Branching Out

Wine & Viticulture Department
Hosts International Wine Institute

> TAPPING NELSON RESERVOIR
> SOLAR PANELS ON CAMPUS
> STUDENTS COMPETE — AND WIN
FROM THE DEAN

DEAR CAFES ALUMNI & FRIENDS,

Please join me in congratulating the 1,026 Cal Poly College of Agriculture, Food & Environmental Sciences Class of 2014 graduates. The commencement events were fabulous and inspiring, and I continue to be so proud and impressed with the caliber of students we work with every day. To learn more about some of our graduates, you can view our video here: YouTube/user/CalPolyCAFES.

I was named dean of CAFES in May, a role I had assumed on an interim basis in July 2013. To aid Cal Poly efforts in forging international relationships to better prepare our graduates to compete in the global marketplace, I spent some time this summer meeting with partners in China, the Netherlands and Spain. I believe it’s critical to prepare our students to think globally, whether they go on to develop water technologies for Salinas or developing countries, treat animals in California, or run the family farm in Tulare.

We’ve also spent the past nine months recruiting, hiring and onboarding new faculty and are thrilled to have some pre-eminent experts in their respective fields join us in the fall. We’ve added 17 thus far and expect to hire another dozen during the 2014-15 academic year. And, of course, we’re excited to welcome more than 1,000 first-year and transfer students to campus in mid-September.

Thank you for your continued support, ideas and enthusiasm. As we prepare to kick off the academic year, I’m very excited about what we can accomplish together.

ANDREW J. THULIN

ON THE COVER: Changing color with the season, Cal Poly’s Trestle Vineyard will soon bustle with wine & viticulture students working fall harvest. The Wine & Viticulture Department expanded its horizons in July, hosting a Summer International Wine Institute. Read about it on pages 8-11.

AGRIVIEW SUMMER 2014

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AGRIBUSINESS REUNION GALA SET FOR NOV. 8
Cal Poly’s Agribusiness Department will host its first-ever gala reunion for current students, alumni, faculty and friends Nov. 8 at the Madonna Inn Expo Center.

The department traces its roots to 1956, when the Farm Management Department was established. Over the years, it has seen many changes, but it has remained dedicated to Cal Poly’s Learn by Doing educational philosophy and committed to student success.

“The Agribusiness Gala Reunion will celebrate the theme Honoring the Past and Advancing the Future,” said Agribusiness Department Chair Jay Noel. “It will provide an opportunity to recognize the accomplishments and contributions made by thousands of past graduates in their careers and communities, as well as emeriti faculty, staff and other stakeholders who built the foundation on which the current agribusiness program stands.”

Visit agb.calpoly.edu/content/gala.

2012 A WINNING VINTAGE
A trio of student-made Cal Poly wines were recognized at the 2014 San Francisco Chronicle Wine Competition:
• 2012 Chardonnay — Gold
• 2012 Pinot Noir — Silver
• 2012 Syrah/Grenache — Silver.

NATIONAL HONORS FOR PROFESSOR PHIL TONG
Dairy science Professor Phil Tong was recognized with the Award of Honor by the American Dairy Science Association in July. The award was created to recognize notably outstanding and consistent contributions to the industry.

Tong helped launch Cal Poly’s Dairy Products Technology Center 27 years ago and has deep relationships in the industry.

ALUMNI AND FRIENDS: STAY CONNECTED!
You’re invited to follow us on Facebook, LinkedIn™ and our new YouTube channel, where you’ll hear from amazing 2014 grads and learn about our Rodeo Team. You can always read all the latest news at cafes.calpoly.edu/news/morenews.

PLANS FOR CAL POLY AGRICULTURAL RESEARCH CENTER TAKE ROOT
Cal Poly recently announced plans for the new J.G. Boswell Agricultural Research Center, which was initiated by an $8 million donation from the James G. Boswell Foundation.

“This generous gift will jumpstart a project that will help keep Cal Poly’s agricultural programs at the leading edge, advance the interdisciplinary nature of our hands-on education, and further transform the heart of our campus,” said Cal Poly President Jeffrey D. Armstrong. “We are grateful to the foundation for its investment and partnership in Learn by Doing.”

Current plans for the research center include facilities such as laboratories to support sensory, food safety, plant pathology, enology and genomics. This will allow students from the College of Agriculture, Food & Environmental Sciences, and from across the university, to experience frontline agricultural research technology and enhance their preparedness for industry success.

“Our mission is to prepare students to become innovative professionals ready to solve the complex challenges associated with California’s robust agricultural economy and to feed the world in sustainable ways,” said Andrew J. Thulin, dean of Cal Poly’s College of Agriculture, Food & Environmental Sciences. “The Boswell Agricultural Research Center will provide our faculty and students with a state-of-the-art research and teaching facility that helps achieve these goals.”

Construction on the approximately $20 million Boswell Agricultural Research Center is expected to begin when the balance of funding is raised. For more information, contact Russ Kabaker, assistant dean of advancement and external relations, at rakahner@calpoly.edu or 805-756-3269.
Q&A with Russ Kabaker

CAL POLY ALUMNUS ‘COMES HOME’

Meet Russ Kabaker (B.S., Environmental & Systematic Biology, 1994), new assistant dean of advancement and external relations in the College of Agriculture, Food & Environmental Sciences (CAFES). “After 20 years working in agriculture in the private sector, I’ve come home to Cal Poly,” Kabaker said.

WHAT’S YOUR ROLE AT CAL POLY?
The CAFES Advancement Office is responsible for all aspects of external relations for the college, including strategic planning and implementation of fundraising programs to support CAFES’ mission and vision.

Important elements of our efforts include outreach and engagement with alumni, friends, corporate partners, foundations, key volunteers, parents, media and the community. Ultimately, my job is to be the link that brings opportunities that enhance the Learn by Doing experience.

HOW DID YOUR PAST ROLES PREPARE YOU FOR THIS JOB?
After graduating from Cal Poly, I went to work for Grimmway Farms in Bakersfield, Calif., where I was involved with field production, processing and special projects. I then moved to a sales position with a global vegetable-seed company that eventually became part of Bayer CropScience (BCS). During my 15 years at BCS Vegetable Seeds, I was involved with many sectors of the produce industry, both domestically and internationally, and developed a keen understanding of international agricultural issues.

When you look at the challenges the industry is facing — drought, labor shortages, food safety, growing populations, globalization, and urbanization — what better place is there to be than at Cal Poly, playing a role in preparing students to meet these challenges?

YOU’RE A CAL POLY GRAD, BUT IS THERE ANYTHING ABOUT WORKING FOR CAFES THAT SURPRISES YOU?
Yes, I am a proud Cal Poly alumnus. And I have been engaged with Cal Poly over the past 10 years as an employer, recruiting and hiring many Cal Poly graduates. My family and I are also season ticket holders, and we attend most games.

I’ve been reinvigorated by the vision and ideas that President Armstrong and Dean Thulin have for further enhancing the university and college. And the quality of our students and faculty is an amazing thing to be a part of.

WHAT DO YOU LIKE TO DO WHEN YOU’RE NOT IN THE OFFICE?
When I’m not on campus, you can find me spending time with my family and friends, cycling, mountain biking, surfing and hiking.

WHAT’S YOUR FAVORITE SPOT IN CALIFORNIA?
I’ve lived in many locations throughout California, and it’s tough to name one favorite spot. Whether sitting by a mountain stream with my feet in the water, standing on top of Bishop Peak overlooking San Luis Obispo and Cal Poly, or staring at the blue waters of Lake Tahoe, we are fortunate to have so many great places to live and visit.

ANY CLOSING THOUGHTS?
I’m very excited about honoring the great traditions of the past and working to build an even brighter future for Cal Poly’s next generation with the support of alumni, friends and partners. Let’s all dream big and make Cal Poly even greater.

Contact Russ Kabaker at 805-756-3269 or rkabaker@calpoly.edu.
Let It Flow

STUDENTS HELP ROUTE NEW SOURCE OF WATER FROM NELSON RESERVOIR

The Nelson Reservoir project, under the leadership of bioresource & agricultural engineering Professor Stuart Styles, is another prime example of how one endeavor can result in several positive outcomes.

The most obvious outcome is that Cal Poly gets a new, much-needed water source. The currently non-active reservoir, located on the northeast side of campus near the Trestle Vineyard, will soon be used to irrigate the surrounding agricultural area.

“It was created as a new water source for the College of Agriculture, Food & Environmental Sciences,” Styles said.

The project, which includes two pumps and a filter station, is also an invaluable Learn by Doing tool. Students in BRAE 433, Agricultural Structures Design, got hands-on experience with concrete structures during the first phase of construction. “One group of students was responsible for pouring the concrete pad for the pump and filter station,” Styles said. “They had to account for the layout of the station and the pipelines that will be installed later.

“This student-run project took many hours outside of class to prepare, plan, design and finally construct,” Styles continued. “It was well thought-out and executed extremely well.”

Additional lessons in electrical wiring, pipelines, pumps, and filters will be passed on to students during the remainder of construction, which is expected to last most of the 2014-15 academic year.

In addition to the class project, several students’ senior projects are based on the project.

“The Nelson Reservoir project is giving students an opportunity to solve real-world problems while also equipping them with the knowledge and experience they will need to enter the workforce as productive team members,” Styles said.

Agricultural Structures Design students planned, designed and constructed the concrete pad for the pump and filter station at Nelson Reservoir.
STUDENT-INSTALLED SOLAR PANELS EXPECTED TO SAVE THE UNIVERSITY ENERGY, MONEY

It’s rare when a student project can save the university money while also providing a valuable Learn by Doing experience, but that’s exactly what happened spring quarter in Professor Art MacCarley’s Solar Photovoltaic System Engineering course. MacCarley, interim BioResource & Agricultural Engineering Department head, taught the course to a multidisciplinary group of 41 students who designed and installed a solar-electric system on the BioResource & Agricultural Engineering Building using solar panels provided by SunPower and additional installation components and supplies donated by SnapNRack, Sunrun (formerly REC Solar Residential), and Quaglino Roofing.

In 10 weeks, the students — supervised by faculty, industry, and campus facilities professionals — completed the entire project. “As a service-learning course, the primary objective was the completion of an actual project that would become a permanent
part of the campus infrastructure,” MacCarley said. “Engineering, regulatory requirements, economic planning and payback analysis, solar power electronics, and compliant electrical systems are all learning objectives of the course.”

The system will offset the electric power use of this and surrounding buildings for 25 years and save the university an estimated $1,600 per year.

In addition to bioresource and agricultural engineering, agricultural systems management, and environmental horticultural science majors in the College of Agriculture, Food & Environmental Sciences, students from four departments in the College of Engineering participated: electrical, materials, general and computer engineering. The group also included an exchange student from Brazil.

MacCarley created the class after SunPower provided the solar panels to the university. “It is the first student-designed and -built project of its type to become part of the campus infrastructure,” he said. “We were fortunate to have the full cooperation of Cal Poly’s Facilities Services, especially Dennis Elliot, assistant director of energy, utilities and sustainability.”

“SunPower provided a great opportunity to implement some of the design concepts that we learned in our class,” MacCarley said. “The project was a great way to combine our knowledge of solar energy with practical experience.”

“Learn by Doing philosophy,” said College of Agriculture, Food & Environmental Sciences Dean Andrew Thulin. “Not only does this project have immediate benefits, it also provides an opportunity for students from multiple disciplines and departments to work together to solve real-world problems.”

And it is just the beginning. “We have four other solar projects lined up,” MacCarley said.
How do you improve an already stellar wine and viticulture program that incorporates intensive laboratory experimentation and hands-on learning practices? Throw in a Summer International Wine Institute that lets students experience winemaking at not just nearby Central Coast wineries, but also at facilities in Northern California, Oregon and Washington and, some years, clear across the Atlantic in Switzerland.

Created and organized by the University of Changins in Switzerland about six years ago, the program alternates between Switzerland and California. “Most of the wine produced in Switzerland is consumed there, so the faculty at Changins wanted their students to see how other countries produced wines,” said Marianne McGarry Wolf, interim department head of Cal Poly’s Wine & Viticulture Department.

The Swiss university reached out to Cal Poly, Fresno State and Brock University in Canada in about 2008,” said Wolf. The program now also includes Charles Sturt University in Australia.

Wolf first experienced the program in 2010, when she accompanied 15 students overseas to learn about Swiss and Italian winemaking. “We went to small family-owned wineries in Switzerland with vineyards planted on incredibly steep
Vino Culture
slopes. To see how they farm that was amazing — and so different from what we do here,” Wolf recalled. In Italy, they visited some of the country’s largest winemaking facilities, allowing the group to experience huge contrasts in the winemaking process.

This year, Cal Poly hosted five students from Cal Poly, five from Australia, 21 from Switzerland, and four Swiss faculty members. The institute, which ran three weeks in July, kicked off with a week of lectures and tours of the major Central Coast AVA’s (American Viticultural Areas). The group then traveled to Ceres, Napa and Sonoma, before heading to southern Oregon, the Willamette Valley, Portland, the Columbia River Gorge, and the Walla Walla region of Washington. (See opposite page for a complete list of this year’s participating vineyards and wineries.)

After two days in Seattle, Cal Poly students bid farewell to their international friends before flying home to San Luis Obispo.

Recent graduate Robert McKinley (B.S., Wine & Viticulture, 2014) participated in the Summer International Wine Institute program in Europe last year and helped with the program on the West Coast this year.

“Each of the wineries we visited offered unique perspectives,” McKinley said, “and getting to travel with the professors offered a very special learning experience. I developed long-term friendships and industry contacts that will benefit my career.”

More Cal Poly students tend to participate when the program is hosted in Switzerland, according to Wolf. “Part of the reason is because U.S. law prohibits those under 21 from drinking,” she explained. Another reason is that many Cal Poly students are working or completing internships at wineries and vineyards during the summer.

“Plenty of foreign students travel to the U.S. to participate, and it’s great for our students to get to know them,” Wolf said. “Only five Cal Poly students took part this year, and three of those had been to Switzerland last year.”

One of those is a student who transferred out of animal science; another is an agricultural systems management major whose family owns a winery in Lodi. “So many different majors at Cal Poly are involved in the wine industry because of their families.” Wolf said. “The wine industry is one of the biggest industries in the state.”

Indeed. It is estimated that almost one million jobs in the U.S. are created by the wine industry, including jobs in tourism, packaging, sales and distribution, not to mention those directly involved in grape growing and winemaking.

The summer institute runs a tight schedule, with students often visiting two facilities in one day. That’s probably the only downside, Wolf said. “Some days it was difficult to find time to eat lunch.
Right: Cal Poly wine & viticulture students Kenneth Strauss (left) and Cody Alt (right) toured the Opus One cellar room with a participant from Switzerland.

Opposite: The group visited J. Lohr’s Hilltop Vineyard in Paso Robles.

if we had more than one winery to tour. Our students ask intelligent questions, and our hosts took time to answer them.”

Wolf said the program gives students an understanding of the diversity of the wine industry and opens their eyes to the many opportunities and various types of jobs it offers.

“In the vineyards, we saw how they grow the grapes; at the wineries, we learned how they make the wine; and in the tasting room, we heard their marketing strategy,” Wolf said. “Our majors were exposed to the three integral areas of industry: viticulture, enology and business — and they are hearing about it from industry insiders.”

A highlight — and a surprise — for Wolf was seeing how many Cal Poly wine & viticulture alumni are involved in the industry. “I expected it on the Central Coast,” she said, “but I was extremely surprised by the huge presence we have in Napa and Sonoma. Literally every winery in California except one had Cal Poly alumni working there. They showed us around every place we went. I got to see my former students articulate their knowledge. They are the industry leaders. It was inspirational.

“A former student said to me, ‘Napa Valley loves Cal Poly. They eat up our grads. They want more.’”

The group toured wineries with production levels that ranged from 1,000 to millions of cases of wines and learned that every winery has a different way of doing things. “There’s a great deal of science involved in winemaking — in grape growing and in actual production,” Wolf said. “But it also has a lot of art. And that was clearly evident by the different grape-growing methods and wine-making practices we saw. Every individual winery is different from every other.”

The summer institute is not all tours and tastings, though. The students, in pairs or in groups, gave two presentations at the beginning of the program. “They had to present wines from their own country, talk about the growing practices, winemaking, varietals and taste profiles,” Wolf explained.

The importance of the program’s global connection cannot be overlooked. “Some of our students have gotten internships in Switzerland, and some Swiss students have found work here in the U.S.,” Wolf said.

Scheduling a summer institute in Australia has been a challenge because it’s summer in the U.S. and Switzerland when its winter Down Under, and school breaks don’t align. Wolf is hopeful though that the program might continue in Australia next year.

WINERIES AND VINEYARDS VISITED

Listed in order of visits:
Halter Ranch Vineyard, Paso Robles, Calif.
Tablas Creek, Paso Robles, Calif.
J. Lohr, Paso Robles, Calif.
Tolosa Winery, San Luis Obispo, Calif.
Talley Vineyards, San Luis Obispo, Calif.
Bronco Winery, Ceres, Calif.
Kunde Family Estate, Sonoma, Calif.
Alpha Omega, Napa, Calif. - Seguin Moreau Cooperage, Napa, Calif. - Opus One, Oakville, Calif.
Paraduxx, Napa, Calif.
Frei Ranch, Gallo, Healdsburg, Calif.
Merry Edwards Winery, Sebastopol, Calif.
Van Duzer Vineyards, Dallas, Ore.
SE Wine Collective, Portland, Ore.
Domaine Serene, Dayton, Ore.
Archery Summit, Dayton, Ore.
Trisaetum, Newberg, Ore.
Chehalem, Newberg, Ore.
Phelps Creek Vineyard, Hood River, Ore.
Woodward Canyon, Lowden, Wash.
Pepper Bridge, Walla Walla, Wash.
Chinook Wines, Prosser, Wash.
STUDENT SUCCESS

FS&N STUDENTS PLACE A HEART-HEALTHY SECOND
A team of food science & nutrition students came away with a second place win at the Heart-Healthy Product Development Competition at the Institute of Food Technologists (IFT) Student Association Wellness Conference.

The competition challenged students to make a product deemed “heart healthy.” Based on market research, the Cal Poly team created Demergo, a savory chip-and-dip product that relied on ingredients other than salt, fat and sugar to achieve a likeable product.

FOOD TECH COMPETITION DELIVERS FIRST-PLACE WIN
Food science & nutrition students placed first at an international competition held by the Institute of Food Technologists (IFT). Teams were evaluated on their ability to develop nutritious food solutions for real-world challenges.

Cal Poly’s undergraduate FSN students competed against 67 domestic and international universities, including undergraduate and graduate students.

The Developing Solutions for Developing Countries (DSDC) Competition promotes the application of food science and technology in the development of products and processes that improve the quality of life in developing countries.

Teams were asked to invent a food product for a country in Africa that utilized defatted soy flour, which is a byproduct of oil processing, a growing industry in Africa. Students had to take into consideration stability, shelf life, food safety and consumer cost issues.

Cal Poly’s team came up with Amma Mamas, a sweet tortilla-like product made from soy flour, millet, bovine milk, sweet potato and cinnamon aimed at improving maternal nutrition in Chad, Africa.

Taylor Santos-Karney won the national tie-down roping title.

LASSOING SUCCESS
RODEO TEAM WINS NATIONAL & REGIONAL TITLES
Cal Poly’s Rodeo Team competed in the College National Finals Rodeo (CNFR) in June in Casper, Wyo., where Taylor Santos-Karney, who just completed his first year in agricultural systems management, won the national tie-down roping title.

The win gave Cal Poly its first individual CNFR title since the team’s coach, Ben Londo, won in 2005. Londo, a Cal Poly graduate, was also named Coach of the Year for the West Coast Region.

Londo is in his first year as the Cal Poly Rodeo coach but has a long background in competitive rodeo. A Professional Rodeo Cowboys Association rider since 2003, Londo has amassed numerous awards, including being named three-time saddle bronce champion for the Columbia River Circuit. As a member of Cal Poly’s Rodeo Team from 2003 to 2005, he earned bareback riding and all-around champion titles for two years running at the College National Finals Rodeo.

CAL POLY’S LOGGING TEAM TAKES TOP HONORS
The Cal Poly Logging Team won top honors at the 75th annual Association of Western Forestry Clubs’ logging sports conclave held on the Cal Poly campus in spring 2014.

The four-day competition featured more than 100 athletes from 12 Western university teams competing in events that included axe throwing, log rolling, boom running, pole climbing and power sawing.

Cal Poly’s team earned the top score, with forestry and natural resources student Sam Mulholland being named Bull of the Woods as the top male competitor, and 2014 environmental management and protection graduate Melissa Pechter being named Belle of the Woods as the top female competitor.

Mulholland went on to win the STIHL® Timbersports® Collegiate Championship in June, earning a spot in the STIHL Timbersports 2015 Professional Series. Mulholland will also represent the U.S. on the international rookie team at the world championship in Austria in November.
A TROPHY TO BOOT

REGIONAL WIN FOR WOMEN’S POLO TEAM
The Women’s Polo Team won the Western Intercollegiate Women’s Regional Tournament in March to advance to the National Intercollegiate Championship in April. Below (from left) are Coach Megan Judge with 3-year-old son Wyatt, Jessica Hartley, Lizzy Peck, Joyce Pexton, Hannah Heitzig, Kylie Everitt, Lexi Huff and Nora Williams.

CAL POLY AGRIBUSINESS STUDENTS WIN NATIONAL MARKETING COMPETITION
A team of agribusiness students won this year’s national marketing competition hosted by the National Agri-Marketing Association (NAMA) in April. The Cal Poly team was coached by agribusiness Professor Lindsey Higgins.

Team members spent several months conducting market research, writing a marketing plan, and developing a presentation for the marketing of a high-end specialty leafy green product, branded as Belgian Crowns.

CAL POLY TEAM IS TOPS AT DAIRY CHALLENGE
Dairy science students won first place at the 13th annual North American Intercollegiate Dairy Challenge.

The competition enables students to apply theory and learning to a real-world dairy by visiting dairy farms to help farmers evaluate and adapt management to optimize success and animal care.
For those with a hankering to make sausage, taste artisan cheese, or experience a farm dinner, Cal Poly has a workshop for that!

SLOcavore, a series that explores the rich agricultural and culinary offerings of the Central Coast and of the College of Agriculture, Food & Environmental Sciences (CAFES), is gaining in popularity and course offerings.

Introduced at Sunset magazine’s 2013 Savor the Central Coast, SLOcavore was “intended to showcase the incredible things we are doing in the college and tie it in with the local food movement,” said Hunter Francis, director of the CAFES’ Center for Sustainability.

Discussions culminated in a collaboration between the Center for Sustainability and Extended Education that provides enjoyable, educational lifestyle experiences.

And it benefits students. “We have an intern working on social networking and helping with workshops,” Francis said. “Opportunities exist for student projects and research. A wine & viticulture class completed a marketing survey for us, and a recreation, parks & tourism administration class prepared a sustainable travel and tourism document that will help us plan future possibilities.

“Students gain a greater understanding of the resources around us in the area of agriculture and tourism,” Francis continued. “It’s a fun program.”

FALL SLOCAVORE WORKSHOPS

Upcoming workshops include: Celebration of Central Coast Foods on Sept. 5; Heritage Poultry Intensive for Beginners, Sept. 6; Advanced Training in Heritage Poultry Husbandry, Sept. 7; Everything Olives, Oct. 4. For more on SLOcavore, visit slocavore.calpoly.edu.

Kristy Lazanoff serves dessert at a SLOcavore event after a talk about campus cattle and grazing operations by her husband, Cal Poly Beef Operations Manager Aaron Lazanoff.
CELEBRATE WHERE IT ALL BEGAN

For generations, our alumni have returned to campus with their sons and daughters, the next generation of Mustangs. This proud tradition is powered by the passion for Learn by Doing. This legacy runs deep through the thousands of alumni who will forever call Cal Poly home.

Every day in the College of Agriculture, Food & Environmental Sciences, students are inspired by what they experience in labs, enterprise classes, senior projects, classroom learning, paid student assistantships, special problems courses and more.

Through your gift to the College of Agriculture, Food & Environmental Sciences, you can make Cal Poly part of your family legacy.