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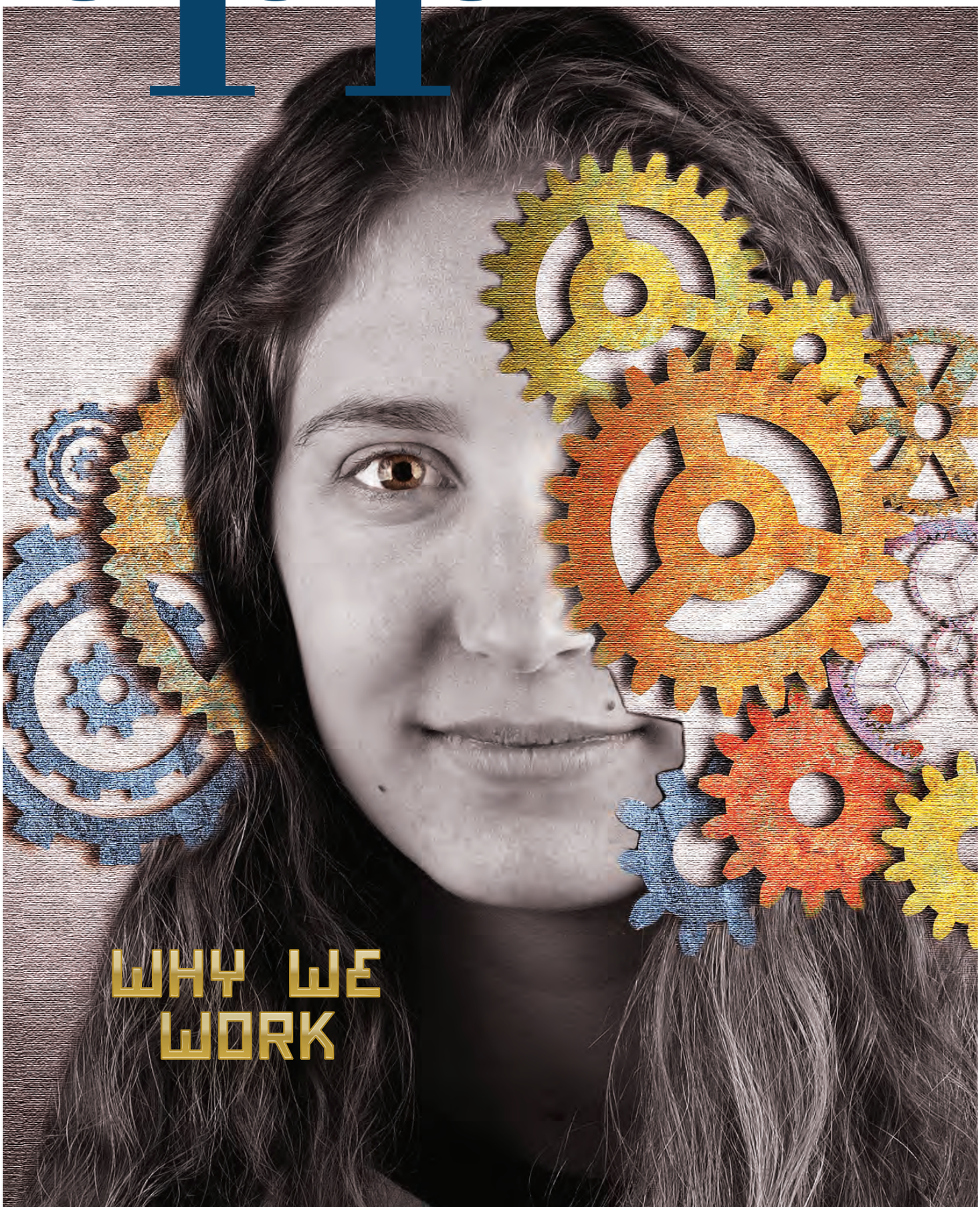
CAL POLY POMONA **MAGAZINE** | SPRING 2019



WHY WE WORK

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what's INSIDE?

That's SoCalPoly
A collection of short stories that celebrate our campus' unique location, traditions and polytechnic identity. **Page 2**

Why We Work
Cal Poly Pomona's polytechnic advantage means that our graduates are ready to make a positive impact in their professional and personal worlds. **Page 7**

Difference Maker
ASI President Jenny Greenberg teaches prisoners, advocates for students and plans to reform criminal justice policy. **Page 22**

Living the Dream
Three alumni tell us about their first job out of college. **Page 24**

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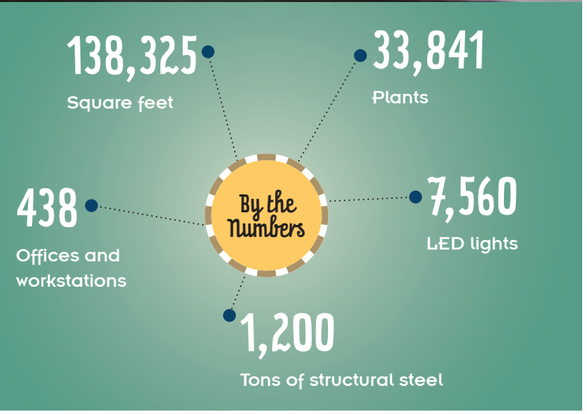
ON THE COVER: ASI President **Jenny Greenberg** has made the most of her polytechnic experience – student leadership, volunteer activities, research and advocacy. Greenberg is graduating in May 2019 with a sociology degree.

As part of its commitment to green printing, CPP Magazine is printed on FSC®-certified paper. The Forest Stewardship Council™ (FSC) promotes environmentally appropriate, socially beneficial and economically viable management of the world's forests.

That's SOCAL POLY

Student Services Building

In January, Cal Poly Pomona opened its new Student Services Building to provide an easy, one-stop service center for students. The first floor has offices for admissions, financial aid and academic advising, as well as campus tours and the Veterans Resource Center.



A Brief History
COLLEGE OF BUSINESS ADMINISTRATION

Fifty years ago, Cal Poly Pomona welcomed a new college for business administration. Since 1968, the college has received many accolades, including being named a "2018 Best College for Business Majors" by Money Magazine.

1958

The business program begins with three majors: **business administration, accounting,** and **marketing and sales**

1964

CPP becomes one of the first in the country to offer a **data processing major**, setting precedence for decades of digital innovation

1970

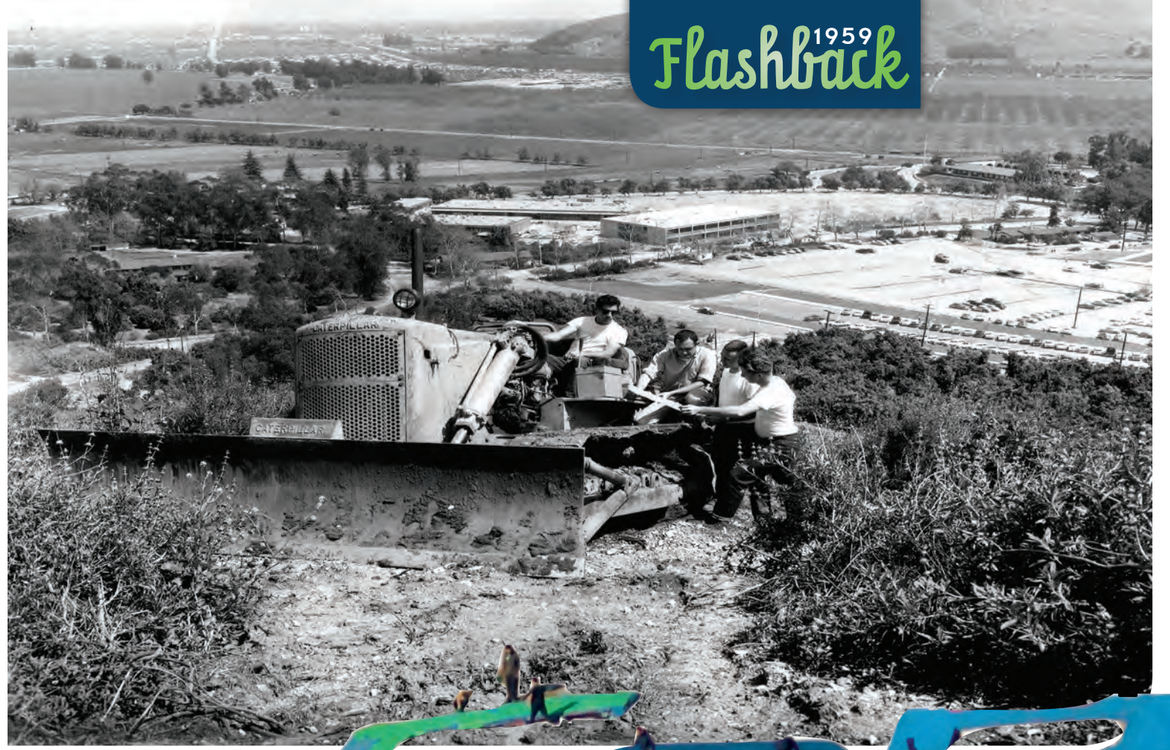
The college introduces an **MBA** program

1988

Carl Karcher, founder of Carl's Jr., is the college's first executive-in-residence

2012

CBA opens a new 75,000-square-foot, three-building complex



The CPP Letters

Engineering students pour concrete for the second "P" for Pomona in 2004.

In 1959, ASB Vice President **Warren "Skip" Tyler** led 50 students in constructing the CP letters on Colt Hill overlooking the campus. The engineering club drew the plans and formed a foundation for the sign. Tyler drove a bulldozer with about 300 gallons of concrete up the hill, and volunteers mixed cement while shoveling it into the mold.

After its completion, student clubs began the tradition of painting the letters different colors to represent their organizations.

In 2004, the Cal Poly Pomona Alumni Association organized students, faculty and staff to add the second "P" as a way for the campus to distinguish itself from Cal Poly San Luis Obispo.

That's SOCAL POLY

"Bridget"

"Jubilee"

How To: BREED A HORSE at the W.K. Kellogg Arabian Horse Center

1. **Find a perfect match.** Study your mare and then research the genotype and phenotype of stallions who complement her. Ask the stallion owners to donate the breeding.
2. **Breed the mare.** Track the mare's heat cycle and inseminate at the horse center breeding lab. Pregnancy check at 17 days.
3. **Care for the mare.** Monitor the mare's health over the 11-month pregnancy. When milk calcium levels reach 200 parts per million, the mare is ready to give birth within 72 hours.
4. **Foal watch.** Students and staff spend the night at the horse center and wait for the mare's water to break. The foal enters the world head and hooves first. The foal stands within an hour and nurses within two hours.
5. **Foal pole.** Raise the flag to announce the foal's arrival. Pink for female and blue for male.

BRONCOS AT WORK

Joe Vertrees

'88, engineering technology
Architect, engineer and owner of Vertrees A&E

Tell us about your career.
Before and after graduating from Cal Poly Pomona, I worked at an architectural and engineering firm. In 2000, I formed Vertrees A&E to design facilities for industries like food and beverage processing, manufacturing and transportation.

What was your role in Rose Float?
When I joined in 1982, I learned to weld, work with hydraulics and build mechanisms. I was the design chair for the 1985 and 1986 floats, and the Pomona committee chair for the 1987 float.

How did Rose Float shape your career?
The learn-by-doing philosophy taught me how to make improvements in the future. I take lessons from previous projects to help me when I translate a client's needs into a new design. Rose Float also taught me how to keep with tight schedules and budgets.

How are you still involved with Rose Float?
I am the vice president of the Rose Float Alumni Board, and in the last 25 years, I helped with the plans for the new Rose Float lab. I designed the Rose Float Legacy Fence that will feature 113 stainless steel tiles, each with the name, year and award of Cal Poly Rose Floats.

Heather Shanahan

'10, construction engineering technology
Inventory manager at NAVCO

Tell us about your career.
I worked with my company as a student, so I was excited when I received a job offer after graduation. I oversee inventory, purchases, shipments and receiving.

What was your role in Rose Float?
My first float and the float that got me hooked was the 2003 "A Sundae Afternoon." I was involved with construction, electronics and decorations. In my final year (2006), I was the program chair, so I managed the project, people, schedule, budget and volunteers.

How did Rose Float shape your career?
It taught me project management skills, how to work with people and how to maintain a consistent timeline. The learn-by-doing experiences in Rose Float taught me the skills that got me hired, and I still use them today.

How are you still involved with Rose Float?
I volunteer to escort the float from the Rose Float lab to Pasadena, and I still keep in touch with many of the Rose Float alumni. I mentor and assist the current students and provide food so they can focus on the float and not worry about being hungry when they devote so much time to the project.

An Extraordinary Polytechnic University

On New Year's Day 2019, the 71st Cal Poly Universities' entry in the Tournament of Roses Parade glided down Colorado Avenue in Pasadena. Titled "Far Out Frequencies," the float was a tribute to the universality of music, and once again, our joint entry with San Luis Obispo was an embodiment of creativity, collaboration, and countless hours of hard work.

But this year was different. For the first time, we were honored with the "Extraordinaire Award" for creating the most extraordinary entry. This was our 59th trophy – an incredible achievement for the parade's only student-designed and student-built entry. But this achievement proves to be even more remarkable when considering the previous years' honorees. In recent years, other honorees of the "Extraordinaire Award" included major corporate entities such as Disneyland, Trader Joe's, UPS and Farmers Insurance. In other words, the work of our students measures up to and even exceeds the work of even the most experienced professionals.

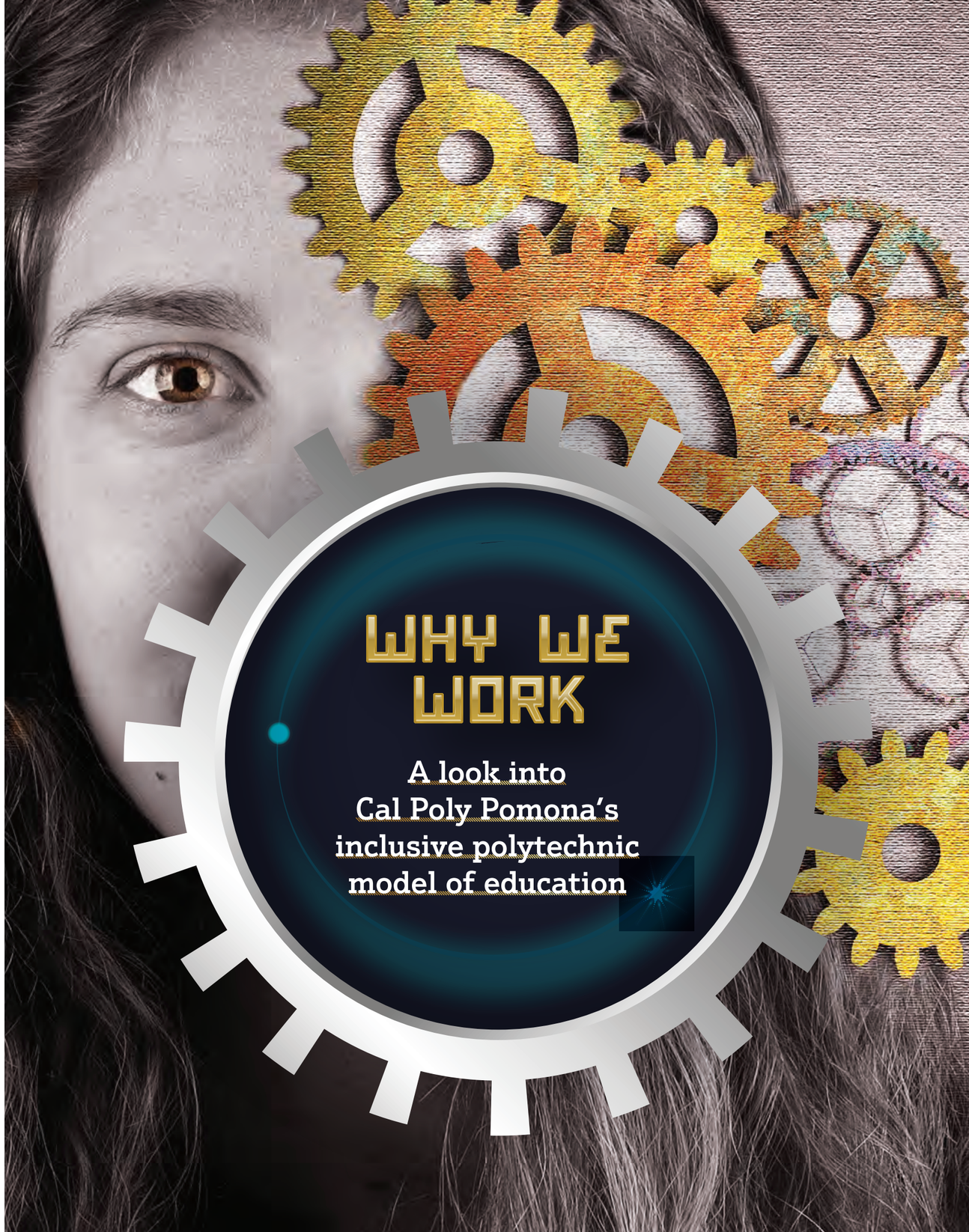
Of course, for anyone who has studied, taught, worked, or even spent any time at Cal Poly Pomona, this comes as no surprise. At Cal Poly Pomona, students participate in an immersive educational experience that is inclusive, relevant, and engaging; where connecting theory and practice sits at the core of every curricular and co-curricular activity and where learning by doing is a given. The end result is that our students leave our campus uniquely prepared to succeed in their careers and in life.

This edition of CPP Magazine highlights the impact of Cal Poly Pomona's inclusive polytechnic model. Through stories of current students and recent alumni, you'll read how our commitment to experiential learning, multidisciplinary perspectives, collaboration, and professional readiness provides a one-of-a-kind educational experience and puts our graduates on a path to their "dream jobs."

We didn't need a trophy from the Tournament of Roses to prove to us that Cal Poly Pomona is extraordinary. We've been proving it for more than 80 years through a legacy of creativity, discovery and innovation. And with each new class of incoming students and every cohort of graduates, our inclusive polytechnic legacy grows.

Sincerely,

SORAYA M. COLEY
President



WHY WE WORK
We value our differences

The Mariachi Los Broncos ensemble performs at Pomona Mayor Tim Sandoval's State of the City address at the Fox Theater in downtown.

DIVERSE & MULTI-DISCIPLINARY PERSPECTIVES

We value diversity, diverse perspectives and inclusivity, all of which are integral to multi-disciplinary and collaborative teaching, learning, discovery and innovation.

On a Cultural Note

MARIACHI STRIKES A CHORD WITH A DIVERSITY OF STUDENTS

By Melanie Johnson

Before joining Cal Poly Pomona's mariachi ensemble, **Charisse Talaro**'s exposure to the music genre was limited to a few bands that played at parties at her friends' homes.

Talaro, who is Filipina, didn't have a cultural connection to mariachi, but growing up in Los Angeles with Hispanic friends, she did have an appreciation for it.

"I always thought it was really cool," says the guitarist.

With memories of those backyard parties, Talaro decided to audition for the campus' **Mariachi Los Broncos** during her freshman year.

"It was really just out of curiosity," she says.

Performing in the mariachi ensemble has brought her out of her shell, says Talaro, who describes herself as fairly shy. For example, she has gone so far as to sing a couple of solos.

"What I've enjoyed about it is not only the friendships I've made, but it has expanded my music library," says the music industry studies senior. "You don't have to understand the lyrics. You can still feel the emotion the music is trying to convey."

Ethnomusicology Professor **Jessie Vallejo** launched Mariachi Los Broncos in 2016 with 15 students. Three years later, there is a second group for beginning- and intermediate-level students dubbed **Mariachi Los Caballeros** (knights).

In all, the ensembles have around 40 participants. A total of 77 students have gone through the program, with a near-even split of 53 percent majoring in music and 47 percent studying other fields.

"What makes us special is that Cal Poly Pomona is one of two universities in California that has a full-time professional dedicated to the ensemble," Vallejo says. "Everywhere else, it's a student club or a class taught by part-time faculty. This shows a different level of commitment."

> "You don't have to understand the lyrics. You can still feel the emotion the music is trying to convey. Music is a universal language."
>
> CHARISSE TALARO, music student

Mariela Gomez, a junior studying music education, says she met Vallejo after auditioning for a music scholarship at Cal Poly Pomona. Gomez, who is Mexican American, says she was familiar with mariachi but she had never played it. The trumpet player had to adapt to mariachi's improvisational style.

"It was very different because I've been classically trained," she says. "You give me the music, and I learn what's on the page. Mariachi is not like that. You have to make sure you come in on time after the singer's notes and sometimes we add to it. That's the hardest part."

Mariachi has a wide appeal because the genre is played in different countries and cultures, Gomez says.

"I've learned that mariachi is very expressive, very proud," she says. "I think it connects with people from different backgrounds because there are many countries that interpret different forms of mariachi like Cuba, Mexico and Guatemala."

WHY WE WORK
We're hands on

Students evaluate the taste, appearance and texture of the food products during taste testing.

APPLICATION OF KNOWLEDGE
We use multiple modalities of teaching to facilitate student learning of theory, followed by reinforcement of theoretical knowledge through active, hands-on application of principles to address opportunities and challenges of the modern world.

Food for Thought

THROUGH TEAMWORK AND LEARN-BY-DOING, STUDENTS CREATE PRODUCTS DESIGNED FOR SUPERMARKET SHELVES

By Paul Sterman

Milk-and-cereal balls

The students were stumped. The group of five seniors had a goal at the beginning of the food product development class: to make an instant breakfast item that's tasty and nutritious. Their vision for a bite-size milk-and-cereal ball was clear, but making it a reality was proving harder than they thought.

They were stymied as they tried to develop the precise formula for the ball's milky center – the "lava" filling. The texture and taste weren't right, and students couldn't figure out the exact temperature at which to heat the liquid.

"We had a lot of difficulties," recalls team member **Zin Mon**.

Unlocking the keys to this food puzzle would take perseverance and problem-solving skills – qualities that every food scientist worth their salt needs to be successful.

Showtime at AGRIscapes

The class, part of the Don B. Huntley College of Agriculture's nutrition and food science department, challenges student teams to design and develop an innovative food product intended for supermarket shelves. It's a task that draws upon students' previous coursework in biology, chemistry, food safety, nutrition and food process engineering.

A few days before the end of the fall semester, the class showcases its ideas in a large room at Cal Poly Pomona's AGRIscapes. Open to the public, the event represents the culmination of student work over the past 15 weeks.

At the showcase, students hand out a variety of samples, such as vegan jerky, grilled-cheese-and-tomato flatbread, and a cookie snack with peanut butter and banana filling.

Of that last item, called a Breakie, senior **Rosanna Eldumiate** says it took a lot of tinkering until her team was satisfied.

"We had at least 20 different versions of our Breakie until we got the right one," she says.

Her group's trial-and-error experience is the norm. Throughout the semester, the eight teams of four or five students put in about six hours a week in the lab to experiment with their product, revise formulations, draw on feedback from taste tests, assess input from their classmates, and experiment and revise some more – all while adhering to strict food safety and nutrition guidelines.

"It's the ultimate example of learning by doing, from beginning to end," says **Lisa Kessler**, interim dean of the Huntley College of Agriculture.

It Begins with Breakfast

The milk-and-cereal ball team was inspired by a popular snack in Vietnam – deep-fried rice balls coated in bread crumbs. Team member **Thanh Nguyen**, who emigrated from Vietnam when he was 18, says the team put an American spin on the snack in creating a nutritious breakfast product for consumers on the go.

> "We had at least 20 different versions of our Breakie until we got the right one."
>
> ROSANNA ELDUMIATE, STUDENT

The bite-sized ball has a crunchy cereal exterior and a warm, creamy center.

"It's a good source of protein for people who want to go out and exercise after breakfast," Nguyen notes.

Where things got sticky for the group was nailing down the specifics for the liquid center. It took a great deal of experimentation before they found the right temperature and cooking time.

The students also struggled with the consistency of the creamy filling, which is made from pudding, whey and sweet potatoes.

Jacqueline Trinh, the team's culinary expert, tried adding starch to the filling, but it made the texture too jellylike. To thicken the filling, she hit upon an idea: xanthan gum, a substance she learned about and analyzed in other food science classes. Xanthan gum thickened the milky center and gave it the right texture.

Another important aspect was the data analysis by team member **Jeffery Lo**. After the sensory evaluation tests (outside participants taste-tasted the various products), Lo broke down their responses about taste, look and texture so his group could improve its offering.

The result is a breakfast item that goes from freezer to toaster oven. A quick and easy meal – no utensils or bowls needed.

FOOD FOR THOUGHT **Continued on page 31**

WHY WE WORK
We're ready for a challenge

PROFESSIONAL & CAREER READINESS
Our curricular and co-curricular learning experiences optimize students' professional and career readiness.

Help Wanted

CAREER COUNSELOR ASSISTS STUDENTS WITH THEIR NEXT STEPS

For the past six years, Career Center counselor and Clothes Closet coordinator **Cheryl Love** has been working to get students ready for life after graduation. As part of a staff of 15, Love says the most rewarding aspect of her job is helping students find their path.

What do employers want from prospective employees?

Teamwork. Regardless of the industry, employers are looking for people who can play well with others. Also, they want people who can communicate and problem solve. Whether you're an engineer or a kindergarten teacher, you're going to have to do some problem-solving.

Leadership. If there's a problem to solve or a program to implement, can this individual take the lead and make sure those things happen?

Other core competencies include professionalism, career management, oral and written communication skills, and the ability to use technology.

How are we preparing students differently than other universities?

I think the polytechnic aspect of Cal Poly Pomona makes the university unique. For example, the Career Center's Clothes Closet has become a learning lab for apparel merchandising and management students. I have three interns this semester.

Also, students studying retail simulation in the apparel merchandising and management department get placed in different retail settings on campus, including the Clothes Closet, so they see all aspects of what working in a store is like.

What are the strengths of a Cal Poly Pomona graduate?

Because learn by doing is at the core of all that happens here, we have students who are very good at problem-solving. The polytechnic aspect helps them develop excellent communication skills and the ability to work with diverse populations.

How has our approach to career readiness changed over the years?

Career readiness is a part of GI 2025. [GI 2025 is a CSU initiative to increase graduation rates for all students while eliminating achievement gaps.] The shift is that career readiness is not just the responsibility of those of us in career services. It's a campus-wide responsibility. We do some good things, but getting everybody to the party is going to help us do great things.

What should students be doing to get themselves career ready?

We created a four-year timeline that guides students from their freshman year, so when they are done, they will be ready for career opportunities.

We're helping students understand the importance of things like extracurricular/co-curricular activities. Employers say they want students who do well in their classes, but they also want someone who is engaged in the campus community.

Career readiness is a process that starts freshman year. It is something you work on throughout your time and beyond.

WHY WE WORK
We engage with our community

STEM Learning One Shovel at a Time

By Nancy Yeang

Kellogg Polytechnic Elementary students pick fresh snap peas from their garden, learning that the green pods have edible peas and the seeds in the yellow dry pods can be placed in the soil to grow new plants. With the help of Cal Poly Pomona undergraduate students, the children are learning STEM concepts.

The fellows, who are being introduced to education as a potential career through the Ernest Prete Jr. Fellowship program, collaborate with teachers at two Pomona schools to create and deliver lessons for young learners that use the garden as a hands-on laboratory. Healthy eating habits, higher education opportunities and college life are a few of the co-curricular lessons.

This year, 29 Prete Fellows in STEM majors are paired up with classroom teachers – 14 co-teaching at Kellogg Polytechnic and 15 at Armstrong Elementary. Two of the fellows are mentors who completed the program last year.

This partnership was launched through a $117,000 grant from the Ernest Prete Jr. Foundation. Fellows receive an annual stipend of $5,125, attend workshops and dedicate 10 hours a week to the program, with at least six of those hours working in the schools.

COMMUNITY & GLOBAL ENGAGEMENT
We are engaged with our community, link our academic programs to local and regional stakeholders, and have an understanding of global perspectives and trends.

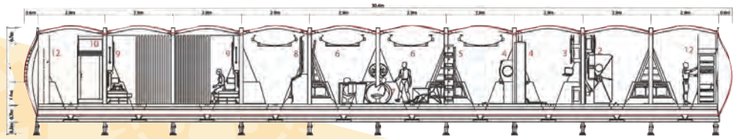
Martin Rios, a botany student and a Prete Fellow, shows a group of Armstrong Elementary students the loveliness of ladybugs that will be released into the garden.

WHY WE WORK

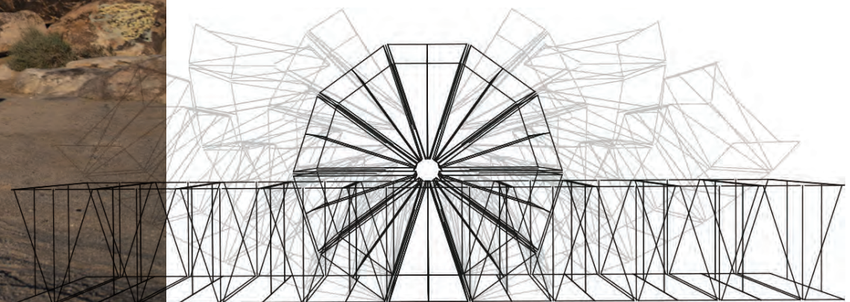
We connect theory to real life

CRITICAL THINKING & PROBLEM SOLVING

Our academic programs connect theory, practice and research, and are focused on creativity, discovery and innovation.



Architecture and civil engineering students designed and built a prototype of a Martian habitat for astronauts.



Life on the Red Planet

ARCHITECTURE AND ENGINEERING STUDENTS DESIGN HABITAT FOR MARS

By Clay Fowler

Kinetic architecture is an emerging trend, one that requires engineers and architects to collaboratively solve problems.

The project that a group of 65 Cal Poly Pomona architecture and civil engineering students took on last year was so far off the grid – it involved a simulated trip to Mars – that kinetic architecture doesn't begin to describe it.

The NASA eXploration Systems and Habitation Academic Innovation Challenge required student teams to create living quarters that would travel 34 million miles inside a spacecraft, propel across the surface of an alien planet and unfold into a functional habitat for astronauts.

Designing for the Red Planet's extreme temperatures, low gravity and toxic atmosphere introduced exponentially more variables for the interdisciplinary CPP team.

"Students went from knowing nothing about space architecture to having a completed prototype in 20 weeks," says Architecture Professor **Michael Fox**. "You can make something on the computer, but when you scale it up, there's all sorts of problems to tackle, the kind you're not aware of unless you're doing it hands-on."

The Mars habitation module (nicknamed the Cal-Roli) was inspired by a roly poly bug and funded by a $30,000 competitive NASA grant. Once the Cal-Roli lands on Mars, the idea is that four pod-shaped modules would roll to the designed site and unroll into living quarters.

"This project was very challenging because it involves problems we usually don't deal with on Earth," says architecture student **Eduardo Martinez**. "Every time you're designing something, you're not just showing it to your professors, you're going to Skype with real NASA engineers. So you're always adding more pressure on yourself in terms of solving problems."

WHY WE WORK
We're curious

CREATIVITY, DISCOVERY & INNOVATION
Our academic programs connect theory, practice and research, and are focused on creativity, discovery and innovation.

On a Mission

PARTNERSHIP WITH NASA BRINGS PRODUCT IDEAS TO LIFE

By Melanie Johnson

Improving lives with new products may sound like a lofty goal, but for Cal Poly Pomona students participating in the **NASA-CPP Business Startup Program**, it's the mission.

From an affordable and portable microscope to a more efficient fan blade to a device that monitors posture, students are tapping into their education and know-how to translate NASA technology into new products that could be marketed to the masses.

"Our main goal is to improve lives one technology at a time," says **H. Erkan Ozkaya**, business professor and director of the program. "We work with wonderful technologies, and we want to give a second life to those technologies by creating products that everybody can use."

NASA-CPP also offers students an opportunity to gain the kinds of skills that translate into jobs at some of the top companies in the country and admittance into highly competitive Ph.D. programs, while also fueling their passion for entrepreneurship and technology.

"It's about a multidisciplinary experience, a polytechnic approach, learning by doing and all of that," Ozkaya says. "Our biggest achievement is creating an environment for people who are passionate about technology and entrepreneurship to come together and create fantastic products. That, I think, encapsulates what Cal Poly Pomona is all about."

Building Something Great

At weekly meetings, students from the various project teams give a progress report on the development of their products. The microscope team discusses its design woes. The team working on the posture-monitoring device talks colors and material for the T-shirt that houses wearable tech.

The program, which has about 55 students and five faculty members, is run like a company in which students are key players. They're expected to give and receive suggestions about product development, conduct market research and competitor analysis, and flex their problem-solving skills day in and day out.

For **Alyssa Harrison**, a visual communications junior, solving problems and puzzles is what drives her. Her role is to help with the overall design of the products, graphics and marketing.

"I am getting more hands-on experience instead of just working with theory," she says. "I like that I am building physical things and seeing them go through different phases over a long period of time. It gives me a greater understanding of what it is like in the real world and the job force."

Johnathan McGowan, a computer information systems senior, says the program gives him something he couldn't get elsewhere.

"I want to be with like-minded individuals to build something that's going to be great," he says. "A lot of clubs on campus don't normally have opportunities where you can work continuously on a project, and you don't really get to work for a long time in the classroom itself. I was looking for a community that I could join to build products and work on those products throughout my time at school."

"I think our biggest achievement is creating an environment for people who are passionate about technology and entrepreneurship to come together and create fantastic products. That, I think, encapsulates what Cal Poly Pomona is all about."

H. ERKAN OZKAYA, business professor

The NASA-CPP Business Startup Program includes faculty and students from several colleges. The program also seeks advice from industry professionals.

A Polytechnic Education

Eddie Bader, a senior business student, already owns a tech company.

The business team leader says that he's using what he learns from NASA-CPP to improve his business. One of his most memorable experiences was being on a teleconference call with NASA engineers and scientists to get feedback on students' product ideas.

"They are really on a next level," he says. "They are thinking of things we never thought about or they've been down that road before and they are able to identify pitfalls. That really reduces the learning curve for us. It gives us an opportunity to work through some of those issues at a quicker pace then we've done before."

For **Elnaz Ghiaei Shamlou**, an electrical engineering junior and the lead on the wearable engineering and testing teams, the program has taught her how to work in a team, connect with people from diverse backgrounds and be professional.

"The products we build are there to help people to live a better life," she says. "Maybe I could never be a doctor, nurse or firefighter, but as an engineer, I am impacting people's lives, not just people around me, but worlds away."

Physics Professor **Ertan Salik**, who serves as the technical supervisor, sees the program's great potential for growth and success.

"In traditional research, you determine a problem to work on and typically, in my field, you do some laboratory research and you publish your results," he says. "In this program, something else happens. A real product is being developed."

That experience developing products has been stimulating and exciting for the students involved, and they have learned from one another, he says.

"Great products cannot be developed in isolation," he says. "You need input and feedback from various backgrounds, various expertise levels. And that's what the NASA-CPP program achieves, in my opinion, on a small scale, which gives students a great preparation for their future."

WHY WE WORK
We embrace new technologies

Success in a Tech-Centric Society

By Olukemi Sawyerr
Interim Assistant Vice President
for Academic Innovation

Student Success is our core mission at Cal Poly Pomona, a multifaceted commitment that must be met on every level by using the tools of today and the technology of tomorrow.

Success includes retention, timely graduation and career readiness. It means preparing students for the future of work and civic engagement. Cal Poly Pomona's model of an inclusive polytechnic education aims to produce successful graduates who are engaged and productive members of society.

An increasingly critical component of that success is technological competence and adaptability. It is imperative that we integrate not only established technologies into our curriculum, but actively find ways to integrate emerging technologies into curricular and co-curricular activities to ensure that our students are well equipped to meet the future with confidence.

We are on the cusp of what some have termed the "Fourth Industrial Revolution (4IR)" (Schwab, 2016) or "Industry 4.0" (Hermann, Pentek & Otto, 2016) or the "Second Machine Age" (Brynjolfsson & McAfee, 2014), characterized by cyber-physical systems that are blurring the lines between the physical, digital and biological through rapid and unprecedented advances in technology. By leveraging the power of digitization and information technology, we are witnessing parallel technological advancements in multiple domains, including artificial intelligence (AI) and machine learning, genetic engineering and synthetic biology, virtual reality/augmented reality/mixed reality (VR/AR/MR), nanotechnology, nanomaterials, advanced robotics, IoT (internet of things), 3D printing and additive manufacturing.

According to Klaus Schwab, executive chairman of the World Economic Forum, what makes the Fourth Industrial Revolution different is the speed at which technology is advancing and the integration of these technologies across multiple domains. These advances have fundamentally changed how we live and relate to one another, how we work and how we do business and govern, and they show no signs of slowing.

Exactly how these emerging technologies will develop is not well understood. One thing is certain, though: These changes have fundamentally altered and will continue to alter the very nature of work. Many jobs exist today that did not exist only a decade ago and many jobs will be created within the next decade that we cannot yet envision. Can you imagine life without the on-demand economy that provides us convenient and immediate access to goods and services? In the gig economy, employers source for talent from the "human cloud" for discrete projects or tasks. In 2017, Intuit estimated the number of Americans in the gig economy at 34 percent and predicted it would grow to 43 percent by 2020. The gig economy provides workers with the utmost flexibility in determining when and how much they work, and it provides employers the ability to hire for specific skills. These trends will continue challenging our conventions of what it means to work and be a productive member of society.

> "These innovation spaces serve all Cal Poly Pomona students, eliminating the digital divide between students in the more technical disciplines and those in less technical majors."

INTEGRATION OF TECHNOLOGY
We use evidence-based approaches to integrate technology in support of excellence in curricular and co-curricular pedagogies.

What does all of this mean for Cal Poly Pomona and its students?

While it is difficult to fully predict how these changes will evolve, as a university we must ensure that our students are prepared for success today and in the future world we do not yet know. Success means that they will be ready to thrive in this highly uncertain environment because of a strong foundation in the liberal arts and humanities, as well as depth in their primary disciplines through curricular and co-curricular activities.

As part of the implementation of the new strategic plan (www.cpp.edu/stratplan) and the academic master plan, Cal Poly Pomona will provide students multiple opportunities to engage with the technologies that are fueling the Fourth Industrial Revolution (4IR). In addition to existing classes, labs and learning areas, multiple innovation spaces are beginning to dot the campus and surrounding areas.

- The Student Innovation Idea Lab, or iLab, fosters creativity and entrepreneurship, and provides boot camps, workshops and support to help students launch their ideas.
- The off-campus Innovation Orchard at Ganesha High School is an offshoot of the iLab, offering space and equipment for collaboration, creation and innovation.
- Maker Studio @ the University Library, scheduled to open in fall 2019, will provide a creative environment for innovators.

These innovation spaces serve all Cal Poly Pomona students, eliminating the digital divide between students in the more technical disciplines and those in less technical majors. These spaces encourage multidisciplinary perspectives, collaborative learning and provide ample opportunities for students to apply both general education and discipline-specific knowledge to their ideas. All students can participate in workshops to engage with 4IR technologies.

Any student can learn for free how to use a 3D printer and explore potential applications, such as a incorporating human cells and electrical circuitry into 3D prints for medical and industrial applications. Students can play with VR/AR/MR technologies, learn how to utilize high-powered computing or interact with smart materials such as self-healing mats. In these spaces, students can work on projects related to a specific course or on co-curricular or personal projects.

Faculty from all disciplines also can learn to utilize 4IR technologies and incorporate them into their teaching. They can lead their students in conversations around the promise of these technologies as well as their potential perils. They can discuss the benefits of genetic engineering and the myriad ethical issues associated with genome editing and designer babies. They can explore the gig economy and the human cloud, including their implications for public policy. They can explore VR/AR/MR technologies, the benefits of VR therapy on PTSD in soldiers, as well as a possible link between VR video games and PTSD in children.

SUCCESS **Continued on page 31**

WHY WE WORK
Because we work together

Learning the Ropes

HOSPITALITY MANAGEMENT STUDENTS EXPERIENCE ALL SIDES OF THE BUSINESS

By Paul Sterman

When it comes to the restaurant business, senior **Janine Raymundo** always thought she belonged in the kitchen. Until she began working at **The Restaurant at Kellogg Ranch**.

The restaurant is operated and managed by students in The Collins College of Hospitality Management. They rotate positions weekly to experience all sides of the business – management, food preparation, serving guests, opening bottles of wine at the tables, handling reservations and more. The rotations were a revelation for Raymundo, who had worked in a restaurant before but was tucked away in the kitchen – "the back of the house," as it's known.

"This class really helped me find out that I'm more suited to the front of the house," she says. "I really enjoy the interactions with the guests."

Open to the public for lunch and dinner, the RKR has a sophisticated presence, with sweeping hillside views and a large, open dining room. There is also a culinary garden outside, from which students harvest fruits and vegetables to make seasonal dishes.

The 30 or so students are guided by chef instructor **Michael Reyes** and general manager **Jason Zhang** ('10, hospitality management). But much of the educational experience is learning from their peers: Student managers teach, train and lead their fellow students.

"They are asked to be entrepreneurs," Zhang says. "They have to develop their leadership style."

Working both the front and back of the house is great training for future restaurant managers, Zhang says. Even the RKR managerial roles are specialized: Different students manage the kitchen, bar, dining room and events. They also set tables, clean dishes, and learn to use the latest restaurant-technology tools, such as software for meal reservations, event planning, retail and bookkeeping.

"You have to know everything to be a manager," Zhang says.

Strong teamwork is vital to success.

"Everybody helps each other out," says senior **Felipe Aquino**, who has worked in restaurants since he was 15. "The most essential thing is communication between the front of the house and back of the house."

When the restaurant is extra busy – it averages 85 customers a day – it can be stressful for the students, Reyes says.

"But it's also a bonding experience, because when they're done, they can sit back, exhale and say, 'Ah, we did it!'"

> "Everybody helps each other out. The most essential thing is communication between the front of the house and back of the house."
>
> FELIPE AQUINO, STUDENT

Over the course of the semester, Collins students Kirsten Wiesinger and Jay Kang have worked every position, including manager and chef, in The Restaurant at Kellogg Ranch.

COLLABORATIVE LEARNING

We embrace team approaches to foster collaborative teaching, learning, discovery and innovation.

Change Maker

ASI PRESIDENT HONES LEADERSHIP SKILLS ON THE JOB

By Melanie Johnson

ASI President **Jenny Greenberg** aspires to be a difference maker.

The senior, who is studying sociology with an emphasis in criminology, has felt that pull since she was a little girl glued to episodes of the television series NCIS.

"I've always been interested in crime as far as I can remember," she says.

As she got older and learned more about how the justice system works, her interest in crime shows waned, but her desire to make a difference grew. Her courses and extracurricular activities at Cal Poly Pomona have helped her zero in on what she wants to do after graduation – criminal justice policy reform work.

"I am more interested in preventing crime and understanding the root causes," she says. "My experiences have taught me to view crime as more of a reflection on our governing society rather than the criminals themselves."

At a polytechnic university steeped in the philosophy of learn-by-doing, Greenberg is getting hands-on opportunities in her coursework, volunteer activities and student leadership posts that will shape her efforts to improve lives.

"It's harder to describe what a hands-on education is for social science majors," she says. "For us, hands on is mostly researching and writing. But writing to me is creating."

Greenberg applies the writing and research skills from her sociology courses to her activities outside of the classroom. She worked on a research project with faculty in her department on resources for veterans. She also provided input to a student conducting research on biases in standardized testing.

She put her passion for criminal justice to work – volunteer teaching academic orientation and introduction to college courses to inmates through Political Science Professor **Renford Reese's Prison Education Project** (PEP).

Greenberg recalled her first visit to Norco's California Rehabilitation Center (a prison for men) and how an arrival at the wrong gate and a security measure involving a whistle nearly cancelled her trip. Her group was set to go through the security checkpoint but got separated from the person who was carrying the whistle – a safety requirement because volunteers would be alone in the classroom with the inmates. An hour later, a new whistle was purchased and the group went through.

"When we arrived, all of the inmates were sitting there waiting for us," she says. "I was struck by how they apologized to us for the difficulty coming in. It immediately set up an atmosphere of respect between us."

Her students had lots of questions. They wanted to know what kind of jobs they could get, what resources would be available and whether they could vote, she says.

After teaching incarcerated men, women and juveniles, Greenberg says she feels a connection between her volunteer work and her student leadership role on campus.

"Working with inmates and new students is essentially the same thing," she says. "With PEP, a lot of it is helping them get resources to transition back into society. Here, a lot of what you do is helping students get resources to operate in college society."

Greenberg's involvement in student leadership began during her freshman year living in Montecito Hall where her resident advisors recruited her to serve on housing's Inter-Hall Council.

University President Soraya M. Coley and ASI President Jenny Greenberg answer questions from students at Pizza with the Presidents.

"I ended up really enjoying my time there," she says. "I liked getting to brainstorm with other students about what programs and projects they would like to see happen and follow through with producing those programs and projects."

ASI Past President Farris Hamza ('18, industrial engineering) served with Greenberg on the Inter-Hall Council and encouraged her to get involved in ASI, appointing her to secretary of internal affairs and tasking her with researching services for student health and wellbeing.

Typically, the secretary of internal affairs will later run for president, but Greenberg didn't plan to seek a higher office. Again, she was recruited.

"People were telling me, 'You are the only person with the experience for this,'" she says. "I ran uncontested."

Advocacy is also important to Greenberg. She and nine other students recently traveled to Sacramento to lobby state legislators to increase funding for financial aid.

> "I feel like we now have more students on campus who are aware of how our government effects them on an individual level."

"It was a very fun experience, a very productive experience and empowering," she says. "I feel like we now have more students on campus who are aware of how our government effects them on an individual level."

Liz Roosa Millar, ASI executive director, says that Greenberg looks at things through a social justice lens – a fact that is reflected in her leadership style.

"One of the unique things about Jenny is she has a level of compassion and empathy that you don't always see in a student leader," Roosa Millar says. "She's very selfless and humble. It's not about Jenny. It's not about the ASI president. It's about serving the needs of the students."

As students meet with influential politicians in Sacramento and Washington, D.C., they are learning invaluable leadership skills that aren't directly taught in the classroom, Roosa Millar says.

"She's got a level of patience. She listens intently, and she knows when to speak and get her platform. But she doesn't do it by speaking over people. She doesn't do it by taking the gavel. When she does speak, it's powerful."

Greenberg credits the encouragement she received early on to become a student advocate for enabling her to run for president and to put her desire to help others front and center.

"The biggest thing I gained was being supported by others and learning how to support others," she says. "As people encouraged me to do more, I wanted to be able to do the same thing for others."

Living the DREAM

By Clay Fowler

CAL POLY POMONA GRADUATES ARE READY TO HIT THE GROUND RUNNING ON DAY ONE. HERE ARE THREE STORIES OF ALUMNI WHO LANDED THEIR DREAM JOB AND ARE MAKING A DIFFERENCE.

ALUMNI

NICOLE PARR

Production chemist, Abbott Laboratories

"I like my job because it feels like home"

Nicole Parr's on-screen equivalent likely won't be the protagonist of your favorite TV crime drama.

But the Cal Poly Pomona alumna ('18, chemistry) plays a vital role aiding law enforcement and medical professionals to perform accurate drug testing.

After graduating last year, Parr accepted a job with **Kelly Scientific** as a production chemist at **Abbott Laboratories** in Pomona. She isn't the one testing humans for drugs like opiates, LSD and cocaine. Her role precedes that part of the process.

Her job is to ensure the biotech company's drug tests on blood, urine and saliva will yield accurate results in the amount of time it takes to watch a couple of CSI episodes.

"We test the drug test administered to people in hospitals," Parr says. "When our tests come back good, then my company packs the drug tests and sells them to police or hospitals."

By the time she graduated, Parr had more than three years of hands-on experience both through her coursework and a part-time job in Cal Poly Pomona's biology stock room. She learned the practical functions of pipets and microscopes in the classroom and gained even deeper knowledge of supplies while repairing them.

It's not just the work that drew Parr to Abbott Laboratories, but the familiarity of her surroundings.

"I had two job offers and I chose this one because that's where I felt the love and support that I had at Cal Poly Pomona," Parr says, specifically referencing the relationships she formed in the biology stock room. "I like my job because it feels like home."

ALUMNI

ANDREW KOPP

Archival and metadata technician, Peterson Automotive Museum

"I really found myself at Cal Poly Pomona"

The first item **Andrew Kopp** archived after graduating from Cal Poly Pomona was a photo of Evel Knievel's famous 1974 attempt to jump the Snake River Canyon.

If confirmation that Kopp had landed his dream job didn't settle in when he peered through the magnifier at his first strip of film, it was driven home the minute he walked into the vault of the **Petersen Automotive Museum**.

"It just took my breath away," Kopp says. "I was floored. To see so many pieces of automotive history just lined up in front of me, I knew that I needed this job. I knew that I wanted to tell the story of these cars, the story of automotive history."

The Peterson Museum displays more than 150 vehicles in its 25 galleries. The 60,000 square-foot museum vault contains some of the rarest vehicles from around the world, including hypercars, early 20th-century cars, head-of-state cars and supercars.

As the museum's archival and metadata technician, Kopp ('17, history) has archived close to 700,000 of the 20 million images from Robert Petersen's famous publications, including Hot Rod Magazine, Motor Trend and Rod & Custom.

When Kopp arrived at Cal Poly Pomona after community college, his emphasis was history. His original aspiration was to teach it, not piece it together.

Kopp discovered the archival profession during an internship at the March Field Air Museum in Riverside. His ensuing work as a student at the W.K. Kellogg Arabian Horse Library cemented his love for the archival process.

Kopp has since transitioned from horses to horse power.

"The opportunities I had in school are the reason why I got the opportunity (at the Petersen Automotive Museum)," he says. "I really found myself at Cal Poly Pomona. When I got to process a collection from start to finish at the Arabian Horse Library, all of that research and preservation really propelled my career and what I wanted to do."

CARLY OWENS

Public relations specialist, Experian

"It's a challenge, and I thrive on challenges"

Carly Owens' most telling detour on her path toward a career in public relations came through the loose nuts and bolts aisle at Ace Hardware.

She says she knew "next to nothing about hardware" when she began the part-time job she held during college. By the end, she could find every rivet and explain every fastener on the most intimidating aisle in the store.

Owens' curiosity and attention to detail have also served her well as a public relations specialist at **Experian**, where her expertise has since expanded on an international scale.

Experian is a global information services company that maintains up-to-date knowledge across an array of rapidly changing industries all over the world.

"I enjoy everything that I do here because it's so technical and can be hard to understand, which sounds weird," says Owens ('16, communication). "But to me, it's just a challenge, and I thrive on challenges."

Experian helps companies make the most of data in an effort to unlock future solutions for its myriad of clients. Owens' role involves media relations, content creation and overseeing measurement of public relations efforts for North America.

Whether it's breaking down sales trends in the automotive industry or understanding how to mitigate fraud, every day is different for Owens as the global company expands its reach. If that weren't enough for her to digest, most of the industries in which Experian deals are in a constant state of change.

"Being on top of that change and understanding how that impacts what we do is a constant challenge," Owens says. "But that's what I love about it."

Owens was hired by Experian in April 2017, but her first job in public relations came as a student assistant in the Cal Poly Pomona Department of Strategic Communications. Owens relished the chance to take what she learned in the classroom and immediately apply her knowledge.

The same innate curiosity that Owens satisfied through Cal Poly Pomona's learn-by-doing philosophy is stimulated on a daily basis through her many endeavors at Experian.

"This is absolutely a dream job," Owens says. "Working for a company whose mission I believe in means so much to me. We don't just say we're trying to help create a better tomorrow, we really are doing it. Getting to share the stories of how we're doing that is why I look forward to coming to work every day."

President Coley congratulates Diane Miller on the honorary doctorate.

Alumna and Cybersecurity Leader Receives University's Highest Degree

The digital world can be a precarious place, but Cal Poly Pomona alumna **Diane Miller** ('81, computer information systems) is committed to meeting the constantly evolving cyber threat for generations to come.

Miller is director of Global Cyber Education and Workforce Development at **Northrop Grumman**, as well as a leading voice for CyberPatriot, which promotes cyber literacy starting in kindergarten.

In recognition of her distinguished career, Miller was awarded an honorary doctorate by Cal Poly Pomona and the California State University system at the College of Business Administration's 50th anniversary gala.

Miller has forged a distinguished career at Northrop Grumman and is an internationally recognized speaker on the need to educate and develop a diverse and talented cyber workforce pipeline. She is a longtime advocate for diversity across STEM disciplines and has shaped the national conversation about cybersecurity.

"Underlying all her professional pursuits and accomplishments is an undying commitment to expanding opportunity," said University President **Soraya M. Coley**. "She has stayed closely connected to Cal Poly Pomona since graduation. And whether it is conducting a workshop at our Cyber Security & Awareness Fair or lending her voice to our strategic planning process, Diane remains 'Bronco Loyal' to this day."

Miller's commitment to higher education includes helping to develop curricula, offering internships, and cultivating relationships between academia, government and industry. At Cal Poly Pomona, Northrop Grumman has provided resources for research in the Cyber Physical Systems Laboratory and helped create a student-led Cyber Security Operations Center.

At the CBA's anniversary gala in March, the college also honored Distinguished Alumni **David Singelyn** ('84, accounting and computer information systems) and **Ruth Singelyn** ('84, information systems), as well as digital leader **Avanade** with the Corporate Partnership Award.

In May, the university will also bestow an honorary degree at the College of Engineering's commencement ceremony to **Joan Robinson Berry** ('82, engineering technology).

NEWS

Student Services Building Officially Opens

Cal Poly Pomona ushered in a new era at the grand opening of the Student Services Building (SSB), an architectural centerpiece of the campus.

The 140,000-square-foot building consolidates essential services for students, including academic advising, financial aid and admissions. It also houses the offices for Alumni Affairs and Orientation Services, as well as the Veterans Resource Center. The building is also the starting point for prospective students and parents going on a campus tour.

"Regardless of the role or responsibilities, each of us is part of this team – each of us has a role to play in student success. This new building is a monument to this vision," said President **Soraya M. Coley** at the ribbon cutting in January. "By aggregating resources for prospective students, current students, parents, and alumni all in one place, we are helping students succeed along the entire journey from when they first step foot on campus to long after they graduate."

In addition to becoming the administrative headquarters, the SSB gives Cal Poly Pomona a true front door to the university. One distinct design trait is the low-slung, undulating roofline, which echoes the hills that make up the rolling landscape of the campus.

The SSB was built to LEED Platinum specifications to meet the campus' longstanding commitment to sustainability.

Architect Frank Gehry Receives Award from Cal Poly Pomona

In his six-decade career, **Frank Gehry** revolutionized architecture's aesthetics and techniques and recast its relationship with cities as one of the modern era's early advocates of design's inherent social responsibility.

For his pioneering work, the Cal Poly Pomona Department of Architecture honored Gehry with the Richard Neutra Award for Professional Excellence in a ceremony in the J. Paul Getty Center's Museum Lecture Hall.

The Neutra medal recognizes the contributions that Neutra, an acclaimed modernist architect and former Cal Poly Pomona lecturer, made to architecture as well as individuals who have dedicated their careers to researching and developing new environments.

Gehry spoke about his projects and philanthropy, architecture and design education, and at his most revelatory, the "healthy insecurity" that continues to drive him. At 89, he is still active in **Gehry Partners**, a practice he established in 1962.

"You've got to stay hungry, stay searching," Gehry said. "I mean it's nice to have accolades, it's nice for people to say nice things, and I certainly am not immune to it. I love it too. But when I'm working, it's not sure if I am going to get there on each project. I sort of feel comfortable in that space and as soon I feel like I know what I am doing, I change the game."

Gehry has connections to Cal Poly Pomona. His sister, Professor Emeritus **Doreen Gehry Nelson**, founded the Design Based Learning Program in the College of Education and Integrative Studies. In his student days at USC, Frank Gehry crossed paths with Raphael Soriano, one of the pioneering figures in mid-century modern architecture and a former lecturer at Cal Poly Pomona.

Far Out and Extraordinary

A pair of astronauts and their alien friends helped Cal Poly Universities capture the Extraordinaire Award at the **2019 Rose Parade**.

"Far Out Frequencies" was the 71st student-built and student-designed float of Cal Poly Pomona and Cal Poly San Luis Obispo. The Extraordinaire Award, honoring the most extraordinary float, brings the trophy tally to 59 since 1949 when campus' first float rolled down Colorado Boulevard.

On the 48-foot float, astronauts Morgan and Sally played the guitar and tambourine with a group of six aliens, sharing a message of goodwill.

The joint effort of both campuses is a prime example of the universities' polytechnic approach to education. Less than a week before the parade, students' problem-solving skills were put to the test.

Originally, the plan was to cover all six aliens in green button mums. With less than three days until the parade, it was clear that there wouldn't be enough green flowers to cover them all.

"That's Deco Week," explained **Summer Blanco**, Cal Poly Pomona's decorations chair, and a senior majoring in biology. "We plan the whole year, and that's when the magic happens ... [But] you get a lot of curveballs thrown at you and have to make lots of on-the-fly decisions."

Three of the aliens – Tuba-Head, Lucy and Mufasa were covered in more than 5,500 green button mums. The others – Ketchup, Scarlett and Lucy – were given additional colors and textures using purple, orange and yellow mums, as well as tomatillos, purple onions, lemons and jalapeños.

NEWS

Music Department Debuts 'Rolls Royce' Studio Recording Equipment

A new state-of-the-art audio recording console puts Cal Poly Pomona on the same level as many renowned music studios worldwide.

CPP's studio now houses an AMS Neve Genesys G32 audio recording console and some associated equipment, secured with funds from the Student Success Fee's 2018-19 SPICE grant and the California Lottery.

"A console is the heart of a recording studio," said Music Professor **Arthur Winer**. "After the microphone, the console is the vehicle by which audio signal interfaces with both the acoustic and recorded realms.

"Neve is the 'Rolls-Royce' of the audio world. Cal Poly Pomona students who record with this console can be confident that they are learning on the very best."

The music department's recording studios are in near-constant use by faculty and students from early in the morning until late in the evening.

"I cracked the proverbial bottle of champagne over the console in December by recording a variety of demanding tests," Winer said. "It's ready for the students for spring semester and beyond!"

Music technician Will Wright-Hooks, left, and Music Professor Arthur Winer operate the new recording console.

Huntley College Hosts 2nd Annual Coffee Summit

Coffee lovers and coffee growers came together at Cal Poly Pomona for the second annual Coffee Summit in January.

Industry leaders and agriculture professionals discussed how to establish a coffee farm in California, shared best practices for farm management, and also tasted a few varieties of coffee. The summit concluded with tours of three coffee farms in various stages of development in San Diego County.

Kaytlin O'Dell of Frinj Coffee brews samples of California-grown coffee.

Streamlining the Path for Future Teachers

A new program can help future teachers save time and money as they earn both a teaching credential and master's degree.

The combined program, offered through the College of Education and Integrative Studies, allows students to earn the degree and credential concurrently. Some students could complete the program in less than two years, saving an additional year and a half of school.

Prior to this, students were required to earn a bachelor's degree and teaching credential before enrolling in the master's program. The change to semesters allowed the college to redesign both programs.

Teachers with a master's degree usually receive higher pay and advancement opportunities. According to the California Department of Education, a teacher in Los Angeles County with a master's degree and credential can earn up to $14,000 more per year.

FOOD FOR THOUGHT Continued from page 11

Team members say that overcoming challenges along the way made their eventual success all the more satisfying.

"This is how we learn," says **My Le**, a senior. The exacting process of experimentation and analysis is preparation for working in the food-science industry, she adds.

"You have to make sure that every step is done right."

Healthy Competition

Students in the class also gear their efforts toward regional and national collegiate food-product competitions. Each group creates its product with an eye on a specific contest: healthy children's snacks, products for developing countries, or products using 50 percent dairy ingredients. All have specific requirements.

Once they have a finished product, students submit their proposals. Competitions give teams an opportunity to hear feedback from industry professionals and possibly win a cash prize.

"Competition brings extra motivation to students, and the contests' guidelines align with what we're trying to teach them," says Assistant Professor and Culinology® coordinator **Gabriel Davidov-Pardo**, who teaches the class with lecturer **Dianne Thuy Trinh**. "It brings the real world to the class."

Trinh, a veteran of the food industry, brings a real-world perspective. Having worked as a product development scientist for companies such as Kellogg's and Nellson Nutraceutical, Trinh offers a multitude of practical tips to her charges.

Cognizant of the different skill sets needed to flourish in the food industry, she prods students to work efficiently and consistently, be creative, think critically, communicate clearly and be aware of financial constraints.

All of these skills lead to success after graduation.

"We push them, but they want to be pushed," Trinh says with a smile.

Indeed, students in the nutrition and food science department are a hard-working and highly motivated bunch, says Department Chair and Professor **Harmit Singh**.

Visiting the end-of-semester showcase, he beams with pride when discussing the work not only of the students in this class but in the department as a whole. It's exciting and impressive, says Singh, to watch students and alumni grow and progress – in classes, internships, job interviews and successful career paths.

"It's really amazing and rewarding."

SUCCESS Continued from page 19

The technologies driving the Fourth Industrial Revolution have the potential to create a better world. Their integration into CPP's inclusive polytechnic model can help us learn and teach better by allowing us to make data-informed decisions about curricula. Our campus and students will not be bystanders in the Fourth Industrial Revolution, but rather will be actively engaged participants in ensuring the promise of these technologies to develop what Schwab calls a "human-centric" and equitable society.

Student Success is our core mission. By opening wide the doors of technological opportunity for everyone, all of our students will be prepared to meet the challenges of the future – the very definition of success.

What's up?

May 17, 18 & 19
Commencement

Students, families and friends will celebrate the conclusion of many years of hard work, dedication and academic achievement. For the graduates, commencement is also the start of the next chapter as they put their knowledge and skills to work. Follow the three-day celebration via live video (video.cpp.edu) and on Cal Poly Pomona's social media accounts (@calpolypomona).
www.cpp.edu/commencement

August 23 to September 14
Southern California Shakespeare Festival

Nonstop deaths (14 in all), hatred and revenge dominate Shakespeare's first tragedy, "Titus Andronicus." Robert Shields ('12, theatre) serves as guest director and Professor Linda Bisesti is artistic director. The company also includes alumni, students and guest actors from the Actors' Equity Association. Performances will be held in the CPP Studio Theatre, as well as two special performances in the Downtown Center for the School of Arts and Enterprise in Pomona.
www.cpp.edu/scsf/

October 5 & 6
Pumpkin Festival

You'll have your pick of tens of thousands of locally grown pumpkins at the campus' annual festival. The event also includes a corn maze, horse rides, petting farm, live music and games for kids. After the festival, the pumpkin patch will remain open through the end of October.
www.cpp.edu/pumpkinfestival

Working with NASA engineers and scientists, Cal Poly Pomona students are getting hands-on experience in developing and marketing new products.

"Our main goal is to improve lives one technology at a time."

Business Professor
H. Erkan Ozkaya

bronco
CAL POLY POMONA DIGITAL MAGAZINE

See the new ideas and projects from the NASA-CPP Business Startup in Bronco Digital Magazine.
broncomag.cpp.edu

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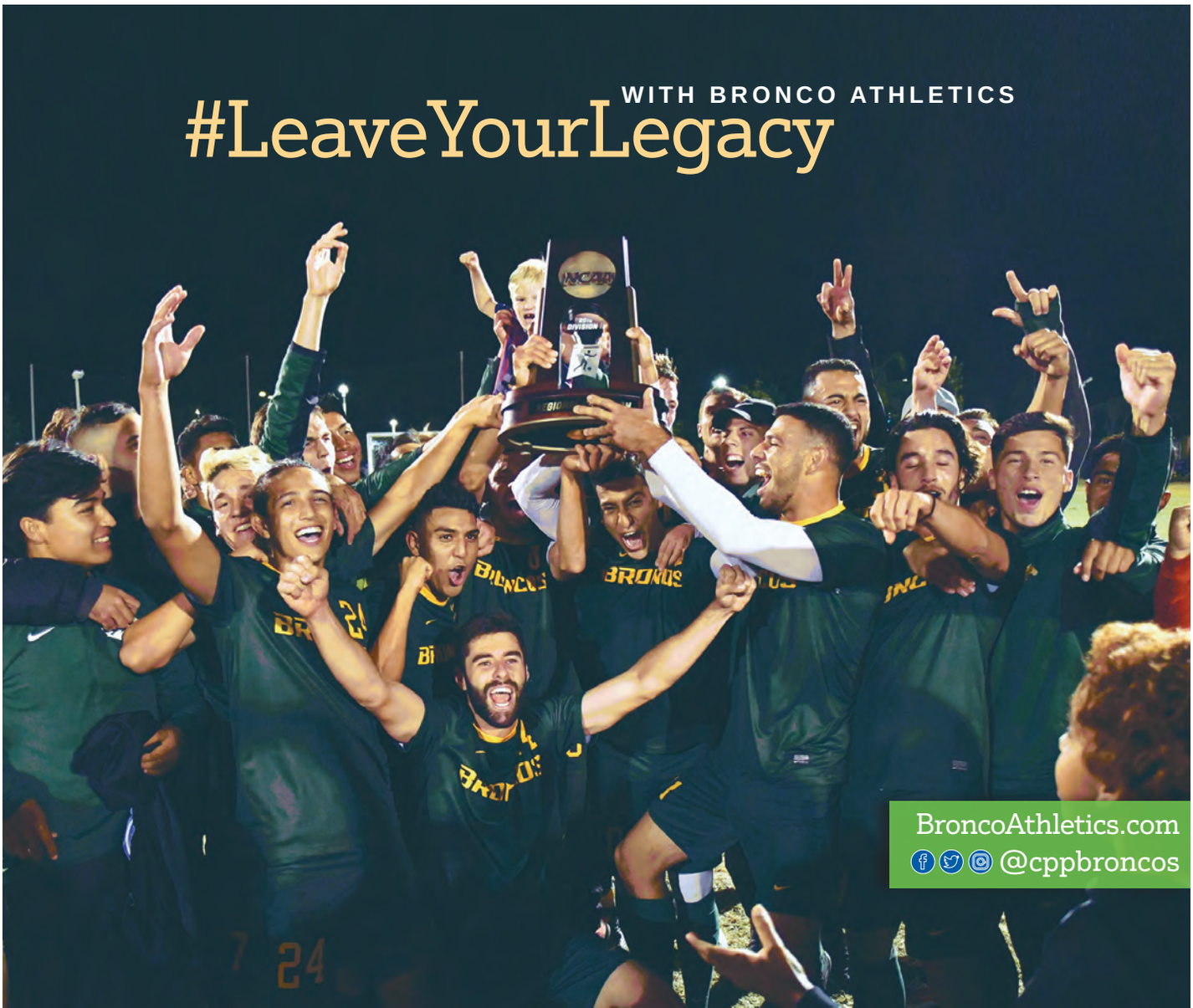
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