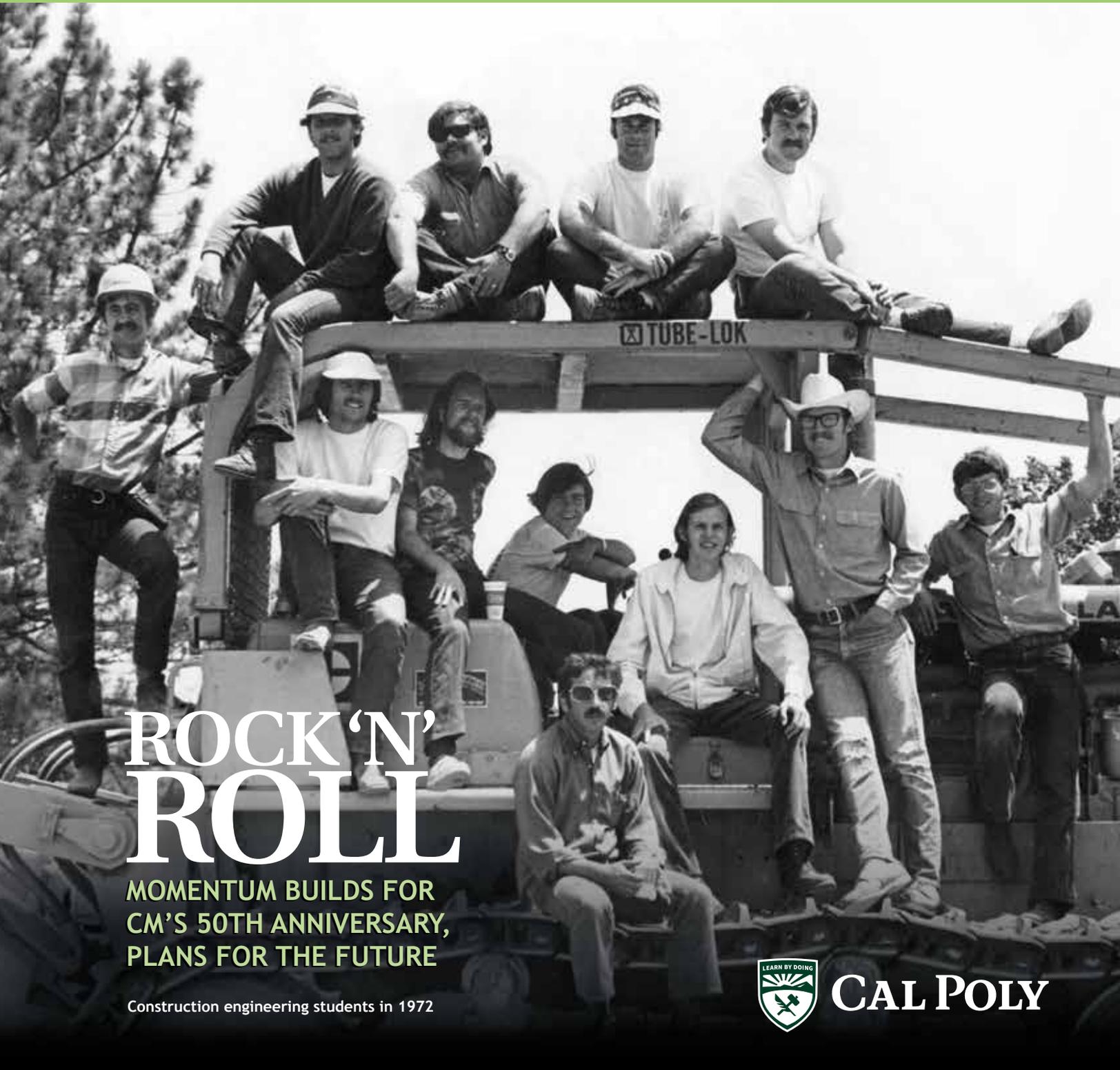


CONSTRUCTION

INNOVATOR

CONSTRUCTION MANAGEMENT DEPARTMENT | COLLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN | FALL 2019



ROCK 'N' ROLL

MOMENTUM BUILDS FOR
CM'S 50TH ANNIVERSARY,
PLANS FOR THE FUTURE

Construction engineering students in 1972



CAL POLY

CONSTRUCTION INNOVATIONS CENTER
106



New Beginnings

DEPARTMENT WELCOMES NEW HEAD JEONG WOO

JEONG WOO, THE NEW HEAD of Cal Poly's Construction Management (CM) Department, thinks he has the "best job in the world." The former construction management program director at the Milwaukee School of Engineering (MSOE) came on board at the end of August 2019 with big plans for the future.

Woo's goals for the department include "developing visionary and comprehensive plans that inspire us to be at the forefront of construction education in the coming years.

"We will develop strategies and programs for recruiting and retaining diverse and inclusive student populations," Woo said. "The CM Department has been growing rapidly for the past few years. Our visions and strategies will guide the transformation required to educate the next generation of construction professionals.

"We will continuously assess our teaching performance to make sure we have the best resources for the highest quality teaching," he continued. "If necessary, we will invest our resources to create innovative curriculum and invite excellent new faculty members to increase opportunities for significant student and faculty interactions."

Jeong Woo's goals as department head include developing strategies and programs to recruit and retain diverse and inclusive student populations.

Woo was well into graduate school before he decided to pursue a career in academia.

"While working on my graduate studies at Texas A&M University, I met and worked with great professors who inspired me to be a professor," he said. "One of them was Mark Clayton, who taught at Cal Poly from 1989-91. I loved his classes because he celebrated students' creative ideas and helped us develop them into much better outcomes."

Now, with 15 years' teaching experience under his belt, Woo is excited to begin his tenure at Cal Poly, where he said, there is "exceptional synergy among great faculty members, students and staff members."

In addition to serving as department head, he will teach BIM (building information modeling) courses and will coach some student competition teams.

"It's fun to work with smart, creative, young and energetic students," Woo said. "It's rewarding to help them grow up to be the future leaders of the construction industry."

His father, a general contractor, introduced Woo to the world of construction. While in college, Woo worked part time as a laborer. "I loved working with the whole team to complete the project successfully," he said.

He brings that same team spirit to his new position as department head.

"I believe it's important to serve others rather than using the power from the top," Woo said. "Good leaders support the entire team and embrace opportunities for growth together. One good thing about a leader in academia is that we always

"It's fun to work with smart, creative, young and energetic students. It's rewarding to help them grow up to be the future leaders of the construction industry."

“One good thing about a leader in academia is that we always have smart team members, so we don’t have to tell them what to do. Each team member can tell me what to do.”

have smart team members, so we don’t have to tell them what to do. Each team member can tell me what to do.”

Woo has been involved in research related to the development of virtual reality applications that enhance the training and operation of first responders during a crisis or disaster.

“My research team worked with the Milwaukee Police Department, Milwaukee Fire Department, and EMT training centers to design and develop alternate reality/virtual reality training materials for first

responders who need training to deal with a wide array of emergencies.”

In addition to serving as program director of construction management at the Milwaukee School of Engineering, Woo was a professor of civil and architectural engineering and construction management, and he served as faculty advisor and coach to several clubs and winning competition teams.

He’s been a consultant to a variety of companies, including Autodesk Inc.; the National Plumbing, Heating and Cooling Contractors Association; and Kohler Inc. He has been awarded multiple research grants from Smart Cities, Smart Futures, Midwest Energy Research Consortium, and the Department of Energy.

Woo has authored or co-authored numerous research reports and technical papers as well as scholarly articles that have appeared in peer-reviewed journals and conference proceedings.

He earned his bachelor’s degree in architectural engineering from Kyung Won University in South Korea, master’s degree in construction management from Texas A&M University in College Station, Texas, and doctorate in architecture, also from Texas A&M.

An avid runner and bicyclist, Woo also enjoys attending sporting events and watching his son’s basketball games and his two daughters’ music concerts. He lives in Avila Beach and hopes this new venture will create “lifelong relationships with great people.” ■



Retiring Construction Management Department Head Al Hauck welcomes his successor, Jeong Woo. Hauck plans to return winter quarters to teach.

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THIS PAGE

College of Architecture and Environmental Design students and faculty visit Weed, a town near Mount Shasta, to survey a site designated for workforce housing after homes were lost to wildfire. Read about the interdisciplinary team's work, including the contributions made by construction management (CM) faculty and students, on Pages 18-19.

ON THE COVER

The CM Department is uncovering old photos like this 1972 gem in celebration of its golden anniversary next year. David Burke, Dean Gelvin and George Rosenberger — three in the group of construction engineering majors pictured — share a few of their fond memories.

Gelvin (Construction Engineering, '73) writes: "Probably one of the best stories is behind this photo. That was our senior project. With the help of local Engineering and Grading Contractors Association members, we worked together as a team to design and build a baseball field for the town of Santa Margarita. From meeting with town leaders and surveying the site, to estimating the project and eventually expediting two weeks of work into a weekend, we provided the solid beginnings for a local ball field."

Burke (Construction Engineering, '72) writes: "That was the first time I experienced a true Santa Maria-style barbecue, with tri-tip, garlic bread, beans, salad and beer. I couldn't stop eating!"

Rosenberger (Construction Engineering) writes: "I kept my copy of this infamous photo close by during my career, and I do in my retirement. My time at Cal Poly from 1965 on was special to me."

Students in the photo are bottom, center: Abe Sominsky. Middle row, from left: Pat Modica (standing), Dean Gelvin, James Barnes, could not verify, Steve Green, John Warmington and Dean Benedix. Top, from left: Mark Burroughs, Ken Porter, David Burke and George Rosenberger.





DONOR SUPPORT

Giving On A Grand Scale

CMAC DONATES \$200,000 TO SUPPORT CAL POLY SCHOLARS IN CONSTRUCTION MANAGEMENT

“LET’S PUT OUR MONEY where our mouth is,” challenged James Ostrom, CMAC (Construction Management Advisory Council) board member, before handing over his own \$5,000 donation in support of an effort to recruit and retain high-achieving, low-income students from California high schools to Cal Poly’s construction management (CM) program.

That rallying cry and initial donation was the start of an ambitious campaign to raise \$100,000 for Cal Poly Scholars. This particular campaign was specifically targeted at the CM Department — and a big part of the effort was to honor recently retired Department Head Al Hauck for his 17 years of service to the department, university and the profession.

“Al will be remembered for the incredible impact he has had on students and the legacy he has left on campus,” said alumnus Pat Callahan (Construction Engineering, ’75), past CMAC president and senior vice president of operations at Hathaway Dinwiddie Construction. “Right after James made his donation

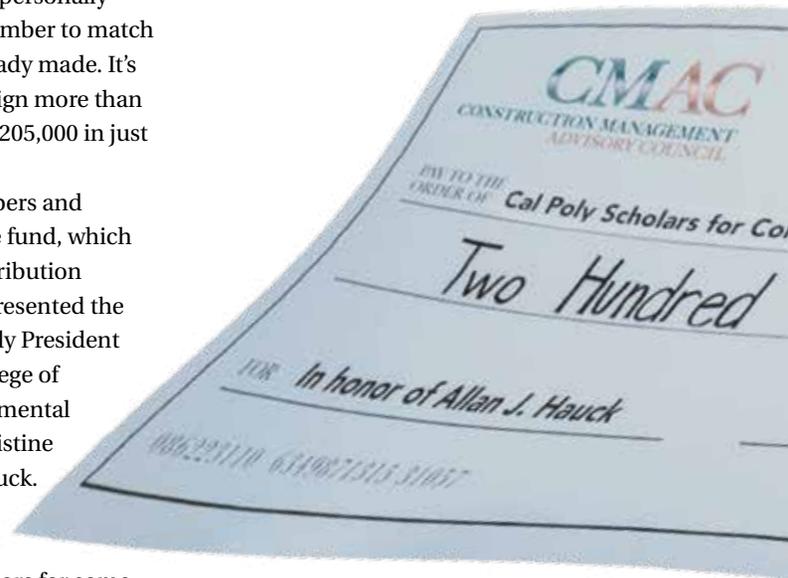
and challenged the rest of us to do the same, Bruce Daseking, executive vice president of McGuire Hester, donated another \$5,000.

“From there, the executive board put a full court press on the rest of our board members,” Callahan continued. “Each executive board member personally called and asked each member to match the \$5,000 donations already made. It’s not surprising the campaign more than doubled its goal, raising \$205,000 in just six months.”

In all, 40 CMAC members and friends contributed to the fund, which received a matching contribution from Cal Poly. Callahan presented the gift in June 2019 to Cal Poly President Jeffrey D. Armstrong, College of Architecture and Environmental Design (CAED) Dean Christine Theodoropoulos, and Hauck.

“To put it simply, this fund is going to help change lives and open doors for some of California’s best and brightest students who otherwise might not have

Cal Poly President Jeffrey D. Armstrong and former CM Department Head Al Hauck accept a donation for the Cal Poly Scholars program, with CMAC members, other donors, students and CAED Dean Christine Theodoropoulos (foreground, third from left) looking on.



the opportunity to attend Cal Poly,” Armstrong said. “The Construction Management Department’s industry partners have shown, by their financial support, that they too are invested in giving low-income California students the opportunity to benefit from Cal Poly’s Learn by Doing philosophy. In turn, the diverse backgrounds and experiences these students bring will benefit our campus community and make all of our graduates stronger and poised for even greater success in their careers and lives.”

The seed for the scholarship fund was planted by Jessica Otten, senior director of development for Cal Poly’s College of Architecture and Environmental Design, who shared the Cal Poly Scholars idea at CMAC’s meeting in November 2018.

That’s all it took for Ostrom, who has since increased his initial \$5,000 donation to \$20,000 over four years. In addition, his company, Brookfield Properties, has agreed to match \$12,500 of the gift. “I encourage others to inquire if their companies might also match employee donations,” Ostrom said.

“Everyone on campus knows CM donors go above and beyond in their steadfast support of the department, but they really outdid themselves this time,” said Tanya Hauck, wife of Al Hauck and former assistant dean of advancement in Cal Poly’s College of Engineering. “Who could say ‘no’ to the alumni ringleaders of this effort, Pat Callahan and Mark Montoya? Al was truly and deeply touched. Anyone who knows Al, knows he is all about the students. The creation of these Cal Poly Scholars in his name could not be more perfect.”

Partners of the CM Department have already sponsored five scholars. With this new support, the department will be able to support four additional scholars, beginning in the 2019-20 academic year. An endowment has also been created so that the scholarships can continue in perpetuity.

Cal Poly Scholars are supported in a variety of ways, including special advising sessions, technology packages, two years of on-campus housing, and career preparation.

Editor’s Note: Special thanks to business administration student Shea Alise Brennan for gathering and reporting much of the information contained in this article. ■

Thank You!

The Construction Management Department thanks the following donors who so generously gave to the Allan J. Hauck Cal Poly Scholars for Construction Management Fund:

Anning-Johnson Co.
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Brookfield Properties
Build Group Inc.
C. Overaa & Co.
California Buildings
Charles Pankow Builders Ltd.
Charlie and Hollie Mallers
Construction Employers’ Association
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DPR Construction Inc.
Granite Construction Inc.
Hathaway Dinwiddie Construction Co.
James M. and Maura D. Ostrom
Kitchell Corp.
Mark and Jennifer Montoya
MATT Construction Corp.
McGuire & Hester
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Skanska USA Inc.
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Tanya L. Hauck
The Clark Construction Group LLC
The Raymond Group Inc.
The Swinerton Foundation
The Whiting-Turner Contracting Co.
Timothy C. Bolton
Webcor Builders
Wright Contracting LLC
XL Construction



She Wears Two Hats

NEW STAFFER RACHELL SMITH LEADS CMAC AND CCCE EFFORTS

CAL POLY ALUMNA Rachell Smith (Art and Design, '11) has been selected to serve the Construction Management (CM) Department in two key positions: executive secretary of CMAC (Construction Management Advisory Council) and program manager of the California Center for Construction Education (CCCE), the department's educational outreach unit.

Smith, a third-generation Mustang, succeeds Brigette Olmos-Arreoloa, who accepted a job in the university's College of Engineering.

SMITH'S BACKGROUND

During her undergraduate years at Cal Poly, Smith served as advertising manager for then-Mustang Daily, now Mustang News. After graduating, she headed north to the Bay Area for a job in advertising.

She returned to San Luis Obispo to work for a multimedia company, then switched to a position as marketing coordinator for a business consulting firm. Her position grew into an associate consultant role and then to account manager and business development lead. "I supported the launch of new market initiatives in San Francisco, Los Angeles and Santa Barbara, while strengthening our presence in San Luis Obispo," she said.

Outside work, she serves as an ambassador for the San Luis Obispo Chamber of Commerce, promoting it to local businesses, fostering member growth and retention, and connecting and engaging new and existing members.

"Working with people and helping them find the right solution is essential



Rachell Smith is executive secretary of CMAC and program manager of the CCCE.

to my personal core values," Smith said, and she is committed to bringing that same enthusiastic attitude to her work with CMAC and the CCCE.

CMAC: GOALS AND PLANS

CMAC works to increase alumni involvement as a way to provide additional avenues of interaction with the department and strengthen connections with industry practitioners. Specifically, the CMAC's goal is to provide feedback to the department related to current and future programs and curriculum, as well as guidance related to how to best prepare students to support the dynamic needs of the construction industry.

To ensure continued effectiveness in its support of the department, CMAC worked with a consulting firm to devise a five-year strategic plan, which laid out key initiatives to identify the necessary

focus areas for CMAC to support the department. The plan seeks to integrate into the curriculum a fundamental understanding of risk management and mitigation and expand the number of committees and groups to provide focus on the most impactful areas of support.

Additional developments included: a vision statement that provided a clear understanding of the group's direction; a leadership and communication program for professional development; and a program to include cutting-edge industry developments into the curriculum.

The new CMAC Executive Committee members, elected to serve two year-terms, include President Marcus Staniford, XL Construction; Vice President Rick Pomeroy, Millie and Severson General Contractors; and Secretary Brad Denney, Webcor. New CM Department Head Jeong Woo is serving as executive director, and Pat Callahan of Hathaway Dinwiddie Construction is past president.

Staniford aims to increase support for students, faculty and the CM program through a greater alumni and industry focus on the most critical development areas for student success. "Specifically, our ability to raise funds and donate time to support programs, clubs, events, senior projects, classroom learning, scholarships and alumni networks are critical to further learning and development opportunities," he said. "We will do this through CMAC's increased emphasis on curriculum, diversity and inclusion, facilities, community outreach, interdisciplinary practices and technology in the coming years."

CMAC is looking for new members to serve on several realigned 2019-21



committees and teams. They include the Development and Facilities Committee, Curriculum and Programs Committee and its four subcommittees (Curriculum, Interdisciplinary, Specialty Contractors, Construction Technology), and Community Outreach Committee, as well as the Events and Program Team, Membership and Growth Team, and Young Alumni Team. Anyone interested in serving on a committee or team should contact Smith at 805-756-1723 or email rsmit120@calpoly.edu.

CCCE: GOALS AND PLANS

Among Smith's goals for the CCCE are helping establish and maintain high levels of engagement

with the architecture, engineering and construction industry. She will concentrate on the connections among student studies, the construction management faculty, and the industries that serve the built environment.

"I plan to implement business best practices to aid in the scalability of CCCE to further enhance and engage students and faculty with industry partners," Smith said. "To support this outcome, I want to launch a pilot CCCE Ambassador program with several student interns, leverage technology to create a collaborative database for communication, and expand on existing and outline new opportunities for increased

From left: Rachell Smith and CMAC Past President Pat Callahan with new CMAC Executive Committee members Jeong Woo, executive director; Marcus Staniford, president; Brad Denney, secretary; and Rick Pomeroy, vice president.

engagement, such as implementing a constructor-in-residence program, corporate tours, faculty services and increase recruitment opportunities."

Smith's proven ability to build long-lasting relationships with strategic partners, community leaders and key stakeholders will serve her well as she strives for creative ways to bring key people together. ■

INDUSTRY CONNECTIONS

SCHOOL OF HARD



KNOCKS

CARPENTER APPRENTICE INTERNS HONE SKILLS ON REAL PROJECTS AND LEARN FROM THE BEST — CM ALUMNI

CAL POLY ALUMNI Chris Forster (Construction Management, '84), vice president for Largo Concrete, and Bob Stephens (Construction Management, '86), project executive for Morley Builders, are among a dedicated group of Cal Poly construction management graduates who are passionate about their work and are eager to expose students to the specialized field of carpentry.

Forster and Stephens — along with 12 additional industry partners — lead their respective company efforts in overseeing student participants in the Cal Poly Carpenters Apprenticeship program. The program allows students in the College of Architecture and Environmental Design the opportunity to work on a construction site as a first-period apprentice for 11 weeks during the summer.

“This program is great for students wanting to gain hands-on experience working with a carpenter crew, with the goal of broadening the students’ experience and producing superior quality project leadership,” Forster said.

The first week of the program students attend a five-day safety and basic carpenter skill training at the local carpenter training center. They are then supplied with their own set of hand tools and are placed on an active site for the balance of their summer experience.

As part of the program, they attend the two-day Carpenters International Training Center in Las Vegas, where they are exposed to the various career paths and training that a union carpenter can pursue.

The Carpenters Apprenticeship Program is offered as part of the Cal Poly CM Department’s educational outreach unit, the California Center for Construction Education (CCCE).

The apprenticeship program, now in its fifth year, is expanding the opportunity to other construction management schools in California. For details about how to participate in Cal Poly’s program, contact Rachell Smith, Cal Poly’s CCCE program manager, at 805-756-1723 or rsmit120@calpoly.edu. ■

Isabella Crafton (left) and Shay O’Laughlin (above) interned with Largo Concrete Inc. in Irvine and San Diego, respectively.



TEAMING UP

In summer 2019, 15 companies participated in Cal Poly’s Carpenters Apprenticeship Program. Twenty students interned, with 10 each working for companies in Northern California and Southern California. The students and the companies they worked for are:

NORTHERN CALIFORNIA

Flint Merrill-Gehrke | **Build Group (Pacific Structures)**
Matthew Sharman | **Cahill Contractors, LLC**
John Leone | **DPR Construction Inc.**
Jonathan Lin | **Hathaway Dinwiddie Construction Co.**
Brendan Mulholland | **McCarthy Building Companies Inc.**
Aidan O’Leary | **McGuire & Hester**
Luis Badillo | **Nibbi Brothers Associates Inc.**
Ashton Reinhold | **Skanska USA Inc.**
Keith Hackleman | **Webcor Builders**
Carson Earnst | **XL Construction**

SOUTHERN CALIFORNIA

Jack Sampson | **DPR Construction Inc.**
Cesar Hernandez | **Granite Construction Inc.**
Luis Escobar | **Hathaway Dinwiddie Construction Co.**
Isabella (Bella) Crafton | **Largo Concrete Inc. (Irvine)**
Shay O’Laughlin | **Largo Concrete Inc. (San Diego)**
Ryan McCombs | **Largo Concrete Inc. (Santa Barbara)**
Aedan Allen-Brower | **Morley Builders Inc.**
Corey Smith | **Neff Construction**
Lizette Galvez-Puentes | **PCL Construction Services Inc.**
Michael Knoechel | **Webcor Builders**

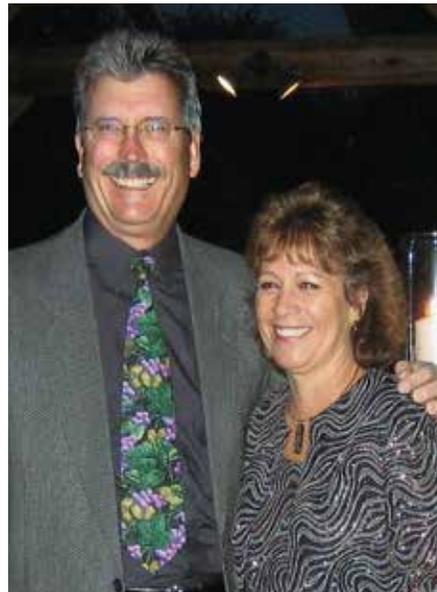
CATCHING UP WITH ALUMNI

RETIREMENT BLISS

Dean Gelvin (Construction Management, '73) was hired at Bechtel Group right out of Cal Poly. Shortly thereafter, he met his wife-to-be, Lori, and they married in 1975. Since they both worked at Bechtel, they enjoyed many years of project travel and relocations that took them to Alberta, Ontario, Canada; Texas, Tennessee, California, Australia, and Oregon before he retired at the age of 51. The couple gives much credit for his ability to retire young to his education at Cal Poly. Gelvin participated for many years on the Construction Management Department's Dean's Advisory Council to help coordinate industry and academic endeavors. He has been involved in the annual Cal Poly Charity Golf Tournament, held for many years at Jack Roddy's golf course and now at various East Bay venues to raise scholarship funds for Cal Poly students. Currently he stays busy with community involvement, household upgrades, including a recent solar project, and spending time at the local golf club, where new Cal Poly connections have been developed. "Retirement has provided us the opportunity for travel and time with family over these past 18 years," Dean Gelvin wrote. "Our travels have taken us to countries we greatly enjoy, such as France and Australia, as well as to the local California wine region."

IT'S HER BUSINESS

Elizabeth A. Barrie (Construction Management and Architecture, '95), AIA, is the founding principal of the barrie company, or TBC, a design and project management firm in San Diego that she started in 2015. Although a licensed architect, Barrie spent 18 years as a builder with DPR Construction and more recently at TBC, which was recently recognized by the San Diego Business Journal as one of the 100 Fastest



▲ Dean Gelvin is enjoying retirement activities with his wife, Lori.

Growing Companies in San Diego in 2019. Recent TBC projects include several for Palomar Community College, including a \$45 million retrofit of a commercial speculative building into an anchor building for a new school campus; a \$39 million medical office building; several projects for Rady Children's Hospital; and involvement with nearly 300 projects at San Diego State University. Barrie's business plan includes streamlining the construction management process through the innovative use of technology, such as in-house drone operations and thermal imaging. Aerial imagery from the drone has already proven useful for change order management as well as roofing, building skin assessments, earthwork, and



▲ Elizabeth Barrie is the founding principal of the barrie company (TBC) in San Diego.

◀ Matthew Angell worked on a community solar project in Nashville for Lighwave Solar.

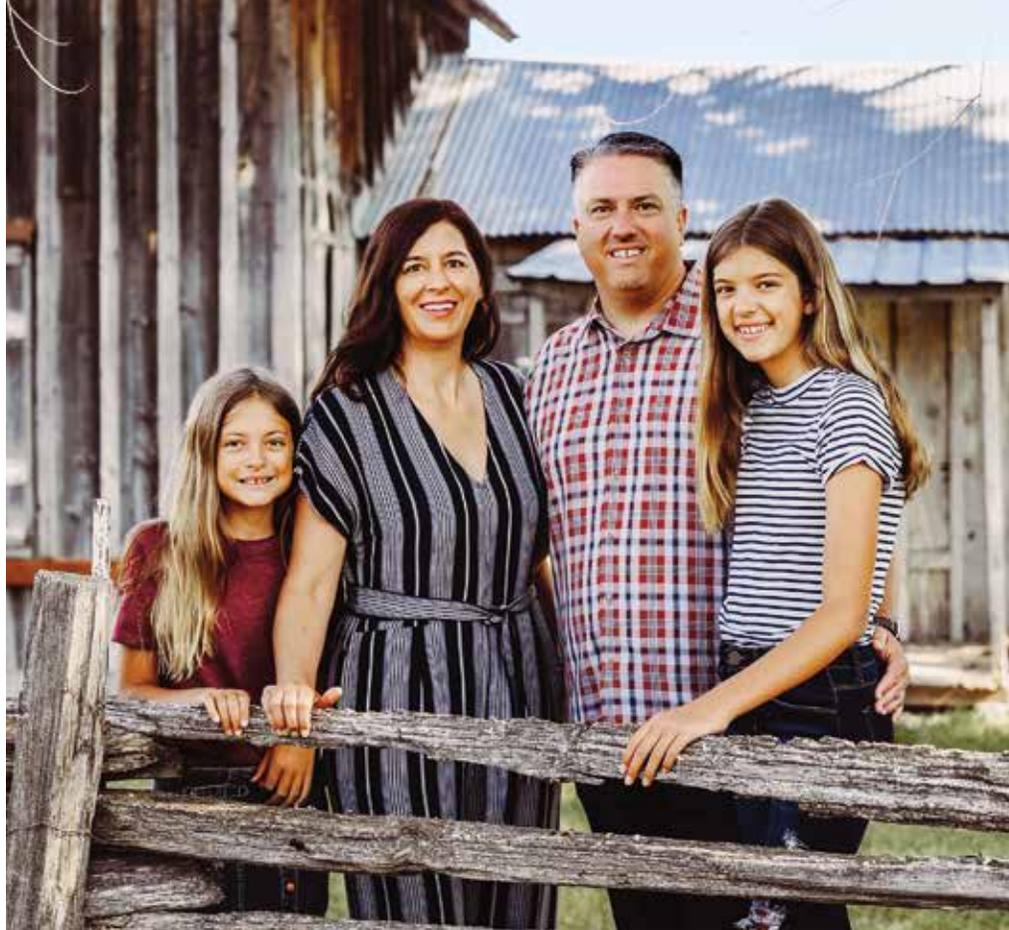
landscaping quantity take-offs. Barrie attributes Cal Poly as the catalyst for her success. "From day one, the Learn by Doing attitude pushes students to not only understand the industry, but to experience it prior to graduation," she wrote. "The school facilitates an interactive learning environment with faculty and companies that stay involved with the school and students. It's exciting to see the growth of both the CM and architecture programs over the years and even more so, the increased number of women in both programs. There is a high demand for skilled workers across the industry, and I am optimistic about the important role women can play to be part of the solution."

A BRIGHT IDEA IN NASHVILLE

Matthew Angell (Construction Management, '96) works for Lightwave Solar as the senior project manager responsible for the first community solar project in Nashville, Tennessee, for Nashville Electric Service. It was built on an old landfill site to make use of the land using a ballasted solution for solar. Angell has built over 50 MW of solar projects over that last 12 years. To watch the project come together, go to: https://www.youtube.com/watch?v=pT6M_7V3E_U&feature=youtu.be.

BUILDING OTHERS' DREAMS

Tom Ehlers (Construction Management, '97) writes, "After working for other great firms for nearly 20 years in the trades and in management, I decided to pursue my own dream of being a small general contractor and a business owner. I founded Columbia Builders of California Inc. in Paso Robles, California, in 2014 with an emphasis to 'build' other people's dreams. Since then, my firm has steadily grown in volume, talent and people. Columbia Builders of California specializes in commercial construction projects of all sizes, and some residential projects. I have been married for over 21 years with three great kids in the local schools and my daughter now at Cal Poly."



▲ Cory Keller works at Truebeck Construction and lives in San Jose with his wife, Kim, and their daughters.

MOVING UP AT TRUEBECK

Cory Keller (Construction Management, '99) was promoted to senior project executive at Truebeck Construction, where he is involved in management of Ground Up and Mission Critical projects along with training and recruiting programs. Keller lives in San Jose, California, with his wife, Cal Poly alumna Kim (Underhill) Keller (Nutrition, '98), and two daughters.

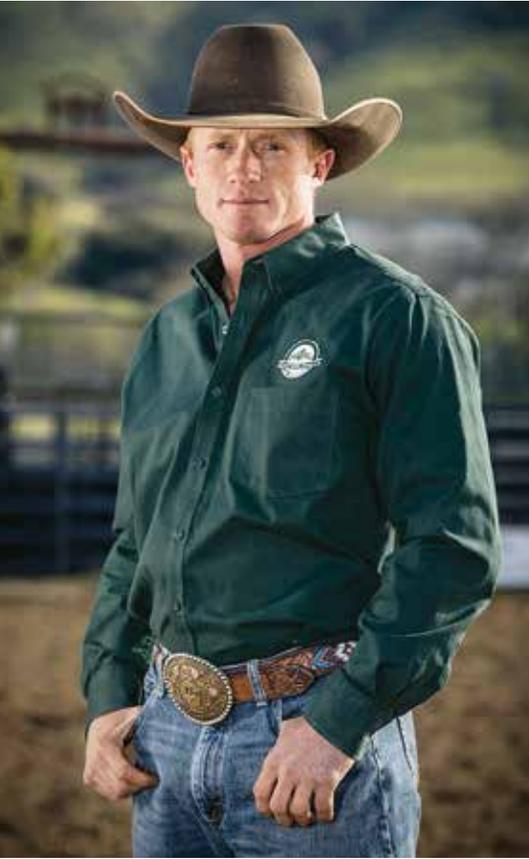
RETURNING TO THE SCENE OF HIS INTERNSHIP

Ray Boff (Construction Management, '05) recently "rejoined" the DPR team in Newport Beach, California. He interned for DPR in 2004 while still a student at Cal Poly. Since then, he has worked at ConXtech structural steel and more recently at RAD Urban, a vertically integrated development, design/engineering, manufacturing and construction company that delivers fully finished prefabricated modular



▲ Ray Boff recently returned to DPR – the company where he interned as a student.

components. At RAD, he was responsible for project management, product modeling, production labor, production engineering, and supply chain and logistics within the manufacturing division. He also managed projects in the construction division. At DPR, Boff will work closely with the management committee and core business units to further advance the implementation and execution of DPR's national prefabrication strategy. He invites alumni and friends to reach out and say hello. ▶



ROPING A NATIONAL TITLE

Cal Poly Rodeo Coach **Ben Londo** (Construction Management, '07) was named the 2019 National Intercollegiate Rodeo Association (NIRA) Coach of the Year at College National Finals Rodeo in June. The award recognizes Londo for his success in the arena as a coach and for his character, personality, initiative and interaction with students and coaches. He was selected by his peers and the NIRA board. Londo has served as head coach of the Cal Poly Rodeo Team since 2013. He is credited with growing the program to be one of the largest collegiate rodeos in the nation. Londo was named Coach of the Year for the West Coast Region in 2013, 2014, 2016, and 2017. A professional Rodeo Cowboys Association rider since 2003, Londo has a long list of achievements, including being named a saddle bronc champion six times for the Columbia River circuit and a two-time collegiate all-around national champion.



▲ U.S. Marine John Angelo Pezzini will specialize in unmanned aircraft systems.

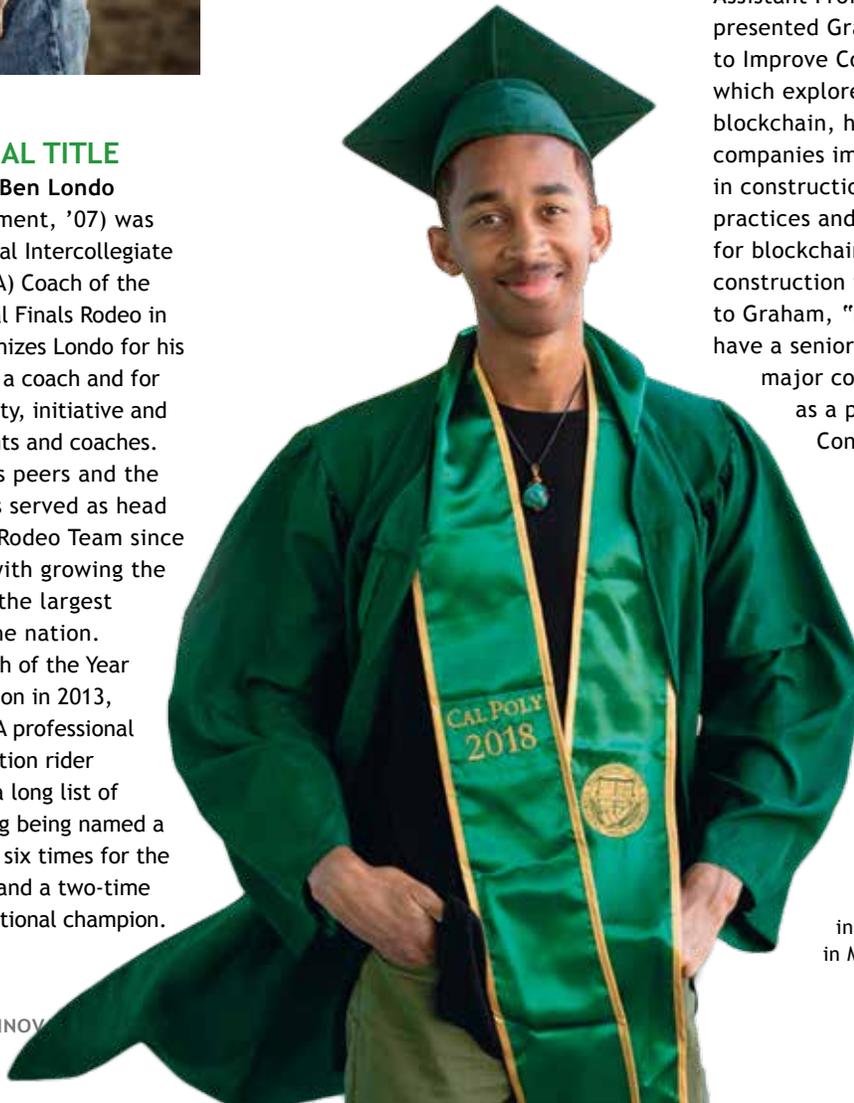
◀ Cal Poly Rodeo Coach Ben Londo claimed a national Coach of the Year title this year.

U.S. MARINE WITH A MISSION

After graduating, **John Angelo Pezzini** (Construction Management, '18) earned a commission as a second lieutenant in the U.S. Marine Corps. He spent seven months training at the Basic Officer Course in Quantico, Virginia. That course determined his selection for the military occupational specialty of unmanned aircraft system officer. He is in flight training in Colorado and Texas.

A PRESENTATION-WORTHY SENIOR PROJECT

Steven Graham (Construction Management, '19) learned after he graduated that his senior project was accepted for oral presentation and inclusion in the conference proceedings of the seventh annual Canadian Society for Civil Engineering International Construction Specialty Conference/Construction Research Congress in Montreal, Canada. At one of the technical sessions, CM Assistant Professor Jason Hailer presented Graham's paper, "Blockchain to Improve Construction Operations," which explores the emergence of blockchain, highlights progressive companies implementing this technology in construction, and analyzes the best practices and applications needed for blockchain to succeed in the construction industry. Hailer wrote to Graham, "It is quite impressive to have a senior project accepted at a major conference." Graham works as a project engineer at MATT Construction in Los Angeles. ■



◀ Steven Graham's senior project was presented at an international conference in Montreal, Canada.

OUR GOLDEN ANNIVERSARY

CONSTRUCTION MANAGEMENT DEPARTMENT PLANS A HOST OF FESTIVITIES TO CELEBRATE ITS 50TH YEAR

NEW CONSTRUCTION MANAGEMENT (CM) Department Head Jeong Han Woo is delighted that his arrival on campus coincides with the department's 50th anniversary.

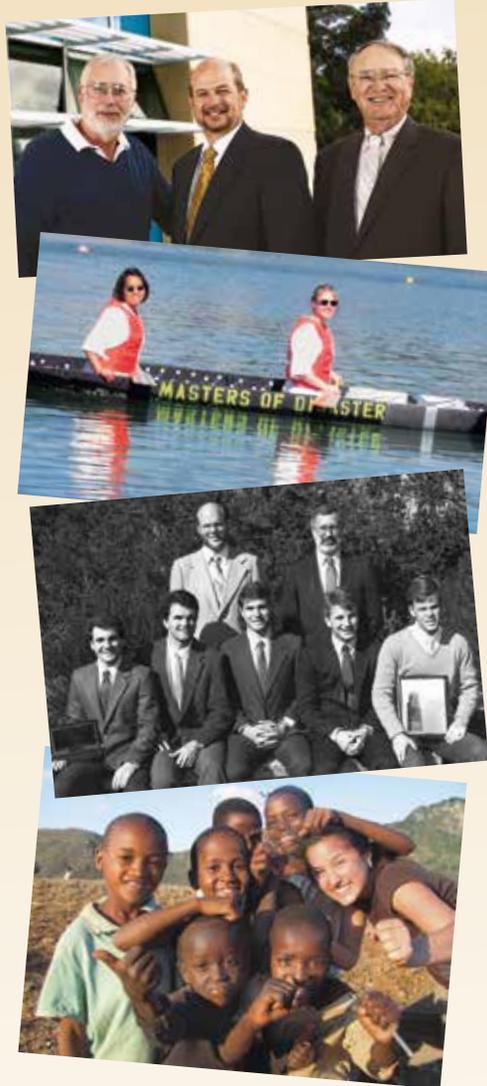
"I am excited to take over the leadership of outgoing Department Head Al Hauck, and I am honored to lead and work with such an amazing team of faculty and students," Woo said. "As we start an exciting academic year, I am proud to announce that our 50th anniversary celebration has also begun. We will recognize our excellence throughout the 2019-20 academic year. This milestone provides us with a unique opportunity to honor our history, celebrate our present, and envision our future."

The anniversary celebration will include numerous activities and events throughout California and beyond for friends, families and alumni. On Nov. 6, 2020, a signature banquet in San Luis Obispo County will be held to conclude the yearlong celebration. The following day, the department plans a golf outing and wine tasting.

"We will share our vision for how we will continue to lead construction education for the next 50 years," Woo said. "It will be a great time to visit the Central Coast and reconnect with other alumni."

The department will send out formal invitations and email alerts to join the celebrations, which will include mixers, special projects, and a campaign leading to naming opportunities. Updates will be posted at: <https://construction.calpoly.edu/>.

"The campaign will invest in strengthening curriculum, advancing collaboration, and promoting Learn by Doing activities that inspire every student to transform the future of the construction industry," Woo said. "It will provide a vehicle to leave a lasting impression on the CM Department." ■



CM MILESTONES

- 1970** ▶ Construction Engineering Department is founded and headed by Bill Brown.
- 1978** ▶ Name is changed to the Construction Department, it is accredited by the American Council for Construction Education, and Jim Rodger serves as interim department head.
- 1979** ▶ Ronald Shaw is named department head.
- 1980** ▶ Jim Rodger is interim department head.
- 1981** ▶ Dave Pierce is named department head.
- 1984** ▶ Name is changed to the Construction Management Department.
- 1986** ▶ Jim Rodger is named department head.
- 1988** ▶ First win at the Associated Schools of Construction (ASC) competition.
- 2002** ▶ Al Hauck is named department head.
- 2008** ▶ Construction Innovations Center opens.
- 2009** ▶ Integrated curriculum is implemented.
- 2010** ▶ Simpson Strong-Tie Lab opens.
- 2019** ▶ Jeong Woo is named department head.

ALUMNI: SHARE YOUR PHOTOS!

Have a photo album tucked away from your college days? If so, we invite you to share a few photos. Please submit high-resolution (300-dpi) scans to cm50th@calpoly.edu with photo details, such as the folks pictured and graduation years, so we can get permission for use. Our archivist will contact you with any questions. Note that we have all senior class photos except 1973 and 1981, so dig deep and help us complete our collection.

PICTURED (FROM TOP):

- Then-Department Head Al Hauck (center) with his predecessors Jim Rodger (left) and Bill Brown in 2008.
- CM majors Gigi Lasquete (left) and Kristin Schussel (nee Wilbur) navigate a concrete canoe contest in the 1990s.
- CM's team placed first at the inaugural ASC competition in 1988.
- CM major Jessica Boriskin enjoys young locals during a 2008 visit to Tanzania.

SENIOR PROJECT



A LASTING LEGACY

CONSTRUCTION MANAGEMENT graduates Tony Pellegrini (CM, '19) and Harrison Woods (CM, '19) have succeeded in doing what so many students in the College of Architecture and Environmental Design (CAED) have wanted to do: leave a lasting mark at their alma mater.

That “mark” is a 12-foot by 12-foot redwood observation deck situated near the top of Poly Canyon. The trapezoid-shaped structure satisfied their senior project requirement, ended a nearly 15-year lapse in new construction in the canyon, and now provides a welcome space for runners and hikers to rest, reflect and enjoy the view.

Poly Canyon is a 9-acre expanse where, in the past, mostly CAED students had practiced Learn by Doing through full-scale design and construction.

The deck was designed by two architectural engineering majors — Emir Kuljancic (ARCE, '19) and senior Sitora Vaxidova — but they lacked the funding to get it built. Woods' interest was sparked the moment he heard about it.

“I needed a senior project, and I'm passionate about building,” he said. “I wanted a project that would have an impact, but project-based senior projects are few and far between. This project utilizes all the knowledge we've acquired as students. We enjoy Learn by Doing, and this embodies that perfectly.”

Woods invited Pellegrini to help. They knew they worked well together, having served as co-captains of the winning Concrete Team at the 2018 Associated Schools of Construction Region 3 Division Competition in Illinois and the 2019 Region 6 and 7 competition in Nevada.

Pellegrini was intrigued by the possibility of building in Poly Canyon.

“I remember during WOW Week people trying to describe Poly Canyon,” Pellegrini said. “The first time I saw it, I was very impressed, seeing what students had built there. I wanted to do



OBSERVATION DECK PROJECT REVIVES CONSTRUCTION IN POLY CANYON

that, but I thought it wasn't allowed. This opportunity was too good to be true.”

Woods added, “We wanted to put our name on something and inspire the next class of students.”

Though they learned about the project in spring 2018, they didn't start construction until spring 2019.

“We had to be persistent,” Woods said. “We didn't get the building permit until January, and then the rain kept us out. When spring quarter came around, we had 10 weeks in which to get it built.”

The two worked 10-hour days in the canyon Friday, Saturday and Sunday and completed administrative duties during the week.

“It has doubled our workload,” Pellegrini said. “When we run into problems, we figure it out for ourselves. We learn something every day.”

Added Woods, “I think we are learning much more than if we were

Above: A newly built observation deck offers a resting place with a view for visitors to Poly Canyon.

Opposite: Recent CM graduates Tony Pellegrini (left) and Harrison Woods enjoy their completed senior project with one of the designers, ARCE senior Sitora Vaxidova, and other visitors.

doing a research paper. The problems that we are running into are probably the same ones we'll run into in our careers.”

For Woods, the best part of the experience is “showing everyone on campus that students shouldn't be deterred.”

Pellegrini can't wait to show it off to everyone who helped. “We could not have done it without the support of our family and friends,” he said. “I can't wait to finally show it to them.” ■

WEED WORK

FACULTY AND STUDENTS’
PRE-FABRICATED HOME
PROJECT BENEFITS THE
FIRE-RAVAGED NORTHERN
CALIFORNIA TOWN



THE FAST-MOVING BOLES Fire that swept through the small Siskiyou County town of Weed, California, in mid-September 2014, destroyed 150 residential structures and eight other buildings. That devastation naturally caused much suffering; however, it also led to a unique learning opportunity for an interdisciplinary group of students and faculty in Cal Poly’s College of Architecture and Environmental Design.

The team’s ambitious goal? To design and build a prototype for affordable homes for working families. The effort was led by construction management (CM) Associate Professor Greg Starzyk, architecture Lecturer Margaret “Maggie” Kirk, and architectural engineering Lecturer Dennis Bashaw, who combined their 400-level classes into a team-taught studio in fall 2017.

Great Northern Services, a community-based nonprofit agency based in Weed, asked Cal Poly to design workforce

Associate Professor Greg Starzyk and CM seniors (from left) Patrick Shami, Jeremiah Eseed and John Espino shipped the fabricated panels they built and materials to Weed.

housing that could be built in panels on campus. The project also involved the College of the Siskiyous (COS), which instituted a construction trades class.

After that first quarter, executives at GNS reviewed the students’ conceptual designs for single-family and duplex homes, selected two designs and suggested combining the best features of both.

The following quarter, students refined the design and planned the construction processes, intending to have a complete set of plans ready and permitted in spring, so that construction could begin in summer 2018, when COS students in the construction trades class could work on the project.

“It was to be their first project,” Starzyk said, “but the start of the class stalled, and construction was pushed back a year.”

Plans were set to fabricate 25 panels for the home’s exterior walls. CM seniors Jeremiah Eseed, Patrick Shami and John Espino made it their senior project.

“They met with me weekly during winter quarter while they created spool drawings,” Starzyk said, referring to the detailed drawings of each wall.

“During spring, the three senior-project students, CM Assistant Professor Joe Cleary and I spent Fridays, all day, in the Simpson Strong-Tie Lab, fabricating panels,” Starzyk continued. “The most difficult issue was moving the nearly 500-pound panels. The lab lacks an overhead bridge crane and other lifting equipment. The students devised simple moving methods and recruited other students to help push the panels around.”

Espino estimated that he worked more than 100 hours over two quarters. “We did pre-construction in winter 2019. We were planning, estimating, looking for space to build and store material, and communicating with GNS and each other.”



Espino is grateful for the lessons he learned working on the project. “I learned that you cannot do a construction project by yourself; you need others’ input and knowledge. It made me realize I need to have back-up plans if something doesn’t work out, and it helped me become a better problem-solver. Most gratifying was constructing something for a good cause before I graduated.”

Cal Poly shipped the panels to Weed during summer 2019 so that COS students could build the deck, or first-floor platform, Starzyk said. “Two other COS classes will erect the exterior partitions on the deck this fall.”

The project was another prime example of Learn by Doing. “This was a practicum of carpentry, not a classroom exercise, but the real deal,” Starzyk said. “It was not construction management — emphasis on management — but actual construction, which is not learned so much by study as it is by sweat, fatigue, frustration, and relentless doing.”

Top: Eseed, Shami and Espino built the home’s exterior walls as their senior project.
Above: A model of the house design.

While many students build structures for their senior projects, this project was on another level entirely. A family will actually occupy this home.

“What set this project apart was its scale and veracity,” Starzyk said. “Most students who build something, build something small: a deck, accessible ramp, shelves, some cabinets. But even when a project is large in scale — entire modular houses have been built by Cal Poly students — they are not ordinarily permitted projects, built to code, for a real client.” ■

WELL-DESERVED RECOGNITION

Construction management Associate Professor Greg Starzyk, architecture Lecturer Margaret “Maggie” Kirk, and architectural engineering Lecturer Dennis Bashaw won the Service Learning – Faculty Team award in spring 2018 for their work on the Weed project.

The team was recognized at the 32nd annual Cal Poly Community Service Awards ceremony. Cal Poly President Jeffrey D. Armstrong and other state dignitaries were on hand to present the award, which included commendations from the California Assembly and San Luis Obispo County.

TROPHIES GALORE

CAL POLY CONSTRUCTION MANAGEMENT TEAMS SWEEP ASC REGION 3 CONTESTS

THE ACADEMIC YEAR got off to a great start, with Cal Poly construction management (CM) students sweeping all four open national categories at the 2018 Associated Schools of Construction (ASC) Region 3 Division Competition in Downers Grove, Illinois. The Concrete, Electrical, Preconstruction and Project Solutions teams garnered four first-place trophies at the competition, held Oct. 17-20.

“There was something special about all four of this year’s teams,” said CM Associate Professor Greg Starzyk, who has advised the teams for six years. “They worked so well together that they made the work appear effortless.”

ASC Region 3 encompasses Illinois, Indiana, Kentucky, Michigan, Ohio and Wisconsin. The competition’s seven categories are open to ASC Region 3 schools; four categories are open to teams from any ASC-affiliated school in the nation.

During the competition, teams are given a short window to turn in their materials. “The greatest challenge is time management,” said fourth-year student Arlen Hartoonian, a Concrete Team member. “Given that we had little more than 24 hours between the assignment of the prompt and the meeting with the judges, most would think that there would be a surplus of time. However, our attempt to understand the project as thoroughly as possible meant every hour was valuable to us.”

For complete competition results, go to <http://ascregion3.wixsite.com/ascregion3>. For photos and more information about Cal Poly’s teams, go to construction.calpoly.edu/content/competitions-and-awards/asc-3. ▶

The Concrete Solutions Team beams over their first-place victory in the ASC Region 6 and 7 competition.



THE WINNING TEAMS AND THEIR GENEROUS SPONSORS

ASSOCIATED SCHOOLS OF CONSTRUCTION TEAMS

REGION 3 (2018)

First Place: Concrete Solutions Team: Keenan Brekke (Captain), Arlen Hartoonian, Tony Pellegrini, Timothy Smith, Samantha Solow and Harrison Woods.

First Place: Electrical Team: Lorcan Yeung (Captain), Chris Audi, Giovanni Dal Canto, Ryan Fiorio, Nicholas Gairaud and Theodore Powers.

First Place: Preconstruction Services Team: Ally Forster (Co-Captain), Dominic Parella (Co-Captain), Connor Cody, Manny Gonzalez, Billy Markham and Jake Navarre.

First Place: Project Solutions Team: Chris Farkas (Co-Captain), Nicklaus Wilcots (Co-Captain), Michael Avila, Donnie Lipsey, Katie Love and Zach Stellini.

REGION 6 AND 7 (2019)

First Place: Concrete Solutions Team: Arlen Hartoonian, Gavin Griffin, Tony Pellegrini, Timothy Smith, Sam Solow and Harrison Woods. Alternates: Grace Brekke and Sterling Treloar.

First Place: Heavy Civil Team: Jared Calise, Tony Roberts, Sean Stratton, John Theofanides, Cameron Tilmont and Jason Wahlund. Alternates: Kyler Cruz and Ryan Nielsen.

First Place: Mixed Use Team: Adam Alvarez, Dante Feliciano, Austin Logan, Alyssa Mathias, Ryan O'Neill and Sherry Saroufeem. Alternates: Tim Bartolomei and Matthew Robert Langbehn.

Third Place: Commercial Team: Parker Doshier, Forrest Gobble, Will Myers, Marco Reza, Avery Spector and Harrison Wygal. Alternates: Anna Dissman and Connor Morinini.

Third Place: Project Management Team: Michael Avila, Chris Farkas, Donnie Lipsey, Katie Love, Collin Martin and Nicklaus Wilcots. Alternates: Kirk Arena and Alexandra Gattuso.

2018-19 NATIONAL ASSOCIATION OF HOMEBUILDERS TEAM

Third Place Nationally: Abraham Ahmed, Caroline Burke, Matthew Jacob "Jake" Colbert, Cornelis De Nysschen, Parker Doshier, Jordan Harrison, Will Kieckhefer, Jeff Koby, Collin Martin, Shay O'Laughlin, Dom Parella and Hunter Price.



HOLLAND CONSTRUCTION, INC



2020 EVENTS CALENDAR

JAN. 14

50th Anniversary Construction Management Advisory Committee (CMAC) Mixer - XL Construction, San Jose, California

JAN. 30

Semi-Annual Construction Management (CM) Job Fair

FEB. 5-8

Associated Schools of Construction (ASC) Competition - Sparks, Nevada (<http://asc67.org/>)

FEB. 6

CMAC Mixer - Sparks, Nevada

FEB. 20-22

National Association of Home Builders Competition - Las Vegas, Nevada (www.buildersshow.com)

MARCH 12

50th Anniversary CMAC Mixer - Whiting-Turner Contracting Company, San Diego, California

APRIL 9

50th Anniversary CMAC Mixer - PCL, Glendale, California

APRIL 15-18

ASC International Faculty Conference - Liverpool, U.K. (<https://www.ljmu.ac.uk/conferences/asc-2020>)

APRIL 16-18

Cal Poly Open House

MAY 7

50th Anniversary CMAC Mixer - Webcor Builders, San Francisco, California

MAY 29

CMAC Meeting - San Luis Obispo, California
CM Scholarship and Awards Reception

MAY 29-30

CM Spring Banquet and Golf Tournament

JUNE 13-14

Spring Commencement

SEPT. 13-20

Week of Welcome

OCTOBER (DATE TBA)

Semi-Annual Construction Management Job Fair (<https://construction.calpoly.edu/content/opportunities/recruitment/cm-job-fair>)

OCT. 14-17

ASC Region 3 Student Competition - Downer's Grove, Illinois (<https://ascregion3.wixsite.com/ascregion3>)

OCT. 23-25 (TENTATIVE)

Mustang Family Weekend (<https://parent.calpoly.edu/events>)

NOV. 6

CMAC Meeting - San Luis Obispo, California
CM 50th Anniversary Celebration Dinner

NOV. 7

CM 50th Anniversary Celebration Activities

Competitions CONTINUED FROM PAGE 21

STUDENTS WIN TOP HONORS AT ASSOCIATED SCHOOLS OF CONSTRUCTION COMPETITION

Five out of 12 Cal Poly Construction Management teams placed in the top three spots in their respective categories at the Associated Schools of Construction (ASC) Student Competition in Reno, Nevada. Cal Poly students took home more trophies than any other university.

Cal Poly students won first place in the Concrete, Heavy Civil, and Mixed Use categories, and third place in the Commercial and Project Management categories. The Concrete and Project Management teams won national awards; the Commercial, Heavy Civil, and Mixed Use won the ASC Region 6 and 7 competition.

A total of 197 teams from 49 universities competed in the competition, held in early February. A record-high 1,463 construction management students (including alternates) participated in the competition, which included 96 Cal Poly students from the College of Architecture and Environmental Design. Cal Poly has competed in this event for 31 years.

For more information and to see photos of the winning teams, go to <https://construction.calpoly.edu/content/competitions-and-awards/asc-6-7>.

CAL POLY NAHB STUDENT CHAPTER PLACES THIRD AT NATIONAL COMPETITION

Cal Poly's student chapter of the National Association of Home Builders (NAHB) placed third in the Four-Year College category of the NAHB Student Competition, held as part of the annual NAHB International Builders' Show (IBS) in Las Vegas.

Fifty-seven teams representing universities, community colleges, high schools and career technical schools from across the U.S. participated in the annual competition.

The competition gives architecture, business and construction management students the opportunity to apply skills learned in the classroom to the real world by completing a management project or proposal for a real project.

For this year's competition, students had to develop a proposal to acquire and develop a 152-acre parcel in Oklahoma.

"The Cal Poly the team worked through fall quarter 2018 to get their deliverables in," said CM Assistant Professor Stacy Kolgraff, who co-advises the team with Associate Professor Scott Kelting. "There were some complications to the project that needed to be considered, including wetlands and zoning requirements."

Judges reviewed the proposals, paying attention to the market analysis, site design, cost estimate and schedule, site management and logistics, sales and marketing strategy, financial analysis, risk analysis, and sustainability.

"In Las Vegas, their presentation execution was flawless," Kolgraff said. "They should be really proud of the work they accomplished over the two quarters." ■

Spring Banquet Honors Students

NEARLY 250 PEOPLE gathered for the Construction Management Department's Spring Banquet, held June 7 at Cypress Ridge Golf Course in Arroyo Grande, California. Faculty, staff, students and their dates and industry partners cheered for the students who were being honored for their accomplishments during the 2018-19 academic year.

The end-of-the-year event celebrates senior award winners (*see related article, Pages 24-29*), student winners of competitions, scholarship award recipients, and — new this year — the student who earned the highest score on a national certification exam. This year the department awarded more than \$90,000 in scholarships to 20 students (*listed at right*).

"It's exciting to see the synergy between our industry partners and our students," said Rachell Smith, executive secretary for CMAC (Construction Management Advisory Council) and program manager for the CEEE (California Center for Construction Education). "The event has become so popular, we've nearly maxed out our venue." ■

Former CM Department Head Al Hauck presents Matt Williamson with a special award for his high score on the American Institute of Contractors Associate Constructor certification exam.

2019-20 SCHOLARSHIP RECIPIENTS

American Society of Professional Estimators Chapter 55 Scholarship

\$2,000 each: Xavier Caldera, Jacob Clark, Ellis Fryer, Maggie Lai and Shay O'Laughlin

Beavers Heavy Construction Scholarship

\$3,000 each: Adriana Bernabe Martinez, Grace Brekke, Kyler Cruz and Collin Martin

Kris Cello Scholarship

\$1,500: Jacob Clark

Don Chapin Company Scholarship

\$2,400 each: Josh De Mattei and Heilam Wu

Hayward Lumber/ Edgar Contreras Memorial Scholarship

\$1,000: Luis Badillo

Herbert E. Collins Scholarship

\$1,800 each: Adriana Bernabe Martinez, Jacob Clark, Josh De Mattei, Collin Martin, Everett "Tony" Roberts and Avery Spector

Allen and Nancy Minton Scholarship

\$24,000: Tim Bartolomei

Robin L. Rossi Scholarship

\$1,000 each: Luis Badillo, Kyler Cruz, Ramon Hernandez and Maggie Lai

Don Tanklage Scholarship

\$5,000 each: Adriana Bernabe Martinez and Collin Martin

Blair Tulloch Memorial Scholarship

\$3,480 each: Ava Bednarek, Kyler Cruz and Carson Ernst

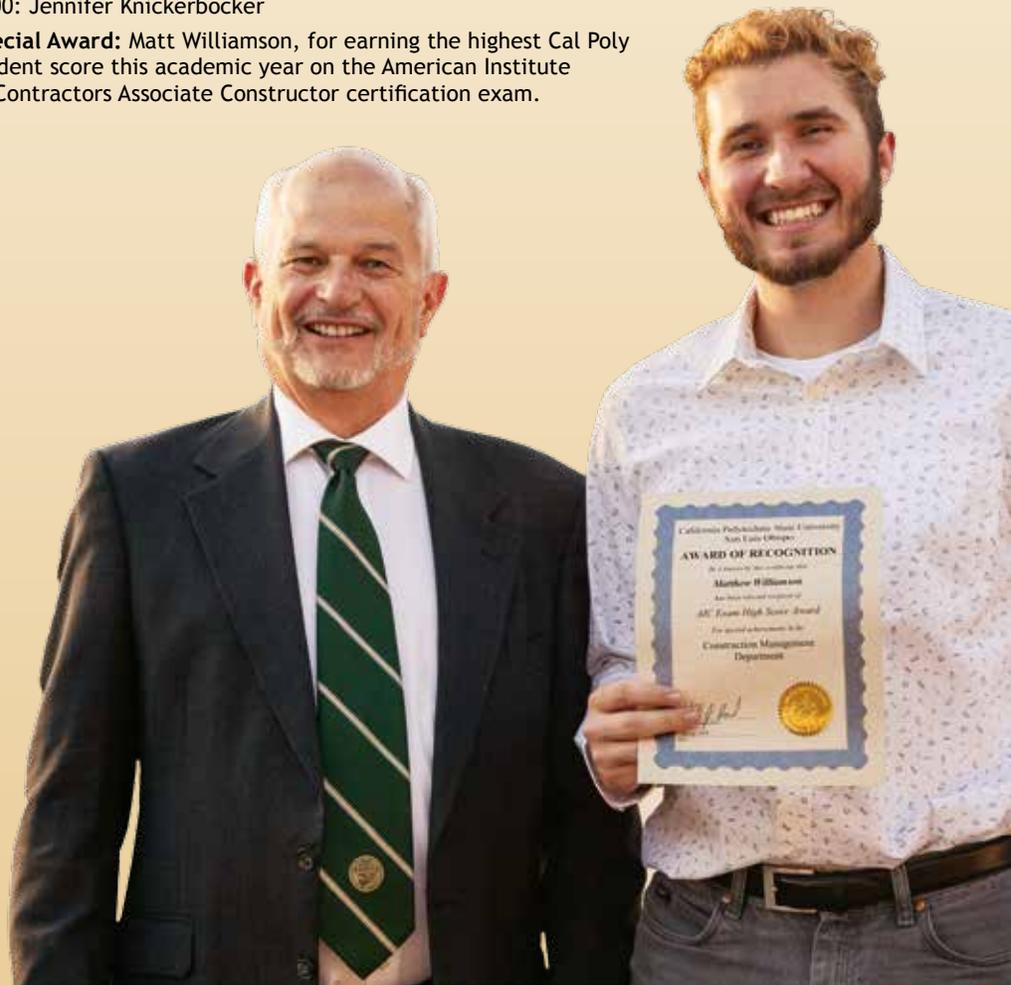
Vinnell Foundation Scholarship

\$1,800: Dante De Mayo

Women in Construction: Sponsored by Blach Construction

\$500: Jennifer Knickerbocker

Special Award: Matt Williamson, for earning the highest Cal Poly student score this academic year on the American Institute of Contractors Associate Constructor certification exam.



Celebrating

RECOGNIZING SIX STUDENTS IN THE CLASS OF 2019



Jeremiah Eseed

SERVICE TO THE DEPARTMENT

JEREMIAH ESEED (Construction Management, '19), searched for a major that would combine his interests in engineering, building, leadership and management. "In high school, I explored all of these through clubs and classes. My engineering teacher's daughter was a construction management (CM) major at Cal Poly, and I realized it was a perfect fit."

Eseed knew immediately that the CM faculty were going to be instrumental to his success. "They are extremely experienced and invested in sharing their knowledge, which made me want to learn even more," he said. "One of my professors during my freshman year, Elbert Speidel, noticed I really liked modeling and software. He guided me toward my niche in Building Information Modeling (BIM)."

Eseed put his BIM knowledge to the test by competing in the Associated Schools of Construction Student Competition on the Virtual Design and Construction Team. "When you learn in the classroom, it's a controlled environment. In the competitions, we're dealing with a real-world simulation in which every choice and change has consequences," he said. "It puts you under a lot of pressure, but allows for you to grow, shine, and learn to handle stress."

Eseed's experience with modeling software landed him in front of the classroom teaching BIM courses his senior year. In recognition of this and other contributions, he was awarded the 2018-19 Service to the Department Award. "The faculty vote on these awards, so I was honored to receive this from people I greatly respect," he said.

Teaching the BIM classes helped Eseed recognize that he had a knack for translating software into practical use on student projects. "I love helping people, and I could put myself in each student's shoes as they were trying to navigate the technology," he said. "This opportunity solidified my plan to teach later in my career."

Beyond the department, Eseed joined the Omega Xi Delta fraternity and the Pilipino Cultural Exchange (PCE). "I learned about these groups during PolyCultural Weekend for newly admitted students. It was important to me to be part of these communities; they provided a good support network," he said. "It was also amazing to be involved in various events like the Lantern Festival, which shares our culture with everyone at Cal Poly."

Eseed lives in the Bay Area, working as a project engineer for Turner Construction.

JEREMIAH'S ACTIVITIES

Jeremiah Eseed, winner of the 2018-19 Service to the Department Award, stayed active in:

Associated Schools of Construction Region 6 and 7 Competition Virtual Design and Construction Team

Junior - Third Place
Senior - Co-Captain

Building Information Modeling Student Club

Senior - Treasurer

Omega Xi Delta Fraternity

Freshman, Junior, Senior - Member
Sophomore - External Vice President

Pilipino Cultural Exchange

Freshman, Junior, Senior - Member
Sophomore - Modern Dance Coordinator

Excellence

FOR THEIR ACCOMPLISHMENTS AND CONTRIBUTIONS

Allyson Forster

SERVICE TO THE DEPARTMENT

ALLYSON FORSTER (Construction Management, '19) considered a number of schools but ultimately followed a tradition set by her father and two older sisters who had also majored in Cal Poly's construction management (CM) degree program. "Cal Poly felt like home, and I had a big network of people there," she said. "I got the chance to become a young professional in a supportive and comfortable setting."

Fostering connections had a big impact on Forster and her success in the major. "Construction is a relationship-based industry," she said. "As students, we learned to support one another in a competitive and professional setting that mirrors what we'll find in the workplace."

Forster seized the opportunity to help her fellow students by becoming a student assistant in the Simpson Strong-Tie Materials Demonstration Lab, where hands-on learning comes to life. "My job was to help classes with framing, installation, water-proofing, and more — all while maintaining strict safety standards," she said.

The department recognized Forster's efforts in advancing the Learn by Doing concept by awarding her the 2018-19 Service to the Department Award. "The department gave me so much; I wanted to invest back into it," she said. "I got to make an impact that people could see, and it was really meaningful to be recognized for that."

She also pursued other activities as an investment in herself. "I wanted a well-rounded college experience, so I made time to be on the cheerleading squad for four years," she said. "I also wanted to place my academics front and center, so I joined the construction management honor society, Sigma Lambda Chi. I'm proud to say that as president, I helped recruit the most inductees ever."

Being a member of the Preconstruction Team at the Associated Schools of Construction Competition was a highlight for Forster. "The strength of Cal Poly's teams comes from understanding that our peers are our best resources," she said. "We did a lot of prep before the actual competition. We went to our fellow teams when we needed specialized knowledge about things like concrete or technology. I find we're stronger when we work together."

Forster lives in Los Angeles, where she is working on a student housing project as a field engineer for PCL Construction.



ALLYSON'S ACTIVITIES

Allyson Forster, the 2018-19 Service to the Department Award winner, was active in:

Associated Schools of Construction Competition Preconstruction Team

Sophomore - Region 6 and 7 - Alternate
Junior - Region 6 and 7 - First Place;
Region 3 - First Place
Senior - Region 6 and 7 - Captain;
Region 3 - Captain - First Place;
Region 8 - Fourth Place/Honorable Mention

Cal Poly Cheerleading

Freshman, Sophomore, Junior -
Squad Member
Senior - Captain

Sigma Lambda Chi Student Chapter

Sophomore and Junior - Member
Senior - President

Celebrating



Arlen Hartoonian

SERVICE TO THE DEPARTMENT

ARLEN HARTOONIAN (Construction Management, '19) was always certain he wanted to major in something related to the built environment. As soon as he came to Cal Poly, he realized the Construction Management (CM) Department was the perfect fit for him. "The polytechnic aspect really shines through in some majors, and CM is one of them. Students apply the Learn by Doing philosophy by working together to build things with our own hands," he said.

That sense of shared purpose is a highlight of Hartoonian's undergraduate experience. "We're all here because we love to build. That fosters a tight-knit community within the major and brings a uniqueness to the program," he said.

Hartoonian thrived academically and was rewarded with the department's 2018-19 Outstanding Senior Award, given to the graduating student with the highest GPA. Achieving a 3.9 GPA was a challenge he took seriously. "Time management was definitely key. I scheduled each day to the fullest, especially the valuable time between classes," he said. "The bonus was that I was able to accomplish a lot and still have time for fun on weekends."

Another important aspect to his success was joining the university's Armenian Student Association. "Being a part of this cultural club helped me adjust to living in San Luis Obispo and provided a needed support system," Hartoonian said. "We welcomed everyone to our events and proudly shared our heritage with them."

He competed four times on the Concrete Solutions Team in the Associated Schools of Construction student competition. "That was a high-stress environment, but it provided me with some of the most valuable experiences as a student. My specialty on the team was estimating, and it was so rewarding to win first place in two regional competitions my senior year," he said.

Hartoonian's hard work paid off, but he is quick to point out how instrumental the department was in all his accomplishments. "The CM Department's resources and strong industry ties truly enhance our education," he said. "Plus, the faculty and staff went above and beyond to help me succeed."

Now living in Los Angeles, Hartoonian is a project engineer with MATT Construction.

ARLEN'S ACTIVITIES

Arlen Hartoonian, who earned the 2018-19 Outstanding Senior Award, was active in several extracurricular activities, including:

Armenian Student Association

Freshman, Sophomore, Junior - Member
Senior - Vice President

Associated Schools of Construction Competition Concrete Solutions Team

Junior - Region 6 and 7;
Region 3 - Second Place
Senior - Region 6 and 7 - First Place;
Region 3 - First Place

Associated Students of Construction Management

Sophomore, Junior, Senior - Member

Excellence

Katherine Love

INCLUSIVITY AWARD

KATHERINE LOVE (Construction Management, '19) didn't follow a traditional path into the Construction Management (CM) Department.

"I started Cal Poly in a different major, but I met all of these incredible CM students in the dorms. They were so excited about what they were doing, so I decided to check it out," Love said.

"Understanding how buildings come together and learning to read plans was all it took for me to make the switch to CM."

To enhance her education, Love availed herself of the numerous networking opportunities with industry.

"Companies come to the department to recruit students for internships and full-time jobs," she said. "In one of my internships, I was given a great deal of responsibility, which provided huge growth experience and gave me more confidence."

Love helped other students recognize the value of networking and internships as a part of her work with the Women in Construction (WIC) club.

"Our events were designed to provide resources for students, and we opened them up to everyone. I'm particularly proud of our workshop series intended to educate students about internships and professional development."

To recognize her achievements, Love won the department's unique 2018-19 Inclusivity Award, created just for her.

"I was surprised and proud to receive this award. I believe inclusivity is very important, and we need to continually practice it," she said.

As president of WIC, Love enjoyed the club's social aspects.

"Bringing a group of women together to discuss and legitimize our struggles was important. Together we could problem-solve valuable solutions and provide each other with support," she said.

While participating in the Associated Schools of Construction Student Competition, Love didn't have an assigned role.

"On the Project Management Team, my job was to help wherever it was needed, and I was determined to learn as much as I could," she said. "The Region 3 competition in Chicago had a new section testing our knowledge of hospitals. That was certainly a challenge, and we were so proud to walk away with a first-place win."

Love expects to graduate in fall 2019.



KATHERINE'S ACTIVITIES

Katherine Love, who earned the 2018-19 Inclusivity Award, participated in the following activities:

Associated Schools of Construction Competition Project Management Team

Senior - Region 6 and 7 - Third Place;
Region 3 - First Place

Women in Construction Club

Junior - Marketing and
Communications Chair
Senior - President

Celebrating



Peter Riley

OUTSTANDING LEADERSHIP

GROWING UP DOING hands-on building projects, Peter Riley (Construction Management, '19) knew that construction was the right field for him as he started to research college programs. "Cal Poly was my top choice because I liked the way it combined both business and engineering with construction management," he said. "I got accepted during early decision, and I only regret that the time went by too quickly."

Riley saw the value in all the opportunities the department had to offer in addition to the classroom, and he strove to make the most of them. "Being involved in clubs and competitions helped give me a more immersive, comprehensive education and definitely shaped my college experience," he said.

Riley quickly found his way into key leadership positions and was recognized with the CM Department's 2018-19 Outstanding Leadership Award for his contributions. "I was honored and humbled to receive this award because I didn't really set out to be a leader. I just wanted to provide support to my fellow students," he said.

One of Riley's leadership roles was serving as captain of the Virtual Design and Construction (VDC) Team for the Associated Schools of Construction student competition. He extended this role further by organizing the leadership of all the teams. "I was in the role of captain of captains. We met regularly to be sure we were providing a uniform base for each of our 12 teams and strategize how to use each team's skill sets to help one another," he said. "It definitely made us better competitors."

Riley's expertise in VDC extended past the competitions and into the classroom, where he helped teach BIM classes for two years. "Understanding the technology side of construction, and being able to share it, allowed me to really flourish in the program," he said.

As president of the Cal Poly Construction Management Association of America student chapter, Riley helped increase enrollment in the recently reactivated chapter through a variety of activities. "CMAA is a national professional organization dedicated to providing quality construction managers to the architecture, engineering and construction industry," he said. "It was gratifying to offer our student members opportunities to participate in workshops, jobsite tours, and junior accreditation exam preparation. All of this will continue to help them in the industry."

Riley is a project engineer for Truebeck Construction in the Bay Area.

PETER'S ACTIVITIES

Peter Riley, who earned the 2018-19 Outstanding Leadership Award, was involved in the following activities:

Associated Schools of Construction Region 6 and 7 Competition

Virtual Design and Construction Team

Junior - Third Place

Senior - Captain

Building Information Modeling Student Club

Sophomore - Member

Junior - Social Media and Marketing Chair

Senior - Vice President

Construction Management Association of America Student Chapter

Junior - Board Member

Senior - President

Excellence

Sherry Saroufeem

OUTSTANDING LEADERSHIP

DURING A HIGH SCHOOL internship with an architectural firm in Germany, Sherry Saroufeem (Construction Management, '19) got a chance to visit an active jobsite. From that moment on, she knew she wanted to pursue construction management.

Coming to Cal Poly was an easy decision for Saroufeem. "The construction management (CM) program had everything I was looking for: hands-on activities, the ability to take CM classes as a freshman, and a close-knit community of students, faculty and staff," she said. "I knew everyone in my major, and we worked hard to support one another."

Another benefit of the program was the numerous extracurricular opportunities. Saroufeem dove right into the Associated Students of Construction Management (ASCM) club and competed in the Associated Schools of Construction (ASC) student competition. Both led to leadership positions and earned her the CM Department's 2018-19 Outstanding Leadership Award.

As president of ASCM, Saroufeem was involved in such well-known events as the golf tournament and spring banquet, but it was the smaller events that became most memorable. "Having things like barbecues and pancake days were fulfilling and helped us come together as a club," she said. "I was honored to be president, but it was only with the help of the other board members that I was able to effectively lead."

Saroufeem used the resources available to connect with alumni. "We used social media to make sure the CM family stayed in contact after graduation," she said. "I also got heavily involved in merchandising, which was a win-win that provided fundraising for ASCM and a way for alumni to show their Cal Poly pride."

As captain of the ASC Mixed-Use Team, she felt pressure to bring home a win. "Cal Poly hadn't placed in this category for a while, so the team put in a lot of energy pre-competition to make sure we brought our best," she said. "It worked; we brought home a first-place win. Receiving that trophy was an overwhelmingly amazing moment."

Saroufeem encourages students to get involved right from the start, like she did. "The CM Department provides so much more than just academics," she said. "There's no reason not to jump right into everything and see where it takes you."

Saroufeem is a field engineer at Sundt Construction in San Diego. ■



SHERRY'S ACTIVITIES

Sherry Saroufeem, winner of the 2018-19 Outstanding Leadership Award, participated in:

Associated Schools of Construction Region 6 and 7 Competition Mixed-Use Team

Sophomore - Alternate
Junior - Team Member
Senior - Captain, First Place

Associated Students of Construction Management

Freshman - Board Member
Sophomore - Open House Chair
Junior - Vice President
Senior - President

Expanding Our Expertise

LECTURER BRYAN KNAKIEWICZ JOINS DEPARTMENT; LECTURER ERIC BRINKMAN



Bryan Knakiewicz taught civil engineering technology at Savannah State University.



Before teaching, Eric Brinkman worked for two decades as a general contractor.

LECTURER BRYAN KNAKIEWICZ joined the Construction Management (CM) Department this fall quarter, and former part-time Lecturer Eric Brinkman is now teaching full time to help fill the gap made when faculty members Elbert Speidel and Barry Jones retired. (See related article on Pages 32-33).

BRYAN KNAKIEWICZ

Knakiewicz, who grew up in rural Michigan, moved to the Central Coast with his wife and toddler daughter. He left an assistant professor position at Savannah State University, where he had been teaching civil engineering technology since 2012.

Teaching as a profession didn't occur to Knakiewicz until a little later in life. "I was working as a municipal construction engineer in Dundee, Michigan, and the city had a tuition reimbursement program," he explained. "I went back to get my master's degree, and then doctorate. While working on my Ph.D., I was asked to teach an adjunct course. I accepted.

"After that one course, I didn't renew my construction engineering contract," Knakiewicz continued. "I fell in love with teaching."

He is enthusiastic about teaching at Cal Poly, which he said is widely respected. "I don't know if the faculty and staff at Cal Poly are aware of its image, but the university's — and the CM Department's — reputation is very highly regarded across the country," he said.

Knakiewicz cited the Learn by Doing philosophy as another reason he wanted to teach at Cal Poly. "I have been trying as much as possible to implement practical lessons into my own curriculum at

Savannah State," he said. "I would take my classes on site visits and field trips to expose them to the actual workforce and to projects. We also competed in several engineering student competitions that were a ton of fun."

At Cal Poly he will teach Construction Fundamentals, Cost Evaluation, and Building Information Modeling.

Knakiewicz considers himself to be persistent, encouraging and active, qualities that could prove useful in his goals to become an integral advisor for CM student competitions and conduct new research projects with students that can benefit the regional construction industry.

He wants students to know that anything is possible with a focus. "Keep your focus on a goal. That is why I'm here today," he said.

ERIC BRINKMAN

Before joining the CM faculty, Cal Poly Lecturer Eric Brinkman (Construction Management, '97) enjoyed a long and varied career that included seismic retrofitting of bridges, building townhomes and million-dollar houses, and owning and operating his own business.

After nearly two decades in private industry, the licensed general contractor changed course, enrolling in the master's program in construction management at Arizona State University with the goal to teach. He's actually been teaching part time in the CM Department since 2016; he began his full-time appointment in fall 2019.

"I wanted to be in a fulfilling environment and give back to the school and the industry that has been such a

MOVES TO FULL-TIME STATUS

major part of my life,” Brinkman said. “I wanted a new career that would define the next chapter of my life.”

His teaching load will consist of Materials and Methods of Construction, Residential Construction, Fundamentals of Construction Management, and Construction Management and Project Planning, a course for non-majors.

Incorporating Learn by Doing into his classes should come naturally. “Much of my experience was hands-on and Learn by Doing. I was put into a situation, and I had to figure it out as I went along,” Brinkman said. “My experience as an undergrad at Cal Poly absolutely helped me face those challenges.

“I consider Learn by Doing to be very effective,” he continued. “In my Residential Construction class, students estimate and schedule the construction of an entire house utilizing a newly learned computer program. They quantify every component of a house, which provides the opportunity to learn about the materials and processes that go into the construction of a home, while also learning new computer skills. We then take those skills and apply them to build ‘tiny-homes’ in a hands-on fashion.”

In his classroom he aims to bring the same attributes he strives for in his personal life. “I try to follow my parenting style — to be caring, respectful and supportive while also expressing clear expectations.

“I think students understand that I have their best interests in mind, and that I’m here to help them succeed. But to succeed you have to work hard!” ■



Joseph Cleary has been appointed assistant professor.

Kudos

JOSEPH CLEARY NAMED ASSISTANT PROFESSOR

Construction management (CM) faculty member Joseph Cleary, who came on board last year as a lecturer, has been appointed assistant professor, effective with the start of fall quarter 2019.

Cleary brings years of industry experience to his classes, which primarily are Commercial Construction Management and Specialty Contracting Construction Management. His research interests are in net-zero energy buildings and sustainable infrastructure, as well as integrated project delivery, modularization, and labor relations.

In addition to earning a bachelor’s degree in construction management and a master’s in project management, both from Illinois State University, Cleary holds building safety assessment certifications through the California Governor’s Office of Emergency Services and Federal Emergency Management Agency.

“We were pleased to welcome Joe and his family a year ago, when we convinced him to move from Illinois to accept a position as lecturer,” said recently retired Department Head Al Hauck. “Then during the search last year for an assistant professor, Joe was hired, and he’s on tenure track. Now we are even more pleased to welcome him into this new position, and we look forward to his ongoing contributions.” ■

Retirement Beckons

DEPARTMENT BIDS A FOND FAREWELL TO A FEW OF ITS OWN

Al Hauck

Department Head | CPC
(Certified Professional Constructor)

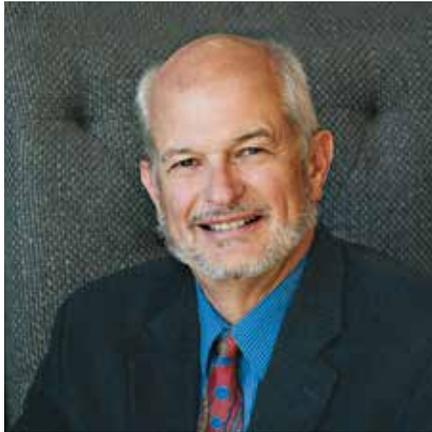
HE TRIED TO retire once before, back in 2017, but Cal Poly couldn't find a suitable replacement to fill the shoes of Construction Management (CM) Department Head Al Hauck. But it's 2019, a well-qualified new department head is at the helm, and Hauck is now officially enjoying retirement after a career that spanned 46 years, both in industry and academia.

He came to Cal Poly in 2002, after nine years' teaching and helping to administer the undergraduate program at Colorado State University, which actually marked a return to teaching after a stint running commercial construction projects in Washington, D.C.

"So, for the past 40 years," Hauck said, "I've been working my way West until I ran out of geography."

In his 34 years of teaching at four different universities, he has taught nearly every course in a CM curriculum. At Cal Poly, his teaching responsibilities have been primarily focused on Engineering Economics, Commercial Building Construction, Residential Construction, and Fundamentals of Construction Management.

Hauck is looking forward to returning to teach during winter quarters for the next few years and is especially interested in teaching incoming freshmen to have an influence on future leaders of the construction profession. He considers winters the perfect time to spend on the Central Coast, before he and his wife hit the road again on their retirement travels.



Al Hauck has hit the road for leisurely travels, with plans to return to campus to teach during winter quarters.

Barry Jones

Professor | FASCE, FCIQB
(Fellow of the American Society of Civil Engineers; Fellow of the Chartered Institute of Building)

LONGTIME CM PROFESSOR Barry Jones is now enjoying retirement, after 19 years of teaching, guiding and mentoring students. He joined the Cal Poly faculty in 2001, sharing with students his extensive experience in infrastructure engineering and construction project management.

Jones taught Heavy Civil Construction and the Construction Materials Lab. One former student, Ryan Swenson (Architectural Engineering, '10; MBA '12), earned a minor in construction management and took a summer class taught by Jones.

"Barry lined up job site tours with his connections so we could get a realistic picture of the work that goes on in construction management," Swenson said. "It was much more valuable to



Barry Jones donned traditional Balinese dress during the year he spent in Indonesia.

experience the workforce versus hearing someone lecture about it.”

For several years, Jones took students to Prague, where they studied Integrated Project Delivery and Management of the Construction Firm.

He was named a Senior Fulbright Scholar in 2015 and spent a year in Indonesia, teaching and giving seminars to undergraduate and graduate students in that country, Thailand and Sri Lanka. Earlier in his career, Jones was elected a Fellow in both the American Society of Civil Engineers and the Chartered Institute of Building.

Elbert O. Speidel

Lecturer | AIA
(American Institute of Architects)

AFTER A CAREER spanning more than six decades serving his country, his profession, and the students of Cal Poly, lecturer Elbert O. Speidel (Architecture, '67) retired from the CM Department at the end of spring quarter 2019.

Speidel, who served in the U.S. Marine Corp. in the late 1950s, was living in San Diego and studying chemistry in college. But after spending half a day with George Hasslein, founding dean of Cal Poly's College of Architecture and Environmental Design, Speidel did an about face and enrolled in Cal Poly's architecture program, earning a degree in 1967.

He worked a few years in Switzerland, and for almost 15 years, operated his own Pittsburgh-area business before he and his wife moved back to sunny California. "I was done shoveling snow," he said.

Arriving on the Central Coast in 1986, Speidel opened a full-service architecture firm, which he is still involved in. About



16 years ago, he began teaching part time in Cal Poly's Architecture Department before accepting a full-time lecturer position in the CM Department.

"I have a general contractor's license, a carpenter's license and an architect's license," Speidel said. "I thought teaching construction management was a good fit. It worked out very well indeed."

He said he went into teaching because of something Hasslein had told him years before.

"George said that once you retire, it's time to give back," Speidel recalled. Speidel figures he's "given back" to more than 1,000 students over the years.

He's taught a variety of CM classes, including Introduction to Construction Management, Concrete Lab, Integrated Project Delivery,

Elbert Speidel thought of teaching at Cal Poly as a way of "giving back."

and BIM for Constructors/Emerging Technologies, a class he developed.

Speidel expects he'll miss coming to campus every morning. "It's a little bittersweet," he said. "There isn't anything bad about this place; the whole CM group is like family."

He hopes his students remember him as helpful and caring.

"I'd like the students to think they got a lot of good information from me," he said. "I tried to bring personal experiences into each lesson." ■

Cheers to You

RALLYING WITH ALUMNI, PARTNERS AND FRIENDS INTO OUR 50TH YEAR

AS WE PLAN to celebrate the 50th anniversary of Cal Poly's construction management program, we recognize the extraordinary impacts that generations of our alumni have had in California and beyond. Your stories inform the future direction of our program and inspire students who are eager to build and lead.

With the help of alumni, industry partners and friends, we have made great strides in creating scholarships that make it possible for more low-income students to attend Cal Poly. I would especially like to thank CMAC (Construction Management Advisory Council) for leading an extraordinarily successful campaign to fund Cal Poly Scholars. We are all deeply touched by the naming of this and other gifts in honor of Allan J. Hauck, who retired as department head after 17 years of distinguished service.

Please join me in welcoming Jeong Woo, our new head of the Construction Management Department. He comes to Cal Poly from the Milwaukee School of Engineering, where he directed the construction management program. His extensive experience in construction education and his expertise in BIM modeling and computational tools that serve the building industry are wonderful additions to the college leadership team and the construction management program.

Thank you for all that you do to ensure our students' success.



CHRISTINE THEODOROPOULOS | AIA, PE
DEAN | COLLEGE OF ARCHITECTURE
AND ENVIRONMENTAL DESIGN



Christine Theodoropoulos

“With the help of alumni, industry partners and friends, we have made great strides in creating scholarships that make it possible for more low-income students to attend Cal Poly.”

CELEBRATING YOUR SUCCESS

... And Ensuring It for Current and Future Students

It's a wonderful feeling – celebrating years of academic and personal achievement with a walk down the aisle to claim that degree and the dream job that awaits.

Your choice to enroll in Cal Poly's Construction Management (CM) program and embrace Learn by Doing was brilliant, and now it's paying off. What could be more satisfying than realizing your professional hopes and dreams? For many Cal Poly alumni, giving back is the next step.

Join us and do something powerful for innovation, excellence and our students. Your monetary gift will provide crucial support to help grow our department by providing the latest equipment, supporting hands-on labs, and offering students travel opportunities to job sites. It will ensure that current and future students continue to learn and grow from the best CM program in the nation.

To make a donation, simply visit <http://construction.calpoly.edu> and click on the "Support CM" box. Questions? Contact Construction Management Department Head Jeong Han Woo at 805-756-5493 or jwoo21@calpoly.edu.

Thanks for your support!

THE POWER OF DOING

The Campaign for
Learn by Doing

Katrina Hasson
(Construction Management, '19)
PHOTO BY @EMILYELISEPHOTOGRAPHY





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LEAN AND GREEN

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