CONTENTS

DEPARTMENTS

04 UNIVERSITY NEWS

28 SPORTS NEWS

FEATURES

08 RIDING HIGH
Will rodeo star Ben Lando be a ‘three-peat’ winner?

11 ROCKET SCIENCE AND A WHOLE LOT MORE
Three new projects take flight in university honors program

12 PERSONALIZING PEACE
Alum and faculty help spread goodwill in Iraq

15 SPOT ON
Recycling paint makes sense - looks great too

16 IT’S NOT EASY BEING GREEN
Ag alums Steve Barnard and Ed Boutonnet grow with success

20 OLD AS DIRT
Engineering students create ultimate building block for Africa

22 LEARN BY DOING GOOD: MOBILIZING LIVES AND HOPE
The success of the Cal Poly Wheelchair Foundation

24 DYSLEXIA TO DESIGN
Louis Rosenberg's journey to discovery

26 SCIENCE IS CENTRAL
College of Science and Mathematics to build new facility

30 A MATTER OF DEGREE
Parents learn how to help prepare K-12 students for college
Cal Poly Magazine is published four times a year for alumni and friends of California Polytechnic State University, San Luis Obispo, by the Public Affairs office, with support from the Cal Poly Corporation.

Comments may be sent to Cal Poly Magazine, Public Affairs, Heron Hall 205, Cal Poly, San Luis Obispo, CA 93407-0009.
PHONE: (805) 756-1511
FAX: (805) 756-6533
E-MAIL: polynews@calpoly.edu

Please send Class Notes and In Memoriam information to the Alumni Relations office, Attention: Class Notes, Cal Poly, San Luis Obispo, CA 93407, or alumni@calpoly.edu.

Mail address changes to Advancement Services, Heron Hall, Cal Poly, San Luis Obispo, CA 93407-0448; e-mail to alumni-info@calpoly.edu, or call (805) 756-1511.

Vice President for University Advancement: Sandra Ogren

Editor: Leah Kolt, Cal Poly Public Affairs Director

Cal Poly Magazine Senior Editor: Galen Ricard

Contributors: Teresa Hendrix, Jo Ann Lloyd, Pat Ketchum, Stacie Momburg & Scott Roark

Design: KRAFTWERKDESIGNinc.
www.kraftwerkdesign.com

Art Director: Thomas Reiss

Designer: Bryan Bremer

Photographer: Chris Leschinsky
(unless otherwise noted)

Printing: Journal Graphics

For up-to-date news about Cal Poly, go to www.calpoly.edu.

Past editions of the Cal Poly Magazine, Honor Roll and Annual Report are available online at calpolynews.calpoly.edu/magazine/index.html.

Editor's Note:
These individuals were inadvertently omitted from the 2005-2006 Honor Roll edition of the Cal Poly Magazine. We regret the error.

Julian McPhee Society ($1,000-$1,999): Sheila A. Alves, Cary A. Bowdich
Faculty and Staff Support ($250 or more): Cary A. Bowdich
Athletic Gifts, Stampede ($600-$749): Elaine M. Ramos Doyle
YOUNG AT HEART

THE CHARACTERISTICS that keep humans young – curiosity, wonder, play, acting silly – get subverted as we age, writes Ronda Beaman, Cal Poly speech communication adjunct professor and author of “You’re Only Young Twice: 10 Do-Overs to Reawaken BEAMAN AND HER WORK WERE RECENTLY PROFILED THROUGHOUT THE COUNTRY

Your Spirit.” Inspiration for the 53-year-old author and mother of two came from anthropologist Ashley Montagu’s 1988 book, “Growing Young.” Montagu introduced Beaman to neoteny, the idea that human beings are built to grow and develop their childhood traits rather than minimize them. Beaman and her work were recently profiled in numerous papers throughout the country.

PREPARING FOR THE WORST

NO COMMUNITY IS IMMUNE to natural disaster, but things can be done to make them safer.

That fact drove the creation of California’s Hazard Mitigation Plan, currently being revised by a team in Cal Poly’s City and Regional Planning Department.

The Hazard Mitigation Plan is crucial to how the state deals with disasters such as quakes, floods, fires, landslides and levee failure.

“The challenge is to reduce losses with better planning. We must address safety issues before, not after, a catastrophic event,” explains Ken Topping, team leader and lecturer in the City and Regional Planning Department. The department was awarded a state grant of more than $750,000 specifically to update the plan.

California is required to adopt a Hazard Mitigation Plan to qualify for federal funds before and after a disaster. Money for mitigation projects such as earthquake retrofitting of old buildings and reinforcement of aging levees is only available to states with a federally-approved plan.

Topping and his co-directors, City and Regional Planning Department Head Bill Siembieda and Professor Michael Boswell, are midway through the yearlong process of updating the plan. In addition, they’ll elevate the state to an “enhanced” status, which potentially means millions more in federal funding.

The City and Regional Planning Department’s role of think tank for the California Office of Emergency Services will likely continue past the October 2007 deadline for the mitigation plan. According to Siembieda, the depth of faculty expertise and clear willingness to be involved in real world projects will hopefully propel the department into another future contract with the state.
CAL POLY PRESIDENT WARREN J. BAKER RECEIVES UNM RODEY AWARD

CAL POLY PRESIDENT WARREN J. BAKER recently received the University of New Mexico’s Bernard S. Rodey Award for his lifelong contributions in the field of higher education.

Baker, who earned his Ph.D. in geotechnical engineering from UNM in 1966, received the award during a dinner and awards ceremony at the Hotel Albuquerque. He was honored for his efforts to further science and mathematics education in the United States and for his achievements as president of Cal Poly over the past 28 years.

In presenting the award, UNM Alumni Association President Roberto Ortega referred to Baker as “a man whose knowledge, experience, and style command attention and respect.” He also praised Baker’s efforts “to restore our country’s leadership position in science, technology, and innovation.”

“The UNM Alumni Association is pleased to recognize Warren Baker for his leadership in the progress that Cal Poly has made through the years and for his involvement in the critical area of national science-education policy,” said Karen Abraham, executive director of the UNM Alumni Association.

The Rodey Award is one of four annual awards given to outstanding alumni and faculty by the UNM Alumni Association. The award is given to an individual in recognition of significant leadership and contributions in the field of education. □

KUDOS FOR CANO

CAL POLY MICROBIOLOGY PROFESSOR Raul Cano appears in the 2007 edition of “Hispanic Legends.” The glossy photo calendar is published by State Farm Insurance and includes photos and biographies of prominent Hispanic Americans. In 1995, Cano and colleagues stunned the world with the news that they had revived 30-million-year-old bacteria from spores taken from the belly of an ancient bee entombed in amber. Cano has received several awards for his outstanding teaching skills and is recognized for his laboratory training of undergraduate students. □

ALUMNI ONLINE ON THE WAY

IT’S COMING: The Cal Poly Alumni Online Community is almost here. GOLD alumni — Graduates Of the Last Decade — are already asking when they can sign in. Other alumni are asking what it is. No matter which group you’re in, read on.

The Cal Poly Alumni Online Community is a secure, private, protected university Web site open only to alumni — and free.

Cal Poly alumni of all decades will be able to sign in, look up fellow alums, send private e-mails to catch up with old friends, view friends’ online photo galleries, and network online with other Mustangs.

Alumni will also be able to post their own class notes, photos and professional updates on the Web — with full control over how much (or how little) information is displayed. The community will allow users to receive Cal Poly-specific news and information as well as provide a location to easily register for events.

The secure and private university Web site will also allow alumni to sign up to mentor current Cal Poly students. And alumni will also be able to post information about job openings at their companies and businesses — giving current students and fellow alums an inside line on career prospects.

The Cal Poly Alumni Online Community will be free and open to all Mustang alumni — regardless of whether they are members of the Cal Poly Alumni Association. Plans also call for special guest memberships for faculty, retired faculty and staff members — so alumni can stay in touch with favorite professors and Cal Poly mentors.

Watch the Alumni Web site at www.alumni.calpoly.edu for more details on the Alumni Online Community and its launch in late spring.

Can’t wait? Want a sneak preview? If you’d like to be one of the first to try out the Cal Poly Alumni Online Community, to help test it and give us feedback, sign up to be in the “preview” group. Watch the Alumni Web site for details and sign-ups at www.alumni.calpoly.edu. □
FACULTY MEMBERS AWARDED FULBRIGHT SCHOLAR GRANTS

TWO CAL POLY FACULTY MEMBERS are currently studying abroad as part of the Fulbright Scholars Program.

Mei-Ling Liu, a computer science professor, and Robert P. Rice Jr., a professor of integrated pest management in the Horticulture and Crop Science Department, are among more than 800 individuals who will travel to some 150 countries to lecture or conduct research as part of the 2006-2007 Fulbright Scholar Program.

Liu has departed for a five-month stint in the Republic of Macedonia, where she is teaching a graduate seminar in distributed computing, as well as conducting research at the South East European University.

Rice is teaching for a year at the American University of Beirut in Lebanon, both on the main campus and at the university farm in the Bekaa Valley. He also is working with a plant pathologist to learn lab techniques that can be shared with students in his integrated pest management class at Cal Poly.

The Fulbright Program is an international educational exchange activity established in 1946 to build mutual understanding between the people of the United States and other countries. The program is sponsored by the U.S. Department of State, Bureau of Educational and Cultural Affairs.

Fulbright Scholars are selected for their academic or professional achievements and for demonstrating extraordinary leadership potential in their fields.

PROFESSOR’S RESEARCH ON CHILDREN PUBLISHED IN LANCET

THE BRITISH MEDICAL JOURNAL The Lancet has published a three-part Child Development Series that documents the reasons more than 200 million children in emerging countries are underdeveloped and how intervention programs and strategies can help them reach their full potential. A lead researcher in the groundbreaking study was Patrice Engle, Cal Poly professor of psychology and child development. Engle, who earned a Ph.D. in child development from Stanford University, has been teaching at Cal Poly since 1980. She spent the past seven years at UNICEF as senior advisor for early childhood development, living both in India and New York. She returned to the Central Coast and her teaching post at Cal Poly in September.

CAL POLY STUDENTS PLAY KEY ROLE IN FIRST U.S. LAUNCH OF CUBESATS

WHEN A U.S. AIR FORCE Minotaur rocket blasted off from the Wallops Mid-Atlantic Flight Facility in Virginia on Dec. 17, it launched an exciting new relationship between Cal Poly and NASA.

The rocket carried Cal Poly’s P-Pod CubeSat orbital delivery system, designed and built by a team of aerospace engineering students.

Cal Poly aero students Roland Coelho, Lori Brooks, Jonathan Brown and Wenshel Lan worked with NASA Ames Research Center, the Center for Robotic Exploration and Space Technologies, and engineering students from Santa Clara University on GeneSat-1, a 10-pound satellite carrying bacteria that researchers will analyze to determine the effects of space flight on microscopic life. Cal Poly’s P-Pod deployed the 10 x 10 x 30-centimeter GeneSat-1.

The NASA Ames-designed GeneSat-1 is a fully automated, miniaturized spaceflight system that contains a micro-laboratory, including sensors and optical systems to detect protein development and specific genetic growth in bacteria. It's the first CubeSat to carry a biological payload into space.
DEAN TO HEAD NATIONAL CONTINUING EDUCATION ORGANIZATION

DENNIS "SKIP" PARKS, dean of Cal Poly Continuing Education and University Outreach, has been elected president of the Association for Continuing Higher Education. ACHE is one of the country's oldest and largest organizations dedicated to promoting lifelong learning and continuing education.

Parks was named president at ACHE's 68th Annual Meeting and Conference in Los Angeles. Previously, he had served as the organization's regional chair, director at large and vice president. Parks has been dean of Continuing Education and University Outreach at Cal Poly since 2000.

PASSINGS: CHEMISTRY PROFESSOR BILL RIFE

WILLIAM C. RIFE, Cal Poly professor emeritus since 1998, passed away Jan. 3, 2007. He came to Cal Poly in 1977 as head of the Chemistry and Biochemistry Department and served in that capacity for over a decade. During his tenure, he also led curriculum development for the university as interim associate vice president for academic programs, before returning full time to the classroom.

He is remembered and respected for his "Renaissance man" persona. A colleague remarked: "I was always very impressed with his intelligence, clarity of thought and incredibly dry sense of humor and irony."

Generations of students were impressed with his exceedingly well-organized courses and phenomenal ability to present chemistry in an intriguing and understandable manner, no matter the major or interests of the students, according to his colleagues in the department.

In 1992 and 1993, Saunders College Publishing released "Essentials of Chemistry," a textbook authored by Rice. He wrote in his preface: "The motto of my university is ‘learn by doing’; and this book uses that method. A student who sees chemistry as isolated scraps of information to be memorized will be defeated by it; to be learned effectively, chemistry must make sense."

After spending a year in the Faculty Early Retirement Program, Rife and his wife, Anne D'Arcy, retired to Santa Rosa in 1999.

DOCTORAL GRADUATES MAKE HISTORY

FIVE CAL POLY ALUMS who made history last year as the university's first doctoral graduates are making history again as contributors to the inaugural issue of the Central California THE FIRST-OF-ITS-KIND JOURNAL IS A PERIODIC COMPILATION OF THE LATEST RESEARCH SPECIFICALLY RELEVANT TO LEADERS IN THE REGION. Instructional Leadership Forum. The first-of-its-kind journal is a periodic compilation of the latest research specifically relevant to education leaders in the region. In the first issue, doctoral grads Patty Grady, Kevin Bontenbal, James Brescia, Holly Edds and Janice Wellman explore issues ranging from intervention programs for high-risk junior high students to accreditation standards in community colleges. Elizabeth Truesdell of Cal Poly's College of Education is the editor.

(L-R) Holly Edds, Jim Brescia, Patty Grady and Janice Wellman (Kevin Bontenbal not pictured)
WILL THIRD TIME BE THE CHARM FOR RODEO CHAMP?

BY TERESA HENDRIX

IF BEN LONDO'S SPORT WAS FOOTBALL, he'd be a two-time Heisman Trophy winner.

Londo's sport is rodeo. His events are bronc riding, bareback riding and calf roping. For his efforts he's been named the All-Around Men's Champion in the National Intercollegiate Rodeo Association the past two years. The honor goes to the NIRA cowboy who amasses the most points over the competition season. As a Los Angeles Times front-page article on Londo pointed out, that's like winning the Heisman Trophy twice.

He's poised to enter the finals in Wyoming in June and attempt a "three-peat." Only one other student in the history of collegiate rodeo - a Texan - managed to do the same thing, and that was 45 years ago.

Thanks to the major media coverage, Londo's becoming known around campus, especially in the College of Architecture and Environmental Design. He's a senior construction management major set to graduate with honors in June.

"My teachers started hanging up the clips in the hallways," Londo said, sounding happy and a bit embarrassed.

After graduation, he plans to compete full time in the pro rodeo circuit. Last year, in between competing for Cal Poly, attending school full time and staying on the Dean's List, he earned $45,000 in pro rodeo. (NIRA and Professional Rodeo Cowboy Association rules allow collegiate riders to compete professionally.)

Rodeo, Londo says, is simply what he was born to do. "I grew up on a big ranch," he explains. His father competed in rodeo, too. Before settling down in Milton Freewater, Ore., Ned Londo went to Wrangler National Rodeo Finals four times - the Super Bowl of the sport.

continued on next page...
Just a bit after he learned to walk, Ben Londo was on a horse—sitting in the saddle with his father. He started competing in youth rodeo events when he was 10. When he signed up for his first rodeo event, his mother nearly tanned his hide.

That was because he signed up for an adult bull-riding competition when he was in third grade.

Cal Poly and the Central Coast will get a chance to see Londo and the Cal Poly Rodeo Team in action at the annual Poly Royal Rodeo, April 20 and 21. More information can be found at www.openhouse.calpoly.edu. (Photo by Nick Hoover, GRC '08)

Though he’s set on a career in professional rodeo, this spring Londo is focusing on graduating and rounding up a third Men’s All-Around title. And on explaining his sport—something no one expects a football or basketball player to do.

Londo and his fellow students on the Cal Poly Rodeo Team know they have “a task to create the awareness that we are not out to hurt these animals.”

Ask him about animal anatomy, rodeo animal care, or why and how rodeo livestock do what they do in the ring, and you’ll get a complete, quiet, methodical and rational explanation and Western history lesson from the construction management major.

Every event can be traced back to historical life on a ranch, Londo says. Roping steers and calves, riding horses, and staying on a bucking horse are all skills needed on a cattle ranch.

‘THE RODEO HORSE IS DEFINITELY AN ATHLETE.’

“Tack one off, filled it out, and dropped it in the entry box. Minimum age for the competition was 18 but I fudged my entry a little bit hoping no one would notice. Once my mom found out, she quickly pulled my entry and let the authorities know the whole story. I was a little upset with her. She still has that entry form in a scrapbook she keeps,” he remembers, with a laugh.

His parents are now his biggest fans. His father gave Londo a St. Christopher medal to wear in competition—a family tradition. “They’re very supportive of me,” he says. “My dad is my greatest teacher.”

Inheriting his father’s compact build also helps. At five feet, eight inches tall, Londo has a center of gravity that makes it harder for a horse to throw him. “I’m built right for my events,” he says.

His father’s footsteps also led Londo to Cal Poly, where Ned Londo was a Cal Poly animal science student and rodeo team member.

Much of rodeo is about understanding horses and cattle and partnering with them as much as it is taming them.

He spends a lot of his afternoons working with his own quarter horses—his partners in the roping events. The saddle horses and their riders are a team in the ring and on the range. “I train them the same way you’d train a dog. It takes a lot of time and patience to make a good horse,” he explains.

The bucking broncos earn the same respect from the rodeo rider as an opponent in wrestling or boxing. The tougher the opponent, the bigger and better the challenge in the arena. “The rodeo horse is definitely an athlete,” Londo stresses.

“Bucking is what they’re bred to do, and what they like to do. If they don’t want to buck, they’re not going to do it.”

Editor’s Note: Sponsored by the College of Agriculture, Food and Environmental Sciences, Cal Poly’s rodeo team is among the top five in the country, says Coach Tony Branquinho. Both the men’s and women’s teams have a chance to be national champions.
ROCKET SCIENCE AND A WHOLE LOT MORE

BY TERE SA HENDRIX

IT'S ROCKET SCIENCE — and a whole lot more — with the launch of three new team projects this spring by the university's Honors Program.

All three involve intensive collaboration among engineering, science and mathematics students on research to benefit industry and contribute to the community:

- A rocket-science-in-the-classroom outreach project, Dianne DeTursis, professor of aerospace engineering
- An innovative "tech appeal" approach to raise health and fitness awareness among local middle school students, Kevin Taylor, professor of kinesiology
- Research on potential new drugs from the sea, Jennifer Carroll, professor of biochemistry

The new program is made possible, in part, by a recent grant from the National Science Foundation. The $500,000 grant to the university Honors Program funds scholarships for financially disadvantaged honors students in the fields of science, technology, engineering and mathematics.

Students who receive scholarships are required to participate in collaborative, cross-disciplinary projects that have practical value for industry or the community.

NSF provided the scholarships, deans from various colleges and programs help fund the programs, said Sema Alptekin, director of the Honors Program.

Seed money to launch 20 interdisciplinary, undergraduate research projects came from the Research and Graduate Programs office, the College of Engineering, the College of Science and Mathematics, and the College of Agriculture, Food and Environmental Sciences, she said.

"The award not only supports financially disadvantaged honors students, it was a catalyst to create the kind of project-based multidisciplinary learning curriculum we had long been hoping for in the Honors Program," said Alptekin.

"These deans' support was invaluable."

Eighty-eight scholarships worth $5,000 each will be awarded annually over the next four years. □

MATH TEACHING SCHOLARSHIP TARGETS MID-CAREER PROFESSIONALS, TOP STUDENTS

The increasingly high demand for qualified mathematics teachers in high-need schools is potentially being met with a grant of nearly $425,000 awarded to Cal Poly by the National Science Foundation.

The Robert Noyce Scholarship Program will fund stellar students in the fields of science, technology, engineering and mathematics. It is also intended to attract mid-career professionals or students in other areas of study who have an interest in pursuing a math or science teaching credential.

Twelve one-year scholarships target "career changers" or non-mathematics majors, with another 12 two-year scholarships to be awarded to mathematics majors for their final year of undergraduate studies and their one-year credential program. All scholarship recipients will be required to teach two years in a high-need school district for each year of scholarship funds received.

The $10,000 scholarships cover about two-thirds of the cost of the credential program at Cal Poly, according to Todd Grundmeyer, co-director of the university's Noyce Scholarship Program. Scholarships will be awarded to three career changers each year for the next four years and to four current mathematics majors over each of the next three years. Complete program information can be found at www.calpoly.edu/math.
NALIZING PEACE
MEMBERS OF THE CAL POLY COMMUNITY WORK FOR PEACE IN IRAQ

A CARE PACKAGE WITH KICK

BY KRISTEN KIDD
PHOTOS COURTESY OF STEFFAN TUBBS

AT FIRST IT WAS A SIMPLE REQUEST from just a few soldiers in Iraq: “Please get us some soccer balls to give to the kids.”

Then a year ago, while embedded with the 4th Infantry Division in Baghdad, broadcaster Steffan Tubbs (JOUR ’92), interviewed several soldiers who echoed the same appeal – describing the balls as “gold” to Iraqi children.

So once back with his employer, Denver radio station 850 KOA-AM, Tubbs launched an all-out, on-air campaign on behalf of the soldiers. And listeners responded – with a staggering two tons of school supplies and more than 8,000 soccer balls.

The outpouring caught the attention of Sports Authority, the national sporting goods retailer, which offered to sell the balls at a discount and ship them directly to individual soldiers.

Tubbs’ efforts were also supported by Trevor Slavick (JOUR ’92), an American Airlines pilot and longtime friend from their days as Cal Poly KCPR newscasters. Slavick knew the extraordinary impact of soccer balls from his own experiences in the Caribbean and Central America. “I’ve seen the smile firsthand on a kid’s face when he realizes the ball is for him. I sometimes wonder how many kids one soccer ball can affect. I like to think it’s a lot.”

An avid soccer fan, player and coach, Slavick convinced Tubbs to take the campaign nationwide. As a start, they enlisted soccer star Cobi Jones as spokesman. The world-famous soccer star donated generous amounts of time to promote the project on ESPN and local media outlets.

This year the two Cal Poly alums plan to double the distribution and expand the project into other countries.

Little Feet, Big Goals will soon be an official nonprofit organization, which means contributions may be tax-deductible. But even now, a $10 donation will send a colorful soccer ball directly to a soldier.

Traditional care packages will always be welcomed by the troops. But a package from Little Feet, Big Goals may be even more prized and create untold opportunities for one-on-one soccer ball diplomacy. For more information, go online to www.littlefeet.com.

continued on next page
SOLDIERS FROM THE 164TH BATTALION in Iraq are getting by with a little help from their Cal Poly friends.

Countless goodie boxes and letters of encouragement arrive from the United States almost daily to boost their spirits.

But recently, a most extraordinary care package landed at Camp Anaconda, the largest support base in Iraq – four giant crates filled with 200 olive trees.

This unique cargo was a gift from the California Rare Fruit Growers Association and part of an important goal of the 164th Corps Support Group.

"We wanted to leave something behind when we go home – something that also happens to be an international symbol of peace and friendship," explains Master Sgt. Patricia Marsano, who spearheaded the olive tree project in Iraq.

After concluding olive trees are perfectly suited to the sweltering conditions there, Marsano "Googled" her way to the California Rare Fruit Growers Association.

Her written plea to the CRFG for 164 olive trees landed in the hands of Cal Poly Professor Emeritus Joe Sabol. He accepted the challenge, coordinating the donation and shipment of 200 saplings.

"I'm proud of our soldiers, and I'm proud to facilitate the extension of a literal olive branch of peace to the people of Iraq," Sabol says.

Tom Burchell, Cal Poly alum and owner of a nursery in Oakdale, offered the trees at half price and an anonymous donor covered the remaining bill. "Burchell Nursery is a family-owned company started by my grandfather in 1942. We're always glad to help a cause greater than us."

Legal hurdles and paperwork delays did not deter the mission. The trees were shipped to Iraq in early December, compliments of FedEx. They arrived just in time for a Christmas Eve planting ceremony.

"For a few brief moments we forgot about where we were and why we are here," recalls Marsano. "The ceremony included Iraqi citizens, and peace was the pure essence of their speeches. I will never forget how proud I was at that moment to be an American."

Meanwhile, the gesture of peace also took root in San Luis Obispo, where Sabol and many community residents planted matching olive trees along Foothill Boulevard.

Marsano, an Ohio native, says she looks forward to visiting the trees planted in California someday. "I think that will make my journey complete."
A COAT OF FRESH PAINT can make almost anything look as good as new.

And if it's recycled paint, you can be assured that it's good as new, too. If it has a Green Seal of approval, that is – a new national certification that Cal Poly research helped make possible.

No surprise that California, with its groundbreaking environmental policies, was the catalyst for this greening-of-paint initiative. No surprise either about Cal Poly's vital role in the project.

Cal Poly's Polymers and Coatings Program is the only one of its kind west of the Mississippi. The program's independent laboratory facilities made it ideal for the testing and research needed to develop the nation's first environmental product standards for recycled paints.

"No university is doing what we're doing in terms of testing and analysis," said Dane Jones, one of the chemistry and biochemistry faculty members who developed the program nearly 20 years ago.

The recycled paint certification applies only to water-based latex products – but that's a big target: Sixty-four million gallons of leftover latex paint lurk in garages or clog waste streams. The buckets of leftover paint are the equivalent of 10 percent of all paint sold annually.

Green Seal is an independent nonprofit organization that promotes the production and use of environmentally preferable products and services. A Green Seal label on the can means the recycled paint, in addition to being environmentally preferable, meets the same high Master Painters Institute standards that are set for newly manufactured paints. That's the "gold bar" of quality assurance that gives consumers confidence in the product and provides incentive for paint companies to expand their line of recycled paints.

That combination of MPI quality standards and the Green Seal environmental seal of approval creates a powerful marketing tool, explained Jones.

And an expanded marketplace means increased recycling and a reduced waste stream. Of all household wastes, paint is the most expensive to collect and manage. The costs for municipalities to manage leftover consumer paint averages $8 per gallon.

"Is it all just beige"? That's a question often heard by Ray Fernando, director of Cal Poly's Polymers and Coatings Program. A research chemist with extensive knowledge of water-based coating technology, Fernando holds the Arthur C. Edward Endowed Chair for Polymers and Coatings at the university.

"Consumers generally think of recycled paints as inferior," noted Fernando. "The new standards will assure consumers, architects and specifiers that certified recycled paints are top-quality materials – with the added benefit of being environmentally responsible."

The new standard was developed in partnership with the Product Stewardship Institute, which facilitated dialog with more than 60 stakeholders, including paint manufacturers, recyclers, painting contractors and government agencies.

Dunn-Edwards Paint Co. was among the leading proponents of the certification effort and funded the initial feasibility study conducted by Cal Poly. The California Integrated Waste Management Board and the Portland Metro Regional Government were also among major funders of the breakthrough research project.

"Paint is a highly manufactured product that uses very expensive non-renewable resources, so it just makes sense to use it to the fullest extent possible," said Jones. □
IT'S NOT EASY BEING GREEN
IT WAS A ROCKY FOUR MONTHS FOR CALIFORNIA FARMERS.

First, in September tainted spinach from a California farm sickened hundreds of people across the country, virtually shutting down the spinach industry across the United States, Canada and Mexico for nearly a month.

Then, in January several days of freezing temperatures literally sucked the life out of many California crops, from artichokes and avocados to citrus and lettuce.

The incidents were deemed disasters, and two Cal Poly alumni found themselves smack in the middle of the fray: Steve Barnard (AGB '75), president and CEO of Mission Produce Inc. in Oxnard, and Ed Boutonnet (CRSC '62), president and CEO of Ocean Mist Farms in Castroville.

Barnard is a leading grower and processor of avocados, whose company supplies all the frozen guacamole for such fast-food chains as Del Taco, Taco Bell and McDonald’s.

Boutonnet is the world’s largest artichoke grower, supplying most of the artichokes in North America. He also grows a variety of other crops at locations throughout California, in Yuma, Ariz., and in Mexico.

Mission Produce suffered significantly from the freeze; Ocean Mist was hit hard by both events. But Barnard and Boutonnet’s leadership and foresight in creating such diversified companies helped them survive.

AVOCADOS ANYTIME

By importing produce from other countries and planting crops in varying climates, Mission Produce and Ocean Mist provide seasonal produce year-round. They have literally changed the way growers do business and the way consumers plan meals. Fresh, ripe avocados are as easy to find in December as they are in August.

continued on next page...
In 1984 Mission Produce was the first company to import avocados from Chile. The company now also imports from Mexico, New Zealand, Peru and South Africa, and owns orchards in San Luis Obispo and Ventura counties. The company recently ventured into the asparagus business, importing the low-calorie, nutrient-rich vegetable from Peru.

In addition to providing ripe avocados all year, Mission Produce revolutionized the industry when it opened ripening and distribution centers across the United States.

Ripening is a very technical, computerized and sophisticated process, Barnard said. The fruit is picked before it is ripe, then it is heated, humidified and treated to enhance ripening. Machines detect the degree of ripeness and package the fruit in groups accordingly. "Restaurants need ripe fruit right now; markets may want the fruit to ripen in a few days' time," Barnard explained.

All that work wouldn't be necessary, though, if people all over weren't eating lots of avocados. The average U.S. citizen eats about 3 pounds of avocados annually; the average Mexican citizen eats nearly 22 pounds a year. Barnard, who still sports the lanky build of a college student, says he eats up to 50 pounds. That's a lot of guacamole.

And why not? Avocados don't just taste good, they're good for you. They're filled with fiber and nutrients, with only five grams of fat per serving - mostly monounsaturated fat, "the good kind."

Boutonnet took over as president of Ocean Mist in 1990, leading the company's growth from modest acreage to a whopping 24,000 acres. When he took over, the company basically had two crops - artichokes and broccoli - in one geographic region - the Castroville area. Except for a few artichokes, the company literally shut down every winter.

Boutonnet changed all that. The company is now diversified in land base and product, he said. In addition to artichokes, the company grows asparagus, broccoli, cauliflower, celery, fava beans, onions, lettuce, spinach and more.

Diversification is one of the keys to the company's success. The other keys are rooted in four basic values: integrity, quality, passion and success. "Darn few growing and shipping companies are 83-years-old," he boasted.

The company's longevity is partly linked to Boutonnet's

"THE ECOSYSTEM IS BETTER BALANCED AND BETTER MANAGED NOW THAN IT WAS 20 YEARS AGO. I THINK THE FUTURE IS BRIGHT."

— ED BOUTONNET
ability to adapt to change. Whether the issue is food safety, freezing temperatures, or protecting the fragile ecosystem, he stays ahead of the curve.

Farmers are very good stewards of the land, he said. "The ecosystem is better balanced and better managed now than it was 20 years ago. I think the future is bright."

Even for the artichoke market, which Boutonnet calls "flat." But that could soon change, thanks to recent research revealing the artichoke's extremely high antioxidant content. "Plus, they're just plain fun to eat," he said.

If the antioxidants aren't enough to whet people's appetite for the thorny thistle, Boutonnet has another plan. He aims to make them easier to prepare. He and Cal Poly horticulture and crop science Professor Wyatt Brown are looking at ways to prevent the leaves from oxidizing, or turning brown, after they are trimmed. Boutonnet says they are close to marketing trimmed artichokes that won't oxidize, in a ready-to-microwave package.

Barnard is also energized by bringing new ideas to life. "I came out of Cal Poly with a great sense of confidence," he said. "I'm not afraid of challenges; they pop up every day. You just have to have the right frame of mind. Heck, what did I know about asparagus?"

FROZEN ASSETS

STEVE BARNARD'S MISSION PRODUCE, including its partners in Mexico and Chile, supplied about 210 million "fresh pounds" of avocados last year. This year and next, that figure will drop as dramatically as the temperatures did in January.

Several straight days of freezing temperatures wreaked havoc on California crops, creating what some are calling the worst-ever freeze disaster.

The California avocado industry lost about 30 percent of its crop, with some Northern California areas losing as much as 100 percent. "This is a minimum of a two-year loss," Barnard stressed. "The freeze damaged the bud wood that provides the bloom for the 2008 crop."

Virtually all of the produce-growing regions in the West were affected, including Cal Poly and its 70-acre avocado orchard, planted by Mission Produce almost five years ago. This "living classroom" was designed to be a profitable, commercial business and a model for the latest and best orchard management techniques. While the campus orchard was heavily damaged, it seems to have survived better than most.

HARVEST HAZARD

THE PRODUCE INDUSTRY changed forever on September 14, 2006, when the U.S. Food and Drug Administration issued its first alert about the spinach E. coli outbreak.

"After 9/14, we made the decision to be a leader," said Ed Boutonnet, president and CEO of Ocean Mist Farms. "Many people wouldn't talk to the media. We talked. We were on national news and ready to face criticism even though we weren't responsible."

Before 9/14, Ocean Mist and other growers practiced voluntary guidelines known as "good agricultural practices" (GAP). "We did a great job, but because it was voluntary, not everyone was as diligent in their growing practices," said Joseph Pezzini, vice president of operations at Ocean Mist.

"Then people got sick," Boutonnet said. "The bad spinach was eventually traced back to one entity, but what one grower does, affects the whole industry."

Ocean Mist has since adopted new, stricter production and processing standards. But growers decided it was time to adopt mandatory guidelines.

California produce companies and governmental agencies formulated the Proposed California Leafy Green Products Handler Marketing Agreement, which could become law. But, Pezzini cautioned, there is still much work ahead to get the whole thing off the ground. Food safety has been mainly of interest in California. If the agreement is adopted, Boutonnet hopes it could become an FDA model for the United States, Canada and Mexico.
YOU WON’T SEE ANY SLICK ADS or dazzling packaging for this product.
That is because it’s being marketed by Grand Avenue, not Madison Avenue. And its target audience doesn’t live on Main Street U.S.A. but in a rural village in Zambia.

When a class of engineering students decided to develop a product for people in southern Africa, their goal was to produce a real-world solution for critical housing problems in an emerging country. A chance encounter with the Zambian ambassador to the United States further inspired and focused their efforts.

As a result, a simple brick press is headed later this year for Zambia where there’s an abundance of soil for making fired-clay bricks, with workers eager to be trained. In a country desperate for housing, the bricks will provide the literal building blocks to replace mud, wattle and thatch-roof habitats — much of those lost to recent floods — with structurally sound dwellings. It can be expected to boost the local economy as well.

“The beauty is that dirt costs nothing,” says Kirk Schauer, executive director of the nonprofit Seeds of Hope International Partnerships, one of two organizations partnering with the students. Rienk Ayers, an entrepreneur and inventor, is another active advisor. The two men have worked together closely for several years on community development projects in Africa.

Using what’s at hand is one of the core principles in making a difference in developing countries, notes Schauer. “What the class calls new-product development is what we call appropriate ‘next-step’ technology. That means not looking for new inventions but taking what’s there and tweaking it just a little so it’s useful,” he explains.

Identifying which small changes will yield significant and sustainable results requires research, knowledge and first-hand experience.

The research portion was undertaken by students during the fall quarter — the first phase of a class that spans two quarters. Taught by Liz Schlemer, professor of industrial and manufacturing engineering, the initial phase focused on concepts. In addition to research, the students’ multidisciplinary tasks included preparation of a business plan, feasibility analysis, testing of the soil and building a prototype.

This spring, Unny Menon, engineering professor and interim assistant vice provost of academic programs, is helping the students take the product from prototype to reality.

"They are taking it from concept to a fully operational product that will ultimately make a difference in a village far from campus," says Menon.

Chris Deaner, team project manager, cited the classroom visit from the Zambian ambassador, Inonge Mvikusita-Lewanika, as an especially motivating experience. “Housing is a top priority in Zambia and she was genuinely interested in our project and very encouraged.”

The ambassador’s visit set the tone, underscoring the humanitarian nature of the enterprise.

“So many projects are a practical exercise, but it stops there,” says Deaner. “It’s cool to know you’re working on something for Africa, that you’re making a difference. For the first time, I felt involved with a project that will benefit not just one or two people but may change an entire community."
LEARN BY DOING GOOD

BY STACIA MOMBURG

PHOTOS COURTESY OF CAL POLY WHEELCHAIR FOUNDATION

SOME SENIOR PROJECTS NEVER END, but few students create that situation by design. Marketing Professor Lynn Metcalf and her students in the Orfalea College of Business are the exception. A long-term senior project was exactly what they set out to do.

The result - now in its sixth generation - is a project that would be the envy of many companies. Is there another organization that thrives on 100 percent employee turnover every 33 weeks and still manages to top its previous year's revenue?

The Cal Poly Wheelchair Foundation is a campus fund-raising organization that works on behalf of the National Wheelchair Foundation. It's a relationship that dates back six years, when philanthropist, entrepreneur and founder of the national organization Jeff Behring spoke as part of the Orfalea College of Business's Distinguished Speaker Series.

Metcalf says she created the Cal Poly Wheelchair Foundation as a senior project because it has an array of real-world challenges and opportunities to engage her students. "As a fund-raising project it has a lot of marketing aspects - sales, media relations, graphics and advertising - that span the business spectrum."

With a background in international marketing, Metcalf also felt it was important to combine student service learning with
exposure to the global market. And they would not only learn by doing – but learn by doing good.

Chris Cole, project manager for the inaugural 2001 team, learned the importance of teamwork and the power of making a difference in the world. "When we delivered a chair to a man who had been bedridden his entire life, the look of gratitude on his face touched me deeply. In that moment, I realized the importance of everything I had done up to that point," said Cole. The team raised $18,000 that initial year.

In 2006 the team raised $66,000 and secured three containers of wheelchairs – 880 chairs – creating a record for the campus organization. Krista Couch, 2006 project manager, credits the extraordinary year to Metcalf’s influence. "Lynn was an amazing mentor and a constant source of encouragement. She helped hone my leadership skills – which I now incorporate each day."

The students are not the only ones learning by doing in this venture. Metcalf says she’s learned a great deal as well. "In the first year, I had no idea where this would take us. In the second and third years, I spent a lot of time directing my students’ efforts. But in the fourth and fifth years, I’ve been completely hands-off," she says. "When bright people have ideas and can act on them within a framework, they’re bound for success."

How successful has the Cal Poly Wheelchair Foundation been? Since its inception, the group has raised $160,000 and delivered 2,133 wheelchairs to six countries. They have also received donations of clothing, shoes, school supplies and toiletries for orphanages and schools in Guatemala and Belize.

With 100 percent turnover each year, and virtually no training time, how do the students continue to outdo their predecessors? Perhaps because much of the training is virtual.

It’s all in the business model say the students. Each year’s team adds to the organization’s institutional knowledge through a Web site that archives templates, forms, instructions, and job roles and responsibilities. "We try to build on each employee’s individual ideas, experiences and passions and pass that information down to the next group," Metcalf says.

This year’s Cal Poly Wheelchair Foundation hopes to raise almost $70,000 to pay for and distribute another 880 chairs in Argentina.

The 2007 Gift of Mobility annual gala will take place April 14 in Pismo Beach. For more information about the Cal Poly Wheelchair Foundation, contact Metcalf at 805-756-2010 or wheelchairfoundation@calpoly.edu.
TWENTY-SIX YEARS AGO, Louis Rosenberg wrote a three-word postcard to his parents from summer camp.

For his parents, the joy of receiving a dispatch from their son quickly turned into a kind of despair—all three words had errors.

It was the breaking point for the Rosenbergs. After years of trying to help their son conquer his dyslexia, they tried another tack, at Louis’s request.

“When I said I wanted a computer, my parents paid attention—even though they had no idea what one was, except that it was really expensive,” Rosenberg recalls.

It was 1980, when computers were scarce even in the workplace. Yet it was an immediate mind meld with the machine for the young student, who was soon teaching himself to write programs. “If I spelled things wrong it would give me a syntax error and let me try again,” he said, adding “that’s a helpful feature for someone who is dyslexic.”

In the following years, Rosenberg developed into a straight-A student. As his programming skills improved, so did his self-esteem. By age 16, he joined the high-tech work force, developing his own line of educational software.

One full academic scholarship, two successful start-up companies, three degrees from Stanford, and more than 100 patents later, Rosenberg landed at Cal Poly.

His role on campus is groundbreaking. An engineering whiz devoted to helping children learn, Rosenberg is a professor of educational technology for both the College of Education and the College of Engineering. It is the university’s first joint appointment.

Rosenberg is in sync with how students learn in the 21st century, according to Dean Bonnie Konopak of the College of Education. “He provides a critical bridge between the polytechnic colleges and teacher education at Cal Poly. His joint appointment is just the beginning of an ongoing collaboration between education and engineering.”

To nurture such synergy, Rosenberg combines innovative technologies with learning environments. The result is the development of a Center for Exhibit Design, where students create high-tech exhibits for children’s museums and learning institutions throughout California.

Steer a mock submarine through underwater caverns using a robotic camera or learn about marine life in a “real time” tide pool in a huge wave tank—these are two engineering students’ state-of-the-art creations on display at the new Avila Beach Marine Institute.

Institute founder Jim Bucheri says the students’ exhibits are already making big waves in Avila Beach and in the Southern California marine community. “My colleagues at the Cabrillo Aquarium in San Pedro were so impressed with the design of the underwater robotic camera, they’re now having one created for them by Cal Poly.”

Engineering senior Drew Gray is busy this quarter designing the camera for the Cabrillo Aquarium. It’s the perfect project for this “mechatronics” major who marvels that his invention will be showcased for years to come. “I someday want to bring my own children to see what I built.”

Anyone who has ever wished that a child’s boundless energy could be channeled to light the house will get a kick out of the Energy of Motion Exhibit at the soon-to-open San Luis Obispo Children’s Museum. Cal Poly students are designing energy meters that will clip onto children’s clothing, documenting the
amount of energy the child generates exploring the museum.

Giving new meaning to the idiom "Flower Power," engineering students have also developed a 30-foot-tall interactive solar sunflower for the children's museum. It demonstrates solar power as a renewable energy source in a way that kids will love: Aim the freely rotating flower at the sun, and three-foot streams of water shoot into the air.

Sunflower techno-artists Rachel Santee, Steve Teran and Kyle Hayes all agree the seemingly simple sunflower is a complex learning tool. Its design incorporates all four years of their mechanical engineering curriculum, including dynamics, statics, fluids, electronics and even vibration analysis.

It's a good thing one of the developers of the museum's claymation exhibit loves to get his hands dirty. College of Education grad student Steve Rotondo says kids will be able to make short animated films of lava flow with a computer while developing critical math, logic, creativity and thinking skills.

"A three-way win" is how Roy Mueller, executive director of the museum, describes the collaboration.

"Students gain real-world experience from designing and fabricating exhibits – and we benefit from some very creative thinkers and reduced labor costs. Most importantly, the children and families will be exposed to fantastic learning experiences at the new museum," he added.

Rosenberg marvels at the opportunities that have come his way.

A firm believer in the power of technology to help people learn, he says his career has allowed him to focus on studying human perception, bending the rules, twisting the perspective – and using his personal experiences with dyslexia as a source of insight.
WHERE DO YOU GO after you've raised $264 million in the largest fund-raising campaign ever conducted by a public master's university in the United States?

This was the dilemma faced by President Warren J. Baker in 2004, at the conclusion of Cal Poly's Centennial Campaign.

So he appealed to some of the university's most successful alumni and supporters to join him in continuing the momentum generated by the campaign, inviting them to serve as founding board members of a new philanthropic foundation.

The new board members for the Cal Poly Foundation wasted no time in designating as their top priority the raising of funds for a new Center for Science and Mathematics, to replace the campus's aging "spider" complex, a science facility built some 50 years ago.

"With new challenges to our society's way of life emerging almost daily, the Foundation Board members recognize that science is the best hope for finding solutions to such problems as global warming, energy shortages and antibiotic-resistant bacteria," Baker explained.

In addition, the Board was motivated by the belief that the new center will revitalize the campus core, as well as provide the infrastructure for planned growth in the polytechnic majors, according to Gary Bloom (CSC '82), who serves as the Foundation Board chair.

Every student on campus will take classes in this new building,
“Students come to Cal Poly already knowing they want to be a scientist or engineer. So Cal Poly doesn’t have to inspire them to major in these fields so much as to provide the learn-by-doing environment where they can fulfill their creativity through experimentation, lab work, senior projects and other hands-on activities.”

BURT RUTAN (‘65)
CAL POLY AEROSPACE GRADUATE

Developer of SpaceShipOne, the world’s first privately built aircraft to reach space and winner of the $10-million Ansari X PRIZE.

where 75 percent of the teaching done will be for students from colleges other than the College of Science and Mathematics, including 25 percent of the engineering curriculum, he said.

Visualizing students collaborating with each other and with faculty in a state-of-the-art facility excites Phil Bailey, dean of the College of Science and Mathematics. “A defining landmark at the nexus of the academic, residential and recreational areas of campus, the center will use only one-third of the current architectural footprint,” he said.

Such spatial economies will allow the building to be surrounded by a new park-like area. These exterior vistas will combine with interior spaces to create an inviting environment for study, reflection and exploration, he added.

The passage of a $102-million general obligation bond by California taxpayers last November paved the way for the planning and design phase of the new center. “The state is funding a large percent of the bricks and mortar, but it is the public-private partnership that will create the margin of excellence,” said Sandra Ogren, vice president for advancement.

More than $15 million in private funding has been donated so far, almost $3 million of that raised by the Board, with a number of the Board members themselves pledging major gifts. “It’s remarkable how the Board members have personally reached out to prospective donors, and a number of them have been generous with their financial support, too,” Ogren added.

Their enthusiasm is infectious. Local architect/investor and Cal Poly grad Rob Rossi (BAR ’75) has also pledged a major gift. “Private support will help make the center a national model of undergraduate education, incorporating futuristic learning technologies with research opportunities to stimulate collaboration and interdisciplinary work,” he said.

For example, studio classrooms will efficiently pair lecture and lab activities to enable students and faculty to combine hands-on activities with intellectual analysis, using classrooms that integrate networking, digital and audio-visual technologies.

Student computers will interface with the latest scientific equipment and will be networked to facilitate communication among students, faculty and lab instructors.

Privately funded research facilities will provide undergraduates with access to additional instruments, software and materials and expertise—benefits usually reserved for graduate students.
VOLLEYBALL TEAM IMPROVES BY LEAPS AND BOUNDS

BY CHRIS GIOVANNETTI

THE LARGEST VOLLEYBALL CROWD in 17 seasons filed into Mott Gym in October to watch 20th-ranked Cal Poly deal a dominating and demoralizing 3-0 defeat to rival UC Santa Barbara. For local volleyball aficionados, the record crowd of just under 2,500 conjured up memories from the 1980s, when the Mustangs were a national powerhouse and regularly packed Mott Gym for matches.

The Mustangs brought the volleyball spirit back to the Central Coast while fighting their way to the 2006 Big West Conference title and NCAA Tournament. During an NCAA second-round match, spectators had to be turned away from Mott Gym as a sellout crowd of more than 3,000 watched the Mustangs face UC Berkeley. Though the Mustangs fell to Cal 3-1, they set a precedent for future squads, not only in the program records they smashed, but also in the tradition that was re-established.

Head coach Jon Stevenson has transformed Cal Poly into one of the hottest sports tickets in town. Quite an accomplishment, considering that Stevenson took over two years ago when the program had gone 5-24 for the season.

Stevenson’s 2005 Mustangs finished 19-6 in his first season. Despite the dramatic turnaround, however, Cal Poly was not extended a postseason invitation. Ensuring another snub wouldn’t ensue, Stevenson loaded the 2006 schedule with nationally prominent clubs. Cal Poly responded by overcoming No. 8 Texas, No. 12 Hawaii and No. 20 Louisville, while chipping away at the national poll to reach No. 14 in the nation. The Mustangs were seasoned veterans when the Big West schedule commenced, cruising past their conference foes and dropping just one match in recording the program’s first title since 1984.

The records fell as the crowds and media coverage increased. Cal Poly’s 23 victories and .793 winning percentage were the second-highest marks in program history. Led by Kylie Atherstone, Big West Player of the Year, five Mustangs were named to the all-conference team, a school record.

When the NCAA distributed tournament entries, the Mustangs and their burgeoning fan base were ready. Before the largest crowd in Cal Poly volleyball history, spectators packed Mott Gym to see the Mustangs win their NCAA Tournament first-round game against Michigan 3-1.

For Stevenson and the Mustangs, there’s no reason the momentum can’t continue next season and for years to come.

The incoming freshmen class includes two of the nation’s top 40 players, while two of the 16 players on Cal Poly’s 2006 roster will graduate this spring. ☐
THE GRADUATION CEREMONY had all the usual pomp and circumstance – speeches, diplomas and the parents' proud and beaming faces.

Except that in this standing-room-only auditorium, those walking across the stage to receive their diplomas were the parents themselves.

It was the first graduating class of its kind on the Central Coast. The 160 participants were graduates of the Parent Institute for Quality Education, which is partnering with Cal Poly and The California State University to help parents take a more active and supportive role in their children's educational efforts – starting in elementary school – to set them on the path to a college degree.

"It's a great opportunity for our university to reach out to a local underserved community," said Robert Detweiler, former Cal Poly provost. "The PIQE program educates parents about the importance of the educational success of their children and how they can help their children prepare for success in college. It has a wonderful record of success, and it makes good sense for Cal Poly to promote PIQE in our region."

Sam Cortez, the university's lead facilitator for the project, was instrumental in making certain the partnership was successful.

"The goal is to demystify the process – whether it's how to ask the right questions at a parent-teacher conference or how to apply for scholarships and financial aid," said Cortez. "We tell the parents, 'You can change your child's life if they attend college – and these are the steps to get there.'"

Adds Cornel Morton, vice president of student affairs, "We tend to think that people are either qualified or not qualified for college. But if you don't have access to information and resources, it's not a level playing field for students. Low-income families in our state, particularly Latinos, have had poor rates of college participation. This program is giving underserved families access to that information."

All the recent grads have children in elementary or junior high schools in Guadalupe, a predominantly Hispanic community about 30 miles south of Cal Poly's campus. For many participants, the distance had seemed much farther and more daunting before their PIQE training.

Prior to taking the course, most participants were not sure how the college application process works, said Maria Elena Meraz, executive director of PIQE's Los Angeles office. "Some didn't know the questions to ask. Some are intimidated by the college application process. All felt college would be prohibitively expensive."

Cal Poly's partnership with PIQE is funded by a $25,000 grant from the CSU Chancellor's Office that is matched by PIQE. Cal Poly also covers a portion of the program costs.

Parents who enroll in the free nine-week program learn skills and techniques to improve their child's motivation and ability to attend college. And by their "commencement," parents see that college is within reach.

Denise Campbell, associate vice president of student affairs at Cal Poly, noted these are working parents – many of them field workers – yet they spent evenings investing in their children's future.

"At the graduation ceremony, it was most impressive to see that we had come together as a community – PIQE, parents, the schools, the school district and the university. It was community collaboration at its finest," she added.

THE CEREMONY was packed with people – and emotion. For many parents, the certificate they received for completing the program marked the first recognition of an educational achievement in their lives.

A special moment, recalls Meraz, was when Detweiler spoke. Obviously moved by the many personal stories told at the ceremony, Detweiler shared some of his own. "You see me up here, a successful person with an important job and a good life. But it was not always that way. Like your families, mine had to work hard just to make ends meet," he said. The son of migrant workers, Detweiler said no one in his family finished elementary school. He had attended more than 22 elementary schools. "I have a better middle-class life because I got an education," he said. ☑
SUPPORT DESERVING STUDENTS ...
INVEST IN THE NEXT GENERATION OF CAL POLY FACULTY ...
ENHANCE LEARN-BY-DOING FACILITIES ...

DID YOU KNOW that you may be able to make a charitable gift directly and tax-free from your IRA? And the best part is, your contribution to Cal Poly can support your favorite college or program, fund a scholarship, enhance a facility, honor a loved one or a mentor ... it's up to you.

NEW IRA LAW
■ You must be 70-1/2 or older.
■ You can make charitable contributions up to $100,000 this year only. (Remember that IRAs are individual accounts, so a couple may be able to contribute up to $200,000.)
■ This gift will count toward your required minimum distribution, but will not count for income tax purposes.

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

PLANNED GIVING AND ENDOWMENTS
Heron Hall, Building 117
Cal Poly
San Luis Obispo, CA 93407-0444
Phone: (805) 756-7125
Toll free: (800) 549-2666
Fax: (805) 756-2711
E-mail: plannedgiving@calpoly.edu
Web: www.plannedgiving.calpoly.edu
DANCING IN THE PARK... Members of Cal Poly’s Chinese Student Association performed a traditional lion dance at the dedication of LC YC Cheng Park on Marsh Street in downtown San Luis Obispo. The park is named in honor of the parents of Alice Loh, professor emeritus of landscape architecture.