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AGRIcolumn

AGRIcolumn Magazine, College of Agriculture

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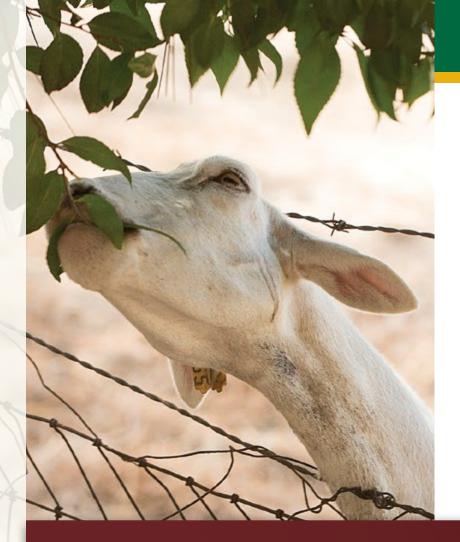
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On the cover: Dr. Martin Sancho Madriz (left), HNFS Chairman, is pictured with Dr. Ramiro Dutra (right), founding Chairman of the department along with several HNFS students.



Message from the dean



Mary Holz-Clause Dean, College of Agriculture

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"The best way to prepare for the future is to take care of the present." Tony Robbins

At CPP this year we've been busy taking care of the present and preparing our college and students for the future. We are addressing several issues:

- People—Bringing in new people with energy and passion for the magic of Cal Poly Pomona.
- Opportunities—for our students to get outside their comfort zones through study abroad, internships and laboratory research.
- Curriculum changes—Converting to semesters by 2018 gives us an opportunity to retool our courses.
- Infrastructure—Finding more space for classrooms and offices. Upgrading what we have and employing 21st century technology.

To quote a song from the group Alabama. Our motto this year has been "We are in a hurry to get things done." Here are a few things we've been working on this year.

- Career Days—attracting industry partners who hire our students for the summer and beyond.
- Quarterly Industry Day—providing our alums, students and friends opportunities to meet and hear critical issues affecting the agriculture industry.
- Engaged advisory boards—helping to shape curriculum and strategic planning.
- Industry sponsored research—giving our students hands-on experience with real-life problems.
- New people at AGRIscapes—exciting young and old about our agricultural heritage and future with new events, ideas and activities.
- Study abroad—Apparel Marketing and Management majors interning in London and other students working in New Zealand, India and Thailand.
- Farm-to-table dinner—Celebrating our agricultural bounty with food grown by CPP students.
- Students traveling to Sacramento for the leadership seminar and Tulare for the World Food Ag Expo

I encourage you to participate in a College of Agriculture mentoring group that will help connect students with an internship or job opportunity. Together we build the leaders of the future. Email me at agdean@cpp.edu and let me know how you would like to be involved.

Yours Truly,

Mary Holz-Clause

FALL 2015

PASTURE, HOUSING DECISION ANNOUNCED

President Soraya M. Coley made the decision in July to move forward with a proposal to build new student housing on a portion of the horse pastures.

The proposal had generated concerns earlier this year. In response, the president put the proposal on hold and asked staff to reevaluate the plans and reconsider all the options and impacts for each potential housing site. A forum was held in February, and a presentation made to Associated Students, Inc. leaders in May to share the university's plans and gather feedback.

Those who spoke out in support of the pastures made a difference: their concerns led to the hiring of an outside expert who identified steps that Cal Poly Pomona could take to improve pasture management.

As a result, the university will spend about \$200,000 on pasture improvements, including fencing and irrigation that should provide more flexibility and productivity from the pastures.

In addition, the university is planning to contribute funding toward the construction of the new covered horse arena at the center as part of its commitment to keeping the W.K. Kellogg legacy alive.



Pasture where new dorm will be located.

The decisions strive to balance the university's needs for student housing while ensuring the future of the Arabian horse herd.

University administration has committed to being open and transparent with students about its priorities, planning and options. Informing students and including student input in the process will be standard procedure.

More information is available at: www.cpp.edu/~housing/futurehousing.

INAUGURAL WEST COVINA FOOD & WINE FESTIVAL BOOSTS COLLEGE

The inaugural West Covina Food & Wine Festival raised \$2,500 for scholarships to support students in the College of Agriculture.

The two-day event in July was hosted by the West Covina Historical Society and the Hurst Ranch Foundation.

The festival began July 18 at the South Hills Country Club with an auction and a gourmet four-course dinner.

The event continued July 19 at the historic Hurst Ranch in West Covina and featured more than 30 restaurants and 40 wineries and brewers, including Cal Poly Pomona's own wines and beers.

JIM HICKS HONORED AT INAUGURAL SPRING HARVEST DINNER

The College of Agriculture held its first Spring Harvest Farm 2 Table Dinner near the Farm Store at Kellogg Ranch.

The March 21 event celebrated Southern California agriculture and the fact that the region is one of the few places farmers are harvesting in the spring. Much of the food was grown by Cal Poly Pomona agricultural students using sustainable practices.

The college also honored businessman Jim Hicks for his accomplishments in the agriculture industry and his long support of agricultural education from grade school to the university. Hicks was the inaugural recipient of the Agricultural Achievement Award, which will be named in



Jim Hicks accepting his award.

his honor in subsequent years.

Guests enjoyed food prepared by Arnold Zavalza, executive chef for Cal Poly Pomona Foundation's dining services. Current students spoke about their educational experiences and how the College of Agriculture is preparing them for their careers.

The next Spring Harvest Dinner is April 9, 2016.

COMMENCEMENT Celebration

Aasta Yim (right) presents the class gift to President

Coley (left) at commencement.

Nearly 450 students in the College of Agriculture graduated on a beautiful Saturday evening in June.

In caps and gowns, festooned with floral leis, honor cords, hoods and sashes, they marched into the University Quad for the momentous occasion. They were greeted with cheers and applause from family, friends and onlookers.

To receive their diplomas, each graduating student walked across a stage illuminated by green and yellow lights and decorated with flowers. They were congratulated in turn by University President Soraya M. Coley, former Provost Marten denBoer, College of Agriculture Dean Mary Holz-Clause and their department chair.

Holz-Clause and Coley also presented the Julian A. McPhee Award to students Madeleine E. Gross and Michaiah J. Leal, the college's valedictorians.

Also recognized at the ceremony were 2015 Distinguished Alumna Teresa Becker, Teacher of the Year Melissa Hulgreen, Advisor of the Year Professor Broc Sandelin, Staff of the Year Sarah De La Parra and Undergraduate Student Leader of the Year Aasta Yim.

The Department of Animal & Veterinary Sciences led the way with 110 graduates. Apparel Merchandising and Management had 101 graduates, while human nutrition and food science had 95.

Agribusiness and food industry management/agricultural science had 48, and plant science had 38.

In addition, 18 students graduated with master's degrees.

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PUMPKIN FESTIVAL Huge SUCCESS

About 45,000 people attended the 23rd Annual Pumpkin Festival at Cal Poly Pomona on October 17 and 18.

In additional to the traditional pumpkin patch, 4-acre corn maze and petting zoo, this year's Pumpkin Festival offered new activities and attractions. The theme was "Celebrating California Agriculture." Agricultural industry and commodity groups set up booths and offered activities in "Ag Discovery Lane." The festival also featured pumpkin carving, pie eating and costume contests.

The festival had become so popular and successful that it became necessary to charge admission for the first time to help keep the event family friendly. Tickets were \$4 for adults and \$2 for children 3 to 12.

COLLEGE NEWS



Joe Produce was one of the many companies that attended the spring 2015 Ag Career Day.

AG CAREER DAYS

Hundreds of students flocked to Ag Career Day at Cal Poly Pomona to prepare for their futures and employers came looking for talented young workers.

The April 14 event at Cowboy Corner was the first all-college Career Day since 2011. Thanks to the hard work of planners, about 380 students attended – almost double the number from the last career day. Fifteen student clubs participated by providing 80 volunteers to help with publicity, setup and cleanup, and other duties.

The Career Center received 78 submissions for the Best Résumé contest, and 94 students took advantage of the opportunity to have a professional photograph taken in the AGREES Center for their job-hunting efforts.

Many of the students came professionally dressed and armed with résumés and business cards. They visited with representatives from 48 employers, many of whom came away impressed with the students.

Other companies wanted to attend, but couldn't make the date.

Two Career Days are planned for the 2015-16 academic year. One event was held Nov. 5 in the Bronco Student Center. The second career day will be held April 14, 2016 at Cowboy Corner.

For more information or to register your company to attend, contact Danielle Townley at drtownley@cpp.edu or (909) 869-2869.

MANAGEMENT GURU PETER SENGE LECTURES ON CAMPUS

More than 100 people attended management guru Peter Senge's April 22 lecture on "Leadership & Organizational Learning: Building a Sustainable Future for a Global Society."

Senge, who is the author of the widely acclaimed book "The Fifth Discipline: The Art and Practice of the Learning Organization," spoke about how complex systems such as the agricultural industry can have both benefits and unintended consequences.

Among the most difficult challenges is getting people with different viewpoints to work together and solve complex problems, he said, and that takes leadership; not leadership in the form of the boss, but the willingness to listen, to step outside of ourselves and see the problem.

Senge is a senior lecturer in leadership and sustainability at the MIT Sloan School of Management and founding chair of the Society for Organizational Learning, a global community of corporations, researchers and consultants dedicated to the development of people and their institutions.

The lecture, which was held in Ursa Minor, was sponsored by the College of Agriculture, the California Agricultural Leadership Foundation and Reiter Affiliated Companies.



Some of the International athletes who participated in the Special Olympics 2015 got a chance to visit Danny's Farm at the Farm Store.

THE COLLEGE ADDS TWITTER ACCOUNT, CREATES LINKEDIN GROUP

The College of Agriculture has increased its presence in the social media world.

It now has an account with the microblogging service Twitter. Twitter will allow the College of Agriculture to share news about our faculty, students and alumni with a diverse audience that could potentially span the globe. It's an opportunity to expand awareness and the reputation of the college. If you enjoy social media, sign up for a free account with Twitter and follow the college at @CPPAgri.

In addition, the College of Agriculture started a LinkedIn group this spring, and everyone with a connection to the college – students, faculty, staff, alumni and Ag industry folks – is invited to join.

LinkedIn is social media for students and working professionals, allowing them to connect and network with others in their fields. It can be a great way to brand and market who you are, what you can do and what interests you.

It's also a good way to develop knowledge. Students can share what they are learning in internships or the classroom. Alumni and faculty can share what they are doing



professionally. Industry figures and companies can share what they are doing and if they have internships or job openings for students and alumni.

Creating a free LinkedIn profile is the only requirement to join the group. Think of the profile as your online resume. You can decide how much the public sees. You can also connect with students, faculty, friends and co-workers, much as you would on Facebook.

Once you have created your profile, use the LinkedIn search engine to find the Cal Poly Pomona College of Agriculture group and ask to join.

After your request is approved, you can begin participating in discussions.

We hope to see you there soon!



Youngsters ride horses during horse camp at the W.K. Kellogg Arabian Horse Center.

CHILDREN LEARN TO RIDE AT HORSE CAMP

Two dozen children enjoyed Horse Camp this summer at the W.K. Kellogg Arabian Horse Center.

Horse Camp was part of the Discovery Summer Camps that were held at Cal Poly Pomona. Children ages 10-17 learned basic equitation, horsemanship, grooming, tacking, nutrition, anatomy and humane education.

They worked on arts and crafts centered on the horses and were required to help with chores such as feeding and boarding the horses, and cleaning tack.

The camp had two sessions, both of which were sold out.

4 AGRICOLUMN FALL 2015



Lucio Zepeda speaks at the Focus on the Future reception

PROGRAM PROVIDES WORKPLACE SKILLS

Cal Poly Pomona President Soraya M. Coley joined Dean Mary Holz-Clause and 40 agriculture students and alumni in celebrating the completion on May 29 of a three-year program aimed at training Hispanic students in the "soft skills" needed to succeed in the workplace.

Focus on the Future was a \$289,000 program funded by the U.S. Department of Agriculture's Hispanic Serving Education Program. Ron Heimler was the faculty member and principal investigator who directed the project.

Invitations were sent to all Hispanic freshmen and sophomores in the college to apply. Four cohorts of 10 students each were chosen over the term of the project.

The students participated in presentations, discussions and readings. In addition, students were assigned a professional

mentor who met with them individually.

Among the topics covered during the program were how to build résumés, write cover and thank you letters, how to interview for jobs, and navigate the graduate school application process. Little things such as how to address people properly and being on time were addressed.

There also were sessions on public speaking, how to make presentations – with weekly practice – and how to be a leader.

Three of the students who participated in the program and graduated from Cal Poly Pomona have gone on to find work.

Although the Focus on the Future program has been completed, its legacy will continue with the students who participated and the new resources that are available to all Cal Poly Pomona students.

The University Library houses the Focus on the Future Leadership Collection, which includes 200 books and DVDs that the students used and College of Agriculture faculty recommended.

In addition, an online skills certification program will provide training in effective decision making, customer service and workplace ethics. The San Bernardino County School District's Alliance for Excellence provided access to the nationally recognized program for free.

Students who gain certification can include it on their résumés. The certifications are highly regarded by employers, Heimler says. The certification program is available at: http://amm.ag.cpp.edu.

AMM Character ANNIVERSARY

APPAREL MERCHANDISING AND MANAGEMENT MARKS 20th ANNIVERSARY

In September 1995, Apparel Merchandising and Management was approved by the CSU Chancellor's Office as a new degree at Cal Poly Pomona. The first students were admitted in January 1996. To mark the 20th anniversary year, AMM will hold several special activities and events throughout the year that include students, faculty, staff, the AMM Industry Advisory Board and the Los Angeles apparel industry. Keep watching the AMM website for announcements about these activities at www.cpp.edu/~amm.



AMM students with some of the items they created for babies at local hospitals



INDUSTRY PARTNER LUNCHEON

The College of Agriculture held a luncheon at AGRIscapes in August for more than 20 of its industry partners.

Dean Mary Holz-Clause greeted the guests, who also heard updates from Valerie Mellano, chair of the plant sciences and agribusiness and food industry management/agriculture science departments, and Broc Sandelin, chair of the animal and veterinary science department.

In addition, Dale Stern, a member of the Dean's Advisory Council and an attorney who is a legal advisor to major agricultural producers, addressed issues in the regulatory environment in California. Craig Walters, director of outreach for AGRIscapes, spoke about the facility and its availability for use.

The goal of the luncheon is to strengthen the college's relationships with its industry partners, keeping them informed of developments on campus. The college hopes to hold further luncheons on a quarterly basis.



SUCCESSFUL AUCTION FOR THE AHC

The W.K. Kellogg Arabian Horse Center (AHC) grossed nearly \$75,000 in its first online horse auction.

The center sold 17 horses in the Aug. 5 auction to buyers in California, Arizona, Missouri, Montana, Nevada, Ohio, Tennessee and Texas.

CP Charmming Notions, a 3-year-old mare and national-caliber English prospect with a good pedigree, fetched the highest sale price at \$26,000. She was sold to a buyer in Ohio.



AGRICOLUMN

SUPER BUGS THE RISE OF ANTIBIOTIC RESISTANT MICROBES Fantasy, Apocalyptic Doom or Reality?

by Dr. Shelton Murinda
Director Agricultural Research Institute
Professor Animal & Veterinary Sciences Department

Researchers (and some talking heads) have warned for years that antibiotics—the miracle drugs that changed the course of human health and history in the 20th century—are losing their power because of overuse. Some warn that if the trend is not halted, the world could return to the time before antibiotics, when it was common for people to die from ordinary infections. The World Health Organization (WHO) surveyed the emergence of antibiotic-resistant microbes around the world and came up with disturbing findings. It found that antimicrobial resistance in bacteria, fungi, viruses and parasites is an increasingly serious worldwide threat. The consequences of antibiotic resistance are well-documented.

Antibiotic-resistant pathogens resist standard treatments. Infections are more difficult to control. The risk of spreading infections to others is increased, and illnesses and hospital stays are prolonged. All these outcomes pose public health and economic consequences as they drive up the costs of medical treatment and exacerbate the risk of death. In 2007, the Centers for Disease Control and Prevention (CDC) reported that at least 2 million Americans fall ill from antibiotic-resistant bacteria every year and that at least 23,000 die from those infections. It was the first time the CDC quantified the effects of antibiotic-resistant organisms. It estimated that 100,000 people died every year from hospital-acquired infections, mostly from bacteria that are resistant to some antibiotics.

Major resistance problems have developed, both for antibiotics that are used routinely and for those deemed last-resort treatments to cure people and animals. For example, carbapenem antibiotics, a class of drugs used as a last resort to treat life-threatening infections caused by a common intestinal microbe (Klebsiella species), have

failed to work in more than half the people treated in some countries. This germ is a major cause of hospital-acquired infections such as pneumonia, bloodstream infections, and infections in newborns and intensive-care patients. The failure of a last-resort treatment for gonorrhea also has been confirmed in 10 countries, including many with advanced health-care systems, namely Australia, Canada, France, Sweden and Britain. Resistance to a class of antibiotics that is routinely used to treat urinary tract infections caused by E. coli is widespread. In some countries, the drugs are ineffective in more than 50 percent of the patients treated.

Some notoriously drug-resistant pathogens are known by their acronyms: DT104, MRSA and CRE. Salmonella typhimurium phage type or definitive type 104 (aka DT104) is a virulent pathogen for humans and animals, particularly cattle. DT104 has a high frequency of resistance to a wide range of commonly used antimicrobials, notably ampicillin, chloramphenicol, streptomycin, sulfonamides and tetracycline. Methicillinresistant Staphylococcus aureus (MRSA) infection is caused by a strain of Staphylococcus (staph) bacterium that developed resistance to the antibiotics commonly used to treat ordinary staph infections. There is health care or hospital-acquired MRSA (HA-MRSA) typically associated with invasive procedures or devices, such as surgeries, intravenous tubing or artificial joints. Community-associated MRSA (CA-MRSA) is another type of MRSA infection that has occurred in the wider community among healthy people. HA-MRSA infections have declined by more than half from 2005 to 2011. The number of CA-MRSA infections has surpassed HA-MRSA Carbapenem-resistant Enterobacteriaceae (CRE) is a family of germs that is difficult to treat because of high levels of resistance to penicillin-type antibiotics called carbapenems. Klebsiella species and Escherichia coli (E. coli) are examples of Enterobacteriaceae, a normal part of the human gut bacterial flora that can become carbapenem-resistant. According to the CDC, CRE is a particularly lethal type of bacteria that developed resistance to nearly all antibiotics on the market. Although still relatively rare, CRE has been isolated in facilities in 44 states and cause about 600 deaths per year. Further spread of the germ or transfer of its resistance genes to other pathogens could lead to nightmare scenarios.

Antibiotics have transformed medicine and saved countless lives over the past seven decades, but rampant overuse and the lack of new drugs in development threaten to undermine their effectiveness. The pharmaceutical industry needs to be encouraged to develop new antibiotics to supplement those that are losing their effectiveness. Stronger financial incentives need to be proffered to encourage the development of new antimicrobials, biologics or alternative approaches. A major impediment in the discovery of new antibiotics is low financial returns. Another disincentive is that antibiotics are typically taken for a short period of time, and any new drug is bound to be used sparingly and held in reserve to treat patients resistant to older drugs.

Recently, at the international level, WHO emphasized the need to develop surveillance of resistance, act more fully to prevent infections, better control the use of existing antibiotics, and develop mechanisms to support investment in the development of new antibiotics. WHO called on all countries to prepare action plans to meet these objectives. The Obama administration recently announced similar measures to tackle the growing threat of antibiotic resistance. President Barack Obama created a national task force to be led by the secretaries of Health and Human Services (HHS), Defense and Agriculture. The task force will develop a five-year action plan, and HHS will propose regulations requiring hospitals to set up antibiotics stewardship programs. Other expert recommendations included doubling current investment in surveillance and research, and providing additional funds to give companies incentives to develop rapid diagnostics and new drugs.

According to the Pew Charitable Trusts, a Washingtonbased research and advocacy group, Americans use more antibiotics than people in other industrialized nations, with rates more than twice those in Germany and the Netherlands. The United States also uses far more antibiotics in livestock than many other nations. Animals raised for food in America are given about six times as much antibiotics as animals in Norway and Denmark. One area of contention has been the extent to which industrial-scale animal farming, particularly in concentrated animal feeding operations, contributes to the problem of antibiotic-resistant infections in humans. The government has estimated that more than 70 percent of antibiotics in the United States are given to livestock. They are administered to prevent sickness when animals are packed together in ways that breed infection. Antibiotics also are used routinely to make animals grow faster, a practice that federal authorities are trying to discontinue. Producers of meat and poultry are not required to report how they use

The most urgent need is to minimize the overuse of antibiotics in medicine and agriculture. In the U.S., hospitals have taken steps to prevent drug-resistant infections, but less is known about preventing infections outside hospitals, clinics and nursing homes. The Food and Drug Administration has issued voluntary guidelines calling on drug companies, animal producers and veterinarians to stop indiscriminately using antibiotics that are vital for treating humans on livestock. There has been little research on the extent in which antibiotic use on industrial farms contributes to the emergence of resistant germs in people. Unfortunately, the livestock industry has been reluctant to allow data collection. Thus, very few studies of the linkage have been conducted.

Although antibiotics are a sound tool for management of disease, drug resistance as the consequence of drug use, overuse or abuse has been suggested. Contrary to these viewpoints, it has also been reported that antimicrobial resistance could develop (albeit, at a lesser prevalence rate) in the absence by antibiotics. Without compelling science-based facts on the linkage of antibiotic use and increased resistance to antibiotics, more epidemiological research is needed to understand the key drivers of increased antibiotic resistance.





The Human Nutrition & Food Science Department Marks Its 50th Anniversary With High Aspirations



Left: Dr. Ramiro Dutra hands out an outstanding student award to Linda Costa in 1976

A GROWING APPETITE

Ramiro Dutra came to Cal Poly Pomona in 1959 when he was hired as an instructor for chemistry classes in the physical sciences department.

Dutra had just finished his doctorate in agricultural and food chemistry at UC Davis. Although he was new to Cal Poly Pomona, he decided to take a page out of the university's tradition of applied, hands-on learning in his classes.

"Instead of having abstract applications of chemical reactions, I would bring as examples things from real life, and the real life that I was acquainted with was food technology, food chemistry and nutrition," Dutra recalls. "Man, the students lapped it up. The timidness of chemistry that some students have quickly melts into fascination when they are shown that control of certain molecular behaviors is what makes for smooth ice cream, perfect beer foam or the noisiest chips in the world."

His chemistry classes were so popular that Dutra soon gained permission from administrators to create actual courses in foods and nutrition. Eventually, the Department of Foods & Nutrition was established in the College of Agriculture in 1965 with Dutra as its first chairman and only full-time instructor. He started with just 17 students.

Fifty years later, the Department of Human Nutrition & Food Science has seven tenured and tenure-track faculty members and is recruiting for two open positions to be filled by September 2016. The department also has 14 temporary faculty members in its lecturer pool. More than 500 students seek everything from a bachelor's degree in foods and nutrition to food science and technology to a master's degree in agriculture with a nutrition and food science option.

The department's evolution over the last 50 years has been marked by dramatic changes. But today, it is preparing students to become leaders in the fields of nutrition and food science and technology.

HUMBLE ORIGINS

Dutra may have received the university's blessing to start a new department, but there wasn't much else. His initial budget was a mere \$500.

"Facilities and resources were nonexistent," he says. "At the time, there were limited resources for the whole university."

Dutra was able to hire a retiree as a lecturer for one year. But the new department did not have secretaries or lab technicians – those positions didn't exist at the time. There were only two typists to serve the stenography needs of the entire College of Agriculture. After the first year, Dutra was able to hire Cheryl Loggins as full-time faculty member.

The new department chairman looked far and wide for supporters. He made sure he did not cut his ties to his former colleagues in science. Lab equipment was scarce on campus, and departments often had to share.

"My Number I rule was, 'Don't burn bridges. You may need them again," Dutra recalls.

Dutra would often have to pay for supplies out of his own pocket.

"Many times I went to L.A. to buy reagents with my own VW, on my own time. I paid for them with my own money," he says. "I wasn't the only one. That was what higher education was like in those days."

Dutra also hit the road to promote the fledgling program, again spending his own time and money – there were no travel budgets or buyout time then, either – going to conferences and professional meetings. He also took his students on field trips to factories, food-processing plants, dairies and wineries.

"They were places where I thought they might hire my graduates," he says. "You always have to be aiming at putting your people in high places."

Working seven days a week eventually took its toll on Dutra.

"I was teaching about 20 units while developing the new foods and nutrition program when I got my first ulcer. Not a big surprise; everybody carried what would be regarded today as an overload. In those days at Cal Poly Pomona, there was no tenure, no limit on teaching load, no Faculty Senate," Dutra recalls.

"A good instructor could expect a yearly letter of reappointment, but promotions were reserved for those who—outside the classroom—made significant contributions to the development and status of our newborn university."

THE FIRST STUDENTS

Sue Godfrey ('70, foods and nutrition) was one of the first students in the new department, arriving in fall 1966. The Whittier resident heard about the program from her high school counselor, who thought the dietetics curriculum matched Godfrey's interest in medicine and science and her love of cooking.

"This was so exciting," Godfrey recalls. "I was sold."

Godfrey came to a campus that was still relatively small: there were only about 4,000 students, less than a quarter of whom lived in the dorms. Even then, Cal Poly Pomona was mainly a commuter campus. There was no Highway 57 until 1972.

The university had become co-ed only four years earlier, and the ratio of men to women was 4 to 1. There were no parking structures, no lot at the top of the hill above Building 2. Many students parked on the dirt, and it wasn't uncommon for cars to become stuck in the mud after it rained.

Class sizes were relatively small—10 students for major courses and 20 students in most non-major classes, Godfrey recalls. Computers weren't available and calculators had paper rolls for printing. Most students carried slide rules and logarithm books, and were told the career of the future was keypunch operator, she says.

Dutra was able to wrangle a piece of new technology for students to evaluate in a food preparation class: a microwave oven.

"We made cake after cake experimenting with cooking times, ingredients and such. We had failure after failure – cooked too hard on the outside like concrete, uncooked in the center, cooked too short, never set," Godfrey says. "Eggs exploded. Meat petrified and burned to a crisp. Our final conclusion was that this thing will never fly."



Cheryl Loggins was the first full time faculty member hired by Ramiro Dutra in 1966. She remained in the department for 31 years.





Technology was not the only thing evolving. The department had a growth spurt in the 1970s.

Building 7 was constructed in 1970 at a cost of \$1.8 million. It included a food chemistry and analysis laboratory, two kitchen laboratories, four offices for faculty, and the main department office.

Rebecca Moore ('75, foods and nutrition) was among the first students to make use of the new food lab and equipment.

"I remember using the bomb calorimeter for the first time and thinking it was an amazing piece of equipment," she recalls. "Measuring actual calories in food was so much fun."

In addition, the department created a major in 1971 based on a traditional subject: home economics.

The major was traditionally offered at universities to prepare teachers for high school home economics courses, Dutra says. It also was traditionally considered an umbrella major over dietetics, he says.

But professional dietetic requirements became more stringent, thus demanding more science.

"There was no room to take the rest of home economics courses like interior design, child development, and marriage and the family," Dutra remembers. "And so it had to be a separate major."

A clothing lab was established in Building 2 for the home economics major. Eventually, a chapter of the Phi Upsilon Omicron national honor society in family and consumer sciences was established at Cal Poly Pomona.

Drs. Anahid Crecelius, left and Nenita Cabacungan in 1980 →

MEMORABLE TEACHERS

Home economics bolstered enrollment in what was redesignated the Department of Foods & Nutrition and Home Economics. By 1975, it had grown to about 350 students. In addition, the department had nine tenured or tenuretrack faculty and three lecturers. These instructors left memorable impressions on students.

Dutra was passionate about teaching and demanding of his students.

"He instilled a love for learning, a strong work ethic and striving to do your very best – no excuses. Critical thinking was an absolute," Godfrey recalls. "Dr. Dutra was a perfectionist. Our research papers had to follow the correct protocols of tests and conclusions as those expected in the real world. No shortcuts, no guessing!"

In 1984, Dutra was selected by the university as its Outstanding Professsor. Three years earlier, he was knighted by the president of Portugal for "relevant services to humanity" in recognition of extensive services on behalf of underdeveloped countries.

Michelle Wien ('78, foods and nutrition; '93, master's in agriculture, food and nutrition option) enjoyed the cultural foods course taught by Professor Nenita Cabacungan, where students learned about, cooked and consumed foods from other countries.

"In the 1970s, it was very costly to travel abroad, and there was a lack of ethnic restaurants as compared to today," recalls Wien, who is now a professor in the department. "The faculty that were from other countries were fascinating because I had not been exposed to ethnic diversity growing up in Orange County. Drs. Cabacaungan, Dutra and Anahid Crecelius shared many fascinating experiences from the Philippines, Portugal and Egypt, respectively."





MATURATION PROCESS

The Department of Foods & Nutrition would continue to evolve into the new century.

One area of constant change was in technology.

"Computer science was a new major, so we had to take some basic computer classes," says Lisa Alley-Zarkades ('82, foods and nutrition), who serves on the College of Agriculture's Dean's Advisory Council. "It was intimidating with codes, punch cards, big machines and MS-DOS language."

Of course, computers would become ubiquitous in the late 1980s. The 1990s would see the arrival of the Internet and websites, which led to laptops, social media and mobile technologies for students after the turn of the century.

"I purchased my first PC in 1992 to type my master's thesis, and it was effortless compared to the electric typewriter that I used to type my senior project from 1977 to 1978," Wien recalls.

Technology was not the only thing changing. In 1987, the department received accreditation from the American Dietetic Association to offer a post-baccalaureate dietetic internship. Prior to accreditation, the department had to send its graduates to internship programs at other universities.

Since its inception, the program has had much success in producing registered dietitians. The five-year pass rate on the registration exam is 89 percent, as of January 2014.

The department also saw the phasing out of the home economics program. Enrollment had dropped for several reasons, including the reduction of such programs in high schools.

"The traditional home economist positions at the utility and

appliance companies disappeared as well," recalls Professor Emeritus Jean Gipe, who began teaching home economics at Cal Poly Pomona in 1975. "The general interest in home economics was replaced with specific interest in the fashion industry, interior design and product development at food companies."

As a result, two faculty members left the foods and nutrition program to form the Department of Apparel Merchandising and Management. Gipe and Professor Emeritus Betty Tracy developed the new program, and Tracy became the first department chairwoman.

Another program that was added was the food science and technology baccalaureate, which started with just three students in 1999 and one tenure-track faculty member and has grown to nearly 180 students and four tenure-track faculty members plus three lecturers.

"When we began offering the major, there were no other undergraduate degrees in food science and technology in public schools in Southern California," says Martin Sancho-Madriz, the professor who developed the program and is now chairman of the Department of Human Nutrition & Food Science.

Food science and technology differed from the existing foods and nutrition degree program in that it prepared students to work in the food-processing industry and regulatory agencies, and required a significantly different curriculum.

The Culinology emphasis within the food science and technology degree was developed in partnership with The Collins College of Hospitality Management, blending the creativity of culinary arts with food science and the technical aspects of food processing to focus on new product development. It was the first program in California to be approved by the Research Chefs Association.

THE FUTURE

The recession of the late 2000s hit public universities hard in California. Budgets were cut dramatically, creating challenges.

Administrators struggled to balance the cuts. Faculty retirements helped ease the fiscal strain across campus, but also increased the faculty-to-student ratio. Enrollment in the department doubled from 2009 to 2014 – accounting for a third of the College of Agriculture's total enrollment – while the number of tenured and tenure-track faculty was cut in half.

"This has put tremendous strain on the faculty in terms of advising and committee work as the increased workload has fallen on a smaller group of faculty," Sancho-Madriz says. "It's important to recognize the effort and dedication of the faculty."

The department also faces challenges in securing enough funding and resources to attract high-caliber faculty and obtain state-of-the-art facilities and equipment.

"We know resources from the state are not likely to increase significantly enough to meet our growing needs," Sancho-Madriz says, "and thus we need alumni, industry and other supporters to partner with us to help us achieve our vision."

Human Nutrition & Food Science was able to obtain a \$25,000 donation from the Kellogg Co. and matching funds from the College of Agriculture dean's office to transform Room 237 in Building 7 into a food technology laboratory. The total investment to renovate the lab and purchase new equipment was about \$80,000.

Looking ahead, Sancho-Madriz hopes to establish the Center for Food Innovation and Technology.

Industry experts had noted that the food science and technology program did not have a facility for food research,

Martin Sancho-Madriz with students in the renovated Food Technology lab



product development and quality control. The center would cover between 20,000 and 25,000 square feet, and cost \$25 million to \$30 million to build.

"We envision Human Nutrition & Food Science becoming a regional center of excellence in both nutrition and food science," Sancho-Madriz says. "This center would support undergraduate and graduate education and research, while also strengthening our connections with the food industry."

After a long absence, Dutra recently made a visit to see how the department that he sprouted has matured.

"I was impressed with what Dr. Sancho-Madriz told me about the future plans for the department. It is a logical, clearly defined vision with a well-thought-out map for its execution," Dutra says. "It will require extra work from everyone on the faculty, but I am confident that the future will validate their collective wisdom and commitment."

Evolution of a department

1964: The CSU Board of Trustees approves

a new degree program for a department in

1965: The Department of Foods & Nutrition is launched with 17 students, 1½ faculty positions and a \$500 budget.

1970s

1970: Building 7 is completed with facilities to house the Department of Foods & Nutrition, including offices and laboratories.

1971: The department begins offering a bachelor's degree in home economics. A clothing laboratory was installed in Room 218.

1975: The Department of Foods & Nutrition/ Home Economics grows to nearly 350 students, nine faculty and three lecturers.

1980s

1987: Dietetic internship program receives accreditation.

1995-96: A group of faculty leaves the department to start the Department of Apparel Merchandising & Management.

1990s

1999: The food science and technology program starts with 3 students.

*Timeline compiled by Dr. Martin Sancho-Madriz, professor and chair, Department of Human Nutrition & Food Science 2000s

2001: The department is renamed Human Nutrition & Food Science, with the termination of the consumer science (home ec.) program.

2006: The Culinology emphasis is established in partnership with The Collins College of Hospitality Management,

2013: Workers begin the first phase of renovating Room 237 in Building 7 into a food technology laboratory.

Celebration!

The HNFS Department invites You to a 50th anniversary gala on

Saturday, February 27, 2016, 4:00 pm at Cal Poly Pomona

For more information email: hnfs@cpp.edu

FALL 2015

foods and nutrition.

NEW FACULTY AND STAFF



Jéanne Brooks Abernathy is the new director of the W.K. Kellogg Arabian Horse Center. She has extensive experience in the horse industry. Most recently, she was the owner of Brookhill Farms in Franklin, Tennessee. Prior to that, she was a major account manager for Xerox Corp. in Nashville and Engineered Glass Products in Chicago. She holds an MBA and a Bachelor of Arts degree from the University of Tennessee in Knoxville.



Reginald Clause is director of development for the College of Agriculture. He is retired from lowa State University Extension and owns agribusinesses in lowa. He has a background in banking and investment fund management, and has worked extensively as a consultant business development, planning and feasibility modeling. He also has experience in marketing, client

development and fundraising. He earned a bachelor's in animal science at Iowa State University.



Victor Delaire is the new compliance and safety specialist for the Department of Animal & Veterinary Sciences. He spent the last four years as a compliance coordinator/technical assistant at the University of Connecticut's Department of Animal Science. He also has worked as a laboratory animal technician and an assistant manager at a horse training facility. He has a bachelor's degree in animal and poultry sciences from Virginia Tech University.



Gabriel Davidov-Pardo is an assistant professor in the Department of Human Nutrition & Food Science. He earned his doctorate in food science and technology from the Public University of Navarre in Pamplona, Spain. Prior to coming to Cal Poly Pomona, he was a postdoctoral fellow at

the food sciences department at the University of Massachusetts. He has specialized in the design and fabrication of micro and nano delivery systems for antioxidants extracted from vinification byproducts.



Aaron Fox joined the Department of Plant Sciences in January as an assistant professor. He earned his doctorate in crop science with a minor in entomology from North Carolina State University. He also was a postdoctoral research associate at Michigan State University. He is co-leading the new urban and community agriculture focus with Professor Eileen

Cullen and taught a new farmers market course in the spring quarter. He also received a Strategic Interdisciplinary Research Grant with Professor Joan Leong in the College of Science to examine pollinators and other beneficial insects living in urban farms across Los Angeles. He also has worked in Ecuador and Croatia and would like to develop a study-abroad course that offers students the opportunity learn about food and agriculture in other parts of the world.



Marcus Elam is a new assistant professor in the Department of Human Nutrition & Food Science. He comes to Cal Poly Pomona from Florida State University, where he earned his doctorate earlier this year in nutrition and food science. He has been an instructor in nutrition and exercise science courses,

and assisted professors in laboratory research. In addition, he is a certified sports nutritionist.



John Lambert is the W.K. Kellogg Arabian Horse Center's new horse trainer. He owns a horse-training business in Scottsdale, Ariz., where he had previously worked as a trainer of English performance horses that have earned many national and regional championships. He has more than 26 years of experience and has served as a board member on the Arabian Horse Association in Arizona

and Michigan. He is a licensed "R" Arabian Horse Association and U.S. Equestrian Federation judge and has a bachelor's degree in animal science from Michigan State University.



Dan Lee is the new communications specialist for the College, managing the website and social media accounts, editing AgriColumn and the college newsletters, and handling marketing and communications duties. He comes to the college after two years in the Division of Advancement's Office of Public Affairs. He spent 15 years as a newspaper reporter and has a master's degree in public relations from USC.



Frances Loya is the administrative support coordinator for the Department of Human Nutrition & Food Science. Prior to joining the department, she worked as an administrative support coordinator for the Office of the Registrar. Her previous experience includes working for the vice chancellor of administration and the housing operations department at UC Riverside.



Mary Romo is working in the College of Agriculture part time to help coordinate and secure sponsorships for the college's external events, such as the Spring Harvest dinner and the Pumpkin Festival. She has worked as a marketing and sales representative and educational consultant/account executive for information technology service companies. She also was vice president of

operations for the entertainment screening division of OTX. She has a bachelor's degree in political science from UC Riverside.



Adam Mason is the new agronomy farm coordinator. A recent graduate ('15, plant science), he worked in farming operations for the past four years, supervising the crew with detailed procedures, equipment operation and planning for crop installment. He owns his own landscape design business and also

has worked as a utility forester in urban forestry projects, inspecting and mapping trees in several Southern California areas.



Craig Walters is the director and outreach coordinator for AGRIscapes. In this new position, Craig is charged with increasing public awareness of AGRIscapes' programs and services. A College of Agriculture alumnus ('78, plant and soil science), he has lengthy experience in video production and directing, including 33 years running his own company. He also is a former La Verne city councilman and chairman of the Old Town La Verne Business District.

He organized the annual Wine Walk and founded La Verne's Heritage Park, which preserves the city's citrus history.

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FACULTY AND STAFF ACHIEVEMENTS

DR. WAYNE BIDLACK Dean of Ag & Professor, HNFS Department



Wayne Bidlack became a professor in the Department of Human Nutrition & Food Science after serving as the College of Agriculture's dean from 1995 to 2007. He taught courses nutrient metabolism and nutritional genomics. During his tenure as dean, enrollment in the college increased 40

percent, research grants increased 42 percent and the new food science and technology program was started. In addition, AGRIscapes was built. Bidlack was presented with the Wang Family Excellence Award for Administrators in 2002.

DR. TERRY FUJIMOTO

Professor, Plant Science Department



Terry Fujimoto taught, advised and supported students for more than 35 years in plant science. He was instrumental in the creation of the new greenhouses at AGRIscapes and started a hydroponics program to grow greenhouse

tomatoes and other vegetables. The College of Agriculture recognized him with the 2014 Outstanding Teacher of the Year Award. He retired in 2014.

AWARD SALUTES HOSTETLER FOR SERVICE TO EDUCATION

Dan Hostetler, a professor emeritus and former chair of the plant sciences department, was awarded the California Future Farmers Association's highest honor for his three decades of service to agricultural education.

Hostetler was presented with the CFFA's Honorary State Degree at the annual State FFA Leadership Conference in Fresno last April. He is the fifth person from Cal Poly Pomona to receive the honor.

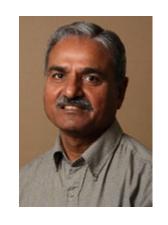
The award recognizes those who have provided exceptional service to agriculture, agricultural education and the California FFA. Among his many FFA activities, Hostetler has organized and judged contests and provided industry tours in Southern California.

He also was honored in February at the Provost's Awards for Excellence Symposium at Cal Poly Pomona. He was selected for the Provost's Award for Excellence in Service.

Hostetler has worked for the College of Agriculture as farm manager, administrator, chief of the plant sciences department and leader of the AGRIscapes development.



RAMESH KUMAR Professor, Plant Science Department



Ramesh Kumar came to Cal Poly Pomona in 1980 after earning his doctorate in agricultural engineering at UC Davis. He started as a lecturer and rose to professor. He served as acting chair of the Department of Agricultural

Engineering in 1981, and then department chair from 1992 to 1995. He was instrumental in the development and success of the Center for Turf, Irrigation and Landscape Technology. He was the college's representative to the Water Resources Policy Initiative.

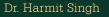
SHERRI REICHARDT MOVES UP TO ASSISTANT PROFESSOR



Sherri Reichardt has been promoted to assistant professor of animal and veterinary sciences and as a registered veterinary technician. Since 2006, she has served as an animal health technician, lecturer and surgical coordinator for the department. She also served as the interim director for the animal health science

program, maintaining accreditation standards and collecting data and other records. An alumna ('05, animal health science), she earned her master's degree in agriculture with an animal science option last June. She is a licensed registered veterinary technologist.







Dr. Shelton Murinda

FALL 2015

SINGH, MURINDA TO SERVE IN NEW **POSITIONS**

Two faculty members have been appointed to new positions in the College of Agriculture.

Harmit Singh, an associate professor in the Department of Human Nutrition & Food Science, will serve as coordinator for graduate programs.

Shelton Murinda, a professor in the Department of Animal & Veterinary Sciences, will serve as the coordinator for the Agricultural Research Institute.

Both positions are three-year appointments.

DAN HOSTETLER Chairman & Professor, Plant Science Department



Dan Hostetler wore many hats during his 38 years at Cal Poly Pomona: farm supervisor, professor, fundraiser, chair of the plant and soil science department, interim chair of the agribusiness, food industry management and agricultural science, and was a member of the Cal Poly Pomona

Foundation Board of Directors. He won many honors during his career, including Outstanding Advisor and Outstanding Teacher in the College of Agriculture. He was recognized with the 2014 Provost's Award for Excellence in Service. He retired in 2014.

AGRICOLUMN

FACULTY AND STAFF ACHIEVEMENTS



SANDELIN EARNS ADVISOR OF THE YEAR HONOR

Professor Broc Sandelin, chair of the animal and veterinary sciences department, was named the college's 2014-15 Mack H. Kennington Advisor of the Year.

Students said he "provides concise and complete answers to any question." He also was praised for being "professional, consistent, having complete knowledge of the field, efficient and having a never-ending willingness to help."

Sandelin was honored at a May 5 awards ceremony and recognized at Commencement.



HULGREEN RECEIVES TEACHER OF THE YEAR AWARD

Melissa Hulgreen, a lecturer in the animal and veterinary sciences department, was selected the college's 2014-15 Teacher of the Year.

Students who nominated her expressed appreciation for her ability to "incorporate hands-on experience into the classroom and the fact that she allows them to practice techniques in a calm and supportive manner."

In addition, "She has made lab enjoyable" and "makes learning fun."

Hulgreen uses an approach called "listen, try, teach," where students listen to her explanations and demonstrations, then try and master the skill and teach the skill to one another.

Hulgreen was recognized at Commencement.



DE LA PARRA WINS STAFF OF THE YEAR AWARD

Sarah De La Parra, the administrative support coordinator for the animal and veterinary sciences department, was selected the college's 2014-15 Staff of the Year Award.

De La Parra was described as "always being willing to help students" and "organized, polite, enthusiastic and devoted to students."

She also serves on Staff Council, is a member of the Commencement committee and founded the "Raising a Little Health" club, which promotes healthy eating and exercise for the staff.

De La Parra was recognized at Commencement.

STUDENT ACHIEVEMENTS



YIM RECEIVES STUDENT LEADER OF THE YEAR **AWARD**

Aasta Yim was named the College of Agriculture's 2014-15 Student of the Year.

Yim, who graduated in June with a degree in food marketing and agribusiness management, served as president of the Agribusiness Management Club and president of Ag Council.

In her nomination form, she was described as "an extremely bright, inquisitive and resourceful individual."

Yim was recognized at Commencement.







Michaiah Leal

VALEDICTORIANS SHARE MCPHEE AWARD

Madeleine E. Gross and Michaiah J. Leal were chosen as co-recipients of the Julian A. McPhee Award.

The award is given to the College of Agriculture's valedictorians.

Gross graduated summa cum laude in foods and nutrition. She also was a member of the Keith and Jean Honors College. Leal graduated summa cum laude in animal and veterinary sciences.

The students were honored at the College of Agriculture's Commencement last June.

STUDENT RIDERS FINISH IN TOP FIVE AT NATIONALS

McKenna Coveney and Shannon Mulcahy competed at the Intercollegiate Horse Show Association National Championships in May.

Coveney, who is Cal Poly Pomona's Western captain, competed in the AQHA High Point Rider class, which is for the riders who have scored the most combined points in Open Western Horsemanship and Open Reining throughout the regular show

season in their region.

OUNDED 19

HORSE SHOW

Coveney rode Bear for the horsemanship phase and placed fourth. She rode George in the reining phase and scored 140.5, placing second in that class. Overall, Coveney placed second in the AQHA High Point and was Reserve National Champion.

Mulcahy rode Individual Novice Equitation Over Fences on a horse provided by Dartmouth College. She qualified by advancing through regionals (held in March at Cal Poly Pomona) and zones (held in April at Stanford University). Mulcahy, who is the Hunt Seat Captain, earned a score of 81 and fifth place.

The championships were in West Springfield, MA.

LIVESTOCK TEAM TAKES TOP HONORS

A team from Cal Poly Pomona took home top honors at the California State Fair last summer for breeding Dorset sheep.

The team was named the Premier Dorset Breeder from California. It was the first time a university flock has won the award. The perpetual plaque for the award will remain at Cal Poly Pomona until next year's show.

Cal Poly Pomona sheep that were exhibited at the fair garnered four first-place and four second-place finishes in their classes. They included the stud ram Emmett that was purchased last year and won the Reserve Grand Champion Dorset Ram title. Mr. Cruise, which was born on campus last January and raised by students took home the Junior Grand Champion Dorset Ram award.



STUDENTS FINISH THIRD IN NATIONAL LANDSCAPE COMPETITION

A Cal Poly Pomona team took third place at the PLANET Student Career Days National Collegiate Landscape Competition.

More than 850 students from 65 colleges and universities competed last March in Raleigh, North Carolina, at the event, which is often characterized as the "Olympics" of landscaping.

Cal Poly Pomona finished third behind Brigham Young University in Idaho and Michigan State University, but ahead of many other universities, including Brigham Young in Utah, Georgia, Virginia Tech, Iowa State, Oklahoma State and Auburn. It was the Broncos' first top-three finish in at least 15 years.

In addition, Cal Poly Pomona students finished in the top three in five categories during the competition:

- Whitney Redfield, first place, 3D Exterior Landscape Design
- Ivan Velazquez, first place, Interior Landscape
- Raul Martinez, second place, Turf & Weed Identification
- Tyler Harvey, third place, Irrigation Design
- Luellen Swayzer, third place, Plant Problem Diagnosis.

Other team members include Ernesto Altamirano, Ryan Anderson, Oscar Del Real, Felix Jaimes, Ryusuke Kanagawa, Joshua Klockman, Adam Mason, Juan Prieto, Bret Timmons and Austin Zendejas.

The competition is organized by the Professional Landcare Network (PLANET), the national trade association representing landscape professionals. The event includes a career fair and is a major recruiting event for companies in the \$73-billion landscape industry.

FOOD SCIENCE STUDENTS CONTINUE TO EXCEL

Cal Poly Pomona's food science students earned accolades and awards throughout the year.

- The Cal Poly Pomona Food Science Society was honored by the Institute of Food Technologists Student Association. The society was named as the 2015 Outstanding Chapter for Organizational Growth.
- Spencer Jones, a recent graduate in food science and technology, was one of five finalists at the Institute of Food Technologists' student poster competition held in Chicago last July. He made a presentation on the "Effects of Dietary Fiber Sources and Addition Levels on Organoleptic Properties of Fortified Pasta Products."
- The team of Jaclyn Gonzalez, Sabah Baig, Kristine Frohnauer and Sandra Largaespada took second prize at the Southern California Food Industry Conference held in Anaheim last March. The team created "P-Stash to Go," a pistachio-based, ready-to-eat dip using natural ingredients.
- Another team of Jaynie Tao, Ali Hasan, Giselle Hernandez, Spencer Jones, Lisa Mai, Haley Smolinski, Ashley Stowells and Megan Telebrico took first place in the biological and agricultural science division at the third annual Cal Poly Pomona Student Research Conference for its presentation on "Development of a Fortified Rice Product Using Edible Insect Flours for Developing Countries." The team also competed in the CSU Student

Research Competition at Cal State San Bernardino last May and at the national Institute of Food **Technologists** competition in Chicago last July.





PRE-VET STUDENT WORKS WITH ANIMALS IN THAILAND



An animal science student spent a month in Thailand last summer gaining handson experience working with veterinarians and helping animals that ranged from exotic jungle creatures to domestic cats.

Nicole Killigrew traveled to Thailand with a small team from Loop Abroad, a Boston-based program that gives high school and college students a chance to explore global issues and possible careers in conservation.

Her team spent a week as volunteer workers at a dog shelter in Chiang Mai. The shelter is home to more than 100 dogs that have been rescued after being abandoned, beaten or abused. The dogs can be adopted or stay in the shelter for the rest of their lives.

The students provided checkups and cleanings, diagnosed and treated dogs for ear and eye problems, tested blood

samples from the animals, administered vaccines, cleaned and treated wounds, and helped with sterilization surgeries. The students performed daily eye treatments to about 25 dogs, administered fluids and assisted Thai veterinarians by restraining animals.

The team then spent a week at the Elephant Nature Park in northern Thailand to work with the animals and learn about animal rescue and conservation. The park is home to more than 60 elephants that have been rescued from trekking, logging or forced breeding programs. Many of them were abused and suffer from chronic injuries.

Volunteers from around the world come to care, feed and bathe the elephants, and learn about their conditions from a veterinarian. They also cared for rabbits, water buffalo and other animals that lived at the park.

Killigrew and two other students chose to stay for another two weeks at the elephant park after the team had completed its stay.

STUDENTS LEARN ABOUT FOOD SAFETY IN ALASKA

Three human nutrition and food science students went to the last frontier last summer to learn about food

Jenny Hoang, Jonathan Kwalk and Kathleen Serrano interned with Trident Seafood Corp. in Naknek, Alaska, a community of about 600 residents that is about an hour's flight southwest from Anchorage.

Among the experience they gained during the five-week internship was working on quality assurance at Trident Seafood's cannery, monitoring cans to make sure that the seams didn't have defects, ensuring that the cans were cooked at the right time and temperature, and verifying that the water-

cooling process was followed.

STUDENTS WORK PET SHOW IN LAS VEGAS

College of Agriculture students had the opportunity last summer to participate at Superzoo, one of the largest trade shows for pet retailers in the country.

Caryn Butts, Amy Guerrero, Mackenzie Hays, Luke Lightbody and Roxana Velazquez worked the Horn Animal Wellness booth at the July 21-23 show held in the Mandalay Bay Convention Center in Las Vegas.

They set up the interactive displays to engage attendees and promote the educational talks being given in the School of Animal Wellness, which La Mirada-based Horn sponsors.

The School of Wellness featured seminars by experts on topics such as "Optimal Vitamin Nutrition for Dogs and Cats" to "Who is Looking Out After Your Pet Food."

AGRICOLUMN FALL 2015

ALUMNI ACHIEVEMENTS



Don Brinkerhoff



David Lannom



Mark Pedicone



Susan Sims

ALUMNI NAMED TO GREEN INDUSTRY HALL OF FAME

Four alumni were inducted this May into the Green Industry Hall of Fame.

The inductees are:

Don Brinkerhoff ('52, BS-ornamental horticulture) is the founder and chairman/CEO of Lifescapes International Inc. He has extensive experience in the design of casinos, world-renowned hotels and master-planned communities. Brinkerhoff is a fellow with the American Society of Landscape Architects and a longtime supporter of the College of Environmental Design at Cal Poly Pomona.

David Lannom ('69, BS-ornamental horticulture; '89, MS-agriculture) is a horticulture professor and former chair of the agriculture science department at Mt. San Antonio

Mark Pedicone ('79, BS-ornamental horticulture) is a regional sales manager for ETwater Sales Inc. who has worked in the landscape irrigation industry in Southern California for 35 years.

Susan Sims ('02, BS-agricultural biology) runs Sims Tree Health Specialists and also has built a gardening tool business. She has created a center to educate others about trees and preservation efforts. Sims also has started a program to educate green industry professionals about law and regulations protecting wildlife that reside in California's



Based in Ontario, the Green Industry Hall of Fame was created to honor the contributions of those who worked in the Green Industry. Inductees must have worked at least 20 years in the industry, invented new technology, provided education or changed the industry. The Hall of Fame inducted its first member in 2005.

BECKER NAMED **2015** ALUMNA OF THE YEAR

Teresa Becker ('07, apparel production) was named the College of Agriculture's 2015 Distinguished Alumni Award winner.

Becker was already a fashion designer, business owner and teacher when she enrolled in the apparel merchandising

and management program at Cal Poly Pomona. She needed a bachelor's degree to continue teaching at community colleges and design schools.

While at Cal Poly Pomona, she started a wholesale and retail e-commerce clothing business in her home with her daughter. Today, Heart of Haute employs 16 people and sells to more

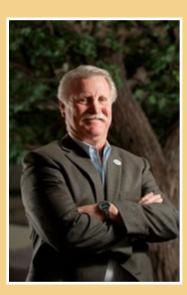
than 400 boutiques and online businesses, and about 80 percent of the clothing line is handled on the Internet. The company occupies an 8,000-square-foot building in San Dimas.

The American Apparel Education Foundation named Becker as its 2006-07 Cal Poly Apparel Student of the Year. In addition, she and her daughter, Amanda, were named Businesswomen of the Year by the San Dimas Chamber of Commerce in 2009.

Since graduating in 2007, she has volunteered on campus, donated to the university, and participated in and provided garments for the Apparel Merchandising and Management Fashion Show.

Her company has provided internships to students and jobs for alumni.

The Cal Poly Pomona Alumni Association honored Becker on April 24 at the Sheraton Hotel & Resort, Fairplex. She was also recognized at the College of Agriculture's commencement ceremony.



EVANSON 2014 DISTINGUISHED ALUM

For Marty Evanson, the meat business has always been the family business. His father was a meat distributor in Los Angeles, and after graduating with a degree in animal husbandry in 1963, Evanson ventured into the meat packing house industry. Sixteen years later, in 1979, he and a couple of friends founded Jobbers Meat Packing Co. and Ice Cold Storage Co., both headquartered in Vernon.

Currently, Jobbers, through its subsidiary WilMar Ground Meat, provides a million pounds of ground beef per week to retailers, food service companies and restaurant distributors in California, Arizona and Nevada. Marty is Chairman of the Board of the North American Meat Association and the 2014 recipient of the Richard Knowlton Award.

Throughout the years of success, Evanson has not forgotten his alma mater. He sits on the College of Agriculture Dean's Council, and in 2013, pledged \$100,000 to support an endowed scholarship for undergraduate animal science students who demonstrate financial need.

Evanson and his wife, Carol, have been married for 44 years and are parents to four grown children: Gina, Heather, Danielle (Dani) and Andrew. They have eight grandchildren: Halen, Jake, Haley, Kieran, Xander, Ethan, Kiya and Alice.

ALUMNUS STAKES CLAIM IN LAS VEGAS

For a man who has made his living in Las Vegas, Dan Stark found that the odds were usually on his side.



In 1981, Stark earned a Bachelor of Science degree in agricultural business management from Cal Poly Pomona, where he was a member of the University Union Board, served on the Poly Vue Committee and was captain of the Intercollegiate Horse Show Team. He expected to manage a horse ranch as a career, and he did that for seven years

at Disneyland after graduation. But then, other opportunities emerged.

"I didn't really choose my career path as much as I kind of just fell into it by being in the right place at the right time, being prepared to think outside the box and not being afraid to try new things," he recalls. "The time at Disney allowed me to acquire professional experience in the entertainment/hospitality/tourism industry, which led me to other career opportunities."

After leaving Disney, Stark headed the tourism and marketing efforts of several cities. In 1999, he landed in Las Vegas and worked for Boyd Gaming Corp., eventually becoming vice president of corporate marketing. He put some of his Cal Poly Pomona expertise to work when he was charged with elevating the visibility of the company during the annual Professional Rodeo Cowboys Association's National Finals Rodeo.

He left Boyd Gaming to become a consultant and has since worked on television shows related to casinos and an entertainment facility in Athens, Greece, near the famous Acropolis. He is leading a team developing entertainment and hospitality projects in Las Vegas and Austin, Texas.

Stark also continued his education through the years. In 1989, he received a certificate in executive management from the Peter F. Drucker Graduate School of Management at Claremont Graduate University, followed in 1992 by an M.A. in management, also from the Drucker School.

He has served on the Cal Poly Pomona Alumni Association Board and was one of Cal Poly Pomona's representatives to the CSU Alumni Council.

DEVELOPMENT SPOTLIGHT





the historic drought in California persists, farmers could turn to the water-sipping pigeon pea legume as a substitute for thirsty alfalfa fields. Drought-tolerant sorghum may provide a critical food source in the harsh climates of famine-prone countries.

That's what two Cal Poly Pomona seniors learned during an intensive summer internship in India.

Plant science majors Blake Stark and Lucia Sellati spent eleven weeks in Hyderabad, capital city of the southern India state of Telangana, whose semi-arid climate and agrarian subenvironment made it an ideal research site. They evaluated plants that might thrive in difficult climates and help feed hungry populations.

The internships are a hallmark of the university's learn-bydoing approach.

"The overriding goal was to help these students put into practice the plant science they've learned here at Cal Poly Pomona," says Mary S. Holz-Clause, dean of the College of Agriculture. "International experiences can be so transformative in the lives of students, helping them understand that they have both a responsibility and an obligation to think beyond our own borders and recognize that they are part of a global community."

Stark and Sellati were part of plant-breeding projects at the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), working with chickpea, pigeon pea and other food staples. ICRISAT is a nonprofit United Nationsfunded organization that conducts agricultural research for plant development in Asia and Africa. The internships were funded by Jim Hicks, a longtime and staunch supporter of the College of Agriculture.

Sellati worked for the Sorghum Breeding Department in ICRISAT's Dryland Cereals Sector, examining drought tolerance.

"We chemically blocked different water pathways in the sorghum plants to simulate drought, study the physiological effects, and pinpoint more resistant genotypes," she says.

According to Sellati, her research has at least one potentially significant application: Because India is a densely populated country, development of cereal crops, including sorghum, is crucial to feeding its people and those in famine-plagued

Stark worked on a water-logging tolerance study for pigeon pea, an edible seed. Plants were grown in cement ponds that were filled to replicate stagnant water and screened for survival rates. He also assisted with a report focusing on increasing the global awareness of pigeon pea.

"Pigeon pea works great for intercropping, can be used for fodder, has many medicinal uses and tastes delicious," he says. "I believe there is a special niche for the use of pigeon pea in the U.S. because it is drought-tolerant and has extremely beneficial effects on the soil. Since California grows so much alfalfa, which is a high water-demanding crop, I believe we could save a lot of water, thus saving farmers money, by growing pigeon pea for fodder instead of alfalfa."

For Stark, from Brea, the research has led him on the path to graduate school and further study of plant science.

"I learned a lot about many different aspects of plant breeding," he says. "I learned how to make hybrid crosses essential for plant breeding. I also learned about male sterility and its usefulness in plant breeding as well as a couple of tricks to improve data collection and analysis. I was also reminded of the many variables that can affect research and how much time, effort and planning go into generating a scientifically sound experiment."

Sellati, of Monrovia, says the internship gave her many new skills, the most valuable one being data analysis. "I was able to experience every aspect of data analysis firsthand," she says. "I feel as though I could utilize this skill and the overall experience in the future."

"I got to see firsthand how agriculture is crucial in another country"

After graduation, she hopes to work in plant breeding or pathology and eventually enroll in graduate school.

The internship also helped open her eyes to the world.

"I got to see firsthand how agriculture is crucial in another country," she said. "I saw small farmers treat agriculture as their livelihood, and they would be destitute without it. It further solidified the importance of agriculture and how universal it is."

For more information on supporting student internships, estate planning or to make a gift to the college, please contact:

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Human Nutrition & Food Science 50th Anniversary Gala

Mar 5

College of Agriculture Open House and Taste of the Farm Store

2nd Annual Spring Harvest Dinner at AGRIscapes

Ag Career Day in Cowboy Corner

May

Tractor and Car Show

24th Annual Pumpkin Festival **Activities • Contests • Pumpkin Patch**

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