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Friends of the Animal Science Department,

The 2015-16 academic year was one of merit, as we worked collectively to combine the animal science and dairy science programs. Throughout this process, there have been numerous opportunities for our faculty and students to collaborate, learn across disciplines, and ultimately create a stronger whole.

In fall 2015, we had an incoming class of 260 students this year, including both first-time freshmen and transfer students. We bid a fond farewell to several retiring faculty and staff, and welcomed several new experts to our team (see story, p. 3-8).

Several of our faculty were recognized at the College of Agriculture, Food and Environmental Sciences (CAFES) annual Faculty and Staff Awards Ceremony last month, including Kim Sprayberry with the New Teaching Award and Leanne Berning with the Outstanding Mentor Award. We celebrated these and many more accomplishments at our annual Animal Science and Dairy Science end-of-year banquets, with each event hosting more than 200 students, staff, faculty, and their families.

We also devoted time to enhancing our infrastructure. The renovations to the Poultry Unit are almost complete (see story, p. 11), and we’ve added new enclosures and fencing to the Equine Unit. We’ve also provided considerable input to Cal Poly’s draft Master Plan, specifically regarding the Cal Poly Dairy and surrounding lands. Students, faculty and our industry partners all came together to help make the case for preserving vital agricultural lands, and the university has agreed to remove those lands from consideration for future development.

With all of this and more, we are positioned for ongoing success. I want to thank each of you for your support and partnership.

Best Regards,

Jaymie Noland, D.V.M.
Department Head
HALF A DOZEN NEW FACULTY MEMBERS JOINED THE DEPARTMENT THIS YEAR. WE ARE PLEASED TO INTRODUCE THEM IN THIS ISSUE.
Bolivian-born Cedric Blanc stepped in as the dairy herd operations manager in February 2016, when Richard Silacci accepted a teaching position in the department.

Blanc, a veterinarian, left a job managing two commercial dairy herds in the San Joaquin Valley to join Cal Poly. It’s a decision he is happy with. “The cows and the students make me want to jump out of bed to be here every day,” Blanc said.

The Cal Poly Dairy is a student-run operation providing up to 95 students valuable hands-on experience in the day-to-day operations of a typical working dairy.

“They do all the animal husbandry, milking and feeding,” Blanc said. “They also order most of the feed and are involved in breeding and management decisions. It gives them a solid understanding of all that is at play.”

Blanc and the students oversee 216 heifers and the 223 cows that supply 900 gallons of wholesome milk a day, most of which is sold to the Leprino Foods company to make mozzarella cheese. Cal Poly’s milk is also the main ingredient for all Cal Poly Creamery products, including cheese, ice cream, chocolate milk and the popular holiday eggnog.

His days are long, typically starting at 6 a.m. to work with the students in the dairy.

But the long hours aren’t his biggest challenge — making the dairy unit financially sustainable is. “I plan to make this the best little teaching dairy in the country,” Blanc said. “To achieve that, I need to make sure we have a financially sustainable model to build and grow on. I have remodeling and changes to management I’d like to make, once the economic model for the dairy is established.”

His love for animals and the outdoors are what originally attracted him to the dairy industry. And seeing the students bloom into dairymen are his rewards, he said.

Blanc earned a bachelor’s degree in animal science from Oregon State University in Corvallis and a doctor of veterinary medicine degree from UC Davis.

He lives in Atascadero, Calif., with his spouse, Mireille, two high-school aged daughters, Sophie and Maite, and “too many pets to count.”
ALL IN A DAY’S WORK

EVERETT AIMS TO RE-BRAND, GROW DAIRY INNOVATION INSTITUTE

To say David W. Everett has his work cut out for him as associate professor and director of Cal Poly’s Dairy Innovation Institute, is an understatement of enormous proportions.

He teaches in the dairy foods processing program within the Animal Science Department; oversees the Dairy Products Technology Center, part of the Dairy Innovation Institute; meets with representatives from the U.S. dairy industry, “making sure our research and educational programs benefit the industry;” attends industry meetings in the U.S.; and speaks at national and international conferences.

And that’s not all. Everett writes research grants to “keep staff employed, run research programs, and support students.” He authors research papers for professional journals. He is editor of the International Dairy Journal and chair of the Dairy Science and Technology standing committee of the International Dairy Federation. He is also co-writing a two-volume textbook on cheese science and technology.

Since earning his doctorate in food science at the University of Wisconsin, Madison, he has worked at a federal government research center in Australia and at a dairy industry-funded company as a science liaison linking publicly funded researchers with the dairy industry to solve technical problems.

The Australian-born husband and father of four came to Cal Poly from the University of Otago in Dunedin, New Zealand, where he taught for 16 years.

His research focuses on understanding the role of dairy product microstructure on enzymatic reactions that produce flavor compounds; release of flavor compounds, nutrients and bioactive components under oral and digestive conditions; colloidal and surface physical chemical reactions in dairy products; cheese, as a vehicle for carrying health-conferring antioxidant compounds; and dairy ingredient functionality.

At Cal Poly, he applies all of the elements of his previous jobs combined: management, leadership, teaching, research, communication and service to the dairy industry. It isn’t what he expected, but he appreciates “testing his skills. I thought it would be a relatively simple job of teaching and student research,” he said. “But it grew legs and ran!”

He has plans to re-brand and grow the Dairy Innovation Institute to align with the future needs of the industry, develop strong graduate programs, and increase the number of undergraduate students in dairy food processing.

“My goal is to make the Dairy Innovation Institute the premier research center in the U.S.”

He is working with the Food Science and Nutrition Department to develop teaching synergies and a closer relationship to market the degree program. My goal is to make the Dairy Innovation Institute the premier research center in the U.S. for teaching, research, and dairy industry support. We have great infrastructure and great people.”
The Animal Science Department welcomed award-winning meat food processing scientist Ike Kang to the faculty in January 2016.

The new tenure-track associate professor came to Cal Poly from Michigan State University, where he taught since 2009.

Kang brings a wealth of academic and professional experience to the classroom and laboratory. His industry experience includes positions as associate principal scientist at Kraft/Oscar Mayer Foods, where he won several awards for innovative processes and techniques, and as a postdoctoral research associate at North Carolina State University.

His teaching and research interests (see related story, page 10) will greatly bolster Learn by Doing opportunities at Cal Poly, where he is "eager to make a difference and influence students in a positive way."

At Cal Poly he is teaching ASCI 384: Processed Meat Products and ASCI 211: Meat Science. Kang invites industry experts into the classroom to share their expertise and explain ways to apply classroom knowledge to their fields.

In his laboratory activities, Kang provides students with hands-on experiences that allow them to produce various processed meats. “I encourage them to evaluate their products in both learning and fun environments,” he said. “As a result, students improve their ability to solve problems they might encounter outside of school.”

A strong believer in the adage, “Educate a person as if you are thinking 100 years ahead,” Kang hopes to leave a confident, lasting impression on his students.

“I dream that many of my students will remember me decades from now as a teacher who shared positive initiative, discipline and the encouragement to be successful,” he said.

The married father of four grew up in Seoul, South Korea, where he earned a bachelor’s degree in animal science from Kon-Kuk University. He also holds a master’s degree in animal science from Fresno State and a doctorate in food science and technology from Texas A&M University in College Station, Texas.
Fourth-generation dairy farmer Richard D. Silacci (Dairy Science, ’94; M.S., Agricultural Education, ’15) joined the Animal Science Department faculty in January, bringing with him the knowledge that comes from a lifetime of dairy industry experience.

He was born on a dairy farm that had been in his family for 100 years. After earning his bachelor’s degree, he worked in industry before returning to his family dairy business in Petaluma, Calif.

“I never thought I would return to Cal Poly to teach, but our dairy operation was experiencing some costly environmental problems,” he said. “My family and I decided that selling the business and exploring the opportunity at Cal Poly was a timely option.”

Dairy science Professors Leanne Berning and Stan Henderson called Silacci to tell him Cal Poly needed a dairy herd operations manager. They sweetened the deal by offering Silacci the opportunity to finish the master’s degree he had started years earlier.

He took the job in 2007, completed his master’s degree in 2015, and the following February, accepted the full-time lecturer position.

His first year, he taught Senior Seminar; the Dairy Calf Enterprise; Dairy Cattle Management, Safety and Animal Well-Being; Introduction to Dairy Farm Consultation; Dairy Cattle Evaluation; Advanced Dairy Calf Management; and Senior Project.

He serves as head coach of the Dairy Cattle Judging Team, assistant coach of the Dairy Challenge Team, and advisor to the FFA State Finals Dairy Judging Contest. He recently began advising the Cal Poly Dairy Science Open House Committee and the California Jr. Holstein Association Cow Camp.

Although he hadn’t envisioned himself at the head of a classroom, he enjoys the change and the challenge. “My classes are practical and applied; I get to relate to my students in a hands-on laboratory setting,” he said. “I try to be organized so that my students know what I expect, and I hope that I’m passing on the tools to be successful.”

The bigger challenge will be to increase student enrollment. “To the uninformed, dairy science sounds like it is focused only on milking cows and making cheese,” he said. “But there is so much more to it: harvesting and feeding, animal nutrition, artificial insemination, genetics and reproduction — so many areas to explore and grow in.”
Alumna Jennifer Pelayo just can’t get enough of the Cal Poly Creamery. The 2010 food science graduate worked there while an undergraduate, and in February 2016, she returned to manage the facility full time.

“As a student employee, I dreamt of one day coming back and becoming the creamery manager,” Pelayo said. “I just knew I had to work there.”

During her six-year absence from campus, she gained industry experience as a production supervisor at Leprino Foods in Lemoore, Calif., and more recently as quality assurance manager for Sure Fresh Produce Inc. in Santa Maria, Calif.

At Cal Poly, Pelayo oversees the production, packaging and distribution of chocolate milk; cheddar, smoked cheddar, spicy cheddar, Monterey Jack, smoked Monterey Jack, chipotle Jack, Gouda, and smoked Gouda cheeses; vanilla, mint chip, chocolate chip, cookies and cream, mud pie and strawberry ice cream; and eggnog during the holiday season.

She knows firsthand the benefits students derive from working in the creamery. “The work supplements the theory they are learning in class. This allows them to experience the practical, hands-on aspect,” Pelayo said. “They get to work in collaborative environments and learn to multitask, plan, organize and prioritize work, all while gaining technical knowledge of several dairy processes.”

Pelayo aims to share her industry experience with the students, including having them earn certification in pasteurization and milk sampling. “In the industry, a well-rounded student is the most desirable candidate,” she noted.

Her position is bringing her rewards greater than those initial dreams of just working in the creamery. Most gratifying, she said, is seeing the growth of her employees. “I have coached and motivated employees who thought they couldn’t be cross-trained. They thank me for believing in them.”

Pelayo lives in Pismo Beach with her husband, Valentín, (Architecture, ’11). “We’ve actually been together since we were 15 years old, sophomores in high school,” she said. They both moved from Palmdale, Calif., to attend Cal Poly and fell in love with San Luis Obispo.

Cal Poly Creamery products are sold locally at Spencer’s and Vons markets and on campus at the Campus Market and Village Market; cheese is sold at the J & G Lau Family Meat Processing Center.
Whether he’s teaching students about dairy cattle nutrition at Cal Poly or at Hebron University College of Agriculture in the Palestinian Territories, assistant professor David Vagnoni remains focused on student success.

“It’s improved my teaching, and I think it helps their engagement to see their professor genuinely interested in their ideas.”

Vagnoni, the Animal Science Department’s newest dairy nutritionist, moved with his wife and two teenage daughters from the Middle East to Grover Beach in 2015. He teaches Dairy Cattle Nutrition and contributes to other courses, but he’s most excited about the new course he’s developing, Advanced Dairy Cattle Nutrition.

To keep his classes fresh and engaging, he sometimes goes right to the source, eliciting advice from his students.

“Perhaps the single greatest thing we can impart to students is a passion for learning and the knowledge that they can solve problems,” he said. “That’s probably my biggest hope — to contribute — at least a little — to the students’ development as lifelong learners.”

Vagnoni’s research has been published in numerous journals, he has given presentations at conferences throughout the U.S., and he has been awarded more than $500,000 in grants from various agencies, including the U.S. Department of Agriculture.

A native New Yorker, he earned a bachelor’s degree in biomedical engineering from Tulane University, a master’s in animal science from Louisiana State University, and a doctorate in dairy science from the University of Wisconsin.
The Animal Science Department has teamed up with The Marine Mammal Center (TMMC) in Morro Bay, Calif., to offer a new interdisciplinary enterprise course titled Marine Mammal Health.

The course was inspired by the overwhelming interest expressed by animal science and biological sciences students seeking learning opportunities at the center.

The course was developed and taught for the first time in spring quarter 2016 by wildlife veterinarian Heather Harris of the TMMC.

“The course bridges traditional veterinary medicine and herd health concepts within the framework of marine ecosystem health and the broader One Health perspective, which seeks to unite human and veterinary medicine,” said Animal Science Department Head Jaymie Noland. “As an enterprise class designed to provide students with hands-on animal experience and team building skills in a real-world setting, this course exemplifies Cal Poly’s Learn by Doing motto.

Sixteen upper-division animal science and biological sciences students with a demonstrated interest in veterinary medicine or marine science were chosen from a large pool of qualified applicants to participate in the first course spring quarter.

Students attended weekly lectures and training sessions on topics that included marine mammal biology and natural history, methods for rescue and rehabilitation, wildlife disease ecology, common diseases and treatments, and necropsy techniques. Students were also required to work six hours per week at TMMC, participating in the rescue and rehabilitation of sick and injured pinnipeds and sea otters.

“This unique partnership benefits both the university and TMMC by expanding the scope of Cal Poly’s curriculum and fulfilling the marine center’s mission as a teaching hospital to advance global ocean conservation through rehabilitation, scientific research and education,” Harris said.

Harris and Cal Poly students were recently instrumental in reuniting a stranded sea otter pup with its mom. Watch the video here: www.facebook.com/themarinemammalcenter/videos/10153883002113462/.
RESEARCH SEEKS TO IMPROVE FOOD SAFETY AND QUALITY

Food processing scientist Ike Kang, who joined the Animal Science Department faculty in January 2016, has been involved in a variety of research projects since he was first awarded a research assistantship while still a graduate student at Fresno State in the late ’80s. One recent project aims to reduce the amount of sodium and fat in processed meats by employing cold batter-mincing and hot-boned/crust-freezing air chilling technologies.

“Until today, no research had been conducted to evaluate the effect of cold-cutting technology in pre-rigor meat, especially for fat and salt reduction,” Kang said. “Previously reported research had focused on a simple replacement of sodium and/or fat with other ingredients.”

He has a U.S. patent pending based on his research, and in 2015, he was awarded a $489,529 grant from the U.S. Department of Agriculture’s National Institute of Food and Agriculture (USDA-NIFA), allowing the research to continue through November 2018.

“We will conduct fundamental research to enhance nutritional quality, health and sensory attributes using the new proposed processing techniques for structural, functional and organoleptic changes,” Kang said.

Kang’s innovative ideas have also extended to improving poultry product safety by reducing Salmonella and Campylobacter, the two most commonly identified sources of foodborne illness in the U.S.

Unlike previous research, in which only loosely attached bacteria were eliminated, Kang evaluated attachment levels of bacteria on broiler carcasses for loose, intermediate and tight attachments. Based on these preliminary findings, Kang submitted a grant proposal to the Agriculture Research Institute and is preparing another proposal for USDA-NIFA consideration.

Master’s degree student Morgan Metheny is participating in Kang’s research, gaining valuable Learn by Doing expertise.
Cal Poly’s poultry have shiny new digs and even more room to move in three newly renovated barns.

The renovations, made possible with funds donated by alumni Peter and Mary Beth Oppenheimer, will keep Cal Poly at the forefront of poultry production and in line with industry standards adopted when Proposition 2 passed in 2008. Proposition 2 increased cage space from 69 square inches to 116 square inches.

The new barns include a cage-free environment, an enriched-colony system, and a pullet barn.

The different environments increase the educational value to students by providing them with a wider range of industry practices, said Steve Soderstrom, Poultry Center manager.

The enriched-colony barn holds 3,100 birds and includes “added enrichments.”

“We have an area with a plastic scratch pad,” Soderstrom said. “During the day the feed system drops feed onto the pad, and the birds can scratch while they feed, mimicking outdoor behavior. We installed perches inside the enclosure so the birds can roost like they would in a normal outdoor setting. One end of the enclosure is curtained off to create a nest box. The birds will go into that area, which is darker and quieter, to lay their eggs.

“We have two set-ups in the pullet barn,” Soderstrom said. “A caged-rearing system, for chicks that will go into the enriched-colony barn, and a cage-free rearing system, which includes a scratch area on one level and food and water on another.”

The cage-free chicks start in an enclosed area. “After three weeks, we open the door so they can move around, using ramps to learn to move vertically from one level to the next. A bird that has been raised in a cage, would have a difficult time in a cage-free barn because they have not learned to move vertically,” Soderstrom said.

The birds are the foundation for the Layer Enterprise, taught by Professor Robert Spiller. Students in the enterprise are responsible for gathering the approximately 2,800 eggs every day. The eggs supply campus dining outlets, a few local restaurants, and are also sold at area Food 4 Less and Vons stores.
Beef production specialist and Assistant Professor Keela Retallick-Trennepohl accompanied a group of 14 animal science students to the National Cattlemen’s Beef Association (NCBA) meeting in San Diego at the end of January.

The students learned about issues facing the beef industry and advances in technology, networked with industry professionals and other Young Cattlemen members, and heard guest speakers, including celebrity chef Robert Irvine and U.S. Navy SEAL Rob O’Neill.

Aboard the USS Midway, the students attended the Stars ‘n’ Stripes USO Show, toured the battleship, and tried out flight simulators.

Retallick-Trennepohl has taken students every year since arriving on campus in 2013, continuing a longstanding tradition that she thinks is important.

“Networking at the convention tradeshow — which covers more than an acre — gives students the opportunity to find internships and even full-time careers,” Retallick-Trennepohl said. “This year students took turns working the Cal Poly booth, where they brought attendees, including many alumni, up to date on Cal Poly news and told prospective students what the university has to offer.”

Student Danielle Wood, the Young Cattlemen Committee president, agrees that the convention provides students a valuable opportunity. “It’s great for students to meet connections in the beef industry and beyond, to hear amazing guest speakers, and to make friends and unforgettable memories.”
A record 602 exhibitors participated in the 32nd annual Western Bonanza, held Feb. 12-14 at the Paso Robles Event Center. They came from throughout California and from Arizona, Idaho, Nevada and Washington to showcase their cattle, swine, sheep and goats.

Six judges traveled all the way from Illinois, Missouri and Texas to take part in the event, which included 1,278 entries on Saturday and 1,184 entries on Sunday.

The event was organized entirely by Cal Poly students, including a 33-person management team and more than 100 committee members. This year’s theme was “Crowning Champions Since 1985.”

This year, the management team brought back the Western Bonanza Scholarship, awarding it to Megan Silveria and Conner Vernon, both high school seniors who have shown at Western Bonanza many years. Silveria, from Turlock, Calif., and Vernon, from Nipomo, Calif., each received $500. The scholarship is intended “to encourage the educational pursuits and goals of the exhibitors who have demonstrated leadership, academic excellence, and interest in the agricultural industry.”
CAMP CHAMP

STUDENT’S SAUSAGE TAKES SECOND AT CURED AND PROCESSED MEATS COMPETITION

Beaujena DeSilva, a student assistant in Cal Poly’s J & G Lau Meat Processing Center, was named the Collegiate Reserve Grand Champion at the California Association of Meat Processors’ (CAMP) Cured and Processed Meats Championships, held at Chico State University.

Her winning Beau’s Brat sausage was a tasty concoction that included crushed cashews. “It was inspired by a recipe we make at the plant with pistachio nuts called Pork Bockwurst,” DeSilva said.

DeSilva, a second-year agricultural business major, was one of six Cal Poly students who competed against 25 entries in the sausage-making portion of the competition. More than 245 entries were judged in 16 categories.

The students were charged with making fresh, uncooked sausage, and it had to include Sierra Nevada Pale Ale beer. DeSilva’s recipe included ground pork, beer, green onion, parsley, egg, a unique spice blend, and roasted cashews.

“One of the judges noted that he ordinarily doesn’t like cashews, but he called DeSilva’s sausage ‘incredible,’” said Jim Douglass, manager of the Meat Processing Center and advisor to the students. He and the students made the trip to the Northern California campus in late February.

DeSilva learned to make several varieties of Cal Poly’s signature sausages while working in the Meat Processing Center.

“It’s actually a simple process,” she said. “You cut up pork and put it into a grinder. You can grind it twice to give it a smoother, more uniform texture. Add in your ingredients and mix well. A machine inserts the sausage meat into casings. All you need to do then is cook it.”

“Learning their techniques and hearing their experiences was inspiring.”

In addition to the competition, the students benefit from CAMP’s convention activities, including demonstrations, discussions and networking.

“It was a wonderful experience,” confirmed DeSilva. “I attended workshops by professors and industry professionals who had their own butcher shops and catering companies. Learning their techniques and hearing their experiences was inspiring.

“I’m grateful for the opportunity to participate and to my advisor, Jim Douglass, who guided me every step of the way,” she continued.

Cal Poly is on board to host next year’s competition.
STUDENTS ATTEND EGG AND POULTRY MEETING

TWO STUDENTS AWARDED SCHOLARSHIPS

During the annual meeting of the Pacific Egg and Poultry Association in February, poultry nutrition graduate student Rose Petros (Animal Science, ’16) and agricultural business student Aaron Foster were each awarded $1,250 scholarships from the Western Poultry Scholarship and Research Foundation.

Scholarships are awarded based on a student’s interest — current and future — in the poultry industry, scholastic achievement, and financial need.

Petros and Foster were among a group of students who attended the regional meeting in Santa Barbara with animal science faculty members Darin Bennett, Joe Gardner, Ike Kang and Robert Spiller.

Spiller accompanied Foster and animal science students David De La Cruz, Paris Gilbert, Dickson Kwok, Rebecca Mason, Kelly Prescott, Jessica Reyes and Carlos Valencia and agricultural business students Eric Lahargou and Colton Nauta.

Bennett and Kang traveled with several Poultry Club members, including Petros, president; Mikaela Tosta, secretary; Catie Field, historian and scrapbook chair; Shelby Mitchell, treasurer; and Megan Kelley, vice president. All are animal science majors.

Kelley and Petros presented posters in the student poster competition, and the Cal Poly Poultry Club placed third in the scrapbook competition.

“The experience of presenting my research strengthened my public speaking and networking skills,” Kelley said. “We students also enjoyed networking with alumni Amanda Berry, sales representative at Elanco, and Dominic Diaz, Chino Valley Rancher’s flock manager. They gave us great insight and advice for future careers in the poultry industry.”

Students Megan Kelley (top and middle with animal science Professor Darin Bennett) and Rose Petros (bottom) attended the Pacific Egg and Poultry Association annual meeting.
MILKING IT

CAL POLY WINS FOURTH STRAIGHT NATIONAL DAIRY CHALLENGE

The Cal Poly Dairy Challenge Team earned first place at the 15th annual North American Intercollegiate Dairy Challenge held in April in Liverpool, N.Y., marking the team’s fourth consecutive win.

The students assessed all aspects of a working New York dairy farm and developed a farm analysis that included recommendations related to facilities, nutrition, financials, reproduction and animal health. They ranked first among eight competing teams.

Cal Poly team members John Schoneveld, Christine Sousa, Toni Silva, and Justine DeVries were coached by dairy science Professor Stan Henderson and animal science Professor Julie Huzzey, who accompanied the students to the competition.

“Cal Poly is the only university to take first-place honors for four consecutive years at the national level,” Henderson said.

In all, 247 students from 39 colleges across the U.S. and Canada attended the event. As part of their training, collegiate participants visited six dairy farms in New York to help farmers evaluate and adapt management practices to optimize success and animal care.
STUDENTS ATTEND ANIMAL NUTRITION CONFERENCE

GRAD STUDENT WINS FIRST IN POSTER PRESENTATION

Animal Science Professor Mark Edwards in May accompanied students to the annual California Animal Nutrition Conference in Fresno, where students enjoyed networking and interacting with Cal Poly alumni and other industry professionals.

Undergraduate Caitlin Scott and graduate students Rhianne Maxwell and Breanna Modica, who won first place in the student poster presentation, attended the two-day conference. Modica competed against students from Fresno State and UC Davis.

“We are extremely proud of the recognition given by the California Animal Nutrition Conference for Breanna’s presentation on ‘Physically Effective Fiber Threshold for the Hindgut-fermenting Leopard Tortoise,’” Edwards said. “Breanna professionally and confidently presented a unique approach to a biological question and effectively explained how her work can have positive implications for the health of a wide range of species.

“The quality of the other presentations was very high and from some very well established laboratories,” Edwards continued. “This recognition speaks highly of Breanna’s achievements and the contributions of the many students involved in her project.”

Edwards said this year’s conference program had a strong scientific component and attracted expert speakers from around the country. Students gain knowledge and insights beyond what is taught in the classroom and laboratory.

“Students get to meet scientists whose names they are familiar with from the literature,” Edwards said.

DAIRY CATTLE JUDGING TEAMS EXCEL IN NATIONAL CONTESTS

Cal Poly’s two dairy cattle judging teams placed in the top five at the annual Southwestern Livestock Exposition Collegiate Dairy Judging Contest in Fort Worth, Texas, in January.

Fifteen teams representing the nation’s top college dairy programs competed. The top five overall winning teams were University of Wisconsin Madison, first; Cal Poly Gold, second; Purdue University, third; Iowa State, fourth; and Cal Poly Green, fifth.

“I was pleased both of our teams placed in the top five, said dairy science Professor Rich Silacci, who coached the teams. “The Gold Team was only a few points shy of winning the whole thing.”

The Cal Poly Gold Team included Matt Ruby, Tony Lopes, Annalicia Luis, and Amber LaSalle. The Cal Poly Green Team included Alex Gambonini, Elise Regusci, Elisabeth Regusci, and Mark Weststeyn.

Both teams also placed in individual events. Cal Poly Gold placed first in Holsteins and second in presenting reasons. Cal Poly Green placed third in Jerseys.

Individually, sophomore Lopes placed first in Holsteins, second in presenting reasons and eighth overall. Sophomore Ruby placed sixth in presenting reasons, and freshman Regusci placed 10th high individual.

The 24-day Southwestern Livestock Exposition and Livestock Show is one of the oldest continuous running livestock shows in the country, drawing more than 1 million visitors from more than 90 countries annually.
Alumni Peter and Mary Beth Oppenheimer are at it again. In addition to the $20 million landmark gift to the College of Agriculture, Food and Environmental Sciences and the Animal Science Department in 2014, the couple recently purchased and donated to the department five Quarter Horse yearlings and six broodmares valued at $275,000.

“The broodmares are intended to improve the genetic lines in Cal Poly’s broodmare pool,” said veterinarian and lecturer Joy Altermatt, who teaches the Breeding Enterprise. “They have outstanding bloodlines, and they are in foal to some of the top Quarter Horse sires in the country.”

The Oppenheimer’s gift breathes new life into the Animal Science Department’s equine enterprises.

“The department’s enterprise programs have been going on for decades,” Altermatt said. “The programs expose students to all aspects of a common horse operation.”
“In the Breeding Enterprise, students are in charge of getting our Quarter Horse and Thoroughbred broodmares bred to our stallions or to outside stallions through assisted reproductive techniques such as artificial insemination and embryo transfer,” Altermatt said.

The Mare Care Enterprise introduces students to basic horse knowledge and care. The Foaling Enterprise exposes students to all aspects of foaling, and students in the Quarter Horse Enterprise are responsible for starting and training the Cal Poly Quarter Horses.

“The program is vertically integrated from breeding to breaking. The students are involved in — and at the helm of — keeping the enterprises going,” Altermatt said.

“The students benefit from having all this on site. It’s invaluable to have these animals as our teachers, giving students the hands-on experience and skillset they need to secure jobs in the horse industry.”

Animal Science Department Head Jaymie Noland is especially pleased with this latest donation. “These new mares will be the foundation for the department’s proposed program in embryo transfer, giving students extensive Learn by Doing opportunities in this critical, growing technology,” she said.
Proud of Her Pride

Alumna Torie Hilley Works With Lions in Zimbabwe and Zambia
As an undergraduate, Torie Hilley (Animal Science, ’13) started as a pre-vet student, but switched to animal behavior after an experience with a conservation project involving sea turtles in Costa Rica. She then landed an internship with the African Lion and Environmental Research Trust (ALERT). That internship turned into so much more. The Ventura, Calif., resident gives readers a glimpse into her life in Africa.

How did you get the internship with ALERT?  
I Googled! I was determined to find a wildlife conservation internship in Africa and researched until I found ALERT. I inquired, applied and was accepted.

When were you there?  
From July to August 2012 for the internship. I went back the following year for a 10-week independent study program.

Where in Africa were you?  
I lived in Gweru, Zimbabwe. Gweru is very small and fairly run down, but civilized. The internship was on the Antelope Park private game reserve, about 40 minutes from town. It’s lovely, with its own herd of wildebeest, giraffe, waterbuck, impala, hartebeest, many birds of prey, and four rescued elephants. It is also a safari lodge that houses tourists and a volunteer/intern program for students and others to get involved with conservation and the care of the 90 captive African lions on site.

What did you do? Describe a typical day.  
I woke at 6:30 a.m. to go on a lion walk or conduct research. After breakfast, I would monitor sick or injured lions, bottle feed lion cubs, or conduct my senior project. After lunch, I would clean enclosures or participate in behavior enrichment activities. Late afternoon, I could go on another lion walk, go into the release site where a pride of 11 self-sustained lions are living, or conduct research. Dinner is around 6:30 p.m. They are long 12-hour days!

Was it difficult to adjust?  
It took a while to adjust to the time difference, climate and culture. It was a fairly quick transition because we were so busy. The only frustrating thing every now and then was “Africa time” — it gets done when it gets done!
What was the biggest surprise?
The lion manager that I was supposed to be following was on maternity leave! I was basically acting lion manager! I experienced more than any other intern before me, that’s for sure.

What was your greatest challenge?
When I was doing my internship, I was also conducting my senior project. With the lion manager on leave, I had to take care of three newborn cubs and keep an eye on all the adult lions at their compound. Balancing all those duties was challenging but rewarding.

Do you have a favorite memory?
It’s pretty rare to see the stalk, chase and take down of the lions hunting. My first sight of a kill was exhilarating, sad in some ways, and mind-blowing. I was lucky enough to be with the researcher when the pride went after a zebra that crossed their path. Lions being opportunistic hunters don’t hesitate and went for it. Once the adults killed the zebra, one of the females went to look for the sub-adults, returning with all five sub-adults following her to the feed. It was incredible.

What and where is your current job?
After graduation, I returned to ALERT and Zimbabwe as the principal researcher for the Ngamo Release Pride, which contains 11 lions, six adults that were hand-raised then released in a semi-wild environment where they hunt for themselves. Three of the females had cubs that have had no human contact and are therefore wild. They will be released in an area where lions are needed, such as a national park. I was transferred to Zambia, and now I’m the principal researcher and project manager of the Dambwa Release Pride.

How did these experiences change your life?
Living in a Third World country is challenging. You deal with random power cuts, no water for hours, and witnessing poverty. It’s been an eye-opener, and I am lucky to have the option to leave whenever I’m ready. Others do not have that luxury.

What are your plans for the future?
I will pursue a Master of Research (MRes) in animal behavior in the U.K. In this career field, it’s recommended to pursue higher education to advance and gain credibility.
Animal science senior Allyson Heston inspired the idea and helped bring back the long-dormant Cal Poly Swine Clinic and Sale as her senior project.

Assistant professor and project advisor Julie Huzzey and animal science lecturers Lee Rincker and Joe Gardner helped Heston plan the clinic and sale. More than 20 Cal Poly students — a majority enrolled in the Swine Enterprise course — helped organize the daylong event, held in March at the Livestock Pavilion on campus.

The 30-minute clinics are intended to enhance students’ knowledge in different aspects of showing pigs. Clinic topics included swine health, swine evaluation and swine nutrition.

In the health clinic, Allan Rios of Generation X Farms discussed protocols and steps to ensure pigs stay healthy upon receiving. Rios also covered vaccination, treatment and worming schedules.

Blaine Rodgers of BioEnzyme taught the nutrition clinic, which covered feeding strategies and methods to maximize pigs’ potential for show.

Rincker held the evaluation clinic, focusing on the criteria students should look for when purchasing a show pig. In typical Cal Poly Learn by Doing fashion, participants were given several hogs to evaluate and rank.

“Approximately 50 FFA and 4-H members from Santa Maria to Paso Robles attended the clinics, designed to help them better care for their pigs in preparation for the upcoming show season,” Rincker said. “After the clinics, we held a swine sale so people could buy a show pig to raise for the upcoming season.”

The sale included 20 11-week-old pigs, which sold for an average price of $400 each — a “very nice average for our first year,” according to Rincker.

The money raised goes toward improvements to the Swine Unit.

“Students worked well in advance to make sure that the pigs were ready and the event venue was organized to host,” Rincker said. “We thought the clinics complemented the sale and offered something for everyone. Heston found two gracious sponsors — Santa Margarita Hay and Feed and Old San Luis BBQ — to help offset costs.

Rincker plans to host another clinic next year, with the hope of offering more pigs and a greater variety of ages.
SAVE THE DATE

Cal Poly’s 60th Annual
ALL-BREED PERFORMANCE TESTED BULL SALE

1 p.m.
Cal Poly Beef Center

The Cal Poly Bull Test is a breeder-financed test station striving to identify and improve the quality of beef cattle. The annual event was established in 1956.

For more information, contact Keela Retallick-Trennepohl at 805-756-2685 or kretalli@calpoly.edu.
WE NEED YOUR HELP TO ACHIEVE THE NEW
CAL POLY ANIMAL HEALTH CENTER

Cal Poly is the premier pre-veterinary medicine program in the state, yet our current Vet Clinic does not support the level of hands-on learning and research our students deserve. Help us achieve our vision of a new Animal Health Center where students can learn about animal health and welfare by working directly with Cal Poly's animals in a state-of-the-art, 10,000-square-foot clinic.

For more information, contact Russ Kabaker, assistant dean, Advancement and External Relations.

rkabaker@calpoly.edu
805-756-6235
Class of 2016 animal science graduates Justice Rasmussen and Stacy Stroing celebrated at Cal Poly’s Spring Commencement ceremony on June 11, 2016.