



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. □