



WE RECENTLY SURVEYED several hundred alumni at random about their experience at Cal Poly, and they expressed a nearly unanimous sentiment: Cal Poly's learn by doing educational experience was crucial to their professional success.

As Honored Alumnus Darran Littlefield said, "After being hired by a large consulting company, I was placed in an intensive training course with 250 new hires from around the world. I was one of two Cal Poly graduates that finished the class in the top 5 percent. This didn't happen because we were smarter or worked harder; it was simply because Cal Poly's incredible learn by doing educational experience translated so well to the working world. It was easy for us to excel."

Learn by doing was a core value for Cal Poly when it was founded, and it has been sustained and enriched for more than a century.

The essence of that philosophy is the act of questioning why things are the way they are – and whether we can make them better. That comes to life in Cal Poly's laboratories and in the field, where our students and faculty work every day to examine real-world problems, question assumptions and find practical solutions.

In this edition of Cal Poly Magazine, we present to you many examples of students, faculty and alumni embracing the learn by doing methodology and finding ways to improve the world through applied research.

Natural Resources Management students and professors are turning burned areas of Cal Poly's Swanton Pacific Ranch near Santa Cruz into a living laboratory. A Cal Poly alumna is developing a new gadget that could help children be more active and healthy – and that caught the attention of President Barack Obama this summer. And see our cover story for a look at cutting edge research projects happening in each of Cal Poly's six colleges.

In spite of cutbacks in state funding and the tough economic times we face, the heartbeat that drives Cal Poly – our learn-by-doing philosophy – is still very much alive.

We trust you will take great pride as you read about it in our Winter 2009 edition of Cal Poly Magazine.

Please let us know. You can e-mail us your comments at [mlazier@calpoly.edu](mailto:mlazier@calpoly.edu). □

**Leah Kolt**  
**Matt Lazier**



## CAL POLY TEAM TAKES SILVER IN AIRCRAFT DESIGN CONTEST

STUDENT AIRCRAFT DESIGNERS from Cal Poly continued to soar at the American Institute of Aeronautics and Astronautics (AIAA) annual Undergraduate Team Aircraft Design Competition. The team took second place in the competition, which drew 22 international entries.

Cal Poly's Hummingbird Aeronautics won the silver for its design of the Tersus, a 150-seat "environmentally compatible" transport aircraft.

Hummingbird Aviation – which included aerospace engineering students Ashley Evans, Kevin Lovell, Marko Pavlov, Jason Stavro and Jonathon Wilson – received a \$1,500 prize from the AIAA Foundation for their second-place design.

Virginia Polytechnic University won \$2,500 for first prize, and Georgia Institute of Technology received a \$1,000 award for finishing third. □

## CAL POLY TO IMPROVE K-12 TEACHING WITH SHARED \$12.6M GRANT

CAL POLY HAS RECEIVED a shared \$12.6 million grant to strengthen the quantity and scale of successful techniques in K-12 teacher preparation with special focus in math, sciences and special education.

Cal Poly is partnering with CSU Monterey Bay and CSU Bakersfield in the grant program, which will focus on high-needs schools in Central California.

The \$12.6 million grant will be spread over the next five years to fund the Central California Partnership for Teacher Quality Programs (CCP-TQP).

The Tulare County Office of Education and the Kern County Superintendent of Schools are also participating in the program. □

## CAL POLY MAKES U.S. NEWS LIST FOR 17TH STRAIGHT YEAR

FOR THE 17TH YEAR IN A ROW, Cal Poly has been rated the best public-master's university in the West by U.S. News & World Report, in its 2010 America's Best Colleges guidebook.

Cal Poly moved up four spots, from 10th to sixth, in the magazine's overall list of the West's best universities, including both public and private institutions, that provide "a full range of undergraduate and master's-level programs but few, if any, doctoral programs."

U.S. News ranks colleges that grant doctoral degrees, such as those in the University of California system, in a separate category.

Cal Poly President Warren J. Baker observed, "This is a wonderful tribute to the quality of our faculty and students. This ranking should be reassuring to employers, who have already expressed to us a high regard for our graduates. Because of Cal Poly's renowned learn-by-doing teaching methods, employers know that our graduates are ready to contribute on day one."

Cal Poly's College of Engineering program ranked third among public engineering programs, bested only by the U.S. Military and Naval Academies, for schools whose highest degree is a bachelor's or master's. □

## GREENREPORTCARD.ORG GIVES CAL POLY TOP GRADES FOR SUSTAINABILITY

GREENREPORTCARD.ORG has named Cal Poly a Campus Sustainability Leader for 2010 for its efforts in sustainable campus practices – the only CSU campus to earn the award.

Cal Poly moved up to an overall B-plus for 2010 on the annual College Sustainability Report Card, from a B-minus in 2009.

The university was graded on eight of nine possible categories. It earned As in Administration, Climate Change & Energy, Student Involvement and Transportation and Bs for Food & Recycling, Green Building and Endowment Transparency. In the Investment Priorities category, the university earned a C.

Larry Kelley, Cal Poly's vice president for Administration and Finance, said he is pleased the university moved up by two grades this year. "We work very hard to meet and exceed standards in our sustainable campus practices. The dedication of our students, faculty and staff to support Cal Poly's excellence in sustainability is evidenced in our report card this year."

For more information about sustainable practices at Cal Poly, visit <http://www.facilities.calpoly.edu/sustainability/index.htm>.

## LOOKING FOR A WAY TO GET INVOLVED WITH CAL POLY?

Check out the new Get Involved page on the online version of Cal Poly Magazine and choose from many ways you can support your alma mater.

Visit [www.GetInvolved.CalPoly.edu](http://www.GetInvolved.CalPoly.edu) to discover how you can:

- Join a parents group
- Attend events
- Post jobs and internships for students and alumni
- Mentor students (coming soon)
- Sign up for daily, automatic news feeds about Cal Poly
- Take classes
- Travel with fellow Mustangs
- Receive Cal Poly newsletters
- Check out Cal Poly's Facebook, Twitter and YouTube sites
- Give to your college or department and help support student projects, scholarships, enterprises and more.





## FINANCE MAJOR IS 2009 CAL POLY HEARST SCHOLAR

PHONG V. DANG, a finance major in Cal Poly's Orfalea College of Business, is the 2009 California Polytechnic State University recipient of the prestigious William Randolph Hearst CSU Trustees' Award for Outstanding Achievement.

Dang was among 23 students selected by the California State University to receive the 2009-10 William R. Hearst/CSU Trustees' Award for Outstanding Achievement. The winners, one from each campus in the system, were honored by the trustees in September at the CSU Office of the Chancellor in Long Beach.

The award is among the highest forms of recognition for student achievement in the CSU. Hearst Scholars demonstrate superior academic achievements, community service, financial need and the ability to overcome adversity.

Dang, who transferred to Cal Poly in fall 2008 from Santa Rosa Junior College, is working on a bachelor's degree in business with an emphasis in finance management. Now a junior with a 3.70 GPA, he plans to complete his degree in business, gain career experience and then return for an MBA. Ultimately he hopes to pursue a career in finance.

Dang first arrived in the United States from Vietnam with his father and two younger brothers in 2005 at the age of 21. At Santa Rosa Junior College, despite language and cultural differences, he earned the Dean's Highest Honor every semester while also working as a computer and math lab assistant.

In 2006, his father and brothers moved to Houston, where his father works supporting the family and sending funds to Phong's mother, who is still in Vietnam. Dang stayed behind in California to finish his studies. The family hopes Dang's mother can join them in the United States in the next two years.

For details on Dang and the other 2009-10 Hearst Scholarship winners, visit the CSU Web site at [www.calstate.edu](http://www.calstate.edu). □

## ALUMNI ASSOCIATION RECOGNIZES 2009 HONORED ALUMNI

CAL POLY GRADS WHO'VE GONE ON to successful careers in diverse industries such as California agriculture, education, publishing, architecture and tire recycling were recognized at Homecoming in October as this year's Honored Alumni.

Recipients of the award this year included **Ed Boutonnet (CRSC '62)**, president and CEO of Ocean Mist Farms; **Wallace B. Gordon (ARCH '79, '80)**, president of Deems Lewis McKinley Architects of San Francisco; **Darran S. Littlefield (BUS '85)**, co-founder and partner of Point B Solutions Group, LLC, headquartered in Seattle, Wash; and **Arlene Chandler, (EDUC '63)** who served as Cal Poly's associate dean of women and taught sociology, marriage and family relations and child development at Cuesta Community College, where she served as Chair of the Human Development Division.

Also honored were **Jon Monett (ENG, '64)** chairman of Quality of Life Plus (QL+), a company he founded to generate research, development and innovations to aid and improve the quality of life for those injured in the line of duty; **Paul L. Cousineau (GRC '85)** director of Innovation and Continuous Improvement for Dow Jones, publisher of the Wall Street

CAL POLY GRADS WHO'VE GONE ON TO SUCCESSFUL CAREERS IN DIVERSE INDUSTRIES ... WERE RECOGNIZED AT HOMECOMING IN OCTOBER AS THIS YEAR'S HONORED ALUMNI.

Journal and Barron's; and **Robert H. Davis (MATH '65)** president of Rubber Recovery Inc., a California-based scrap and tire processing and recycling company.

**Manfred Sander (ASCI '53)** received the Distinguished Service Award for 20 years of service to the university, including work on the Cal Poly Alumni Association Board, long-time service for the Rodeo Boosters, participation on the College of Agriculture, Food and Environmental Sciences Advisory Council and other philanthropic and fundraising activities.

For more on the 2009 Honored Alumni, visit Cal Poly Magazine online at [www.magazine.calpoly.edu](http://www.magazine.calpoly.edu).

## FIRST-PLACE AWARDS ABOUND FOR SOCIETY OF WOMEN ENGINEERS

CAL POLY'S CHAPTER of the Society of Women Engineers showed well at the organization's annual national conference in October with four first-place awards.

The Cal Poly group brought home a top honor for Outstanding Outreach Event/Series for its "Building an Engineer Day." Held in the fall, the event brings middle school students to campus for hands-on laboratory experience in several engineering disciplines, to give the youngsters an idea of the career possibilities in engineering.

In addition, the group took first place for Outstanding Collegiate Section, Gold Level.

Cal Poly SWE also had two teams competing in the Boeing-sponsored Team Tech Competition at the conference.

One team worked with Lockheed Martin on a Hinge Moment Measuring System (lead by Nadia Shraibati, a 4th year BMED), and the other worked with Walt Disney Imagineering on a Vertical Drop Test Tower (lead by Nate Hague, 5th year ME, and Eric Davis, 4th Year LAES).

The Cal Poly teams tied for first place in what was the first time two teams from the same school competed in the SWE Nationals. □

## IN REMEMBRANCE

FRANK CALABRESE, a Cal Poly graduate and longtime university employee, died Sept. 19, 2009, in San Luis Obispo after battling brain cancer. He was 62.

Calabrese attended St. Mary's Elementary School, Bellarmine College Preparatory, Gavilan Community College, and Cal Poly.

For the past 30 years, Frank devoted his energies and talents to Cal Poly, working in various capacities, including instructor in the field of industrial arts and technical specialist in fire and security alarms systems. He is survived by his wife, Pamela Logan, and many siblings, nieces, nephews and cousins.

DORAL 'SANDY' SANDLIN, professor emeritus of Aeronautical Engineering, died Sept. 3, 2009, at his home in Albuquerque, N.M., at age 79.

Sandlin received his master's degree in aeronautical engineering from the Air Force Institute of Technology while stationed at Wright Patterson Air Force Base near Dayton, Ohio, and his doctorate from the University of Arizona in 1967. Between March 1967 and February 1968, he served as a flight test officer for a fighter wing in Vietnam. In 1969, he accepted a position as a professor of aeronautical engineering at Cal Poly, where he started the departmental master's program with research grants from NASA. He served as department head during the late 1980s and early '90s, retiring in 1992.

He is survived by his wife of 50 years, Terri, three children and seven grandchildren.



## MUSTY?

## WHERE'S

Our mini-mascot, Musty the Mustang, went exploring recently and came back with photos from his adventure. Can you tell where on campus he's been?

We'll run one of Musty's photos in each edition of Cal Poly Magazine and let you tell us where Musty is. Send your responses to [mlazier@calpoly.edu](mailto:mlazier@calpoly.edu). Be very specific in your answer.

The correct answer and the name of the first person who submitted it will be printed in this space in the next edition, along with Musty's next photo.

## HOW WELL DO YOU KNOW THE CAL POLY CAMPUS?

Alumna Andrea Gadioma (ARCH 2009) was the first to guess the correct answer for our Fall 2009 edition: Musty was at the railings in front of the Old Powerhouse (on the corner of Perimeter and Cuesta).