This year has definitely been one of growth for the animal science department. Thanks to the combined efforts of the department’s faculty, staff and students, we continue to advance our hands-on teaching techniques through improved facilities, expanded research technologies and increased student activities.

This fall brought 165 new freshmen and transfer students into the animal science department, which currently educates about 625 of the university’s best and brightest. We are also increasing our graduate student population as faculty secure more research grants and increase funding for undergraduates and master’s students to conduct applied research.

Students kept very busy during the summer and early fall preparing horses and cattle for various sales. A total of 32 Cal Poly-trained quarter horses and four Thoroughbred yearlings were sold at five different sales, bringing in over $125,000 for our equine program. The 51st Annual Bull Test Sale was a big success as well, due to the more than 30 students involved in the performance testing program of 215 bulls, one of which sold for a record-high $33,000 to a ranch in Texas.

Historically, animal production centers have been managed by faculty supervisors along with student managers. As the department continues to grow and fiscal management of the animal production centers becomes more critical, we are moving to a model where full-time managers assume more of the daily supervision responsibilities. We are in the selection process for a full-time equine center manager and soon will announce a new beef program manager position. These two positions, coupled with the animal nutrition center and poultry center managers, will provide some great relief for faculty supervisors who are also very involved in teaching and research activities.

We continue to invest in our facilities and infrastructure to meet the needs and demands of our excellent students. During the past year, we completed the new beef center, finished a new biotechnology laboratory for undergraduate and graduate student research, and put in a new swine nursery for teaching and research. In addition, we completed the new animal nutrition center and expect to begin processing animal feed in January 2008 as we complete the start up phase.

We have raised over $3 million for the new meat processing center and we are working hard to secure the remaining $2.25 million needed to completely fund the new facility. While support of these projects has been great, we encourage you to consider helping us secure the remaining funding and allow this facility to enhance the teaching of the next generation of young people.

On behalf of the faculty, staff, and students in animal science, I hope you enjoy a great fall and a wonderful holiday season. Thanks for being part of our team!
SUPPORT ANIMAL SCIENCE WITH YOUR IRA

DID YOU KNOW that you may be able to make a charitable gift directly and tax-free from your IRA? The best part is that your contribution to Cal Poly can support the Animal Science Department or any other program you choose in the College of Agriculture, Food and Environmental Sciences.

FUTURE GENERATIONS of Cal Poly students will benefit from your generosity, as so many others have previously benefited from our hands-on learning approach.

FOR THE REMAINDER OF 2007 you may make a charitable distribution in any amount up to $100,000 to Cal Poly from your IRA if you are 70½ or older. A couple with separate IRAs could each give up to that amount.

NO IRA? Not yet 70½ or older? Let us show you how anyone can make a gift of stocks, real estate, or other appreciated assets without paying capital gains. Or help you establish a gift arrangement now, obtain current tax benefits, create a flow of income for life, and provide a future gift to Cal Poly.

FOR MORE INFORMATION about IRA gifts or supporting Cal Poly through your estate plan, please contact:

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LEARNING LIAISON
CAL POLY TEAMS WITH CUESTA COLLEGE THROUGH AG TECH PROGRAM

BY TRICIA HARLAN

Cal Poly Agriculture and Cuesta College are working together through the Ag Tech program, which currently boasts 25 students.

The program gives students the opportunity to complete general education classes at Cuesta while enrolled in lower division major courses within Cal Poly’s College of Agriculture, Food, and Environmental Sciences (CAFES). Majors currently participating in the Ag Tech program on Cal Poly’s end include animal science, dairy science, and crop science. The program’s animal science sector has Linda Brady of Cuesta working with Cal Poly’s Rob Rutherford to create a program for an associate degree.

THE AG TECH PROGRAM GIVES CUESTA STUDENTS A HEAD START IN MAJOR COURSES, MAKING AN EASIER TRANSFER TO CAL POLY FOR COMPLETION OF A BACHELOR’S DEGREE

The Ag Tech program gives Cuesta students a head start in major courses, thereby making an easier transition to Cal Poly for completion of a bachelor’s degree. After gaining 60 units of credit, Cuesta students can transfer to Cal Poly with junior equivalency. Those who choose not to transfer still achieve an associate degree with a specialized emphasis on animal science that can be used immediately in the work force.

The Ag Tech program creates benefits in all aspects of schooling, according to Rutherford. “Cuesta College has teachers who really emphasize the teaching,” he said.

As word travels and the Ag Tech program gains more interest, both Cuesta and Cal Poly are receiving excellent feedback of a program that improves the education of all students involved.

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ANIMAL SCIENCE ALUMNI GRADUATE FROM UC DAVIS VET SCHOOL, MARRY

Between their wedding and graduation, 2007 was a big year for Molly and Mario Dinucci. The duo, both Cal Poly Animal Science graduates, completed the UC Davis veterinary school program earlier this year before marrying in Healdsburg, Calif. in August.

Before they even met, the Dinuccis had a lot in common; a San Francisco Bay Area upbringing devoid of agriculture but filled with veterinary aspirations. The latter ultimately brought them both to Cal Poly for their animal science undergraduate education. Even with a horse-free childhood, Mario and Molly fell in love with horses while at Cal Poly. In fact, Molly took an internship position with Loomis Basin Equine Medical Center after earning her DVM, while Mario accepted an associate position at a private practice in Grass Valley, Calif.

While the pair did not begin dating until attending UC Davis, they were first introduced at Cal Poly, and agree that their time at Cal Poly made for an easy transition into the UC Davis program.

“Cal Poly gave us a solid foundation for veterinary school,” Mario said. “Not only did it prepare us academically, it also provided us with one-of-a-kind hands-on skills that proved to be invaluable when senior year rolled around.”

BARRETT’S SALE

The Cal Poly Thoroughbred Enterprise sold four horses totaling $23,000 at this year’s Barrett’s Sale in Pomona, Calif.

Cal Poly’s top sell was Donthaveatizzy, a yearling colt by Tribal Rule out of A Cee’s Tizzy mare, which sold for $13,000.

More than 15 enterprise members were also on hand to work for various such consigners as Andy Havens, Greg Fanning, River Edge Farms, Sam Hendricks, Tat Yakutis, and Valley Creek Farms.

SNAFFLE BIT FUTURITY

The Cal Poly Quarter Horse Program entered six two-year-olds in the 2007 National Reined Cow Horse Association (NRCHA) Snaffle Bit Futurity, held Oct. 4 through Oct. 6 in Reno, Nev.

The sale brought in more than $30,000 for the Cal Poly Equine Program, with the top selling Cal Poly horse, a select sale filly named My Wild Irish Fox, going for $6,500; over $1,500 more than the $4,700 average sale price for Cal Poly horses.

Cal Poly’s sale success was largely due to the hard work of quarter horse enterprise members, five of whom traveled to Reno for the futurity: Dana Callahan, Kristin Hampshire, Jason Holloway, Leslie Hunewill, and Terra Plumley.

From left: Terra Plumley, Dana Callahan, Leslie Hunewill and Kristen Hampshire at the Reno event.

From left: animal science students Karen Shaw, Shauna Romero and Olivia Zublin with a Barrett’s Sale horse and buyer.
A low birth weight Angus bull sold for $33,000 at the 2007 Cal Poly Bull Test Sale, shattering the event’s previous high sell record. Century Farm-bred CF Prime Star 619 sold to Houston-based 44 Farms, more than tripling the sale’s previous high-sell record of $10,000.

The record-breaking bull was one of 105 sold at the 51st Annual Bull Test Sale, held Oct. 7 at the new Cal Poly Beef Center. The sale average came in at $2,568 overall, a combination of 30 low birth weight bulls, 25 multi-trait Angus, 30 Angus, two Charolais, five Sim-Angus, four Herefords, two Limousin, four red Angus, and three Simmental bulls.

Prior to the sale, Cal Poly hosted a “Managing Cattle Profitably in Tough Times” field day, which included industry speakers as well as workshops and a trade show. Among the speakers were John Nalivka of Sterling Marketing, Inc., Craig Jones of Boehringer Ingelheim, Larry Corah of Certified Angus Beef, and John Evans of the California Department of Food and Agriculture.

Follow the field day, a pre-sale tri-tip barbeque and Western Treasures Auction brought in more than $14,000 for Cal Poly’s Livestock Judging Team and Young Cattlemen’s Association.

The William’s family purchased 15 bulls between their William’s Livestock and Hanson Ranches, making them the event’s high-volume buyer.

This year’s Performance Horse Sale auctioned 22 horses and brought in over $61,000 for the Cal Poly Equine Center. The September 29th event was held at the equine center arena and included 2-year-olds, broodmares and riding horses.

The event’s high sell was Monita Shining Spark, a 1995 AQHA palomino mare, which sold for $10,000.

The sale was a culmination of student efforts, as the event was completely student organized and all 2-year-olds sold were trained by members of the Cal Poly Quarter Horse Enterprise.

“Through the quarter horse project students have learned not only how to prepare a 2-year-old, but have also learned all the aspects of putting on a very successful sale,” said Animal Science Department Head Andy Thulin. “This sale was an example of hands-on training to the ultimate.”

An additional four horses were auctioned off the following weekend in conjunction with the Cal Poly Bull Test Sale, bringing in another $14,000 for the equine center.
At the animal science department, we chose to stick our neck out to build a new meat processing facility. In fact, it is the first new university teaching and research facility of its kind in the United States in many years. Why, you ask, should we build a new meat processing facility when many universities are not replacing their meat science facilities and faculty? Well it’s an easy decision if you think about the two biggest consumer trends affecting the food industry – food safety and demand for ready-to-eat (RTE) products.

Due to their hectic way of life, consumers want to eat great tasting products that take minimal time to prepare, and they want those products to be safe and free of contamination. The current demand is high, and the future demand will be even greater, for food industry graduates who understand HACCP and food safety. In addition, there is a similar need for university graduates who understand ready-to-eat product development with meat science and culinary backgrounds.

It is obvious to us that the food industry shares our vision for the future through their verbal and financial support. Many individuals and companies have been very gracious in providing funding for the meat processing center. We have secured $3.1 million to date toward the estimated $5.35 million project. The remaining $2.25 million needs to be secured by the end of May 2008 for us to avoid additional construction costs from our current construction contract.

We sincerely appreciate the kind generosity of those companies and individuals who have pledged their support for the project through their donations. We ask that you share in the animal science department’s vision to have an impact on the food safety and innovation of wholesome meat products for future generations. Please don’t hesitate to contact Dr. Andrew Thulin at athulin@calpoly.edu or 805-756-2419 if you would like additional information.

“BEHOLD THE TURTLE. HE MAKES PROGRESS ONLY WHEN HE STICKS HIS NECK OUT.”
- JAMES B. CONANT

“CAL POLY AND FOSTER FARMS BOTH SHARE A LEGACY OF EXCELLENCE. THE CENTER WILL ALLOW BOTH TO CONTINUE AND BUILD ON THAT LEGACY.”
- RON FOSTER, CHEF EXECUTIVE OFFICER FOSTER FARMS CAL POLY ALUMNUS

THANK YOU FOR YOUR GENEROSITY:

- JOHN AND GAY LAU
- BEEF PRODUCTS, INC.
- FOSTER FARMS
- PETER AND MARY BETH OPPENHEIMER
- SUPERIOR FARMS
- WILLIAM L. BRIDGEFORD
- GAYLORD AND LUVIMINDA MCCOOL
- PHILLIP OLSSON
- TANCREDI ASSOCIATES, INC.
- RICHARD AND MARJORY JOHNSON
- JAMES AND MARJORIE DALY

“CAL POLY’S PHILOSOPHY OF LEARN BY DOING IS THE FOUNDATION OF OUR STUDENT’S EXPERIENCE, AND THE NEW AND MODERNIZED MEAT PROCESSING CENTER WILL PROVIDE HANDS-ON EXPERIENCE FOR YEARS TO COME.”
- PETER OPPENHEIMER CHIEF FINANCIAL OFFICER APPLE CAL POLY ALUMNUS
FAST FEED
ANIMAL NUTRITION IN A HIGH TECH FACILITY

Cal Poly’s state-of-the-art Animal Nutrition Center is in the start-up testing phase after equipment installation was completed over the summer.

By the end of fall quarter, the new mill will provide a hub for students to learn animal feed production for both university-owned animals and research purposes. All stages of animal feed processing will be taught within the center, from feed formulation to merchandising and manufacturing, to packaging, marketing and research.

“Cal Poly is now at the cutting-edge of developing a single-source facility where a student can learn everything from feed design to feed manufacturing,” said Gerry Leukam, senior vice president of technical operations for T.E. Ibberson Company, which played a major role in the facility’s planning.

The center was co-designed by the animal science department and the animal feed industry with the vision to provide students real-life opportunities to gain hands-on experience in operating a contemporary feed mill.

“The facility is beautiful and the installation is first class,” said Scott Anderson of California Pellet Mill. “CPM is very proud to be associated with a program of this caliber at Cal Poly.”

CPM is one of a number of equipment manufacturers to support the project through major equipment donations or discounted prices. Also making that list are: Automated Process Equipment Corporation, Scott Equipment Company, Screw Conveyor Corporation, Interstates Electric and Engineering Company, Boedecker Corporation, Thiele Technologies, Inc., Eastern Instruments, Clayton Industries and Land O’Lakes Purina Feed, LLC.

In addition to industry support, individuals have stepped up to make the mill a reality. Harold Page, Jr. (ASCI ’56) and William and Patricia McLean (The Essmueller Co.), were all especially generous, each donating $100,000 to the completion of the new facility.

To finalize the scope of the animal nutrition center to meet the teaching and research needs for the future, $1.25 million in additional private funding is still needed. If you would like additional information, please do not hesitate to contact Dr. Andy Thulin at athulin@calpoly.edu or (805) 756-2419.

THESE RESEARCH FEED MILL IS UNIQUE. FEATURES INCLUDE:

- Raw materials can be received from trucks, front-end loader, totes or CORK paper bags.
- The mill has the ability to pre-grind, post-grind and/or re-grind a single batch of ration.
- The mill can fine pre-grind, coarse pre-grind or mill roll grain products.
- The process is equipped to make a premix batch and use that batch as an ingredient into future formulas.
- The pellet mill can single pass or double pass steam condition feed rations.
- Liquids can be added at the twin shaft main mixer, down stream coater or the TMR mixer.
- Finished product can be bagged or loaded out to bulk trucks.
- Finished product can be directly recycled to be reprocessed.

Scott Anderson and Gerry Leukam look down at Andy Thulin and Fred Kerr inside the new facility.
Laura Morgan was 6 years old the first time she visited Sea World.

“I remember telling my parents at that time that I was going to train Shamu,” she said. “From that point on, I pursued my dream.”

While in high school, Morgan honed her water skills through competitive swimming and work as a lifeguard. Then she came to Cal Poly, where she studied animal science and worked at a veterinary clinic to polish her animal handling skills.

The combination of experiences landed Morgan an internship in Sea World’s education department for the summer of 1999. Then, in August 2000, she was hired on as an animal trainer at the park’s Orlando location, and has since worked her way over to San Diego, where she is currently a senior trainer at Shamu stadium.

In her position, Morgan works hands on with the animals every day, performing shows for the public and training new animal behaviors during the park’s off hours.

“Building a relationship with an animal like a killer whale is one of the most rewarding things I have ever done in my life,” she said. “I always knew I wanted to work in the marine mammal field and Cal Poly helped me to focus my direction and pursue my goal.”

For students interested in a similar career path, Morgan is quick to advise the value of experience. From involvement in the animal science department’s many student enterprise programs to marine mammal internships, Morgan recommends getting all the hands-on animal practice available. Strong water skills are also essential for a future as an aquatic animal trainer, as all applicants must pass a demanding swim test to even be considered for an interview.

Throughout her seven years with Sea World, and her rise to a senior trainer, Morgan was has been lucky enough to work with a diverse selection of the park’s animals. She has trained Asian Small Clawed River Otters, North American Otters, Pacific Walruses, California Sea Lions, Atlantic Bottlenose Dolphins, Common Dolphins, Short-Finned Pacific Pilot Whales and Killer Whales.

“I feel very lucky to have the job I have,” she said. “It was through hard work, dedication and persistence that I was able to accomplish my goals.”

While the path to such a competitive career may involve its struggles, for Morgan, it all led to her dream job.
When Jessi Ghezzi interviewed for a county GIS internship, it was on a whim. The recent animal science graduate was in her senior year when she was first introduced to Geographic Information Systems (GIS) through an entry level Cal Poly course as part of her range resource management minor. The course coincided with a GIS internship opening with San Luis Obispo County, and since her dad works as a road supervisor for the county, he alerted Ghezzi to the position.

After landing the internship, Ghezzi brought her basic GIS knowledge and taught herself the rest of the arcGIS program. Using GIS technology, she is now able to perform such tasks as pinpointing endangered species and locating areas of disease within a region.

“IT’S IMPORTANT TO KNOW THE VALUE OF RESOURCES FOR LIVESTOCK, NO MATTER WHAT FIELD YOU’RE IN.”

Ghezzi is quick to advocate range resource management as a crucial aspect of the animal science program, saying, “it teaches sustainability and resource management in agriculture – it’s important to know the value of resources for livestock, no matter what field you’re in.”

Thanks to her diverse undergraduate coursework, the once-aspiring large animal veterinarian has changed career goals completely. Ghezzi’s new future ambition: to return to Cal Poly as a professor of soil science and range resource management, and hopefully teach GIS as well.

To achieve her goal, Ghezzi enrolled in Cal Poly’s soil science master’s program after earning her animal science degree in June of 2007. She is currently working to develop a GIS lab for the earth and soil sciences department, and plans to continue her GIS internship for the county while working towards her master’s.
Like many animal science students, Michael Kovach came to Cal Poly with veterinary aspirations. And like many animal science students, he realized during his undergraduate education that a career as a veterinarian was not for him.

So Kovach picked up an agribusiness marketing degree to accompany his animal science degree, and molded the two into a position as marketing coordinator for Vet-Stem, a veterinary regenerative medicine company.

San Diego based Vet-Stem isolates autologous mesenchymal stem cells from a couple of tablespoons of an animal’s own fat. The concentrated stem cells are then sent back to the veterinarian and the regenerative cells are injected back into the donor animal – all within 48 hours. Vet-Stem regenerative cells can treat a number of ailments, from tendon injuries to osteoarthritis. Since opening in 2002, Vet-Stem has treated over 2,500 horses, including many world champions, with about 85 percent returning to their prior performance level. Vet-Stem also just launched their small animal division to treat dogs and cats.

Kovach now runs Vet-Stem’s entire marketing department alongside Julie Ryan-Johnson, vice president of sales and marketing, and a fellow Cal Poly graduate.

“Cal Poly gave me the foundation to be able to move into the corporate work environment and function on an international scale with some of the most brilliant and innovative veterinarians in the world,” Kovach said. “The fact that I get to combine my agribusiness and animal science degrees is more than I could ask for.”

Kovach has undertaken an array of duties as marketing coordinator, from creating ad concepts and website design, to new product launches and public relations.

“Pretty much what the consumer sees, the image of Vet-Stem, goes through me,” he said.

Kovach attributes much of his professional success to the hands-on education he received while at Cal Poly. And just as Kovach dove into Vet-Stem’s marketing branch, Cal Poly animal science graduate Kenneth Williams is taking on the laboratory field of the operation. In his post, Williams works directly with the samples delivered to the lab, isolating the stem cells from the fat.

“Typically, it can take up to three months to train someone to work in the lab and count stem cells under a microscope,” Kovach said. “Kenny did that during his first interview all thanks to the training he received at Cal Poly.”
At the southern end of the Windward Islands chain, in the heart of the Caribbean Sea, sits the 133 square mile island of Grenada. With its pleasant climate and white sand beaches, Grenada appears to be paradise.

On the island’s southwest peninsula is St. George’s University (SGU). Originally founded in 1977 as a School of Medicine, the university now includes a School of Veterinary Medicine and a School of Arts and Sciences.

It is within the St. George’s School of Veterinary Medicine that Cal Poly Animal Science alumna Kelley Cummings is training for a future as a small animal veterinarian. But for Cummings, education on the blissful Caribbean island extends far beyond veterinary school.

“There is poverty here that most people in the United States may never be exposed to,” she said. “It makes me appreciate what I have at home so much more.”

Even with its developing country status, Grenada’s tropical location attracts top educators from around the United States, and Cummings has been taught by professors from schools such as Purdue and Texas A&M.

With first:

“Cal Poly was a great school to ready me for vet school,” she said. “The learn by doing philosophy really prepared me for my clinical skills courses. Not many of my classmates had the opportunity to work with animals during their undergraduate education like I did at Poly.”

Now in her second year on Grenada, Cummings’ next step is deciding which of the 21 SGU-affiliated U.S. schools she would like to attend for her fourth year of clinical rotations. After that, she said she will likely practice veterinary medicine in her hometown of San Diego, but nothing is certain.

“Making my way in another country with people from all over the United States has really opened my eyes to all the possibilities out there open to me,” Cummings said. “So as much as I love San Diego, and California in general, I am open to going wherever life takes me.”
ANIMAL SCIENCE DEPARTMENT GETS PUBLISHED

The animal science department has been putting its top-of-the-line facilities to good use in regards to research. In fact, a number of department faculty and students have had their research published professionally over the past year. Samplings of 2007 professional publications are as follows:

Dr. M. Steven Daugherty:

Dr. Robert Delmore:

Dr. Robert Delmore and Dr. Jonathon Beckett:

Dr. Daniel Peterson and Dr. Elizabeth Koutsos:

Dr. William Plummer:

Tara Black and Erin Lewis (Senior Project):