Melissa Heringer graduated from CSU, Chico in 1999 earning a Bachelor of Science degree with an option in animal science. Heringer grew up in Chico and began getting involved in agriculturally focused activities at an early age. A former member of the 4-H and FFA, Heringer was drawn to the College of Agriculture. "I knew I wanted to stay in the area, and the College of Agriculture soon became my second home," she stated. Heringer worked at Christian & Johnson throughout her college education.

After graduation Heringer teamed up with FOCUS (a student fellowship group on campus), and spent two years in Kenya. Working with street kids in Nairobi, as well as at the English school, Heringer served refugees from Somalia and Ethiopia. "The experience helped me to understand that there is more than one way to look at issues, and each culture has their own lens," Heringer shared. When her service in Kenya was complete, Heringer returned to the states and set her roots in the community she has been so strongly tied to, Chico. While she earned her degree in Animal Science, Heringer had always dreamed of one day being a florist. "I went back to work at Christian & Johnson because I enjoy getting to do something that is creative every day," Heringer said. Finally in June 2005 Heringer bought Christian & Johnson and looks forward to using her creativity to foster a career in the floral business, as well as being a positive member of the Chico Community."
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Upcoming Events »

January 26
Alumni Reunion at the Red Bluff Bull and Gelding Sale
February 7
Alumni Breakfast at the Colusa Farm Show
May 20
College of Agriculture Commencement
June 11
Superior Ag/Wittmeier Ford Golf Classic

The Cutting Edge

Remember the days when a new millennium seemed too far off to imagine, the future meant flying space vehicles, and robots would one day take over the world? With the dawning of a new semester Professor Lal Singh is well on the way to fulfilling these unimaginable prophecies.

Singh, professor of Agricultural Business at California State University, Chico, has raised the bar for more efficient harvesting methods in the agriculture industry. Since 2000, Singh has joined forces with a research team consisting of CSU Chico professors; Joel Arthur, professor of Civil Engineering; Ramesh Varahamurti, professor of Mechanical and Mechatronic Engineering, and Ronald Borge, professor of Agricultural Engineering to pioneer an innovative “touchless” harvester. Singh, with the assistance of a dedicated research team, sought to identify the feasibility of employing the principle of acoustic vibration with the mechanical harvesting procedure used for olives. This research project is funded by the California Olive Comittee, “By California” an initiative at CDFA, and by the Agricultural Research Initiative, CARI. In its sixth year, the research project is the only one of its kind in the CSU system that has lead to a patent.

With this pulse-air harvester, air is pushed up the blower via a “flapper” valve which causes the olive branches to be held in an air stream, allowing the olives to be harvested. Interestingly enough, the study has found that the pulses air does not cause leaves to fall, since their frequency to fatigue is different from that of the olives. Large-scale field tests were conducted to determine how long it would take to fatigue the olive stems and at what frequency. The harvester was originally developed for olives; however, after additional testing the harvester was successful with pistachios, almonds, prunes, and peaches. Further design lead to development of the updated model pulsating air harvester. This harvester is operated by “controlling the rotational speed of the blower, the rotational speed of the flap valve in the pulse-generator, and the driving speed of the vehicle.” Singh is enthusiastic about the continued research. “I have always been fascinated with economic and food processing issues, and our current research projects allow me to use my industry experience to help solve ongoing problems in the agriculture sector,” stated Singh.

Within the upcoming months, Singh will be heading other projects involving a robotic-tomato transplanter, a $5.4 million conservation proposal, and ongoing food processing research conducted with Pacific Coast Producers.

At the Forefront of Global Education

With the passing of each year, issues such as feeding the world and sustainability become increasingly more apparent. Carrying the weight of such tribulations can exhaust the creative fiber of the agriculture industry. For Professor Lee Altier, it is through global research and education that creative solutions can be found.

This past summer Altier, professor of Plant and Soil Sciences, returned once again to Chiang Mai University (CMU) in Thailand and reunited with collaborator Professor Sakda Jongkaewwattana. During the 2001–2002 academic year, Altier went to CMU on a Fulbright Senior Scholar Fellowship to study hill tribe agriculture. “The year I spent working with Dr. Sakda expanded my understanding of farming systems, and proved a wonderful teaching experience,” stated Altier. For the past five years Altier has dedicated his time to conducting research on farm systems and teaching a graduate course in agricultural ecology. However, this past June proved a first for Altier, as twenty students accompanied him to Thailand for the Food Forever theme course. Altier’s group united with nine Thai students and one Vietnamese student to learn about and research management of resources and farm systems.

Over the course of three weeks, the class visited farms throughout the country to compare and contrast benefits of various resource management methods. Altier said the class was vital for the students because, “So many people overlook how much our quality of life is impacted locally by agriculture production.” Throughout his time spent in Thailand Altier realized that there is great room for improvement. As with many rural countries, Thailand has limited technology development and therefore cannot realize goods and products as we can. Thailand doesn’t have the opportunities for recycling as America does, which causes an increase in pollution and loss of valuable farmland. Urban congestion creates greater resource conflict, especially that of water and energy sources.

“It is such a fulfilling experience to be able to teach a diverse group of students about agriculture and environment issues,” stated Altier, “by immersing the students in a culture completely different than their own they were able to experience first-hand the value of resource management.”

For more information regarding studies abroad students should contact Professor Altier in Plumas 221 or at the International Programs Office.
What’s New?

Home Away from Home:
One year later and the Agriculture Theme House is going strong at University Village. It’s an exciting year as the house is full with 36 agriculture students. The fall semester has been packed with activities including guest lecturers Professors Lee Altier and Dr. Richard Rosencrance, construction of a community garden, root beer float party, as well as a welcome back dinner. For more information and updates on the Theme House contact Sarah Hubbart, resident advisor at: AgOutreach@csuchico.edu

Lal Singh Awarded Grant
Lal Singh was awarded $173,000 grant from the USDA and $60,000 from The Morning Star Company to develop “robotics for tomato transplanting.” He also received a $45,000,000 grant from State-Wide ARI to further develop “touchless harvester” and a catch frame.

Bruising Grant Given
Rich Rosencrance has received a $20,000 grant from the Olive Commission and ARI to evaluate fruit-loosening agents to decrease fruit bruising caused by mechanical harvesters.

What’s Growing On?

Students:
• Monica Galli, received a competitive internship with the USDA this summer.
• Erica Flores received the Chico State Friend Award last spring
• Sarah Hubbart is the first-ever RA for the Agriculture Theme House in University Village.
• Trevor Nunes, Davin Lauer, Mallory Greco, Bridget Wood, Kallie DeArlethy, Brian Miller, and Ashley Cockrell have all been working to get the Organic Dairy up and running.
• Forrest Ward, Casey Rose, and Jim Rogers worked on the PAM crop trial.

Faculty:
• Professor Celina Johnson has been selected as the next Superintendent of the National 4-H Livestock Judging Contest in Louisville, KY. This is a four year term.

Contributors…

The Harvest:
Is partially funded by Superior Ag…whose sole mission is to bolster programs at the college. The Harvest is published each spring and fall by the CSU, Chico College of Agriculture's Agricultural Teaching and Research Center (ATRC) to celebrate student achievements, recognize alumni, and provide students with the chance to apply the scientific principles associated with “growing” a business.

I am truly honored to have been selected as dean of this remarkable college. I started officially on August 1 and as you can imagine it’s been a steep learning curve, one that I don’t expect to completely level off. The integrated programs we have in the College of Agriculture present a wonderful opportunity for our students to be exposed to every aspect of agriculture that they wish to pursue. For me, it presents new challenges and a chance to stretch beyond my comfort zones of plant and soil science and crop protection to learn about animal science, ag education, and ag business, and I am fully embracing these opportunities.

At our Fall Festival on September 30 we honored the California Women in Agriculture for their constant support of our students through their scholarship program. We also honored former dean Charlie Crab as our Hall of Honor recipient, a deserving recognition of his many contributions to the college and to the industry of the North State. In addition to being named our Hall of Honor recipient, Charlie was also awarded the status of emeritus faculty, as an additional means of showing our appreciation for what he did for the college in his seven years of service.

Our students are an amazing group of people who are dedicated to furthering themselves professionally and show great pride in this college. They are a joy to be around, and I am privileged to be able to interact with them. Our student clubs continue to provide professional development and service opportunities for our students, a model of community engagement that hopefully they will take with them in their chosen careers.

The College of Ag faculty and staff are dedicated to providing the best educational experiences possible and are continually looking for ways to update what is offered in the classroom and at our farm. The integration of our living laboratories into the instructional experience, whether it is working with livestock or orchards, provides students with the chance to apply the scientific principles associated with “growing” a business.

Student enrollment numbers are good this year, and we are hoping to continue this increase in the coming years. Ag Business saw the biggest increase in student numbers, and this increase was the result of a concerted effort of our faculty to bring students to our campus. We are looking at our curricula and think there are opportunities to revise or expand into areas that may give our programs a broader appeal to students throughout the state and perhaps in those outside its borders.

I am truly honored to have been selected as the next Superintendent of the National 4-H Livestock Judging Contest in Louisville, KY. This is a four year term.

Jeff Alves, Erica Flores, and Nicolina Prestininzi laugh the night away.

Fall Festival’s Sweet Sixteen

The College of Agriculture has witnessed several changes over the past 16 years, but one thing that has become a staple is the annual Fall Festival. Each year faculty, students, and friends of the college and community make the scenic drive out to the Agricultural Teaching and Research Center (ATRC) to celebrate student achievements, recognize alumni, and induct a true leader into the Hall of Honor.

This year was no exception. Students with parents and friends in tow enjoyed cheese, wine, and beer tasting along with the best tri-tip dinner north of Sacramento. Scholarship recipients met with their donors for photographs and the California Cattlwomen Inc. were recognized as the Outstanding Scholarship Donor of the Year.

The highlight of the evening’s program was induction of past dean of the College of Agriculture, A. Charles Crab as into the Hall of Honor. Crab devoted seven years to the college and its students, and left an undeniable impact on California Agriculture. Everyone was surprised when Crab was awarded the status of emeritus faculty. A standing ovation followed heartfelt comments from students, faculty, and even Paul Zingg, president of California State University, Chico.

SRA (Students for Responsible Agriculture) was in charge of the silent auction, which raised $1870, and YCA held a cow–pie bingo contest that brought in another $250 for scholarships. The evening would not have been a success without the hard work and dedication of Professor Celina Johnson’s Fair Management and Ag Leadership classes.
Lau Ackerman is a Chico State alumnus who as a student worked at the Agriculture Teaching and Research Center (ATRC). For the past 10 years Ackerman has served the College of Agriculture well as the crops coordinator. This summer marked the first year of a two-year soil absorbed pesticide run-off mitigation trial. While there is no issue with run-off at the ATRC, in recent years there has been a public demand for the agriculture industry to ensure it is using environmentally responsible products. In conjunction with UC extension advisors, Ackerman is assisting with the trial to identify the most efficient way to reduce run-off, as well as what pesticides are the most applicable and environment friendly. “Standards are being set higher all the time,” stated Ackerman, “in order for the agriculture industry to remain in compliance with state regulations we have to constantly evolve and find new ways to produce our crops.”

The trial tests whether polyacrylamide (PAM) has a positive effect on the reduction of pesticide run-off. A two-and-a-half-acre field is being used for the trial site at the ATRC. The layout includes four plots of nine rows of beans each. Each plot employs one of four catch systems: a tail ditch serves as the control, grass-lined vegetation strip, sediment trap, and a tail ditch with PAM. The first step involved cultivating the field followed by applying a pyrethroid insecticide, and then irrigating the plots the next day. The student assistants who helped to manage the trial this summer were Forrest Ward, Casey Rose, and Jim Rogers.

For the past 10 years Ackerman has served the College of Agriculture well as the crops coordinator. A TCR

What’s Growing On?

For more than 50 years the College of Agriculture has served the agriculture industry by producing students who are aware of current and future agricultural issues, prepared for a challenging career, and who are a true reflection of society’s efforts to achieve sustainability. It is the goal of the College of Agriculture to expose them to the vast industry and opportunities it provides.

In a stride towards sustainability, the College of Agriculture recently received organic certification for the dairy at the Agricultural Teaching and Research Center (ATRC), in Chico. The ATRC previously housed a conventional dairy which proved too small to create adequate cash flow. In an effort to create a more innovative teaching model the College of Agriculture liquidated the conventional Holstein herd to develop a grass-based program in organic agriculture. Advantages to this model include more environmentally friendly management practices, addressing both air and water quality issues, and higher price premiums that have historically been more stable to cover the higher cost of production that is inevitable with smaller herds.

Cindy Daley, professor of Animal Science at CSU, Chico, views the development of the organic dairy as a wonderful opportunity for students to gain hands-on experience working in an ever-evolving industry. “This is a unique opportunity for students to familiarize themselves with a growing niche market,” Daley stated. “We are the only organic teaching facility in the West.”

Crops coordinator, Lau Ackerman discusses plot layouts for PAM trial with student assistant Forrest Ward.

The organic dairy project is consistent with the University’s emphasis toward sustainable practices. While switching from conventional production can be a rather intimidating process, Ackerman said that student management of such trials makes a difference because, “in the middle of a trial if anything goes wrong you have to make it work on the fly, and it’s a great experience for students to learn proper research methods.”

The Natural Resources Conservation Service (NRCS) is pushing for increased use of the vegetation ditches accompanied by PAM since these applications have shown significant reduction in run-off. Preliminary results show that the grass-lined vegetation ditches have a reduction rate of approximately 60 percent, while the tail ditch with PAM has a reduction rate of approximately 97 percent compared to the controls. Additional studies will be conducted to evaluate non-target effects of PAM.

Ackerman is enthusiastic about the research developments taking place at the ATRC. Research initiatives benefit the entire agriculture program at CSU, Chico because while Ackerman is conducting the run-off trial, Professors Tim Tripp and Richard Rosecrance can utilize the study for labs and possibly student research projects. “Everything has a purpose on the farm, and students can dig their hands into the industry we talk about in the classroom,” Ackerman explained. “I encourage all of our students to come out and see what we are doing and to bring someone who may not know anything about agriculture to expose them to the vast industry and opportunities it provides.”

Student assistant Forrest Ward on PAM trial

Grig Taylor working at the University Farm Agriculture Teaching and Research Center
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The Faculty, Staff and students would like to thank the following businesses and individuals who have supported the college of Agriculture with financial gifts or in-kind donations in the past year. Donations are crucial to program excellence. Our annual fund drive will be coming soon; please watch the mail for your donation request. Support from our alumni, the Ag industry, and the community sends the message to our students that their education is vital to the future of agriculture.

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