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Campus mourns two students

This past summer, Berkeley lost two students in separate terror attacks. Cut short by violence, their lives spoke eloquently to a zeal for understanding cultures outside of our own and making the world a better place.

Sophomore Tarishi Jain was killed in Dhaka, Bangladesh, and junior Nicolas “Nick” Leslie died in Nice, France. Intending to major in economics, Tarishi was completing an internship with Berkeley’s Subir and Malini Chowdhury Center for Bangladesh Studies. She was active in International Students at Berkeley and EthiCAL Apparel. Nick was planning to study at the Haas School of Business. He was a member of Net Impact Berkeley, a student-run nonprofit that consults on tough social and environmental issues, and had been studying abroad.

The Cal community came together to honor Tarishi and Nick and offer its support and love.

promise.berkeley.edu/jain
promise.berkeley.edu/leslie
Who’s No. 1?

The 2016 Academic Ranking of World Universities once again placed Berkeley at the very top of public universities worldwide — and third overall, following Harvard and Stanford. We also kept our coveted ranking as the nation’s top public university by U.S. News and World Report.

Berkeley to partner in “Biohub”

UC Berkeley, UC San Francisco, and Stanford University will join forces in a new biomedical science research center funded by a $600 million commitment from Facebook CEO and founder Mark Zuckerberg and pediatrician Priscilla Chan. Announced in late September, the San Francisco-based Chan Zuckerberg Biohub, an independent collaboration of these world-class research universities, is the first philanthropic science investment made by the Chan Zuckerberg Initiative, which is dedicated to advancing human potential and promoting equality.

A record-breaking year of giving

Fueled by a spirit of generosity, the Cal community broke a philanthropic record last fiscal year. More than 65,300 donors gave $479.1 million, enabling us to build upon Berkeley’s legacy as a global force for inquiry and innovation.

Chancellor Dirks to step down

After three years as UC Berkeley’s 10th chancellor, Nicholas Dirks announced in August that he will step down once a successor is in place. Read his message and a summary of his achievements at promise.berkeley.edu/dirks
One day not long ago, a young girl named Sophie came home from school with bruises on her left wrist. When her mom asked her what had happened, she said she was trying to cross the monkey bars. Today, Sophie, who was born with four partial fingers on her left hand, uses a 3D-printed “super hand” that was created especially for her by researchers in Berkeley’s CITRIS Invention Lab. Not only is her hand a winning story of low-cost, customizable prosthetics, it’s helping make some everyday challenges, like gripping the monkey bars, a little easier.

Sophie’s story got us thinking about movement — in her case, how Berkeley researchers are moving forward a digital revolution in the prosthetic industry that is helping people literally move better. In this issue, we share stories about movement, speed, progress, and other related concepts. Astronomers have obtained new data that suggest the universe is expanding even faster than expected. Physical movement can be a powerful tool for coping with trauma. A rich ecosystem of resources is helping nascent entrepreneurs accelerate innovative ideas into successful startups. And, as befits a public university with a strong ethical compass, Berkeley students, faculty, and alumni are moving the dial on a host of challenging health, social, and environmental issues.

So sit back, and enjoy the ride. ■
A preschool teacher is reading a story to her class. Suddenly, her phone warns her of an impending earthquake. She quickly gets the children under classroom tables, where they safely ride out the shaking.

When an earthquake strikes, a few seconds’ warning could make all the difference between safety and harm’s way. With that in mind, Berkeley researchers have developed a free Android app that taps a smartphone’s ability to record ground shaking, with the goal of creating a worldwide seismic detection network that could eventually warn users of imminent jolts from nearby quakes. (An iPhone app is also planned.)

The app, called MyShake, “can make earthquake early warning faster and more accurate in areas that have a traditional seismic network, and can provide life-saving early warning in countries that have no seismic network,” says Richard Allen, the leader of the app project, director of the Berkeley Seismological Laboratory, and chair of the Department of Earth and Planetary Sciences.

Downloaded by more than 170,000 users worldwide, the app uses the phone’s accelerometers to record local shaking. For now, it only collects the information, analyzes it, and — if it fits the vibrational profile of a quake — relays it and the phone’s GPS coordinates to Berkeley for analysis.

Once enough people are using the app and the bugs are worked out, Berkeley seismologists plan to use the data to warn people miles from ground zero that shaking is rumbling their way.
Universe expanding faster than expected

A Berkeley astronomy professor has helped to obtain the most precise measurement yet of how fast the universe is expanding — 9 percent faster than previously believed.

“If you really believe our number — and we have shed blood, sweat, and tears to get our measurement right and to accurately understand the uncertainties — then it leads to the conclusion that there is a problem with predictions based on measurements of the cosmic microwave background radiation, the leftover glow from the Big Bang,” says Alex Filippenko, co-author of the paper announcing the discovery.

“Maybe the universe is tricking us, or our understanding of the universe isn’t complete.”

The cause could be the existence of another, unknown particle, or that the influence of dark energy (which accelerates the expansion of the universe) has increased. Or perhaps Einstein’s general theory of relativity is slightly wrong.

“This surprising finding may be an important clue to understanding those mysterious parts of the universe that make up 95 percent of everything and don’t emit light, such as dark energy, dark matter, and dark radiation,” says the study leader, Nobel laureate Adam Riess, a former Berkeley postdoctoral fellow now with the Space Telescope Science Institute and Johns Hopkins University.

For war veterans who live with a looping rerun of nightmarish memories, anxiety relief can come from an unexpected source — the adrenaline rush of whitewater rafting.

Craig Anderson Ph.D. ’16, a doctoral student in psychology, questioned whether veterans, who generally have higher diagnoses of post-traumatic stress disorder (PTSD), would benefit from the great outdoors. He took two dozen Cal student veterans to the American River last summer to measure their psychological and physiological responses — and observed apprehension and fear give way to camaraderie and splash fights.

“It felt like we were really living in the moment,” says Jet Garner, a veteran of two tours in Afghanistan who is majoring in political economy. “It really felt like we were moving on beyond our hang-ups.”

The multi-year research project utilizes three methods to track stress and anxiety: surveys and journals; saliva collection monitoring physiological changes; and GoPro footage coding facial expressions, body language, and interactions.

Preliminary results support Anderson’s hunch: nature-inspired awe and curiosity can boost positive feelings and ease symptoms, even for wary and withdrawn personalities.

Anderson is also taking inner-city teens on rafting trips to measure their responses.

“If doctors were able to write prescriptions for people to get out in nature, it would be one of the most cost-effective health interventions available, and would change our relationship to the outdoors,” says Anderson.
Coping with conflict

Scene: A Syrian refugee camp in Jordan. A young girl’s confident song cuts through the chaos. One beat later, a chorus of girls responds in force.

At first, a Syrian refugee camp may seem like an unlikely place to hear the call-and-response exchange of capoeira, a Brazilian fusion of martial arts and dance. Yet for these girls, uprooted and deposited in unfamiliar terrain, learning capoeira is a way to help reclaim their voice.

Peace and conflict studies student Kasandra Kachakji ’15 received funding that enabled her to move to Jordan and pursue her belief in capoeira’s potential for helping refugees cope with their disrupted lives. Her instincts proved correct. The movement dialogue that unfolds between two people in capoeira was building a sense of community.

“People are using music and song and movement to build each other up, and feel together, in a place like a refugee camp where you don’t necessarily have the structures to have a sense of community and togetherness,” says Kachakji.

She also created a training program that enables girls to become trainers themselves. For Kachakji, the sweetest reward is the sound of an enthusiastic student proudly leading her peers in song.

Last year, Kachakji joined Capoeira4Refugees, continuing her work to bring movement, fun, and friendship to those affected by conflict.
Engineering students give the band a hand

Engineering students in an introductory computer programming course sometimes create robot computer games for their final project. But last semester, Tina Katopodes Chow, professor of civil and environmental engineering, identified a real-life problem for her 400 students to solve that hits close to campus.

The University of California Marching Band, aka the Cal Band, needed help. In this age of automation, they were still mapping their transitions from one formation to the next by hand. With several hours required to plan each transition, and multiple transitions per show, that’s a time-consuming task. The band’s size (240 musicians) and precision make it even more difficult. Their request? A computer program for choreographing transformations.

While band management software exists, it doesn’t work well for the Cal Band. Chow’s students organized into teams of three and seized the challenge. “The hard part,” she says, “was finding a solution in which the band members don’t collide, and then finding a new path or target if they do.”

Eight student groups developed an effective algorithm that automatically solves most transition issues within minutes, and three of those groups rectified every problem.

“The elegance was in how they systematically went through the transitions and eliminated collisions. They kept fixing the movements until there were zero collisions,” says Chow.

While Chow initially worried that the task would be too hard, the band now has a useful tool it could someday use to create a halftime show. ■
Across campus, at nearly any time of day or night, you will find hordes of students dancing — in front of reflective glass windows, on plazas, and even in parking lots.

Berkeley boasts nearly 16 formal dance clubs representing more than 1,200 students.

The community has grown from just 300 students in four years and hopes to add more formal clubs this year.

Covering a mix of styles and cultures, the clubs range from swing to hip hop, bhangra to blues, and gypsy to salsa. They even have their own senator in the student government. Most groups are highly organized with leadership teams, set schedules, and uniforms. Some compete, others perform, and all of them have fun.

Rosalind Hsu ’17, who is majoring in molecular and cell biology, is the artistic director of Main Stacks, Berkeley’s first competitive urban dance team. Though she danced as a child, she had never been exposed to street styles until she auditioned for several campus groups.

Hsu has gained more than new skills, a community, and a break from the demands of her major. “I used to be quiet and restricted growing up,” she says. “Now I feel accepted.”

Why is dance such a popular extracurricular choice, and why now? Hopi Hernandez ’16, who is majoring in media studies, points to social media. “YouTube has created a culture of sharing and learning,” she says. “I used to get together with my friends in middle school and emulate the videos.”

The rising interest may also speak to our students’ desire to build unity in an often fractured world. Dance is one language, albeit physical, that can bring cultures together in creative and meaningful ways.
Undergrads address the data deluge

Whether fledgling freshmen or pre-professional, Berkeley students have countless opportunities to gain practical experience and fast-track their careers on campus and in the world.

One new opportunity addresses the deluge of digital data and enables students to engage capably and critically with it to gain insight. Helping students across a wide range of majors become data literate, Berkeley’s data science education program emerged last fall and quickly branched out from a base in computer science and statistics.

“Berkeley is doing something transformational, something no other university has imagined. It’s integrating data science as a core component of liberal education,” says Bob Jacobsen, dean of undergraduate studies in the College of Letters & Science.

The entry-level course “Foundations of Data Science” combines key concepts in computation and mathematics with hands-on analyzing and interpreting of real data. An accompanying series of 16 courses lets students follow their curiosity further and connect data fundamentals to fields as diverse as ecology, history, neuroscience, sociology, and urban planning.

More than 550 students from at least 50 majors enrolled in the new courses during the program’s first two semesters. Berkeley’s plan to train tomorrow’s data scientists will continue to expand into new disciplines, add more advanced courses, and may create a data science minor or major.
Law students take learning to court

People in underserved communities often lack access to a lawyer for their legal challenges. Driven by a desire to make a difference and to learn by doing, Berkeley Law students can perform pro bono work for actual clients as soon as they start classes — something few law schools offer.

For the past five years, the Student-Initiated Legal Services Projects (SLPS) have provided opportunities for students to assist immigrants, inmates, international refugees, indigenous people, and others caught in a crisis or conflict. Students also partake in legal research and educational outreach. Practicing attorneys mentor the members of each project.

According to academic coordinator Diana DiGennaro, what distinguishes Berkeley’s pro bono program are the breadth of client experiences, the active student leadership, and the chance to take part from the first semester. Last year, more than 350 students applied for and nearly 250 took part in SLPS projects; almost three-quarters of the participants were first-year students.

Since a typical commitment involves training and 20 to 40 hours of work each semester, some students learn lessons they won’t gain in a classroom ... or find their life’s calling.

Richard Weir ’16 began working with the International Refugee Assistance Project during his first week at Berkeley Law — setting him on track to secure a highly competitive post-graduate fellowship with Human Rights Watch.

Berkeley students display pro bono power

- Conducting legal clinics for tenants and workers
- Assisting northern California’s Karuk Tribe with natural resource issues
- Teaching street law to youth in Juvenile Hall
- Preparing long-term prisoners for reentry to society
A research university advances on the flow of ideas from its faculty and students. Some ideas inspire useful products, services, or even new industries. How does an idea with commercial potential make it from the lab to the marketplace?

To compete with our private peers, including a certain campus in the heart of Silicon Valley, Berkeley has built a rich ecosystem of resources to help nascent entrepreneurs nurture their innovative ideas into startups that can survive in an aggressive environment. This ecosystem includes incubators, which provide initial funds or other support, as well as accelerators, which offer office space, business acumen, and access to investors.

With startups emanating from its breadth of bioscience, business, computer science, engineering, and other programs, says Caroline Winnett M.B.A. ’90, executive director of SkyDeck, a leading campus accelerator, “Berkeley is as quality a place for investors to seek good deals as any campus on the planet.”

*The Promise of Berkeley* looks at three options open to students, faculty, and alumni to help launch their startups from idea toward IPO.
Free Ventures

**Founded:** 2013, by alumni Jeremy Fiance ’14 and Sam Kirschner ’14

**What it is:** Student-run “sandbox” incubator for undergraduate entrepreneurs

**What it offers:** Seed capital, community, connections with alumni entrepreneurs, and academic credit for converting ideas into companies that otherwise might never exist

**What it’s done:** Create 34 businesses backed by investments of over $20 million

**Success story:** Lily Robotics makes an autonomous aerial camera that follows whoever wears an accompanying GPS transmitter and captures outdoor activities. Part of Free Ventures’ first cohort of startups and later accelerated at SkyDeck, Lily launched a pre-order campaign generating $34 million by the end of 2015.

CITRIS Foundry

**Founded:** 2013, by engineering Ph.D.s Peter Minor ’13 and Alic Chen ’11 and former tech executive Patrick Scaglia within UC’s Center for Information Technology Research in the Interest of Society (CITRIS)

**What it is:** Accelerator of early-stage companies spawning hardware or software solutions for challenges such as clean energy

**What it offers:** Up to $50,000 in cash and services, studio space, invention lab for prototype production, and six months or more of customized coaching with industry experts

**What it’s done:** Develop 31 startups that have added $70 million to California’s economy

**Success story:** WattTime, a nonprofit whose software connects smart devices with clean energy and lets consumers learn — and limit — the carbon footprint of their electricity. A prototype won the CITRIS Mobile App Challenge in 2014. This year, WattTime partnered with Energate to deploy a smart green thermostat for residential use.

SkyDeck Berkeley

**Founded:** 2012, by Haas School of Business, College of Engineering, and Office of the Vice Chancellor for Research

**What it is:** Downtown Berkeley accelerator of “moonshot startups” ready to change the world and turn a profit

**What it offers:** Penthouse office space or “hot-desks,” six-month Berkeley Acceleration Method program of business development, and Demo Day for presenting to potential investors

**What it’s done:** Graduate more than 100 SkyTeams that have raised $107 million in funding

**Success story:** Zephyrus Biosciences, co-founded by Berkeley bioengineering professor Amy Herr to market a single-cell protein analysis technique, completed SkyDeck training in 2015 and was acquired this year by Bio-Techne Corporation.
Most contest winners receive something tangible, like a trophy or a new car. But students who come out on top of many Berkeley-sponsored contests reap a reward greater than mere financial support: the chance to scale up their bright ideas and export positive change to developing countries worldwide. Consider these innovative — and inspirational — examples.
Recognized by Big Ideas@Berkeley, which supports student innovation for social change, Dost (“friend” in Hindi) is a mobile phone platform that empowers poor, urban mothers to engage in their children’s early education. The tool takes advantage of ubiquitous mobile technology to transmit brief, automated voice messages — each one suggesting a simple activity for parents to stimulate a child’s learning of words, numbers, or motor skills. Collaborating on Dost are Sneha Sheth M.B.A. ’16, i-School engineer Sindhuja Jeyabal ’16, and education doctoral student Devanshi Unadkat. Since India alone has some 150 million illiterate women, Sheth sees Dost’s vast potential for helping “…millions of mothers to break the cycle of illiteracy.” They have completed tests in Mumbai and Delhi and hope to reach 1 million families in the next five years.

Another standout twice recognized by Big Ideas is an effort to turn poop into power. Emily Woods, a master’s student in the College of Natural Resources, had already co-founded Sanivation, an organization that installs toilets and collects the waste from homes in Naivasha, Kenya, that lack plumbing. Now she’s working with three other students on Feces to Fuel to enable the production of charcoal for cooking fuel. Compared with wood charcoal, human fecal briquettes create less smoke and require no removal of trees: a win-win for Kenyans and their environment.

Alumni Manuel Schulze ’13 and Torben Fischer ’14 also envisioned a cleaner world when they started Recycle Up Ghana in 2014, with cash from an International House contest that supports grassroots projects. Around 70 percent of the plastic waste produced daily in Ghana ends up littering streets and beaches, clogging storm drains, or burning in landfills. The program targets this plague of plastic trash by empowering high-school students to learn firsthand about waste management issues in their own communities and to effect entrepreneurial solutions for reducing litter. ■
This past summer, 50 future, current, and former Golden Bears rallied in Rio for the Summer Olympic Games, including 41 athletes spanning 15 sports and nine coaches/staffers. When it comes to swimming, Cal was in a lane of its own — hauling in a staggering 19 medals, including eight golds.

Dana Vollmer ’10 (pictured here) made a comeback for the ages. After winning one Olympic gold in 2004 and three in 2012, she thought she’d hung up her
swimsuit for good. But with a toddler in tow, she dove into the 2016 Games — winning a gold (400 free relay), silver (400 medley relay), and bronze (100 butterfly). Vollmer is the first American mother to win a gold in swimming.

At the close of Rio, Cal stood tall on the international stage, earning 21 medals in all. (The other two were in volleyball and rowing).

CalBears.com/Olympics
Around campus, there’s an old joke that the “UC” in UC Berkeley stands for “under construction.” And for good reason — more often than not, a crane or construction workers can be seen somewhere at Cal, a testament to the university’s endless efforts to expand and upgrade its facilities.

With several projects nearing completion, The Promise of Berkeley takes a look at three new — or newly refurbished — spots on campus that enhance the visitor and student experience.

**Cal’s answer to Hogwarts**

This fall, nearly 200 Berkeley undergraduates moved into the renovated Bowles Hall (pictured below), which bears more than a passing resemblance to residential colleges at Cambridge and Oxford — with a touch of Hogwarts from Harry Potter for good measure.

Built in the 1920s, Bowles sits on a hill near Memorial Stadium and boasts Gothic arches and a square turret. After a $40 million renovation project, it has now reopened as a residential college for undergrads, plus three graduate students and two professors — a housemaster and a dean.

Original donor Mary Bowles envisioned the hall as more than “a mere boarding house where men would eat and sleep but ... a home.” That vision faded over the years — by the mid-1970s, key features such as student governance had ended, and on-site dining left in 2000.

“When they told us in 2005 that it had become a freshmen-only dorm,” says former resident Bob Sayles ’52, “we just couldn’t square it with our remembrance of what the Bowles experience once was.” Sayles and fellow Bowles alumni spearheaded the push to revive it as a residential college.
Berkeley’s building boom

A hub for visitors far and wide

California Memorial Stadium is already a bustling spot on football gamedays — but this fall, the university’s new Visitor Center is adding to the activity at the stadium.

For La Dawn Duvall, executive director of visitor and parent services, a vibrant, state-of-the-art center for campus guests is “necessary, overdue, and completes what a visit to a university should be. Along with visitors to the Campanile, we serve 150,000 to 160,000 people a year … first impressions count for so much.”

The Visitor Center has hung its hat in several humble spaces over the years, including a tiny spot in the student union, a slice of University Hall’s ground floor, and an office in Sproul Hall.

At the new location, “the guests’ experience will be on par with the academic excellence of the campus,” Duvall says, adding that visitors will be able to purchase food and souvenirs.

A new chapter for a campus library

Moffitt Library was recently transformed into a premier campus location for undergraduate study.

New spaces on the fourth and fifth floors now serve as magnets for social and group learning, while other spaces support quiet, solitary work. Technology-rich, 24-hour floors empower the around-the-clock, 21st-century learning style of today’s students. And a “Maker Space,” opening this spring, will feature 3D printers that enable students to create three-dimensional objects by laying down successive layers of material.

The $15 million project, primarily funded through the generosity of donors, is generating excitement among undergrads. “Moffitt’s renovations thrive on innovation and a new way to work together,” says Carmen Zheng ’17, a dual major in media studies and business administration.
When a heart beats abnormally, a pacemaker may be implanted that can set it on the right path. Jerry Arellano’s path might have skipped a few beats had he not been able to pursue a college degree.

Raised in the Bay Area by a single mother from Nicaragua, Arellano and his family lived on the edge of poverty. Despite their misfortunes, he excelled in high school. “I was just waiting for the opportunity,” he says, holding back tears, “and, quite frankly, the opportunity was a Berkeley scholarship.”

Arellano graduated from Berkeley in 1996 with a degree in molecular and cell biology. He went on to pursue an M.D., training and practicing outside of California for nine years before returning for his dream job — as a cardiologist at Kaiser Permanente. He specializes in implanting devices that restore and create normal heartbeats and rhythms.

One day Arellano greeted an unexpected patient — Wilmer Fong ’49, a retired teacher and YMCA director who, years earlier, had served on the selection committee for Arellano’s scholarship. Fong had found his name on a list of doctors.

“I thought, ‘Hey, this name is familiar! What a small world,’” says Fong. “I have a serious illness. Jerry is saving my life.”

The opportunity Fong helped bring to Arellano is being returned immeasurably toward a longer, better life. Whether through supporting scholarships or giving back, however coincidentally, to those who supported you, both men have kept the gift of a Berkeley education close to their hearts.
Math major Morgan Randall ’16 is taking on the world with two hands, a keen eye, and a giant heart. While his math studies have honed his capacity for accuracy, his curiosity and concern for others inspire him to represent many faces, interests, and ideas in drawings, video games, and comic books.

Recently Randall, who literally draws with both hands, decided to make portraits of every student in International House, his campus home. Nearly 600 portraits later, he created a video about his effort and won a contest through Big Ideas@Berkeley, a program that supports innovative, high-impact student projects. He hopes to use the prize money to teach art and make murals with cancer patients at an oncology hospital in Vietnam.

Randall’s ambidextrousness enables him to do one portrait in three minutes, but his interest in the international cohort at I-House — not to mention a desire to practice German, Japanese, and Korean — often lead to long conversations, new friendships, and treats!

“\text{I’ve come to love Lithuanian chocolate and Colombian coffee-caramels ... Turkish delights and Singaporean hot chocolate mix,\textquotedblright he says. \textquoteleft\textquoteleft But even nicer than the food are the friendships — sometimes a total stranger becomes my close friend.\textquoteright\textquoteright"

When not hanging out at I-House, Randall can be found on Sproul Plaza, making portraits for $3 a pop. He has also worked on video games for differently-abled players and created a comic book for a research project on black women superheroes. While studying math is helping Randall develop an eye for detail, he is using art to share his skills with others and create a vision of a fun, inclusive world.
A reunion is a natural time to reflect on your college experience. It’s also a chance to look forward, by leaving a legacy that makes the dream of Berkeley possible for future students.

For the first time in Cal history, the Class of ’66 invited its members to make a planned gift that will count toward its fundraising goal for the university. At press time, the class had raised $12.5 million — $2 million of which is through documented bequests. If they meet their $15 million goal, they will set a new record for a reunion class gift.

In the past two years, Joffa ’66, M.B.A. ’67 and Ellen ’66 Dale (pictured above) have celebrated both their 50th anniversary and 50 years since they graduated from the university that brought them together.

“We can’t think of a more meaningful way to mark this occasion than by including Berkeley in our will,” says Ellen.

While life swept the Dales away from Cal, they reconnected to it when their son, Jeff, started playing in the Cal Band.

“We became band groupies,” says Joffa, “and for over 20 years, we have continued to broaden our commitment to the campus areas that have shaped our lives.”

When it came time to think about their will, they wanted to make sure the organizations they care passionately about continue on — and that includes Cal.

Their granddaughter, Audrey, started at Berkeley this fall — a 4th-generation Golden Bear. “She represents the future in a very personal and powerful way,” says Ellen. “We hope our gift will support more bright young people like her in learning, growing, and making their own memories of Cal.”
IN PERPETUITY: NEW ENDOWMENTS FUEL RANGE OF CAMPUS NEEDS

Philanthropic endowments often provide a prominent professor with extended support for research. A trio of recent endowments to Berkeley illustrates how they can fulfill a variety of goals, while sharing the quality of having a sustained impact.

Endowed coach a first

Three decades after an early date at a driving range, their passion for golf inspired Alex ’78 and Marie Shipman to endow the first named coaching position in the history of Cal Athletics: The Alex and Marie Shipman Director of Men’s Golf Endowment.

This gift honors their friend and former men’s golf coach Steve Desimone, who retired last spring after leading Cal’s team for 37 seasons. As Alex says, “In addition to leaving a lasting legacy for the donor, a coaching endowment can lead to sustainability for a team.”

Succeeding Desimone as the new director of men’s golf is Walter Chun ’01, M.A. ’03 (pictured above), a former student player and team captain who has worked for the golf program since 2002. Chun has served as associate head coach since 2009 — a period when the Golden Bears were the nation’s top-ranked men’s golf team in 2012–13 and twice reached the NCAA Championship semifinals.

Director of Athletics Mike Williams says, “I applaud Alex and Marie for pioneering this permanent support of Cal Athletics in a way that celebrates a legendary Golden Bear.” Williams also says Chun is “the ideal selection” as head coach.

Student-athlete Collin Morikawa ’18 agrees about the new head coach: “He’s represented Cal so well for so long ... and I know he’s going to do as much as he can to make us into better people and better student-athletes.”
How a garden grows

Two frequent visitors and past contributors to the UC Botanical Garden provided a generous gift — the garden’s largest ever — to mark its 125th anniversary. The anonymous couple’s establishment of the $10 million Horticultural Happiness Fund will sustain the salary of four horticulturists, among 13 currently on staff, who care for 34 acres of priceless plant specimens. This endowment will also initiate a matching challenge to support expanding research and conservation efforts and to cultivate greater diversity in the garden’s plants and its audiences.

Already possessing a remarkably diverse collection, the garden is a living museum of 11,000 different types of plants from six continents. The flora of California, a global biodiversity hotspot, is well represented in a substantial number of native plants. Other highlights include nationally recognized collections of cycads, ferns, oaks, and magnolias, as well as herbs and other ethnobotanical plantings — plus many spaces for quiet contemplation.

“The plants don’t grow themselves,” says horticulturist Corina Rieder, who nurtures and tends the garden’s orchids and other greenhouse residents. “It’s a great pat on the back to be recognized for our work and be funded.”
Dual degree to produce “double threat” graduates

Alumni from the College of Engineering and the Haas School of Business have created the Joint Engineering and Business Fund to endow a new undergraduate degree program. The Management, Entrepreneurship, & Technology Program (M.E.T.) will integrate business and engineering education and instill a rich understanding of technology — so students can successfully innovate in startups or more established enterprises, with an eye toward addressing social challenges.

As of fall 2017, students accepted into M.E.T. can earn simultaneous B.S. degrees in business administration and engineering. One track combines business with electrical engineering and computer sciences (creating new technologies, software, or mobile apps). The other track focuses on business and industrial engineering and operations research (making and managing complex systems, such as financial networks or energy grids). Each cohort will be kept small to build a close-knit community and facilitate strong mentoring opportunities.

Both schools maintain close ties to Silicon Valley and other innovation hubs and offer a top-ranked education to their undergraduates. “Our industry partners can’t wait to meet our M.E.T. graduates,” says Berkeley Engineering Dean S. Shankar Sastry. “They’re eager to recruit leaders who can bring inventions into the marketplace.”

Berkeley-Haas Dean Rich Lyons also sees a promising future for graduates of the new program. He says, “Their M.E.T. education will greatly expand their capacity to shape parts of our future that we cannot even see today.”
PLAYWRIGHT TONY KUSHNER WROTE *Angels in America* at a time when gay men were marginalized by the culture and dying in droves of AIDS. Architect Maya Lin designed a black granite wall etched with the names of more than 58,000 Americans who died in the Vietnam War. Such examples illustrate how art can distill, even transcend, a crisis, in whatever form it takes. Two Berkeley alumni have created new works — one driven by a personal crisis and the other by an environmental one — that strive to turn something negative into something positive.

FINDING HOPE IN THE DARKNESS

While hiking in Iran in 2009, journalist *Sarah Shourd '03* (pictured above) was captured by the Iranian government and imprisoned in solitary confinement for 410 days. Since her release, she has traveled around the country sharing her experiences and interviewing dozens of people held in isolation, as well as family members, prison officials, and others affected by life “inside the box.” Shourd wove these stories into a play, *The Box*, that debuted in San Francisco this past June.

Describing the piece as “transformational theater,” Shourd wanted to explore what you would do if you had nothing left to lose. *The Box* tracks its nine characters as they journey from racist to revolutionary, from tough guy to suicide victim, from teacher to lost soul, and from father to friend.

While *The Box* criticizes the alleged overuse and horrific conditions of solitary confinement in the United States, it has also helped Shourd understand her own trauma, which, she says, threatened her sanity, dignity, and future.

“This project has propelled me into the next stage of my life,” Shourd says. “It’s a small attempt to give back what’s been given to me.”

*sarahshourd.com*
URGENCY AND INNOVATION

In the Academy Award-winning documentary Inside Job, Charles Ferguson ’78 examined the elements that led to the global financial collapse of 2008. Now he has turned his lens to climate change.

Time to Choose, which opened in June, does more than attempt to educate audiences about the immense scope and challenges of climate change. It shares the stories of leaders, innovators, and everyday people fighting for a cleaner, more sustainable world.

With breathtaking footage from five continents, the film travels from Appalachian coal country to Nigerian oil fields to Indonesian rainforests — showing the toll that our reliance on fossil fuels and industrialized agriculture is taking on humans.

The film also points to better ways. Dr. Jane Goodall connects climate to the places and animals we love. Nobel Prize winner Muhammad Yunus is leading efforts to bring solar power to millions of Bangladeshi homes. The film even features a few familiar Berkeley faces, including Michael Pollan, a journalism professor and best-selling author of several books on the intersection of food, culture, and the environment.

“My most surprising discovery in making this film is also the most crucial fact about the issue,” says Ferguson. “The solutions to climate change are already here, waiting for us.”

timetochoose.com
1. Lawrence R. Johnson ‘72, a founding donor to Student Mentoring and Research Teams (SMART), speaks with one of 20 graduate and undergraduate research pairs who presented posters on their summer research at International House.

2. Kim Baldonado ‘87 and Cindy Johnson attend a California Live! panel discussion in Los Angeles in May, hosted by the Cal Alumni Association. Baldonado is a four-time Emmy Award-winning reporter for NBC4 Southern California.


Making connections

6. Harry Camp ’33, who turned 106 years old on September 20, reminisces about his time at Cal, football games, and leading the summer field course at Forestry Camp.

7. Scholarship recipients pose for a photo outside Sproul Hall in September.

UPCOMING EVENTS

Discover Cal
A traveling lecture series

CONFlict Zones of the president-elect

Professor Michael Nacht, a noted public policy expert and former assistant secretary of defense for global strategic affairs, will analyze key national security issues facing our incoming president.

OCT. 25 — THE CITY CLUB OF SAN FRANCISCO, SAN FRANCISCO

NOV. 9 — RICHARD J. RIORDAN CENTRAL LIBRARY, LOS ANGELES

NOV. 10 — BALBOA BAY RESORT, NEWPORT BEACH

Register: discovercal.berkeley.edu
8. Kathleen ’70 and Gerald ’65 Silverfield meet with physics doctoral student Vinay Ramasesh ’19 at an event highlighting Berkeley’s Center for Quantum Coherent Science.

9. Li-chiang Chu ’64 and Pasteur Yuen ’56 enjoy the Berkeley Art Museum and Pacific Film Archive’s galleries during the Charter Hill Society’s Annual Leadership Roundtable in April.

10. Members of the Berkeley Art Museum and Pacific Film Archive (BAMPFA) Curator’s Circle listen to Swedish artist Cecilia Edefalk discuss some of her works in an exhibition at BAMPFA through October 16.

11. Jackie Tavelman ’78, ’80 (center) and Michael Cypers ’78, J.D. ’81 (fourth from right) welcome Brandon Pearl ’17, Dean Joseph Greenwell, Itzel Pena ’19, Ellen Kulinsky ’19, David Grinsfelder ’19, and Mariana Rivas ’19 to the Los Angeles Scholarship Reception.
12. Irving Tragen ’45 meets fellowship recipients Catalina Moncada LL.M. ’15 and Christina Randall J.D. ’16 at International House for dinner and conversation in August. The Eleanor D. and Irving G. Tragen I-House Fellowship was established in 2013 to provide partial room and board support for Berkeley Law students.

13. Stefany Millstein ’10, Claudia Walterspiel ’11, Haley Hart ’11, Mary King ’11, and Clara Dellenhach ’11 enjoy happy hour with other young alums at San Francisco’s Press Club in August.

14. Students participating in the MasterCard Foundation Scholars Program meet with Chancellor Nicholas Dirks and Harry Le Grande, vice chancellor for student affairs, at a September reception at University House. The program provides financial, academic, and social support to students from sub-Saharan Africa as they pursue undergraduate and master’s degrees.

Contributing photographers: 1) Peg Skorpinski; 2) Paul Espanola; 3) Preston Davis; 4) Sabrina Burris; 5) Keegan Houser; 6) Elliott Malcolm; 7) Keegan Houser; 8) Gina Spindler; 9) Keegan Houser; 10) Alison Bernet; 11) Felicia Torrez; 12) Bonnie Johnston; 13) Tamara Bock; 14) Keegan Houser
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