



CAL POLY'S DAIRY SCIENCE PROGRAM PROVIDES REAL WORLD EXPERIENCES AND SOLUTIONS

BY STACIA MOMBURG

CAL POLY'S "GOT MILK," AND A LOT OF IT – about half a million gallons a year, in fact, from a herd of 160 Jersey and Holstein cows.

Half a million gallons of milk that, for Cal Poly Dairy Science students, equal real-world experience in fields as diverse as animal husbandry, milk production, dairy processing, research and food development.

Half a million gallons that, for students such as Maci DePaoli, can add up to years of professional experience already under their belts when they enter the workforce.

DePaoli, a 2009 graduate of the Dairy Sciences program, now works for Dryer's Grand Ice Cream, the nation's largest ice cream producer. She was initially hired into the company's nine-month training program to learn about its various production departments. And when she finished the program, Dryer's moved her to its quality control department.

DePaoli credits her Cal Poly education to her quick ascent. "My internships, course work and hands-on learning I received at Cal Poly provided me with five years of industry work experience," she said. "I came to Dryer's well above entry level."

Her Cal Poly coursework is still providing her with a foundation for success, she said. When Dryer's announced it would implement a comprehensive program to eliminate food safety hazards, DePaoli went home and dug into her old class notes.

"I reviewed notes from my Principles of Food Safety and Hazard Analysis class, which covered Hazard Analysis and Critical Control Point, and put myself ahead of the curve when Dryer's continued work on the program," she said.

Making a difference in the real world isn't just for Cal Poly alumni. Current students in Dairy Science are also making their mark on real problems that industry faces. For example, students are figuring out how to extend shelf life, defining milk quality for today's dairy industry, improving the quality of low-fat cheeses,



and more. (To learn more about dairy research at Cal Poly, visit <http://www.calpoly.edu/~dptc/centerprojects.html>.)

Sometimes, industry professionals bring problems to Cal Poly. In 2007, creamery faculty and students helped Pinkberry, a southern California Yogurt chain, reformulate their yogurt base so it could be produced in larger quantities, retain its taste and comply with California production laws.

"We worked with other consultants and universities previously with little success," Pinkberry President Shelly Hwang wrote in a thank you letter to Dairy Science Professor Phil Tong. "The advice you gave and the test trials you performed enabled us to continue with our development of the Pinkberry business and are positioning us for larger-scale production."

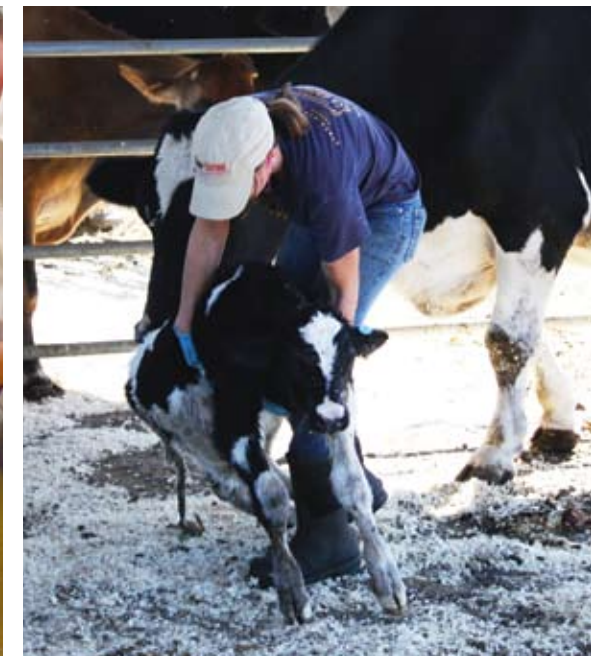
And through the Cal Poly Dairy's food production program, students are learning how to create dairy products from ice cream to eggnog and also how to package, market and sell them. With guidance from creamery manager Jerry Mattas, students produce seven different cheeses, ice cream, eggnog and now chocolate milk.

Dairy Science Department Head Bruce Golden said he works to find new and better ways to continue the self-sustaining program. So far, he's been successful.

"We've seen revenue increase by 80 percent over the last four years," he said. "As we develop more products and increase our outreach to industry partners, I can see us continuing to grow exponentially."

Students package Cal Poly cheeses to sell at Campus Market and at Spencer's Fresh Markets in the San Luis Obispo area. Holiday cheese packs are sold online – and sell out every year. In addition, students package ice cream year round and eggnog for the holidays, and they work with third-party cheese producers and ice cream makers to package Cal Poly products under those labels.

Spencer's owner John Spencer loves selling local products to



local families and calls Cal Poly cheese "second to none."

"Last year, we couldn't keep the holiday eggnog on the shelves," Spencer said. "Bruce, Jerry and the students are sending the message that good things are going on at the Cal Poly Dairy."

Third-year Dairy Science major David Valenzuela is capitalizing on the program's success. He makes cheese in the creamery daily and has helped with ice cream and eggnog production.

"The Dairy Science program is providing me with a solid foundation and job experience that will ultimately help me do more for my world," said Valenzuela, who wants to help improve dairy industries around the world in his career.

Valenzuela said he's been well prepared since his first day at Cal Poly.

"My first day in class, the professor lectured for 30 minutes, and then we went out to the dairy to apply what we had just learned," he said. "I knew about learn by doing at Cal Poly, but the speed of it still just blew me away." □

