Coloradan Alumni Magazine Summer 2019

Alumni Magazine Summer 2019

BACK TO THE MOON -

FOR GOOD?

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ENGINEERING DEAN BOBBY BRAUN: **MARS WITHIN REACH**

LISTENING TO **BIGFOOT**

HOW TO FIND A JOB

THE **HIKING CLUB** AT 100

Be Boulder.







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COVER CU astrophysicist Jack Burns, photographed at CU Boulder's Fiske Planetarium. Photo by Glenn Asakawa.

LEFT Maddie McNamee (EnvSt'19) and **Riley Kenyon** (MechEngr'19) share a moment during CU's snowy commencement festivities May 9. Photo by Patrick Campbell.

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EDITOR'S NOTE

In 1890, the superintendent of the Census, a British journalist named Robert P. Porter, claimed (somewhat dubiously) that the Western frontier of the United States had closed, erased by the density of new settlers.

Seventy years later, John F. Kennedy, then a presidential candidate, heralded a "new frontier," at once an attitude and a set of ambitions, that would lead to Neil Armstrong's spectacular lunar footstep of July 20, 1969.

Space is a frontier that inarguably remains raw, open and vast. Just 13 humans have walked on the moon, and none since 1972. Humanity has never built anything on the surface of the moon or on any planet besides ours.

But intensive efforts are afoot by governments and private industry to return to the moon and press deeper into space. As several stories and graphics in this issue attest, CU Boulder researchers and alumni, long prominent in space study and exploration, will remain at the frontier of the frontier.

Eric Gershon



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THE MOON AND BEYOND

Bobby Braun, dean of CU Boulder's College of Engineering & Applied Science, is a former NASA chief technologist. Here he talks about the moon, Mars and why we should think there's life on other planets.

There's a lot of talk about sending humans back to the moon. Do you think that should be a high priority?

The U.S. space program should always have a flagship goal. When the United States is fully committed to achieving its space goals, our nation benefits in many ways — economically, in national security and with quality of life. Our nation should commit to becoming deep space explorers.

What could we learn from another moon visit that would help us put people on other planets — Mars, say?

Returning to the moon is one path to reduce some of the operations risk of a human Mars mission. The moon is much closer and therefore a safer step. While there are distinct technologies needed for surface operations on Mars relative to the moon, learning how to live and work in space beyond low-Earth orbit will require new space transportation systems, habitation systems, autonomy and navigation technologies.

Could we get humans to Mars now? Could we get them back to Earth?

Yes. Absolutely. With the technology currently available, we could land humans on Mars and return them safely to Earth. No Nobel prizes in physics (like those CU already has to its name) need be won — we know the hardware and approach it would require. However, that question hinges on much more than the technological aspects of the mission, including stable support from Congress and the American people, as well as alignment among all facets of the space community — government, academia and industry.

Do you expect this will happen in your lifetime?

Yes. We are certainly trending closer and closer, as a nation and as a society. Personally, I've been dreaming of seeing humans walk on Mars ever since I watched the first U.S. planetary lander, Viking, touch down on the Mars surface over 40 years ago.

You were NASA's chief technologist. What were some highlights of the job?

Working with Congress and the White House to create a new organization within NASA that invests in the technologies

needed for future missions in space was definitely one. Creating a foundational research and technology program that extended beyond the next mission was, and still is, a critical need for an agency that plans to send humans to the moon and Mars, discover life on other planets and search for Earth-like planets around other stars. Representing the amazing work being done by the technologists and applied scientists across the agency, in academia and industry, was also the honor of my lifetime. Lastly, working across many different government agencies to help create the National Nanotechnology Initiative, National Robotics Initiative and the Advanced Manufacturing Partnership was time well spent.

How is commercial space travel likely to influence NASA's priorities?

Industrial strength is a hallmark of the United States space program. The fact that the U.S. space industry has emerged as a major provider is extremely exciting, even enabling, for some of the national missions under consideration. NASA has been increasingly leveraging its relationship to commercial space partners. This relationship has proven to be mutually beneficial and is still growing.

CU is about to open a new aerospace engineering center. How will it make us better?

This facility will allow us to grow our pipeline for talent, connect us more closely to industry across the state and the nation and serve as a connector for aerospace activities across our campus. The new building positions us at the center of the aerospace innovation ecosystem.

You once edited the Journal of Spacecraft and Rockets. What's your all-time favorite spacecraft?

Pathfinder, which landed on Mars on July 4, 1997, obviously holds a special place in my heart. I was part of the team responsible for safely landing it and the first-ever Mars rover, Sojourner, on the surface of the Red Planet.

What's the best reason to believe there's life on other planets?

Given the sheer size of the universe and the massive number of planets out there, one has to consider the mathematical probabilities. To me, answering this ageold question is just a matter of time.

Condensed and edited.



News SUMMER 2019

Making History

FEWER THAN 18 PERCENT OF ALL WIKIPEDIA ENTRIES ARE ABOUT WOMEN. MEGAN MORIARTY IS DOING SOMETHING ABOUT IT.

MEGAN MORIARTY (HIST'02) HAD recently started as the Museum of Boulder's community engagement director when she picked up on the pattern: Wikipedia, a first-stop research source for her and millions of other people, had conspicuously little to offer about women.

In fact, she learned from Women in Red, a Wikipedia editing group, that fewer than 18 percent of Wikipedia biographical pages are about women.

So, last year Moriarty started her own project, Inclusipedia, to add influential Boulder women and people of color to the free online encyclopedia.

"Wikipedia's biographical pages are not representative," she said. "What does that mean for our collective history here in Boulder?"

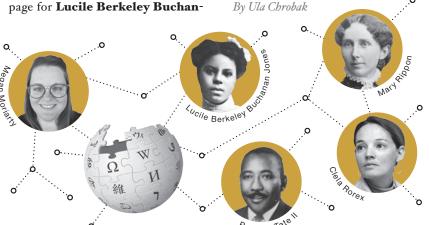
So far, Inclusipedia has led 10 editing events, including one at CU's College of Music. Laptop-carrying volunteers, up to 30 at a time, meet, learn how to edit pages and get to work. Sometimes they add detail to existing pages, sometimes they create new ones.

Inclusipedia's first addition was a page for **Lucile Berkeley Buchan**-

an Jones (Ger1918), the first African American woman to graduate from CU Boulder. Clela Rorex (A&S'73), who issued the country's first same sex marriage licenses, now has a bio, too. Mary Rippon, CU Boulder's first female professor — and perhaps the first woman to teach at a state university — is now a quick Google search away. And there's a page for Penfield Tate II (Law'68), Boulder's first and, so far, only black mayor.

The main obstacle to adding entries is Wikipedia's vetting process. It requires detailed citations of secondary sources, such as newspaper articles and books, as well as proof of notability. This doesn't always exist in ready form, or at all, for people whose historical significance has been unappreciated until now.

"We can create a more inclusive history that celebrates diverse types of accomplishments," Moriarty said. "We can expose more people to the diverse resources and accomplishments from folks in Boulder County."



otos by Camegie Library for Local History, *Daily Camera* collection (Clela); Camegie Library for Local History eum of Boulder collection (Mary); University of Colorado (Lucile); CU Law (Penfield); Courtesy Megan Moriarty

BOULDER BEAT By Paul Danish

WHAT HAPPENED TO THE DAILY?

The Colorado Daily, which for 61 years was CU's official student newspaper, is today published by the Boulder Daily Camera. It's still distributed on campus, but it's no longer a student newspaper.

What happened? It's complicated. And, to me, sad.

From 1892 to 1953, CU's student newspaper was called *The Silver & Gold*. In 1953, the name changed to *Colorado Daily*, reflecting a new five-day publishing schedule.

But the *Daily* was still CU's official student newspaper: CU sponsored it, students wrote and edited it, non-students couldn't be on the staff. (Neither could students with a GPA under 2.0.)

At first, the *Daily* wasn't much different from the S & G.

But in the late '50s the editors grew feistier and more focused on off-campus political issues. And a lot more liberal.

Make that radical.

Crises and drama ensued.

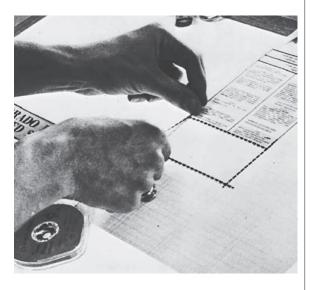
By 1970, the *Daily*'s staffers wanted out from under CU's thumb. The Regents, weary of catching flak for the paper, agreed.

So, a divorce was arranged. By mutual agreement, CU no longer recognized the *Daily* as its student paper and quit subsidizing it. The paper incorporated as a nonprofit and moved off campus.

FOR ME, THE DAILY WAS LIFE-CHANGING.

Then something unexpected happened. The *Daily* not only stopped being the official student paper; it also stopped being a student-edited paper. The emancipated paper's incumbent student staff never developed a process for transferring power to a new student staff. They couldn't let go.

So, the *Daily* evolved from a newspaper produced by CU students for CU students to a paper produced by CU



alumni (mostly) for CU students.

Toward the end of the '90s, the *Daily*, by then employee-owned, hired an accountant who turned out to be crooked. Accused of taking more than \$250,000, he ultimately pleaded guilty to a related criminal charge.

Partly as a result, the *Daily* declared bankruptcy and, in early 2001, sold itself to Randy Miller, a veteran of both the editorial and business sides of newspapering, for \$2.3 million.

Miller returned the paper to profitability, and, 4.5 years later, sold it to the *Camera*.

The *Camera*'s incarnation of the *Colorado Daily* genuinely tries to appeal to CU students and millennials. But newspapers should be dangerous things, and by the *Daily*'s historic standards, it's harmless. I still get a little ache in my heart when I pick it up.

For me, and I suspect for many former *Daily* student staffers, being on staff during the '60s was a life-changing experience. I didn't do anything remotely as exciting and satisfying until a decade later.

Don't get me wrong. The post-1970 *Daily* staffers produced some terrific journalism. I just think it's sad they couldn't find a way to share that experience with future generations of CU students.

Still, I like to think today's *Daily* isn't the late-night final. It's a newspaper. So long as it lives, there's always another edition.

Paul Danish (Hist'65) is a Coloradan columnist.

Photo 1969 Coloradan yearbook Coloradan SUMMER 2019 8

Walk This Way

WITH A HIGH-TECH SAFETY GADGET FOR WALKERS, UNDERGRADS HIT THE JACKPOT IN CU'S LATEST NEW VENTURE CHALLENGE

TIMOTHY VISOS-ELY HAD a lot to celebrate in May: Not only did he and high-school sweetheart **Amy Eichman** (IntPhys'19) both earn CU Boulder degrees, but Visos-Ely's souped-up, midnight-gray Nissan Xterra was about ready for summer off-roading.

Also, he'd just won \$100,000.

On April 3, before a live audience of about 750, **Visos-Ely** (EngrPlus'19) and four fellow engineering undergraduates placed first in the 11th annual New Venture Challenge (NVC), CU Boulder's top contest for aspiring entrepreneurs.

"This means we get to have a decent shot at launching this company," said the 22-year-old Kansas-bred CEO of Stride Tech, a budding medical device firm that emerged from the team's senior design project.

In all, 230 students, faculty and affiliates participated in the latest NVC, which this year awarded a record \$250,000-plus from a mix of donors, companies and investors.

The Stride Tech team designed a digital accessory for walkers intended to improve user health and safety. The device, Smart Step, aims to minimize falls and correct lapses in posture by assessing gait patterns and relaying real-time information about force on the walker.





"Very little weight should be applied to the walker," said Visos-Ely, whose grandmother's reliance on a walker inspired the project.

The first-place finish catapults
Stride Tech's co-founders into postcollegiate life as bona fide entrepreneurs. This summer, Visos-Ely, Max
Watrous (EngrPlus'19), Humsini
Acharya (EngrPlus'19) and Andrew
Plum (MechEngr'19) will work fulltime on their product and company as
participants in Catalyze CU, a threemonth business accelerator program.
[NVC teammate Tom Saunders
(MechEngr'19) has other plans.]

If Visos-Ely gets a breather, he'll recharge outdoors — hiking, mountain biking, tubing or off-roading in the Xterra. It's equipped with a suspension he rebuilt himself.

"I've always liked fixing things," he said. "The reason why I work on my truck is to make it better. I find ways to improve it. That's kind of what inventing is — looking at what's out there and making it better."

Learn more about the NVC at www.colorado.edu/nvc.

Eric Gershon

EDUCATION SCHOOL TO MOVE

In January, CU Boulder's School of Education will move to the Fleming Building, currently occupied by various academic and academic support programs.

Renovations to Fleming — located off Kittredge Loop near Broadway and Baseline — will yield contemporary classrooms, learning labs and community spaces to meet the demands of a growing 21st-century education school.

The school has been in its current location, just south of the University Theatre, since the 1950s. Following renovations, it is expected to house the linguistics department and the Student Academic Success Center.

CU SYSTEM GETS A NEW PRESIDENT

Mark Kennedy, a former business executive and threeterm Minnesota congressman who leads the University of North Dakota, will be the 23rd president of the University of Colorado System. Kennedy, 62, succeeds **Bruce Benson**, 80, (Geol'64; HonDocSci'04), who retires July 1 after more than a decade in the job.

In May, the CU Board of Regents approved Kennedy, the sole finalist for the job, in a 5-4 vote.

The CU system includes the Boulder, Denver and Colorado Springs campuses, plus the Anschutz medical campus. Kennedy's initial contract is for three years.

Philip P. DiStefano remains chancellor of the Boulder campus.

HEARD AROUND CAMPUS

"WE CAN'T GO OUT TO-MORROW AND CHANGE THE JUSTICE SYSTEM, BUT YOU CAN DO THAT ON YOUR CAMPUS. YOU CAN TRY OUT NEW SYSTEMS OF ACCOUNTABILITY. YOU

CAN TRY AND FAIL AND TRY SOMETHING DIFFERENT."

— Tarana Burke, founder of the #MeToo movement, during a CU Cultural Events Board talk at Macky Auditorium April 15.



CU'S FISKE PLANETARIUM

44

Years open

65

Width in feet of dome, largest between Chicago and L.A.

10

Million stars shown with its Mega Star projector

TWO

Most popular shows— Black Holes: The Other Side of Infinity and Laser Floyd: Dark Side of the Moon

206

Seats in theater

60,000

Visitors a year

20

Public shows per week

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LOOK SCULPTURE











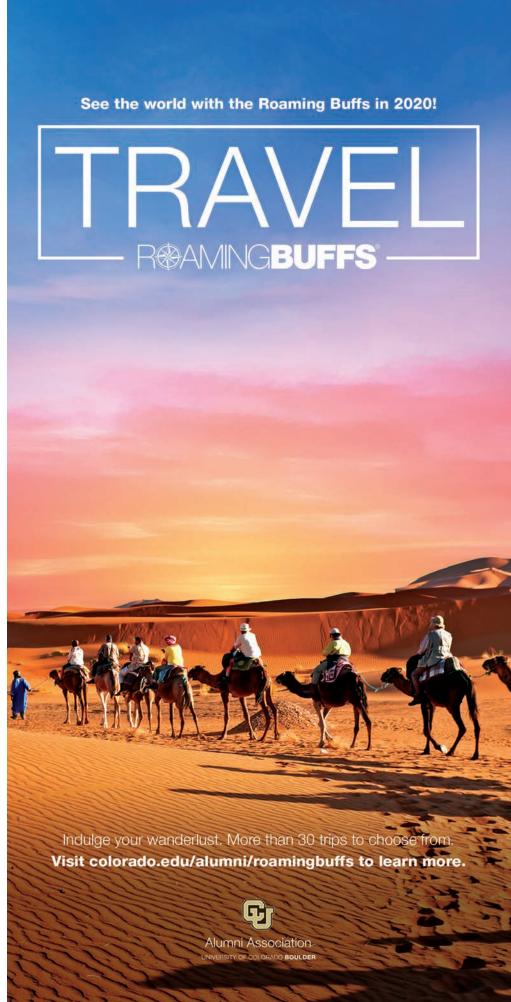


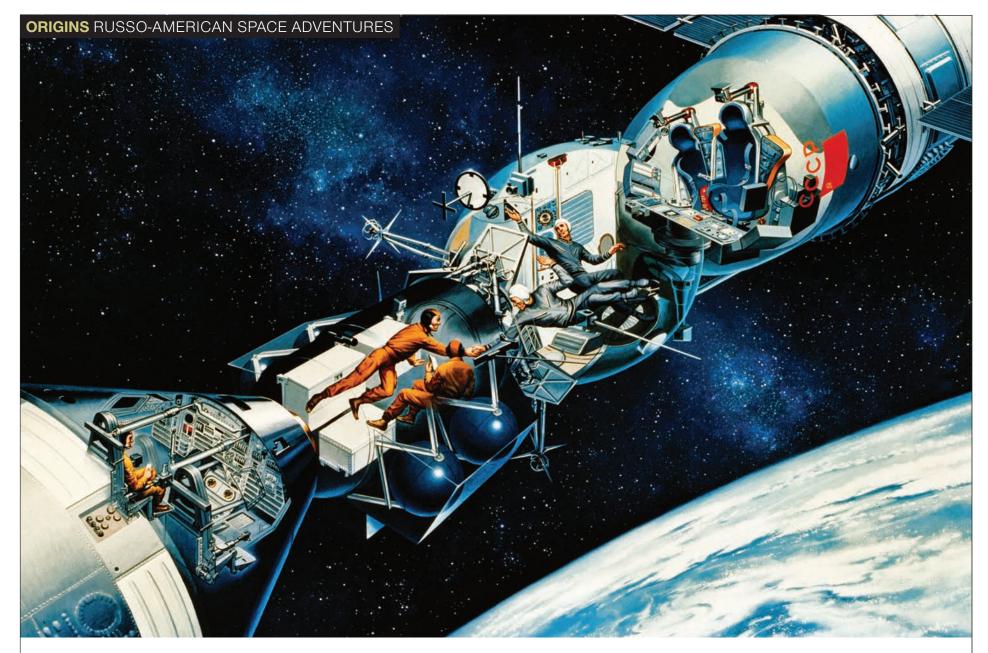




CAST IN IRON, SET IN STONE

Well over two dozen major outdoor sculptures populate the CU Boulder campus. All are fairly new: The oldest, a stone fountain with lions outside Sewell Hall, dates from the 1960s. "Ralphie and the Handlers," among the newest, arrived in the Champions Center plaza in 2016. From the detail views above, can you identify the artworks or recall their locations? Email editor@colorado.edu.







RUSHIN' OFF TO SPACE

The United States and Russia have often been at odds, sometimes perilously. But in the mid-

1970s, a landmark adventure brought the superpowers together, providing much-needed détente amid the Cold War and establishing a sphere of collegial partnership that continues today.

On July 18, 1975, a space capsule containing two Russians (then Soviets) and a second capsule toting Americans **Vance Brand** (Bus'53; AeroEngr'60) and two fellow NASA astronauts maneuvered into position far above Metz, France, and docked with each other.

The mission, dubbed the Apollo-Soyuz Test Project, was the rival nations' first joint space operation and the start of a collaborative tradition.

"My fondest memory was liftoff," said Brand, who prior to rendezvous spotted the approaching Soviet spacecraft through an onboard telescope. "We all had been test pilots and wanted to go higher and faster."

Over the next two days, the multinational space travelers shared meals, conducted experiments and exchanged flags and gifts.

They'd come to know and like each other long before liftoff.

Brand, Thomas Stafford and Donald "Deke" Slayton had visited the Soviet Union's space center three times, and Soviets Alexei Leonov and Valeri Kubasov had visited NASA's Johnson Space Center, also three times. They flew simulators and learned more about the other country's space technology and, importantly, culture.

During these visits the men took intensive one-on-one language courses. The U.S. astronauts spoke Russian, the Soviet cosmonauts replied in English. Everybody mangled phrases, prompting gales of laughter.

"The opposite crew always appreciated the humor," said Brand, now 88, who went on to command three space shuttle missions.

Since 1975, the vastness of space has brought Americans and Russians closer still.

In 2001, for example, **Jim Voss** (MAeroEngr'74), along with astronaut Susan Helms and cosmonaut Yuri Usachev, traveled to the International Space

Station aboard the shuttle Discovery, spending 167 days in space together. (During the mission Voss, now a scholar-in-residence at CU Boulder, and Helms conducted the longest spacewalk ever: 8 hours and 56 minutes).

In 2017, NASA and the Russian space agency announced a partnership for human exploration of the moon and deep space.

And in March two Americans and three Russians entered a sealed structure in Russia as part of a four-month mock moon flight that would include a virtual reality lunar landing.

For a partnership begun 44 years ago, the beat goes on. Through Vance Brand, CU was there at the start.

By Jim Scott (EPOBio'73)

On Dec. 13, 1972, Apollo 17 astronaut Eugene Cernan stepped off the surface of the moon and onto a ladder leading up the Challenger lunar module.

"We leave as we came," he'd proclaimed a moment earlier, "and, God willing, as we shall return, with peace and hope for all mankind."

But nearly 47 years later, we still haven't: No human from any country has been back to the moon.

HUMANS: ALWAYS WONDERING WHAT'S BEYOND THE HORIZON.

Now, as the United States prepares to celebrate the 50th anniversary, on July 20, of Neil Armstrong's first lunar step, the nation is again getting serious about going back. In April, Vice President Mike Pence vowed NASA would return astronauts to the moon by 2024.

The space agency is already testing the Orion spacecraft, a capsule designed by Lockheed Martin that is expected to deliver astronauts there. Plans are also underway for an orbiting space station called the Lunar Gateway, which could serve as a base of operations for astronauts shuttling to and from the lunar surface.

CU Boulder's Jack Burns, who served on the Trump administration's NASA transition team and was present for Pence's pledge, has been waiting a long time for this moment — not for the sake of adventure or geopolitics, but for science. He envisions humans living and working on the moon, using it as a platform for seeing the cosmos' origins.

"When I hear people say 'been there, done that' for science on the moon, I tell them 'You are nuts," said Burns, a professor of astrophysical and planetary sciences who also directs the NASA-funded Network for Exploration and Space Science at CU. "When it comes to the moon, we have only scraped the thinnest surface of what is possible."

Burns and other CU researchers are already working to meet the 2024 dead-line, developing new technologies that could help humans explore the moon in ways Cernan, who died in 2017, could only have imagined.

NEW TERRITORY

As a young astrophysicist, Burns didn't think much about the moon. He was more interested in detecting the faint fingerprints of the universe's first stars.

But in the mid-1980s, a colleague told him something new about the moon's far side: Because it always faces away from Earth, it's shielded from all of the noise of human civilization, including radio waves. And that made it the only territory

within billions of miles where scientists could conceivably detect the signals Burns was after.

"On the moon, we can do these observations of the early universe that aren't

accessible any other way," he said.

From that point on, Burns was hooked on the idea of getting people back there.

You can see early fruit of his current efforts in a small office at Folsom Field. There, a knee-high robot nudges forward on its wheels, then lowers its claw to drop an object into a funnel-like base.

Nicknamed "Armstrong," this robot, built from off-the-shelf parts, wouldn't last a minute in space's harsh environment. But it helps Burns and colleagues explore a big question: How could humans use robots to colonize the moon?

Specifically, could astronauts living on the Lunar Gateway use remotely controlled robots to set up scientific instruments and moon bases?

"Obviously, it would be way more complicated in a real mission," said **Benjamin Mellinkoff** (Aero'18), a graduate student in Burns' lab leading the Armstrong experiments. "But for what we're trying to identify, this is a good first cut." These experiments wouldn't put

These experiments wouldn't put humans on the moon by 2024, but they serve longer term aims: Burns and colleagues want people to live and work there for months or years on end — not simply land, look around and leave.

To make that happen, space agencies and companies need to build permanent infrastructure, said CU computer scientist Daniel Szafir, Burns' collaborator on the robot project. That's where robots like Armstrong come in. Sophisticated versions could serve as mobile scientific labs, like NASA's Mars Curiosity rover.

"I think it's our destiny as a species to expand out into the universe," said Szafir,

of the engineering college's ATLAS Institute. "But even if you're going to do that, it will still be important to send robots first to prep the way, to build the habitats, to do some exploration."

Burns hopes fleets of robots will eventually lay out miles and miles of radio antennae on the moon for detecting his long-sought signals from the first stars.

"No one has ever tried to assemble anything on the surface of another planet," he said. "This is new territory."

For Burns, the moon of a decade or two from now will be a busy place: Home to scientists probing both distant stars and the geology under their feet, and also to companies mining moon rocks for rare minerals and water.

The burgeoning moon economy would provide a practice round for an even more ambitious goal, he said — sending people to Mars, perhaps as soon as the 2030s.

SQUISHY HUMANS

There are other variables to consider, of course, including the toll long-term space travel could take on the human body.

With enough time and money, engineers can figure out how to build space shuttles and moon bases, said Allison Anderson, a CU assistant professor of aerospace engineering, but "the only thing you can't reengineer is the soft squishy person on the inside."

Anderson and colleagues in CU's bioastronautics program are exploring these fleshy concerns. Their work ranges from trying to understand how human bones change in the absence of gravity and how to slow down that loss to designing the next generation of spacesuits.

One of the program's experiments already has a ticket for orbit. NASA has said it will send an Orion spacecraft for a spin around the moon as soon as 2020. The capsule won't host human passengers, but it will carry other life forms: Yeast cells cultured by CU's **Luis Zea** (PhDAero'15) and team. Studying how radiation in space affects the yeast cells could indicate how it would affect human DNA.

"Orion is going to go to the moon, orbit, come back, and then we're going to look at which of our yeast colonies survived," said Zea, an assistant research professor in aerospace engineering.

Like Burns, Zea has been admiring the moon for a long time. He grew up in Guatemala and, as a young man, did everything he could to find work in a country with a space program. He's since worked in three: The U.S., Germany and Brazil.

"Humans are always wondering what's beyond the horizon," Zea said.

By the time robots are laying antennae on the far side of the moon, a decade from now or so, Burns will be in his mid-70s. He'll never see the results in person.

But it'll be enough for him to see other scientists fulfill Cernan's 1972 promise.

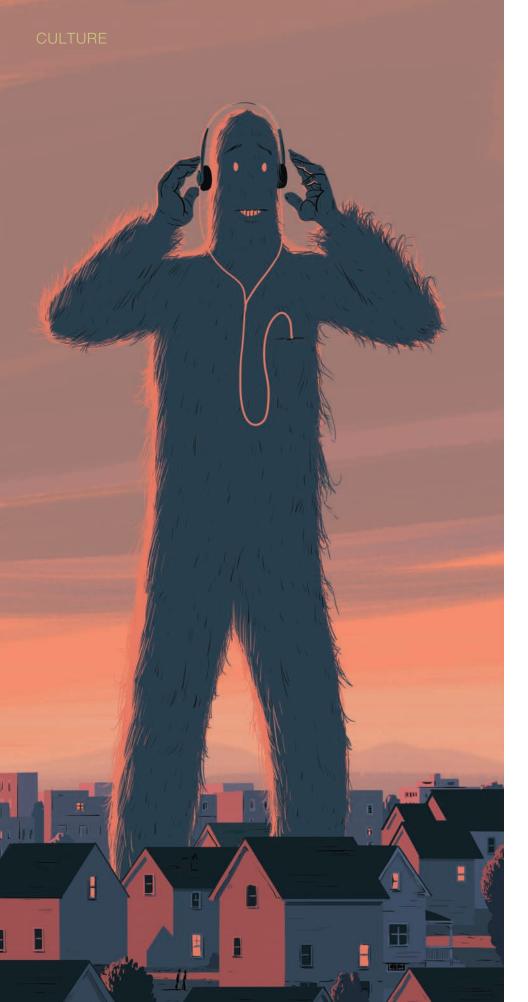
"I'll continue to work on moon science until I drop," he said.

Comments? Email editor@colorado.edu.



"No one has ever tried to assemble anything on the surface of another planet."

17 SUMMER 2019 Coloradan Photo courtesy NASA



Bigfoot, Big HIT

FORMER CU BOULDER JOURNALISM FELLOW LAURA KRANTZ EXPLORES ALL THINGS BIGFOOT IN *WILD THING*, ONE OF 2018'S BEST PODCASTS.

By Sarah Kuta

MAYBE BIGFOOT EXISTS IN nature, maybe not. What's for sure is that the mysterious hairy guy (or gal) has firm footing in American culture.

Bigfoot, aka Sasquatch, and his cousin the yeti, are everywhere — on Great Divide Brewing's "I believe" stickers, which bear the elusive creature's silhouette, in shops selling kitschy "Bigfoot crossing" signs, in movies and on TV.

But who, or what, is Bigfoot? And why are we so fascinated by him?

Laura Krantz, a 2014-15 Scripps Fellow in CU Boulder's Center for Environmental Journalism, wanted to find out. She spent more than a year digging into the scientific, psychological, historical and social aspects of the legendary bipedal primate who, if real, most likely lives in the woods of the Pacific Northwest.

The resulting podcast, *Wild Thing*, became a hit, with more than 1.5 million downloads since its October 2018 debut. *The Atlantic* called it one of the best podcasts of 2018 and Vox described it as "delightful." Listeners loved it, too, writing in reviews that it's "beautifully scripted" and "the definitive podcast on Sasquatch."

In nine 30-minute episodes (and several bonus interviews), Krantz weaves together pieces of the Bigfoot puzzle, touching on biology, popular culture and the psychology of belief.

"We've always had monsters in our history," said Krantz, a former NPR editor and producer. "Beowulf,' the 'Epic of Gilgamesh,' this thing that's beyond the campfire or just outside the city wall. We've evolved with these kinds of stories for centuries, and maybe we need them more than we think."

Through it all, Krantz reminds us why she went down this rabbit hole in the first place, referring often to Grover Krantz, an anthropologist at Washington State University and leading Bigfoot expert who happens to be her distant cousin.

Sharing a last name with one of the world's preeminent Sasquatch research-

ers helped her gain trust among Bigfoot seekers, many of whom are simply interested in the world around them — not quacks, as Krantz initially assumed.

"If you look at it from the angle that Bigfoot is a creature that has eluded capture or hasn't left any concrete evidence behind, then you just have a group of people who are curious about the environment and want to know more about it, which isn't that far off from what naturalists have done for centuries," she said.

The seed for *Wild Thing* began germinating when Krantz stumbled upon a *Washington Post* story about Grover Krantz in 2006. Afterward, she learned of their family relation.

For years, she considered how best to tell the story. When the true crime podcast *Serial* launched in late 2014, it captivated millions of listeners around the world. Krantz, a radio veteran, was among them. She decided the medium was ideal for *Wild Thing*.

Many hit podcasts are backed by well-funded companies. Krantz and husband Scott Carney, a journalist and former Scripps Fellow, created *Wild Thing* independently. And while they haven't made all their money back yet, Krantz said they're close to breaking even and considering options for a slate of podcasts under their Foxtopus Ink masthead.

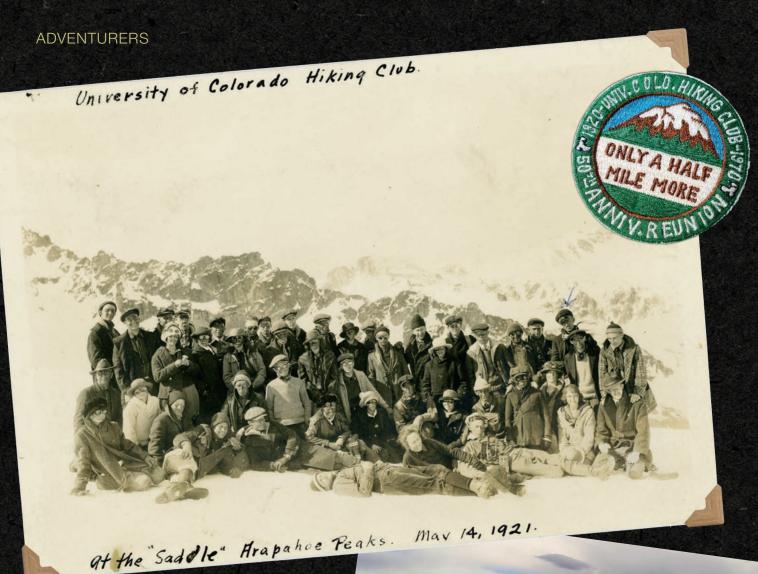
"It's a huge success story for Colorado podcasts," said Paul Karolyi of Denver podcast incubator House of Pod.

Success doesn't mean Krantz found Bigfoot; she didn't. And she's at peace with that.

"I'm not sure I want to find Sasquatch," she says in the show's last episode. "I'd prefer the mystery remain intact, for people to go out into the woods and look for something, to feel a sense of possibility and discovery."

Comment on this story? Email editor@ colorado.edu.

Illustration by Paul Blow Coloradan SUMMER 2019 20



THE FOUR PASS LOOP Hike outside Aspen, Colo., takes backpackers through alpine meadows, rocky scree, scrub and spruce forest — and some spectacular views. The Maroon Bells, two 14,000-foot peaks, put on a purple-tinged show for trekkers of the 28-mile trail.

But high-elevation terrain is also prone to fickle weather. In fall 2017, **Katherine Feldmann** (Bio'20) experienced this when she helped lead eight CU Boulder Hiking Club members on the hike. "We had four seasons over four passes in two days," she said.

Many on the trip were new to hiking at 12,500 feet in a snowstorm, and "there was a lot of hesitation and uncertainty," said Feldmann, now a club officer. She talked to hikers coming down the upcoming pass to assess conditions on the other side, concluding the team could get across safely. She encouraged everyone to push onward.

By the end of the trip, one of the students told Feldmann that the hike was the "craziest, most incredible thing he had done," Feldmann said. "It pushed people's boundaries to the point where they understood 'Yeah, I can do this — I'm not limited by my past experiences."

Finding Your Place in NATURE

THE CU HIKING CLUB, NOW IN ITS 100TH YEAR, THROWS OPEN THE DOORS TO THE GREAT OUTDOORS.

By Ula Chrobak







1928 1923

H. of C. Triking Club
Issued to: Weston E. Taylor
MEMBERSHIP CARD

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DUES X

The University of Colorado Kiking Club

Cordially invites you to attend a hike

Cayal Carch

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Approximate cost \$... 2 ... Approximate time on hike \$\int_{\text{N}}\$ hours.

Call Boulder 922-W not later than Triling home
if you intend to go.

Approximate time on hike \$\int_{\text{N}}\$ hours.

Hiking Manager.







I HAD MADE LIFELONG FRIENDS.

And that, in essence, is the mission of the Hiking Club, which turned 100 this year. Today, the club has about 700 paying members and an email list of more than 3,000. A group of about 20 officers takes turns planning and leading day hikes and overnight trips each weekend during the school year. The club also guides longer excursions during fall and spring breaks.

The club started in 1919 with 35 charter members. An early constitution says the group's purpose is "to stimulate an enjoyment of the out-of-door life in the mountains of Boulder, and to establish an organization of true comradeship and recreational activities." Old photos show groups of up to about 50 people—including women, who were members from the start—hiking up Sunshine Canyon, Arapahoe Peak and Longs Peak.

Even without today's high-tech fabrics and gear, the club made some challenging ascents. At least one ended in tragedy: In December 1946, club member Jeanette Martin slipped on an icy descent from Navajo Peak, pulling her two companions down with her as they were all tied into a rope. Martin died. The two others were hospitalized but survived. In the 1980s, a Hiking Club team completed the Maroon Bells traverse, which follows a sheer ridgeline between 14,000-foot peaks, requiring technical climbing and route-finding skills.

Club outings are less risky these days, and most officers have some level of medical training. "In the past couple years we've really transitioned from a small organization where the same few members go on trips every weekend to a big community," said **Katherine Halama** (EnvSt'20), another club officer. "We want everyone to have the chance to participate."

Costs, gear and know-how can prohibit students from getting into hiking and backpacking. Many freshmen lack cars to even get to trailheads. The Hiking Club provides transportation, free gear rentals, and experienced leaders to get students outside, no matter their resources.

It also provides a sense of community for its members. That's why **Jason Chalmers** (ChemEngr'20) joined. He moved to Boulder as a freshman from Ohio and had few friends in town. Over his first spring break, he went on a club trip to Escalante National Monument in Utah, where the group trekked through canyons, waded across rivers and gazed at the star-strewn desert sky.

"After literally a week of spending time with people, I had made lifelong friends," he said. "That whole experience of finding my place was incredible."

Comment? Write editor@colorado.edu.



How to Land a JOB

A Q&A WITH ANDREW HUDSON — BUFF, JAZZ MUSICIAN, CAREER EXPERT AND FOUNDER OF ANDREW HUDSON'S JOBS LIST.



Career expert **Andrew Hudson** (Engl'89) is founder of Andrew Hudson's Jobs List, a Colorado-focused job board. A former press secretary for Denver Mayor Wellington Webb and U.S. Senator Timothy Wirth, he's also an accomplished jazz musician.

What's the best attitude for a job search?

Focused confidence: An intense belief in yourself and your skills and the ability to specifically and confidently describe how your experiences and accomplishments will add value.

Your confidence must be consistent across the main "touch points" in the job-seeking life cycle — résumé, short introductory speech ("tell me about yourself!"), cover letter, online profiles and answers to predictable interview questions. (What do you want to do? Why do you want to work here? What skills and experience make you the best candidate?) Be prepared with specific stories about accomplishments that demonstrate your skills, work ethic and professionalism.

Job seeking is a skill. Mastering specific job seeking skills will be useful throughout your career.

If I don't have a lot of work experience, what do I put on my résumé?

Don't discount any of your experiences — even those that go beyond your work/ internship experience. If you've volunteered or were part of a humanitarian effort, if you were a sports team captain, if you had a leadership role at your summer job or internship, if you've won awards, if you ran your own babysiting or lawn care business, if you were required to manage a budget or build a website for your on-campus club... anything that demonstrates professional skill, experience and accomplishment will be helpful.

How do I find a job?

More job offers are made through person-to-person networking than any other type of job search technique.

Online job boards are important for prospecting, but all too often job seekers find themselves mindlessly sending off dozens of résumés, then getting frustrated they are not hearing back. Only 25 percent of job search time should be spent on job boards. Only respond to

jobs that match your skills and experiences, as well as your criteria for the type of job you want (type of company, job title, location, salary/benefits, etc.).

CU Boulder has an excellent Career Resources Center to help students and alumni with networking, self-branding, interviewing and writing skills for résumés, cover letters and online profiles.

What is networking?

Power partners: These are people who know you best: Friends, family, professors, colleagues, neighbors or former bosses. They will not only call you back, but will be your biggest cheerleaders. They will open their list of contacts to you, testify to your abilities and actively work to open doors. Remember me? These are close acquaintances who you know well enough to reach out to: Parents of friends, folks you met at an internship, other second-level LinkedIn contacts. The cold call: "Let me introduce myself!" A challenging but necessary networking skill. Let's say you read an interesting article about the CEO of a local company. Or during your research, you came across a nonprofit you'd like to work for. Make contact! Prepare a short script about why you are calling and respectfully ask if you can visit.

Is it OK to ask for something?

Always be ready to make an ask. You've got their attention. "Do you have a job? Can you introduce me to your recruiter? Is there anyone you can refer me to? Will you review my résumé? Can I call you back in a few weeks to check in?"

This might sound forward, but, guess what? Every person you meet has been in your shoes. It's OK. You'll find most people are incredibly helpful.

Parting advice?

Don't panic! Research different careers that fit not only your skills and experiences, but your passions. Things that excite you and bring you joy. In your first years after college, you will identify things about yourself — talents, strengths and skills — that will lead you in career directions you didn't expect.

Condensed and edited by Eric Gershon. Comment? Email editor@colorado.edu.



When **Heather Hansman** (MJour'10) stepped into her single-person inflatable raft on the Green River Lakes in Wyoming, she felt a surge of excitement, followed by a crash of panic.

It was May 2016. The frigid water was high from snowmelt gushing in from the surrounding Wind River Mountains. Hansman was at the origin of the Green River, the largest tributary of the Colorado River, about to embark on her longest rafting journey yet.

"It was time to actually do what I said I was going to do — which was terrifying," said Hansman, a Seattle-based environmental journalist and long-time raft guide.

Over nearly three months, Hansman paddled 730 miles, down the entirety

of the Green to its confluence with the Colorado River in Utah's Canyonlands National Park. Along the way, she talked with farmers, ranchers, fishermen, government officials and scientists about the fate of water in the rapidly drying Southwest.

For decades, the rivers that make up the Colorado River Basin, including the Green, have been drained and diverted to bolster population growth in the booming West. But the rivers have reached their limits, with water demands exceeding dwindling supplies — putting increasing pressure on cities, rural communities and river ecosystems to adapt to a new reality.

"I was shocked at how out of touch I had become, even though I was trying

to pay attention," said Hansman, 35, who recently published a book about her journey, *Downriver: Into the Future of Water in the West*.

"The creep of apathy started to feel scarier than drowning alone in some Utah canyon," she said. "And I think subconsciously, I wanted an adventure too."

Unlike the Colorado River, where every drop of water is allocated to users, the Green still has water up for grabs. But due to population growth, epic droughts, rising temperatures and decreasing stream flows due to climate change, possibly not for long.

"I wanted to try and understand that vulnerability," Hansman said, "and I wanted to do so from the river."

LIVES AT STAKE

The Green is an integral part of the Colorado River Basin system, which supplies water to approximately 40 million people in Wyoming, Colorado, Utah, New Mexico, Nevada, Arizona, California and Mexico. Water flowing through the basin is a crucial cultural and economic resource for 29 federally recognized Indian tribes and irrigates nearly 5.5 million acres of agricultural lands.

After the Green feeds into the Colorado, the water helps fill Lake Powell and Lake Mead, the two largest man-made reservoirs in the United States. Due to a nearly 20-year drought and increasing water demands, both reservoirs have

fallen to dangerously low levels, with mandatory cutbacks for users likely in the near future.

"A lot of lives and livelihoods are really at stake," said Hansman, who has written about Western water issues for nearly a decade.

I HAD TO BE GONE, TO BE IN IT, TO SEE THE GOOD AND THE BAD.

Complicating matters, there's more water promised to users than exists in the system of which the Green is part. This means that if everyone used the amount they're legally entitled to, there wouldn't be enough to go around. The deficit stems from the 1922 Colorado River Compact, which dictates how the seven member states and Mexico use the river basin's water. The original drafters overestimated how much water there is.

The agreement assumes availability of 18 million acre-feet per year, but the historical average is closer to 13. Currently, the seven states and Mexico use approximately 16.5 million acrefeet per year. One acre-foot of water equals 326,000 gallons, or the amount it would take to flood a football field one foot deep.

"Even a washed-up raft guide can see that those numbers don't add up," said Hansman.

And the numbers don't take into account annual fluctuations in water supplies. Many experts have predicted the West will continue to get drier and drier as average temperatures increase, a long-term phenomenon called aridification.

"There isn't enough water to keep up with demands," said Doug Kenney, director of CU Boulder's Water Policy Program. "And supplies will continue to decrease because of climate change."

This leaves Westerners in a tough spot.

"People want the water they were promised," Kenney said. "But the fact remains, someone has to use less."

LIFE ON THE GREEN

At the beginning of her journey, Hansman's arms ached from fighting the upstream wind and roaring current. She was sunburned and her palms were raw

from paddling. She longed for a beer and a popsicle.

She worried about hypothermia, getting lost on the unmarked river, or being murdered in the middle of the night as she camped on the riverbank. She prayed her recently dislocated shoulder

wouldn't fail her.

But the experienced rafter soon found a welcome rhythm: Paddle, eat, write, sleep, repeat.

Most days, she wore the same outfit: Pink board shorts, a plaid

snap-button shirt, Chacos shoes and a blue ball cap to shield her eyes from the sun. Occasionally, adventurous friends joined her for short sections of the trip.

She paddled past the place where water is diverted to the Wasatch Front, home of Salt Lake City's swelling suburbs. She navigated legendary rapids, including the Gates of Lodore in Utah's Dinosaur National Monument, infamous for wrecking one of explorer John Wesley Powell's boats when he first navigated the Green and Colorado Rivers in 1869.

She passed through towering red canyons and sprawling oil and gas developments. She toured a dam, visited an insect researcher and an Indian reservation. She learned about endangered fish from a biologist and attended a heated Bureau of Reclamation meeting.

Back on the river, she mulled what she'd learned. She considered how cities and rural areas might share drought's burden. She thought about decreasing streamflows, water conservation, river ecosystem health and the challenge of balancing growing urban and rural water demands.

She visited farmers and ranchers to try to understand how agriculture is adapting. In the Colorado River Basin, agriculture uses approximately 80 percent of the water supply and holds a large majority of the West's senior water rights. Negotiating compromises won't be easy — but, Hansman discovered, the affected parties are better informed and more thoughtful than she'd realized.

"My assumptions about ranchers and ag producers were really upended," she said. "A lot of those people are doing some of the most detailed, thoughtful, on-theground work and research about dealing with drought and climate change, and I had assumed they were just using all the

water they could, just to do it."

It was late July 2016 when Hansman and three friends who had joined her for the last leg of her trip reached the end in Utah's Canyonlands National Park. On their final day, they ate peanut butter, pita bread and chocolate, and passed around a tiny bottle of champagne.

In the morning, Hansman walked down to the spot where the Green meets the Colorado and dipped her toes in the water. She'd been writing about Western water issues for years, and yet the experience augmented her sense of urgency. She hoped the book she would write would help the rest of us feel it. Because there are hard choices ahead.

"I had to be gone, to be in it, to see the good and the bad," she would write in the book's final chapter. "...For me, it took that constant contact to start to understand the complexity."

Comments? Email editor@colorado.edu.



INFOGRAPHIC CU'S MARTIAN MISSIONS **UP, UP AND AWAY**

With NASA planning to send a rover to Mars in 2020, interest in the Red Planet is arguably at an all-time high. CU scientists have been involved in learning about our neighbor in the solar system since at least the 1960s. Here's a glimpse of past Mars missions with CU connections, plus a sampling of recent discoveries and future plans.

1996 to 2006

This orbiter found gullies with relatively few craters, indicating that they were carved by water recently in the planet's history, after other regions had dried up. CU scientists helped analyze the data.



Planned for 2020

Emirates Mars Mission Launch

The Hope spacecraft would reach Mars by 2021, where it would study weather throughout the planet's atmosphere. CU scientists are helping train the UAE team and test hardware for the mission.



performed back-to-back flybys of Mars, mapping its surface and making the first observations of its atmosphere's composition. The CU instrument on board found that 95% of the Martian atmosphere is CO_a, rendering it toxic for life as we know it.



1971

Mariner 9 was the first spacecraft to circle another planet. It photographed Mars' surface, allowing scientists to map the planet. A CU device on board measured ultraviolet radiation, helping determine the height of features like Olympus Mons, the largest volcano in our solar system.



Mars Atmosphere and Volatile **Evolution Mission (MAVEN)**

MAVEN is orbiting Mars to study gas loss in the top layer of its atmosphere. The aim is to understand how the once-wet planet became dry and inhospitable to life. Early findings show that seasonal dust storms toss up water, accelerating the loss of this liquid. CU planetary scientist Bruce Jakosky leads the effort.

2020



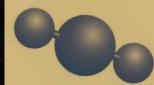


CU geologists are studying meteorites found on Earth for clues about how Mars' moons formed. Recent analyses of the meteorites' minerals hint that debris from a massive asteroid impact clumped together to create these small, lumpy moons.



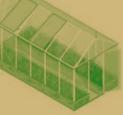
Getting to Mars

CU engineers are studying bone density loss in mice at the International Space Station. The findings are key to ensuring future Mars-bound astronauts retain strong bones during their trip to the planet.



Terraforming

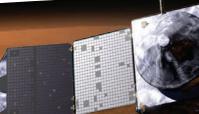
Can we create an Earth-like atmosphere on Mars? CU scientists say no. Its CO. atmosphere is constantly being lost to space, so pumping out the gas to create a warmer environment probably wouldn't work.

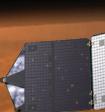


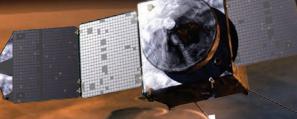
In NASA's latest Breakthrough, Innovative and Game-changing (BIG) Idea Challenge, CU students competed to design a greenhouse that could be used to grow produce on Mars.













1969

GROWING UP IN POST-CULTURAL Revolution China, **Wei Wu** (MMus'13) might have been the only kid in Beijing listening to both Giuseppe Verdi and Miles Davis.

"My grandfather was a trumpeter in a jazz band in 1920s Shanghai," said Wu, now a professional opera singer living in New York. "Even after most Western music in China was destroyed, he and my parents still had classical and jazz music around."

From his earliest years, Wu, a bass, loved singing. He nurtured that love through choirs, voice lessons and undergraduate studies at People's University of China. In 2007, legendary bass Hao Jiang Tian, his future mentor, offered him an opportunity he and his tight-knit family knew he ought to take — in Colorado.

"Chinese composer Guo Wenjing had written an opera specifically for my teacher, to be premiered at Central City Opera," Wu said. "Tian brought me to the United States as his understudy."

The move proved fortuitous: That summer, Wu met his future CU voice teacher, Julie Simson, and auditioned for graduate work at the College of Music. By fall, he was a master's and voice performance certificate student.

A hop, skip and a couple of young artist programs later, Wu can call himself a Grammy Award winner.

In February, Wu and the cast of "The (R)evolution of Steve Jobs" — an opera about the Apple co-founder written by composer Mason Bates and librettist Mark Campbell (Thtr'75) — beat out five heavy-hitting contenders in the "Best Opera Recording" category. Wu played Jobs' spiritual advisor, Japanese zen master Kôbun Chino Otogawa, in the opera's 2017 world premiere in Santa Fe.

"We were never really expecting it," said Wu, who landed the gig after graduating from Washington National Opera's young artist program and a Metropolitan Opera debut. "A nomination is already quite an honor. Then we won."

Bringing Otogawa's story to the stage was an honor — but only a handful of people in the U.S. were likely to get the role, he said, and they're all Asian.

"The people from China who are making it here as professional singers are all my best friends," he said, "and I can count them on one hand." As in film and television, singers of Asian descent are often considered mainly for Asian roles, like Kôbun or the soprano in "Madame Butterfly." That means there's an added challenge when auditioning for parts like King Philip in Verdi's "Don Carlo," Wu's dream role.

A SINGER FIRST.

"My teacher told me that if other singers have to give 100 percent to be cast in an opera, we have to give 200 percent," Wu said. "I have 10 minutes in an audition to make them see past my face and see me as a singer first."

But Wu said he's seeing more and more Asian singers coming to the U.S. to take advantage of growing opportunities in opera, and he views this as a good sign, cautiously.

"This is where the training and opportunities are," he said. "But it is still very competitive."

Wu said the language, diction and voice training he received at CU have made a big difference for him, along with encouragement from his parents and CU supporters John and Anna Sie.

"They always want me to keep working toward the next thing," he said. "Even after I won the Grammy, two days later my father told me not to let the opportunity for this fresh start pass me by."

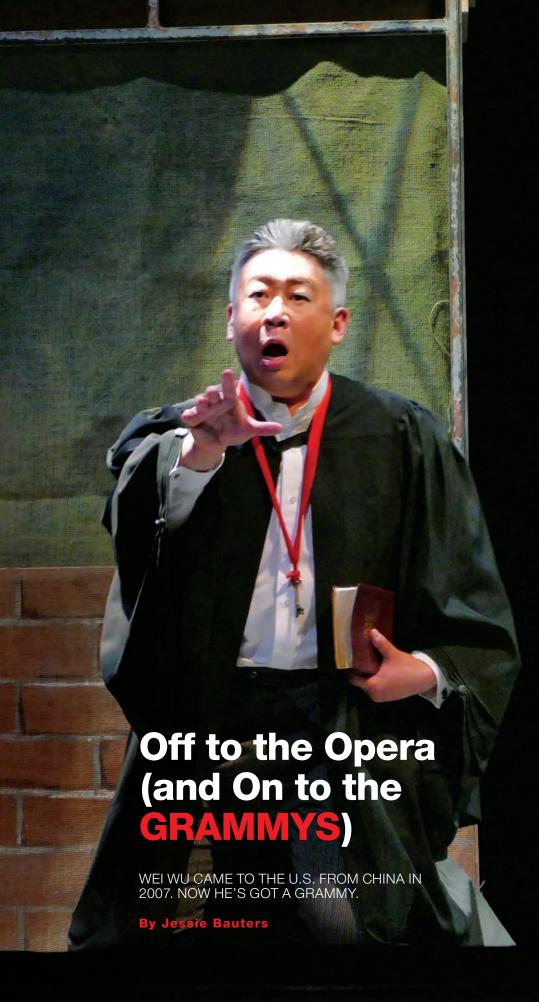
Next year, Wu will reprise his "(R)evolution" role at San Francisco Opera, close to Steve Jobs' old Silicon Valley stomping grounds.

Other CU alumni also fared well at the 2019 Grammys. Record producer **Erica Brenner**'s (Mus'82) album *Songs of Orpheus*, with chamber ensemble Apollo's Fire and vocalist Karim Sulayman, won Best Classical Solo Vocal Album. **Tia Fuller**'s (MMus'00) *Diamond Cut* was nominated for Best Jazz Instrumental Album, and CU Director of Bands Donald McKinney was nominated as a producer in the Best Classical Compendium category for the Dallas Winds' album *John Williams at the Movies*.

Where there's great music, said College of Music Dean Robert Shay, there's probably a Music Buff.

"All this recognition is an incredible honor," he said, "but it's no surprise to us!"

Comment? Write editor@colorado.edu.





Cracking the LOVE Code

INTREPID BRAIN SCIENTIST ZOE DONALDSON AND AN ARMY OF FURRY RODENTS ARE DECODING LIFE'S MOST COMPLEX EMOTIONS.

By Lisa Marshall

OBSERVING A FAMILY OF prairie voles scurrying around their nest, you can't help but feel like you're in the presence of kindred spirits.

With fuzzy round faces, tiny ears and wide eyes that occasionally connect with yours, the palm-sized rodents tempt you to pick them up and cuddle them. But it's the bonds they form with one another that make them of keen interest to us.

Like humans — and only three-to-five percent of all mammal species — they mate for life, forming a lasting connection with partners and sticking together to raise their plentiful offspring. They even experience something akin to grief when they lose their significant other.

Zoe Donaldson, a CU assistant professor of behavioral neuroscience, wants to know why.

"If you think about some of the most important events that take place in life, they fall around our social relationships: We fall in love, we get married, we have kids, we lose someone. But what makes these events possible?" she asks as she looks upon a family of six prairie voles playfully chasing each other through a cardboard tube in her lab. "From a neurobiological perspective, what do you need to form a bond, maintain a bond and overcome a loss?"

A rising scientific star, Donaldson is among a small group of scientists working to answer this question, in hopes of helping people who struggle to make powerful emotional connections.

For those with autism, which impacts I in 59 children, for instance, forming close social bonds can be extremely challenging. At the other end of the spectrum, separation anxiety disorder leads to emotional attachments so intense that they're detrimental. And for those with a condition called "complicated grief," loss of a loved one can lead to profound emotional pain that doesn't fade with time.

In contrast to depression, which centers on individual thoughts and feelings, conditions related to social bonding are understudied and nearly impossible to treat with medication, said Dr. Katherine Shear, a Columbia University psychiatrist who specializes in bereavement.

"Close attachments contribute importantly to many of the psychological problems individuals face, yet there is very little research informing this question of what happens in the brain when we form or lose them," said Shear. "Zoe's research promises to fill the gap."

By observing prairie voles and comparing them to their more promiscuous cousins, such as meadow voles, Donaldson and others have zeroed in on two key hormones — oxytocin and vasopressin.

Now, with several million dollars in federal grants, she's expanding her lab and vole colony to learn precisely what those chemicals do and where in the brain they do them. In short, she's on a mission to decode love.

LOSS, LOVE AND LEARNING

Donaldson was a precocious 17-year-old when she experienced what she now recalls as "a profoundly horrible feeling."

She'd been with a boyfriend for just three months. When he dumped her, she was heartbroken — but also intrigued.

"It was the most intense thing I'd ever felt before," she said of the day she first had an inkling of what she wanted to do for work. "And on some level I thought, 'I want to understand this better."

Raised in Reno, Nev., in a family of scientists and tinkerers, Donaldson had always been a deep thinker.

She left high school at 16 to attend a liberal arts college in Massachusetts, and by 20 had spent time in West Africa researching malaria and finished her undergraduate degree, at UCLA. At 21, she was working on a doctorate in neuroscience at Emory University. There, she was

Illustrations by Bill Mayer Coloradan SUMMER 2019 38

mentored by social neuroscientist Larry Young, a pioneer in prairie vole research.

Voles' monogamy was discovered in the 1970s, when a biologist doing population surveys in Illinois noticed that the same male and female pairs kept showing up together in his traps. Their cousins the meadow voles sleep around, and their female hamster cousins occasionally eat their mates after sex. So the discovery of amorous and faithful rodents was greeted as a scientific gift.

"Typical rodents don't form these attachments like we do, so for a long time these emotions were really difficult to study," says Donaldson.

As she dug into her research at Emory, she had another moment of inspiration.

She'd just had a tonsillectomy and was violently ill, but her then-beau, now-hus-band, Kyle Allen, stuck around anyway, fielding calls from the doctor and cleaning up after her.

She knew that day he was the one.

"I was like, 'this is someone who is going to do everything possible for me when I need it the most," she recalls. "It was a rational realization, but on a deeply emotional level."

Scientifically speaking, she was fascinated by the idea that it probably also had a lot to do with the neurochemicals which flooded the reward centers in her brain when he was around.

When prairie voles, aka *Microtus ochrogaster*, couple up for the first time, research has shown, oxytocin (a hormone associated with trust, understanding social cues and maternal bonding) is released in a brain region called the nucleus accumbens. Vasopressin (a hormone that makes our blood pressure rise and warms us up) is released in a region called the ventral pallidum.

After an initial bond is forged, the animals associate the significant other with that feel-good sensation and keep coming back for more.

Brain imaging studies suggest a similar phenomenon may be at play in humans.

"The idea is that when you see that special someone again, you get a little reward juice and certain cells light up in these reward centers," said Donaldson, noting that they happen to be the same centers that light up when people use heroin or cocaine.

In a way, she says, the term "addicted to love" may not be so far off.

FROM LAB TO PRACTICE

Since moving to CU Boulder in 2016, Donaldson has been flooded with accolades, including the NIH Director's New Innovator Award, and received more than \$2.4 million in research grants.

By filming and observing how prairie voles behave around one another and using state-of-the-art neuroimaging tools to see what happens in their brains when they are with (and without) their mates, she hopes to understand not just which neurochemicals are at play, but precisely which switches they're turning on in which regions of the brain.

Both promiscuous meadow voles and monogamous prairie voles have oxytocin and vasopressin coursing through their little bodies, she said. But prairie voles appear to have more and differently distributed receptors in their brains' reward centers. "The difference between them is not whether they produce these hormones, but rather what they can unlock within their brains," she said. "We're working to find that out."

Meanwhile, researchers at several universities have begun experimenting with intranasal oxytocin in autistic children. At least one university is using it in couple's therapy. Others are exploring its role in complicated grief.

Donaldson is quick to note that the science is young: We're still far from discovering a "Love Potion Number 9."

But she does imagine a day when her discoveries could help lead to new drugs, counseling strategies and even diagnostic tools that use brain imaging to see if a treatment is really working to ignite the brain pathways required to form a bond.

In the meantime, she and her husband have gotten used to snarky questions about their love life and frequent jokes about their oxytocin levels.

Does knowing so much about the neurochemistry of love somehow make it less romantic for her?

Absolutely not.

"Are you really going to feel any less in love if I tell you that it is just a bunch of chemicals in your brain making you feel that way?" she said as a pair of prairie voles snuggled nearby. "I don't. If anything, it gives me an even greater appreciation for it."

Comment? Write editor@colorado.edu.





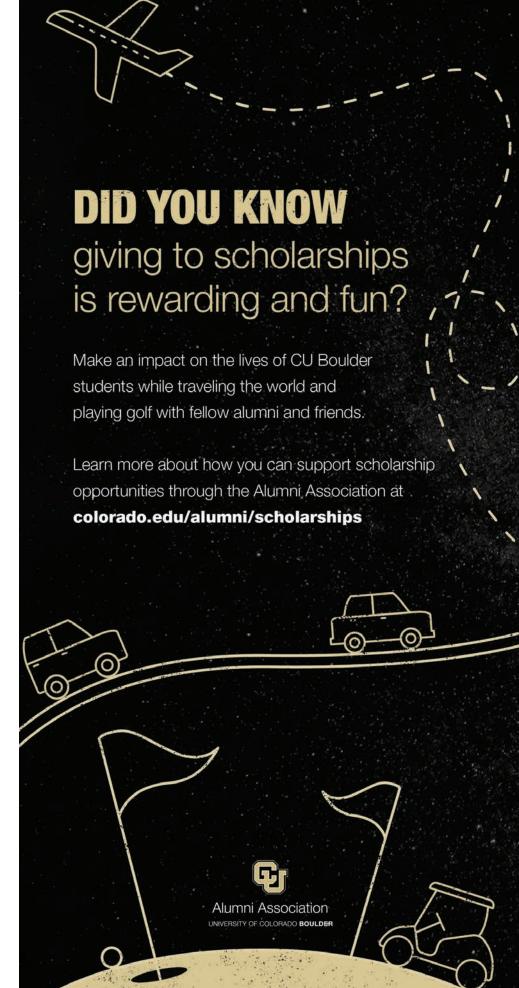


The responsibility to maintain an athletics program that operates within compliance of all NCAA, Pac-12, and University regulations does not fall solely on CU and its leadership, it is also the responsibility of every Buffalo supporter.

Did you know that CU is held accountable for the conduct and actions of its athletics representatives and all organizations that promote the institution's athletic programs? If a violation of NCAA rules occurs, even unintentionally, it may jeopardize a prospect's or current student-athlete's eligibility.

Have Questions? Ask Compliance! comply@colorado.edu





News SUMMER 2019

Our Universe Is Expanding

POPULATION OF CU BOULDER ALUMNI APPROACHES MILESTONE

The swelling universe of CU Boulder alumni surged toward 300,000 May 9 with the commencement of more than 8,600 students, the largest number to seek graduation in one year.

The Class of 2019 included 6,595 undergraduates and 2,024 graduate and professional school students, or 8,619 in all, according to preliminary figures.

These newest alumni are off to work in nearly every conceivable industry, many at marquee enterprises, among them ExxonMobil, Goldman Sachs, Google, NBC and Tesla. Some are starting their own companies (see page 9), others are pursuing advanced study.

Serene Singh (PolSci, Jour), CU Boulder's first woman Rhodes Scholar, is headed to the University of Oxford. Claire Lamman (Phys, Astro), 2019's outstanding Arts & Sciences graduate, is off to Harvard.

"When the impostor syndrome knocks on your door, punch it in the face," 27-year-old commencement speaker Savannah Sellers (Jour'13)

of NBC News said at Folsom Field, where an abbreviated ceremony unfolded amid falling snow and flying snowballs. "You guys are entering a world where young people are the ones making the things we use. Building companies from the ground up. Changing the narforms of technology." A Washington Post report about the snowy ceremony picked up a term spread by Matt Duncan (Bus'92) of CU's social media team: 'Snowmencement.'

rative in D.C. Creating completely new

In 1882, CU's first graduating class had six members.

Today, about half of alumni live in Colorado. California, Texas and Washington have the next largest Buffs populations.

Representing them all is the CU Boulder Alumni Association, led by Assistant Vice Chancellor Ryan Chreist (Kines'96) and board chair Colin Finch (PolSci'o5), who recently succeeded Tom Shepherd (Bus'78).

"I've run into Buffs all over the world — on the street in Florence, Italy, at the airport in Tokyo, even on a trail in the jungles of Peru," Chreist said. "There's an immediate connection every time."

The odds of a chance encounter are better than ever.

Coloradan staff



ROAMING BUFFS SCHOLARSHIP

A new Alumni Association travel scholarship will benefit its debut winners this fall, supporting three Buffs studying overseas. Funded by proceeds from the Roaming Buffs alumni travel program, the scholarship provides \$1,500 grants for tuition, books and other academic expenses.

Magdalena Castillo (IntlAf'20) will go to Spain for the Council on International Educational Exchange Seville Liberal Arts program. Luke Collier (Mech-Engr'19) will attend the CIEE Madrid Engineering & Society program, also in Spain. And Austin Chrisp (PolSci'20) will study at the University of New South Wales in Australia. Donate at colorado.edu/alumni/ roamingbuffs/scholarship.



ALUMNI ASSOCIATION TIDBITS

The new Silicon Valley alumni chapter is led by **Bob Mickus** (MechEngr'86). Genevieve (PolSci'09) and Jeff Land

(Hist'09) have taken over in Memphis. And Kyle Landers (Acct'o6) is steering the Aspen group, succeeding Mike Jahn (Mktg'90).



Buffs Give Back is organizing community service projects for August, November and January 2020. If you'd like to organize a project in your region, contact John Wetenkamp at john.wetenkamp@colorado.edu.



The Forever Buffs Golf Tournament, July 29 at the Boulder Country Club, supports the Alumni Association Scholarship program. Register at colorado.

edu/alumni/golf. On August 19, the CU Boulder Latino Alumni Association hosts the Chili Open at the Colorado National Golf Course, also a scholarship fundraiser. Register at colorado.edu/alumni/latinoalumni.



This summer Buffs at the Ballpark is coming to Chicago, Boston, New York and Washington, D.C. Tickets include a pregame reception, admission and

a Buffs at the Ballpark hat. Register at colorado.edu/ alumni/buffsattheballpark.

June 5 - Colorado Rockies at Chicago Cubs

July 17 - Toronto Blue Jays at Boston Red Sox

July 20 - Colorado Rockies at New York Yankees

July 22 - Colorado Rockies at Washington Nationals Or join Buffs in Denver Aug. 16 for CU Night at the Rockies. Register at colorado.edu/alumni/rockies.



Volunteer at Black and Gold Bash Aug. 23 and help The Herd welcome nearly 7,000 new students to the Forever Buffs family. The event involves bungee tram-

polines, a zip line, a ropes course and other games, plus free food, a DJ and more. Email Sara Abdulla at sara.abdulla@colorado.edu.

2020 TRIPS



THE GALAPAGOS **ISLANDS**

January 8-15, 2020



LEGENDS TO LAGOONS

March 5-15, 2020



SOUTHERN ITALY & SICILY

April 1-15, 2020



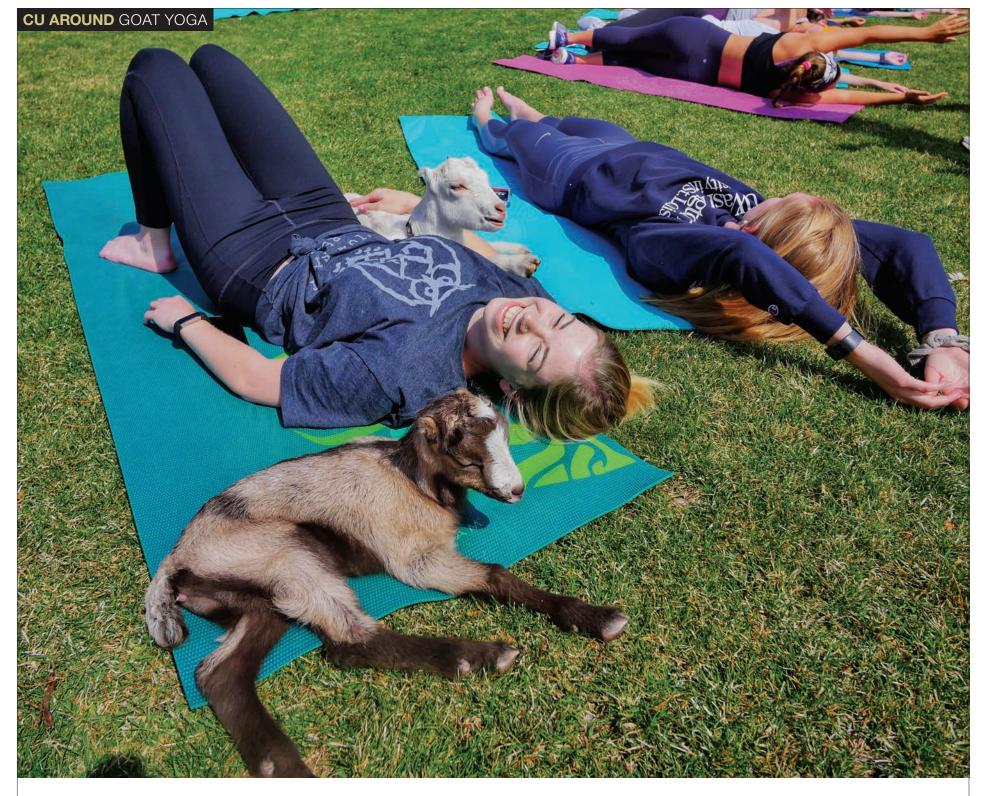
MOROCCAN DISCOVERY

April 17-30, 2020



April 25 - March 3, 2020

For more information about the Roaming Buffs travel program, email lisa.munro@colorado. edu, call 303-492-5640 or visit colorado.edu/ alumni/travel.



GOATS GALORE

It was springtime, and CU students were showing off their downward-facing dogs for a group of four-legged friends.

Welcome to goat yoga. As more than 100 students flowed through traditional yoga poses on the lawn outside the CU Rec Center April
16, eight baby goats
— including three-dayold triplets — wandered
among them, occasionally
climbing onto yogis'
backs or curling up on
mats to bask in the sun.

There was tender finger

nibbling and hair tugging. Giggles and

selfies abounded.

Passersby cuddled with a pair of year-old kids on leashes.

Organized by the rec center, the free classes aimed to help students relax during a stressful time of the semester, said Denise Adelsen, the center's assistant director of fitness and wellness.

Goats complement yoga because they naturally exhibit calmness, curiosity and emotional warmth, she said: "Their innate sense of openness reminds all who participate to be inquisitive, show kindness and truly experience the moment."

The animals came from Boulder's Mountain Flower Goat Dairy.

"My favorite 'thank you' was from a student who had never been this close to a goat before,"
Adelsen said. "She didn't
have pets growing up,
and the experience of
doing yoga while with
the goats made her feel
calm and connected."

Goat yoga returns to campus next April, if not sooner.

Q&A WITH THE CHANCELLOR PHILIP P. DISTEFANO



CU IN SPACE

The first moon landing is one of those historic events in which people worldwide remember where they were that day. How about you?

I was in graduate school at West Virginia. Yvonne and I were newly married, and we had delayed our honeymoon to accommodate my studies. A year earlier the country was deeply divided by race relations, riots, assassinations and Vietnam. I remember how the moon landing united the country. On the streets, people from all walks of life who would never have spoken to each other were talking about the moon landing, and everyone felt pride and excitement. It was the embodiment of John F. Kennedy's vision and we were exploring a new frontier.

CU Boulder went on to become a preeminent space research powerhouse.

We're NASA's top-funded — number one or two — public university for research. We've sent scientific instruments to every planet in our solar system with the help of our students, we're exploring life in other solar systems, we've documented how space weather profoundly impacts our technological society, we're

a top producer of graduates for the aerospace industry, and 18 CU Boulder alumni or associates have flown in space. We're proud of our legacy to expand knowledge and the human condition.

NASA was on campus this spring to help CU Boulder celebrate 70 years of space exploration.

Our Laboratory for Atmospheric and Space Physics predates NASA by a decade and the lunar landing by 21 years. NASA Deputy Administrator Jim Morhard paid us the ultimate compliment when he said that we are a true leader in making breakthroughs and training the next generation of scientists and engineers who will change the world.

What's next?

There's a lot we can learn about the future of our own planet by studying other planets and space generally. We are using our expertise in space-based observation and exploration to address some of Earth's most pressing problems: Changing environment, increasing populations and limited resources. Our space research is an acknowledged crown jewel — and not the only one.



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Be Boulder.

Gift Fund

Sports

News SUMMER 2019

By Andrew Daigle (PhDEngl'16)

Hot Seat

JACK ZABLE IS CHANGING HOW THE NBA WARMS UP

Last November, Troy Flanagan, the Milwaukee Bucks' director of performance, explained the team's 7-0 start to CU's Jack Zable:

"It's the seats."

Zable, a professor emeritus of mechanical engineering, laughed: He'd helped design the Bucks' state-of-the-art sideline benches.

About 18 months earlier, Zable had contacted Flanagan, an acquaintance, seeking a partner for his CU students' senior design projects. Flanagan said he was looking for a way to ensure players were limber and ready to play as soon as they entered the game. Maybe CU could come up with a better sideline seat design, he suggested.

The Bucks, like most NBA teams, were using standard folding chairs for bench seats. Players sat on cold surfaces with their knees crunched up, causing stiffness.

Zable was game. "We'd have one semester to build a prototype," he said.

He assembled a 10-student team to start work in August 2017. The specific challenge: Design adjustable heated chairs to accommodate players ranging in height from 5'8" to 7'6".

After researching chair design and kinesiology, the students found the seat and back should optimally form a 110° angle with an ideal seat temperature of 106°F.

Construction began on campus. Students welded and wired several models, and ultimately produced a durable electric prototype similar to a heated car seat.

Its strength would please Bobby Knight.

"If a player dives into one, it has to be robust," Zable said. "Students would throw it on the ground."

Impressed, Flanagan asked for five connected seats, two sets of which would constitute a full bench.

With help from the University of Canterbury in New Zealand, the CU team finished the bench and recruited a manufacturer. By October 2018, the Bucks had new seats, installed on the home side.

"You get to warm your buns up," guard George Hill told ESPN. "I've never had anything like that before."

The Bucks went on to an NBA-best 60-22 regular-season record.

Now Zable is working on a new project with Milwaukee — preventing ankle injuries: "We're developing a wobbly balancing-beam to improve ankle strength."





MEN'S BASKETBALL MAKES LATE RUN

A seesaw season for CU men's basketball (23-13 overall) ended with a strong March run in the National Invitation Tournament, with wins over Dayton and Norfolk State and a quarterfinals matchup with Texas.

But fatigue caught up there with the fourth-seeded Buffs, who fell to the Long-

horns 68-55, despite outplaying them in the second half.

The Buffs have played in 11 NITs and two in three years. The young CU squad had opened the season 9-1 in nonconference games but struggled early in Pac-12 play. Season-ending injuries to **Namon Wright** (Soc'19) and **Dallas Walton** (StComm'21) hurt.

After falling to 2-6 in conference play, Colorado won 10 of 12. **Tyler Bey** (Ethn'21) and **McKinley Wright IV** (Ethn'21) led the Buffs' resurgence, earning All-Pac-12 First Team honors. CU lost to Washington in the Pac-12 Tournament semifinals.

Projected to finish No. 2 next season by *Pac-12 Hotline*, coach Tad Boyle is optimistic: "Every one of these guys in uniform are coming back next year."

Women's basketball got off to a 10-1 start, but ultimately won just two Pac-12 conference games, while losing 16.

BUFFS BITS

Golfer Victor Bjorlow (Bus'20) rallied to win the Colorado Mines Bob Writz Invitational in March. ... Carol Callan (MPE'77; MBA'87), longtime women's basketball radio analyst, was named the 2019 Naismith Outstanding Contributor to Women's Basketball. ... Joe Klecker (IntPhys'19) scored 14 combined points at the NCAA indoor track-and-field championships, the most ever by a Buff at nationals. ... Alpine skier Isabelle Fidjeland (StComm'20) and football lineman Lyle Tuiloma (Ethn'20) each won the year-end Clancy A. Herbst Jr. Student-Athlete Achievement Award. ... Anne Kelly completed her 22nd year as Women's Golf head coach, tying her with Ceal Barry as the longest-tenured women's coach in Buffs history. ... Lisa Van Goor (EPO-Bio'86), the first and only player in Colorado history to score 2,000 career points and grab 1,000 rebounds, was inducted into the Pac-12 Hall of Honor. ... Lacrosse celebrated its 100th game by avenging its 2018 season-ending loss to Stanford with a 20-11 victory. ... Colorado skiers finished third at the NCAA championships, where Erik Dengerud (Math'22) won the Nordic freestyle title.

STATS

Buffs skiers named
All-Americans this year

23

Career-high points scored vs. UCLA by women's basketball's **Alexis Robinson** (Art'19)

EIGHT

Goals scored by lacrosse player **Miranda Stinson** (EnvSt'19) vs. Cal

53

Percent of studentathletes posted GPAs of 3.0 or higher

TWENTY-THREE

Men's basketball wins, tied for CU's third-most in a season

10-1

Women's basketball's record through first 11 games



THE FEELING OF FAST

Dani Jones (Psych, SLHS'20) is the NCAA's current women's individual cross-country champion. She talks here about her first rival, winning in the snow and the joy of maximum speed.

Going into cross-country nationals, you weren't the favorite. What were your expectations?

I wasn't a huge underdog. I needed to give myself a shot. It happened to be my day.

Were the championships in Wisconsin cold?

It was breezy and there was a layer of snow. They cleared off the first and last 50 meters of the course. There were people slipping and falling. But the temperature wasn't horrible.

You've mentioned that cross-country isn't your ideal race. Why?

I've always considered myself a miler. But 6K isn't that far. I've put the miles in and run workouts to be capable of longer races. The mile's more my favorite than my strength.

What makes the mile your favorite?

That 'I can't go any faster' feeling. There's a lot of strategy. And a lot of bumping around, physical contact and jostling.

What singular advice has Coach Wetmore given you?

Mark's not a hoo-rah, in-your-face, really excited kind of coach. Our team is known for going to the line calm and confident. I don't get nervous anymore to where I'm going to throw up. I go in thinking this is the easiest part.

When you're in season, how much mileage are you doing each week?

Probably 70 miles. The most I'll run at once is 15. We do workouts on the grass where we're running faster and easy days where I'm running for an hour talking to teammates.

What's the longest you've gone without running since you came to CU?

I run every day during season. We get two weeks off between each season. Maybe a month total out of the year I step back from training and thinking about running. I stay off the articles and videos and give myself time with family to veg out.

Do you spend as much time on recovery as you do running?

If anything, it's more recovery. I spend one to two hours a day running, and then, whenever I get the chance, I work on recovery. My roommates say I spend half my life on my living room floor — stretching and rolling — trying to heal.

How do you stay in tune with your body throughout a run?

I push myself throughout. But once I get into a rhythm, my mind can wander. I think about friends and family. It's almost meditating.

What CU alumni have helped you?

[Olympian] **Jenny Simpson** (Econ, PolSci'09) has been great. She's exactly 10 years older than me. I had the opportunity to get off the college circuit for a semester and do some pro races. She was wonderful. I call her if something's bothering me. She's been through everything I'm going through.

Do you have a favorite trail around Boulder?

We're spoiled. The hardest part is deciding where to run. There are gorgeous places on the way to Nederland. I'm a fan of Dowdy Draw. Getting off a dead, flat track is good for strengthening your ankles and feet.

Your younger sister Baylee is on the team. Do you run together?

I love running with her when I can. She's the reason I started running. My parents said she'd beat me in a mile, so I had to stick my nose in there. If I could pick one person who I wouldn't mind too much if she beat me, it would be Bay.

What do you do with your free time?

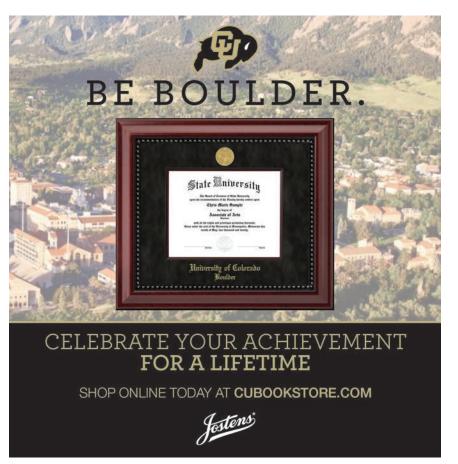
Get out and see Colorado. But my biggest activity is eating. Going out to brunch. The distance runners are all really good cooks.

What's something people may not know about you?

I ate a waffle the size of the plate, with peanut butter and syrup, before cross-country nationals. That's my go-to. I want to be a speech therapist after I run, but my ideal career would be to open a breakfast place in a small Colorado town.

Condensed and edited by **Andrew Daigle** (PhDEngl'16).







A BOULDER ADVENTURE

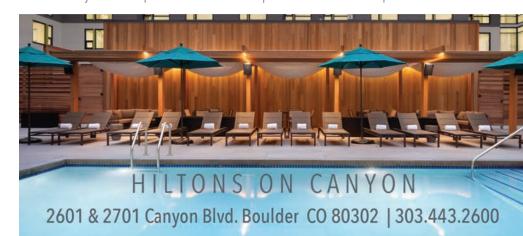
When a summer trip to Boulder calls, stay at our sister properties, Embassy Suites and Hilton Garden Inn, and be minutes from hiking Chautauqua, a bike ride along Boulder Creek Path or strolling along Pearl Street.

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Notes

40s, 50s, 60s & 70s SUMMER 2019



Twins and former CU tennis players Judy Sigel Freeman and Jill Sigel Greer still play.

CU Regent **Emeritus Hugh Fowler** (Mgmt) received the 2019 Lifetime Achievement Award in Advocacy from the Colorado League of Charter Schools, Hugh. 93, writes that most of his classmates and Navy shipmates have passed away. In the '60s and '70s, Hugh hosted three CU Navy alumni reunions with his late twin brother and "computer science wizard" Parker Fowler (Mgmt; MS'55).

152 John R. Thompson (A&S; PhD'60), emeritus professor at Oberlin

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College, writes that he has been retired for 28 years. Oberlin's first clinical psychologist, he taught abnormal psychology and systems of therapy. There he also founded the student counseling and psychological services center. Later, John and his wife, Wynona Tank Thompson (A&S'51), led a group that advocated for the Episcopal Church to ordain women priests, and another group that pushed the U.S. Presbyterian Church to ordain and marry same sex-couples. John recently published the book Me, Now and Then: a Memoir. He and Wynona have fond memories of CU, where they married as undergraduates. "That campus is so beautiful and the education we got there was wonderful," he wrote.

For the past 20 years. Vik 20 years, Vikki Viskniskki Woods (Spch) has run the Iron Mountain Inn, a bed-and-breakfast that she designed and built in Butler, Tenn. "Because an innkeeper never knows who is going to come across the threshold, every time the door opens to new guests, it's like the opening of a new show. And what fun has it been all these years!" writes Vikki. Since opening the inn, she has also opened Creekside Chalet, a cabin rental company, and built her retirement cabin by a nearby lake in Butler.

160 Louis DeLuca (Law) wrote: "I went back East after graduation, clerked for a federal judge and then switched gears into a career in urban

planning, education and the arts in Connecticut and Kentucky. Retired, I live in Berea, Ky., and weave rugs for friends. Transferring to CU law was one of the best decisions I ever made."

William M. Sprecher (IntlAf) writes that attending CU was a chance decision for him, and a great one. "Three universities accepted my applications," he wrote. "Eventually, I narrowed the schools to the University of Washington (Seattle) and CU. A 'flip of the coin' on my bunk bed in my army barracks turned out to be CU. It was a great and lasting choice." After enlisting in the U.S. Army in 1954 following high school in Newark, Del., William was transferred to Texas and then Missouri, before being sent to Saint-Nazaire, France, as a private first class. He eventually rose to the rank of sergeant.

Nancy Rader Kellogg (Zool; PhDEdu'80) retired after 50 years of working in science education. A member of the National Science Teachers Association and the National Science Education Leadership Association, she co-founded the Colorado Science Education Network in 1998 and currently serves on the organization's steering committee. She writes that she continues her service by volunteering with state and national science organizations.

Thomas Lee Turman (ArchEngr) is an architect in El Cerrito, Calif. The author of two books and now at work on a third, he has taught at the University of California, Berkeley, Laney College and California College of the Arts. After helping start a school of architecture in Ghana, he published a memoir about his experience, WAWA — West Africa Wins Again. He has published TEACHER — Stories to Be Graded by Friday and is now working on a volume called Sailors and Dogs Keep off the Grass. When not writing, Thomas enjoys spending time with his wife, daughters and grandsons.

In March 2019, Marilyn Amelia Moore (PE) was inducted into the Missouri Sports Hall of Fame for her 30 years of teaching and coaching at Hillcrest High School in Springfield, Mo.

Sandra Nance the Albert Nelson Marquis Lifetime Achievement Award by Marquis Who's Who, a national publisher of biographical profiles. Sandra began her career as a reporter for United Press International in Cheyenne, Wy., before working as a statehouse correspondent for the Casper Star-Tribune. She later taught journalism and media courses at Denver's Regis University and Metropolitan State College. During her career, she was an active member of the Colorado Press Women, an affiliate of the National Federation of Press Women, and a longtime member of the Society of Professional Journalists. She lives in Wheat Ridge, Colo.

After graduating from CU, Nancy Burger Beauprez (Jour) worked briefly at the Greelev Tribune and then in university public relations in Colorado and Montana. Later, she worked as a technical editor for an environmental consulting company before becoming an English teacher. "The final 12 years of my work life were spent in a junior high classroom trying to show 13-year-olds how cool writing can be," Nancy wrote. She now lives in Fort Collins with her husband, Gerald, but writes "our hearts live in Boulder."

Author Roger P. Barrick (Law) lives in Roseville, Calif. In 2012, he published At the Gates of the Wolf's Lair. Set in 1944 Berlin, the novel follows the life of Robert Felsen, the son of Jews who fled Germany after "The Night of Broken Glass." In the book, Felsen is a detective

WE WANT YOUR NEWS!



Write Christie Sounart, Koenig Alumni Center, Boulder, CO 80309, or classnotes@colorado.edu

IT WAS AN EXCITING TIME FOR WOMEN'S TENNIS WHEN JUDY SIGEL FREEMAN (ART'75) AND JILL SIGEL GREER (ART'75) ATTENDED CU. NOW 65, THE TWINS CONTINUE TO PLAY TOGETHER IN THE TWIN CITIES.

and investigative reporter who takes on a mysterious and dangerous case that "threatens to destroy all that he loves in life."

It was an exciting time for war. time for women's tennis when identical twins Judy Sigel Freeman (Art) and Jill Sigel Greer (Art) attended CU. Professional female tennis player Billie Jean King had just beaten Bobby Riggs and Title IX had just passed for equality in sports for women. Yellow tennis balls were just being tested. "What an incredible experience for two Minnesota girls who played one tennis match in high school and won the Lake Conference in high-top tennis shoes and cutoff jean shorts!" wrote Judy. Her CU sweatsuit now hangs in Old Main. The twins, now 65, continue to play tennis together in the Twin Cities. "We dress alike and feel that usually gives us a three-game advantage," said Judy, whose husband, Todd Freeman (Mktg'74), was a cheerleader at CU. Judy and Jill's sister Susie Sigel Teboul (Jour'82) also went to CU, along with Judy's son Zach Freeman (Mgmt'06) and Jill's daughter Allison

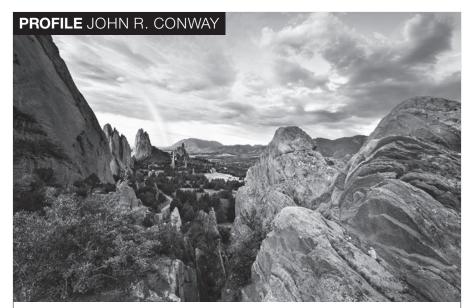
all continue to have the University of Colorado deep in our hearts," wrote Judy.

76 Dr. Peter A Fields (Soc) attended medical school at age 37. Prior to that, he was a chiropractor. He specializes in regenerative orthopedics, which is fixing joints and spines without surgery. He is an expert in stem cell therapy, PRP and prolotherapy. Peter lectures on these topics throughout the world and has appeared on national television. An active 10-time Ironman triathlon finisher, he has competed in over 60 triathlons. This vear he climbed Mount Kilimanjaro (19,371 feet). He has trademarked the term "The Athletic Doc." Peter's love of travel has brought him to 43 countries and 47 states. He has lived overseas three times. "Life is good at 65!" wrote Peter. His website is www.drfields.com.

After two years of "semi-retirement" and consulting with the startup Craft Distillers, Paul T. Criscuolo (Econ) joined Broken Shed Distillery USA as vice president, specializing in branding and market-

ing. The craft distillery is based in New Zealand and currently produces vodka and plans to expand into other spirits.

Gary Porter (MBA'74; PhDBusAd'77) and wife Melissa Komisar Porter (Mktg) fell in love at CU in 1976. The couple, who celebrated their 40th wedding anniversary last year, write that they traveled to Boulder in 2017 for their first Homecoming weekend since graduation. After leaving CU, Gary taught accounting at various universities and Melissa embarked on a 32-year career in marketing and business development at IBM. Garv is the author of several accounting textbooks, as well as the fiction book Duffy: The Tale of a Terrier and a new collection of essays, Town Kid: Reflections of a Midwestern Boyhood. Earlier this year, the couple attended Western Art Week in Great Falls, Mont., where they met up with former Buffs running back and artist Shay Davis (A&S ex'97). "It was fun to reminisce about the 1992 Fiesta Bowl that we attended and he played in," Melissa wrote. The couple currently lives in



No one knows Garden of the Gods' resident honey ants better than John Conway.

THE ANT KING

IT HAD BEEN NEARLY 40 years since **John R. Conway** (MZool'68; PhDBio'75) laid eyes on the towering red and white sandstone formations in Colorado's Garden of the Gods National Natural Landmark. He took a few moments to appreciate the view, then began scouring the path ahead.

He hadn't come for the scenery — he'd come for the ants.

From 1971 to 1975, Conway, a University of Scranton professor emeritus, hiked the 1,320-acre park, at the foot of Pikes Peak in Colorado Springs, in search of the unique, elusive and minimally studied insect called the honey ant. The project, which led to his CU doctoral thesis, inspired a lifelong scientific mission to uncover the insect's mysterious ecology and evolution.

Last summer, encouraged by the City of Colorado Springs, Conway began meticulously retracing his steps to evaluate the current number, size and location of the ants. His goal: To understand how climate change and the park's 5.8 million annual visitors were impacting their ecosystem.

What he found was sobering: The number of honey ant nests in the Garden of the Gods had fallen 58 percent, from 50 in 1975 to 21 in 2018.

Honey ant society includes specialized workers called repletes, which gorge themselves until their abdomens swell to the size of grapes. When the climate is dry and there's little to eat, the repletes regurgitate food to nourish other ants. Once emptied of stored food, the repletes die.

The behavior of the "sacrificial" ant has long baffled scientists, and little was known about the honey ant at all until Rev. Henry Christopher McCook studied the species in the Garden of the Gods in 1882 — the research that originally inspired Conway back in 1971.

Some of the ant's characteristics complicated Conway's investigations, then and lately. Most notably, honey ants are nocturnal.

Often, Conway would stay up all night stalking them as they foraged. As the sun peeked over the towers of sandstone, he'd sleepily veer toward his camp as hundreds of six-legged organisms marched to their own nests.

Though the nests were easy to recognize (they look like small volcanic craters with perfectly round entrances about the size of a pea), they were difficult to get to. Most were at about 7,000 feet, along the park's rugged ridgelines.

Currently, he's working on a book about the diversity of life, focused on the 100 or so naturalists who first discovered and named most of the approximately two million species on Earth.

Conway has also been settling into a new home. In April 2018, he and his wife, Sharon, built a house in Durango.

"We were looking forward to retiring in the state where we fell in love," said Conway, who met Sharon at CU in a human physiology class.

So far, he's found one species of ant in his new backyard — the western thatch mound ant.

By Amanda K. Clark (Mfour'19)

Hudson, Wis.

Notes

80s & 90s SUMMER 2019



Future Buff Piper Rudell and her family at CU's Admitted Students Day on April 6, 2019.

After graduating from CU. Michael Allan Fox (ElEngr) worked at Bell Labs while earning a master's in electrical engineering from Stanford University. He later attended medical school at Thomas Jefferson University in Philadelphia before training as a radiologist. In his spare time, he plays piano, sings with a barbershop chorus and performs in community theater musicals. He lives in San Rafael, Calif.

Joanie Griffin (Jour) was inducted into the New Mexico Tourism Hall of Fame in April. In 1990, Joanie founded the public relations firm Griffin & Associates in Albuquerque. She rebranded her firm as

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Sunny 505 with a stronger focus on social media, web and print design and video production. Joanie lives in Albuquerque with her husband. Rob Durham.

In January, Peter Doody (Engl) received the Defense Lawyer of the Year Award from the San Diego Defense Lawyers. In February, he became president of the Association of Southern California Defense Counsel, the largest regional civil litigation defense organization in the nation, with 1,200 attorney members from Santa Barbara to San Diego. Peter was captain of the CU rugby team.

Project manager and marketing strategist Andrea Robbins (Comm) and her team at Studio Six Branding in

Longmont, Colo., recently rebranded several transit systems: The Lift in Winter Park, The Hop in Boulder, SMART in Telluride and the Trinidad Trolley in Trinidad. Separately, Andrea has coached and trained young athletes in alpine skiing in Winter Park for the past 15 years.

Alan F. Willenbrock

(ChemEngr, Mktg) joined Morgan Stanley's Alternative Investments Directors Program. A financial advisor in Tucson, Alan helps clients with retirement planning, alternative investments, financial planning and wealth management.

Julie Baldwin (MCDBio) was promoted to the rank of Regents' Professor at the University of Northern

Arizona University, the highest rank a faculty member there can achieve. Julie is founding director of the Center for Health Equity Research and lead principal investigator for the Southwest Health Equity Research Collaborative. Her work includes community-based participatory research with Native American tribes, public health, substance abuse prevention, diabetes and cancer prevention and behavioral and oral health.

Tony Evans (Anth), award-winning reporter and columnist at the Idaho Mountain Express in Ketchum, published A History of Indians in the Sun Valley Area in 2017 in collaboration with the Blaine County Museum.

Andrew Kelsev

(ArchEngr) founded and manages Ascent Group Inc., a structural engineering firm in Boulder. In his free time, he enjoys skiing, mountain and road biking, backpacking and traveling. He and his wife, Amanda, live in Erie, Colo. They have two children in college, one at Montana State University and the other. Courtney (AeroEngr'19), at CU.

In May, Chris Lehnertz

(EPOBio) became president and CEO of the Golden Gate National Parks Conservancy. In her prior career with the National Park Service, she served as superintendent of both Grand Canyon National Park and Golden Gate National Recreation Area, as well as deputy superintendent at Yellowstone National Park. Chris was the subject of a Coloradan cover story in December 2016.

Sam Ventola (PolSci; Law'88) was awarded the 2019 Outstanding Community Servant Award by Sisters in Service, which provides scholarships and book stipends to Colorado residents ages 17 to 23. Sam is the founder of Denver-based law firm Ventola Law, which specializes in business formation, litigation and mediation, as well as employment law.

Karen Auvinen's (EPOBio;

MEngl'95) memoir, Rough Beauty: Forty Seasons of Mountain Living, was a finalist for the Colorado Book Award. Winners were announced May 18. In her book, Karen describes her experience of living in a primitive wood-stoveheated cabin on Overland Mountain near Fort Collins with her dog for 10 years before a fire incinerated every word she ever wrote and all her possessions. She now lives outside Rollinsville, Colo., with her watercolorist partner, Greg Marquez (who illustrated her book), and their dog, River. She teaches in CU's Residential Academic Program.

Since graduating, Barbara Davis (Phil) has reunited with a group of CU alumni in Boulder's

Chautaugua Park every five years. "We call ourselves 'The Class of 80 Something,' because we didn't all start or end at the same time, but along the way we found ourselves life-long friends," wrote Barbara. "Several of us have children currently at CU and applying to CU next year!" The group most recently met in July 2018. "[We] are already looking forward to our next reunion!" wrote Barbara.

This year, filmmaker Robin Truesdale (Jour; MA'03) screened her latest documentary, Cuba's Forgotten Jewels, around the country and in Cuba. The film documents the journey of Jews who survived the Holocaust and found refuge in Cuba. It's based on the life of Robin's co-director's mother. Robin lives in Louisville, Colo.

Adam Kenny (PolSci) writes he's been practicing law in New Jersey for the past 25 years and is a member of the Weiner Law Group, LLP in Parsippany. Since graduating, he has completed nine marathons. including the New York City Marathon three times. He and his wife, Margaret, are the proud "Pop Pop" and "Nana" to three grandchil-

WE WANT YOUR NEWS!



Write Christie Sounart, Koenig Alumni Center, Boulder, CO 80309, or classnotes@colorado.edu dren, which inspired his first book, *Pop Pop Rules*, published in November 2018.

Editor Gregory Foley (Engl) of the Idaho Mountain Express traveled to Norfolk, Va., Sept. 29 to accept the General Excellence Award from the National Newspaper Association. There were 1,405 entries for the award from across the nation, according to the NNA. In 2003, Gregory published a novel, The Clarity of Light, about a French-American artist who travels to reunite with her ailing grandmother. He lives in Sun Valley.

Elizabeth Slater
Jasper (Econ, Phil) was
named chief legal officer
for the Denver-based
community health program
Nurse-Family Partnership
Service, where she has
been a part of the executive team for more than
five years. Elizabeth lives in
Denver with her husband,
David, and son, Francis.

In 2016. David Steinmann (Phys) discovered a new species of daddy long-leg spider while exploring Mallory Cave in Boulder. These spiders, named Sclerobunus steinmanni, after David, moved into caves over 10 million years ago. David, a research associate with the Denver Museum of Nature and Science, has discovered many new invertebrate species in Colorado caves, including an unusual new worm from a cave in Steamboat Springs. His daddy long-leg discovery was documented by National Geographic.

Laura Barber
(Art) writes she

recently landed her "dream job." She is the new San Francisco Bay Area and Northern Nevada sales consultant for Boonsupply. com, an online shopping and fundraiser platform launched by Serena & Lily co-founder Lily Kanter. "If either shopping or giving to a worthy cause makes you happy, can it get any better than shopping and supporting your favorite cause at the same time?" she wrote.

Suzanne DiBianca (Comm), executive vice president of corporate relations and chief philanthropy officer at cloud computing company Salesforce, accepted the Distinguished Citizen Award from the Commonwealth Club at its annual awards ceremony in San Francisco, in Salesforce's honor. Suzanne leads corporate giving, community relations and sustainability efforts. She was named one of Inside Philanthropy's 50 "Most Powerful Women in Philanthropy" and is a member of the San Francisco Business Times' "Most Influential Women in the Bay Area" Business Hall of Fame.

In March, María
Sepúlveda (IntlAf) was
named vice president of
community and government partnerships at
Habitat for Humanity of
Metro Denver. In her new
role, María will lead Habitat
Metro Denver's advocacy program, managing
the government grants
and contracts team and
advancing its community
development strategy.

192 In April, Jeff Wieland (EngrPhys) joined the Minneapolis-based law firm Moss & Barnett, where he specializes in construction, commercial and public procurement litigation.

7. Jeffrey Fitzgerald

(Math) was named to BTI Consulting Group's 2019 Client Service All-Stars list. Jeffrey is recognized for his work as shareholder in the firm's healthcare litigation and disputes practice in Denver.

Katherine Wegher Haney (Comm) is the public affairs director for North Carolina's Alcoholic Beverage Control Commission. When she isn't spending time with her husband, two daughters and miniature dachshund, she volunteers as vice president of the nonprofit charity CDH International, a global initiative to find the cause and cure for congenital diaphragmatic hernia, a birth defect that occurs in 1 in every 2,500 babies.

Kent Holsinger (Psych) was named in the *Denver Business Journal* and Colorado Farm Bureau's Who's Who in Agriculture lists in 2019. He was also in the journal's Who's Who in Energy in 2019. Kent founded Denver-based Holsinger Law, LLC in 2006, which specializes in land, wildlife and water law.

195 Heather Younger (Law) gave a TedX talk in Colorado Springs May 12 titled "Don't Let Adversity Stop You." Heather is the author of the best-selling book *The 7 Intuitive Laws of Employee Loyalty* and founder of Customer Fanatix, a consulting and training firm. She lives in Aurora, Colo. with her husband and four children.

PROFILE LAURIE CANTILLO

SPACE TALK

LAURIE CANTILLO (JOUR'80) WAS fresh out of college when she first spotted the Milky Way during an outdoor education trip in Utah. Since then, the director of communication and education at NASA's Jet Propulsion Laboratory (JPL) has been on a mission to share the wonders of space with the world.

At CU, Cantillo produced a space film in her astronomy intro course. It was shown in Fiske Planetarium and set to Pink Floyd's *Dark Side of the Moon* album. After graduating, she worked as a radio anchor, reporter and program director for 30 years before landing in NASA's headquarters in Washington, D.C., where she was a writer and public affairs specialist for the New Horizons mission to Pluto, led by **Alan Stern** (PhDAstro'89).

When Pluto became visible through a sequence of images in 2015, Cantillo noticed a large bright spot that resembled a heart. That day, she wrote a short article about the icy formation now called Sputnik Planitia and shared it on NASA's website and social media channels.

The next morning, the mainstream media had erupted with headlines featuring Pluto's "heart."

While in D.C., Cantillo produced NASA's first podcast, *Gravity Assist*, which refers to the slingshot effect a

spacecraft gets when it uses the gravity of a planet or object to speed up or alter its course. The podcast's first season, in 2017, was hosted by chief scientist Jim Green and featured lively discussions about top discoveries and mysteries in space science. Each episode's guest reveals the "gravity assist" that propelled them into their field of research.

"I appreciate the value of audio and wanted to share the powerful stories of the people behind our missions — their struggles, and how 'failing' is an essential ingredient for success," said Cantillo, who grew up in Parker, Colo.

Today, Cantillo and her California-based JPL team often set up telescopes in public spaces and wait for curious viewers to walk by: "It never gets old to see how surprised and delighted people are to see the Moon's craters, Saturn's rings or Jupiter's stripes through a telescope for the first time," she said.

Cantillo credits her son David for planting the idea of a career pivot to NASA. He had encouraged her to apply.

"I was able to achieve a couple extra years of 'coolness' by working at NASA and JPL. With a teenager, that's priceless," she said.

Cantillo hopes her work inspires others to learn more about space and pursue STEM careers.

"When I was growing up, it never occurred to me to be a scientist or engineer, since there were so few female role models," she said. "Had I been in school today, I might have chosen a different path."

When she sees young girls wearing NASA T-shirts and playing with Space Legos, or receives a letter from a child who now wants to be a scientist after meeting someone from JPL, she knows her work is having an impact.

"It doesn't get any better than that," Cantillo said.

By Amanda K. Clark (Mfour'19)



Notes

00s & 10s SUMMER 2019



In summer 2018, Lauren Gray (MCDBio'20) biked 4,500 miles from coast to coast.

Denys Van Renen

(AeroEngr, CompSci; Engl'04) published three books, The Other Exchange: Women, Servants, and the Urban Underclass in Early Modern English Literature (2017); Nature and the New Science in England, 1665-1726 (2018); and Beyond 1776: Globalizing the Cultures of the American Revolution (2018). Denys is an associate professor at the University of Nebraska,

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where he specializes in 18th-century British literature and representations of water, air and atmosphere.

Austin Sol, the professional ultimate frisbee team Patrick Christmas (CompSci) founded in Texas in 2015. is now in its fourth season. Sol has a 35-player roster and is a member of the American Ultimate Disc League. Since 2001, Patrick has worked as a chief software engineer at National Instruments. He and the Sol appeared in the Coloradan's March 2016 cover story, "Ultimate Goes Pro." This

year Patrick took a spring break trip with his family to Big Bend and Carlsbad Caverns National Parks, "a great trip that always seemed too far away when I lived in Colorado," he wrote.

Michael Maney

(MComm) is local head of team member communications and engagement for Whole Foods Market in Austin, Tex. He previously held a similar position with Target.

Nicholas Sandoval

(ChemEngr), assistant professor of chemistry and biomolecular engineer-

ing at Tulane University, was awarded a National Science Foundation Career Award of \$500,000 to develop new tools and techniques for studying Clostridium, a genus of bacteria. Nicholas leads a research group with four graduate students and one postdoctoral researcher. He writes that his research falls generally in the field of synthetic biology and metabolic engineering.

Sarah Kleinman (PolSci, Art), a doctoral candidate in art history at Virginia Commonwealth University, received a Fulbright U.S. Student Program award to do research in Trinidad and Tobago. At the University of the West Indies she'll work on her forthcoming dissertation, "The Curatorial Practice and Exhibitions of Kynaston McShine." McShine (1935-2018) organized some of the most consequential art exhibitions of the 20th century, writes Sarah, and is recognized as the first curator of color to work at a major museum in the United States.

For Sarah Off (Mus), good music and doing good are all in a day's work. After earning her undergraduate degree in violin performance at CU, where she studied with Lina Bahn and Judith Ingolfsson, Sarah continued her academic pursuits at Arizona State University, earning master's and doctoral degrees in violin performance. Along the way, she co-founded the Mt. Blanca Summer Music Conservatory, a nonprofit organization that provides high-quality, affordable

Photo by Glenn Asakawa

performance experiences for young musicians.

50il ecologist Kelly Ramirez (PhDEBio) is a postdoctoral researcher at the Netherlands Institute of Ecology. Her research characterizes the diversity and biogeographical patterns of soil microbes across the globe. In November 2016, she co-founded 500 Women Scientists with friend and colleague Jane Zelikova. The organization's mission is to make science "open, inclusive and accessible, and to be the foremost organization for the transformation of leadership, diversity, and public

engagement in science."

Subini Ancy Annamma (MSpecEd'; PhD'13) is an assistant professor of special education at the University of Kansas. Her research and pedagogy focuses on increasing access to equitable education for historically marginalized students and communities, particularly students of color with disabilities, by linking the ways the intersections of race, gender and disability are under surveillance and susceptible to punishment in

public schools and juvenile incarceration.

Kate Harris (Comm) is an assistant professor of organizational communication at the University of Minnesota. Earlier this year, she published her first book, Beyond the Rapist: Title IX and Sexual Violence on US Campuses. In the text, Harris urges schools to recognize that sexual violence is a systemic injustice that injures not only individual students, but also entire educational institutions. Her related research has won awards from the Organization for the Study of Communication, Language, and Gender; the National Communication Association; and the International Communication Association.

On March 20. Vanessa **Angélica Villarreal** (MEngLit) accepted one of 10 Whiting Awards at a ceremony at the New York Historical Society. The Whiting Foundation gives \$50,000 each to 10 diverse emerging writers of fiction, nonfiction, poetry and drama. Vanessa was born in the Rio Grande Valley borderlands to formerly undocumented Mexican immigrants. She is the

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ZOË ROM (MJOUR'18), HOST AND PRODUCER FOR ASPEN PUBLIC RADIO, WON THE COLORADO BROADCASTERS ASSOCIATION AWARD FOR BEST NEWS FFATURE.

author of the collection Beast Meridian (2017) and the winner of the John A. Robertson Award for Best First Book of Poetry from the Texas Institute of Letters. Her work has been featured in BuzzFeed. The Boston Review, The Rumpus, The Los Angeles Times, NBC News and elsewhere. She is pursuing a doctorate in English literature and creative writing at the University of Southern California, where she is raising her son with the help of a loyal dog.

the Chartis Group, a healthcare management consulting company.

Before joining the Chartis Group, Zoe worked for DaVita, a healthcare company headquartered in Denver. She lives in Chicago.

John Cevaal (CivEngr) joined Ascent Engineering Group in Winter Park, Colo. He is an engineer-in-training working on designing residential and commercial structures.

Kaly (Allen) Trupp (Mgmt; MBA'17) is a senior consultant at the business advisory firm FTI consulting. Since graduating from CU, she's traveled to 15 countries, attended dozens of CU football games, married, and adopted two dogs. She serves on the Leeds MBA Alumni Board.

Nick Mott (MJour) is a reporter at Montana Public Radio and a producer for the podcast Threshold, which is focused on tackling environmental issues. The podcast was founded by Amy Martin, a former CU Center for Environmental Journalism Scripps Fellow. Nick's reporting has been featured in The Washington Post and on NPR's Morning Edition. Threshold's second season, "Cold Comfort," won a regional 2019 Edward R. Murrow Award in the News Series category.

Zoë Rom (MJour) won the Colorado Broadcast-

ers Association Award for Best News Feature for her story "Carbondale Wild West Rodeo Is a Family Tradition." Zoë is a morning host and producer for Aspen Public Radio. When she's not telling stories, she's running up mountains.

For the past year,
Kelsey Simpkins (MJour)
has worked as the digital
and engagement editor at
Anthropocene magazine
and at Future Earth, a
research initiative on global
environmental change and
sustainability. She's based
in Boulder.

Wide receiver Juwann Winfree (Soc) was selected by the Denver Broncos in the sixth round of the 2019 NFL Draft. Winfree played in eight games as a senior and recorded 28 receptions for 324 yards and two touchdowns.

Michelle Ray (EnvDes) joined the design firm SmithGroup in 2018 as a mixed-use specialist in the Phoenix office. In her position, she will co-lead the firm's Mixed-Use Convergence team. which provides clients with "an adaptive framework to navigate the complex challenges and transformative opportunities facing development projects," according to the firm's website. Michelle is a founding member of the Women's Leadership Group for the American Institute of Architects. She also co-founded Arizona Kids Build, an award-winning program teaching young students how the built environment affects human well-being, the environment and society.



Somewhere within this formation of record-setting jumpers is Colby McNeil (Soc ex'12).

SKYDIVER

In videos, the 2015 world-record vertical skydive, executed above Chicago, seems effortless: 164 people jump out of six airplanes. A small group forms a center ring by holding hands, their heads pointed down. Others glide toward the ring, linking into outward-radiating loops. The result looks like a daisy flower.

After just a few seconds in formation, they all split to launch their parachutes.

"They're holding hands at 200 miles per hour," said **Colby McNeil** (Soc ex'12), who was part of the jump.

To pull it off, you need all the skydivers, many of whom travel from out of state, to show up, the planes to fly in the correct V-shape and each of the 164 people to find their designated place while falling. The entire feat lasts less than a minute.

"To successfully do it, just, *oh my gosh*, it's an amazing feeling," said McNeil, who studied at CU between 2007 and 2012.

Remarkably, he's managed to make a full-time living of skydiving. "Everyone can pick

their favorite hobby," he said. "I can make a living off of the thing I love most."

McNeil was first drawn to the sport in 2009, when a friend invited him on a tandem jump, in which each participant tethers to an instructor. Even before his feet hit the ground, McNeil said, he was hooked.

Just weeks later, he took an accelerated freefall program, learning how to maneuver in the air and manage risks involved in jumping solo. Next he started spending two or three days a week practicing in a wind tunnel.

One genre of skydiving captivated him in particular: artistic free flying, which is "akin to pairs figure skating or double gymnastics, but in the sky." Teams of three — two performing flyers and a photographer — execute choreographed sequences of gymnastic moves as they fall from about 13,000 feet.

McNeil joined a team called Oceanside FLO. It won four national championships and placed internationally. But despite sponsorships, McNeil found it challenging to make ends meet through free flying alone, and stopped competing after the 2017 season.

"It is very, very time consuming, as well as very expensive," he said.

HOLDING HANDS AT 200 MILES PER HOUR.

He's since found a new balance. He trains budding skydivers at drop zones near San Diego, shoots videos of people skydiving and runs a small business packing and maintaining parachute equipment.

By Ula Chrobak

In Memoriam

Mary O'Connell Erickson (A&S'42) Elbert E. Baker Jr. (Engr'43) Ruth Strauss Oppenheim (A&S'43) Fred P. Venditti (ElEngr'43) Cynthia Wiard Semmes (Fren, Psvch'44) Norma Robb Bennett (DistSt'45) Dorothy Barbour Haag (Engl'45) Marguerite Johnson Holden (Pharm'46) William W. Milburn Jr. (AeroEngr'46) Helen Neisler Rylant (Bus'46) Marie Parkhill Singer (A&S'46) Charles E. Wardman (AeroEngr'46) Donald A. Campbell (Jour'47) Willis R. Olson (MMus'47) Buford L. Selvy (Mamt'47) Mary Nevella Shaw (A&S'47) Laura Dumm Wierman (IntDes'47) Patricia Stewart Bayer (Jour'48) Peggy Shultz Brown (AeroEngr'48) Marion Von Holst Dukes (A&S'48) Robert J. Graebner (EngrPhys'48; MPhys'54: PhDFngr'06) Betty Burk Hertzler (A&S ex'48) Alan D. Miller (ElEngr'48) Dorothea Fernow Rapp (Art'48) George I. Tibbs (Pharm'48) Annie Lee Whitesides (MArt ex'48) John R. Coash (MGeol'49) Graydon F. Dowis Jr. (Mgmt'49; Law'53) George E. Grady (Mktg'49; MHist'93) llah Ball Helmick (Edu'49) Floyd W. Ingalls (Pharm'49) George L. Wang (MPubAd'49; PhDPolSci'52) Lloyd E. Baker (Acct'50) Donal B. Buchanan (Hist'50) Marvin R. East (ArchEngr'50) Ansel Gower (MechEngr'50) Robert E. Hiller (ElEngr'50) Richard D. Kuerston (ChemEngr'50; MS'51) Samuel Kumagai (Acct'50) Alfred C. Metz (MechEngr'50) Sam S. Terasaki (Pharm'50) Edith Johnson Ullmann (A&S'50) Joan Orloff Cahan (A&S'51) Elvira Garcia De Cobos (Nurs'51) Earl Costello (Mkgt'51) Thomas C. Hancock (PE'51) Daniel M. Herbert (Art'51) Ernest J. Isaacs (A&S'51) Allan C. Jones Jr. (ArchEngr'51) Helen Turnquist Klessig (A&S'51) Edithellen Lindborg Marshall (Edu'51) H. George Marshall (Bus, CivEngr'51) Priscilla Robb McDonnell (Mus'51) Mary Lamb Morrison (Edu'51) Douglas Y. Moy (EngrPhys'51) Mark D. Olson (Mgmt'51) Jane Breitenstein Peacock (A&S'51) Jane O'Dell Periman (A&S'51) Richard L. Porter (Bus, CompEngr'51) Delores Heermann Rhode (Engl'51)

PhD'62)

PhD'72)

PhDEcon'65)

Helen J. Throckmorton (MEdu'56;

John H. Chapman Jr. (Mktg'57;

Ray L. Hauser (PhDChemEngr'57)

Janelle Cowan Krueger (Nurs'57;

Paul T. Therkildsen (MA&S'57;

Robert W. Freson (A&S'57)

MS'58; PhDSoc'69)

John T. Sharp (A&S'57)

Gardner S. Rogers (MechEngr'51) Nancy Simms Alexander (Zool'58) Jerry L. Smith (Mkgt'51; Law'56) James A. Brennan (MechEngr'58) Robert D. Witters (ChemEngr'51) Wilbur A. Derby (MPE'58) Glenn A. Beck (A&S'52) Theodore L. Jones (Mgmt'58) Paul P. Bernard (MA&S'52; PhD'55) Leland Royce Kaiser (A&S'58; Joan Carter (A&S ex'52) MA'61) Richard S. Jamison (ElEngr'52) Gerald J. Klaus (A&S ex'58) William D. Lockett (Mgmt'52) Ellen Greenawalt Linden (Fren'58) Naomi Minner Morris (PreMed'52; Herbert J. Lundin (MGeog'58) MD'55) Harry F. Pierpont (ElEngr'58) Mary Kikel Utley (A&S'52) Joanne Brafford Silkensen John H. Alexander (PreMed'53; (HomeEcon'58) MD'58) T. Richard Spoor (Econ'58) Donald M. Batstone (Mgmt'53) Philip C. Bowman (MBasSci'59) Albert H. Bieser (Mgmt'53) James N. Creacy (MMgmt'59) Robert G. Boggs (Fin, Louise Lauth Elliott (BasSci, MechEngr'53) Nurs'59) Martha Sturm Boltz (Art'53) Joy Habenicht (Engl'59) Kenneth F. Cummings (Geol'53) Irvin D. Johnson (ElEngr'59) Fred R. Harvey (A&S'53) Tony Mendez (A&S'59) Phyllis Miller Murdock (Bus'53) Walter E. Myers (ElEngr'59) Virginia Lewis Roe (Edu'53) Arpad G. Pallai (ElEngr'59) Catherine Reynolds Sanford Neal L. Prince (MPE'59) (A&S'53) Melvin D. Smith (MA&S'59) Nancy Moore Striebing (Edu'53) Juliana Welle Verzuh (Art'59) Gerald R. Swanson (Mktg'53) L. Dean Duncan (MPE'60; Mary Fleming Zirin (A&S'53; MA'62) PhDFdu'75) Barbara Galbasini Burchett (Mktg G. Lane Earnest (PolSci'60; Law'63) ex'54; RelEst'87) Larry E. Lawler (Law'60) Jacqueline Jacques Sang (A&S'60) Peggy Joyce Cook (A&S ex'54) Barbara Brown Hayes (Mktg'54) Charles B. Wilson (ElEngr'60) Imogene M. Huffman (MPE'54) Sally Ballard Wooten (Edu'60) Richard L. Knowlton (Econ. John H. Yee (MA&S'60) Geog'54) Frances Korzeniewski Baschnagel Lawrence E. Marsh (Mgmt'54) (MA&S ex'61) Phyllis Elkourie McGuffie (A&S'54) Dennis Hicks (MechEngr'61) Markley G. Metzger (A&S'54) Alan N. Jensen (A&S'61; Law'64) Alfred R. Polczinski (Jour'54) Robert W. Lamb (PhDChem'61) Henry W. Ranspot (Geol'54; MS'58) Judson P. McClure (PhDChem'61) Donald W. Wickler (A&S ex'54) Janis VanLeuven McRoberts (A&S Willard J. Guy Jr. (Geol'55) ex'61) Ruth Rhoads Hale (Mus'55; MA'81) Robert T. McDaniel (MA&S ex'61) Roger L. Hansen (Mus ex'55) Richard B. Newton (A&S'61) Horace Lycett (A&S ex'55) Kermit Ray Peters (ChemEngr, Georgia Lonnberg Raun (Mus'55) Mkta'61) Milton B. Rogers (PolSci'61) John E. Ringle (Geol'55) Robert P. Yardley (A&S ex'55) Judith Bedford (Edu'62) William G. Britton (PhDChem'56) Valerie Brown (A&S'62) W. John Buchanan (A&S'56) John R. Dicaro (A&S'62) Wallace D. Finley (BusEdu'56) Lawrence D. Hazzard (ArchEngr'62) Richard A. Freund (Fin'56) Whitcomb O. Jones (MMgmt'62) J. D. Geist (ElEngr'56) Thomas K. Laird Jr. (Mktg'62) Robert E. Hunter (MMus'56) R. Peter Lappin (PolSci'62) Gilbert G. Kosirog (A&S ex'56) William K. Morse (ChemEngr'62) Mary Lou Wendelken Peterson Buff Ertl Palm (Engl'62) (A&S'56) Georgette Perry (A&S ex'62) Donald D. Rabb (A&S ex'56) Omer B. Raup (PhDGeol'62) Seymour L. Sharps (MGeol'56; Marjorie A. Alexander (MPE'63)

Larry R. Houge (CivEngr'63; MA&S'64)

To report a death, call 303-541-1290 or 800-405-9488, email records@cufund.org or write Records Management, 10901 W. 120th Avenue, Suite 200, Broomfield, CO 80021. Please include date of death and other relevant information.

Jack C. Ford (AeroEngr'63)

Jonathan Piper (MChemEngr'63) Helen Fagan Reidy (MEdu'63) Carolyn Penningroth Schaper (A&S Kenneth W. Blair (PE'64) Thomas J. Davey (AeroEngr'64; Barbara Ann Fleshman (MEdu'64) William E. Gookin (MBasSci'64) Bernice Halfon (Mgmt'64) Lawrence J. Marks (PolSci'64) Roy W. Otte (PhDEdu'64) Samuel S. Palmer (Mgmt'64; William P. Stockwell (APMath'64) Jonelda Oakley Stone (A&S ex'64) Tramel R. Wilson (Mus'64) Ann Hrvatin Woodward (PE'64) Mel B. Anderson (MGeog'65) Harvey P Barnard III (Bus'65) Marjorie Butz Campbell (Edu'65; MA'69) Bruce P. Gregg Jr. (MMgmt'65) Leo K. Hammond (PhDPsych'65) Georgia P. Hook (A&S'65) Donald W. Leffler (AeroEngr'65) Richard F. Lubinski (ElEngr'65) Pauline W. Wanderer (MA&S'65) Delilah Ball Blount (Math'66) Jimmie B. Heinbaugh (MMgmt'66) Barry B. Hutchings (A&S ex'66) David M. Rust (PhDA&S'66) Lvnn Paul Baker (PE'67) David P. Battini (Hist, Phil, PolSci'67) Timothy J. Beesley (MGeol'67) John J. Burton (Edu'67; MA'75) Alfonzo Dave Jr. (Soc'67) Don D. Eklund (PhDHist'67) Mary John Espy (A&S ex'67) Ernest A. Giedd (Chem'67) George H. Gibson Jr. (MechEngr'67) Leland H. Gregory Jr. (MMgmt'67) Sandra Shellworth Hildner (A&S'67) Hubert T. Mowery (A&S'67) Susan Sloat Myers (PolSci'67) Elise P. Albright (MEdu'68) Samuel W. Burridge (MA&S'68; Law'76) Alvin G. Glusick (ElEngr'68) Helen Tremaine Gregory (PolSci'68) Richard E. Kelly (MEdu'68; PhD'76) Robert E. Stephens (AeroEngr'68) Bruce R. Berg (Mktg'69) Victor E. Carlin (Hist'69) Patsy Port Christopher (A&S ex'69) Stephen A. Douglas (Mgmt'69) Jon J. Driessen (PhDSoc'69) John M. Guiling (MAeroEngr'69)

Nancy Hereford (PolSci'69)

Josephine Morrison Mosley

Robert L. Taylor (Acct'69)

Bill Brundige (A&S'70)

Paul A. Bondurant (Acct'70)

David D. Duran (Psych'70)

(A&S'69)

Deanna F. LaCamera (A&S ex'69)

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Loretta Bourland, Friend Suzanne Hardman Peterson. Friend

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Letters

SUMMER 2019

WHO, NOT HE

Sorry to send in a correction to a correction — i.e., to a letter to the editor

suggesting you had forgotten something. But I can't help myself, because we had this pounded into our heads when I was at CU (as the son of staff members, as a student and later as a staff member myself).

THE INSCRIPTION OVER THE COLONNADE AT NORLIN LIBRARY READS: "WHO KNOWS ONLY HIS OWN GENERATION REMAINS ALWAYS A CHILD." IT DOES NOT START WITH... "HE." A LOT OF PEOPLE THINK IT SHOULD, BUT THE FACT IS THAT "HE" AND "WHO" ARE BOTH PRONOUNS AND IT'S NOT NECESSARY TO USE BOTH.

William Arndt (Art'70) Boulder



COLORADAN OR COLORADOAN?

As a native Denverite (living as a Seattleite) and alumna of CU Boulder, I've always referred to myself as a *Coloradan* ["Origins," Spring 2019]. I know of zero natives (and yeah, of course we count the most) who refer to themselves as Coloradoans. That's just weird...

Annik Stahl (Engl'86; MJour'98) Seattle



SORORITIES

Looking at your "Homes on the Hill" article [LOOK, Spring 2019] brought back fond memories of my CU sorority life. It was great to see my sorority, Delta Gamma, among the doors. Oddly, that really isn't the front door, but the true front door was rarely used. Delta Gammas had many great parties and sun bathing afternoons on that patio. It also was a peaceful place to read. Thanks for these memories.

Debby Fowler (Span'75) Colorado Springs

ALUMNI OF NOTE

For many years I've wondered why so many stories have been devoted to individuals who haven't actually graduated from CU Boulder. Maybe

one and done would be reasonable for exceptional dropouts, but celebrity status within our culture should not be the sole criteria to share the pages with CU's finest. The Coloradan might consider acquainting readers with David Packard, Sidney Altman, Ellen Johnson Sirleaf, Linda Chavez and Kevin Corke. These exceptional individuals actually graduated and should qualify for more than one story.

Todd D. McIntyre (Psych'77; PhD'86) Chester Springs, Penn.

VARIETY AND WARMTH

Your Coloradan publication is superb. In a relatively tiny span, it's loaded with variety, warmth, diversity, humor, and smarts. So, so proud to be a Buff every time I read it. Thanks for the continued classiness.

Nancy Burger Beauprez (Jour'71) Timnath, Colo.

NORDIC STUDIES

Thanks for a very good Spring 2019 issue of the *Coloradan*. The short piece on Nordic Studies program director Jackson Crawford [Inquiry column] was particularly interesting, and led me to an online treasure hunt to his many YouTube videos. I also purchased copies of his two recent translations of the "Poetic Edda" and "Volsung Saga."

Michael L. Smith (MMus'75; Math'83) Boulder

NORM PACE

I knew Norman ["Blowing the Doors Off", Spring 2019] in his teen years and was with him on his first cave trip into Wayne Cave in Monroe County, Indiana. He was a special person even then. Glad to hear that he is still going strong.

Larry FisherBrown County, Ind.

THOMAS RIHA

I just read the article titled "Where's Thomas Riha?" [Boulder Beat column, Spring 2019] and enjoyed it. However, I was really disappointed when the article closed with Galya being "packed off to the state funny farm." I am not sure if this was in reference to the timeframe in which Riha went missing, but when mental health issues are so common, especially on our campus, it does not seem to be a topic that should be downplayed in any way. Additionally, I think it is important to remove as much stigma from suicide as possible, and the word "committed" only heightens it - something like "died by suicide" conveys the same ending but with much less of a connotation.

Lindsey Tollefson CU Boulder Academic Advisor Denver



Photo by Patrick Campbell. Photo courtesy University of Colorado.



RHODES SCHOLAR

I FELT JOY, PRIDE AND HOPE IN SEEING THE PHOTOS AND READING THE ARTICLE ABOUT SERENE SINGH [COVER STORY, SPRING 2019]!

The cover photo is a person filled with genuine joy and happiness. Ms. Singh's story is one all young people, especially young women of color, can be proud of. And reading about Ms. Singh's hard work, successes, and goal of becoming a

Supreme Court Justice should make all of us hopeful that our country and the world will be in better hands as people like her become the leaders we need.

Melisendro A. Otero Jr. (Edu'83; MBA'89) Pueblo, Colo.

NEW CU PRESIDENT

It seems to have not mattered to the Republican Regents that Mark Kennedy is vastly underqualified to run an institution the size of the University of Colorado, nor that he is politically out of step with the majority of Colorado residents. They got exactly what they wanted, another conservative ideologue.

Robert Porath (Engl'69) Boulder

Editor's Note: On May 2, the elected CU Board of Regents voted 5-4 to hire Mark Kennedy as CU's next president. The five Republican members voted for him, the four Democrat members voted against.

PRIORITIES

Regarding the article "Tucker Takes Over Buffs Football" [Sports, Spring 2019], I couldn't help reflecting on how in a different world Coach Tucker's generous salary could be put to alternative uses in benefiting CU. Multiple tenured professorships, more respectable pay for countless adjunct professors, new lab equipment, scholarships, etc. The list is virtually endless. While I don't begrudge any individual their right to maximize income in a market-based economy, it certainly highlights the skewed priorities our society has embraced for the allocation of scarce higher education resources.

> **Les Cowel** (PolSci'81; MBA'84) Naperville, III.

Note: Letters edited for length and clarity.

SOCIAL BUFFS



"And we are done."

@jamesdavis96_



"If your dreams do not scare you, they are not big enough!" @i_m_vipul



"You could say we mastered it." @emm.hines

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Coloradan

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