrative assignments focused on strengthening Cooperative Extension. His work was punctuated in the following decade by a year at the University of Naples (Italy) on a Fulbright Fellowship and several short-term assignments with the U.S. Department of Agriculture.

He left UC in 1971 to head the USDA Economic Research Service in Washington, D.C. In 1981, he left federal service to found the National Center for Food and Agricultural Policy at Resources for the Future in Washington, D.C. Funded by the Kellogg, Ford and Rockefeller Foundations, the center was a first-of-its-kind independent, nonpartisan group devoted to the analysis of national agricultural and natural resource policy issues.

In his role as a UC vice president from 1986 to 1995, Farrell oversaw the Agricultural Experiment Station, located on the Berkeley, Davis and Riverside campuses, and Cooperative Extension, located statewide in California counties.

"Ken Farrell was a person of rare integrity and courage," said Henry Vaux, Jr., who served as associate vice president to Farrell. "His successful efforts to decentralize Cooperative Extension and to make the research and outreach activities of the Division of Agriculture and Natural Resources more seamless benefitted California's citizens and its agricultural sector enormously. His leadership proved crucial in positioning the Division to remain effective in the subsequent era of declining resources."



Kenneth Farrell

Over the course of his career he authored more than 100 professional papers and articles on his work in agricultural policy, natural resources, international trade and marketing. He received many honors including election as president of the Agricultural and Applied Economics Association in 1977 and fellow in 1980.

"Ken was a leader among his peers. He always stood his ground," said Gordon Rausser, Robert Gordon Sproul Distinguished Professor of Agricultural and Resource Economics, and former dean of the College of Natural Resources at UC Berkeley.

In retirement, Farrell consulted for the U.S. Department of Agriculture and the World Bank, which took him to Armenia, Georgia, and Azerbaijan. He organized "People to People" trips to study agriculture in Cuba, Peru and Chile, Australia and New Zealand, and twice to China.

Farrell's wife of over 60 years, Mary, died in 2013. He is survived by six children, eight grandchildren and three great-grandchildren.

A memorial for Farrell will be held at Creekside Clubhouse, 1010 Stanley Dollar Drive, Rossmoor, Walnut Creek at 3 p.m. on Saturday, March 8. In lieu of flowers the family asks that donations be made to Heifer International (<http://www.heifer.org>), a charity focused on ending hunger and poverty and promoting food security, or to a charity of choice.

Birgit Hempel

Birgit Marie Hempel, former administrative assistant at the Small Farm Center, passed away on Feb. 9. She was 91.

Born in Skaelskor, Denmark, Hempel volunteered with California 4-H for 46 years.

In 1968, Hempel and family moved to Acampo, Calif., where they lived on a small ranch and she actively engaged with the San Joaquin County 4-H Council and the California 4-H Leadership Council. She served in virtually every leadership position in both organizations and served as statewide president of the California 4-H Leadership Council from 1983 to 1987. She continued her 4-H volunteer activities while working full-time for 15 years at the Small Farm Center in Davis before retiring in 2008.

She enjoyed travelling around the country to attend 4-H meetings and conferences, visiting her family and friends, seeing new places and meeting new people.

Hempel's husband of 44 years, Soren, preceded her in death in 1987. She is survived by her six children Morten Hempel, Jasper (Amey) Hempel, Anne (Flemming) Hempel, Karin Hempel (Tom Clarke), Lisa Hempel, Britta (Greg) Hempel Hebert, granddaughter Kirsten (Brook) Hempel Moxley, niece Bente Kragh, and grandniece Liselotte Horneman Kragh.

At her request, there will be a private family service. In lieu of flowers, gifts can be directed to the California 4-H Foundation for the Leadership Program, 2801 Second St., Davis, CA 95618 or made online by going to www.ca4hfoundation.org.



Birgit Hempel

UNIVERSITY OF CALIFORNIA

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