A CURRICULUM OF CONVERGENCE
MULTIDISCIPLINARY PROGRAMS PRODUCE WHOLE-SYSTEM THINKERS

ALSO INSIDE >
> STUDENT QUINCY FREEMAN MAKES HER MARK IN RODEO AND FASHION
> ALUM REBECCA MIELIWOCKI IS THE NATIONAL TEACHER OF THE YEAR

SPRING 2012
A CURRICULUM OF CONVERGENCE

CAL POLY CONSTRUCTION MANAGEMENT STUDENTS WIN TOP HONORS AT REGIONAL COMPETITION

CAL POLY CONSTRUCTION MANAGEMENT STUDENTS earned top honors at the recent Associated Schools of Construction Competition (ASC) in Reno. Nevada. Seven Cal Poly teams placed, more than any other school in the competition. Cal Poly had 12 teams competing — also more than any other school in the competition. 

SEVEN CAL POLY TEAMS PLACED, MORE THAN ANY OTHER SCHOOL IN THE COMPETITION.

The university. A total of 169 teams from 41 universities competed in 17 different categories from two different ASC regions. Cal Poly students won first in the Concrete Solutions and Design Build categories; second in the Mixed Use and Determining Project Risk; and third in the Marine Construction, Mechanical and Electrical divisions.

Find out more about the student victories: http://calpolynews.calpoly.edu/news_releases/2012/February/regional.html

MARINE SCIENCE PROFESSOR TESTIFIES ABOUT FISHING, ENVIRONMENTAL ISSUES

CAL POLY MARINE SCIENCE PROFESSOR Dean Wendt testified before the state legislature in Sacramento in February about the impacts that federal Marine Protected Areas (MPAs) are having on the ocean environment. Wendt, associate dean of Cal Poly's College of Science and Mathematics, is acting director of the university's Center for Coastal Marine Sciences and executive director of the center's SLOSEA research program and Central Coast Collaborative Fisheries project. He was invited to speak before the state legislature's Joint Committee on Fisheries and Aquaculture's 39th annual fisheries forum on Feb. 22 in the State Capitol at the request of committee chairman Wesley Chesbrough (D-North Coast). For the past five years, Cal Poly professors and students in the SLOSEA project have been monitoring MPAs and the impacts they're having on fish populations, fishermen and the local economy.

Read more about the new fellowship: http://calpolynews.calpoly.edu/news_releases/2012/February/organic.html

CAL POLY HONORED BY WHITE HOUSE AS A TOP SCHOOL TO RETAIN AND GRADUATE ENGINEERING STUDENTS

CAL POLY WAS HONORED by President Barack Obama as a leading school in the retention and graduation of engineering students. Engineering Dean Debra Larson represented Cal Poly at the Feb. 8 event held at the White House. She was one of roughly 40 engineering deans whose colleges do well in stu- dent retention, as determined by the American Society for En- gineering Education (ASEE). “It was an honor to participate in this special occasion, and it affirms Cal Poly Engineering’s strong commitment to retaining and graduating more globally competitive students in the engineering field,” said Larson.

Read more about the White House honor: http://calpolynews.calpoly.edu/news_releases/2012/February/graduation.html

CAL POLY ESTABLISHES FELLOWSHIP IN ORGANICS

THE COLLEGE of Agriculture, Food & Environmental Sciences Center for Sustainability will add a new faculty fellowship in organic agriculture to the Horticulture and Crop Science Department as a result of the Lundberg Family Farms’ pledge of support to CAL POLY STUDENTS WILL BENEFIT FROM YEAR-ROUND TRAINING AND RESEARCH OPPORTUNITIES IN ORGANIC FARMING METHODS, FOOD SAFETY, AND SUSTAINABLE AGRICULTURAL SYSTEMS.

the organic program at Cal Poly. With this fellowship, Cal Poly students will benefit from year-round training and research opportunities in organic farming methods, food safety, and sustainable agricultural systems. The Center for Sustainability’s valued industry partners at Lundberg Family Farms, in combination with support from the Clarence C. Heller Charitable Foundation, have provided for the establishment of the summer-quarter faculty fellowship dedicated to the field of organic and sustainable farming methods. “The Center for Sustainability is delighted to have the opportunity to support education in this rapidly growing sector,” said Hunter Francis, the center’s director, “and we are so grateful for the generosity and vision of the Lundberg family in helping our college respond to growing student demand for it.”

Read more about the new fellowship: http://calpolynews.calpoly.edu/news_releases/2012/March/organics.html

EDITOR’S NOTE

THIS EDITION’S COVER was handously rendered by Cal Poly Alumni Association President Fred Sweeney, illustrates one of the core ideas animating our recently updated Strategic Plan. Success in the 21st century will require our graduates to be exceptionally capable of working across the boundaries of individual disciplines.

With a curriculum that wed technology and the arts and encourages students and faculty to bring their disciplinary expertise together to solve real-world problems, Cal Poly is ideally positioned to develop and inspire whole-system thinkers. (For more on the Strategic Plan, please see www.academic affairs.calpoly.edu/StrategicPlan/)

In our feature story for this edition, we look at a variety of projects and programs that exemplify this curriculum of convergence. They include: 1. the annual PolyHouse project, in which students from across campus plan and execute a home renovation for a local resident or family in need; 2. the Liberal Arts and Engineering Studies program, in which students explore talent for technology and passion for the humanities in equal measure; and 3. ongoing surveys through the Center of Excellence for Management and Leadership (CEML), which students from several programs are working to gauge the depth and breadth of San Luis Obispo County’s hunger problem.

Elsewhere, we introduce you to Quincy Freeman, who demonstrates the cross-disciplinary approach all on her own. Though still a student, Freeman has already launched her own business venture uniting her flair for fashion and love of rodeo competition.

We also tell you about alums Rebecca Mielniczuk, a nominee for national teacher of the year, and Thomas Kelsey, an award-winning photojournalist who studied with Ansel Adams and recently published a book of his scenic photography. Finally, we introduce a new standing feature – looking ahead, a column by President Jeffrey D. Armstrong, who in this issue reaffirms Cal Poly’s commitment to learn by doing.

As always, we welcome your comments. Feel free to contact me at mlazier@calpoly.edu. And for additional content and multimedia features, please visit Cal Poly Magazine online at www.magazine.calpoly.edu.

— Matt Lazier, Editor, B.S., Journalism, 1997
GOING GLOBAL: ORFALFA COLLEGE'S CHRIS CARR TRAVELS TO TUNISIA ON FULBRIGHT

BUSINESS LAW PROFESSOR CHRIS CARR can now add Tunisia to the list of up-and-coming countries he has visited in the interest of globalizing the scope of a Cal Poly business education.

Carr traveled to the North African country for three weeks in December 2011 as a Fulbright Senior Specialist to give universities in the newly democratic nation ideas on how to jump-start their entrepreneurship initiatives and curriculums.

During his stay, mostly in the southern city of Sfax, he met with judges, lawyers, engineers, professors and administrators at the University of Sfax, government officials, doctors, students and entrepreneurs. “I tried to access as many layers of the society as I could,” Carr said.

He describes Tunisia as Mediterranean, Arab, Muslim and African, with a stable quality of life. A relatively small country with 11 million people, Tunisia’s economy is built on agriculture, tourism and various types of industry. Still, unemployment is high and the need to connect globally is paramount.

“Tunisia has the intellectual capital, work ethic, courage and integrity to succeed,” Carr said. “It is an impressive, progressive, progressive Arab state with an open society and open-minded people; women truly have a voice there.”

The Tunisia trip is an example of how Cal Poly and the Orfalea College of Business are helping enrich students’ global experience.

“Things are happening in the college to expose our students to globalization,” Carr said. “I don't know of any Orfalea College professors who teach only domestic business. Jay Singh and I have for years been taking grad students to China and India on experiential learning courses. As part of a new course, I will travel to Shanghai this spring break with 47 undergraduates to study the global supply chain.”

The college has also used a portion of its endowment to provide scholarships for students to study abroad and to fund student travel to India and China. Upcoming programs include bringing an economics professor to campus from France this summer to collaborate on faculty research and inviting a professor from Italy to teach and collaborate with faculty for a year in 2012–13.

“Chris is committed to developing a rich, global perspective in his work and sharing that perspective with our students,” said Orfalea College Dean Dave Christy. “He is never afraid to get outside his comfort zone. Students gain real insight studying with professors who have this attitude.”

At the university’s highest level, globalization is considered a key component of a well-rounded, learn by Doing education. “The senior leadership at Cal Poly has vast experience building global programs and will help us think more strategically as we move forward.”

The senior leadership at Cal Poly has vast experience building global programs and will help us think more strategically as we move forward,” Carr said.

Carr gained an edge during those three weeks in Tunisia. “In class I now have an alternative political and economic model to talk about and compare to the American and Chinese models.”

And with his new contacts, he is in a position to add North Africa to the list of regions he can access with and for students.

THE SENIOR LEADERSHIP AT CAL POLY HAS VAST EXPERIENCE BUILDING GLOBAL PROGRAMS AND WILL HELP US THINK MORE STRATEGICALLY AS WE MOVE FORWARD...
AROUND CAMPUS

CAL POLY OPEN HOUSE 2012
CAMPUS SHOWCASE, APRIL 14, 2012

PHOTOS BY NICK LUCERO

The marching band takes part in the Campus Showcase Opening Ceremonies.

Students prepare their Design Village shelter.

Youngsters Learn by Doing at the Kids Fair.

Equestrian Team members greet spectators.

Contestants prepare their entries for RoboRodentia.

Students in the Poly Royal Parade.
STEWARDS OF STUDENT SUCCESS

New Faces Fill Important Leadership Roles on Campus

BY MATT LAZIER

WHEN HE TOOK THE REINS of Cal Poly in early 2011, one of the first and most significant tasks facing President Jeffrey D. Armstrong was rounding out his leadership team. Several vacant or soon-to-be vacated administrative seats loomed. But a little more than a year later, Armstrong has assembled several new senior administrators who share his passion for student success and Cal Poly’s Learn by Doing tradition.

“We’ve brought in some very bright minds who are dedicated to helping Cal Poly preserve and enhance Learn by Doing,” Armstrong said. “They join an existing team of accomplished leaders, and together we’re all focused on our students’ success and making sure Cal Poly continues to provide an excellent education.”

Meet Cal Poly’s new leaders:

KATHLEEN ENZ FINKEN

Provost

Values: Befitting her role as the university’s chief academic officer, Enz Finken feels a strong connection with Cal Poly’s comprehensive polytechnic education and the president’s goal of producing professionals who can work across disciplinary boundaries. “I have an innate curiosity and seek to constantly gather information from diverse sources. It’s by making connections across disciplines, functional areas, organizational models, and industries that problems are solved, innovative ideas are born and progress is made.”

Professional background: Degrees in the history of art and architecture, experience as a faculty member, department chair, college dean and, most recently, as provost at the University of Wisconsin-La Crosse.

DEBORAH READ

Vice President for University Advancement/CEO of the Cal Poly Foundation

Values: “I appreciate Cal Poly’s excellent educational reputation and the Learn by Doing model that separates Cal Poly graduates from their counterparts. These qualities serve as the basis for the high regard Cal Poly alumni have for their alma mater,” said Read, whose primary duties are to develop and implement programs for all aspects of the university’s Advancement division – alumni relations, development, government and community relations, marketing and communications. “We are very fortunate as a university to have alumni who care so deeply and are willing to become involved and give back to help future generations of Cal Poly students reach their full potential.”

Professional background: Deep experience in higher education administration, with significant leadership experience in managing comprehensive fundraising campaigns. Has served as vice president for advancement at both public and private campuses, most recently at the University of Dayton, a private research university in Ohio.

PRESTON ALLEN

Interim Vice President, Student Affairs

Values: Allen said Student affairs fulfills a major role in developing students who are successful and who become leaders in their communities. “By collaborating with the academic experience, Student Affairs can provide many supporting elements that help students mature into their strong potential. These are the educational programs, community involvement opportunities, and social support systems that help our students flourish.”

Professional background: Has served Cal Poly since 1993, most recently as associate vice president for student affairs and executive director of university housing.

DON OBERHOLMAN

Director of Athletics

Values: Oberhelman sees athletics as an extension of the Learn by Doing education and an important arena for student growth and development. “I want our student-athletes to become leaders in the community and make a positive impact on the world. It’s my goal that each of them leaves Cal Poly with a diploma and a championship ring.”

Professional background: Nearly 20 years in athletics administration at several universities. Most recently, San Diego State University’s chief operating officer and senior associate athletic director.

DEBRA LARSON

Dean, College of Engineering

Professional background: Degrees in the history of art and architecture, experience as a faculty member, department chair, college dean and, most recently, as provost at the University of Wisconsin-La Crosse.

Values: Has served Cal Poly since 1993, with experience in both industry and academia, Larson knows what Cal Poly’s largest college must do to prepare its students for professional success. “Cal Poly aims to prepare new professionals who are ready to do the work their first day on the job. That means cultivating our connection to industry so we know exactly what they need from our graduates.”

Professional background: Experience as a civil engineer in the private sector and an engineering professor and higher education administrator. Most recently associate vice provost for academic affairs at Northern Arizona University. Serves on the boards for a variety of professional organizations.

BETSY KINSLEY

President’s Chief of Staff

Values: Armstrong lauds Kinsley’s problem-solving skills and ability to unite diverse groups. Kinsley shares Armstrong’s view that student success is the beacon by which all of the Cal Poly community must navigate. “There are many moving parts to supporting the president effectively,” she said. “Ultimately, though, we have a clear and simple goal – to help our students succeed – and every action we take must support that.”

Professional background: Broad background in government service and civic engagement, including work with the U.S. House of Representatives and the San Diego City Council. Most recently, president’s chief of staff at San Diego State University.

‘THEY JOIN AN EXISTING TEAM OF ACCOMPLISHED LEADERS, AND TOGETHER WE’RE ALL FOCUSED ON OUR STUDENTS’ SUCCESS AND MAKING SURE CAL POLY CONTINUES TO PROVIDE AN EXCELLENT EDUCATION.’

— PRESIDENT JEFFREY D. ARMSTRONG
IN HIS BIOGRAPHY, late Apple wunderkind Steve Jobs recalls being inspired by inventor Edwin Land, the co-founder of Polaroid, and his praise for creative minds who can stand at the intersection of the humanities and the sciences.

Jobs proved throughout his career that the most exciting work often happens not in individual disciplines but rather at the places where they converge. He would have found a lot to like at Cal Poly.

As the university continues to define and refine the cornerstones of its comprehensive polytechnic education, the work happening at the intersections of Cal Poly’s various programs becomes ever more vital in its mission to develop and inspire whole-system thinkers. (For more on the Strategic Plan, please see www.academicaffairs.calpoly.edu/StrategicPlan/)

“it is imperative that our graduates be well prepared to work across disciplinary boundaries if they are to succeed in today’s complex global economy,” notes President Jeffrey D. Armstrong. “Cal Poly’s comprehensive polytechnic curriculum provides students exactly the kind of educational foundation that will help transform them into creative and agile-minded professionals.

“Cal Poly has long had a firm bedrock of projects and programs that encourage students to work across multiple disciplines. Now, as we progress under our updated Strategic Plan, it’s crucial that we continue to develop more opportunities for students to gain this important experience before they enter the workforce.”

In true learn by Doing fashion, as Cal Poly students gain experience in multidisciplinary work, they are also making an impact on the community through the arts, service projects for the needy and research aimed at solving real-world problems.

Here are just a few of Cal Poly’s ongoing interdisciplinary programs and projects:
LAES students have produced multimedia elements for local arts productions (left), developed interactive virtual reality programs (center) and handled technological aspects of international interactive displays. (Photos courtesy LAES)

> LIBERAL ARTS AND ENGINEERING STUDIES

FIVE YEARS AGO, Cal Poly faced a growing problem of engineering students interested in expanding their educations beyond the technical boundaries of their chosen disciplines but faced with the daunting prospect of losing ground in their progress to graduation if they changed majors.

Fortunately, a group of faculty members and administrators hit on the solution: a jointly administered, dual-college program that marries technology and the humanities. Today, the Liberal Arts and Engineering Studies (LAES) program is preparing students for a variety of technically based careers in fields such as entertainment, government policy, sustainability, communications and community development.

“We offer a flexible program for those students who have equal appetite for technical disciplines – such as math, physics and science – and the liberal arts and who have a curiosity and a passion for education,” said LAES co-director and English professor David Gillette.

LAES mixes core courses and electives from the colleges of Engineering and Liberal Arts. It gives students flexibility in choosing their concentration courses from each side of the curriculum. And it requires several units of Study Abroad or Global Perspectives courses to broaden the cultural and economic outlook of its graduates.

“Cal Poly graduates used to compete with other California students for jobs in California,” Gillette said. “Now they compete with everyone, everywhere, all over the world.”

The curriculum also includes four project-based learning classes in liberal arts and engineering, in which students take on real-world, quarter-length projects that Gillette said enable them to learn through risk-taking and failure but also teach them that they need to deliver in the end. As part of these class projects, students have taken part in local service projects, developed high-tech cinema devices and produced technical aspects of theater and arts productions – including one that involved partnering with an Australian firm to help produce an interactive multimedia display at the Beijing Olympics in 2008.

The students themselves have had a significant impact on the makeup of the program’s curriculum, Gillette said. After it was established, several students began tailoring concentrations for audio engineering. Gillette said nearly half of the students in the program pursue that track now, and he hopes to make it an official concentration in the near future.

Allowing students this creative freedom with their own educations only serves to facilitate the interdisciplinary aspect of the program, said fifth-year LAES student Molly Schiff.

“Instead of preparing students for a specific job title,” she said, “LAES allows students to pursue a broader spectrum of interests in both the arts and engineering to assure they will be successful in whatever path they decide to take after college.”

Schiff has already done work as a filmmaker with sustainable design-build firm ConsciousBuild and plans to continue in that arena after graduating.

“My concerns with finding a job once I graduate are minimal,” Schiff said. “Because LAES has forced me to take such an active role in my own education, I feel better prepared for life post-graduation, and am confident I will succeed in whichever path I choose to take.”

For more information on Liberal Arts and Engineering Studies, visit http://laws.calpoly.edu.

> POLYHOUSE

THE ANNUAL POLYHOUSE PROJECT began in 2004 not as an interdisciplinary effort but as a class project involving only professor Industrial Engineering Roya Javadpour’s project management students.

But because of its broad community-service appeal and the inherently cross-disciplinary nature of the work it entails, the project soon came to attract students and faculty from nearly every engineering discipline and from programs across the university, including architecture, agriculture and graphic communication.

In the annual project, Javadpour identifies a local disabled resident or family with a disabled child requiring complicated home upgrades to accommodate the disability but lacking the financial resources. Students in her class then plan the renovation project over six weeks and execute the work over two weekends. The project is restricted by a budget (obtained through fundraising), tools and equipment (only what can be borrowed or secured through donation), and human resources (the students and any volunteers they can recruit).

In addition to the physical labor involved, students and volunteers engage in scheduling, supply management, team recruiting, resource allocation, time/cost tradeoffs, risk assessment, task coordination, team building, progress monitoring, and post-project assessment.

In recent years, Javadpour said, participants have begun to arrive from every college on campus. Agriculture students are taking part in the work. Graphic Communications students have pitched in by designing logos for the project managers to use in publicity. David Gillette’s students in the LAES program have volunteered for several years, providing multimedia coverage and producing several videos of past projects (in addition to taking part in the construction work).

“The variety of volunteers we attract from across campus gives all of the participating students a broad exposure to many different skill sets and perspectives,” Javadpour said. “That enhances the learning for everyone involved and helps the students approach problem-solving in a more comprehensive way that reflects what they will find later in the workforce.”

Weston Burke, who was a project coordinator on the 2011 PolyHouse, agreed.

“As engineers, we tend to associate and work with other engineers,” said Burke, who is preparing to work for Lockheed Martin after he graduates in June with bachelor’s and master’s degrees in engineering.

“In the world outside Cal Poly, you have to be able to work with people from all different disciplines and departments,” he said. “You have to empathize with their needs, concerns and motivations. Working on an interdisciplinary project such as PolyHouse was very good practice for getting on in the corporate arena but also life in general.”

The 2012 Polyhouse project will culminate this spring. For more information, visit www.polyhouse.org.

‘WORKING ON AN INTERDISCIPLINARY PROJECT SUCH AS POLYHOUSE WAS VERY GOOD PRACTICE FOR GETTING ON IN THE CORPORATE ARENA BUT ALSO LIFE IN GENERAL.’
ONE HUNDRED STUDENTS from 11 degree programs across campus collaborated through Cal Poly’s STRIDE (Science through Transitional Research in Diet and Exercise) center in 2011 and earlier this year on a pair of surveys to determine how many of San Luis Obispo County’s low-income residents are struggling with food insecurity and where staple foods are and aren’t available.

The work was funded with a U.S. Department of Agriculture Hunger Free Communities grant and is part of a broader effort by the Food Bank Coalition of San Luis Obispo County and local government and service agencies to develop a plan to fight hunger in the county.

In one survey, dozens of Kinesiology students with expertise in nutrition and health issues worked with volunteers from the community and from programs across campus to survey low-income residents to find out if they are going hungry and, if so, why. Christian Cardenas (B.S. Kinesiology, 2011) helped recruit and train survey volunteers and coordinate the survey effort. That meant training students with a variety of backgrounds, seeking out Spanish-speakers for translation, and working with local nonprofits to ensure the questionnaire was appropriate for diverse at-risk populations and systematically find survey respondents across the county.

Once the survey data was in hand, Cardenas and other Kinesiology students then worked with peers from the Biomedical Engineering and Computer Science programs to create a database that allowed for more detailed analysis of the results. These results were given back to the Food Bank Coalition for use in developing a plan and applying for grants to battle hunger in the county. The team also presented the data to Congresswoman Lois Capps in January.

Also on the USDA grant, Cal Poly Food Science and Nutrition Professor Aydin Nazmi and 17 students from his senior-level Community Nutrition class led a related survey on local food availability. After surveying 45 local grocery stores, Nazmi and his students are using the data to create a “hunger map” of food availability in the county’s various regions.

The interdisciplinary aspect of this and projects like it helps students to bring their learning to a new level, said Ann McDermott, Kinesiology professor and director of the STRIDE center. "Interdisciplinary work pushes our students beyond simple memorization, beyond understanding and even beyond application," she said. “It helps them get to the point where they can analyze that application, evaluate the results and then be creative in developing better and more efficient processes.”

Cardenas, now an account manager with healthcare communication company Standard Register, said STRIDE and the hunger study were a vital part of his Cal Poly education. “To be successful in the workforce, you have to collaborate with a variety of people from many different backgrounds and put the pieces together,” he said. “STRIDE runs like a real-world business. It teaches you things like communications skills, business etiquette and professionalism. Cal Poly would not have been the same experience for me without STRIDE, and I know I wouldn’t have the job I do now.”

And the interdisciplinary norm at Cal Poly meant STRIDE had an easier time organizing and executing the survey project, McDermott said. “We are light years ahead of many other universities in that regard. When STRIDE was approached to take part in this work, even though it was complex and required expertise from many different disciplines, we were able to act very quickly. We didn’t have to break down any walls, because there were no walls.”

For more on STRIDE, please visit http://stride.calpoly.edu
AG SCIENCE MAJOR Quincy Freeman’s mind is no easy one to rein in. From her agricultural roots and love of rodeo to her burgeoning business acumen and passion for fashion, the 21-year-old embodies the well-rounded Cal Poly alumn – and she’s still only a junior.

When Freeman saddles up one of her three horses and hits the competitive rodeo circuit, it’s hard to take your eyes off her. And that’s not just because the Women’s Rodeo Team captain has impressive roping and riding skills. She typically competes in vividly decorated, highly personalized clothing and boots of her own design, bringing a playful, feminine touch to the often staid styles of traditional Western wear.

When Freeman was still in high school, her distinctive look caught the eye of representatives from Ariat International, a leading manufacturer of Western riding boots. They saw Freeman make a splash at the 2009 National High School Rodeo Finals and promptly invited her to design a line of boots, belts and clothing. Called the Quincy Collection, the colorful pieces reflect many of Freeman’s interests: Mexican art, tattoos, rose motifs and vintage cowgirl themes.

“I wanted to bring boots to the rodeo world that I’d want to wear myself, something youthful and fun—dual-purpose boots you could wear riding or to a Willie Nelson concert,” said Freeman. “I have always been very creative, so it was natural for me to combine my love of art with my love of rodeo. I started out making things for myself, like belts that I hand painted, decorated with rhinestones and whip stitched. It got a lot of attention, and now Ariat has given me a once-in-a-lifetime opportunity to work with them.”

Growing up the youngest of five children on a ranch in Reedley, Calif., Freeman had rodeo in her DNA. Her father, a cattle rancher, started the first online cattle trading company, and one of her uncles is a world champion bronco rider. But it was the women in Freeman’s family—riders all—that were Freeman’s greatest inspirations. “My heroes have always been cowgirls,” Freeman said. “My grandma, Rosita, would dress up, put on lipstick and go out roping and riding. She always look beautiful, like those amazing vintage cowgirl pinups.”

To honor her family, Freeman named the boots in her first Ariat collection after relatives.

Cal Poly is also something of a family affair; Freeman’s father, uncle and sister are all alumni. “Growing up, I always had my eyes on Cal Poly,” Freeman said. “And the school has a great rodeo team, which is another reason I wanted to be there. My dad competed on the men’s team in the 60s.” Freeman joined the team in her freshman year. Now a junior, she is proud to be team captain.

“It’s the rodeo lifestyle and my passion for art and fashion that got me noticed and has given me a start, but it’s my Cal Poly degree that’s going to get me to the finish line,” Quincy said.

Freeman is majoring in Agricultural Communication, with a minor in Agricultural Business, and credits her studies with helping her succeed as an entrepreneur. “My communication classes have given me a big confidence boost with my public speaking,” she said. “And my business classes have been invaluable. Cal Poly has also expanded my love of agriculture. Even though I grew up on a ranch and compete in rodeos, I was not exposed to all aspects of the industry. I have really come to understand how important it is to respect and preserve our country’s agricultural heritage.”
Out of more than 4 million teachers in the U.S. and its territories and military bases around the globe, a Cal Poly alumna is this year’s National Teacher of the Year.

And Rebecca Mieliwocki (B.A., Speech Communication, 1990) credits Cal Poly’s Learn By Doing education for helping her attain her professional success. “It guides every assignment I give and every decision I make as a teacher,” she said.

Mieliwocki was chosen for the national honor in late April from a group of four finalists. She received the award at an April 24 ceremony at the White House, where she was recognized by President Barack Obama.

Mieliwocki (pronounced like the city in Wisconsin) teaches seventh-grade English at Luther Burbank Middle School in Burbank, Calif. Her fellow teachers first nominated her as the teacher of the year there last year. In subsequent district and state competitions, she went through intense screening that included personal interviews and nine essays on subjects such as current issues and trends in education, her philosophy of teaching, community involvement, and a typical day in her classroom.

Her essays all featured real stories of her students’ successes or hardships. What shone through, she thinks, is that she doesn’t give up on her students. “We’re going to laugh. We’re going to be creative like crazy. We’re going to learn how to solve problems, and if they get knocked down, we’re going to get back up – and they know I’m right there with them.”

Her essays outlined a creative approach to teaching that involves encouraging her students to try their hand at filmmaking and playwriting and leading field trips to science centers, aquariums, museums, historical neighborhoods and a variety of arts events.

When leaving her classroom, she wrote, her students “know that learning is exciting and strong communication skills will help them make the most of their lives. They leave able to write clearly and compellingly about what they believe. They know life will throw them many curveballs, but they have all the tools they need to handle them. They leave loving to read and knowing that the great mysteries of life can be answered through close and careful study of the written word.”

Mieliwocki was selected as California’s Teacher of the Year in November. She was set to receive word about the national honor just as Cal Poly Magazine was going to press this spring.

“Learn by Doing resonates within me,” she said, “and it’s part of the model for how I seek to educate my students.”

As she designs assignments for her students, she asks herself what she wants them to learn and, more importantly, what she will ask them to do with the knowledge.

“Whatever knowledge I gained at Cal Poly,” she said, “I was expected to do something with it – to use that information to perform or lead or solve problems.”

Learn by Doing is not only the North Star of her teaching philosophy; she said, it also gave her a head start as a professional. “The things that most people do in the first five years on the job, we did while we were at Cal Poly. I left campus accelerated.”

That’s why she hopes her own son, Davis, age 11, will attend Cal Poly in the future and continue a family legacy that includes her father, William Lipschutz (M.S., Education, 1977) and husband Duane Mieliwocki (B.S., Applied Art and Design, 1989), a camera operator on the hit Fox TV series “Glee.”

Two decades after graduating, Mieliwocki said she still maintains many relationships that began at Cal Poly.

“I’m so proud of every single person who comes out of Cal Poly,” she said, “They are doing amazing work that matters. We’re good people.”
MAKING GREAT STRIDES
POWERBAR CO-FOUNDER JENNIFER MAXWELL’S DONATION FUELS INTEGRATED HEALTH RESEARCH

BY MARY MCNALLY

CAL POLY’S KINESIOLOGY DEPARTMENT is on the leading edge of a movement to change the way health care research is applied. Traditionally, researchers have been at one end of the development cycle and health care practitioners at the other. But the need for the rapid development of health solutions is so great, it has become critical to merge research and application into an integrated process for better health care delivery.

Thanks to a $250,000 donation from Jennifer Maxwell (co-founder of PowerBar with her late husband Brian), the STRIDE program (Science through Translational Research in Diet and Exercise) in the College of Science and Mathematics has become a model for an integrated approach. “Everything we do has a direct impact in the community,” said the group’s director, Ann McDermott.

The student-run, interdisciplinary group includes students from 37 majors with teams that specialize in nutrition, health and activity. Applying a comprehensive approach to their research, students assess the needs of their community partners, design customized research programs, assess the effectiveness of the findings in near real time, analyze the data, and develop and implement programs based on their findings. Their efforts also include branding, communications and fundraising – efforts critical to any health care organization in the real world.

One of their ongoing efforts is called FLASH. The largest study of its kind, it tracks college students’ health from their freshmen through senior years.

Each student is given a physical exam by a member of the student assessment team, measuring modifiable health factors such as weight and risk factors associated with chronic disease including resting blood pressure, cholesterol levels, body composition, resting energy expenditure and heart health.

Each participant also completes a survey that includes questions about nutrition, stress, sleep, technology use, activities, drinking, smoking, academic performance, drug use and medications taken.

STRIDE’s goal is to correlate behavioral and environmental influences with the results of the physical exam to develop recommendations that can be implemented across the country. STRIDE’s long-term efforts are built on the group’s own statistical research, because, said McDermott, “you have to have good research to make good decisions about where to put limited resources.”

Already the data indicates the alarming statistic that more than 70 percent of college-age males have elevated blood pressure, a leading indicator of heart disease.

To conduct a study of this complexity, most universities would have a team of full-time doctoral candidates, McDermott said. At Cal Poly, the research has been done primarily by more than 100 undergraduates, which means that training and logistics are a big component of the program.

Championing the undergraduates’ efforts, McDermott said, “This study wouldn’t have been done better by any other university in the United States.”

That kind of professional experience gives Cal Poly students the advantage. “Before I graduated, I already knew what it was like to test people in a medical setting and had performed management functions in a professional research study,” said Katlin Baumgartner (B.S., Kinesiology, 2011), who developed, implemented and managed the office administration and data management systems for the FLASH study.

The study is one of several STRIDE initiatives made possible through Maxwell’s gift. STRIDE also equipped their headquarters with a conference room, a test kitchen, health assessment exam rooms and administrative workspace, and launched several other programs.

Maxwell wanted to support STRIDE because, she said, “Cal Poly is an institution that gets things done.” She believed McDermott and the students would develop programs that made a measurable impact.

Trained in nutrition and food science, Maxwell’s interests align with STRIDE’s objectives of healthy weight and habits across the lifespan. With recent studies that indicate nearly 30 percent of children between the ages of 3 and 5 are considered obese or overweight, she said combating that trend “is about education and instilling good habits at a young age.”

To that end, the Maxwell family gift also supported STRIDE’s Farm Fresh Tastings and Botanical Gardens programs that educate elementary school students about the connections between food, agriculture, science and health; a high school boot camp program; and Pink and Dude Chefs, a six-week afterschool program that teaches middle school students how to prepare nutritious snacks and meals for themselves and their families.

STRIDE isn’t just applying the Pink and Dude Chefs programs in the immediate community. Student Health Ambassadors have developed an online webinar to teach others how to implement the program in communities across the country. Maxwell and her husband, both competitive athletes, developed the recipe for PowerBar in their kitchen and marketed it from the trunk of their 1964 Ford Falcon. Like STRIDE students, she said, “we learned how to do it by doing it ourselves, and that makes you stronger because it makes you smarter.”

For more information about STRIDE, visit www.stride.calpoly.edu.
PICTURES OF A DREAM
AWARD-WINNING PHOTOGRAPHER
THOMAS KELSEY'S NEW BOOK
IS A LABOR OF LOVE

BY JO ANN LLOYD

PULITZER PRIZE-WINNING photographer Thomas Kelsey (B.S., Journalism, 1977) has been employed for more than three decades but hasn't worked a day in his life.

What he does is a labor of love.

As a photojournalist, he has photographed six U.S. presidents — from Gerald Ford to George W. Bush — and Pope John Paul II, twice. He shot four World Series, two Indianapolis 500s, Super Bowl XXXI, and the 1984 Summer Olympics in Los Angeles.

As a fine art photographer, he has traveled to all 50 states, Mexico and New Zealand. “The Spirit of the West,” his recently self-published book of stunning wildlife and spectacular landscapes, is the culmination of 30 years of work and realizes a dream he first had at Cal Poly.

Kelsey was photo editor of Mustang Daily and shot for the Five Cities Times Press Recorder and then-Telegram Tribune before he even graduated from Cal Poly.

He says Learn by Doing has been his life’s motto. “If I had an opportunity, I jumped at it and did it,” he said.

After stints at smaller newspapers, Kelsey landed a job as staff photographer at the Los Angeles Times in 1979. He spent 12 years capturing images both heart-warming and heart-wrenching—and award winning. He was part of a team that won a 1983 Pulitzer Prize for a series on Southern California’s Latino community.

In 1992 The Rocky Mountain News in Denver wooed baseball-lover Kelsey with the opportunity to document Colorado acquiring a new Major League Baseball team. A stint at the Riverside Press-Enterprise followed, then an invitation to join the Outdoor Channel. All was well until new owners let go of the channel’s entire creative team in 2007.

“It was a big shock,” Kelsey said. “It was the first time in 30 years I was out of work.”

But it turned out to be a blessing, giving Kelsey time to finally put together “The Spirit of the West,” showcasing the American West and its diverse landscapes and dazzling wildlife.

Kelsey traces his love of the back country to summers as a boy in Yosemite, Yellowstone and Grand Canyon, where his father worked as a seasonal ranger.

“There is something about the serenity and tranquility of the wilderness where no one talks back to you except the trees,” Kelsey said. “Traveling to wilderness areas and photographing wildlife is my therapy.”

Both sides of Kelsey’s career have presented unique opportunities. A few years out of Cal Poly, he participated in what would be Ansel Adams’ final photography workshop in Yosemite Valley. The weeklong workshop attracted 75 eager students and world-renowned photographers to teach and critique. “It was an incredible, life-changing experience,” Kelsey said. “I realized while studying under Mr. Adams that great photography could change the way people think about the environment. When President Gerald Ford hung one of Ansel Adams’ powerful black-and-white prints in the Oval Office in 1976, people started recognizing photography more as an art form. That really had a big effect on me and how I’ve lived my life.”

More recently, Kelsey spotted an online posting from the Greatest Generation Foundation for a photographer to travel to Europe to document the 65th anniversary of the Battle of the Bulge. The ad stipulated that the photographer must have strong historical ties to the battle.

“My dad fought in Europe and earned a purple heart at the Battle of the Bulge Pocket in Germany in 1945,” Kelsey said. “I wrote a passionate letter to the foundation and received a call that night. They were taking seven World War II veterans, aged 82-91, to various sites in Europe in December of 2009. The vets were to meet some of their German counterparts. More than 1,400 photographers applied for the job. I was thrilled to get it.”

“It was highly emotional. My dad had died a few years before, and I felt I was going for my dad, to give him closure,” Kelsey said. “I have been blessed.”

Thomas Kelsey now lives in Goleta and shoots for the Santa Barbara News-Press. His work can be seen at www.thomaskelsey.com.
Time flies when you’re having fun. My first year as president has passed – in a nanosecond, it seems. It has been great fun for me to learn about our fascinating Cal Poly community.

Of course, I’m also mindful of the responsibility that goes with the job. I am keenly aware that I’m following three legendary leaders – Julian McPhee, Robert Kennedy and Warren Baker. Each did so much to make Cal Poly the best public undergraduate university in the West, according to U.S. News and World Report.

Conventional wisdom asserts that with a new president comes change. The truth is that change is constant at Cal Poly. Consider the many positive changes in Warren Baker’s 31 years, including a nearly $1 billion expansion and upgrade of campus facilities and a vast broadening of curriculum.

One significant change in my first year has occurred in the ranks of the university’s senior leadership, as noted on Page 10. Though there are some new names and faces, I assure you that all of us have a profound respect for Cal Poly’s traditions and seek only to strengthen its reputation for excellence.

Let me also assure you of something that won’t change: our commitment to Learn by Doing. It is the cornerstone of our teaching philosophy. It was part of Cal Poly’s founding philosophy, it has served us well for more than a century, and I cannot conceive of Cal Poly without it.

Let me close by sharing an e-mail I received recently from a proud parent that succinctly captures the Cal Poly spirit of excellence and success – and the power of Learn by Doing.

In April the Cal Poly Supermileage vehicle team captured third place in the sixth annual Shell Eco-marathon Americas competition. Great news. But even better is what happened behind the scenes, as recounted to me by Glen Michel, the proud parent of one of the team members: “Let me tell you about the character of the kids in the Supermileage Club. Two other teams encountered some serious challenges just before the competition began. If they didn’t get some help, they would have had to withdraw. The Cal Poly team stepped up so these other teams could overcome the last-minute obstacles and compete. They didn’t have to, and they won’t even let me tell you the details. Suffice to say, good kids, great team, great school – Learn by Doing is the way to go. I love Cal Poly.”

I couldn’t agree more.

**LOOKING AHEAD**

WITH PRESIDENT JEFFREY D. ARMSTRONG

**FACES CHANGE, LEARN BY DOING ENDURES**

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I couldn’t agree more.

**BUILD A LEGACY**

**MAKE A DIFFERENCE ...**

**YOU CAN BUILD A LEGACY TOO**

Bequests, like Kenny’s, have played a significant role in sustaining Cal Poly and providing resources for its growth. We are planning for the university’s future – and we want to hear about your plans.

The university would like to thank you during your lifetime and recognize you as a member of the Legacy Club.

If you plan to include Cal Poly in your estate plans, we want to help you achieve your philanthropic goals.

To plan a possible bequest to Cal Poly, obtain sample language, or notify the university of your intended bequest, please contact us.

**CONTACT**

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www.plannedgiving.calpoly.edu
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Parents, please note: If your son or daughter is no longer at this address, please send his or her current address to alumni-info@calpoly.edu.

Come back to Cal Poly for the first-ever Poly Days Alumni Weekend, July 19–22.

Bring the whole family, visit old friends, make new ones, and remember how great it is to be a CAL POLY MUSTANG.