

Coloradan

Alumni Magazine Summer 2017

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**THIS IS A
CRICKET**
COULD IT BE
THE FUTURE
OF FOOD?



ALSO IN THIS ISSUE:

MYSTERIES OF THE **TEENAGE BRAIN**

GIRL POWER: ALLEGRA BOGGESS (MUS'07)
TRAINS AN ALL-FEMALE AFGHAN ORCHESTRA

CU'S FIRST **SUPREME COURT JUSTICE**

BRUCE LEE: SYMBOL OF THE MODERN WORLD

Be Boulder.

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UNIVERSITY OF COLORADO **BOULDER**



NOW

MARCH 2017

Wildfires burned about 2 million acres in the United States in the early months of 2017. Here a slurry bomber drops retardant on the Sunshine Canyon fire west of downtown Boulder on Sunday, March 19.

No one was injured and no buildings were destroyed. Firefighters fully contained the 74-acre fire by the next afternoon. But residents of more than 400 homes were forced to evacuate temporarily.

The wildfire likely began as a campfire, investigators said.

Indeed, humans start most U.S. wildfires — 84 percent of them from 1992 to 2012, according to recent research by CU Boulder scientists. See page 7.



15 Superfood

Will Americans eat insects? **Dave Baugh** (Mgmt'10) and twin brother Lars are betting on it.

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CU astronomer Douglas Duncan has some advice about this summer's total eclipse: Don't miss it.

23 Mysteries of the Teenage Brain

Teenagers think and act differently from grownups. CU's Marie Banich is helping us see why.

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In Kung Fu film star Bruce Lee, CU's Daryl Maeda sees a symbol of the modern world.

29 No Piano? No Problem

Kristof Klipfel's (TAM'17) musical gloves turn any surface into a keyboard.

33 The Risk of Being Undistinguished

Two CU Boulder scholars, one named Zax, find value in having a last name that starts near A.

37 Girl Power

For years, the Taliban banned music in Afghanistan. Now the country has its first all-female orchestra — and **Allegra Boggess** (Mus'07) to thank.

COVER Among people who eat insects, crickets are a common choice. Photo by iStock GlobalP (cricket) and Givaga (plate).

LEFT The 69th annual Conference on World Affairs brought thousands of people to campus April 10-14 for nearly 200 talks, panels and performances, including an improv aerial dance featuring Lena Gutschank, left. She is a founding member of the German circus research and lobby group Netzwerk Zirkus. Photo by Patrick Campbell.

EDITOR'S NOTE

It was a Sunday morning in April, sunny, not quite warm. I was casting about for an adventure for myself and my daughter Waverly, now almost two.

Might CU's Museum of Natural History be open? Indeed, 10 to 4!

Off to campus we zoomed in our bright orange Subaru.

We parked at the alumni center, marched up Broadway, then weaved southeasterly past campus cottages, brooks and bicycle racks.

Beneath the climbing sun, remnant snowfall vanished into crackling earth. There was no one around.

By the museum entrance we paused to soak in the silence of the adjacent amphitheater, vacant. We bathed in sunshine amid dripping snowmelt.

Then we communed with fossil forms and butterfly wings.

Waverly patted petrified wood. I photographed her beside a Triceratops skull. She beheld a scarlet macaw. All for the first time.

What a place to be a child this university is! Or a full-grown adult.

Eric Gershon



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COMPUTING POWER

*Women represent more than half of all new U.S. college graduates but receive fewer than 20 percent of computer and information science degrees. Former Bell Labs executive **Lucy Sanders** (MCompSci'78), leader of the CU Boulder-based National Center for Women & Information Technology (NCWIT), is trying to fix that.*

There's huge demand in our economy for workers with computing skills and growing interest among students. Why aren't there more women in computing?

Several interrelated theories exist. First, society has associated computing with something men do — it has been gendered male. This means society harbors an unconscious bias about 'who does tech,' and it influences what we do: Who we encourage, who we hire, who we give visible technical jobs to, who we promote.

Second, the popular media has portrayed technologists in less than flattering roles — remember the computing geek in *Jurassic Park*?

Finally, some argue the advent of the home PC led parents to encourage their sons more than their daughters not only to learn more about how to use a computer, but to explore how it works.

You served as R&D vice president and chief technology officer at Bell Labs. How'd you get into computing, and did you ever find yourself thinking, 'Where are all the other women?'

My father ran a corporate computing data center and my older sister got an early computing B.S. degree. So it was part of our family conversation. I also had a high school math teacher who taught us how to program BASIC and FORTRAN — she encouraged curiosity in us.

Working at Bell Labs was an honor. Although women and other minority groups never achieved representative parity, we were pretty darn close and much better than what many organizations achieve today.

What's NCWIT's general strategy for drawing women into computing and helping them succeed?

NCWIT unites nearly 900 organizations across the computing ecosystem to significantly increase girls' and women's meaningful participation. NCWIT serves as a 'personal trainer,' providing advice, resources, tool kits and plug-and-play programs to help them achieve their diversity and inclusion goals. Both women and men are involved as leaders, essential to achieving lasting outcomes.

How is CU Boulder doing?

CU Boulder has been a long-time and active member of NCWIT. The College of Engineering and the computer science department track and analyze metrics, consider different approaches to recruiting, develop new curricular approaches and encourage student persistence. They also have amazing outreach efforts that help build the computing/engineering K-12 pipelines. Recently the College of Arts and Sciences introduced a new B.A. program that allows even more students to enroll in computing-related disciplines. CU understands this is a long-distance race.

What should industry be doing differently?

The cultures at many companies, large and small, have been justifiably criticized over the last few years. Often, members of historically marginalized groups are finding unwelcome, if not hostile, cultures and find it hard to contribute their ideas. It's critical that technical products and services are created by diverse engineers — if many types of people are involved, we will solve problems differently and we will solve different problems.

It's really not that hard to under-

stand — homogenous cultures lead to group-think. Corporations need to look at diversity and inclusion as integral to their business practices, not as something optional.

Are any industries or prominent companies notably better at recruiting, retaining and promoting women in computing than others?

Some are starting to make progress and we are encouraged, but there is still a distance to go. We advocate public transparency and publication of technical diversity data as a first step.

What do young women interested in computing ask you most often?

I get a lot of questions about my early technical work. It's pretty amazing that a high school student today cares about the history of the C programming language or the UNIX operating system. They want to know everything about 'how it was then' at Bell Labs. It's a lot of fun to be around them. One of our students was funded by Mark Cuban on *Shark Tank*, others started a tech company that won a best of show award at SXSW. They are amazing.

Condensed and edited by Eric Gershon.

Campus

News SUMMER 2017

Wildfire's Human Touch

WILDFIRES CAN HAPPEN NATURALLY — BUT IN THE U.S., HUMANS START MOST OF THEM



JENNIFER BALCH THINKS a lot about a millennia-old question: How can humans coexist with fire's devastating power?

The U.S. has experienced some of its largest wildfires in recent years, and her research shows that humans bear much of the blame.

In a 2017 study, the CU Boulder geographer found that humans ignited 84 percent of American wildfires from 1992 to 2012, making fire season a year-round phenomenon and increasing annual firefighting costs to \$2 billion.

The comprehensive study underscored the extent that humans can — and do — affect the landscape with fire.

"Fire is an integral part of human existence," said Balch, who directs the campus' Earth Lab. "But we are also vulnerable to it."

Americans raised on Smokey the Bear's warnings might assume all wildfires should be eliminated. But Balch said some burns can be helpful.

"There's a misconception that fire is unnatural in the ecosystem, but it's more complex than that," she said.

Balch began researching wildfire in southern Venezuela in 2002. There the indigenous Pemón tribe deliberately burns overgrowth to keep it from fueling large wildfires. The U.S. may need to intensify its use of proactive, managed burns to curb wildfire destruction, she said.

Balch next plans to use satellite technology and terrestrial mapping to identify areas where humans and wildfires are likely to overlap.

By Trent Knoss

Illustration by Richard Mia Collection

BOULDER BEAT By Paul Danish

SUMMER OF '67

"GREAT CAESAR'S GHOST!" THUNDERED Editor Eric. "This is the 50th anniversary of the Summer of Love! Write something about how it came down in Boulder!"

Easier said than done, chief. The Summer of Love — 1967, in case you've forgotten, or weren't born yet — happened on Hippie Standard Time (HST).

In Hippie Standard Time, things that happened last month really happened next Tuesday. And vice-versa. During the Summer of Love, things that happened next Tuesday in Boulder happened last month in San Francisco. And con-versa. Got it?

Boulder's Summer of Love started in San Francisco in the dead of winter, on Jan. 14, 1967. The occasion was the first Be-In. Psychedelic psychologist Timothy Leary, by then fired from Harvard, dropped in to Golden Gate Park to tell people to drop out.

At the same time, he was at a Be-In in Boulder on June 2, 1967 (HST), arriving on Sept. 22 (HST).

Other counter-culture A-Listers from the San Francisco Be-In also made the scene in Boulder — on HST, of course.

Allen Ginsberg materialized at Macky on April 14, burned incense, chanted mantras and read poetry. He's never really left.

The Grateful Dead did their thing in the Glenn Miller Ballroom — on April 13, 1969. To make up for being late they jammed until 4 a.m.

Jefferson Airplane actually played during summer of '67 — only the concert took place in Colorado Springs (Hippie Standard Space-Time).

About the only people who showed up more or less in real time were the hippies. Most CU students barely noticed.

During the spring semester, some *Colorado Daily* stories were still putting the word hippie in quotation marks.

The real issues at CU were student power, education reform and the Vietnam War (which was taking place in Terrible Urgency of Now Time).

Students were starting to sweat over the draft.

The Student Peace Union was organizing teach-ins.

Paul Talmey (A&S'67; MBA'78) and I (then a grad student) ran for student body president and vice president on a student power platform. We won.

The Boulder Community Free School got started.

There was a lot of student activism — and hippies weren't into it. Neither was Sigma Nu. It had a meeting over whether the brothers should be allowed to flash the peace sign.

CU's General Electric College Bowl team won the nationally televised competition. Back on campus, the team was treated like royalty for winning. (The CU Trivia Bowl was patterned after the show.)

Nationally, the big news that summer wasn't the Summer of Love. It was Israel's seemingly miraculous victory in the Six Day War and riots in Newark and Detroit.

Still, the counter culture did manifest on campus a little, as when dozens of buses from the Wavy Gravy Bus Caravan showed up outside Baker Hall.

And that's the way it was. Next Tuesday.

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



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Superfast Marathon

CU BOULDER SCIENTISTS SHOW THE WAY TO A SUB-2-HOUR FINISH

The average finish time in U.S. marathons is well over 4 hours. No one's done it in less than 2.

But recent CU Boulder research affirms that a sub-2-hour finish is possible and calculates how much certain strategies can help.

"A sub-2-hour marathon could happen right now," said postdoctoral researcher Wouter Hoogkamer, who led the project and last year finished his first marathon in 2 hours, 44 minutes.

The official world record, held by Dennis Kimetto of Kenya, is 2 hours, 2 minutes, 57 seconds. (A faster finish in a Nike experiment in May had not been certified as of press time.)

The CU study calculates how an elite runner — someone already covering 26.2 miles in just over 2 hours — could shave about 3 minutes.

All the scenarios involve some mixture of a friendly racecourse with a slight downhill stretch, a tailwind or fellow racers blocking headwind — and the right footwear.

Sneakers weighing 130 grams, about 100 grams less than those typically worn by the likes of Kimetto, would shave a minute, according to Hoog-

kamer, 35, who worked with professor Rodger Kram of CU's Locomotion Lab.

As it happened, Adidas promptly came out with such a shoe, the Adizero Sub2, two days before the CU paper appeared in the journal *Sports Medicine* — "a very funny coincidence," Hoogkamer said.

Nike, which sponsors research in the Locomotion Lab, recently introduced its own ultralight, super bouncy marathon sneaker, the Zoom Vaporfly Elite 4%.

But featherweight bouncy shoes alone won't do the trick. The CU study reported that the runner would also need to draft off other runners or get a boost from a tailwind of about 13 miles per hour — on a racecourse with a long, slightly downhill stretch.

Hoogkamer, a former track athlete from the Netherlands, ran the Boston Marathon on April 17. Nike didn't have the Zoom Vaporfly Elite in his size yet, so he wore his regular running shoes. Even so, he improved his best time by about three minutes, clocking 2:41:03.

"I started out a little too fast on the downhills," he said.

EG



Illustration by Brian Stauffer

FOR HEARTBREAK, TRY...ANYTHING

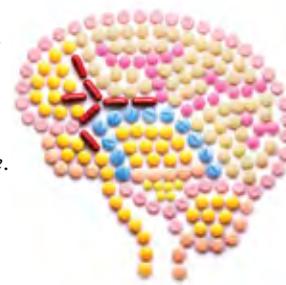
We might have more control over the pain of romantic rejection than we realize, according to new research led by CU Boulder scientists.

In a brain-imaging study of 40 subjects recently involved in an "unwanted romantic breakup," researchers found that administering a placebo — basically, a fake medicine — diminished both negative feelings and also activity in brain regions associated with rejection.

"Doing anything that you believe will help you feel better will probably help you feel better," said CU's Leonie Koban, a postdoctoral research associate in psychology and neuroscience and the study's lead author.

The research paper, "Frontal-brainstem pathways mediating placebo effects on social rejection," was published in the *Journal of Neuroscience*.

For further details, visit colorado.edu/today and search "breakup" and "placebo."



HEARD AROUND CAMPUS

"THERE IS PROBABLY NOT AS MUCH GANG-JOINING HAPPENING IN PRISON AS WE ONCE THOUGHT."

— CU Boulder criminologist David Pyrooz, author of recent research that casts doubt on the common belief that prisons foster gangs.

VENTURE CAPITAL

A sports-related film editing platform, an adjustable socket for prosthetic legs and a digital networking platform for aspiring musicians took home the top prizes at CU Boulder's ninth annual New Venture Challenge competition in April.

In all, entrepreneurs won nearly \$100,000 in awards and investments.

Established in 2009, the challenge is a business development and mentorship program for CU Boulder students, faculty and staff. Teams form in the fall, develop their ideas during the academic year and pitch them to a panel of judges in the spring.

The 2016-17 winners are, respectively, Give & Go (film), ReForm (prosthetic socket) and Gigsicians (musician networking).

The challenge maintains lists of winners at colorado.edu/nvc.

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DIGITS

CU IN 1967

16,877

Total fall enrollment

\$286

Tuition per year for Colorado residents

\$1,134

Tuition per year for non-residents (beginning fall 1967)

FIRST

Ralphie run through Folsom Field

\$2

Cost to see student production of *Oklahoma!* at Macky Auditorium

4,700

Students voting in a Nov. 8 campus election: Topics included the Vietnam War and the legalization of marijuana

50

Pages in *The Seer*, a booklet published by CU student government evaluating teachers and courses



YOUR SHOULD AND YOUR WANT

There were six students in CU Boulder's first graduating class, in 1882. At commencement 2017, Friday, May 12, the university honored nearly 6,300 students — more than 4,600 undergraduates and 1,600 graduate and professional students.

Commencement is a big day for all graduates — and important enough to **Chidobe Awuzie** (Mgmt'16), the 60th overall NFL draft pick, that he skipped his first day of pro football camp to walk in the Folsom Field ceremony. In fact, despite the demands of also playing Division I football, Awuzie finished his degree in just three-and-a-half years.

CU Boulder's 2017 cohort also included the largest Air Force ROTC commissioning class in the nation and 10 students who earned straight A's every semester, among all manner of other standouts.

In addressing the graduates, **Kate Fagan** (Comm'03), ESPN writer and former Buff basketball star, offered a thoughtful take on how to assess one's circumstances at any given phase of life.

"Life is best when your 'should' and your 'want' are aligned," she said. "When they're divergent, ask yourself why."

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— The Colorado Creed

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colorado.edu/alumni/chapters-clubs



SALT OF THE EARTH

Byron White (Econ'38) secured a place in the annals of American law when he joined the U.S. Supreme Court in 1962. His one-time clerk Neil Gorsuch, a former visiting Colorado Law professor and the court's newest justice, won his place in April.

By then, **Wiley B. Rutledge** (Law'22) lay deep in the history books: The first CU Boulder graduate to serve on the nation's highest court joined in 1943.

Often overlooked due to his short tenure — he died six years later — Rutledge nonetheless established himself as a model of collegiality whose amiable, humble, tough-but-fair ways helped stabilize a group of quarrelsome peers.

“Wiley Rutledge had this real skill of making people feel valued and that they were heard,” said Craig Green, a Temple University law professor who has written about Rutledge.

A committed advocate for child labor laws, Rutledge used his brief Supreme Court tenure to bolster freedom of speech and religion, the separation of church and state and limits on executive power.

Born in Kentucky in 1894, Rutledge studied in Tennessee and at the University of Wisconsin-Madison. He began law school at Indiana University while teaching high school, but left to work full time and save money.

He and his wife, Annabel, resettled in Albuquerque, taught and kept saving. In 1920 Rutledge resumed law school at CU. Again he taught, at the now vanished Boulder State Preparatory School.

Rutledge earned his degree, joined a local firm and then CU's law faculty.

In 1939, after serving as law dean at Washington University in St. Louis and the University of Iowa, he became a judge, named to the U.S. Court of Appeals for the District of Columbia by President Franklin D. Roosevelt.

Four years later, he was on the Supreme Court.

A tireless worker with high blood pressure, a smoking habit and a taste, Green said, for “meat and potatoes,” Rutledge died in 1949 after a stroke. He was 55.

A half-century later, a major biography appeared. Author John Ferren called it *Salt of the Earth, Conscience of the Court*. The title says it all.

By Eric Gershon



SUPERFOOD

WILL AMERICANS EAT INSECTS?
DAVE BAUGH AND TWIN BROTHER
LARS ARE BETTING ON IT.

By Eric Gershon



Lithic Nutrition founders Lars (left) and Dave (Mgmt'10) Baugh blend their cricket protein powder into a smoothie.

KURT PERKINS RARELY EATS before 10 a.m. and usually not until afternoon, a practice he calls “intermittent fasting.” When the time comes, he reaches for a protein bar made of cricket.

The Colorado Springs chiropractor said fasting promotes health by minimizing strain on the digestive system. He likes cricket bars because of their exceptionally high protein content and keeps a supply on hand for patients, too.

“I brought ‘em home to my kids — five, three and a one-year-old,” he said. “They chowed it down. It passed the kid taste-test.”

Perkins gets his flavored cricket bars — blueberry vanilla, banana bread and dark chocolate brownie — from Lithic

Nutrition, a start-up health foods company founded by former U.S. Marine **Dave Baugh** (Mgmt’10) and his identical twin brother, Lars, a University of Arizona graduate.

For all Perkins’ enthusiasm about the Baughs’ bars, he isn’t oblivious to the challenge they face in selling Americans on insects as food.

“The biggest hurdle is going to be Western culture,” he said. “The ‘ick-factor.’”

The Baughs, 28, know it, too: “There’s a huge education component to the whole thing,” said Dave, who discovered insect-eating while stationed in Asia with the Marines.

That’s why the amiable brothers, clean-cut and quick to laugh, are

starting with flavored cricket bars and cricket-protein powders for mixing into smoothies and baked goods. None of their products look anything like insects or insect parts, and their pack-

Americans may find the thought of eating insects unappetizing, but elsewhere in the world bugs are a dietary staple. A 2013 United Nations report estimates that at least two billion humans eat insects, primarily

in Asia and Africa, but also in Latin America. Beetles, caterpillars, bees, wasps and crickets are common fare.

As the Baughs and a handful of other insect protein entrepreneurs see it, bugs could, and should, have a place in the U.S. diet, too. The brothers know of a handful of domestic competitors, one of which, Utah-based Chapul, appeared on the reality TV show *Shark Tank* in 2014 and

BILLIONS EAT BUGS WORLDWIDE

aging bears no bug imagery, though it’s clearly labeled “cricket protein.”

“This is a nice easy way to ease people into it,” said Dave, who lived in Arnett Hall at CU and played water polo. “Everybody’s used to what protein bars look like.”

ultimately received an investment from Mark Cuban.

The marketplace has sent other encouraging signals.

In March the *Wall Street Journal* ran a front-page story about insects as an emerging food fad titled “Millennial Entrepreneurs Think Americans Should Eat More Bugs.” In April the Baughs were invited to participate in Twitter’s annual “snack fair” at the firm’s San Francisco headquarters. And Amazon has agreed to add Lithic products to its inventory this summer, starting with pure cricket flour. The flavored bars, which retail for \$2.99 each and typically sell in variety packs of 12, will come next, the Baughs said.

They believe one consumer category will be especially receptive: Hard-core, diet-conscious athletes — “people,” Dave said, “who might already eat things considered different for the nutritional benefits.”

WHY EAT INSECTS?

Advocates of insect-eating, or entomophagy, cite a few basic arguments for it, all practical: Bugs are plentiful, nutritious and generally easy to cultivate at low environmental cost.

Crickets, for example — the Baughs use a tropical species, *Acheta domesticus* — offer more calcium per gram than milk, more iron than spinach and more vitamin B12 than salmon, they said. Crickets are also rich in protein: Pure cricket flour is 67 percent protein by weight, they said, compared with about 35 percent for lean ground beef.

Said Dave: “This is a superfood.”

The brothers cast insect protein as an alternative to better-known protein-rich food sources, such as whey and soy

products. They emphasize that humans are well adapted for processing insects, having eaten them for millennia.

“We’re giving you what your body’s used to,” Lars said.

Then there’s the environmental benefit: Raising crickets is less resource intensive than farming cattle, a traditional protein source for Americans. Growing one pound of cricket protein requires less than one gallon of water, according to the UN report “Edible Insects: Future Prospects for Food and Feed Security,” which runs nearly 200 pages. For one pound of beef, it takes 2,500 gallons.

THIS IS THE ONE

Dave was the first of the twins to give bugs a try. It was 2013 and he was in Asia with the Marines. During a jungle survival exercise with the Thai military, the Thais began roasting whole grasshoppers and crickets over an open fire and offered to share.

“I’m a try-everything-once kind of guy,” said Dave. “I said ‘absolutely!’”

Roasted and salted, they tasted “kind of like a potato chip,” he said.

When Lars, then working in corporate sales in Denver, saw a picture of Dave and his snack on Facebook, he remembered reading an article about insect protein and eventually began wondering if there might be a business in it.

The twins’ entrepreneurial bent was well established. As preteens they’d collected and resold stray hubcaps and golf balls. And while living apart for nearly a decade, they exchanged ideas for future enterprises.

“We began thinking, ‘This is the one,’” said Lars. “We could be on the leading edge of a food supply revolution.”

The timing was right, too. In high school, both brothers had their sights set on CU Boulder. But the twins agreed it was important for them to experience life separately for a while, so they flipped a coin to decide who would apply. Dave won, and they’d been apart ever since, at times separated by oceans and continents. They were ready to reunite.

In fall 2014 a business plan began taking shape. Within six months, Dave, then stationed in San Diego and surfing before work most days, told his commanding officer he planned to resign to start a bug-food business.

“You what?” Dave said, recalling the commander’s reaction. “That sounds crazy! I don’t understand.”

Lars left his job, too, and in September 2015 the brothers moved in with their retired parents in Centennial, Colo., and got to work.

They applied for and received FDA and other licenses. They rented a 1,000-square-foot factory-warehouse in Aurora, east of Denver, and they began importing finely ground cricket powder from a farm in Thailand. They also hired a contract food scientist to help develop their first products, the all-natural flavored protein bars, introduced in mid-2016.

Along the way, they raised more than \$12,000 through a Kickstarter campaign, won CU Denver’s business plan competition and its \$9,500 prize and assembled a board of advisors that includes Justin Gold, founder of Justin’s Nut Butters, the Boulder firm acquired last year by Hormel Foods, maker of Skippy and Spam.

“If there’s a window of opportunity to go for it, it’s now,” said Dave, mindful that he and Lars are young, unencumbered bachelors.

BUG BANQUET

To be sure, Lithic is still a start-up. The brothers, who have mainly financed Lithic from savings, are still living with mom and dad and have yet to pay themselves a salary. As of May, they were personally making and packaging every one of their cricket protein bars.

But good things are happening.

By early 2017 demand had grown sufficiently to warrant plans for mass production through a third-party manufacturer. This will allow the brothers to devote more of their time to sales and marketing.

Already they’re regulars at trade shows and food fairs, and they make appearances at gyms that stock their bars. In January they participated in a “Bug Banquet” hosted by Linger, said

I'M A TRY-EVERYTHING-ONCE KIND OF GUY.

to be Denver’s only restaurant with insects on the menu (cricket-and-cassava empanada, for instance). In April they flew to San Francisco for the Twitter event. And in May they planned to attend Los Angeles’ Annual Bug Fair for the second year running.

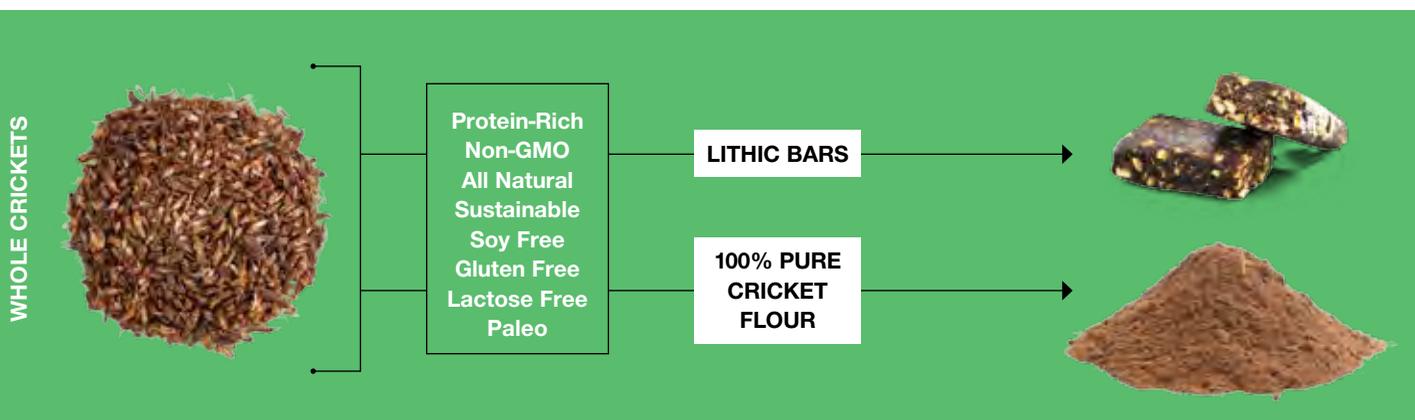
Amid all this, they’re filling orders for paying customers: One Tennessee family regularly orders two pounds of 100-percent pure cricket flour for blending into smoothies and pancakes.

“That’s our ultimate goal,” Dave said, “to get that normalization in the American diet.”

Hooking more Americans on insect protein will take time, and bugs may never become a staple food source. But as the Baughs’ fellow industry pioneers have observed, another critter, once ignored, has managed to find a secure niche in the national cuisine.

“At the turn of the [20th] century,” Dave said, “nobody ate lobster.”

Eric Gershon is editor of the Coloradan.



American ECLIPSE

CU ASTRONOMER DOUG DUNCAN HAS SOME ADVICE ABOUT THIS SUMMER'S TOTAL ECLIPSE: DON'T MISS IT.

By Christie Sounart



STRANGE THINGS HAPPEN WHEN the moon eclipses the sun.

Once, while chasing a total solar eclipse by boat in the Galapagos, CU astronomer Douglas Duncan found himself surrounded by surfacing whales and dolphins.

“It was clear they knew something weird was happening,” said the professor, who’s witnessed 10 total eclipses in spots around the world. “They watched the eclipse and then went away.”

Another time, in Bolivia, he saw a herd of llamas stop to observe an eclipse for three full minutes.

Duncan, who is the outgoing director of CU’s Fiske Planetarium, can appreciate these reactions: When the earth, moon and sun perfectly align, he said, the sky “looks like a black hole into the heavens” surrounded by pink flames.

“People scream, applaud and cry,” he said. “It gets cold and all of the colors of the landscape start to change. It’s like you’re in a dream.”

This year, it will be easier for Americans to experience a total solar eclipse than it’s been in decades. On Aug. 21, 2017, the sun will be obscured completely for roughly 2-minute bursts across a 70-mile-wide strip from Oregon to South Carolina. The last total eclipse over the contiguous U.S. happened in 1979.

At around 10:15 a.m. PDT on Aug. 21, residents of Salem, Ore., will be among the first in the U.S. to see the phenomenon. About 90 minutes later, residents of Charleston, S.C., will be among the last. In all, a total eclipse will be visible in 12 states.

People in every state will see a partial eclipse, according to Duncan, who’s studied the sun and stars for more than four decades. But getting into the total eclipse’s direct path, he said, is worth the extra effort.

“No one who has seen a total eclipse has ever forgotten it,” he said. “It’s the most amazing natural thing you’ll ever see in the sky.”

A total eclipse is visible somewhere on Earth every year or two, but rarely so close to home. Americans are preparing to take advantage of the opportunity: Hundreds of public viewing events are scheduled at parks, libraries, museums, breweries and town centers around the country.

Duncan himself will lead 275 people to Jackson Hole, Wyo., where the party will watch the eclipse at Grand Teton National Park at 11:34 a.m. MST. He chose the location four years ago after determining the area is likely to have clear weather. (Two total eclipses he’s witnessed have been clouded out.)

Other prime viewing locations include Madras, Ore.; St. Joseph, Mo.; and Nashville, Tenn., according to greatamericaneclipse.com. The eclipse will be seen longest near Carbondale, Ill. — for 2 minutes, 40 seconds.

Anyone observing a total solar eclipse should use a pair of certified solar filters, known as “eclipse glasses,” or a handheld solar viewer — easily purchased online — to block the sun’s visible and ultraviolet rays. Sunglasses, binoculars and cameras generally do not offer comparable protection.

“The sun is powerful enough to burn paper when concentrated by a lens,” said Duncan. “That would happen in your eye if you stared at it unprotected.”

IT'S HARD TO FORGET A TOTAL SOLAR ECLIPSE.

Astronomy educator **Cherilynn Morrow** (PhDAstro’88) of Boulder has seen three total solar eclipses, including one during a trip to the Mediterranean Sea led by Duncan. She plans to watch this year’s eclipse with friends and colleagues in Oregon.

“At the moment of totality,” she said of her first experience, in Baja in 1991, “I felt as if I were suddenly immersed in a surreal twilight, as if the sun had just set in all directions at once...in the middle of the day!”

Duncan, who retires from Fiske this summer to focus on teaching at CU and producing videos for NASA, is already looking beyond August’s eclipse: In July 2019, he’ll be on a ship racing to see another just off Tahiti.

For more information, visit eclipse2017.nasa.gov/events and colorado.edu/eclipse.

Christie Sounart (Jour’12) is associate editor of the *Coloradan*.

Mysteries of the TEENAGE Brain

TEENAGERS AND YOUNG ADULTS THINK AND ACT DIFFERENTLY FROM GROWNUPS. CU SCIENTIST MARIE BANICH IS HELPING US SEE WHY.

By Lisa Marshall

MARIE BANICH VIVIDLY REMEMBERS the day she first saw a human brain up close.

It was a Friday morning in 1983. She was standing in a frigid basement morgue, one of two graduate students among a group of University of Chicago medical students. The air was thick with the odor of formaldehyde. Her instructor was headed straight for her with a pale, lesion-riddled slice of gray matter from a cadaver cupped in his hands: “What do you think this person died from?” he asked, pushing the specimen closer.

“And then the world started to go dark,” said Banich, who raced to a nearby sink.

She was mortified, but returned for the following week’s brain cutting lesson, lured by pure fascination with the then-little-understood 3-pound organ.

She wanted to know more: What made her mom a leftie? Why was her dad so good at building things? And what was going on inside her own brain to enable her to, in her early 20s, grasp things she couldn’t as a teen?

“I was fascinated early on with this idea that variations in the structure and function of the brain actually shape the way we experience our world,” she said recently over coffee at a North Boulder café.

Now a professor at CU, Banich literally wrote the book on cognitive



neuroscience: The fourth edition of her 1997 textbook *Cognitive Neuroscience* comes out later this year. And, as a pioneer in the use of functional magnetic resonance imaging (fMRI) brain imaging in adolescents, she's helped shed light on why teenagers and young adults think — and act — differently from adults. This year, she and other CU researchers joined a landmark multi-center study that will follow 10,000 children from age nine for 10 years to explore precisely how their brain changes and what factors shape the change.

“Over the years, we've learned that adolescence is an incredibly important time for brain development, when the brain is particularly malleable and receptive to its environment,” said Banich, of CU Boulder's Institute of Cognitive Science and Department of Psychology and Neuroscience. “But we only have broad brush strokes. We need a clearer picture.”

MAPPING THE TEEN BRAIN

Early brain research focused on diseased or injured brains. Neuroscientists would pore over the brain of someone who had died with cognitive deficits, looking for lesions as clues to which regions controlled what functions.

The 1990s advent of fMRI, which measures blood flow as a proxy for brain activity, allowed researchers to study healthy, living subjects and look beyond structure to see how the brain functioned. And because fMRI was painless, it could be used on minors.

Banich was hired at CU in 2000 in part because of her expertise in fMRI techniques, then relatively new. She worked with colleagues at CU Anschutz to get a neuroimaging program off the ground.

At the time, scientists thought the teen brain had fully developed because it was about the same weight and shape as an adult brain. But Banich's work has shown otherwise.

“If you look at basic cognitive abilities, they are pretty mature by age 16,” she said. “But if you look at the systems that allow you to control and

coordinate your behavior — what some might refer to as your free will — that is all still developing.”

The frontal lobes, which serve an executive function, and the white matter, which helps different regions talk to each other, continue to refine well into early adulthood, for example.

Meanwhile, the unfinished teen brain interacts with the world uniquely.

In a series of studies in the early 2000s funded by the MacArthur Foundation, Banich and colleagues showed that teens lack a mature ability to conceptualize the future, have less self-control, are less organized in their decision making, are more vulnerable to peer pressure — and are much more sensitive to reward than to punishment. By the early-to-mid 20s, these traits tend to fade.

Said Banich, “In adolescence, the carrot is huge and the stick is practically invisible.”

Work by her and others helped influence the U.S. Supreme Court's 2005 decision to abolish the death penalty for juveniles and 2010 decision to eliminate, for them, most life sentences without parole.

Banich's early writings also inspired a new generation of neuroscientists.

“She was a role model,” said UC Berkeley

psychology professor Silvia Bunge, who read Banich's early work as a graduate student and recently discussed a new Banich paper with her students.

“She was part of the first generation of researchers doing brain imaging research to study human cognition, and she has moved mountains to advance this field.”

PRUNING THE GRAY MATTER

At a time when teens are biologically hardwired for risky behavior, their brains may also be especially sensitive to the consequences of it.

As Banich explains it, the teen brain is like a bush that's leafing out in springtime, then selectively pruning itself to suit its environment. Exposure to drugs or trauma, for example, may stunt that natural development.

IN ADOLESCENCE,
THE HUMAN BRAIN
IS STILL A WORK IN
PROGRESS



For teenagers, “the carrot is huge and the stick is practically invisible,” said CU scholar Marie Banich.

In one 2016 study of 466 adults who had used marijuana, Banich found that the earlier they started, the less developed their white matter, which plays a key role in helping different parts of the brain communicate. Those subjects reporting early or frequent drug use also showed alterations in the shape of certain brain regions — one associated with reward, another with memory.

Just what this means for behavior or cognition is still to be determined, but Banich said it suggests that “if you start early and use marijuana a lot, there are likely to be lasting effects on the brain.”

In contrast, the experience of exercise or intellectual stimulation might fuel positive brain development, she believes.

A self-described nerd who grew up feeling out of place in a “stereotypical New Jersey town where the guys wanted to be football players and the girls wanted to be cheerleaders,” Banich credits her parents for encouraging her to travel and to go to college.

“Looking back on it I think I was fortunate to end up in a really beautiful environment for my brain in my late teens and early 20s — it was the right stimulus at the right time.”

FUTURE FRONTIERS

In 2012, Banich founded the Intermountain Neuroimaging Consortium at CU Boulder, bringing together neuroscientists from across the region to study everything from addiction to pain to

learning and memory. They all rely on fMRI as a tool. Instead of examining one slice of brain at a time, they can measure 40 slices, each divided into a 64 by 64 grid, every half second for a half hour during one scan of a healthy human.

Currently, the center is one of 21 test sites nationwide for the federally supported Adolescent Brain Cognitive Development (ABCD) study. It has already begun testing teenagers.

Banich, who serves as co-principal investigator with CU professor John Hewitt, director of the Institute for Behavioral Genetics, hopes the study will fill in some of the many remaining gaps in our understanding of the teenage brain. Is there a phase when the brain is most sensitive to the effects of drugs? Of excess screen time? How great a role does genetics play?

In her rare spare time, Banich travels — sightseeing in Italy, hiking in Sedona — to “press the reset button” on a brain she knows is prone to obsessing about work.

She also cares for her mother, who recently had a stroke, and pursues other projects aimed at divining the neurological underpinnings of addiction, which afflicted one close family member, and mental illness, which drove another to suicide.

“All of these life experiences have really humbled me and made me realize the limits to what I know about the brain,” she said. “There's still so much work to be done.”

Lisa Marshall (Jour, PolSci'94) writes about health, science, running and parenting.

SOMEHOW IT HAD ESCAPED Daryl Maeda's notice: The Museum of Modern Art in New York was hosting a retrospective of Bruce Lee's films.

This was in January.

As luck would have it, a *New York Times* reporter reached out to ask the CU professor about Lee, tipping him off to the show.

"I cleared my schedule and jumped on a plane," said Maeda, who teaches a course called "Bruce Lee and the Trans-Pacific" and is at work on a book about the martial arts star.

THERE'S NO BRUCE LEE BEFORE BRUCE LEE.

Lee died in 1973 at age 32. He'd made just a handful of major films, of which three reached U.S. theaters during his lifetime.

But, as with James Dean, Janice Joplin and Jim Morrison, early death seems only to have amplified Lee's fame. Maeda made him a central figure in a Super Bowl ad as recently as 2014.

Maeda thinks Lee, already the subject of several documentaries and biographies, is overdue for a deeper analysis than he's received.

"Studying Bruce Lee is actually a way of exploring how we come to occupy a globalized world," he said.

Born in San Francisco in 1940 while his Chinese father was singing opera there, Lee grew up in Hong Kong, where he trained in martial arts and dance and appeared in about 20 minor film roles.

Later he studied philosophy and drama at the University of Washington and opened a martial arts school in Seattle. In the mid-1960s he made his way to Hollywood and found work in television, on *The Green Hornet*.

Between 1971 and his death, he starred in four films that quickly made

him a celebrity in Asia. The most famous of these in the U.S., *Enter the Dragon*, reached theaters about a month after his death, in Hong Kong, following a bad reaction to medicine.

Maeda, an ethnic studies professor, said he'll focus on Lee as an early, extraordinary example of a person who forged a new type of truly cross-cultural identity at a time of accelerating global movements of people, information and ideas.

The defining synthesis of Lee's cross-cultural existence was the hybrid form of martial arts fighting on display in his films. He mixed elements of karate, taekwondo and escrima (or kali) and incorporated aspects of Western boxing, fencing and dance also.

Typically cast as an avenger — physically small, but tough, brave, skilled and finely chiseled — Lee basically invented the Asian American tough guy, conquering generations of unflattering stereotypes about Asian men and becoming a symbol of pride for Asians and other racial minorities.

His films, which appeared in the twilight between the civil rights and black power movements, were hugely popular among American blacks, according to Maeda, who aims to publish his book within two years.

"Bruce Lee is a kind of a multifarious figure who can mean different things to different audiences," he said. "He contains a multitude within himself, and as a result of that people are able to identify with various parts of his image and his being."

And yet Lee was one of a kind — making him an appealing subject for an ambitious book.

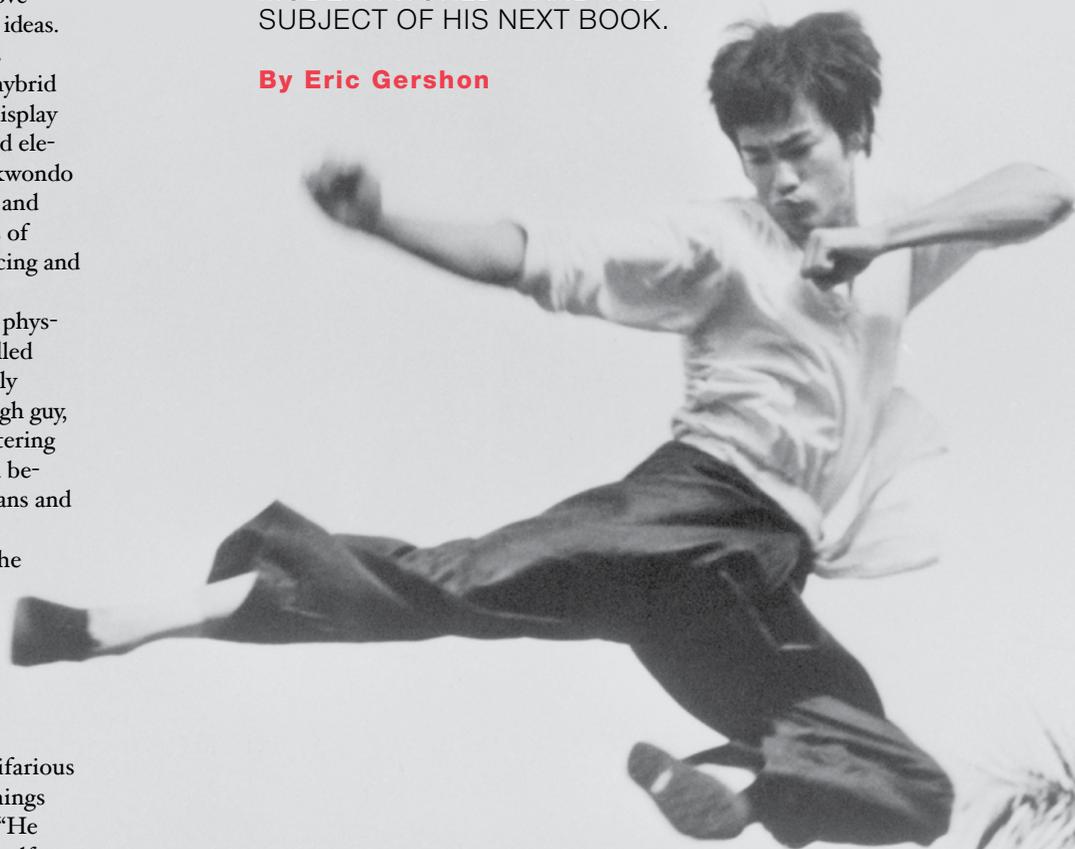
Said Maeda: "There's no Bruce Lee before Bruce Lee."

Eric Gershon edits the Coloradan.

Enter the BIOGRAPHY

IN BRUCE LEE, CU'S DARYL MAEDA SEES A SYMBOL OF THE MODERN WORLD — AND THE SUBJECT OF HIS NEXT BOOK.

By Eric Gershon





No Piano? No PROBLEM

ALL YOU NEED ARE KRISTOF KLIPFEL'S
MUSICAL GLOVES.

By **Christie Sounart**

KRISTOF KLIPFEL (TAM'17) DISAPPEARED for a moment.

"Sorry, I get into this," he said distractedly, absorbed in the blues beats he was making on the fly.

Satisfied with his rhythm, he looped the track on his laptop and began overlaying new notes in the key of A.

IT'S A WEARABLE ELECTRONIC MUSICAL INSTRUMENT.

Music boomed, though no instrument was in sight.

No traditional instrument, anyway — Klipfel was making music through the gloves on his hands, using an ordinary table as his keyboard.

He continued drumming his fingers, encased in a pair of black construction gloves covered in buttons, switches and wires connected to his laptop.

The harder he pressed, the louder the sound of specific notes played. Flexing his fingers triggered a sensor that adjusted overall volume and sound distribution.

By flicking a switch on the side of a finger, he could shift from piano to drums or saxophone.

Software on his laptop recorded it all.

"You're always in the right key and the right scale," said the inventor, a 22-year-old senior from Reno, Nev.

Klipfel calls his device MIDI motion gloves. MIDI stands for musical instrument digital interface, which

links electronic instruments and enables them to communicate.

Basically, he said of the gloves, "It's a wearable electronic musical instrument."

Klipfel is not the first person to develop musical gloves. But his are unique in their ability to generate any note in any key for major, minor, blues and pentatonic scales.

A musician since 6th grade, when he began playing saxophone, Klipfel eventually learned dozens of instruments, including the trombone, drums and piano. He started composing electronic music in high school.

Klipfel designed the gloves in spring 2016 for a course on wearable technologies in the ATLAS Institute, part of the College of Engineering & Applied Science.

"I got tired of playing piano, then jumping to the computer and back and forth," he said.

He realized MIDI might offer a solution.

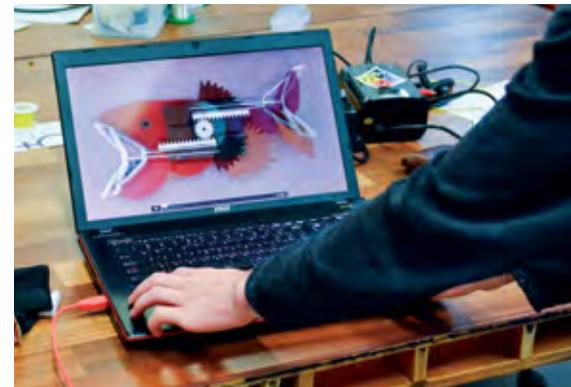
"The gloves as a whole are a MIDI controller," he said. "They send specific signals to the music software, which then interprets the signal and triggers any sound I define within the program."

The gloves were Klipfel's first experience with circuitry and robotics, and he spent a lot of time on Google figuring out how to make everything work. The project cost him about \$300.

"I advised Kristof to start with one sensor on his glove and go from there," said Alicia Gibb, his instructor. "He came in the next class with five sensors working on one glove. From that point, I knew these gloves were going to be epic."

In March, Klipfel took the gloves to Hiyoshi, Japan, for the Tangible Embedded and Embodied Interactions conference. There he showed them off for hundreds of people at a student design challenge — and walked away with the award for best project implementation.

As far as Klipfel is aware, none of the other music gloves on the market have as much flexibility in sound as his do. But for now, he has no plans to patent or commercialize his product.



Klipfel invented a solution for creating electronic music fast: Gloves.

I KNOW NOW I CAN CREATE SOMETHING PRETTY COMPLEX FROM SCRATCH.

"I'm just trying to graduate," Klipfel said. "I wanted to do something off the wall and really cool. This ended up being that."

Making the gloves introduced him to other interests and has inspired him to consider careers in virtual reality, robotics, web development or game development, he said.

Between now and graduation next fall, Klipfel will devote himself to the drone racing club he started at CU, hiking around Boulder and creating a video game with his brother. He's also working on another ATLAS side project called Paper Mech, which aims to get children interested in mechanical engineering by using paper and household items to make things move.

"There's always new stuff that I'm working on," he said. "I know now I can complete something pretty complex from scratch."

Christie Sounart
(Jour'12) is associate editor of the Coloradan.



The Risk of Being UNDISTINGUISHED

TWO CU BOULDER SCHOLARS, ONE NAMED ZAX, FIND VALUE IN HAVING A LAST NAME THAT STARTS NEAR A.

By Eric Gershon

ALEX CAULEY AND JEFFREY Zax may come from opposite ends of the alphabet, but they see eye to eye on certain things.

They agree, for instance, that the first letter of a person's last name can make a big difference in life, and they've got evidence to prove it.

In a recent study, Zax and Cauley (Math, Econ'12; PhdEcon'18) — a CU Boulder economist and graduate student, respectively — found that having a surname starting with a deep-alphabet letter, such as Z, can be a significant disadvantage. The reverse is also true, they said.

Specifically, people with deep-alphabet surnames are less likely to perform well in high school and less likely to attend college. If they do attend college, they're more likely to drop out. And they're less likely to land a highly desirable first job.

"I always thought there was going to be some effect," said Cauley. "I didn't think it would mean this much."

The CU study relied on information from nearly 3,300 men who graduated from Wisconsin high schools in 1957 and are also part of a separate long-term project called the Wisconsin Longitudinal Study.

Other scholars have noted consequences of alphabetical ordering. Zax and Cauley are the first to study the influence of the first letter of the last name.

The good news for the world's Wagners, Youngs and Zwicks is that alphabetism's effects seem to disappear by age 35, said the researchers, whose paper, "Alphabetism: The effects of surname initial and the risk of being otherwise undistinguished," is in peer review.

Zax and Cauley suggest the bias stems from the common use of alphabetical ordering as an organizing method and propose that people farther from A are more easily overlooked and therefore get fewer opportunities, at least early in life.

By midlife, they've found or developed ways to stand out and thus overcome the alphabetical bias.

"We don't believe anybody's got it out for people with initials at the end of the alphabet," said Zax, whose research focuses on inequality.

Another bit of good news (for some people) is that the bias does not seem to apply to those who are somehow distinguished — positively or negatively. The conspicuously smart or dim and especially attractive or unattractive, for example, tend to be noticed by teachers and others in influential positions, and thus get attention and opportunities irrespective of their surnames.

Take Zax, for example, who would go to Harvard and become a professor. As a child in Rochester, N.Y., his aptitude for learning helped him stand out, he believes, neutralizing any disadvantage his last name might have conferred.

"I kind of enjoyed being at the end of the list," he said. "I was never concerned that I was somehow being disregarded."

Similarly, Cauley, who was born in Russia and resettled in Wyoming as a teen, appears immune to alphabetism: He's noticed no relevant difference in life since adopting his stepfather's last name at age 24, he said, although C is 10 places ahead of M, the initial of his original surname, Mikhaylov.

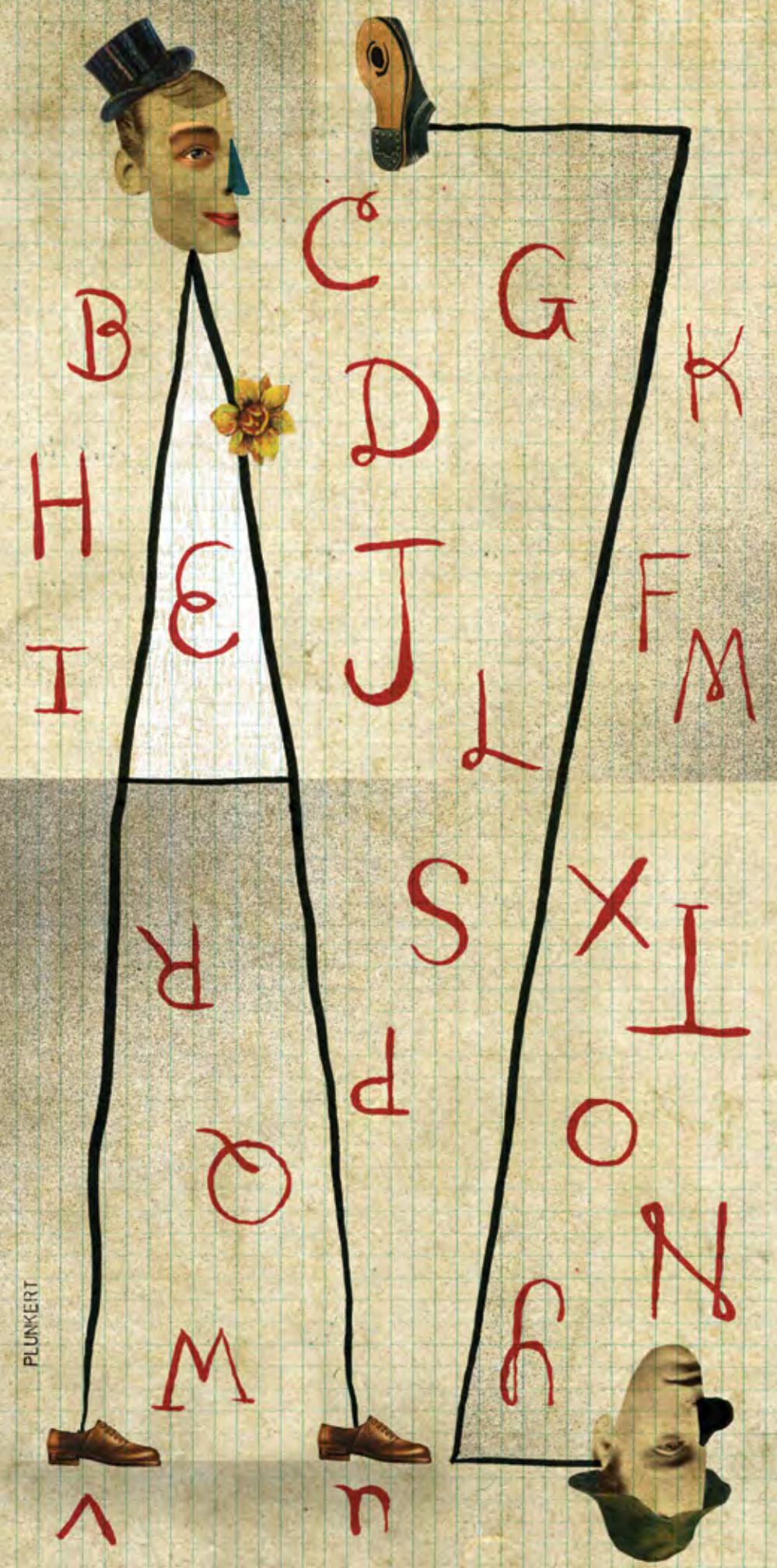
But it's been bothering Zax that, at commencements, for instance, the early-alphabet graduates get all the applause.

"By the time the Rs are going across the stage," he said, "a third of the audience is gone."

So he tries to strike a blow against alphabetism when he can. In his CU classes, he hands back papers and tests in reverse alphabetical order.

"I've been doing that for 15 years," he said.

Eric Gershon edits the Coloradan.



THE LIGHT OF THE GREAT OUTDOORS

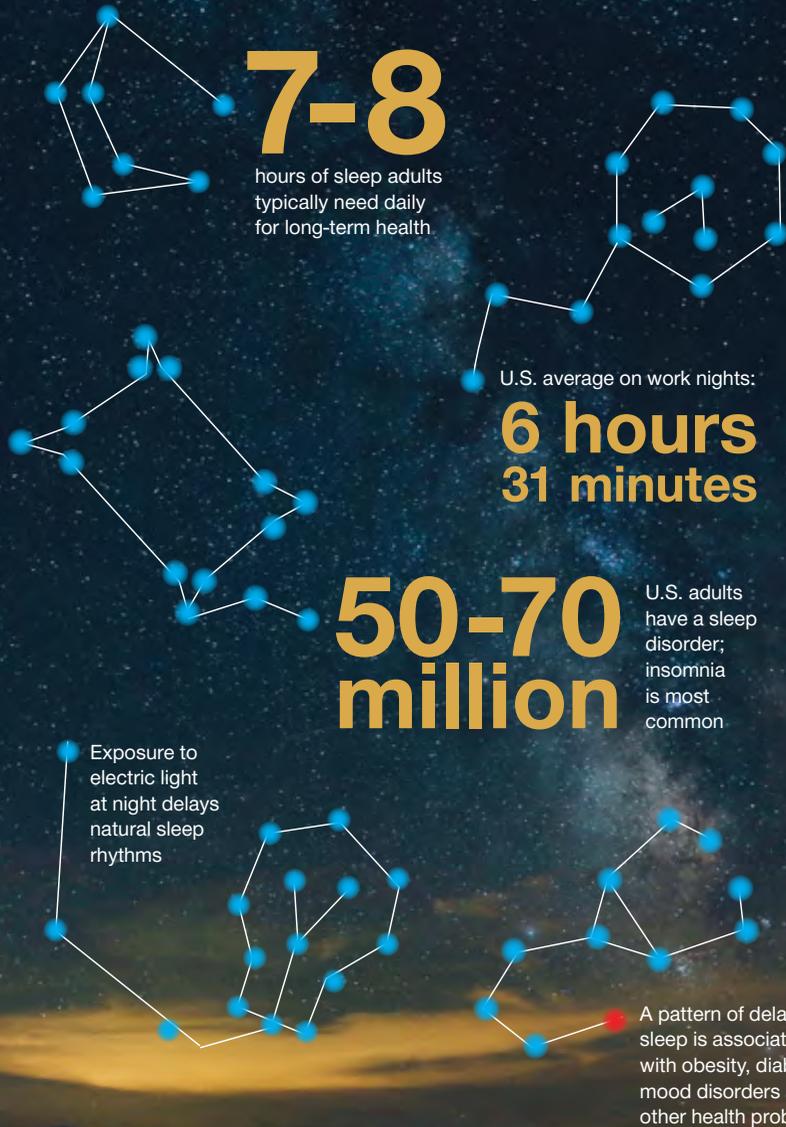
American adults don't sleep enough: On the average work night, we come up 30-90 minutes short of what our bodies need for long-term health, according to a poll by the National Sleep Foundation.

Maybe we should go camping more often.

Recent research by CU Boulder sleep experts Ellen Stothard and Kenneth Wright show that exposure to the natural light and total darkness available outdoors helps reset our internal clocks in as little as two days – a weekend camping trip. By resetting our clocks, we get a chance to establish a more satisfying sleep pattern back at home.

Information from: Kenneth Wright study, "Circadian Entrainment to the Natural Light-Dark Cycle across Seasons and the Weekend," published in Current Biology; CDC; the National Sleep Foundation; the American Sleep Association

"Modern environments can significantly delay our circadian timing, and late circadian timing is associated with many health consequences. But as little as a weekend camping trip can reset it."
— Kenneth Wright



THE CAMPING EFFECT

M T W T F

S S

One weekend of camping can reset our internal clocks

2

-day camping trips can jumpstart production of the sleep-regulating hormone melatonin, promoting sleep at an earlier time



Camping is especially effective at resetting our internal clocks because it exposes us to far more natural light than we get in the typical built environment

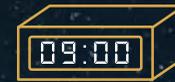


Our bodies respond quickly to the natural light/dark cycle

SLEEP TIPS



Avoid caffeine, alcohol and large meals near bedtime



Be regular: Go to bed and wake up at the same times daily



Get bright natural light, especially in the morning



Shut off smartphones and laptops two hours before bedtime

FUN FACTS ABOUT SLEEP



73% of U.S. adults watch TV before bed

64%

of Americans find lavender a relaxing scent before bed



Average number of pillows per U.S. adult

A photograph of two young girls, likely from Afghanistan, wearing red headscarves with a decorative border and black dresses. They are both smiling broadly and holding saxophones. The girl on the left is looking towards the girl on the right, and the girl on the right is looking towards the camera. The background is a plain, light-colored wall.

GIRL Power

FOR YEARS, THE TALIBAN BANNED MUSIC IN AFGHANISTAN. NOW THE COUNTRY HAS ITS FIRST ALL-FEMALE ORCHESTRA — AND ALLEGRA BOGGESS TO THANK.

By Christie Sounart



AFGHAN MUSIC SOUNDED FROM the orchestra in Davos, Switzerland. From the concert hall's front row, **Allegra Boggess** (Mus'07) listened with pride, and cried. The 30 young women on stage were making history.

Zohra, Afghanistan's first all-female orchestra, kicked off its debut European tour at the World Economic Forum

YOU COULD BE BEATEN FOR LISTENING TO MUSIC.

in Switzerland in January. Boggess, their mentor, flew from Colorado to help supervise the student musicians, the youngest of whom was 12. For her, the performance culminated five years' work at the Afghanistan National Institute of Music (ANIM), the country's only music school.

"I don't think I've ever felt so proud or so grateful in my entire life," said Boggess, a pianist who moved from Denver to Afghanistan in 2011. "I was proud of each one of those girls, especially remembering how hard they worked over the many rehearsals we had and how many battles they fought at home, in their community and in society in general to get where they are now."

Named after a Persian music goddess, Zohra was formed at ANIM in 2014. Boggess, 33, was a teacher in the school and helped encourage the young women to form the ensemble after they requested special Afghan arrangements to play on their own.

Their enthusiasm reflected dedication and bravery. Making music in Afghanistan was risky until recently: The Taliban outlawed it as un-Islamic.

"When the Taliban banned music in the 1990s, all the musicians either had to leave or had to hide their instruments and take up menial jobs," said Boggess. "You could be beaten for even listening to music."

Despite the Taliban's overthrow in 2001, musicians are still sometimes targeted by religious conservatives. It remains rare to see instruments in the streets, Boggess said. But in Kabul, Afghanistan's capital, ANIM provides safety for aspiring musicians.

Ahmad Sarmast, an Afghan musicologist who fled the country's civil wars

for asylum in Australia in the 1990s, returned to his home country in 2006 to develop Afghanistan's first dedicated music school, established in 2010.

With support from donors, including the World Bank, the U.S. Embassy and the German government, ANIM enrolled dozens of children, focusing primarily on providing opportunities

for the country's most vulnerable populations: street vendors, orphans and girls.

"I believe that all kids, regardless of their gender, should have access to music education," Sarmast said in a 2013 documentary from Al Jazeera's *Witness* series. "I will do my utmost to provide more opportunity to the girls, given the challenges they are facing in this country."

Today, there are more than 65 girls among the school's 250 students, who range in age from 10 to 21.

"I wish her to study and become somebody," one student's mother,



ANIM students play Western and traditional Afghan instruments, such as the qashkarcha, pictured.

clothed in a burka, said in *Witness*. "I want her to be free and bare-faced."

ANIM was Boggess' reason for living in a war zone.

After graduating from CU, she felt called to teach music to children outside the U.S. While teaching in India at a school for impoverished children, she visited Afghanistan and ANIM. Her



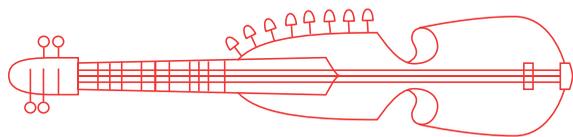
The Zohra Orchestra is Afghanistan's first all-female orchestra. It practices in the country's only music school, the Afghanistan National Institute of Music.

brief experience in Kabul left her wanting more. She joined the faculty full time in August 2011, despite the AK-47s in the streets and suicide bombings.

"I was pretty scared," she said. "But not enough not to go."

Boggess, the youngest of three sisters, arrived in August 2011 and saw there was plenty to do.

"When you ban music, a country's cultural heritage is at stake," she said. "The school is working to bring that back."



Most of the school's incoming students could not name traditional Afghan instruments such as the rubab, related to the lute, or the sitar, a plucked stringed instrument.

Boggess, an experienced pianist and oboist, learned traditional Afghan music from her colleagues and began arranging folk songs for her students to play on the piano. In time, she provided music and instruction to the Zohra Orchestra.

With Afghan and other international colleagues, she worked six days a week, often spending free time practicing with students who wouldn't bring their instruments home for fear of public rebuke.

At times, other CU alumni served as guest teachers alongside Boggess, including cellist **Kimberly Patterson** (DMus'12), her husband, guitarist **Patrick Sutton** (DMus'14), and conductor **Joel Schut** (MMus'12).

"Even with the unstable political environment, ANIM has become a beacon of hope in war-torn Afghani-

stan," said Patterson, now a professor at the University of Memphis.

Boggess also invited David Korevaar, her former CU professor. He went to Kabul for two weeks in May 2016 to work with pianists and flutists behind the school's thick walls and manned steel gate.

"We're just validating the mission by being there," he said. "The fact that I can do this and share music with students who are really hungry for it — there's nothing better in the world."

But Korevaar, who still teaches at CU, fears for the school's future amid continuing turmoil in Afghanistan. He follows the news daily, with a frightening event involving Boggess in mind.

On Dec. 11, 2014, Boggess helped organize eight students for an evening performance at a Kabul high school. She went home with a headache, leaving the students with Sarmast. As the children performed on stage, a teenage suicide

bomber blew himself up in the auditorium. One man was killed and 16 wounded, including Sarmast, who had shrapnel in his head and damaged eardrums.

The experience changed Boggess, who did her best to fill in for Sarmast as he healed.

"To think I could have died — that was the first time I realized, as passion-

I WAS PRETTY SCARED. BUT NOT ENOUGH NOT TO GO.

ate as I was about teaching music, I wasn't ready to die for it," she said. "It was the first time I was really afraid. I would leave the house and wonder, 'What is going to happen to me?'"

Boggess battled with her decision about whether to stay.

"I was still excited and happy to be there, because I felt like part of a family," she said. "But it was a really tough time. It was hard to come to the realization that I needed to leave."

Last August, after more than four years, she returned to Denver, where she took a job at Starbucks — "the opposite of my job in Afghanistan" — and taught piano.

But she kept in touch with members of Zohra as they prepared for their concerts in Europe. And when they made their debut on the world stage, she was with them — with the 18- and 19-year-old female conductors and with freshman Aziza, who, though tiny in stature, learned to play double bass.

"I remember when and how each of those girls joined the ensemble," said Boggess. "To think back to that time and then to fast-forward to watching them perform in Europe — it was incredibly emotional for all of us."

In August, Boggess begins a new job as director of orchestra at Rabun Gap, a Georgia boarding school.

"I'm already talking about how I can get girls from Afghanistan to that school to study," she said.

Christie Sounart (Jour'12) is associate editor of the Coloradan.

2017 Scholarship Challenge



Our goal is to raise **\$50,000** for scholarships this year.

GETTING INVOLVED IS EASY! If you're a Colorado resident, your purchase of CU license plates includes a \$50 scholarship donation. Together, if we add just 1,000 CU plates to the road in 2017, we'll reach our scholarship goal.

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CELEBRATE

The 50th Anniversary of Ralphie's First Run!



WHEN RALPHIE LEADS THE BUFFS onto the field for the Homecoming Game against Cal on Saturday, Oct. 28, we will celebrate the 50th Anniversary of her first run at Folsom Field in 1967. Witness history and cheer on your Buffs as they take on the Bears!

Join us for an unforgettable Homecoming Weekend full of events, reunions and opportunities for you to share your CU pride!

Learn more at colorado.edu/homecoming



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Alumni

News SUMMER 2017

Two Buffs, One Amazing Race

A BUFF SENIOR AND A FORMER STUDENT FOUND THEMSELVES PAIRED ON REALITY TV — AND IN THE HUNT FOR \$1 MILLION

LAST JUNE **FLOYD PIERCE** (ApMath, Econ'17) raced around the world for one million dollars as a contestant on CBS' *The Amazing Race*.

Doing it was fun, he said. Keeping it to himself wasn't.



Floyd Pierce and Becca Droz in Tanzania during *The Amazing Race*.

Then a rising senior, he couldn't tell anyone other than immediate family and certain professors until the first episode aired in March — nearly a year after he'd been picked for the cast.

That meant his CU community, including fellow leaders in The Herd — CU Boulder's student alumni association — the Golden Buffaloes Marching Band and the President's Leadership Class, had no idea he'd visited Italy, Panama or Tanzania during his summer break. Or that he'd be on national TV.

"The entire experience was surreal," he said.

Pierce, a Boettcher Scholar from Highlands Ranch, Colo., was one of 22 contestants on the reality show's 29th

season, which followed 11 teams of two as they deciphered clues, completed physical challenges and navigated foreign cities — all while avoiding elimination at designated checkpoints.

In the show's first episode, Boulder resident **Becca Droz** (Anth ex'12) chose Pierce as her teammate. They made the CU connection on their way to Los Angeles International Airport. After filming wrapped in July and he was back on campus, Pierce attempted normalcy. He kept busy as drum major for the marching band during football season and he planned a Boulder version of *The Amazing Race* for students during Home-

coming Weekend.

Participants chalked up his enthusiasm to his devout interest in the show, which he's watched since grade school. They had no idea he'd done the real thing.

When March 30, the day of revelation, came, he and Droz watched the first episode with about 150 of their family members and friends at Boulder's Rayback Collective beer garden and food truck park.

"Best night of my life," Pierce tweeted afterward.

Other big nights were to come: The Buffs survived until episode 10 (of 12) — broadcast the night before we went to press. For a wrap-up story, visit colorado.edu/coloradan.

MAROLT HEADLINES GOLDEN ANNIVERSARY

In 1990 **Bill Marolt** (Bus'67) made a bold decision that proved historic: Then CU's athletic director, he extended the contract of Buffs football head coach Bill McCartney. The team won its only national championship the next year.

The moment was one of hundreds that defined an illustrious career. Marolt — a member of the 1964 Olympic U.S. Ski Team with **Billy Kidd** (Econ'69) and **Jimmy Heuga** (PolSci'73) — also served as an Olympic ski coach and as president and CEO of the U.S. Ski and Snowboard Association.

This year, he'll be the keynote speaker at the annual Golden Anniversary Club Breakfast on Friday, Oct. 27, at Folsom Field's Touchdown Club. He and the rest of the Class of 1967 will be honored at the event, led by emcee **Wayne Hutchens** (Mktg'67), former president and CEO of the CU Foundation. All alumni from 1967 and earlier are welcome. The breakfast takes place during Homecoming Weekend, Oct. 26-29.

Register for the Golden Anniversary Club breakfast at colorado.edu/homecoming/reunions or call Hailee Koehler at 303-492-5593.

ALUMNI ASSOCIATION TIDBITS



CU Boulder now has its own wine — one red, one white. About a decade ago, San Francisco native **Jody Harris** (Econ'99) and his sister, Gingy Harris Gable, founded Caspar Estate

on a 25-acre property in the Napa Valley foothills. In partnership with the CU Boulder Alumni Association, they're offering limited quantities of their 2015 Sauvignon Blanc and 2014 Cabernet Sauvignon as part of the new Forever Buffs Alumni Wine Collection. Visit foreverbuffswine.com to order your bottles.



Get the scoop this Homecoming on some of CU's most compelling research in a series of mini-lectures.

Douglas Duncan, director of Fiske Planetarium; **Kathryn Hardin**, a brain injury expert; **Jim White**, director of the Institute of Arctic and Alpine Research; and **Travis Rupp**, instructor of classics, art history and anthropology — and also a brewer at Avery Brewing — will give 10-minute BuffTalks on Oct. 27 in Old Main.



In April Buffs across the U.S. met for a meal during the third-annual (and biggest yet) Dinner with 12 Buffs.

Thirty-seven volunteer Buffs hosted nearly 250 young alumni and students in 24 locations from New York to Houston to San Diego and points between. One alum treated 11 Buffs at a Santa Monica restaurant. "Great people, great CU memories," tweeted **Melinda Lee Ferguson** (IntlBus'94), who attended a dinner in New York.

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THE INNOVATION UNIVERSITY

One of your three campus imperatives, along with developing tomorrow's leaders and positively impacting humanity, is to be the top university for innovation. Why is this important?

Innovation is what makes the university run more efficiently, gives our students the skills and mindset to be impact leaders and drives new discoveries that create new products and technologies that impact humanity and our economy.

Let's break this down. How does it make the university more efficient and why is this important?

The more efficiently we run, the less dependent we are on tuition and state funding for financial support. It's one reason we've been able to offer a four-year tuition guarantee and single-digit increases for new students. Our chief financial officer is offering innovation workshops and seed-grant funding to staff to pursue innovations. The resulting ideas have been inspirational — drones for exterior building maintenance inspections, interpretative earbuds to cross the language barrier, especially among maintenance staff, a scholarship pilot program to incorporate nontraditional forms of achievement in admissions criteria. These are just a few of five dozen submissions she received, and it gets the whole university thinking creatively.

How are you seeing this mindset present itself in students?

We have a robust venture capital and start-up accelerator system supported by the community to help students bring their innovations to the marketplace. Two examples just this spring: A battery made of spent brewery water that will store renewable energy, and an adjustable socket for amputee limbs. Both of these resulted in student companies that will impact humanity.

We haven't even mentioned faculty yet.

That could be a whole other conversation. But, briefly, faculty have founded everything from Engineers Without Borders, impacting 2.5 million people, to pharmaceuticals reaching millions worldwide in the fight against serious illness.

This initiative seems personal to you.

We have a rich legacy of innovation. Digital depth of field on your cellphone camera began in a CU Boulder lab. The laser was developed by a CU alumnus in 1960, and the first object printed by 3D printer — a plastic cup — was made by an alumnus in 1983. His company, 3D Systems, recently helped surgeons reconstruct the facial bones of a young man injured by a landmine in Zimbabwe. When our university can impact humanity in such important ways, it feels very personal.



Courtesy of University of Colorado Heritage Center

We've come a long way, baby.

A lot has changed on campus since a photographer snapped this shot of graduation in 1905. This building, once the university library, is home to theater and dance. Magnificent trees now tower over Norlin Quad. And today's graduates are genuinely excited enough to flash at least a smile.

The tradition of commencement — whether a century ago or today — marks a momentous milestone. What remains true is that gifts from generous alumni support the journey.

It seems some things haven't changed.

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News SUMMER 2017

By Jennifer Osieczanek

Lacrosse: Emerging Powerhouse

IN THIRD VARSITY SEASON, CU WOMEN GO 15-2, UNDEFEATED AT HOME



The Buffs, seen here playing against Stanford, this year earned their first NCAA Tournament berth.

THREE YEARS AGO, a group of 21 freshmen and two sophomores embarked on the first season of NCAA women's lacrosse at Colorado. The young Buffs finished 11-8 in 2014.

Fast-forward to 2017, when the group of women that comprised coach Ann Elliott's first CU recruiting class emerged as a force.

The Buffs finished the 2017 regular season with 15 wins, 2 losses and went undefeated (8-0) in Boulder. The season included CU's first appearance in the MPSF Tournament title game (a 16-11 loss to USC) and the Buffs' first-ever NCAA Tournament berth.

CU started the season with an 11-10 overtime victory over No. 9 Northwestern, Elliott's alma mater. By early March, the Buffs surged into the top five nationally (No. 4) for the first time after an upset, on-the-road win over Penn State, then No. 6 and unbeaten. On April 7, the

team wrapped up its home slate without a loss by beating Stanford for the first time — on Senior Day. The Buffs capped the regular season with three consecutive road wins at San Diego State, Saint Mary's and Cal, scoring a school record 24 goals against Saint Mary's.

There were 10 regular-season games in which the Buffs held the lead from the first goal onward. CU scored 18 or more goals eight times.

Junior **Darby Kiernan** (IntlAf'18) led the way during the regular season with 48 goals and 20 assists. Senior **Johnna Fusco** (Comm'17) was next on the team with 43 goals and nine assists, while senior goalie **Paige Soenksen** (Chin, IntlAf'17) was 14-2 in 16 games played and made 127 season saves.

The Buffs' two regular-season losses came at Stony Brook (ranked No. 5/6 at the time) and at Southern Cal (then No. 9).

BUFFS BITS Four Buffs were selected during the NFL Draft in April: **Chidobe Awuzie** (Mgmt'16), **Ahkello Witherspoon** (EBio'17), **Tedric Thompson** (Soc'17) and **Jordan Carrell** (Comm'16). QB **Sefo Liufau** (Econ'17) was among four others who signed as undrafted free agents. ... Former Buffs runner **Laura Thweatt** (Soc'11) was the top American finisher in the London Marathon. She finished sixth in 2 hours, 25 minutes, 38 seconds. ... Golfer **Jeremy Paul** (Mgmt'18) turned pro in the midst of the Buffs' spring season and immediately entered a Web.com Tour event. He fired rounds of 72 and 78, but missed the cut at the United Leasing & Finance Championship. ... The CU women's distance medley relay team won a national title at the NCAA Indoor Championships. ... Men's basketball coach Tad Boyle will serve as one of two assistants to Team USA coach John Calipari (Kentucky) during the Men's U19 World Cup this summer.

SLOPE STARS

The Colorado ski team finished second at the NCAA Championships in March as two Buffs swept their races, taking four of eight individual titles back to Boulder. **Petra Hyncicova** (IntPhys'17) won both women's Nordic races at the NAAs in New Hampshire, and **David Ketterer** (Phys'20) swept the men's alpine races. Hyncicova and Ketterer were named National Skiers of the Year by the U.S. Collegiate Ski Coaches Association.

During the season, Ketterer won seven of 13 races, tying CU's alpine record for single-season victories. Five wins were in the slalom, two in giant slalom.

Hyncicova won five of eight races, including three of four freestyle events.

Both Hyncicova and Ketterer return next season, plus 10 others from the 2017 squad. That's good news as CU looks to end its two-year national title drought. It hosts the 2018 NCAA Championships in Steamboat Springs March 7-10.



Freshman David Ketterer proved himself an alpine champ in 2017.

STATS

500

Pounds nose tackle **Javier Edwards** (A&S'19) was able to squat five times during team strength testing

7,331

Points amassed by decathlete **Isaiah Oliver** (StComm'18) at the California Invitational, the most by a Buff in more than 40 years

TWO

Sports Oliver participates in at CU — he's also a defensive back on the football team

19

Points down for CU men's basketball before rallying to beat Washington State in the Pac-12 Tournament, a CU postseason record

17-16

Women's basketball's record in JR Payne's first season as coach

SEVEN

Races David Ketterer won during his freshman season, tying the CU alpine single-season record



ANCHORS AWEIGH

Ryan Davis (AeroEngr'19) of Sugar Land, Texas, has skippered the resurrection of CU's dormant sailing club. New boats are on the way, and regattas at the Boulder Reservoir are on the horizon.

What's your favorite part about sailing?

It's a big mix of just being out in the sun, being on the water, just the wind in your face, you're making this boat go fast. It's pretty cool. To make it really, really go fast, it takes some skill.

What's the most intense sailing experience that you've ever had?

I've had times when I didn't think I'd be able to get the boat back in. I was out on a Sunfish, which is a smaller one-person boat, almost like a learner boat. It's got a big sail, so when the wind really starts to blow and you're going downwind, there's not a good way to slow yourself down, so you have to go downwind to get back home and you're just going to haul doing it. I actually pitchpoled the Sunfish, which is where you drive the bow into the water because the wind is coming from behind you.

So, you flipped it?

I didn't flip it all the way over. Boats capsize a lot. That's kind of what they do when you're in heavy wind. And when it goes over the front, it's just a scary feeling. It kind of stopped, threw me forward and the boat went over. I didn't know if I'd be able to get it back up — the sail ended up getting wrapped around the mast. It was a whole storm of problems.

When you got back on dry land, did you decide you needed a break?

Exactly. I was like, 'Yep, not doing that again for a while.'

How did you hear about the CU sailing team?

I did a lot of research and ended up finding an old Facebook page. I showed up at a meeting, and I was like, 'Cool, all right, let's do this.'

Do you have people on the team who have never sailed before?

Yes. It's a lot of fun. We have one person who had been to one practice be-

fore he went to a regatta and we raced with him. It's really cool how quick you can pick it up.

Tell me about the crowdfunding campaign you did with the university.

Our goal was \$17,000, which included new boats from Old Dominion University and Virginia — well, they're used boats, but new to us — new sails, some miscellaneous fixing costs, just some new rigging and small parts and shipping. We raised \$12,650 and so that put us at enough to buy the boats and to cover most of the shipping costs. So, we hit the real goal. We aren't going to buy new sails just yet and we aren't going to be able to fix up all the things, but we'll have better, sailable boats here that are all going to be standard so we can host regattas and races.

What kind of boats are you getting?

They're called 420s and they're called that because they're 4.2 meters long. So, it's a two-man dinghy with a main sail and a jib.

What does it mean for you to get these new boats?

It means we'll be able to establish a valid program. Colorado hasn't been active since 2011 or 2012 in the Southeast Region, which is the competitive region we're a part of. A lot of people know that we're starting up again but don't really take the Colorado sailing program seriously because we're just really new, not too organized and we're also not very good. If we get these new boats here, we can really get organized — I believe we can recruit a lot more, we'll be able to host our own races, get people on the water, gain the respect of the rest of the region.

Are there any totally unrealistic sailing scenes in movies that make you cringe?

Pirates of the Caribbean. Those boats turn very slowly. And you can't go whichever way you want. You have to go with the wind. It's a lot harder than people might think.

Condensed and edited by Jennifer Osieczanek.

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10/28 **CAL**

11/4 Arizona State

11/11 **USC**

11/25 Utah



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Notes CLASS

40s, 50s, 60s & 70s SUMMER 2017



CU Boulder gets visitors of all kinds. Here, Oz, a 150-pound Great Dane, and 5-year-old Dario meet outside Old Main. Dario visited the LEGO exhibit "Hit the Bricks" with his family. Its roughly 1 million bricks form a playful version of CU, depicting Macky, Folsom Field and other campus icons.

'47 Mary Grills Broadhurst (Engl) has written a number of short stories and reminiscences. One of her recent stories was featured in the book *World Wars - Memories and Reflections of Boca Grande Families*, which was published by the Boca Grande Community Center in Florida. Mary lives in Denver.

READ THE OTHER
DECADES OF CLASS
NOTES ONLINE AT
COLORADO.EDU/COLORADAN

'57 David W. Geyer (EIEngr) has moved to Santa Fe, N.M., from Carlsbad, Calif. He is still working in support of the United States Air Force Mission Assurance Team and performing independent risk assessments on rocket launches of national interest. He enjoys Santa Fe, where he lives just five minutes north of the plaza downtown.

'63 In February, **Irv Bailey**

(Fren) was elected to Save the Children's board of trustees. Irv has 40 years of business management experience and currently serves as a senior advisor for Chrysalis Ventures, a private equity and venture capital firm. He and wife Cathy, the former U.S. Ambassador to Latvia, live in Louisville, Ky.

'64 Sandra Fuchs Stein (Edu) was named Chamber of Commerce Citizen of the

AFTER A CAREER IN MUSIC ON THE LAS VEGAS STRIP, **TIMOTHY COOPER** (MMUS'77) KEEPS ACTIVE IN THE ARTS. A CHOIR HE DIRECTS IS HEADED TO CARNEGIE HALL.

Year for Pueblo, Colo. Sandy will be honored by the Women's Foundation of Colorado at their annual fundraiser in June. She has been active as president or founder of more than 50 organizations in the community and was previously named to the Pueblo Hall of Fame, among numerous other honors. She and husband **Marvin Stein** (Bus'62) have two daughters and five grandchildren. The couple resides in Pueblo, Colo.

'69 Joyce Earickson (Ital; MA'71) has worked as a high school teacher, hospital chaplain and pastoral counselor, and also with autistic and disabled children. Joyce, who was featured in CU's *Arts and Sciences Magazine*, has lived in California, Australia, Italy and Guatemala, embracing life as a wanderer.

In March CU Regent **Linda Shoemaker** (Jour) was the keynote speaker at the CU Women Succeeding Symposium at CU Colorado Springs. She has spent more than

20 years advocating for public education in Colorado and has worked as a journalist and attorney. Linda is president of the Brett Family Foundation, which invests in organizations working for social justice and advocates for disadvantaged teens. She and husband Steve Brett live in Boulder. The couple has three children and five grandchildren.

'70 Samuel Paul Cummins (Edu) has now retired from both of his jobs. He simultaneously worked as a plant manager at Akzo Nobel Coatings in Matteson, Ill., for

36 years and for the Tinley Park Illinois Fire Department, where he was assistant chief for 40 years. He achieved the designation of chief fire officer and served for 25 years on the MABAS 24 Hazardous Materials Response Team that responded to all HAZMAT calls in the southern suburbs of Chicago. Samuel writes that he and wife Marcia have retired to Myrtle Beach, S.C., and are enjoying the weather.

'72 After working for the Chemithon Corporation, an industrial gas supplier in Seattle, Wash., for 38.5 years, **Brian W. MacArthur** (ChemEngr) retired last August. Following his retirement, he vacationed in Maui.

'75 For the past seven football seasons, **Phil Caragol** (Comm), known to many Folsom Field attendees as Buffalo Phil, has run through the stadium on game day with a furry horned buffalo helmet adorned with a mullet and CU beer koozies. It all started after his return to Boulder seven years ago, when, during his first game back in

WE WANT YOUR NEWS!



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

ROZ BROWN (MUS'79) HAS RETURNED TO RADIO AFTER A CAREER WITH BALL AEROSPACE. SHE'S A NEWS PRODUCER AND MEMBER OF THE BOARD OF DIRECTORS AT BOULDER'S KGNU 88.5 FM 1390 AM.

Folsom, Phil watched disheartened students and alumni in the stands and decided he wanted to do something about it. He writes that he's proud to serve as the Buffs' positive and friendly 64-year-old superfan and cheerleader. He and wife **Susan Blickhahn Caragol** (Jour, Psych'75) live in Boulder.

'77 **Mark Busby** (PhDEngl) published a book of poetry titled *Through Our Years: Occasional Poems 1960-2017*. Many of the poems reflect Mark's years in Boulder.

Timothy Cooper (MMus) has retired after more than 20 years as a music director and composer on the Las Vegas strip, but he remains a part of the city's vibrant arts community. He maintains a recording studio and is currently musical director at temples Bet Kneset Bamidbar and P'nai Tikvah. The choir he directs and accompanies at First Christian Church, Las Vegas, has been selected to sing at Carnegie Hall on Nov. 19, 2017.

Susan Chandler (MAnth) has been

elected to serve as the president of the Society for American Archaeology from 2017 to 2019. She and husband **Alan Reed** (Anth'76; MA'78) are retired from Alpine Archaeological Consultants, the cultural resource company they founded in 1987. Two of Alpine's new owners are also CU alums: son **Charles Reed** (Anth'05) and **Rand Greubel** (Anth'84).

'78 Boulder County district attorney **Stan Garnett** (Hist; Law'82) has decided not to make a second run for Colorado Attorney General. He ran unsuccessfully in 2010. Stan is now in his third term as Boulder's DA. In March, he and his wife, Brenda, celebrated their 39th anniversary. The couple lives in Boulder.

At the Lippin Group, a brand communications firm, **Pamela Ruben Golum** (Comm) has managed notable client accounts, including Dick Wolf and his *Law & Order* franchise, various projects for the Disney Channel and the Emmy Awards. Previously Pam worked as a journalist

with Fairchild Publications and at radio station KBOL in Boulder. She and husband Rob live in Los Angeles, Calif., with their two daughters, Caroline and Jennifer.

'79 After 16 years as media relations manager for Ball Aerospace, **Roz Brown** (Mus) has returned to her radio roots as a news producer for Boulder's KGNU and a member of the station's board of directors. She proudly watched her youngest daughter, **Grey Grimm** (Art'16), graduate from CU last year.

Thomas Walek (Jour) is a senior consultant of strategic public relations at Meyer Capital, a marketing agency in New York. Tom began his career as a financial journalist covering global development at the Chicago Mercantile Exchange. He is a member of the National Press Club and on the information advisory board for CU Boulder's College of Media, Communications and Information. The Pennsylvania native grew up in Connecticut and now lives in New York with wife Nobuko and their son, Andrew.

PROFILE TOM SHEPHERD

THE TRAVELER

LONG BEFORE TOM SHEPHERD began moving tons of fresh berries around the world, he moved a single football from Boulder to Lincoln, Neb. — by bicycle, in the snow, wearing jeans.

Then a first-year Buff from California, **Shepherd** (Bus'78) had a little help from his friends: He was one of about a dozen members of a relay team raising money for charity by hauling a game ball to the October 1975 CU-Nebraska football matchup.

"It was an early storm," said Shepherd, director of logistics for Driscoll's, the global fruit supplier, and the new chair of the Alumni Association's advisory board. "Once we had traveled east of town a ways, the snow stopped."

He remembers a bright moon, the chill of night, the wide open spaces of eastern Colorado and Nebraska.

The riders took turns pedaling stretches of the 500-mile journey on a pair of ten-speeds while the others cruised ahead in a van. They used lighters to melt ice from the bikes' derailleurs.

The mission was a success — the ball arrived at Memorial Stadium. For CU, the game was not: Nebraska won 63-21.

"The Buffs scored first and it was all Nebraska after that," said Shepherd, who lives in Salinas, Calif., with wife **Karen** (EPOBio'78).

He doesn't cycle much now, but he plays trumpet, fishes (fly) and runs marathons — nine so far, in places as far flung as San Francisco, Estes Park and Tahiti.

Work takes him on the road, too, often to Mexico, where Driscoll's sources many of its berries, but also to Asia, South America and Europe. As director of logistics, Shepherd literally makes sure the trains (and trucks, cargo planes and container ships) run on time while keeping the berries at a target temperature just above freezing.

Shepherd gets to Boulder five or six times a year — his mother, **Blanche Shimpfky Shepherd** (HomeEcon'46), grew up

downtown and he has family and CU friends nearby — but he'll be on campus a bit more often now.

He said his top priorities as board chair will involve promoting opportunities for alumni to engage with CU and each other, using data analysis to better assess alumni programming and making service to CU rewarding for his fellow volunteers.

"I'm so energized by the enthusiasm," said Shepherd, who succeeded **Brian Cowan** (Mktg'79) as chair on June 1. "It's an honor to be on the board now."

Shepherd, who lived for spells in Kittredge, Arnett and Andrews Halls and on The Hill, has deep Buff roots. Besides his mother and wife, one of his two sons, **Bryan** (Mgmt'05), is a Buff. So are assorted aunts, uncles and cousins.

A few days before arriving on campus for April's board meeting, Shepherd saw off Bryan, who moved with his family to Europe for a year-long work assignment.

"We're going to miss him," Shepherd said, "but he'll be following the Buffs from Belgium."

By Eric Gershon



Photo courtesy Tom Shepherd

Notes

CLASS

80s & 90s SUMMER 2017



The Indigo Girls performed with the CU Symphony Orchestra at Macky Auditorium in April, recording the session live.

'81 Dennis Mann (EPOBio) works as an emergency room doctor in Dayton, Ohio. He also teaches in Wright State University's emergency medicine department.

'83 John Alsup (Math), professor of math education at Black Hills State University in South Dakota, has received the university's Distinguished Faculty Award, the highest honor it bestows on faculty. John has

taught math to middle, high school and college students. He's also visited six continents in five years, after being inspired while teaching math in rural Tanzania.

Susan Fox-Wolffgramm (Bus) is a professor of management in the college of business at Hawaii Pacific University. The Organization Studies Research Network named one of her 2016 articles winner of the International Award for Excellence. The article, "Towards Strategically Sustaining Business Students' Careers in a Globalized Workplace: The Importance of Being Responsible and Ac-

countable," appeared in the *International Journal of Knowledge, Culture & Change in Organizations*.

'84 Lawyerist, an online magazine for small-firm lawyers, named the website of criminal defense attorney **Patrick Mulligan** (PolSci; Law'87) as a top 10 law firm website in the nation. Patrick's son, CU junior **Colin Mulligan** (Econ'18), designed the site for the Denver firm, Mulligan Breit.

'86 After 18 years in entertainment management, including work with

Broadway tours and Cirque du Soleil, **Kate Amberg** (Ling) has started her own business. Following a long-time interest in family history, storytelling and genealogy, she started Creating Memories Now, which digitizes and stores family photographs and documents. Kate, who has lived in Las Vegas for 10 years, is a member of APPO, the Association of Professional Photo Organizers.

'91 In February, **Matthew Alvarado** (Span) spoke at the second annual Latin America Port Expansion Summit in Cali, Colombia. Matthew works for Musco Lighting, a company that specializes in sports arena and event lighting. His role is promoting brand development in South and Central America.

Steve Fleischli (Econ, EPOBio) is senior attorney and director of the water program for

in September. His memoir, *Beamish Boy*, recounts his struggle with addiction and how he overcame it. Albert returns to Colorado every year to teach at the Shambhala Mountain Center.

Emmy Award-winning journalist **Tim Wieland** (Jour) has been news director at CBS4 in Denver since 2004. He serves as guest faculty at the Poynter Institute and on the board of Habitat for Humanity of Metro Denver. He was recognized in 2010 by the *Denver Business Journal* as a 40 under 40 winner for his work in the community.

DONN CALKINS (HIST; MA'91; LAW'96) HAS LEFT THE LAW FOR A LIFE IN SCIENCE.

Beebe Bahrami (MCD-Bio) works as a fulltime freelance writer specializing in travel, food and wine, archaeology, spirituality and outdoor adventure pieces. In March Beebe gave a reading at the Boulder Book Store to promote her two new books, *Café Oc: A Nomad's Tales of Magic, Mystery and Finding Home in the Dordogne of Southwestern France* and *Café Neandertal: Excavating Our Past in One of Europe's Most Ancient Places*. She visits with family in Boulder several times a year.

'89 Donn Calkins (Hist; MA'91; Law'96) retired from his law career in 2012 and is now pursuing a PhD in biomedical science, with a focus on virology, at The Ohio State University. The Greeley, Colo., native lives in Columbus, Ohio.

the Natural Resources Defense Council. His work focuses on water quality, the role of water security in climate-preparedness programs and the relationship of water to energy production.

Albert Flynn DeSilver (Art), a poet and nonfiction writer, has written a new book, *Writing as a Path to Awakening: A Year to Becoming an Excellent Writer & Living an Awakened Life*. It is scheduled for release

'93 Valerie Arnold (Engl; MA'97; Law'00), a broker with Windermere Real Estate in Fort Collins, Colo., was recently named a trustee of the Poudre River Public Library District and to the transportation board for the City of Fort Collins. Valerie also was selected for Leadership Fort Collins, a program that educates participants on the needs of the community and strengthens leadership skills.

Sara McCabe (Anth, Econ) produced the feature documentary

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BUSINESS INSIDER NAMED APPLE'S **KATE BERGERON** (MMECHENGR'95) AMONG THE MOST POWERFUL FEMALE ENGINEERS OF 2017. SHE IS VICE PRESIDENT OF HARDWARE ENGINEERING AND A KEY PLAYER ON THE TEAM THAT DEVELOPS MAC ACCESSORIES, SUCH AS THE MOUSE AND KEYBOARDS. SHE HAS BEEN WITH THE COMPANY SINCE 2002 AND LIVES IN LOS GATOS, CALIF., WITH HER HUSBAND, MIKE.

3 Hikers, the story of three Americans imprisoned in Iran and their families' fight to rescue them. The film involves scholar Noam Chomsky, political expert Gary Sick, boxer Muhammad Ali and actor Sean Penn. Sara and husband Eugenio live in California with their son, Ronan.

'95 David M. Dye (PolSci), founder of Trailblaze,

Inc., works with people in leadership roles to teach them how to build successful and engaged teams of employees. Since graduating, David has served as president of the Colorado chapter of the National Speakers Association and recently released an award-winning book, *Winning Well: A Manager's Guide to Getting Results Without Losing Your Soul*.

'96 In March, the president of Colombia appointed **César Ocampo** (PhDAeroEngr) director of the nation's Administrative Department of Science, Technology and Innovation. He has previously worked for NASA and as a professor of aerospace engineering at the University of Texas at Austin.

'97 Jagged Peak Energy, Inc., recently named **John Roesink** (Geol; MS'05) its vice president of development planning and geoscience. John lives in Denver with his wife, Heather.

'98 Of his latest book, *Ultimate Glory*, **David Gessner** (MEngl) writes: "It is the story of the 15 years of my life I spent dedicated to playing Ultimate Frisbee braided together with a history of that strange sport. The last six of those years were spent playing for the Boulder team, and Colorado plays a key role in the book... Wildness has always been a key theme for me and those were wild years. But this is also a book about nonconformity during the age of Reagan, about what it means to dedicate yourself to something that many others consider ridiculous. In this way it is a portrait of an artist as a young Ultimate player. And, more directly, it is also about my own simultaneous struggle to become a writer, another 'ridiculous' pursuit."

PROFILE MARJANE AMBLER

YELLOWSTONE

MARJANE AMBLER (ENGL'85) LEARNED to share the road with bison. That's what you do when you live in Yellowstone National Park.

"You'd be snowmobiling and you wouldn't see them at night because they'd be covered in snow," said Ambler, who lived year-round inside the majestic, 2.2 million-acre park for nearly a decade.

After her husband, Terry Wehrman, a heavy equipment operator, was hired by the National Park Service in 1984 to pack the park's roads for snowmobilers, the couple moved from Atlantic City, Wyo., to Lake Village, a tiny community 30 miles past Yellowstone's East entrance.

Home was a quadruplex occupied by a dozen residents — eight park employees, some with spouses. There were no cell phones, no Internet and for most of their residency no television, said Ambler, 69, a semi-retired journalist and author.

In winter, work revolved around snow — shoveled from roofs to prevent collapse, groomed for snowmobiles.

Ambler, a lifelong skier, once spurned the noisy machines. But from November to April, the park's roads closed to cars and trucks.

"For five months of the year, snowmobiles carried the milk, eggs, hamburger and any guests brave enough to visit," she wrote in her 2013 book, *Yellowstone Has Teeth: A Memoir of Living Year-round in the World's First National Park*.

Ambler soaked in the park's beauty, learning to recognize mice, coyote, otter and bison tracks.

With few lights to cancel out the stars, the night sky shimmered.

"One got the sense of being very small," she said.

When the temperature dropped, Yellowstone Lake moaned as it froze, as if "someone were running a finger around the rim of a giant wine glass."

Ambler learned Mother NATURE was boss: "If it was 20 below, you're not going to that concert."

Bison and bears could kill, so "you always looked both ways."

Even twitchy dogs were not to be ignored. "One night our dog was making these strange cries and quivering," she said. "The next morning, we discovered a grizzly bear under the porch."

Ambler spent her days writing: "Every writer's dream is to have these long blocks of uninterrupted time."

Days would go by "when the only interruption was the shadow of a swan across the window," she said.

To foster community, the park residents held weekly potlucks.

Talk of religion or politics was discouraged. Instead residents discussed "snowmobiling — things we had in common," Ambler said.

She found friends she might have overlooked elsewhere.

In April, the plows arrived. In May, the park gates opened.

"It was like moving to the city, except the city came to you," she said.

In 1993, Ambler and Wehrman left for Colorado and Mesa Verde National Park. Today they live in Atlantic City and Lake Havasu, Ariz.

Leaving Yellowstone was a shock. "We'd lived there so long, we didn't know what was normal," she said. "Suddenly we could walk to the post office."

Looking back, Ambler finds it hard to imagine who she'd be without the Yellowstone experience.

"It's a place that really gets into your soul."

By Janice Podsada



Notes

CLASS

00s & 10s SUMMER 2017



Four CU engineering students (pictured here mid-leap) designed a course for the annual Red Bull Slopesoakers competition, held in April at Colorado's Copper Mountain Ski Resort. The course included jumps, rails, water, snow and a giant swing.

'00 Michael Chessa (Engl) and Alison Herlands were married on Feb. 11 at the Loeb Boathouse in New York's Central Park. Michael works as a trial lawyer with Gersowitz Libo & Korek in Manhattan. The couple met in January 2011 during a criminal-law orientation at the Brooklyn District Attorney's office.

Filmmaker **Michelle Kantor** (Film) is co-founder of

Cinefemme, a non-profit organization that supports female professionals in the film industry. Michelle is currently working on a documentary titled *Red Star* and a narrative feature titled *The Rebel*.

In April, **Chris Newton** (Engl), director of e-commerce for Stonebridge Companies, published a book on growing online businesses titled *How to Acquire Your First Million Customers: Scaling Your Online Business by Laying the Foundation for Growth*. At Stonebridge Chris is in charge of digital marketing for more

than 50 hotels across the U.S. His career allows him to merge passions for travel and digital technology. Chris loves spending time with his wife and two kids, traveling and hiking. He has been recording music in Boulder with Motion for Alliance, a band he and friends started in college.

R. Ashby Pate (Engl), a former associate justice of the Supreme Court of Palau, an island country in the western Pacific, has returned to Alabama, where he is of counsel at Light-foot Franklin & White in Birmingham. As his firm

puts it, "Ashby may have the most interesting resume of any lawyer practicing in the State of Alabama." He's also recorded two albums of music and written a children's book. Ashby and wife Christine have two daughters.

'01 Graham Frank (Fin; MBA'07) joined Breckenridge Grand Vacations as vice president of real estate development. Graham joins BGV from Vail Resorts, where he oversaw project management. He and wife Shawanna have two children.

Christine Peck (EPOBio) is co-founder of Wannaplé, a company whose goal is to provide children with access to the benefits of play. She recently launched Silly Street, a line of games and toys to help children develop curiosity, empathy and creativity. She lives in Minneapolis, Minn., with her husband, Stephen.

'02 Entrepreneur and consultant **Aaron Perry** (MGer) works with social enterprises to enhance company culture and holistic balance. He has a new book, *Y on Earth*. Aaron and his partner, Winter Wall, also offer workshops for companies, colleges and community groups.

'03 Scott Fields (EnvSt) was recently appointed head coach of the men's lacrosse team at NCAA-Division III Westminster College in Fulton, Mo. **Paul Gesterling** (Econ, PolSci) has joined

the Steier Group, a national capital campaign fundraising firm, as a campaign manager. He previously served as development director for the Catholic Alliance in Denver. Paul is currently conducting a campaign planning study in Reno, Nev. He and wife Lisa have three children.

Former CU Buffs women's soccer player **Ashley Grosh** (BusAd, Econ) was named to the *Denver Business Journal's* 2017 40 under 40 list of influential young people working in business. Ashley is vice president of environmental affairs for Wells Fargo and has partnered with Buffalo Sports Properties to help conserve water throughout the west. She and husband Michael live in Denver with their two children.

In June, **Olivia Koski** (EngrPhys, Ger) published *Vacation Guide to the Solar System*. The book is part of her work with the Intergalactic Travel Bureau, a public outreach STEM program about humans in space. Olivia works as head of operations at Guerilla Science, an organization that creates and plans installations for festivals,

museums and galleries. She lives in Brooklyn, N.Y.

'04 J. Ernesto Ortiz-Diaz (MSpan) has received tenure at Macalester College in St. Paul, Minn. His interests include Latin American and 19th-century literature with a focus on narrative and poetry.

'05 Travis Macy (Hum) published *The Ultra Mindset: An Endurance Champion's 8 Core Principles for Success in Business, Sports, and Life* in 2015. The former CU track and cross-country runner has finished more than 120 ultra endurance events in 17 countries, and once set a record for the Leadman series, which involves a trail running marathon, 50-mile mountain bike race, Leadville 100 Mountain Bike Race, 10k road run and Leadville 100 Run, all above 10,200 feet in the Rocky Mountains. He and wife Amy have two children. They live near Evergreen, Colo.

'07 Sydney Bergen Haflinger (Soc) and

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R. ASHBY PATE (ENGL'00), A FORMER ASSOCIATE JUSTICE OF THE SUPREME COURT OF PALAU, IS BACK IN ALABAMA AND PRACTICING LAW.

Aaron Hafliger (Econ'05) were married in February in Mexico. The couple honeymooned in Belize. Sydney works for Realities for Children Boulder County, a nonprofit organization that partners with the CU Guardian Scholars program to provide full scholarships for former foster care youth. Aaron is a commercial real estate broker in Denver. Their wedding bands are inscribed with Buff motto "WTF" — Welcome to the Fight.

In February, **Jasmine Fry Cloud** (MArtHist) lectured at Truman State University on the history of papal ceremonies. Jasmine is currently an assistant professor of art history at the University of Central Missouri. She lives in Blue Springs, Mo., with her husband, Nick, and their daughter.

'09 In October, the American Institute of Certified Public Accountants appointed **Diego Baca** (Acct, MS) to the CPA Examination Board of Examiners and to the

institute's board for a three-year term. At 31, Diego is the youngest board member and hopes to contribute a fresh vision for the examination. Diego also is a member of the CU Boulder Latino Alumni Association's board.

New Jersey native **Blake Baldwin** (Mktg) is one of 12 finalists competing on the latest season of *Food Network Star*, which premiered June 4. Blake recently switched careers, entering the culinary world after years of marketing and account management for tech start-ups.

'12 **Joe Mekulski** (Econ) was hired as the newest broker at the Baltimore office of KLNb, a commercial real estate brokerage and services firm. He will assist with tenant and landlord representation activities in the Baltimore and Washington, D.C., metropolitan areas.

'13 **Amanda Laviage** (Comm, PolSci) joined McGlinchey Stafford's

Houston office as an associate in the law firm's commercial litigation practice. Amanda has experience in appellate matters, including those assigned by the State Bar of Texas Appellate Section Pro Bono Committee. She lives in Houston.

'15 In April, **Elizabeth Hernandez** (Jour) returned to Boulder to report on the university that taught her a thing or two about reporting. Prior to landing the Boulder *Daily Camera*'s higher education job, Elizabeth dug deep as a fellow at the Center for Public Integrity, an investigative newsroom in Washington, D.C. Before that, she called the *Denver Post* home for two years, first as an intern and then as a staff reporter covering breaking news and education. When she's not filling her reporter's notebook, she enjoys reading and writing but detests arithmetic.

Alexandra Alonso (Span) has been named executive director of the Colorado Latino Leadership, Advocacy and Research Organization. At 28, Alexandra will be the youngest executive director of the nonprofit organization since it was founded in 1964. Before joining CLLARO in 2015, she worked as an editorial assistant at the *Denver Post*.

'17 On Dec. 6, **Andreas and Allison Deptolla** (MLing) welcomed a son, Benjamin Victor Deptolla. The couple also has a young daughter, Clara.

PROFILE DAN MACKIN

PACIFIC CROSSING

IT WAS THE NIGHTS that most unnerved **Dan Mackin** (EIngrCompEngr'08).

"Staring off into the blackness is really an unsettling feeling," he said.

The sensation was most acute in the middle of the Pacific, as the 34-year-old IT executive, his father and two shipmates sailed from Hawaii to California on a 38-foot Lagoon Catamaran "the size of a studio apartment that you can't leave."

The voyage, last July, was his father's idea. Tim Mackin, a retired civil engineer in Parker, Colo., had been sailing for nearly five decades and still nursed an ambition.

"An ocean crossing has been on my bucket list. I just wanted to do one before the end of my days," Tim, 60, said in a short YouTube film about the voyage, *Trans Pacific Crossing*, filmed by Dan and edited by his brother-in-law, Jeremy Dubs.

For Dan, of Lafayette, Colo., the main appeal was having a grand adventure with his father. This was the man who'd taught him to sail — on lakes near Keller, Texas, where they'd lived, and on trips in Belize, the Bahamas, Virgin Islands and Sea of Cortez. But they'd never lost sight of land for more than a day.

With two other crewmembers contributing mechanical and nautical skills and good cheer, the team set sail from Oahu and arrived in Oxnard 22 days later — about a week late due to rough waters.

"I went into it with a plan," said Dan, who loves plans. "Immediately, it was useless."

Being in control and having a plan are great traits for the chief operating officer of the Boulder IT security con-

sulting firm AppliedTrust. Out on the open ocean, plans reveal what they are: Mere intentions.

They encountered days of strong waves and high winds with intermittent lake-smooth days offering brief respite.

After each churning of the sea, they picked off marine life that had washed aboard. Some creatures found their way into crannies. Stench haunted the boat. Sometimes it exuded from Dan, who found showering futile given the constant damp. Then one of the toilets broke. A few times they had to troubleshoot and repair technical issues amid tossing seas. They slept in three-hour shifts.

An anomaly in the high pressure system pushed them 600 miles north of course, taking them nearer Alaska than California.

But then there were the sublime moments — calm, moonlit nights, long father-son chats, insight amid isolation.

"It made me realize how small we are as individuals," said Dan.

When they reached California, father and son agreed that arriving was the trip's high point.

As so often is the case, it was the journey itself that provided lasting lessons. Dan reflected amid that vastness on what mattered most to him: relationships, communication, being a better person, a better husband, making the world a better place.

"I also realized," he said, "that maybe I'm not as much of a sailor as I thought I was."

By *Beebe Babrami* (MCDBio'86)



Photo courtesy Dan Mackin

In Memoriam

Edith Burnett Morris (Art'33)
 Velma Ingram Delliquadri (A&S'38)
 Eleanor Carlson Flanders (Jour'38)
 Laurence J. Kipp (MA&S'39)
 Galen L. Helmke (A&S'40)
 Antoinette Sax Sanburg (A&S ex'40)
 Franklin S. Prout (Chem'41)
 Martin A. Buffo (EIEngr'42)
 Kathryn Drexel Dickerson (A&S'42)
 Dorothy Larson Gonzoph (Jour'42)
 Robert B. Ramsey Jr.
 (ChemEngr'42)
 Aileen Jewell Deffke (DistSt'43)
 Dorothy Cochran Donnen (A&S'43)
 M. Margaret Roosa Lawrence
 (Mus'44)
 Donald M. Mitchell (EIEngr'44)
 Barbara Johnson Suddath (A&S'44)
 George H. Swerer Jr. (A&S'44)
 John C. Twombly (EIEngr'44;
 PhDA&S'59)
 Shirley Robbins Dierdorff (A&S'45)
 Katherine T. Kawamura
 (Jour ex'45)
 Ilene Pitts Kistrup (Nurs'45)
 James C. Meece (EIEngr'45)
 Beryle W. Wright (MechEngr'45)
 Wells M. Corliss (EIEngr'46)
 Martin C. Hofheinz (EIEngr'46)
 Eleanor Hogan Robb (A&S'46)
 Leonard J. Challain
 (MechEngr ex'47)
 Donna Taylor Corliss (Bus'47)
 Keith H. Gilmore (MechEngr'47)
 Roger L. Logan (Geog'47;
 MMgmt'51)
 Margaret Carswell Lyddon
 (A&S'47)
 Eugene L. Nooker (MechEngr'47;
 MS'49)
 Robert H. Rawlings (A&S'47)
 Edward B. Wilkey (Bus,
 MechEngr'47)
 Rudy J. Anselmi (Pharm'48)
 Margaret Carlisle Ardell (A&S'48)
 Burton C. Boothby (DistSt'48)
 Joanne Lang Callard (DistSt'48)
 Irving Korr (Pharm'48)
 John S. Moore (Pharm'48)
 Ruth Sterling Schmitt (Jour'48)
 Mary Groenewold Thompson
 (A&S ex'48)
 Bonnie Kirkberg Vangundy
 (HomeEcon'48)
 Annette Bailey (A&S ex'49)
 Harold R. Brock (CivEngr'49)
 Warren Culpepper (Acct'49)
 Donald B. Davis (Fin'49)
 Walter L. Dinwiddie (Mgmt'49)
 Elizabeth Hansbury (A&S'49)
 Jack Lawrence (Math'49)
 Archibald McKinlay IV (A&S ex'49)

Bernard A. Mulder (MechEngr'49)
 Joseph W. Murphy (Mgmt'49)
 Laura Greenwood Thomason
 (A&S ex'49)
 John J. Tobin (Bus, Law'49)
 Milton J. Waxman (EngrPhys'49;
 MMath'50)
 Donald M. Campbell (PE'50)
 James W. Cozens (DistSt'50)
 Richard A. Culver (MusEdu'50;
 MA'50)
 Frieda P. Honeck (MEdu'50)
 Ruth Rahm Johnson (PE'50;
 MEdu'68)
 John E. Martin (MEIEngr'50)
 Harry K. Nier Jr. (Law'50)
 Patricia Hollingworth Owens
 (Art'50)
 Donald D. Petersen (Pharm'50)
 Stanley L. Roberts (Econ'50;
 Law'51)
 William E. Russell (A&S'50; Law'53)
 George W. Thompson (MMgmt'50)
 K. Bill Tiley (A&S'50)
 Marilyn Rees White (MMusEdu'50)
 Jerry J. Ahlman (MechEngr'51)
 Chester F. Bruski (CivEngr'51)
 Nancy Chapman Collier (Edu'51)
 Barbara Joyce Dennerline (A&S'51)
 William D. Detweiler (Fin'51; MS'57)
 Henry S. Fingado (A&S'51)
 Robert E. Hagerott (EIEngr'51)
 Arthur W. Hiner III (A&S'51)
 William V. Johnston (Bus,
 EIEngr'51)
 Robert E. Loup (Econ, PolSci'51)
 Donald M. Milliken (CivEngr'51)
 Fred A. Robirds (Pharm'51)
 Francis J. Thomason (Acct'51)
 William E. Wright (Mgmt'51;
 MHist'53; PhD'57)
 Richard Albert (Fin'52)
 Robert H. Birkby (Mgmt, PolSci'52;
 MA'60)
 Jean Hoel Brown (A&S'52)
 Lois Glavins Gilbert (Edu'52)
 Dale M. Harlan (Law'52)
 Rogers A. Hauck (A&S'52; MS'54)
 Evelyn Towbin Richmond
 (Jour ex'52)
 Nellie Gephardt Amondson
 (Math'53)
 Wanda H. Apodaca (A&S'53)
 Gerald W. Bennett Jr. (Law'53)
 Jack Blumenkrantz (PhDPsych'53)
 Charles E. Butcher (Mktg'53)
 Edward J. Currier (CivEngr'53)
 Leroy A. Dahm (Chem'53;
 ChemEngr'57)
 Robert J. Dalton (A&S ex'53)
 Marilyn Robinson Detweiler
 (Jour'53)

William L. Howard (A&S'53)
 Dolores Oparil Jones (Engl'53)
 Gerald Starbuck (MechEngr,
 Mktg'53)
 Barbara Summers Wilking
 (Pharm'53)
 F. Jerome Thomas (A&S'53)
 Alvan W. Boothe (Mktg'54)
 Donald G. Iverson (Zool'54;
 MD'58)
 John A. Laswick (A&S'54)
 Robert A. Norton (Math'54;
 MEdu'58)
 Donald K. Watson (CivEngr'54)
 Benjamin F. Bailar (Geol'55)
 Dolores Hughes Brown (A&S'55)
 William E. Carnahan (Jour'55)
 Stacey Henderson (A&S'55)
 Gilbert J. Leong (MAcct'55)
 Carolyn Joyce Scavo (A&S'55)
 Gloria Wright Madison (A&S ex'55)
 Frederick J. Patridge (Law'55)
 Betty L. Peters (MusEdu'55)
 Melvin L. Twaddle (MEdu'55)
 Harlan E. Branby (Fin'56)
 Margaret Cell Brindell (MChem'56)
 Ronald K. Campbell (PE'56)
 Ann H. Dowler (Bus'56)
 Ebba M. Granat (Pharm'56)
 Donna Martin Heid (MusEdu'56)
 Dale R. Johnson (MechEngr'56)
 William J. Kostka Jr. (Jour'56)
 Nancy Sullivan Mortensen
 (Edu'56)
 James D. Orner (Geol'56; Acct'62)
 D. John Ridings Jr. (A&S'56)
 Suzanne G. Robbins (Mus ex'56)
 Bobbie R. Watkins (A&S'56)
 William B. Williams (Jour'56)
 Terry Wulfekuhler (Mktg'56)
 Jeanne Weare Barthell (A&S'57)
 Delton G. Crosier (MechEngr,
 Mgmt'57)
 Richard G. Gebhardt (A&S'57;
 MS'58)
 Charles E. Helms (PreMed'57;
 MD'60)
 Virginia Strasser Legge (A&S'57)
 Charles F. Murray (Fin'57; Law'64)
 Theodore W. Peyton Jr. (Acct'57)
 Howard M. Tanner (CivEngr'57)
 Harold N. Walgren (PreMed'57)
 Barbara Ceder Weber (A&S'57)
 Daniel J. Desmond III (A&S ex'58)

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Ronald D. Dittmore (Pharm ex'58)
 Donald W. Kelly (A&S ex'58)
 James R. McGregor (Mktg'58)
 Gary L. Anderson (EIEngr'59)
 Robert B. Butts (Mktg'59)
 George S. Dreher (Econ'59)
 Marlene Kinser George (A&S ex'59)
 Patricia Durbin Gonzales (Mgmt,
 Mktg'59)
 Jack E. Johnson Jr. (RealEs'59)
 Carol Jaros Jones (Soc'59)
 Irene Langseth Olson
 (HomeEcon'59)
 Joseph Petta (MMgmt'59)
 Sonya J. Read (Bus'59; MBA'60)
 George A. Stephens (MA&S'59;
 PhDEdu'73)
 Donald V. H. Walker (Geol'59)
 Phyllis Perkins West (MusEdu'59)
 John C. Wouters (Bus'59)
 David R. Greif (MusEdu'60)
 Curtis P. Johnson (Geol'60)
 Shirley Reams Kelly (Nurs'60;
 MS'60)
 Suzanne Kullgren Kintzele
 (A&S'60)
 Richard D. Lowery (CivEngr'60)
 Marilyn W. Marshall (Nurs'60)
 Patricia Gallagher Mehling (Edu'60)
 Jarrold R. Schaefer (Chem,
 Zool'60)
 Richard A. Smith (Jour'60)
 Robert T. Adair (EIEngr'61; MS'66)
 Gunnar Bovre (EIEngr'61)

Laurence A. Boxer (Hist'61)
 Patricia Cunningham Carroll
 (A&S ex'61)
 Donald A. Houlehan (DistSt'61;
 Law'64)
 Harrell H. Hurst (Bus'61)
 Carolyn Street Irish (PolSci'61)
 Kenneth M. Johnson (Chem'61)
 William V. Williams (A&S ex'61)
 Charles J. Carlson (PE'62)
 Larry D. Collom (A&S'62)
 Margaret Johnson Furey (Fren'62)
 William G. Gray (A&S ex'62)
 Edwin W. Marshall (EIEngr'62)
 Rhonda Holderman Mast (Nurs'62)
 Nancy Miller Shea (A&S'62)
 J. B. Spencer (A&S'62)
 John W. R. Webb (Acct, Fin'62)
 Edward G. Brentari (MechEngr'63;
 MA&S'70)
 Julia Y. D'Elia (Nurs'63; MS'63)
 Thomas R. Ford (ChemEngr'63)
 Jack N. Hyatt (Math'63; Law'68)
 William E. Unrau (PhDHist'63)
 James B. Westervelt (PE'63;
 MS'64)
 Susan Stone Epstein (A&S ex'64)
 John P. Hamer (Acct'64)
 Leonard O. Lookner (A&S'64)
 John E. Amos (A&S ex'65)
 Hannah Steuart Dinkel (A&S'65)
 Jerold W. Donaldson (Hist'65)
 Doreen J. Geibel (Mus'65)
 Charlotte York Irey (MThtr'65)

Patricia Hickey Jump (Edu'65)
 James H. May (MA&S'65)
 Robert F. Wilshusen (EIEngr'65)
 Karl T. Benson (MAPMath'66)
 Will B. Betchart (CivEngr'66;
 MS'67)
 Simone H. Christopherson
 (A&S'66; MFren'73)
 John B. Friedlund (Advert'66)
 Robert D. Hall (MGeol'66)
 Frederick M. Magee (A&S'66)
 Bruce A. Tippet (A&S'66)
 Mary Harding Baer (MA&S'67)
 Sheila Aggeler Barnes (A&S'67)
 Jon E. Hanshaw (Mus'67)
 Verlin F. Rockey Sr. (EngrPhys'67)
 Gloria M. Violette (A&S ex'67)
 Curtis E. White (Art'67)
 Roberta J. Altenbern (MEdu'68)
 Mark W. Cappone Jr. (MMgmt'68)
 Clarence E. Corriveau
 (ChemEngr'68)
 Joyce Rosen Culbertson (Soc'68)
 Barrett C. Miller (PolSci'68)
 Jamie Kellam Redmond
 (Dance'68)
 Harold A. Viereck (MMgmt'68)
 Jack P. Witter (Mktg'68)
 Gary R. Bebee (AeroEngr,
 Mgmt'69)
 George E. Farrell II (MNurs'69)
 Rose M. McGinn (MNurs'69)
 David J. Minear
 (PhDCommDisor'69)

Letters

SUMMER 2017

Edward A. Nuccio (A&S'69)
Thomas F. Ullmann (CivEngr'69)
Judith Fauri-Lee (Edu'70; MA'76)
Margaret Haentjens Stone (Soc'70)
Christopher R. Hanson (Mgmt'70)
John R. Harris (MA&S'70)
Mary Wilson Nooney (MA&S'70)
Burt L. Snyder (Law'70)
Susan Stewart Stater (Nurs ex'70)
Thomas A. Barnes Jr. (PolSci'71)
Herman B. Coble (MMus'71)
Ida E. Bosen Murphy (PolSci'71)
John R. Cosgrove (Edu'72)
John W. Coughlin (Law'72)
Marthann Woods Hoffman (Edu'72)
John S. Moberly (Hist'72)
John C. Nicol (ChemEngr, Fin'72)
Emil M. Olson (MBA'72)
Eileen Glendinning Shoemaker (Fren'72)
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Correction: *The Spring 2017 issue of the Coloradan inaccurately reported the death of Frederick B. Herman III (Econ'89). He is alive and well. We regret the error.*

Faculty, Staff and Friends

Walter Colclasure, Staff
Wayne Duke, Sports Information



YELLOW GRASS

Another great issue of the *Coloradan*. I loved every page. Nice job. I especially loved the cover photo. The yellow grass brings me back to CU territory.

Gary Meehan

(MArch'76)
Goffstown, N.H.

DRUMM'S MAPS

Very interesting article on Henry Drumm [Origins, Spring 2017]. I have used his old maps of Lafayette.

Peter Johnson

(CivEngr'79)
Lafayette, Colo.

GORSUCH

My name is Amparo Humphrey and I'm a CU Boulder alumna. I'm appalled at the coverage — a full two pages — that the *Coloradan* has given to Gorsuch in its Spring 2017 issue [“NOW,” inside cover]. Gorsuch is known for being a far-right conservative, popular with the Federalist Society and the Heritage “hard right groups.” If CU prides itself on being a liberal, open-minded institution,

Mr. Gorsuch's whereabouts should've been left out.

Amparo Humphrey
(Span'85; MA'89)
Arvada, Colo.

CU IN THE FAMILY

I really enjoyed your article about legacy families [“CU in the Family,” Spring 2017], especially since it featured my family, the Miles. My grandmother was Alice Miles Pike. Her brother was Leslie Miles, Martin B. Miles' father. Another brother (also Martin) received his M.D. at CU and taught on the medical school faculty in 1901. I can remember, as a small child, being annoyed at having to stay dressed up after church because we were going to have lunch

at the Sunken Gardens (i.e. The Sink)

Nancy Pike Hause
(Jour'53)
Lawrence, Kan.

LETTER TO PAUL DANISH

I always look forward to your column. The Winter 2016 one [“The Album”] brings back great memories. Remember when Judy Collins, whom you mentioned, used to play in The Attic, the little basement coffee shop on Broadway? Another memory: Sitting next to you in Prof. Malich's econ class. I sat behind the late, great Buddy Werner in poli sci. I flunked out that year, but you hung in there.

Guy Wood (Jour'67)
Angel Fire, N.M.





Some people are more expressive than others: At Commencement May 12, **Ozell Williams** (Comm'17), pictured, showed off his graduation joy with a flip. For more about the big day, see "LOOK" on page 11.

Be noticed. Be supportive. Be proud.

Be Boulder.
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LIST OF 10

10 SONGS THAT MENTION BOULDER

- 1. The Chainsmokers,** "Closer" (2016)
- 2. Shawn Mullins,** "Santa Fe" (2000)
- 3. Cowboy Junkies,** "Towne's Blues" (1992)
- 4. Garth Brooks,** "What She's Doing Now" (1991)
- 5. Kathy Mattea,** "She Came From Fort Worth" (1989)
- 6. The Nitty Gritty Dirt Band,** "Colorado Christmas" (1977)
- 7. Emmylou Harris,** "Boulder to Birmingham" (1975)
- 8. Todd Rundgren,** "Zen Archer" (1973)
- 9. John Denver,** "I Guess He'd Rather Be in Colorado" (1971)
- 10. Gordon Lightfoot,** "10 Degrees and Getting Colder" (1971)

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DESIGN AND ART DIRECTION

Pentagram Austin

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THEN

1950s

Life at CU Boulder shifts gears after commencement but hardly goes dormant. The amphitheater rings with Elizabethan eloquence during the annual Shakespeare festival. Summer session students amble well-trod pathways. This year, for the second in a row, a Grateful Dead offshoot will electrify Folsom Field.

Still, come mid-May, a certain serenity settles over campus. Turtles queue along drifting logs on Varsity Lake. Frisbees arc above open lawns. The libraries close a little earlier.

The pair in this CU Heritage Center photograph, undated but thought to be of 1950s vintage, seem to be making the most of a pleasant day outside Norlin Library.

If you have a favorite memory of CU in summertime, we'd love to hear it. Write editor@colorado.edu.

