Home-Grown
ALUMNI, INTERNS TAKE PART IN RESHAPING THEIR ALMA MATER
Welcome back to another academic year at Cal Poly! Many changes are happening, starting with our students. For the third year in a row, over 100 new construction management (CM) majors have joined us. More than 430 students are enrolled, making it the largest student body in the department’s history. As we continue to regrow the department, our graduating classes will increase, too. Soon more than 100 CM students will graduate each year — welcome news to the companies waiting to hire these future leaders. To keep up with the teaching demand, we welcomed three new faculty members. You’ll read about some of the accomplishments of these talented students and faculty in the following pages.

Also highlighted in this issue of the Construction Innovator are stories of alumni who have helped change the physical face of Cal Poly through on-campus projects they have built. The companies involved have provided learning opportunities for our students and faculty through internships, field trips and class presentations — fine examples of the vital industry partnerships that distinguish this department.

Our partnerships are also highlighted in updates about the California Center for Construction Education and the Construction Management Advisory Council (CMAC). CMAC is providing a sustainable structure to better connect current students and faculty with our alumni and friends. How? By formalizing the recruiting program for internships and permanent job placements and providing increased opportunities for valuable professional input into our curriculum.

The Construction Management Department is well positioned to pursue any number of new initiatives over the next few years and beyond. And there will be more changes this year.

Several weeks ago, I announced my plan to step down as department head at the end of the academic year. I have long wanted to return to teaching before my eventual retirement from Cal Poly, and this decision is the first step on that path. A national search is underway to fill my position in the summer of 2017.

I want to personally thank all of you for everything that you do for our students. I have thoroughly appreciated your individual support and friendship over the past 15 years. Serving as department head has been the highlight of my career; I cannot imagine a better job anywhere. But I am not going far — you can find me in the classroom down the hall!

We hope you will visit the campus soon. Great things are happening, and we want you to be part of them. We hope you enjoy reading another edition of the Innovator, and on behalf of the next generation of professional constructors, we thank you for everything that you do to make this possible. Looking forward to seeing you soon.

Allan J. Hauck, Ph.D., CPC
ABOVE: Rachel Holden (CM, '16) and Enrique Ivers (CM, '16) enjoy a day at Cypress Ridge Golf Course as part of the 2016 Spring Social. Read about the annual event on page 25.
PHOTO BY BRIGETTE OLMOS-ARREOLA

ON THE COVER: Alumni Michael Delach (Civil Engineering, '11, left) and Alan Blevins (Civil Engineering, '14) work on Cal Poly’s Student Housing South project as employees of Webcor Builders and Webcor Concrete, respectively. Read about this and other campus construction projects in which alumni and interns have participated on pages 18-24.
PHOTO BY CATE FISHER | WEBCOR CONCRETE GROUP
A dozen Cal Poly students from five majors in two colleges teamed up and earned first place in the 2016 Bank of America Merrill Lynch Low-Income Housing Challenge.

The challenge is a “business plan” competition designed to inform, educate and attract the next generation of affordable housing professionals. Cal Poly’s team tied for first with UC Berkeley. Other finalists included teams from UCLA, the University of Washington, and University of Arizona.

Cal Poly’s team project, titled Sanctuary 6, is a low-income housing project designed specifically for veterans. The team partnered with more than 17 local community groups, including People’s Self Help Housing, the Community Action Partnership of San Luis Obispo, and Supportive Services for Veteran Families, taking into consideration feedback from dozens of veterans and veterans’ service professionals on what they wanted the complex to include.

The team’s work included renderings of their proposed development (above and below).
Sanctuary 6 included such amenities as a wellness clinic, community room, counseling services, and a tranquil courtyard for both formal and informal gatherings. The project’s name comes from the military adage “got your six” or standing back to back with someone to provide defense and support.

“The level to which this project has engaged the community alone puts it on the cutting edge of community planning initiatives,” said Bryan Shields, a faculty member from the College of Architecture and Environmental Design, who partnered with Pratish Patel, a faculty member from the Orfalea College of Business, to advise the team. “Sanctuary 6 is positioned to be the first grassroots veteran housing project of its kind.”

Team members included construction management major Charlie Andrews; architecture students Annelise Barbieri, Chloe Eitzer, Jordan Keiser, Chris McCoy, Amy Rutty, and Rodrigo Robles-Gonzalez and Mengdi Zhang; city and regional planning students Emily Foley and Justin Frentzel; economics major Nathan Roberts; and finance major Andrew Fortner.

STUDENTS VICTORIOUS IN REGIONAL, NATIONAL AND GLOBAL CONTESTS

Cal Poly’s construction management (CM) students continued their long winning streak in a series of competitions — including an international contest — held during 2015-16.

ASSOCIATED SCHOOLS OF CONSTRUCTION (ASC) REGION 3
Two of Cal Poly’s three CM teams placed in the competition, held Oct. 14-17 in Downers Grove, Ill. Cal Poly took first place in the Electrical category and third in Concrete Solutions. Four of the 12 categories in the competition — Concrete Solutions, Electrical, Healthcare and Preconstruction — are open to universities nationwide. A total of 63 teams competed. Professor Greg Starzyk advised the team.

ASC REGIONS 6 AND 7
Cal Poly teams dominated these competitions, held Feb. 10-13 in Reno, Nevada, with six of 12 teams taking home trophies — four first-place, one second, and one third.

“We send teams to all 12 competition categories, which is unique and consistent for Cal Poly,” said Professor Phil Barlow, who also serves as Cal Poly’s team advisor and Region 7 director.

The competition challenges teams of six students to solve real-life construction management problems in 12 categories. Teams were given 18 hours to create and present deliverables to a panel of industry experts. Deliverables included modeling, estimating, scheduling and site
logistics. The competition drew 181 teams from 46 universities. Take a look at https://www.youtube.com/watch?v=ZmRaPy0x_Hk.

INTERNATIONAL ASC REGION 8
Four CM students traveled to Ireland last November with Professor Lonny Simonian to participate in this competition at the Dublin Institute of Technology, where teams had gathered from Ireland, Britain and the U.S. Cal Poly took fourth place.

“We missed the cut for the top three by slivers of a point,” team member Kent Beecham said. “Usually only the top three teams place, but Cal Poly did so great that the judges added a fourth place for the year.”

Competitors spent eight hours putting together a three-part packet on a construction project that included renovation of a six-story mixed-use building. The packet included a management organization chart, trade coordination, change order management, project closeout, quality assurance, project approach, safety plan, pre-task plan, logistics plan, schedule plan, assumptions, and a curveball action plan.

“As finishing our deliverables, we were relieved and excited,” Beecham said. “We knew we had done a good job but weren’t sure if we had turned in exactly what the judges wanted. The next morning we came in confident and a little nervous about the presentation and Q&A. We delivered what we thought was a stellar presentation and noticed the stiff judging board lighten up a bit.”

Beecham and teammate David Mulder will join Cal Poly’s Region 8 team in the November 2016 competition at the University of Reading, just outside London.

NATIONAL ASSOCIATION OF HOME BUILDERS (NAHB) RESIDENTIAL CONSTRUCTION MANAGEMENT
An interdisciplinary team of Cal Poly business, architecture and construction management students placed second in the four-year college category, which culminated at the International Builders’ Show in Las Vegas Jan. 19-21. This year, 34 universities participated, representing NAHB student chapters from across the country.

Students prepared a land acquisition proposal that included building cost estimates, a construction schedule, cash flow and return on investment projections, and marketing and risk analysis. During the convention, students presented their proposals and defended their project in front of a panel of industry experts.

THE AMERICAN INSTITUTE OF CONSTRUCTORS (AIC) COLLEGIATE ETHICS
This competition, sponsored by the AIC to “provide students with a new way to study ethical issues and showcase their knowledge of ethics in a fun, competitive atmosphere,” is held in conjunction with the group’s Annual Forum. Cal Poly continued on next page >
ASSOCIATED SCHOOLS OF CONSTRUCTION — REGION 3
First Place: Electrical — David Mulder, Tyler Eaton, Joe Gugale, Parker Haerr, Lucas Nozick, Garret Whitlock

Third Place: Concrete Solutions — Matthew Stephens, Cameron Procsal, Jack Robinson, Aaron Cook, Jamie Iroz

ASSOCIATED SCHOOLS OF CONSTRUCTION — REGIONS 6 AND 7
First Place: Heavy Civil — Kent Beecham, Alex Cain, Austin Eberle, Dan Leavens, Alex Sargiss, Holli Tripp. Alternates: Sara De Los Reyes, John Stern

First Place: Virtual Design and Construction — Trey Garcia, Trevor Houghton, Kristi Kusa, Marco Maffioli, Dhakshan Potuhera, Cordelia Sam. Alternates: Nic Nam, Brain Sprugeon

First Place: Preconstruction Services — Kevin Barry, Derek Beyer, Breanne Forster, Ivan Margaretic, Marina Rosso, Ryan Walker. Alternates: Kristen Forster, Ryan Macintosh

First Place: Electrical — Tyler Eaton, Alex Feizbakhsh, Joe Gugale, Parker Haerr, David Mulder, Lucas Nozick, Garrett Whitlock. Alternates: Irl Barajas, John Pezzini

Second Place: Concrete Solutions — Aaron Cook, Nick Halle, Jamie Iroz, Jack Robinson, Matt Stephens, Gabe Zagorski. Alternates: Keenan Brekke, Devin Merker

Third Place: Mechanical — A.J. Chamorro, Richard Huang, Tyler Lee, Austin Nelson, Tyler Peinado, Rocky Perrin. Alternates: Josh Heath, Brandon Perez

INTERNATIONAL ASSOCIATED SCHOOLS OF CONSTRUCTION
Fourth Place: Overall — Kent Beecham, Parker Haerr, Maja Harren, David Mulder

NATIONAL ASSOCIATION OF HOMEBUILDERS
Second Place: Four-Year College Category — Eric Bet, James Materne and Garrett Whitlock (construction management); Dylan Corr and Theodore Felix (architecture); Chris Dwyer, Cate Fisher, Scott Heath and Erich Mourey (business); and Spencer Nielsen (agricultural business). Chris Bet, a business alumnus and last year’s team captain, assisted with the presentation.

WINNERS AGAIN!

competed against teams from John Brown, Texas A&M, and Weber State universities in the second annual competition, held in February 2016 in San Diego. The competition is based on the AIC Program on Construction Ethics, commonly referred to as the “Ethics Manual.” Any accredited construction program may enter a single team of up to five individuals to compete.

Teams are required to submit a written report and give an oral presentation. Cal Poly’s team members were Alexa Chan, Jasmine Lomax, Jack O’Brien, Jakob Schork, Candace Stephens and alternate Tyler Rohde.

SYNCHRO UNIVERSITY CHALLENGE

In addition to competing — and winning first place — in the ASC Regions 6 and 7 Student Competition in Reno last year, Cal Poly’s Building Information Modeling (BIM) Team competed for the first time in the third annual Synchro University Challenge in May 2016.

Cal Poly’s team competed virtually, submitting all materials online to the international competition, which was based in the U.K. Twenty universities, 34 teams, and 140 students from around the globe participated.

“We wanted to see how our skills compared to other students’ around the world in the construction industry,” said co-captain Marco Maffioli. Additional team members included Dhakshan Potuhera, who served as captain, Trevor Houghton, Matthew Susank and Trey Garcia.

The team’s main objective was to create a minute-long video to simulate the construction sequence and site logistics of a 12-story student dormitory. To complete this, the BIM Team had to create a detailed schedule and link that schedule to the virtual model of the building.

The finished product was a four-dimensional visual animation showing the steps of construction.
The Construction Management Advisory Council (CMAC) continues to make strides toward its goal of increasing alumni involvement, strengthening ties with industry partners, and fostering networking opportunities.

CMAC held its first board election, filling 19 seats, and overall membership has grown to 120 members. “We had 22 new corporate members join in 2015-16 and 60 new individual members,” said CMAC Executive Secretary Brigette Olmos-Arreola. “Recent graduates receive complimentary individual membership their first year after graduation. We were excited to have recent alumni elected to the board. It is great to get their feedback and perspective.”

In addition to semi-annual board meetings in the fall and spring, CMAC hosts twice-yearly regional mixers. Winter mixers are held in San Diego and San Francisco; summer mixers are in Los Angeles and San Jose.

The advisory council hosted Mustang tailgate parties for industry, alumni and students at the 2015 home football games and did so again during the 2016 football season.

It partnered with the campus’ Associated Students of Construction Management (ASCM) Club to rebrand and develop its annual banquet and golf tournament. Formerly known as the Senior Banquet, it is now called the Spring Social. (See article, page 25.) The partnership between CMAC and ASCM led to the successful fundraising of $20,000 — on top of expenses, which directly benefits student clubs.

“The response we have received on the changes to CMAC has been overwhelmingly positive,” Olmos-Arreola said. “People are excited to see the board grow and change. With that, we get more input and different points of view.”

Visit www.construction.calpoly.edu/content/cmac/index for CMAC details.
ON-SITE INSIGHT

THE CALIFORNIA CENTER FOR CONSTRUCTION EDUCATION’S INTERNSHIP PROGRAM IS ONE OF MANY WAYS THE ORGANIZATION CONNECTS STUDENTS AND INDUSTRY

COMPANIES PARTICIPATING IN CARPENTERS APPRENTICE INTERNSHIP PROGRAM

Northern California
Cahill Contractors LLC
Hathaway Dinwiddie Construction Co.
McGuire and Hester
Nibbi Brothers General Contractors
Rudolph and Sletten Inc.
XL Construction

Southern California
Bomel Construction Company Inc.
Charles Pankow Builders Ltd.
DPR Construction Inc.
Granite Construction Inc.
Largo Concrete Inc.
Morley Builders
Rudolph and Sletten Inc.
Partnerships between the California Center for Construction Education (CCCE) and the construction industry offer invaluable on-the-job opportunities to students before they transition from college into careers. The Carpenters Apprentice Internship program — in its second year and now running in Northern and Southern California — is proof of that.

“The great response from the Carpenters Union Northern 46 in the Bay Area during the first year and interest from students and industry partners resulted in the program’s expansion to Southern California,” said Brigette Olmos-Arreola, CCCE program specialist.

In summer 2016, the Construction Management (CM) Department sent seven interns to work in Northern California and seven to Southern California. CM junior Keenan Brekke was an intern this year and last in San Francisco, working for Webcor Concrete last year and for Nibbi Brothers Concrete this year.

“I’ll be better equipped to manage workers after understanding the work they perform daily,” Brekke said. “That experience gives me a better understanding of what it takes to build and solve complex projects.”

“Initially I found facing the elements and the magnitude of the projects daunting,” he continued. “But developing my skills as a carpenter and contributing to the success of the projects’ completion gave me great satisfaction. I now have experience building a concrete high-rise tower and a 250,000-square-foot housing structure.”

The Carpenters Apprentice Internship program is one of several coordinated by the CCCE with partnering organizations to provide enrichment opportunities for both students and industry professionals. These invaluable partnerships also make the following programs possible.

**PROFESSIONAL DEVELOPMENT**

The first cohort of seven students completed the inaugural year of the Construction Management Professional Certificate program, offered by the CCCE through Cal Poly Extended Education.

The program is open to students and industry members interested in gaining additional practitioner education. Courses in planning, estimating, scheduling, contracts and law, project management, productivity and safety run fall through spring and do not conflict with spring and winter breaks or finals weeks.

**INFO SESSIONS**

The department’s Info Session program continues to grow with new online registration, payment options and calendar. The program brings industry representatives to campus Monday through Thursday evenings to give presentations about their companies and next-day interviews. The program’s popularity led to the development of Meet and Greets, providing students the opportunity to network with company representatives and easily set up interviews.

“Info Sessions and Meet and Greets are where students can learn about different companies — large versus small, general contractors versus sub-contractors, the specific work they do and specialties they have,” Olmos-Arreola said.

The registration fees for these programs generate income for the CCCE, raising $40,000 last year.

Information on the Info Sessions and the calendar are available at: www.construction.calpoly.edu/content/opportunities/recruitment/info-sessionsinterviews.

**CAREER FAIRS**

The CCCE is partnering with Cal Poly’s Career Services to expand its career fairs. “We’re very happy with the increased industry participation,” Olmos-Arreola said. “We had 65 companies attend last fall’s career fair.”

More information on the CCCE can be found at: http://www.construction.calpoly.edu/content/ccce/index.
ON-THE-JOB ALUMNI REUNION

Chris Forster (CM, ’84), operations manager with Largo Concrete Inc. in Tustin, Calif., is collaborating with a team of Cal Poly construction management (CM) alumni, summer interns and carpenter apprentice interns (see related story, page 10) on Circa Los Angeles. The development includes two high-rises with 648 luxury condominiums on top of an eight-level retail podium and parking for 1,770 cars.

Along with Forster, Cal Poly is represented on the project by Donald Kahn (CM, ’84), senior project manager; Mark Manahan (CM ’98), project manager; John Renninger (CM, ’03), project superintendent; Jeremy Carpenter (CM, ’08), project manager; student Arlen Hartoonian, a summer intern; student Richard Nguyen, a carpenter apprentice program participant; and Brian Peugh (Civil Engineering, ’12), assistant project manager.

“I’ve been fortunate to collaborate with so many Cal Poly CM graduates over the past 32 years,” Forster said. “I know firsthand the value of hiring Cal Poly grads.”

Forster met his wife, then Karen Lynn McClure (Social Science, ’85; M.A., Counseling and Guidance, ‘88), at Cal Poly. Their three daughters are all CM majors.

“Breanne graduated in June 2016 and has accepted a position at Turner Construction, Kristen is a junior, working this summer for Hathaway Dinwiddie, and Allyson is a sophomore, working on a high-rise hotel for Davis Reed,” the proud father said.
THIS LEADER WEARS TWO HATS

Donald Hofer (CM,'93) was appointed chairman of the California Building Industry Association (CBIA), an agency responsible for legislative and regulatory advocacy for the building and development industry statewide. He previously served as CBIA governmental affairs chairman and as chairman of the Building Industry Association of the Bay Area.

Hofer is vice president of community and land development in the Bay Area for Shea Homes, a company he has been with for 17 years.

RUNNING BLUE WATER

Josh Schneider (CM, '99) is president of Blue Water Construction Inc. a turnkey construction management firm specializing in hospitality, multifamily housing and commercial projects that he founded in 2015.

After graduation, Schneider was hired by Devcon Construction Inc., where he stayed until 2008, working on both public and private sector projects, including student housing and the Humanities and Social Science facilities at UC Santa Cruz.

“Completing projects from multiple sectors provided me with a broad range of experience from which to draw as my career developed,” he said.

At Slatter Construction Inc. from 2008-15, Schneider worked on projects for such clients as Palo Alto Medical Foundation and the Santa Cruz Beach Boardwalk.

At Blue Water Construction, Schneider is managing projects for developers from different segments of the industry. Current projects include a 120-room Marriott Residence Inn, a 48-unit townhome subdivision, and a 12,000-square-foot mixed-use project with site work, a new street, and a railroad crossing.

Schneider is a LEED-accredited professional, member of the U.S. Green Building Council, Lean Construction “champion,” and member of the Lean Construction Institute. An article he wrote promoting better scheduling methods was recently published in Modern Contractor Solutions magazine.

WORKING AND WEDDED BLISS

Klay Adair (CM, ’09) worked on Cal Poly’s Recreation Center expansion project as an employee of Sundt. (See feature story, page 17.) After moving to the Bay Area to work for Rudolph and Sletten, Adair worked on a Kaiser hospital in Redwood City, a business and technology building at Cal State University, Monterey Bay, and on the Apple Campus 2 project in Cupertino.

Adair got married on Oct.10, 2015, to Sarah Hedayati (Communications, ’11), whom he met through Cal Poly’s Week of Welcome (WOW) program. The couple has moved to Denver, Colo., where Klay works for Mortenson Construction as a superintendent on the Gaylord Rockies Hotel and Convention Center.

continued on next page >
KENNETH BRICKWEDEL, 51

Kenneth Brickwedel (CM, ‘88), avid hunter and fisherman, dedicated son, brother, husband, father, and friend, passed away Nov. 7, 2015. Brickwedel’s generous and newly refurbished heart quit working while duck hunting with his trusted Labrador Retriever, Sugar.

Brickwedel was born in San Jose, Calif., to Arthur and Madeline Brickwedel. After graduating from Cal Poly, Brickwedel, Dave Eichten (CM, ‘88) and Alan Laurlund (CM, ‘88) backpacked throughout Europe. He enjoyed a successful 30-plus year career as a project manager for such firms as Hensel Phelps, Rudolph and Sletten, XL Construction, and A Squared Project Solutions.

As a groomsman for his longtime buddy Joe O’Loughlin (History, ‘89), Brickwedel met and fell head-over-heels for the bride’s sister, Monica Garin. They married in 1994 and had a daughter, Chloe, in 2000. A devoted family man, Brickwedel rarely missed a family gathering, including the annual summer fishing trip to Eagle Lake. He never shied away from helping with a “fix-it” or remodel project.

He loved listening to the blues and country music, often while cooking or grilling. About 10 years ago, he and his wife began growing wine grapes and created the “3 Brix,” label, which won honors at the 2009 Alameda County Fair.

Brickwedel was survived by his wife, Monica; daughter, Chloe; father and mother, Arthur and Madeline; brother, Steve; plus numerous aunts, uncles, cousins, nieces and nephews.

TRADING CM FOR REPTILES, FISH

Rourke Benson (CM, ‘09) teaches in an after-school science program that brings reptiles and amphibians into elementary school classrooms and teaches animal science, ecology, and general science concepts.

“I’m the Reptile Guy, more or less,” he wrote. “I am going to take our 14-foot Burmese python to class today!”

Benson started off on a traditional construction management path, working for BNBuilders in the Bay Area. He built schools and hospitals, drawing on a lot of the mechanical construction training he focused on at Cal Poly.

“It was intense. It was fun at times,” he wrote. “The projects were very technical and schedule-intensive. I did this for two-and-a-half years and burned out. I decided to travel the world and do some soul searching.”

For a year, Benson worked for a nongovernmental organization in Bolivia, building schools and hospitals as a laborer and learning Spanish. “In the process, I decided I’d never go back to the heart of the general contracting world,” he said.

Rourke Benson (left) is living in the Bay Area, teaching elementary schoolers about reptiles and amphibians, and fishing commercially.

Now back in the Bay Area, Benson has been teaching for about three years and working as a commercial salmon fisherman in the summers “to get by.” He enjoys teaching and finds it “nearly as challenging as construction, but much easier on the soul. I learned a ton from my commercial construction years; no regrets and much respect for the people out there doing it.”

KUDOS FOR CREATIVE CULVERTS

Thai Nguyen (CM, ‘08), manager of special projects in the $100,000 to $10 million range at PCL Construction Services Inc. in Glendale, Calif., was recognized as one of the Top 20 under 40 honorees in California by Engineering News-Record (ENR).

The publication cited Nguyen for “out-of-the-box thinking with culverts” at UCLA’s Pauley Pavilion renovation and expansion project, installing box culverts instead of using the traditional cut-and-cover method for the players’ tunnels.

Nguyen was also honored for being a “client-focused professional who colleagues say promotes partnerships and collaboration.” According to ENR’s website, “The Top 20 individuals have built extraordinary industry portfolios in just a few short years. In addition, many donate significant amounts of time and expertise to serve their communities. This diverse group of young industry professionals collaborates with colleagues, mentors younger generations, and leads the way to a more sustainable built environment.”

Nguyen was selected from an applicant pool of about 60. To read more, go to: www.enr.com/topics/211-california-construction-news.

FLYING THE SOUTHERN SKIES

After graduation, Mike Constable (CM, ‘13) worked on the ground and learned to fly at the San Luis Obispo Regional Airport. He then attended the Specialized Undergraduate Pilot Training program.
at Columbus Air Force Base in Columbus, Miss. “I packed up my car and life and drove cross-country to the deep South, the last place I thought I’d live after SLO,” he wrote. “I’ve spent two years earning my wings, becoming a qualified pilot.”

Constable learned to fly the T-6A, T-1A and C-130J Hercules, which he will fly back in California.

“Graduating from Cal Poly with a CM degree may not appear to be a logical start to aviation, but both share quite a bit in common,” he wrote. “Mechanical plans and aircraft systems accomplish several similar operations. As well, air force manuals and designer specifications provide background in a very technical manner. Ultimately, Cal Poly provided a wide and solid foundation to pursue a flying career.”

LESIONS OF THE WORLD

Ethan Peper (CM, ’15) wrote: “My travels have been a nice breath of fresh air after jamming through full scheduled quarters to graduate. I am very appreciative of being involved with Engineers Without Borders and Journeyman International — all thanks to Cal Poly.”

Since graduation, he’s been to India to work on a sewage filtration system, the Philippines to help on a community center and church, Thailand to celebrate the legendary all-night Full Moon beach party, and New Zealand.

“My trip to India with Engineers Without Borders was really educational because I was part of an adverse project,” Peper wrote. “A few days after we arrived, we discovered there was a central divide in the community. After four years and very little progress, the people began losing faith in the project. There was little support for us as we tried to involve the community.

“Cal Poly anthropology Professor Dawn Neill, who traveled with us, helped ease the tension through careful communication and focus groups,” he continued. “The emotional intensity grew following a death in the village. We had to depart for a few days. We came back and built one phase of the system but didn’t complete our projected tasks.”

In the Philippines, Peper helped renovate a church and community center. “The fun part,” he wrote, “was getting to use the sledgehammer, jackhammer, and practice things that OSHA wouldn’t approve.”

In New Zealand, Peper and his girlfriend lived in a van for five months, touring the North Island, volunteering through the World Organization of Organic Farms, exchanging a few hours of their day for accommodations and meals. “We gardened, surfed, dove for crayfish, scallops, sea urchins, fished and played music,” he wrote. “I am looking to settle down in Wellington or Christchurch to start my career, either for a commercial or residential sustainable builder as a project engineer/project manager. If I fail to find work, I’ll move to the Bay Area or Denver.”
A group of service-minded construction management (CM) students and faculty members spent 10 days during winter break last year on a project to bring running water to the people in the remote Ecuadorean village of Santa Rosa.

Parker Haerr (CM, ’16) and David Mulder, both members of Cal Poly’s student chapter of the National Association of Electrical Contractors (NECA), received a $20,000 ELECTI International Student Initiative Grant to install photovoltaic (PV) panels in Ecuador. To secure the grant, the students — with guidance from faculty member Lonny Simonian — presented their project idea to a group of electrical contractors who were attending the ELECTRI conference in Chicago.

Haerr, Mulder and Simonian worked with Reach Beyond in Shell, Ecuador, to identify, design and complete the project. Reach Beyond, a nonprofit agency, fosters community participation in its projects.

Faculty member Paul Redden and students Dhakshan Potuhera (CM, ’16) and Tyler Peinado (CM, ’16), members of the student chapter of the Mechanical Contractors of America Association (MCAA), joined the group and expanded the project to include mechanical components.

“The purpose of the project was twofold,” Haerr said. “We wanted the people of Santa Rosa to have access to running water, and we wanted to help Reach Beyond headquarters achieve carbon neutrality. We accomplished both goals by installing donated PV panels.”

When the team arrived in Ecuador, they spent several days acclimating to the high altitude, trekking through the Amazon jungle, and learning the customs of the native people.

The team traveled inland several days to reach Santa Rosa. They drove unpaved roads, took a small prop plane into the jungle, and hiked 45 minutes with all their gear to arrive at their destination.

“You have to be very resourceful in the Amazon; you try to plan for everything,” Mulder said. “There’s no Home Depot...
around the corner, so you have to use what you have and fix what you need.”

For three long, hot, humid days, the Cal Poly team worked alongside Reach Beyond’s Eric Fogg and the community members to bring water into a distribution system so that every home could have running water. They installed a water pump in a spring-fed well, built a support structure for water tanks from locally named “ironwood,” connected the tanks to the pre-existing infrastructure, and installed PV panels.

On the final day of the project, Potuhera and Peinado installed end points at homes throughout the village. “The kids were so excited to finally see water accessible at their doorsteps,” Potuhera said. “It was a nice touch at the end of this project.”

The students and faculty were overwhelmed by the graciousness of their hosts, who treated them as honored guests, providing lodging and meals and the traditional drink chicha, offered as a sign of respect and appreciation. The Cal Poly contingent even met the village president.

Before returning home, the team traveled to Reach Beyond’s headquarters in Shell, where they designed a solar array using PV panels so that the agency’s headquarters could get off the local power grid. As part of the installation, they dug a 60-foot trench with deteriorating tools.

“Ending up with broken shovels and pick handles led to some seriously funny moments for team members,” Haerr said. “It was frustrating, but all we could do was laugh and keep working.”

The team did manage to find some time to be tourists. “Our Reach Beyond hosts made sure we got to see some of the sights. We went shopping at the markets, saw amazing waterfalls, took gondola rides up the sides of mountains, and went ziplining,” Haerr said. “The trip was a once-in-a-lifetime experience.”

The Cal Poly team built a support structure for the water tanks (above) and connected the tanks to pre-existing infrastructure. Celebrating successful results (from left) are Tyler Peinado, Dhakshan Potuhera, a local resident (background), Parker Haerr and David Mulder.
CAL POLY ALUMNI AND INTERNS LEAD A HAND ON CONSTRUCTION PROJECTS
ALUMNI AND INTERNS LEAD A HAND ON CONSTRUCTION PROJECTS LARGE AND SMALL

It’s a little known fact that many Cal Poly student interns and alumni — particularly construction management (CM) graduates — have had a direct hand in shaping the university’s sprawling campus. They have lent their skills and leadership to work on such award-winning buildings as the Simpson Strong-Tie Materials Demonstration Lab, which cost a modest $2.5 million and took a year to build, and Poly Canyon Village, the largest, most-ambitious project ever undertaken by any of the 23 California State University campuses, costing nearly $300 million and taking more than five years to plan and three and a half to build.

Alumnus Joel Neel (City and Regional Planning, ’91) oversees all construction on campus in his role as director of Facilities Planning and Capital Projects.

Over the years, Neel has tapped into Cal Poly’s rich pool of student employees to help with various projects. “They help with drafting, paperwork and field verification,” he said. “They’re amazing.

They surprise and inspire me every day with their excitement and ability to learn. I’ve worked with more than 50 students over the years, and I would hire almost every one of them again.”

Here we share highlights of a handful of campus buildings (listed in chronological order by earliest completion date) and acknowledge some of the interns and alumni who have left a lasting mark on their alma mater.

continued on next page >
Project start date: April 2002
Construction start date: March 2006
Construction completion: September 2009
Contractor: Clark Design Build
Architect: Niles Bolton Architects
Total project cost: $294,763,915
Construction cost: $249,823,438
Size: Five stories; 1,432,092 square feet
Delivery Method: Design Build
LEED Gold Certified

Poly Canyon Village construction began in 2006, taking three and a half years to complete (above).

Built on a former agricultural site away from the campus core, Poly Canyon Village offers students a community that includes recreation, restaurants, a mail center, retail shops and other amenities.

Nine residence halls make up three distinct neighborhoods. Without leaving the village, students can grab a quick snack or enjoy a hearty meal indoors, outdoors, or on the go. For fun, they can swim, play sand volleyball or basketball, and practice music in specially designed rooms.

Brian Hirsch (CM, ‘03) worked on Poly Canyon Village as a project engineer/project manager with Clark Construction for most of the three and a half years it took to build, working closely with the university and the construction team on design, construction and close-out.

“It was great to return to campus,” Hirsch said. “It was added incentive to be successful with our project, knowing that it represents Cal Poly and the quality of life for students at the university from which I graduated. The campus is taking shape in different ways, and knowing I was part of that is a nice feeling.”

The project had its challenges, too.

“Its size and various elements — site grading, building on a hillside, dealing with Brizzolera Creek and environmental issues — presented obstacles,” he said.

But it’s often those tough experiences that make a project worthwhile. And they didn’t keep Hirsch away for long. He’s back on campus working for Kitchell as a construction manager on Student Housing South.
The Simpson Strong-Tie Materials Demonstration Lab, in the Construction Innovations Center, is an interdisciplinary learning laboratory where students in architecture, construction management, architectural engineering, landscape architecture, and city and regional planning design, build and test various structural components.

Designed by Thomas G. Reay (Construction Engineering, ’80), vice president and director of architecture at Omni Design Group in San Luis Obispo, the lab evolved from a steel building to an exposed heavy timber brace-frame structure.

“It was designed to be a pre-engineered metal building,” Reay said. “But it would not have met the building code for that location at that time. It was necessary to change the building construction type to a Type IV heavy timber construction, giving us the opportunity to highlight the products of the building’s main benefactor, Simpson Strong-Tie, a leading manufacturer of connectors and fastening systems. The lab is the only recent structure on a California State University campus to use heavy timber.”

Reay’s lab design (above and right) features an exposed heavy timber brace-frame.

The lab was specifically designed to be pedagogical — so that just by entering the building, students would learn from it. “We included several exposed construction samples,” Reay said. “We built samples using concrete, steel, heavy timber, and different sidings such as polycarbonate and insulated metal panels. The building itself is a teaching tool.”

Reay also wanted the building to “speak” to students. “I wanted this to be a building that when students saw it, they would say, ‘I don’t know what they do in there, but I want to take a class in that building.’ And from what I hear, they do.”

Not only is the building practical, it is beautiful. The lab’s front doors serve as its centerpiece. “We designed those from scratch to match the building’s details,” Reay recalled. “We had 5,000-pound doors, and we had to figure out how to make them work. They ended up looking and working great.”

Reay enjoyed working on the project and is pleased with the finished product. “I love the way the building looks … like a big, square jewelry box. And coming from a construction engineering background, it’s meant a lot to me to be recognized for it.”
With more than 5,000 health-conscious people using the facility daily, the Rec Center’s three separate exercise areas and state-of-the-art weight and cardio equipment get a good workout of their own. Amenities include six racquetball courts, two basketball courts, a multipurpose athletic court, 19,000-square-foot leisure pool, one-eighth-mile indoor track, three sand volleyball courts, and workout rooms.

The project involved demolishing and renovating a large part of the former 95,000-square-foot recreation center and adding an additional 85,000-square-feet.

Klay Adair (CM, ’09) worked on the Rec Center for about a year and a half as a field engineer with Sundt Construction. Brian Parker (CM, ’10) was a student intern with the company and worked on the project for three months during the summer of 2009.

Adair managed the structural steel, curtain wall, framing, concrete, waterproofing and rebar aspects of the project; coordinated the work of subcontractors through submittals, requests for information, and change orders; helped resolve issues in the field; and participated in on-site safety reviews.

“It was fun to be back at Cal Poly as a full-time professional,” he said. “I felt like I could contribute toward building a better facility for the university. It’s unique that I can point to a building on campus and say, ‘I had a part in that.’”

Adair admitted the work had its challenges. “When we were demoing the old basketball court above the racquetball courts, the building started to lean toward the pool,” he recalled. “We tied it with cables and held it with an excavator to stop it.”

They also had to call in professional bee handlers when a huge nest was discovered at the corner of the existing building.

Adair credits Cal Poly’s Learn by Doing philosophy for helping him gain a better understanding of the industry and teaching him how to be a leader. “I was president of the student chapter of the National Association of Home Builders for a year and competed in Orlando. That taught me about drive, perseverance, hard work, communication and team work,” he said.

Student intern Parker worked in preconstruction, quantifying the different building materials that needed to be bought and contacting subcontractors to get pricing for the different scopes of work.

“I loved it,” he said. “It was great to work on something that I knew would be on campus for a long time. It was a terrific learning experience, and it was especially cool to learn on something I could watch being built during my last year at Cal Poly.

“Learn by Doing meant actually jumping into the details and taking on as much as I could,” Parker continued. “I’ve carried that into my professional work. The best way to learn something is to dive right in and figure it out.”
Both alumni and students worked on the Baker Center for Science and Mathematics, a high-performance green building that has met the rigorous LEED Gold standards for sustainability, water and energy efficiency, resource selection and environmental quality.

Paul Graebner (CM, ’02), project manager/superintendent at Gilbane Construction Co., played a major role in the Baker Center and other buildings on campus, including the Construction Innovations Center.

“Construction on the Baker Center began in September 2010, and I spent the next three-and-a-half years working as a senior project engineer,” Graebner said. “I managed 11 bid packages that included demolition, earthwork, concrete, structural steel, miscellaneous fabrications, masonry, framing/drywall, glazing, roofing, sheet metal and flashing. I was on the job from beginning to end and had a hand in just about everything.”

Alfred Lee (CM, ’12) worked on the Baker Center as a project engineer intern with Cal Poly’s Capital Projects during his junior and senior year. As a student, he was excited to “leave my mark on a building with a life expectancy of 100 years. Every time I pass through San Luis Obispo, I stop by to see the building — even today — on my honeymoon.”

The work helped reinforce concepts Lee learned in the classroom.

“We learn about the importance of staying on schedule and on budget, but on the job, we learn exactly what goes into that,” he said. “We study different aspects of construction: mechanical, electrical, plumbing, steel, concrete. Working brings it all together; you have to figure it out in a five-day work week.”

Considered to be a high-performance green building, the Baker Center for Science and Mathematics (above) met rigorous LEED Gold standards.
stayed the same,” he said. “I also like having a hand in improving the university and the life of the students who are looking for the same experiences I got 15-plus years ago. Those experiences helped me jump into situations head-on as a young project engineer.”

Scott encourages students to get as much field experience as possible.

“Coming out of school, very few people — myself included — know what it takes to swing a hammer all day and be productive. Participating in field activities goes a long way in preparing students to sit behind a desk and price change orders or run crews in the field.”

Blevins, an assistant superintendent with Webcor, works both in the office and in the field.

“I enjoy working both sides of a project — seeing it on paper and then seeing it get built,” he said. “It takes a certain ‘grit’ to be in the construction industry. You have to be able to buckle down and get the job done.”

The challenges are numerous and the hours are long, but, he said, “I am proud to use the knowledge and skills I developed at Cal Poly to make it a better place.”

Currently under construction, Student Housing South (left) will serve as a residential community for first-year students, with seven residence halls, a parking structure and other amenities.

PHOTO BY PATRICK SHULER  |  WEBCOR CONCRETE GROUP

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**STUDENT HOUSING SOUTH**

**Project start date:** September 2013
**Construction start date:** September 2015
**Construction completion:** Estimated to be September 2018
**Contractor:** Webcor Builders
**Architect:** Valerio Dewalt Train Associates
**Total project cost:** $198,862,000
**Construction cost:** $159,072,000
**Size:** Five stories; 561,225 square feet
**Delivery Method:** Design Build
Guaranteed LEED certified

Now under construction on approximately 12 acres at the Grand Avenue entrance to campus, Student Housing South is planned as a residential community for first-year students. The project will include seven three- to five-story residence halls with a total of 1,475 beds, a four-level parking structure, open spaces for outdoor activities, a café, community room, game room, mail room, welcome center, and office and work spaces.

Greg Scott (CM, ’01), Alan Blevins (Civil Engineering, ’14), and Michael Delach (Civil Engineering, ’11) are among the hundreds of people working on the project.

Scott, project director with Webcor Concrete Group, is happy to be back to his “old stomping grounds” — San Luis Obispo. “I love coming to the Central Coast and seeing the changes and all that has
The Construction Management (CM) Department held its annual Spring Social, formerly known as the Senior Banquet, on June 3 at Cypress Ridge Golf Course in Arroyo Grande, Calif. Approximately 160 people attended, including graduating seniors and their family members, faculty, staff, other CM students, industry representatives, and scholarship donors.

Department Head Al Hauck announced scholarship recipients, senior award winners, and winning team members. “We gave away almost $75,000 in scholarships,” Hauck said. “This did not include three $1,665 scholarships that we later awarded to incoming freshmen.”

In addition, Dave Woods, executive director of the Beavers Charitable Trust, presented the department with a check for $50,000, bringing that organization’s scholarship endowment to nearly $250,000. Each year this endowment funds about $10,000 in scholarships to Cal Poly students.
Eric Bet

OUTSTANDING LEADERSHIP

It’s a good thing that Woodside, Calif., native Eric Bet’s (CM, ’17) intention to break from family tradition and attend another university instead of Cal Poly didn’t work out. “My dad, mom and brother all graduated from Cal Poly, and I wanted to do my own thing,” Bet said. “It was a blessing in disguise that it didn’t work out; I can’t imagine going anywhere else now.”

Bet, who is on track to graduate in spring 2017, received the Construction Management (CM) Department’s 2016 Outstanding Leadership Award, proof that he earned more than an undergraduate degree at Cal Poly. “In high school, I was more of a passive leader-by-example,” he said. “At Cal Poly, I gained the confidence to take on more active leadership roles.”

Bet served as treasurer of the Associated Students of Construction Management (ASCM) club during his junior year and vice president his senior year. One of his proudest accomplishments was being at the center of the reorganization of the department’s clubs to make ASCM truly the umbrella club for the others. “I helped lead an open forum attended by about 150 students to discuss the restructuring. We knew we had great clubs in the department but thought they could be even better. I’m proud to have left my mark,” Bet said.

Bet’s leadership abilities also extended to student competitions. He served as captain of the Commercial Team at the 2016 Associated Schools of Construction (ASC) Regions 6 and 7 competition. He was also co-captain of the team that competed at the 2016 National Association of Home Builders (NAHB) competition, bringing home a second-place win.

The ever-ambitious and forward-looking Bet sought out opportunities to expand and enhance his studies. “I pursued things that will keep me happy my whole career,” he said. Following a path he created for himself, he earned a minor in real property development and completed 40 units of business finance classes. He also served as president of the Cal Poly Real Estate Club during his senior year.
Since the age of 10, Claremont resident Parker Haerr (CM, ’16) thought she wanted to be an architect -- a fact that remained true until her first quarter at Cal Poly.

“I was so certain of it that I never really thought about another major. When it didn’t seem like a good fit, I started exploring other options and discovered construction management,” she said.

In her new major, Haerr found a special niche for herself focusing on electrical construction. “My interest started when I took the residential lab with Department Head Al Hauck. I was on a ladder, struggling to wire something, and Al wouldn’t let me down until I figured it out,” she said. “I finally got it, and it was a great feeling of accomplishment.”

During those early days, Haerr never would have guessed that she would receive the Construction Management Department’s 2016 High Voltage Award, a unique award created to acknowledge her involvement in electrical projects over the years. “It was completely overwhelming to receive this award and to know that people noticed what I was doing,” she said.

Haerr served as vice president of the National Electrical Contractors Association (NECA) student chapter. She also competed on the Electrical Team at the 2016 Associated Schools of Construction (ASC) Region 3 and Regions 6 and 7 competitions, winning first in both contests.

Another college highlight for Haerr was her involvement in a photovoltaic project in rural Ecuador. “I was part of it from start to finish. I helped secure the grant that provided $20,000 for the project, worked on the design, and was part of the installation team.” The success of the project led to Cal Poly receiving another grant for a 2016 project in Belize, and Haerr plans to go with them as industry support.

She is grateful for those opportunities and acknowledges her accomplishments but said the best part of the program was the friends she made. “My graduating class was so close, it’s like I have 50 best friends,” she said.

In August, Haerr started work at Sprig Electric as a project engineer. “Electrical work is specialized and important to the success of any construction project. I like being able to contribute to that.”
Jasmine A. Lomax (CM, ’16) toured Cal Poly for the first time while in high school and right then determined it was the only university to which she wanted to apply. “I loved Cal Poly and visited San Luis Obispo more than a dozen times before finally applying to the Construction Management Department,” she said.

Cal Poly’s Learn by Doing approach appealed to the Bay Area native. “I was the ‘handy’ person at home, and I liked the hands-on aspect of building,” Lomax said. “Growing up, I did lots of renovation projects, including removing flooring, installing tile and painting walls.”

Lomax earned the 2016 Construction Management (CM) Service to the Department Award mainly because of her dedicated work with the recruitment program. Every weeknight during the academic year, representatives from more than 150 companies throughout California visit the campus to discuss job opportunities with students.

For two and a half years, Lomax made sure everything ran smoothly at those “info sessions.”

“It was great to network with the construction industry representatives and see them multiple times over the years,” she said. “Getting to know them helped me advise students who were looking for internships and other career opportunities.”

Some of her best days at Cal Poly involved interacting with classmates. “There was such a collaborative energy in the department. Everyone helped each other with their projects, even if it they were solo projects or for a different class,” she said. “Even stressful days were good because I was working with my best friends, and we were all in it together.”

In addition to her studies and work, Lomax participated with Cal Poly’s team at the 2015 U.S. Department of Energy Solar Decathlon, one of the world’s most prestigious sustainable housing competitions. Cal Poly took third place.

Traveling to Malawi, Africa, with Habitat for Humanity International, Lomax built brick houses for orphans for her project-based CM senior project. In addition to her undergraduate degree, she earned dual minors in city and regional planning and real property development.

Now a project engineer at Morley Builders in Los Angeles, Lomax is working on the Academy of Motion Picture Arts and Sciences Museum.
San Diego native Lauren Norwood (CM,’16) credits missionary trips, volunteer work and the guidance of her parents as central reasons for her choice to pursue a degree in construction management. “I like being able to see the fruits of my labor,” she said. “Being able to help others is a rewarding and humbling experience.”

Cal Poly was always Norwood’s top choice, but she wasn’t accepted straight out of high school. “I ended up going to community college and transferring into Cal Poly,” she said. She believes this experience made her a better student. “I worked really hard to get here. I was confident that I was in the right major, and I knew I would give it my all.”

Norwood was completely surprised when she heard she had received the Construction Management (CM) Department’s 2016 Raising Standards Award. “My goal was to set a new bar for myself and my peers,” she said. “I tried to show that when you put your mind to it, anything is attainable.” Norwood realizes she didn’t earn the award alone. “I couldn’t have achieved this without the support of my classmates and the faculty. I can’t thank them enough.”

Norwood didn’t limit her efforts to just her studies. She also helped bring back to campus a student chapter of the Construction Management Association of America (CMAA). During her senior year, she was involved in the restructuring of all the department’s clubs. “CMAA is now the home base for scholarships, certifications, and bringing in guest lecturers,” she said.

“The best part about the CM Department is all the extracurricular activities,” Norwood said. “They helped me grow as an individual and gain confidence in my skills.” Norwood also benefitted from networking opportunities, which will last well beyond her time at Cal Poly. “By getting involved, you make valuable short- and long-term connections,” she said.

In January, Norwood will begin work in Kitchell’s San Diego office, and there’s no doubt she will continue to raise the bar.
Tyler Peinado
SERVICE TO THE DEPARTMENT

Tyler Peinado (CM, ’16), Service to the Department Award winner, decided to go to Cal Poly in the eighth grade, after participating in MESA’s (Mathematics Engineering Science Achievement) annual engineering competition. “We were competing in the semifinals, which were being held on the Cal Poly campus. I knew then it was the right school for me.”

Peinado, from Goleta, Calif., just outside Santa Barbara, researched a number of majors before deciding on construction management. For a time, he considered mechanical engineering and effectively worked that interest into his college studies by competing in multiple mechanical competitions and performing mechanical work on a service project.

At Cal Poly, Peinado competed in the Mechanical Contractors Association of America (MCAA) national competition for three years and was on the Associated Schools of Construction (ASC) Mechanical Team for three years. “We brought home a first-place award in 2015 and a third-place in 2016,” he said.

During his senior year, he spent part of winter break in Ecuador, installing a water pump, plumbing and end points to supply running water to a remote village. “It was great to help a community access something it normally doesn’t have,” he said.

Like many construction management students, Peinado kept a very full schedule while at Cal Poly, but his initiative propelled him to go the extra mile and lend a helping hand. The Service to the Department Award recognizes his many contributions over the years. “I was ecstatic to receive the award,” he said. “I never really thought of myself as doing anything special; I just naturally looked for ways I could help out.”

One way was to become grill master for the Associated Students of Construction Management (ASCM) club. “During Open House, we grilled more than 280 pounds of meat,” Peinado said.

Peinado is working at Sundt’s Irvine office as a field engineer. “I’m working on the pre-construction phase of a project, and then I’m following it out into the field,” he said. “I’m excited to be able to see the project from start to finish.”
Choosing to attend Cal Poly was an easy decision for Torrie Peth (CM, ’16). Her cousin Cailey Reiman (CM, ’08) had enrolled a few years earlier and loved the program.

But growing up in Cheyenne, Wyo., Peth’s decision was also based on Cal Poly’s location. “San Luis Obispo has a Cheyenne kind of vibe,” she said. “Plus, when I was visiting the campus with my mom and then saw cows in Big Sur, it was like being in the country, but with a beach!”

Peth received the Construction Management (CM) Department’s 2016 Outstanding Leadership Award, an honor that had been years in the making. She served on the board of the Associated Students of Construction Management (ASCM) club her freshman year and held various positions until ultimately serving as president during her senior year. “I was involved from the very beginning and spent years learning about leadership,” she said.

Peth put those leadership skills to good use when she helped lead the restructuring of the CM Department clubs. “We truly made ASCM an umbrella club that helps all the clubs reintegrate with each other,” she said. “We re-did the bylaws, created an executive officer team, and pooled all the money so that each club can benefit. I feel like I left a legacy.”

Another highlight for Peth was being asked to give a speech at commencement. “The department is like one big family. It was here that we learned how to build a family through dedication and teamwork.” Her speech was warmly received, with cheers, laughter and a few tears from fellow classmates.

Beyond the department and Cal Poly, Peth was on the executive officer team for the local SLO Wake Board Club. The club travels around the state for competitions and organizes houseboat trips for members.

Currently in San Diego working for the Hanover Co., Peth has found the right company for her. “It is a development company, which is a little different than working for a general contractor. I like the projects, and Hanover has offices all over the country, including Houston and Denver.”
The Construction Management (CM) Department’s 2016 Outstanding Senior Award winner, Holli Tripp, (CM, ’16) has known she would pursue a career related to construction and engineering since childhood. In high school, she took Regional Occupational Program (ROP) courses as part of the ACE Mentor Program of America, which aims to inspire students to pursue careers in design and construction.

“These classes were very hands-on, and I learned skills such as drafting,” Tripp said. She mastered that skill and, while still in high school, started her own business drafting designs for residential projects.

Tripp, a first-generation student, not only had the highest grade point average in the Construction Management (CM) Department when she graduated, she was involved in getting Sigma Lambda Chi (SLC), the construction honor society, revived in the department. “SLC recognizes students’ academic accomplishments and the hard work they put in,” she said.

She credits part of her academic success to attending a community college before transferring to Cal Poly. “When I got to Cal Poly, I had completed most of my general education courses, so I could really focus on my CM classes,” Tripp said. “I also received guidance from Department Head Al Hauck and the staff.”

Tripp, from Auburn, Calif., served on the Heavy Civil Team at the 2016 Associated Schools of Construction (ASC) Regions 6 and 7 competition. “At the awards ceremony, you could feel the energy of everyone around you. When they announced that we won first place, I felt a huge rush of relief. I was shaking all the way up to the stage,” she said.

She also values her time as an intern. Internships introduce students to different areas of the construction industry and help them determine which ones they prefer. “I advise students to vary their internships and check out the different facets of the industry. My only regret was not staying at Cal Poly longer and doing one more internship before I graduated,” she said.

Tripp began working at Teichert Construction, a heavy civil company, in its Lincoln, Calif., office. “I like heavy civil,” she explained, “because you’re building infrastructure that has an important purpose for the community.”
PHIL BARLOW IS PROMOTED TO PROFESSOR

Phil Barlow (CM, ’87) was among 32 Cal Poly faculty members — and the only faculty member in the College of Architecture and Environmental Design — to be promoted to full professor, effective in 2016-17.

Barlow returned to Cal Poly to teach as a full-time tenure-track faculty member in 2006, after working in industry and teaching part time at Sacramento State and full time at Fresno State. At Cal Poly he has taught a variety of classes, including Senior Project and Jobsite Management. He also coordinates the department’s co-op education program and served as interim department head for a quarter last year when Al Hauck was on sabbatical.

Barlow’s areas of expertise include construction jobsite management, healthcare construction, quality control and quality assurance, construction education/curriculum and pedagogy, and cost engineering.

After graduating from Cal Poly, Barlow earned a master’s in business administration in finance from Golden Gate University and a doctorate in construction management from the University of Florida.

ASSISTANT PROFESSOR JASON HAILER JOINS TEAM

Third-generation Arizona native Jason D. Hailer relocated from Tempe over the summer to begin his tenure fall quarter as an assistant professor.

His extensive experience as a project manager, project superintendent and project engineer will benefit his students in Heavy Civil Construction Management.

“I will use my industry experience to relay curriculum content to industry situations in order to provide a well-rounded classroom experience,” Hailer said.

He came to Cal Poly for “the opportunity to instruct exceptional students at a well-respected university in an ideal location to raise our daughter.”

Hailer aims to positively impact his students by being “an instructor and mentor that future construction management professionals can utilize as a resource both in the classroom and in their careers.”

He earned a bachelor’s degree in business administration from the University of Phoenix and master’s and doctorate degrees in construction management from the Del E. Webb School of Construction at Arizona State University.

Hailer, his wife, Jennifer, their 6-year-old daughter, Evelyn, and 9-year-old dog, Foster, have settled in San Luis Obispo.

DEPARTMENT WELCOMES TWO FULL-TIME LECTURERS

Christi Banks

Christi Banks, who joined the department fall quarter with 18 years’ experience as a construction engineer and project controls and dispute resolution/claims consultant, brings her passion for teaching into her Introduction to Construction Management, Construction Materials, and Commercial Construction Management classes.

She went into teaching partly because of the industry’s need for a new generation of experts. “I want to be a catalyst for forming and attracting young adults, especially women, to the industry,” Banks said. “As an undergraduate at Fresno State, I was one of the first women in the Central Valley to earn a construction management degree. I gained the practical, hands-on training I needed to be successful as a project controls consultant. I hope to transfer my experience to young people at Cal Poly.”

Banks wants her students to “learn to navigate the creative world of construction. When a teacher becomes a co-creator with students in a dynamic and active teaching environment, great things happen,” she said. “Students become empowered to lead and to work together. It is essential to teach students the skills of flexibility and collaboration.”

She and her husband, Ed, live with their sons, Connor, 12, and Caden, 10, in Cody, Wyo. San Luis Obispo will be Banks’ home away from home.

Banks earned her master’s degree in negotiation and dispute resolution from Creighton University in Omaha, Neb. She will continue her established consulting business, Creative Planning Solutions.

Dan Knight

Jack-of-all-trades Dan Knight is an attorney, expert witness, real estate broker, property developer, Cuesta College lecturer, student working on passing the CPA exam, and now a full-time lecturer for Cal Poly’s Construction Management Department.

Knight grew up in San Luis Obispo County, “working in construction with my father’s general engineering construction firm.” He admits he wasn’t interested in academics until he realized, as a self-made...
businessman, that he didn’t understand “money or the legalities of business.”

So he went back to school, earning bachelor’s and master’s degrees in accounting from Walden University in Minneapolis, Minn., and a law degree from The Colleges of Law in Santa Barbara, Calif.

Knight teaches Construction Law, Construction Accounting, CM Fundamentals and Building Systems.

“I will focus on imparting real-world experience to add to the learning model that has made Cal Poly’s CM program so successful,” he said. “Teaching is one of the few professions where a meaningful impact can be made on society through understanding and passion — and some dry humor,” which he finds useful when teaching more complex material.

“I try to meet people where they’re at,” he said. “If they need to be taught a certain way, I try to teach them that way. I am not effective if a student puts in the time and is still not able to understand.”

He lives in San Luis Obispo with his wife, Shawn; son, Callahan, 2; and infant daughter, Delaney.

AL HAUCK SERVES AS CHAIR OF AMERICAN COUNCIL FOR CONSTRUCTION EDUCATION

After serving two years as vice chairman of the board of trustees for the American Council for Construction Education (ACCE), Construction Management Department Head Al Hauck in July 2015 began a two-year term as chairman. Hauck’s service to the organization stretches 12 years and includes serving as chairman for numerous committees and task forces and as secretary from 2009 to 2013.

ACCE is the national accreditation agency for construction management and similarly named programs. In addition to ongoing approval of accreditation decisions, the board recently adopted a new governance structure and new by-laws and created a new five-year strategic plan. The ACCE Standards were recently changed to an outcomes-based format, which requires an extensive implementation process for all programs and considerable training for all participants. Cal Poly has been continuously accredited by ACCE since 1978, earning reaccreditation in 2014.

PHIL BARLOW, TROY HART ARE RECOGNIZED FOR SERVICE LEARNING WORK

Construction management Professor Philip Barlow and part-time lecturer Troy Hart were honored at Cal Poly’s 30th annual President’s Community Service Awards for their service learning work at Growing Grounds Farm, a nonprofit nursery that provides horticultural therapy, socialization opportunities, and job skills training for adults with severe and persistent mental illness.

Barlow and Hart were cited for contributing to the community in a meaningful and relevant manner. They improved Growing Grounds’ infrastructure, resulting in a larger capacity and improved working conditions. Their students’ projects increased economic viability and greater long-term sustainability.

Barlow also won the Community Service Award in 2008.
Our Reach for Excellence Continues

It is hard to believe that I am starting my fifth year as dean of the College of Architecture and Environmental Design. I remain proud and inspired by the unique collection of disciplines represented within the college. We have opportunities for interdisciplinary collaboration available to no other school in the country, and the Construction Management (CM) Department is playing a significant role in plans to leverage this competitive advantage.

I am especially proud of our students, who place in the top tier of national and regional competitions sponsored by professional associations such as the National Association of Home Builders, and of our dedicated faculty and staff who ensure that our students are prepared to become leaders who will shape the built environment.

I offer my thanks to the many contributors who support CM. Between sponsored laboratories, scholarships and the CM Fund for Excellence, support for the program has been particularly strong, helping us advance our continued reach for excellence that distinguishes us among peers.

I am also grateful to CM students who volunteer their talents. From helping the Rotary Club of San Luis Obispo restore the stage at the historic Dallidet Adobe and Gardens to being awarded the ELECTRI Student Passport to install a complete and operational photovoltaic array for San Pedro Primary School in Ambergris Caye, Belize, they generously share their time and energy, helping preserve and sustain communities.

Christine Theodoropoulos

\[ Signature \]

Christine Theodoropoulos • AIA, PE

Comments and content contributions are welcome for the annual Construction Innovator. Contact: Jenay Reynolds-Sibbach at jreyno00@calpoly.edu or 805-756-6285.

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Commemorating A Milestone

Cal Poly President Jeffrey D. Armstrong joins some graduating construction management seniors for a "selfie" on Commencement Day in June 2016. The students (from left) are: Maja Harren, David Mulder, Jasmine Lomax, Tyler Peinado (background) and Austin Nelson.