THE MAGAZINE OF THE MIZZOU ALUMNI ASSOCIATION

MIZZOU

mizzou.com | Spring 2019

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George Smith pockets a Nobel Prize in Chemistry 16





FIRST LOOK

NO FAKE PHOTOS The School of Journalism's inaugural Missouri Photo Workshop was held in Columbia in 1949. Every year since, the workshop faculty, a who's who of photojournalism, guides participants during a weeklong immersion in visual storytelling (More: See Page 42). This photo by Gerry Moses, then of Toronto, comes to us from that first workshop with the following caption: "In the evening, there are other activities. For the younger generation, there are some school-sponsored sports events and dances. Bowling is popular, too. Other recreation of the town includes roller-skating, many church-sponsored activities, and the plays and concerts provided by the three colleges. On the whole, no matter how much people may complain about the lack of 'things to do,' Columbia has more variety in recreational activities than do most towns."





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MIZZOU

FROM THE CHANCELLOR



Engaging Communities, Impacting the World



During a late-summer visit to the College of Agriculture, Food and Natural Resources' Fisher Delta Research Center, a local researcher showed me the drone-imaging technology he uses to monitor crop drought. As someone who has spent a career studying optical sensors, I was fascinated by the impact this technology has for the farmers who rely on it the most.

We capitalized on that visit and met with the southeast Missouri research team to learn all about how the work happening there has an impact that transcends the bootheel and reaches across the state.

Since I arrived at Mizzou, I have seen this drive for innovation, hard work and results all across Missouri — from that research center in Portageville to the MU Extension teams in Kansas City, Lee's Summit and Blue Springs who help connect small business owners to critical resources. From agriculture to the economy, health care to education, our state's needs are as diverse as our state, which is why Mizzou is redefining what "impact" means.

We're strengthening our engagement efforts across Missouri and around the world. These efforts are grounded by our Midwestern values of community, hard work and humility.

I am constantly amazed at how well our students help lead this charge. Through Mizzou Alternative Breaks (MAB), for example, they build houses, plant community gardens, and serve schools and community health initiatives on a national and international scale. In partnership with MU Extension, MAB plans to conduct a weekend service trip in every Missouri county by 2020 — a commitment that exemplifies our mission to think comprehensively and expansively about engagement.

† Chancellor Alexander Cartwright wore black and gold to a groundbreaking for a new building at the Southwest Research Center in Mt. Vernon, Missouri. For more on MU's engagement across Missouri, see Page 22.

The more communities I visit, people I meet and stories I hear, the more I experience the tremendous reciprocity that underscores my philosophy of Mizzou: Our campus is the 114 counties and metro areas of Missouri, and our community the world.

I can think of no better example of this than the recent Show Me Mizzou Day — a first-of-its-kind campus open house. On April 13, thousands of visitors heard from our Nobel laureate George Smith, took behind-the-scenes tours of facilities such as the MU Child Development Lab and the X-ray Microanalysis Core Facility, and attended educational sessions on personal finances, nutrition, physical therapy and more. I even had the opportunity to show families around the Residence on Francis Quadrangle — the oldest building on the oldest public university west of the Mississippi River — and where my wife, Melinda, and I live.

This event highlighted what Missouri's flagship, land-grant university means to the world. Most importantly, it showcased what our alumni, supporters and friends mean to us. — *Chancellor Alexander Cartwright*

COURTESY MU COLLEGE OF AGRICULTURE, FOOD AND NATURAL RESOURCES

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Statements of Purpose
The Mizzou Alumni Association proudly supports the best interests and traditions of Missouri's flagship university and its alumni worldwide. Lifelong relationships are the foundation of our support. These relationships are enhanced through advocacy, communication and volunteerism.

MIZZOU magazine reports credible and engaging news about the University of Missouri community to a global audience.

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Historic Images: Photographer Louise Putman made this image of Columbia residents enjoying spring weather on their front porch. View a slideshow of other 1949 Missouri Photo Workshop images at tinyurl.com/mpw01.

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CONTRIBUTORS



Ron Powers, BJ '63, is a best-selling author and a winner of the Pulitzer Prize. His latest book is *No One Cares About Crazy People: The Chaos and Heartbreak of Mental Health in America*. Page 28.

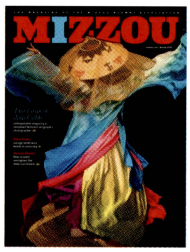


Tony Rehagen, BJ '01, has written for *GQ*, *The Columbia Journalism Review* and *Next Wave: America's New Generation of Great Literary Journalists*. He tagged along for the 70th Missouri Photo Workshop in Mountain Grove, Missouri. Page 42.

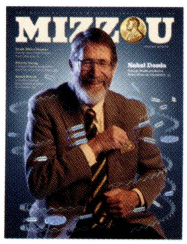


Marina Shifrin, BJ '10, is a stand-up comedian and comedy writer. Her first book is *30 Before 30: How I Made a Mess of My 20s and You Can Too*. Page 36.

KUDOS



In April, MIZZOU magazine received a merit award from the Society of Publication Designers for the Winter 2019 cover. The contest includes thousands of entries from around the world. Photo by Jodi Cobb, BJ '68, MA '71, of *National Geographic* magazine.



About the cover

Professor Emeritus George Smith is MU's first-ever faculty winner of a Nobel Prize in Chemistry. Read a profile of Smith on Page 16. Mizzou's first alumnus to win the Nobel was Frederick Robbins, BA '36, BS MED '38, DS '58, who grew up in Columbia. Robbins was part of a team that succeeded in culturing in a laboratory the virus that causes polio. This was a critical step toward creating a vaccine for the devastating disease.

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AARON FALLON

† Marina Shifrin's journey to becoming a stand-up comedian and comedy writer started at Mizzou. Her first book, *30 Before 30*, is optioned for a television show. Page 36.



INTERNATIONAL PIPELINE

† *MizzouDirect*, a new College of Education program, is expected to bring 50 international students a year to MU by 2025. The inaugural class from Brazil includes, from left, Anna Capilé, Luís Comrian, Ana Clara Eloi Placido and Lucas Britto.

Ana Clara Eloi Placido felt conflicted during her high school years at Colégio Presbiteriano Mackenzie Brasília. She wanted to push herself, to leave Brazil and study in America. Despite learning English since childhood, she was afraid to speak it, terrified she'd make an embarrassing mistake.

She found the confidence she needed in *MizzouDirect*, a locally taught high school curricular pathway offered through the College of Education's Mizzou K–12 program. *MizzouDirect* offers a path to Mizzou admission for international students who pass an English proficiency exam and complete the 16-class program. Students like Eloi Placido are immersed in U.S. high school subjects taught completely in English.

The program has 60 partner schools in Brazil, where five of its first graduates from January 2018 enrolled at Mizzou last fall. That first graduating class had 57 students. The January 2019 class had 507. Mizzou K–12 Executive Director Zac March expects 615 graduates next year from Brazil. *MizzouDirect* is now offered in a growing number of high schools worldwide, and March estimates an influx of 50 international students a year by 2025.

"*MizzouDirect* made me more open to express myself," Eloi Placido says. "Sometimes I say things incorrectly, but I'm not afraid anymore. Mistakes are part of life." — *Erik Potter*

NCAA Penalties Shock MU

The NCAA Committee of Infractions announced on Jan. 31 that Mizzou's football, baseball and softball programs were banned from postseason play for one year and subject to recruiting restrictions, among other penalties. The severe punishment came after a two-year investigation determined that 12 players in those sports received improper academic help from a former athletic department tutor. The NCAA complimented MU for cooperating fully with the investigation and found no proof the tutor was pressured to cheat for the athletes. "We are shocked and dismayed by the penalties that have been imposed today and will aggressively fight for what is right," said Athletic Director Jim Sterk. The university's appeal could continue until about February 2020. The athletics department launched a public relations campaign that included a website and billboards bearing the slogan "Make It Right."

Twitter Buzz About #Mizzou

@GMA
GOOOOOD MORNING! We've got some incredible young @Mizzou journalism students in the studio! Welcome to Times Square!



@AAUniversities
Veterinary oncologists @Mizzou have developed a vaccine treatment for a common type of bone #cancer in dogs, avoiding chemotherapy and opening the door for human clinical trials

@RoyBlunt
Sent a letter to the @NCAA asking them to take another look at the penalties levied against the @Mizzou athletics program. These sanctions negatively and directly punish student-athletes and coaches who had nothing to do with the charges, and could deter future self-reporting.

@j_werninger
Happy 180th founder's day to my dream school—thank you @Mizzou for providing endless opportunities & happiness my way! #MIZ180

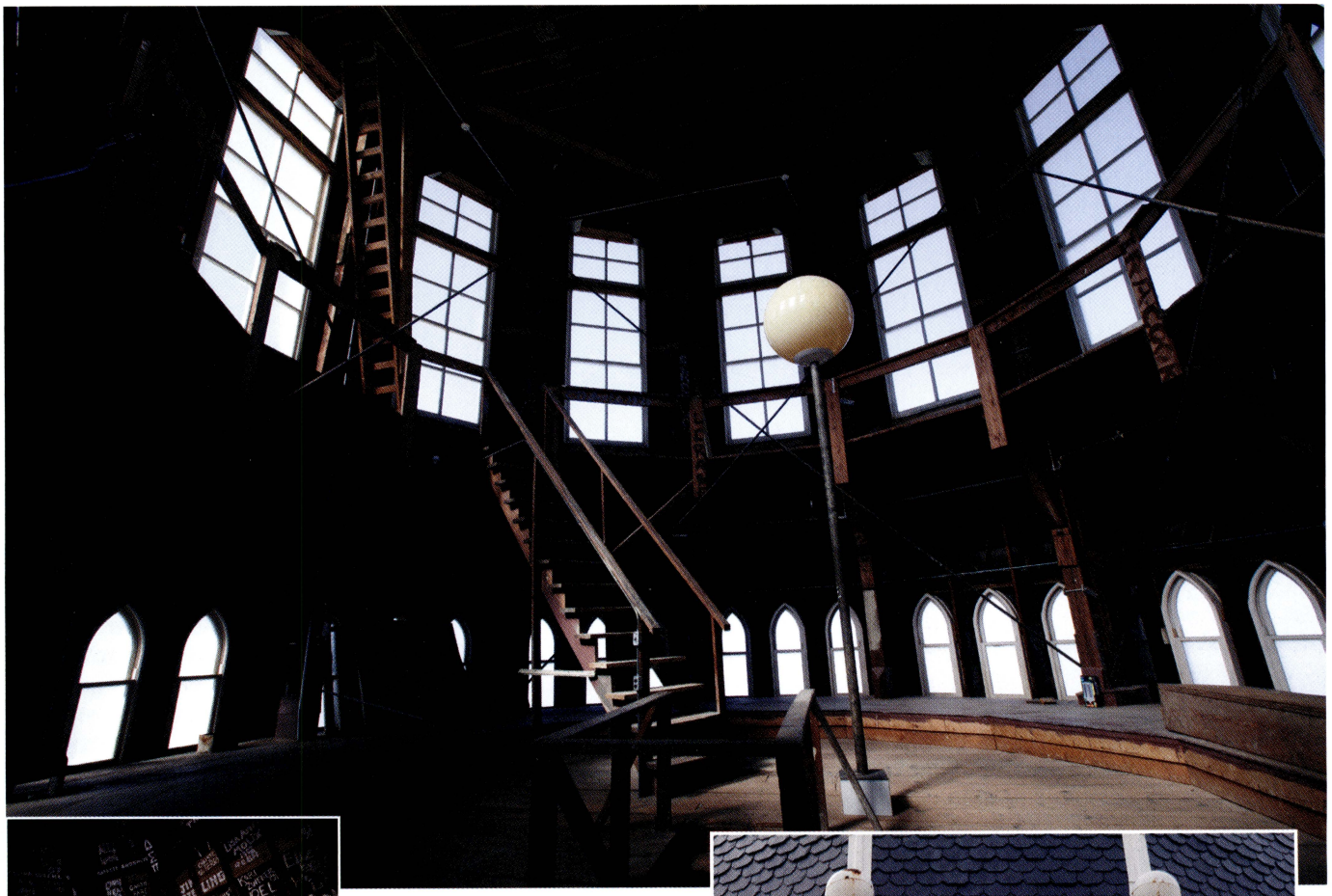
@NFL
THAT ARM. 💪😲
@DrewLock23
@MizzouFootball
📺: Path to the Draft - Pro Day on @nflnetwork

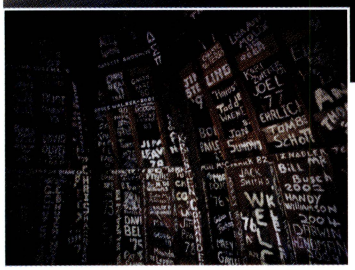
STUDENTS: NICHOLAS BENNER; GMA: TWITTER

TIGER'S EYE

Jesse Dome's Ups and Downs and Ins and Outs

Back in 1996, the last time scaffolding shrouded Jesse Hall's dome for a stint of maintenance, Kee Groshong, BS BA '64, hiked more than a hundred feet to the top for a look around. That was "a *fer* piece" off the ground, recalls the retired vice chancellor for administrative services. The scaffolding goes back up for thorough preservation work after spring 2019 commencement, says Jeff Brown, director of facility operations. Much-needed maintenance will include replacing all 96 windows and their wooden frames as well as damaged metal sheathing over the wooden interior, which is suffering water damage. Domes represent the lofty ideas of perfection and eternity. But maintaining such a structure is an exercise in stewardship. "When we're done with this $2.5 million project," Brown says, "it'll be good to go for decades to come."



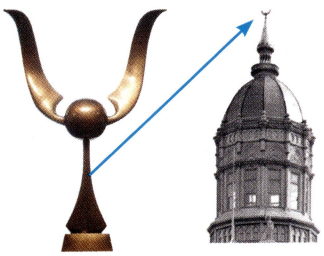


MYSTICAL MARKS

The dome's cedar interior is no Sistine ceiling, but it does sport the names of members of the **Mystical Seven** honorary society, which formerly held a ceremony there, Groshong says.

AT THE TOP

The **original winged globe** surmounting the dome lost an appendage more than a century ago, perhaps in a storm, Groshong says. A replica by sculptor **James Calvin,** associate professor of visual studies, presides over Jesse's second floor.



Did you know: At 102 feet 7 inches, the dome is taller than the 77-foot building itself.



ORDERING THE DOME

In 1895, when architect Morris Frederick Bell's **New Academic Hall** (now Jesse Hall) opened for business, he could have ordered the dome's figured metal sheathing from a catalog, Groshong says. The original skin of tin-plated steel has been patched over the years with copper and other metals.

NICHOLAS BENNER; DOME THUMBNAIL: MU ARCHIVES C6-34-6



Climate Change? Not Sure

† Research by doctoral candidate Lisa Groshong, BJ '92, MS '14, involved the effects of global warming on parks. She is shown here in Rock Bridge Memorial State Park in Columbia.

Midwesterners hear plenty about climate change. But when it comes to actually seeing the effects of global warming, America's heartland lacks the obvious indicators: the stranded polar bears, melting glaciers, vanishing beaches or rising seas. "Because the effects aren't as visible, some people aren't sure how it's affecting us," says Lisa Groshong, a doctoral candidate and research assistant in MU's School of Natural Resources. "They think we're not vulnerable."

But the subtle signs are here, particularly in the preserved nature of state parks. Groshong led a new study showing that at least a few Midwestern parkgoers have noticed signs of climate change — even if they don't realize it.

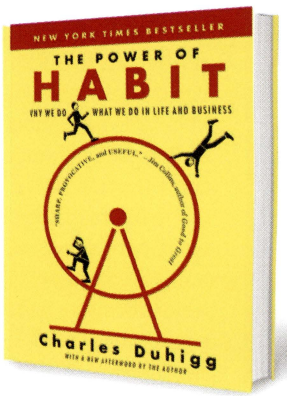
Groshong and her adviser, Associate Professor Sonja Wilhelm Stanis, and Associate Professor Mark Morgan gathered data by interviewing 18 members of the Missouri Parks Association, a park advocacy group. It turns out the respondents noticed extreme weather, increases in the occurrence of flood and drought, and even changes in the timing of early blooming wildflowers and bird migration. But when asked to submit photos of climate-change indicators, they offered little in response. "I got very few pictures back," says Groshong. "And the ones who did give me photos were reluctant to attribute it to climate change. They weren't sure."

She says the results underscore the need for educating the public about the local effects of climate change — how this global problem affects their immediate lives. The good news is that study participants wanted to know more and, most important, wanted parks to take action to stem the tide of this worldwide crisis.

"If park enthusiasts aren't confident talking about climate change, then no one is," says Groshong, herself a lifelong park visitor who has hiked the entire Appalachian Trail. "We need to educate. Flowers are blooming early, storms are getting worse — you're not imagining that. And it would only take a little to bridge the knowledge gap." — *Tony Rehagen, BJ '01*

GRADUATE STUDY

Carol Miller, BS '82, had been trying to get involved in a book club for years, but each attempt to get together with friends in Columbia fizzled. Her solution came this year when the Mizzou Alumni Association announced its inaugural virtual book club for association members. "We thought it would be a cool way to engage alumni who live farther away or who don't typically attend our traditional events," says Julia Davis, coordinator of member benefits. So far, more than 350 Tigers of all ages and majors and from all corners of the country have signed up for the free online forum, where the club will pick and discuss a new book every two months. The club kicked off with *The Power of Habit* by Charles Duhigg and started *Becoming* by Michelle Obama in April. Davis hopes the program will form a habit that keeps alumni active in both reading and the association.



ROB HILL

Pawn Broker

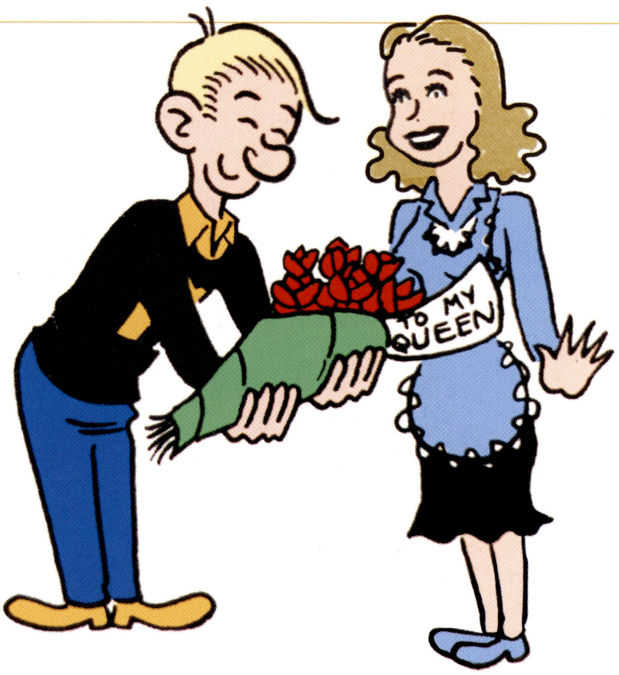


Romanian grandmaster Cristian Chirila is ready to announce "check" on the college chess powers in Missouri and throughout the U.S. Next fall, Chirila will begin his tenure as coach of Mizzou's brand new chess team with full knowledge that the state, particularly St. Louis, is already a hotbed of world-class chess talent. Although the "King's Game" has yet to conquer America as it has Europe and Asia, Chirila hopes to recruit grandmasters from all over the world to come to Columbia and represent the black and gold.

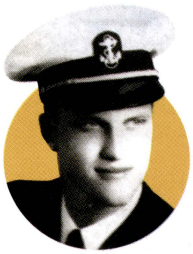
Chirila is targeting four team members from a pool of about 60 to 70 grandmasters, who might otherwise go professional in Europe, where the chess scene is more robust. To capture these valuable pieces for Mizzou, Chirila will be working with a grant for scholarships of nearly $800,000 from the Saint Louis Chess Club. "A university degree is always a good backup for a pro chess player to have," says Chirila. "And university degrees from U.S. schools are more valuable than degrees from places like Romania."

Mizzou is the only NCAA Division I-size school in the U.S. to offer scholarships for chess, hopefully providing an added appeal for would-be Tigers. "Missouri as a state is very competitive in terms of collegiate chess," Chirila says. "Webster University has been seven-time world champions; Saint Louis University is a powerhouse as well. It only makes sense that we're adding more competitiveness to the state's largest university." — *Tony Rehagen, BJ '01*

CHIRILA: MICHAEL CALI; CARTOON: BILL GABRIEL/MARCH 1949 *SHOWME*



Pilot Pens Poem



† Don Lee, a Naval aviator during World War II, piloted blimps along the shores of North and South America in search of enemy submarines. He is shown here as a cadet in 1943.

The following correspondence, in rhyming couplets, recently arrived in the magazine offices from the hand of alumnus C. Donald Lee, 94, a retired Navy pilot from Holts Summit, Missouri.

"MUsings" of a BJ '50 Grad

I've flown monoplanes, biplanes, blimps and balloons,
I've sung karaoke to hundreds of tunes,
I've been to Jamaica, South America, Panama, too,
But I'll never get over my regard for MU.

Mizzou holds a special place in my heart.
After World War II with my G.I. Bill start,
I drove to the KA house in my '41 Ford,
And there my brothers said, "Come on aboard."

I soon lost my Navy conditioning there,
But didn't smoke pot or grow bushy hair,
And then settled down with a very cute blonde,
My main college squeeze and even beyond.

I became qualified to attend journalism school,
The best in the nation, and I was no fool,
Knowing I could put my English studies to work,
Doing news and ad copy was a very nice perk.

So dear old Missouri U. holds a big place,
In this ninety-plus heart still beating through grace.
And I don't mind contributing, these many long years,
While remembering those very renewing Shack beers!

— C. Donald Lee, BJ '50



DREAMING BIGGER

† Anthony Garcia received a scholarship from the new KC Scholars program. He intends to make the most of it.

Some students in Anthony Garcia's classes groan about their weekly assigned readings. There are days Garcia doesn't feel up to it, either. Then he thinks of his family and friends back home. "I'm like, 'If I got my education paid for, I'm going to read the whole book — the front, the back, even the synopsis,' " Garcia says.

Garcia is a first-generation American whose family is from Mexico. His mother raised him and his younger siblings in Kansas City, Missouri. They didn't have a lot of money. College never seemed like an option. But his high school teachers pushed him to think bigger and to look into the new KC Scholars program, which provides five-year renewable $10,000 scholarships for outstanding students who have financial need. No one in Garcia's family had gone to college, but he applied anyway. In May 2017, he became one of the program's inaugural recipients.

"When I told my mom I got a $50,000 scholarship, she flipped out," Garcia says. "She started crying."

Last year, the University of Missouri System made a $100 million commitment to funding student scholarships. As part of that pledge, Mizzou and the University of Missouri System recently announced they will each provide $10 million — matched by $20 million in funding from KC Scholars for a total of $40 million — to pay for 800 KC Scholars recipients chosen over the next four years.

"These scholarships," says President and CEO of KC Scholars Beth Tankersley-Bankhead, PhD '09, "change the culture in families around the opportunity to go to college." And sure enough, two years ago, Garcia's younger sister, now 15, had no interest in college. But these days, after seeing her older brother at Mizzou, she's had a change of heart. — *Erik Potter*

Tennis, Anyone?



Heartthrob Mizzou alum John Goehrke, BS BA '18, may have stumbled into the love game of his life with Canadian net dynamo Genie Bouchard! Sources whisper that a long-shot Twitter wager on the 2017 Super Bowl winner, between Goehrke and Wimbledon singles finalist-cum-model Bouchard, sparked the mixed-doubles tangle that has fans crying for match point! (Bouchard tweeted our Bengals Beau Brummell that her fave Atlanta Falcons would topple the Patriots or she would meet Goehrke for a date. Pats won, Bouchard made good, the duo took in a Nets game in Gotham and a few tête-à-têtes ensued.) We wonder ... will they become a coosome twosome? Now, Fox 2000 is serving up a rom-com based on the story. The spin? Can friendship found on social media thrive in the public eye?

GARCIA: ROB HILL; TENNIS: TWITTER



Storyteller Loretta Washington, 2016

Once Upon a Time

All good stories have unexpected plot twists. They have characters whose desires and actions move the narrative along. One such tale — a true one, mind you — is how the St. Louis Storytelling Festival got to be 40 years old this April.

Ron Turner, MA '67, PhD '70, is both the author and the protagonist. He read about a storytelling festival held in Central Park and thought, "We could do this in St. Louis." Boom! He had a setting. But he needed a cast of characters — including financial sponsors, volunteers and yarn spinners from near and far. It would be overly dramatic to call it an odyssey, but Turner made calls, wrote letters and bent people's ears. The first St. Louis Storytelling Festival, in 1979, drew 5,000. Four decades later, it's a multiday event held at venues across the St. Louis metro area. Last year, more than 17,000 attended the free event to hear world-renowned and homegrown storytellers.

Much has changed in 40 years, but not the founder's original vision. "Stories are at the heart of human experience," says Turner, executive vice president emeritus of the University of Missouri System. "This event is a reminder that there's value in storytelling. It's not a reaction to today's electronic environment."

The festival had been going merrily along until it lost its primary sponsor, which might have been a sad ending had the fest not found a new home at MU in 2014 as part of the University of Missouri Extension Community Arts Program. Lisa Overholser, community arts regional specialist, became the festival's first full-time director, adding dramatis personae through partnerships. For example, through a new MU Extension 4-H program, teens train with a professional storyteller to perform ghost stories at the festival. Through a partnership with the Missouri Folk Arts Program, based out of the MU Museum of Arts and Archeology, the festival provides a new format for the program's master artists to perform publicly.

One thread goes all the way back to the beginning, and that's Turner, who's still chairman of the festival he started. He doesn't want a happy ending so much as he wants the stories to go on.

— *Dawn Klingensmith, BA, BJ '97*

STORYTELLER: DEBORAH A. BAILEY; ILLUSTRATION: SHUTTERSTOCK

NEW LOOK AT GENDER PARITY

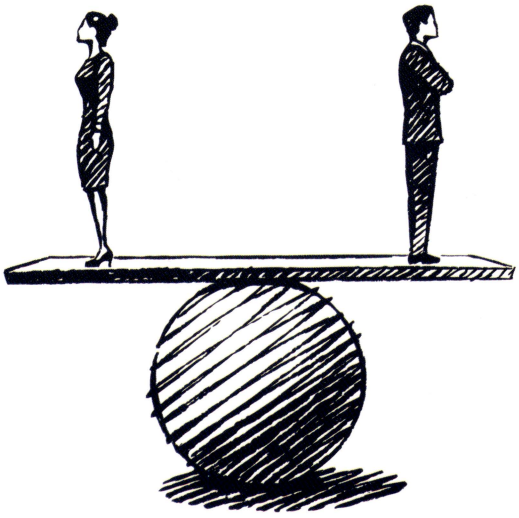
Gender inequality rightfully grabs headlines in the U.S., where fewer women than men work in many careers and are not as well-represented politically. However, a Mizzou researcher's new international study reports that men encounter more disadvantages than many people realize.

Since 2006, policymakers and activists have measured disparities using the Global Gender Gap Index. "Researchers make choices about what to measure," says lead author David Geary, a psychology professor at MU. He, along with a collaborator at the University of Essex, found that the index overlooked situations that slighted men, such as harsher punishments for the same crimes, compulsory military service and more workplace fatalities. So, they sought to develop a more inclusive measure. The Basic Index of Gender Inequality (BIGI) looks at what they call minimum ingredients of a good life, regardless of gender of geography: educational opportunities, healthy life expectancy and life satisfaction.

After tallying BIGI scores for 134 nations that represent 6.8 billion people, Geary found that women in lesser developed countries were behind due primarily to lack of access to education. They found that more advanced countries, such as the U.S. and the U.K., were closer to gender equality, with the scales tilting toward women in key areas, particularly in healthy lifespans. "That's true across the globe, and there is a biological bias to it. But that's not the whole story." In many countries, problems such as alcoholism, drug addiction, homelessness and even prostate cancer — issues that affect men disproportionately — get short shrift from the press and policymakers.

"With the BIGI," Geary says, "we are focusing on issues that are important to all women and men in any nation, regardless of level of economic and political development, and by including factors that can disadvantage men as well as women."

— Tony Rehagen, BJ '01



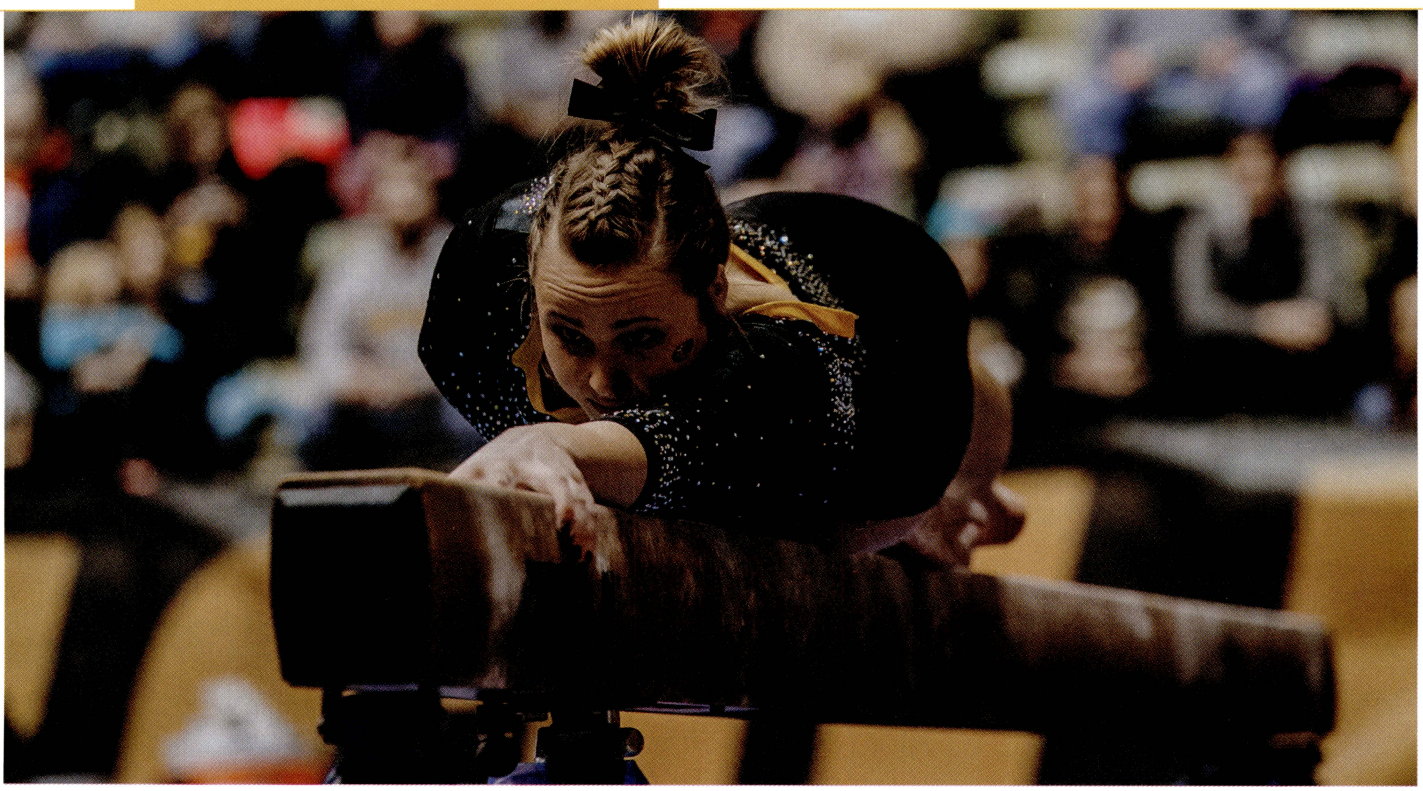
Briefly

· **Steven Zweig,** MD '79, MS '84, chair of the Department of Family and Community Medicine, began serving as interim dean of the School of Medicine March 31, when **Patrice "Patrick" Delafontaine** stepped down. A search has begun for an executive vice chancellor for health affairs, who will oversee MU Health Care and the School of Medicine and will report to MU Chancellor Alexander Cartwright and UM System President Mun Choi.

· The student-led **Mizzou Alternative Breaks** program scheduled 419 MU students to volunteer during spring break 2019. They worked in 21 states on service projects such as building houses with Habitat for Humanity and serving in Veterans Affairs hospitals. *More: breaks.missouri.edu*

· The U.S. Department of Education has awarded nearly $10 million to MU to establish a **National Center for Rural School Mental Health.** The center will create an online data and training system to support the mental health needs of students in rural schools throughout Missouri, Virginia and Montana. Many such schools are remote and have limited access to key resources.

· The Sinquefield Charitable Foundation, a longtime benefactor of the **Mizzou New Music Initiative** at the School of Music, has given $2.5 million to help continue the program for the next three years. *More: music.missouri.edu*



Beaming with Confidence

† Senior Britney Ward is right at home on the balance beam, where she feels calm and confident. Ward, a three-time All-American, has a career-high score of 9.975 on the beam.

A balance beam is a 4-inch wide slab that sits 4 feet off the ground. That someone would ever summon the courage, much less the skill, to perform front and back flips up and down its 16-foot length is a wonder.

"A lot of the very good balance beam workers I've coached have a high level of confidence in themselves and they have a calmness," says Missouri gymnastics Coach Shannon Welker. "Unlike some of the other events in gymnastics that have a little more power to them and go a little quicker, you have to have the ability to slow your heart rate down and calm your nerves on the beam."

For four years, Britney Ward found her quiet, happy place on that beam and delivered. As a freshman and sophomore, Ward earned All-America honors on the beam for finishing among the top 16 in the nation. She also earned All-America honors in the vault as a sophomore. With a career-high score of 9.975 on the beam, Ward ranks second in school history only to Lauren Schwartzman, who posted two perfect 10s in 2004.

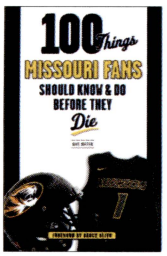
"A lot of it is staying in a positive mental state," Ward says. "We do a lot of working with cues and specific words so you stay in a mental routine that you know you can transfer from a practice setting to competition."

Ward, a native of Ozark, Missouri, says she started gymnastics as soon as she could walk — her parents owned a gymnastics facility. She began mastering beam movements by practicing on a line on the floor, then on a low beam with mats on either side and eventually on the real thing.

"Honestly, it's all about muscle memory," Ward says. "Once you know that your body knows what it's doing, then you have that confidence. It's a little scary when you try it the first time. You want to get that first one done and know that you can do it."

— *Joe Walljasper, BJ '92*

BUCKET LIST BOOK



Dave Matter, BJ '00, has covered the Missouri Tigers for 20 years in the pages of the *Columbia Missourian*, *Columbia Daily Tribune* and *St. Louis Post-Dispatch*, so he had plenty of background information at the ready for his new book, *100 Things Missouri Fans Should Know and Do Before They Die*. He says the most challenging and rewarding part of writing the book was coming up with material readers didn't already know about Norm Stewart. One of Matter's favorite stories involves the championship game of the 1972 Volunteer Classic in Knoxville, Tennessee. Former player Gary Link says Stewart hated the dramatic pregame introductions, so he told his five starters to scatter around the arena so the spotlight operator couldn't find them. "The fans started booing and going crazy before the game even started," Link says. "Coach told us, 'We've got them right where we want them.' We won the damn tournament, and they never invited us back."

MIZZOU ATHLETICS

HIGH-BAR HOPS

Nat Page, AFNR '80, held the Missouri track program's oldest school record. His indoor high jump mark of 7 feet 3¼ inches stood for 42 years. Then Roberto Vilches arrived at MU and promptly cleared 7 feet 5 inches in his second collegiate meet. "That was a pretty good start," says Vilches, a native of Mexico City. "When I knew I could do it, I went straight to do it." Vilches' father and mother played volleyball for the national teams of Cuba and Mexico, respectively, so jumping is in his genes. Growing up, he focused on volleyball and soccer. He got serious about the high jump at age 15 and caught the attention of Missouri Assistant Coach Iliyan Chamov at an international competition a few years later. Vilches, who stands 6 feet 6 inches, hopes to represent Mexico at the 2020 Olympics in Tokyo. The qualifying standard of 7 feet 6½ inches is within his reach. "The sky is the limit," Chamov says. "We'll see how high he can go."



↑ In his second college meet, freshman Roberto Vilches broke Nat Page's 42-year-old school record in the indoor high jump, clearing 7 feet 5 inches.

A TIGER WITH TOOLS



MIZZOU ATHLETICS

Major League Baseball scouts drool over five-tool players. Case in point: Kameron Misner, Missouri's junior outfielder and first baseman. He has speed, hits for power, hits for average, fields his position and has a strong arm. Coach Steve Bieser believes Misner could be among the first 10 players selected in June's MLB draft. He was picked in the 33rd round by the Kansas City Royals coming out of Poplar Bluff High School in 2016, but he opted to accept a scholarship to Missouri, where he has dramatically raised his stock.

Misner, a 6-foot-4, 213-pound lefthander, has one other tool that accentuates the other five. "He's one of those guys that has the 'it' factor," Bieser says. "The 'it' factor is he works harder than anybody else on our team. He probably works harder than anybody in our conference."

Misner hit .282 with seven home runs and 17 stolen bases to earn Freshman All-America honors. As a sophomore, he was playing as well as anyone in the Southeastern Conference, hitting .360 with four homers and 13 stolen bases through 34 games. But a broken foot sidelined him for the rest of the season and forced him to sit out the summer and fall, as well.

All that watching reminded him how much he loved the game and how much he was willing to work to get better at it. "It changed my perspective about baseball," Misner says. "You never want to take it for granted." — *Joe Walljasper, BJ '92*

← Junior outfielder and first baseman Kameron Misner has all the tools necessary to be selected in the first round of the Major League Baseball draft.

Scoreboard

1 — **Sophie Cunningham's** rank on the MU women's basketball team's career scoring list. Cunningham finished her career with 2,187 points, topping the previous record of 2,126 held by Joni Davis. She was the 13th overall pick April 10 in the WNBA draft, going to the Phoenix Mercury.

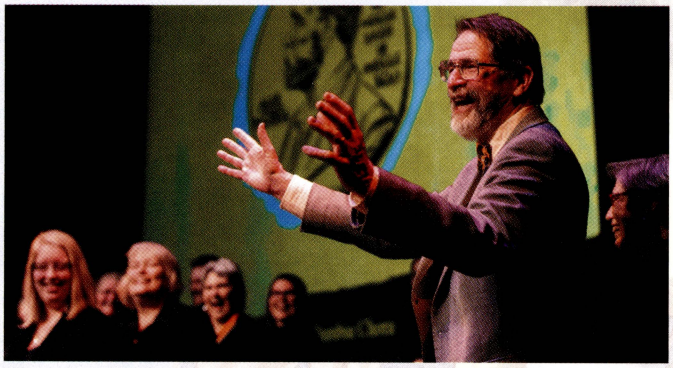


3 — Missouri wrestlers who have earned All-America honors four times. **Daniel Lewis** joined **Ben Askren** and **J'den Cox** in the exclusive club when he placed fourth in the 174-pound weight class at the 2019 NCAA Championships.

Under 4 — Number of minutes it takes for the fastest man in school history to run a mile. **Kieran Wood** broke the school record with a time of 3:59.64 on Feb. 2 at the Husker Invitational in Lincoln, Nebraska.

10 — Missouri gymnasts who have qualified individually for the NCAA Championships. Senior **Brooke Kelly** added her name to the list by qualifying on the balance beam with a score of 9.875 on April 5 at the NCAA Athens Regional.

Tigers Go All In to Raise $13.29 Million During Mizzou Giving Day 2019



GEORGE SMITH AND MARGIE SABLE KICK OFF MIZZOU GIVING DAY WITH DONATION OF NOBEL PRIZE WINNINGS

On the eve of a day celebrating the generosity of the Mizzou family, Nobel Prize winner **George Smith** and spouse **Margie Sable** made an announcement to the crowd in Jesse Auditorium.

Following Smith's March 12 presentation on his prize-winning research, the couple surprised the audience with the news that they would donate the Nobel Prize winnings — **$243,000,** in total — to create scholarships for undergraduate students in Mizzou's College of Arts and Science.

"This might surprise some people, but my first degree was actually a Bachelor of Arts, not a Bachelor of Science," Smith said. "Margie and I hope that supporting the liberal arts as a whole will enrich the lives of future Mizzou students, whatever careers they choose."

MU and the University of Missouri System contributed additional funds to the newly minted Missouri Nobel Scholarship Fund, raising the total to more than half a million dollars.

Smith and Sable's inspiring generosity set the tone for the third annual Mizzou Giving Day, celebrated from noon to noon, March 13-14. Taking part in social media challenges and matching gift opportunities, Tigers gave **4,095 gifts** and over **$13.29 million** to support what they love about MU.

"Thousands of gifts came together to make Mizzou stronger on Mizzou Giving Day, which will help our students, academics and traditions thrive," said Todd McCubbin, executive director of the Mizzou Alumni Association. "When we put out the call for Tigers to go all in for Mizzou, they answered that call with a resounding 'Z-O-U!' "



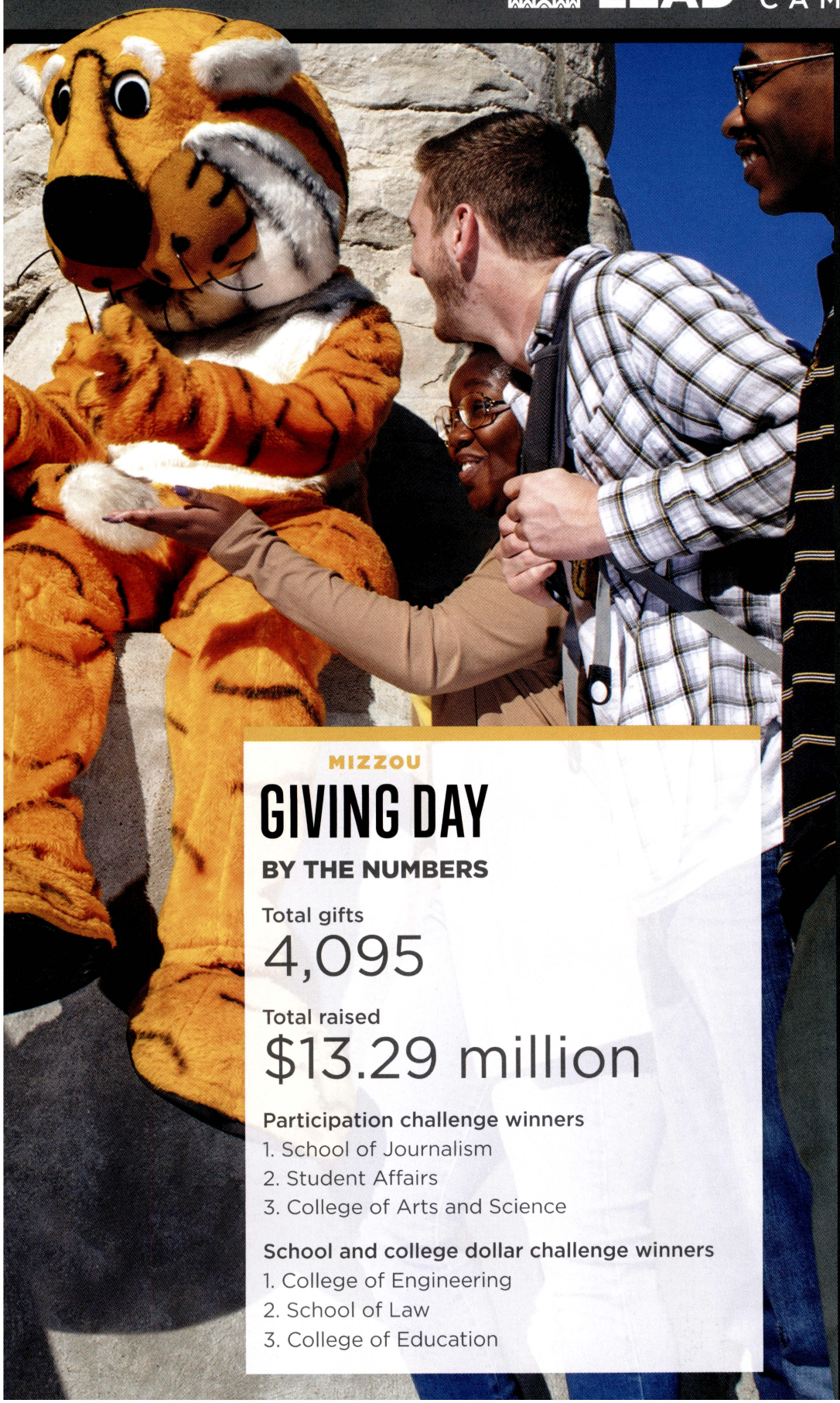
#MIZZOUGIVINGDAY

Tigers entered social media challenges for the chance to win bonus funds for a school or college. As an additional prize for the winner of the "If You Could Ask Dr. George Smith Anything..." challenge, the Nobel laureate personally answered the winning question.

Q: "What would be your advice for young scientists trying to advance in today's scientific society? What skills should they focus on building?"
– Shannon King, MU doctoral student in biochemistry

A: "I think it's important to think of 'success' with a lowercase S rather than a capital S. If you think of success as some abstract goal, if you ever reach it and think 'OK, I achieved it,' you'll stop trying. I really advise you to take pride in your own immediate achievements."

MIZZOU
OUR TIME TO
LEAD CAMPAIGN UPDATE



MIZZOU

GIVING DAY

BY THE NUMBERS

Total gifts

4,095

Total raised

$13.29 million

Participation challenge winners

1. School of Journalism
2. Student Affairs
3. College of Arts and Science

School and college dollar challenge winners

1. College of Engineering
2. School of Law
3. College of Education

Top Priorities

The Mizzou: Our Time to Lead campaign seeks to raise $1.3 billion for the university. The question isn't whether the Mizzou family will meet the goal but how far we will run past it. To make the best use of this remarkable generosity, the campaign focuses on three priorities:

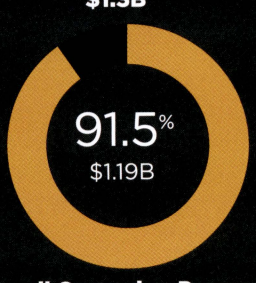
1 **Endowment** — Building MU's endowment to compete with other institutions will enhance our ability to attract and retain stellar students and faculty.

2 **Signature Centers and Institutes** — Interdisciplinary centers and institutes will be engines of research growth that attract additional funding and raise our profile in the Association of American Universities.

3 **Campus Renaissance** — New and renovated facilities will propel Mizzou to global leadership in education and research.

4 **Student Success** — Providing Mizzou students access to world-class learning opportunities will ensure they thrive on campus and throughout their lives.

Taken as a whole, these priorities represent the path to securing Mizzou's standing as one of the nation's elite public universities. Learn more about the Mizzou: Our Time to Lead campaign and the role of philanthropy on campus at giving.missouri.edu.



Overall Campaign Progress*

* As of April 2, 2019



NOBEL DEEDS

When Professor Emeritus George Smith answered the phone at his Columbia home on Oct. 3, 2018, the overseas connection was bad, but the news was very good. The Royal Swedish Academy of Sciences had awarded him a Nobel Prize in Chemistry. Smith completed the prize-winning research decades earlier — work whose benefits to humanity will play out for decades to come.

BY CHARLES E. REINEKE, GRAD '98 • PHOTO BY NICHOLAS BENNER • ILLUSTRATION BY BRYAN CHRISTIE DESIGN

SOON AFTER THEIR PLANE touched down in Stockholm, George Smith and his wife of 38 years, Marjorie Sable, found themselves immersed in a cocoon of rock-star-like celebrity.

Ushered into a private airport lounge, they helped themselves to a small but bespoke buffet of coffee and snacks. Moments later, an attaché from the Swedish foreign service introduced himself, explaining that he was part of a team of helpers who would see to their personal needs, chauffeur them to and from events, and shield them, if they so desired, from the eager clutch of autograph seekers waiting outside their hotel. They arrived at that five-star hotel — the venerable Grand Hôtel — as part of a motorcade of gleaming black Volvo SUVs, each emblazoned in gold with the purpose of their visit: The Nobel Prize.

"It was incredible, really" Smith says. "Like a cross between Disneyland and *Downton* Abbey," adds Sable.

The 2018 Nobel Prize in Chemistry was awarded to Smith, now a distinguished professor emeritus of biological sciences, along with two additional researchers, Caltech's Frances Arnold and Sir Gregory Winter of Britain's Medical Research Council Laboratory of Molecular Biology, on Dec. 10.

Arnold, an engineer, was honored with half the prize for her insights into how a "directed" form of natural selection could help create useful enzymes. Among her celebrated achievements has been the use of such molecules to create more environmentally friendly biofuels, agricultural chemicals, paper products and pharmaceuticals.

Winter, who shared the second half of the prize with Smith, was recognized for his use of bacteriophages, viruses that infect bacteria, to initiate a different form of human-induced Darwinism. From his lab in Cambridge, England, he and his team directed multiple generations of antibodies to evolve into promising therapeutic agents, among them the blockbuster rheumatoid arthritis drug Humira.

Neither of these achievements would have been possible without Smith. His creation of the now-renowned "phage display" not only laid the groundwork for both scientists' breakthroughs but also for the rise of a vast, phage-related research enterprise now spanning the globe.

AT A PACKED MU PRESS CONFERENCE following the prize announcement Oct. 10, Smith, a man for whom modesty comes naturally, downplayed his role. He said he knew his initial publications would be of interest to other molecular biologists. But he hadn't a clue as to where they might lead.

"There is no way you could predict that this would be something really important," Smith told the crowd. "Certainly, I didn't. Nobody in my lab realized it was something, for example, that might lead to medicines." Indeed, before their own star turn in Stockholm, phages have seldom received the red-carpet treatment. In the hours after the Nobel announcement, even the world's

most seasoned science journalists found themselves scrambling to make sense of them. But their ubiquity more than compensates for their pop culture anonymity.

Phages, in short, are the most common organism on Earth. A recent essay published by the National Institutes of Health estimated there are 10^{31} phage particles on the planet, "an impossibly large number that translates into approximately a trillion phages for every grain of sand in the world." These numbers represent an extraordinarily diverse pool of genetic material, perhaps nature's largest reservoir of unexplored genes and proteins.

Their diversity notwithstanding, individual phages are extraordinarily simple. Each consists of a single small chromosome encapsulated in a shell of "coat" proteins. First identified at the beginning of the 20th century, they have long intrigued the world's scientists. Early work centered on identifying and deploying phages that could infect and kill pathogenic bacteria, research that was largely displaced by the development of antibiotics. Later scientists focused on developing phages as model organisms — their simplicity made them perfect for investigating processes such as genetic replication, transcription and protein synthesis that were difficult to observe in more complex creatures.

Like any biologist focused on the molecular level, Smith was well-acquainted with phages by the time he joined MU's faculty in the summer of 1975. Smith had even worked with them as an undergraduate at Haverford College, where the academically gifted son of an Army officer enrolled in 1959.

By the mid-1970s, he was five years removed from a Harvard doctorate and had just completed a postdoctoral fellowship with the eminent immunologist Oliver Smithies at the University of Wisconsin. Both scientists approached their explorations in ways that, unlike previous "classical" methods, emphasized molecular-level research.

These ideas were just catching on at Mizzou, and the university was keen to engage the young scientist. Smith recalls showing up for his job interview with "a scruffy beard and a ponytail," a look signaling his readiness to shake things up. He presented a long list of work-related "wants." He got them all.

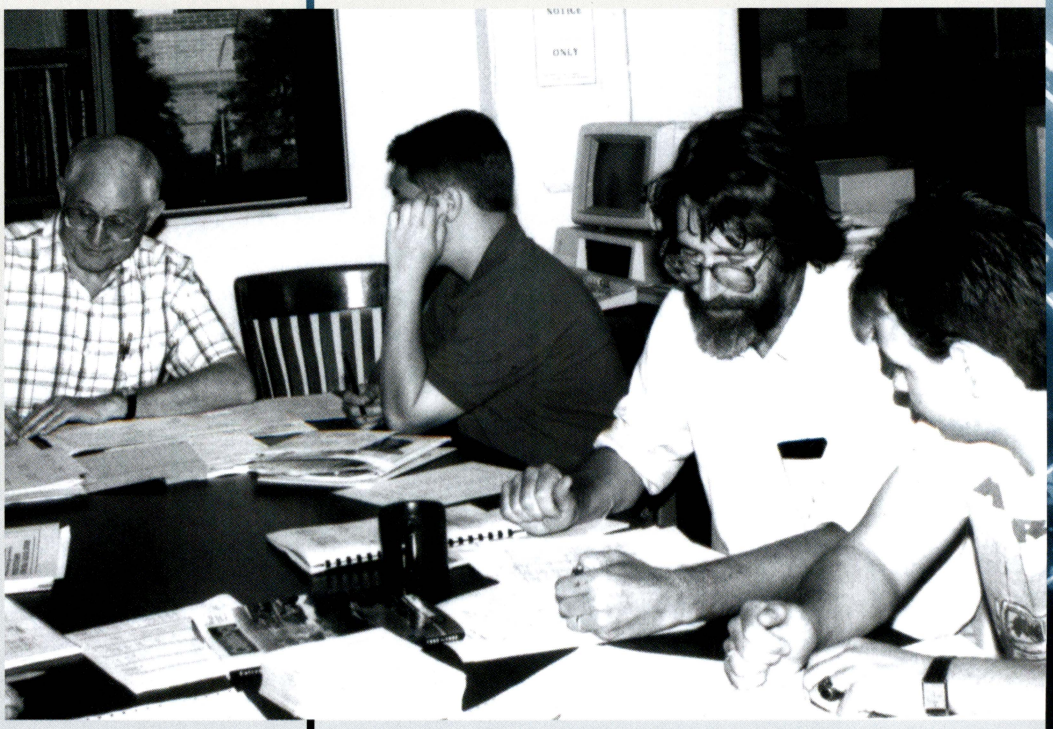
"I was one of the favored hires in the 'new biology,' as it was called in those days — what we now call cellular and molecular biology," says Smith, whose beard is still prominent but now reasonably well-trimmed. "But I didn't stay long in molecular immunology. Within a year and a half I had set my sights on another project — the first project that involved filamentous phages."

SMITH IS TALL AND SLIM. These days he carries himself with a slight stoop, as if four decades of looking down to engage less-lanky colleagues has left a permanent bow. When approached, his gaze is direct and welcoming. He laughs often and is skilled at gently deflecting reporters' phage-related illiteracy, a holdover, undoubtedly, from years of describing his work to the molecular-biologically challenged.

As infectious agents, phages had long been useful to scientists needing vectors capable of transferring one organism's genetic material to another. Smith's new project aimed to deploy phages to assist in determining whether DNA rearrangements might be responsible for what's termed "heritable commitment" of cells during the development of multicellular organisms. In the course of development, Smith explains, different cells become committed to different fates in the developing organism — fates that are generally inherited by the cell's progeny as it divides.

"DNA rearrangements were known to occur regularly in antibody-producing cells," Smith says. "That's how each clone of antibody-producing cells becomes committed to making a single antibody. The reason the body can make millions of antibodies is because there are millions of different clones, each committed to making a single antibody. So, the idea was that maybe this was the general way that cells become heritably committed to particular developmental fates, that small rearrangements in their DNA were responsible. I was trying to detect these rearrangements directly."

Smith says the project went nowhere. The theory was wrong, and his work shed little light as to why. But it did have one major, if unintended, consequence: It piqued Smith's enthusiasm for



† Even future Nobel Prize winners advise and teach students. Smith, right, and Professor Emeritus Billy Cumbie work with incoming freshmen, circa 1994.

phages. "Filamentous phage turned out to be a really good DNA cloning vector," Smith says. "It had some terrific advantages."

Smith made use of those advantages in his next project. That work involved exploring the promise and perils of recombinant DNA, a process that shuffles pieces of genetic code among different species.

Many researchers feared such manipulations could open the door to creating powerful, treatment-resistant pathogens. "At that time," Smith says, "people were really worried about recombinant DNA. There was a big international conference devoted solely to the question of, 'How can we deal with the possible biological threat of cloned DNAs getting out into the environment and wreaking havoc?' "

That conference and subsequent concerns led to a sheaf of federal regulations. One required that all DNA cloning vectors had to be biologically contained. Researchers could clone promising vectors, but to do so they had to demonstrate that the vector could not reproduce organically in the environment. Smith and his team spent months using filamentous phages as a tool to design such a vector.

"It worked beautifully — just in time for all of these DNA guidelines to disappear: No one thought they were needed anymore," Smith says with a laugh. Not needed, at least, as contained vectors. But by now Smith was convinced, like the generations of phage explorers who came before him, that bacteriophages were both useful and important. Perhaps even worth building a career on.

In the mid-1980s, Smith's wife, Marjorie, was advancing her own professional life. Sable, a recently retired reproductive health expert and professor of social work at MU, was pursuing a doctorate in public health at the University of North Carolina at Chapel Hill. Smith knew that Bob Webster, a respected biological scientist with his own interest in filamentous phage, was conducting research at nearby Duke. Smith reached out to Webster: Could he perhaps do a research sabbatical in Webster's lab?

Webster said yes, and Smith soon found himself digging deep into the phages' coat proteins, those tiny components of their molecular shell. The chief attraction for him involved one particular piece of genetic material located at the tip of the long, thin phage particle, a protein partly buried and partly poking out like an infection-seeking beak. Previous research had determined that the structure of this exposed beak-like gene could be fairly easily manipulated.

"It was flexible," Smith says. "It seemed very likely that you'd be able to add new protein parts to that protein by fusing two genes. This, you know, was the era of the recombinant DNA revolution. In recombinant DNA research, you take all or part of gene B and all or part of gene A and fuse them together. They now encode a 'fusion protein' that has parts of both. It would be just like that, only protein B here wasn't a stand-alone protein but part of the phage particle." Smith called these hypothetical structures "fusion phages."

As his time in Webster's lab was winding down, Smith turned to Paul Modrich, a Duke biochemist who was to win his own Nobel Prize in 2015. Researchers in Modrich's lab, which was conveniently located right down the hall, were studying a protein called EcoR1, and had large preparations of the protein, an antibody that bound the protein and the gene for the protein. Smith asked to use these to test his fusion-phage idea. Modrich said he'd be happy to share all three.

Smith said he knew his initial publications would be of interest to other molecular biologists. But he hadn't a clue as to where they might lead. "There is no way you could predict that this would be something really important. Certainly, I didn't. Nobody in my lab realized it was something, for example, that might lead to medicines."

Back at his own bench, Smith cut out a piece of the EcoR1 gene and inserted it into the phage's coat-protein gene. If all went well, he reasoned, new generations of the modified phage would display a piece of the EcoR1 protein on their surfaces, each extended out at the tip.

And so it happened. At this point, the modified phages were still able to infect bacteria. But when Smith introduced the EcoR1 antibody into the mix, this changed, presumably because the antibody had bound to the protein on the surface, preventing infection.

"This was the first indication," Smith says, "that the phage display concept seemed to be feasible — that it was possible to display foreign proteins, or pieces of proteins, on the surface of phage."

With just a few days remaining before returning to Mizzou, Smith excitedly told Sable he finally had the result he was looking for.

The sabbatical work was just a start but a meaningful one. Smith now knew phages could be engineered to display a particular peptide. And that these peptides could be used to link a foreign gene's DNA to the particular proteins he was looking for. So, he wondered, might phages one day usher in an entirely new, highly efficient tool for building vast "libraries" of cloned genes — genes from which new genetic discoveries could be made? Maybe, Smith thought.

Back in his Tucker Hall lab, Smith retooled his research focus. The new agenda would be phage-first. And Steve Parmley, a new graduate student, would be a key part of it.

Now an executive at a San Diego-based biotechnology firm, Parmley, PhD '88, was just 23 when he joined Smith's lab. As an undergraduate at the University of Kansas, Parmley had worked with biotechnologists exploring how antibodies



† Smith in his lab, circa 1994

might be engineered to attack cancer cells. When the native of St. Louis decided to return to Missouri to do similar work as a doctoral student, Mizzou was an obvious choice. So was George Smith.

Smith and his young collaborator began brainstorming ways to take his invention to the next level. There were a lot of long lunches, Parmley recalls, with the two trading ideas via "back-of-the-envelope cartoons about how to modify the phage as a vector."

The work at Duke, Parmley continues, relied in part on serendipity. EcoR1 came already equipped with a usable "site" for making genetic fusions and displaying them on its coat protein. Its weakness was its effect on the modified phage; it just wasn't possible to use it to create vectors in sufficiently large numbers. "My job," says Parmley, "was to see if we could move that site to somewhere else in the phage coat protein, a place where it would be less detrimental to the viability of the phage."

Parmley was eventually able to move the site farther away from parts of the phage protein that would inhibit its function. He credits Smith's "deep knowledge of phage physiology" for making the work possible. At the same time, the two of them laid the groundwork for what came to be known as "affinity selection," a second core element of phage-display technology.

It worked by using a procedure then common among immunologists. First, Parmley anchored a molecular "bait" directly to a plastic petri dish, in this case an antibody against a protein called beta-galactosidase, which, like Modrich's EcoRI, served as a convenient model. Parmley then poured a phage-filled solution into the dish. A tiny fraction of the phages were fusion phages displaying parts of the beta-galactosidase protein; the others were wild-type phages that didn't display any foreign protein. In the dish, the fusion phages were bound by the bait and were captured on the surface of the dish. The wild-type phages weren't bound and could be washed away.

"George had shown in his initial [1985] *Science* paper that he could select fusion phages out of a background of wild-type phages with a frequency of about one in a thousand. But we knew that if we were looking for really rare recombinant phage in a large library we'd need to be better than that," Parmley says. "But because phages are really sticky, some of them would just stick to the surface of the dish nonspecifically. And we couldn't increase what we were calling the enrichment, or the frequency in which you could recover the fusion phages compared to the wild-type phages."

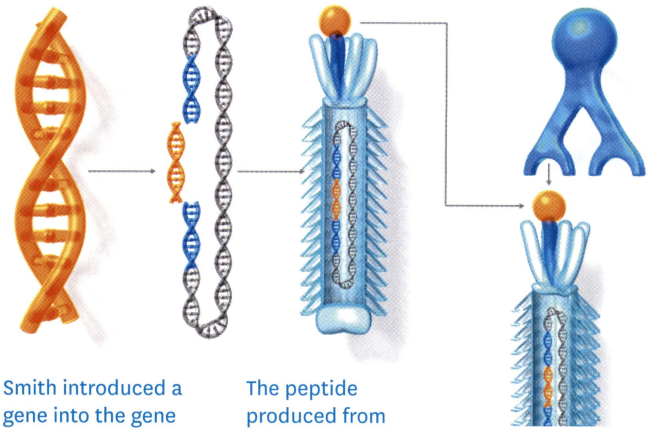
The next hurdle involved designing a way to up the level of enrichment so that they could locate more interesting phages out of larger phage libraries — not one desirable phage out of 10,000 but out of a million, a billion, or even, as Smith jokingly likes to put it, a gazillion. They did this by exploiting phages' remarkable reproductive prowess.

"Because the phages can replicate to huge numbers by infecting fresh bacteria," Parmley says, "you can reproduce the phages that you've recovered from a single round of selection in the petri dish. So, if you grew them back up again and repeated the process with the bait a second time, a third time, each round you got the enrichment of one in a thousand but multiplying that three times you could find something that is one in a billion, one in a gazillion."

"There are other ways of doing it now," continues Parmley. "But this was the first one. No one today could imagine trying to screen for genes in the old, laborious ways: There was strict limit to what you can look for. But with phage display, it's almost unlimited."

THAT UNLIMITED POTENTIAL has since been acknowledged by thousands of researchers around the world, Smith's Nobel co-laureate, Sir Greg Winter, among them. Winter says he initially thought phage display was a fascinating discovery, though he was skeptical it would amount to much. But one of Winter's lab assistants, Phil Jennings, was an enthusiastic early adopter, and soon it became a crucial part of Winter's research program. "It made all the difference," he says.

Before phage display, Winter says, "we were screening anti-



Smith introduced a gene into the gene for a protein in the phage's capsule. The phage DNA was then inserted into bacteria that produced phages.

The peptide produced from the introduced gene ended up as part of the capsule protein on the surface of the phage.

Smith was able to fish out the phage using an antibody designed to attach to the peptide. As a bonus, he got the gene for the peptide.

body-expression libraries made by secretion from bacteria. We realized that this would not be sufficiently powerful for the very large antibody libraries [we] needed to isolate human antibodies against human self-antigens — as required for treatment of cancer or autoimmune disease."

Eventually, Winter adds, phage display became a workhorse he and his team used to create "highly diverse and very large human antibody libraries, both from the blood of human donors and from gene segment building blocks." Such massive libraries, he says, helped distinguish between antibodies that might effectively bind to different therapeutic targets.

Such breakthroughs were crucial to further developments that led to the outcomes noted in the Nobel citation: successful treatments for rheumatoid arthritis, psoriasis and inflammatory bowel diseases. Looking forward, the citation reads, new phage-enabled discoveries are poised to "promote a greener chemicals industry, produce new materials, manufacture sustainable biofuels, mitigate disease and save lives."

For his part, Smith has retired from his science career. In Sweden, however, he was happy to help the Royal Academy promote phage affection. His schedule, he says, was packed with appearances, not only the official Nobel lecture but also seminars at Swedish universities, appearances at schools, interviews with media, and other official and semiofficial duties. "I got very little sleep, maybe three hours at night. But I was running on adrenalin."

While onstage at the medal ceremony with his fellow laureates and the Swedish king, Smith's chief thought was: "Don't screw it up! Bow the right way! Turn the right way before you bow!" Later, at the official banquet — a lavishly catered dinner that Smith and Sable were able to share with Parmley and several other MU laboratory colleagues — he had one final brush with celebrity.

"At the banquet, each of us was paired with someone really prominent in Swedish society. I was paired with Crown Princess Victoria," Smith says in a tone of wonder and bemusement. "She was wearing this elaborate gown that her mother, the queen, had worn to the ceremony 20 years earlier. The paparazzi were all over her. So I actually made it into *People* magazine!

Of course, it was all about her — I'm not even mentioned," Smith adds with a laugh. "But I'm there." **M**



† King Carl XVI Gustaf of Sweden handed Smith his Nobel Prize medal and diploma at a ceremony in Stockholm Dec. 10, 2018, the 121st anniversary of Alfred Nobel's death. View Smith's Nobel lecture at tinyurl.com/smithnobel.

Advancing Precision Medicine



When Mizzou's Nobel laureate George Smith reported on phage display back in 1985, he never imagined how it would ripple through the scientific community. Having laid the groundwork to direct evolution more effectively than in the past, phage display has led to biomedical breakthroughs including treatments for rheumatoid arthritis and inflammatory bowel disease.

Developing biomedical applications from academic research is the impetus behind the University of Missouri System's lead priority. Construction begins this fall on a $220.8 million, 265,000-square-foot research facility on the northwest corner of Hospital Drive and Virginia Avenue. A ribbon-cutting ceremony celebrating its completion is scheduled for Oct. 19, 2021.

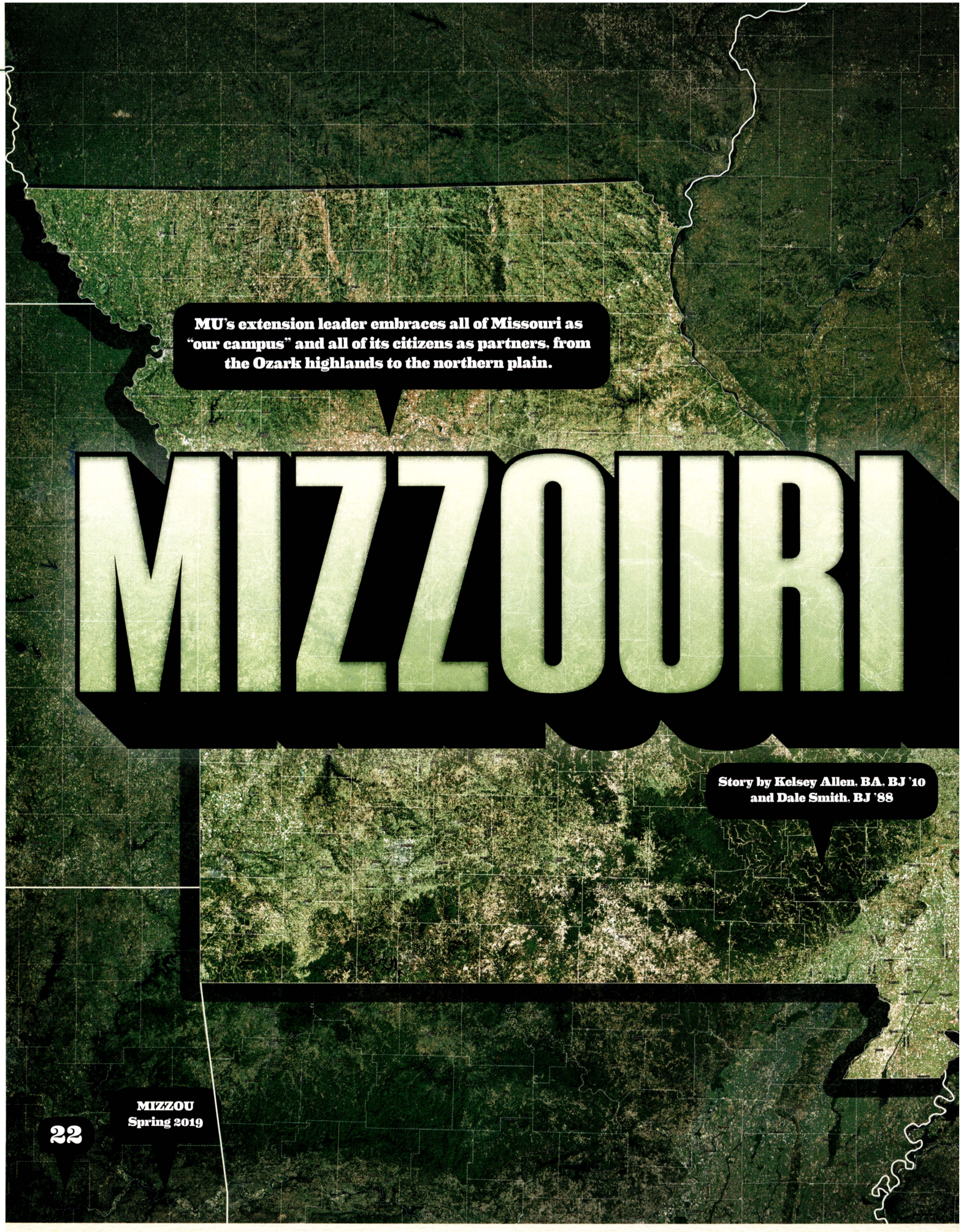
"This facility is absolutely critical to the future of the University of Missouri," says Mark McIntosh, UM System vice president of research and economic development and MU vice chancellor of research and economic development. "Medical research is moving into a period where we can think about treating individual patients rather than whole populations." This approach, known as precision medicine, involves targeting diagnoses and treatments by looking at a patient's genetic makeup, lifestyle and environment.

Although the National Institutes of Health is focusing on precision medicine initiatives nationwide, MU is especially well-suited for it. It's one of fewer than 10 institutions with a medical school and colleges of veterinary science, engineering, agriculture, and arts and science on one campus. And it's the only one with a 10-megawatt reactor producing medically relevant radioisotopes.

The new building will house 30 principal investigators from current faculty, and another 30 will be recruited nationally. Areas of emphasis include cancer, vascular disease and neurological disorders, which will improve the lives of all Missourians while decreasing the costs of health care.

"We want to take the research out of the laboratory and give it to the people," McIntosh says. "We take our mission as a land-grant university seriously."

— Nancy Yang



MU's extension leader embraces all of Missouri as "our campus" and all of its citizens as partners, from the Ozark highlands to the northern plain.

MIZZOURI

Story by Kelsey Allen, BA, BJ '10 and Dale Smith, BJ '88



Marshall Stewart had plenty on his plate upon arriving in Columbia in 2016 as vice chancellor for extension and engagement. His task was to reimagine, reorganize and rededicate a century-old operation whose roots in bolstering a struggling rural populace had evolved into a statewide enterprise offering Missourians useful programs and sharing new knowledge. With more than 20 years under his belt in leadership positions at North Carolina State University, Stewart was well prepared. But job No. 1 was to listen and learn. For months, he toured the counties of Missouri to ask citizens not what MU can do for them but what they need in their communities. Stewart's tour yielded three broad categories that now give extension its daily purpose and measures of success — "economic opportunity, educational access and excellence, and healthy futures." He has set out to reimagine extension's infrastructure and equip faculty and staff to tap the intellectual resources of the entire university to strengthen communities.

MU Extension takes its marching orders from Missouri's taxpayers. "They provide the four-campus UM System with $400 million annually. That is a big check," Stewart says. "From that, extension receives a little more than $20 million to contribute toward a $70 million budget." He proudly notes that extension's budget returns an impact of $940 million to Missourians. When it comes to inspiration and guidance, he gleans those from the likes of Abraham Lincoln and others who in 1862 sought to develop a system of public universities founded by proceeds from the sale of public lands, or land-grants. "Lincoln thought a college education should be affordable and accessible to all, not just the elites," Stewart says. In most states, that led to a pair of universities, with a land-grant school emphasizing research and the other teaching. Not in Missouri. "This university was already standing and the land-grant was put inside of it. That is unusual," Stewart says. "If you visit our friends in Kansas, for instance, you would have to combine Kansas State and the University of Kansas to have the same breadth and depth of disciplines that we have here." That puts a lot of tools at the disposal of Stewart and his talented team.

To make the most of those tools, Stewart has reorganized extension field faculty so that groups of three counties share quick access to extension experts in the key subject areas. One county of each three-county grouping has a specialist in community and economic development. A contiguous county's specialist focuses on 4-H youth development. The third county's specialist will deal with nutrition and health education. This setup also frees specialists who deal with livestock, agronomy and agribusiness from some administrative work so they have more time in the field. And every county now has an engagement specialist whose job is to locate expertise anywhere on the MU campus that matches up with community needs. A few examples: If local veterans are having difficulty navigating their government benefits, the engagement specialist hooks them up with a law school program. If a community's schools want to bolster science education, the specialist puts them in touch with the right faculty at the College of Education. When small-town newspaper editors want to know the latest, the J-School takes workshops on the road. It is common enough that large universities have a few academic units making their expertise available to communities, Stewart says, but the extent to which deans across campus advocate for engaging with Missourians is rare.

Among many Missourians statewide, the desire for connection is mutual, Stewart says. As an example, he mentions a get-together of extension county council members — people in every Missouri county who work with their engagement specialist to ensure that local needs and concerns are reflected in extension programming. Council members interested in sports had been invited to a luncheon followed by a women's basketball game on a Saturday afternoon. The cafeteria was packed. At one table, Stewart met an elderly couple and five grandchildren from southern Missouri. "Did you attend Mizzou?" he asked. They had not. "Do you come to football games?" he continued, noting that the whole family was decked in black and gold from head to toe. Nope. "The gentleman told me he'd never been to campus before that day. He said, 'We went to Walmart and bought all the Mizzou merchandise they had.' What that tells you is they are coming home, that at some point they learned the first public university west of the Mississippi was built here in 1839, and that's special. It means that even people who never set foot on campus or participated in an extension program — you are all Mizzou. And we are here for you. You invest in the University of Missouri System, and we are working every day, generating $5.4 billion in economic impact. Missouri — all 114 of its counties and all 6 million of its people — that's our campus, our students, so to speak. Our responsibility. We are in this thing together."



"Missouri — all 114 of its counties and all 6 million of its people — that's our campus, our students, so to speak. Our responsibility. We are in this thing together."
—Marshall Stewart

STORIES BY KELSEY ALLEN

BUILDING FITNESS AND FRIENDSHIPS

Every Tuesday night, Milton Sovereign eases himself onto his motorcycle, rides to a restaurant near Pickering, Missouri, and eats dinner with the local chapter of the Freedom Road Riders. At 80 years of age, he still has the balance and leg strength to ride his two-wheeler — and he wants to keep it that way.

Sovereign is one of about 1,400 older Missourians participating annually in Stay Strong, Stay Healthy, an eight-week exercise program using the latest research to help seniors develop the fitness, flexibility and balance that will enable them to live independently longer. Developed by MU nutrition and exercise physiology professors Steve Ball and Susan Mills-Gray, Stay Strong, Stay Healthy embodies the mission of a land-grant institution: "We involved undergraduates to help teach the class on campus. Graduate students do research on it, collect data and publish articles. And then there's the outreach component of MU Extension, which has the network, capacity, infrastructure and expertise to deliver the program throughout the state," Ball says.

Research shows that the program improves older adults' strength and flexibility and reduces their fear of falling. The program also helps seniors connect socially. "That's a byproduct we didn't even think about. To see the joy they get from these newfound friendships is really very rewarding," says Mills-Gray, who is working on a research article on the program's social and emotional benefits.

Susan Maxwell has taken the class three times. "It makes me feel better," Maxwell says. "I enjoy the social part, too. It's good to get out and be among people."



† Seniors build fitness, balance and flexibility during Stay Strong, Stay Healthy, an eight-week exercise program offered by MU Extension.



SAFE FOOD SUPPLY

Starting in 1999, Duane Brune and his wife, Michelle, BS Ed '93, MA '03, have expanded their Pin Oak Farms in New Haven, Missouri. They began by growing tomatoes and watermelons for mom and pop stores, then added cabbage, summer and winter squash, cucumbers, peppers and sweet corn for large grocery chains such as Schnucks and Dierbergs. When the FDA Food Safety Modernization Act was passed in 2011, growers who sold over $25,000 annually, which included the Brunes, needed to take a produce safety course. MU Extension — working with the Missouri Department of Agriculture, Lincoln University and Kansas State Extension — has trained more than 550 Missouri produce growers on standards that help assure a safe food supply. Although Brune was already complying with many of the requirements, MU Extension helped him customize a food safety plan for his farm. Pin Oak Farms' record-keeping improved after the training, too. "As much as I hate paperwork," Brune says, "it helps when you can go back and see what you need to clean. Instead of, 'Well, it wasn't *that* long ago,' now we have it logged."

CLASS: NICHOLAS BENNER; FARM: INSTAGRAM

Drone's-eye View

When disasters destroy environments, drones can take on roles where relief workers and manned vehicles fall short. "Drones allow you to go look at the damage and see what's going on, do your search and rescue, do your information gathering and planning — before you send your people in," says Bill Brinton, head of Buchanan County Emergency Management. Since 1933, Missouri Central Fire School — now the MU Fire and Rescue Training Institute (FRTI) — has trained firefighters and other emergency responders from beginning firefighting through executive leadership programs for chief officers. In 2017, FRTI partnered with University of Missouri-Kansas City researchers and Brinton's agency to develop a drone-assisted emergency response system. They tested the system during the solar eclipse to help first responders navigate St. Joseph-area traffic congestion. FRTI's Community Emergency Management Program uses the drone system to identify gaps in emergency planning efforts ahead of future disasters or emergencies.



DRONE: SHUTTERSTOCK; LOEFFEL: BILL BREENBLATT

From Wannabes to Farmers



† After taking MU Extension's Grow Your Farm course, Jennifer Loeffel grew her heirloom production from a small backyard garden to Gateway Tower Farm in Labadie, Missouri.

Jennifer Loeffel always had a passion for growing things. In 2016, the St. Louis native enrolled in the Master Gardener program through MU Extension and tested her knowledge in her family's small garden. Through the course, Loeffel learned about the need for producers in the area. "Some farmers are driving two or three hours to the markets," Loeffel says. She wanted to change that, and MU Extension wanted to help.

The Grow Your Farm course helps landowners who want to get into farming as well as current farmers starting new enterprises. "I call them Wannabes," says Debi Kelly, a field specialist in horticulture who teaches the course. "We help these folks look at the skills and resources they have, where they are going to sell what they grow, and what they're missing — before they start purchasing anything to go into an enterprise."

Although Loeffel and her husband, Derek, had already purchased Calvey Creek Farm in Robertsville, Missouri, the course helped them develop a business and marketing plan, reconsider their infrastructure and crop map, and set annual goals and objectives. "It helped us make the right moves," Loeffel says.

The couple recently sold that farm and bought a property four times larger in Labadie, Missouri. At Gateway Tower Farm, they have a high tunnel greenhouse, 32 aquaponic towers, 100 egg-laying chickens, and two pigs — Kevin Bacon and Pepa Pig — and they continue to deliver heirloom veggies, herbs, fruit and eggs to more than 100 customers. Expanding into local farmers markets and bed and breakfast agritourism is also on the horizon.



Nurturing Artrepreneurs

Locust Street had long been the civic heart of Gladstone, Missouri, but over time, buildings had fallen into disrepair. Armed with a vision to revitalize the downtown, the city bought a few buildings, including the 7,200-square-foot baby blue old Fins & Foliage pet store. That's where the city council's proposed arts incubator would nurture the growth of Gladstone's creative community.

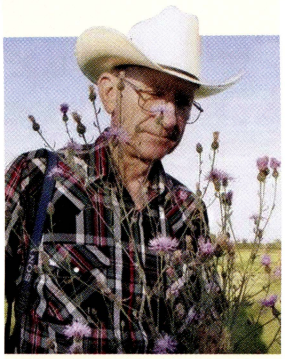
Although arts and cultural production account for over $11 billion of the Missouri economy, Gladstone wanted to investigate before renovating the site, so it turned to MU Extension for a feasibility study. "Due to cost and risk, we didn't think it was the best course of action for the city at the time," says G.K. Callahan, a Clay County engagement specialist with MU Extension. But Callahan knew someone who already had the staff, the model and the capital who might be interested.

Bob Martin, BJ '83, and his business partners had recently opened a co-working space and business incubator called iWerx and an artistic cooperative and incubator called designWerx in North Kansas City, and they were planning a second iWerx location in Gladstone. "The idea of starving artists is so real," Martin says. "If we can help with the business aspect of art, getting it in front of people, providing resources, ultimately creating a co-op with an online presence, we can help artists flourish. Sure enough, designWerx started making sense in Gladstone."

Today, construction crews are transforming the old Fins & Foliage into designWerx Gladstone, which will feature a showroom, dedicated retail studios, workshops to support the business of art, as well as marketing, sales and distribution support for its members and the art community at large.



† Bob Martin, BJ '83, opened business and arts incubators, iWerx and designWerx respectively, in Gladstone, Missouri. Top, artist Gloria Heifner works out of designWerx at its first location in North Kansas City.



DETERMINED TO MAKE A DIFFERENCE

Eldon Cole still keeps track of his work on a yellow legal-size notepad, which hints at why he's done so well as an MU Extension livestock field specialist for 55 years: He understands that change takes time. Cole, BS Ag '62, MS '63, works with Southwest Missouri farmers to improve their livestock production systems, advising on everything from breeding and nutrition to general farm management. For him, the most rewarding programs have been Show-Me-Select Replacement Heifer, Missouri Steer Feedout and on-farm performance testing, which help farmers use objective data to make decisions about their livestock enterprises. "John Wheeler of Marionville — he didn't jump on the Show-Me bandwagon right away," Cole says. But now he's one of the program's most successful participants. "I'm determined we can make a difference," Cole continues. "I think that adds to my longevity."

DESIGNWERX: COURTESY BOB MARTIN; COLE: COURTESY DAVID BURTON



Great Grazing

Most cattlemen in the eastern U.S. turn their cows into a big open field. They may graze under a tree and then mosey on over to the water tank, defecating wherever they please. It sounds idyllic. But Craig Roberts, plant science professor and MU Extension state forage specialist, says this ad-lib grazing diminishes the productivity and profitability of grazing enterprises.

Over the past 30 years, MU Extension Grazing Schools have worked hard to educate and incentivize more than 18,300 producers to adopt updated grazing management practices. Bill Verner, who runs about 150 cows on 360 acres outside of Armstrong, Missouri, is one of those producers. Through courses co-taught by extension and the USDA Natural Resource Conservation Service (NRCS), Verner learned how to rotate cattle through his fields, allowing the paddock to rest, clovers to reseed and manure to distribute nutrients. Once Verner attended the school, he qualified for a program in which the NRCS helped defray the cost of fencing and watering systems required to subdivide his fields.

When farmers implement this management-intensive grazing, it increases the yield between 22 and 30 percent, Roberts says. "It's like adding acres without buying land. You're just getting more off that acre." Today, about 1 in 3 Missouri beef farms practice rotational grazing. MU Extension estimates those efforts support over 2,000 jobs and raise the economic output of Missouri's beef industry by more than $125 million every year.

VERNER: ROB HILL; WINN: NICHOLAS BENNER



COLLEGE WITHIN REACH

Robin Winn didn't have a plan for what she'd do after graduating from Hickman High School in Columbia. That is, until she was invited to participate in the inaugural class of 4-H Youth Futures. A collaborative effort of the extension programs at the University of Missouri and Lincoln University, 4-H Youth Futures helps over 500 underserved students annually across the state overcome obstacles to attending college. Through an extensive orientation program and intensive and sustained mentorship from extension educators, 4-H Youth Futures often supports participants in ways they can't get at home. "My family was excited and proud I was in college, but they didn't know how to help me," says the first-generation college student. "If it wasn't for 4-H, I wouldn't have made it through." Today, she owns Winn Law Practice in Columbia and mentors the next generation of Youth Futures students.



A Pulitzer Prize-winning writer tells a father's tale of his beloved sons, their musical genius and the mental illness that seized them both.

Forever Young

BY RON POWERS, BJ '63, DHL '12

I remember the moment that I promised myself I would never father a child. The moment happened 55 years ago. Yet I can still turn my eyes from whatever I am looking at and call it up with lapidary precision. That night. The glitter. That station wagon.

The setting is Gaslight Square in St. Louis. The square was in the middle of its dozen-year existence — a vapor-lit Milky Way of Dixieland joints, piano bars, and jazz and blues venues that spilled eastward down Olive Street from Boyle until it trickled into darkness.

The nighttime sidewalks on both sides of Olive were thronged with girls in bee-hive bouffants and guys in Vietnam-ready crew cuts: the hip, the groovy, the young, the Forever Young.

← Dean and Kevin Powers, ages 8 and 5



← Gaslight Square in St. Louis, circa 1964

I was feeling kind of hip and groovy myself on that spring night in 1964. A year out of Mizzou, I had landed a cool gig: sportswriter for the *St. Louis Post-Dispatch*. And here I was on the square with a bunch of college buddies. We were standing out in front of a hot pastrami mecca called Jack Carl's 2 Cents Plain. I was inspecting a young dolly-bird in a short mod dress and go-go boots when, for some reason, I shifted my gaze to the street and spotted the station wagon.

It was crawling eastward in the honking traffic. A Ford Country Squire, I think. Brown and yellow. A real Atomic Age job. The gaslights illuminated the faces inside. Dad was behind the wheel. Mom was beside him. In the back seat were Sis and Junior. I'm pretty sure there was a dog, and I'm pretty sure the dog's name was Spot.

In an instant the gas-lit lamps of Gaslight Square glowed a hellish red as the future slouched in behind that station wagon. A rage boiled up inside me. I must have registered it somehow; my friends shot me glances. I said nothing to them — how would I have explained it? — and we made our way inside Carl's.

But I knew exactly where the rage came from. It came from my sense of an invasion. One that threatened my identity.

My world of the Forever Young had been breached — violated — by this family and its goddamn station wagon. They represented everything I loathed and feared about what my future might bring. A parade of invective — contempt — streaked through my mind like life flashing before death: These people were plastic! They were ticky-tacky!

In an instant the gas-lit lamps of Gaslight Square glowed a hellish red as the future slouched in behind that station wagon. A rage boiled up inside me.

Uptight! Straight arrows! Honkies!

I made a promise to myself as I watched this un-welcome wagon creep off into the dark adult reaches beyond the square. No children, ever, for me.

■ ■ ■

Flash ahead 12 years. Twelve years of the single life. Of "Is that all there is?"

In May 1976 I took a leave of absence from the *Chicago Sun-Times,* where I was laboring as a TV critic, and rented a country house on the southern tip of Lake Michigan. I planned to write a book. And score with as many chicks as I could lure to the Michigan Dunes.

On a return flight to Chicago from New York after a round of interviews, I took my assigned aisle seat. And looked up to see Honoree Mary Fleming walking . . . down the aisle. Green eyes, auburn hair that flowed to her waist. And wonderfully, no mod dress, no go-go boots. She was, is, the picture of Celtic beauty. I whispered, "Please, God, for the few good things I've done in my life, let her sit next to me."

God let her sit next to me. The station wagon receded.

She later told me that she'd hid the physics textbook she'd been reading — she was a recent PhD in biophysics at the University of Chicago — so I wouldn't think she was a nerd.

We were married on Oct. 8, 1978, at the Ethical Culture Society in New York. After the ceremony, we took a taxi to the West Side apartment we'd been sharing, where Honoree, still in her wedding dress, baked the hors d'oeuvres for our guests.

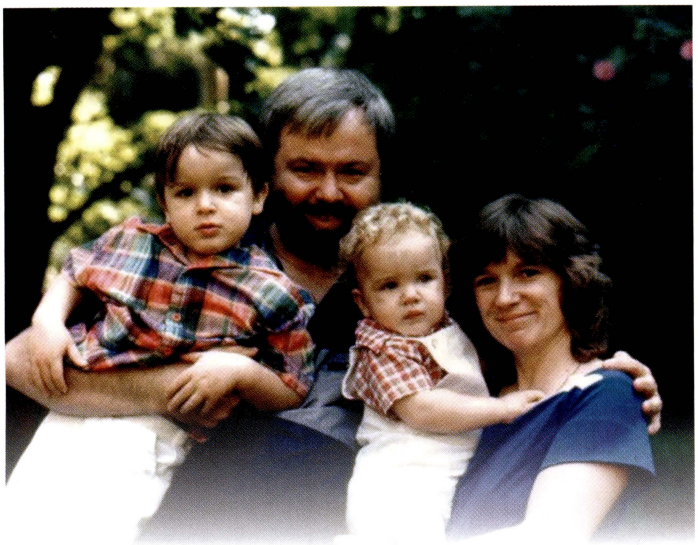
We were ardently in love, and still are. Yet in 1978, children remained an abstraction to me. Children were fine. But children happened to other people. I would stay Forever Young.

■ ■ ■

Dean Paul Justin Powers was born on Nov. 18, 1981. My 40th birthday. The station wagon receded further, and my world re-formed itself around the aura of this luminous, dreamy child. As he grew, his blue baby-eyes transmuted themselves into hazel — my brown, dancing with Honoree's green; his thick caramel hair spilled over his forehead, and his cheeks glowed crimson. I thought of him as a child the color of wheat and apples. With his small hand gripping mine on our daily short walk from our apartment to Riverside Park — where Dean would inevitably cause kid-gridlock as he stood motionless at the top rung of the slide, gazing into New Jersey — I felt my Midwestern anxieties about the city slip away. No bad guy could harm me; no light-running crosstown bus flatten me. Dean Powers was at my side.

Kevin Berkeley Powers rocketed into the world on July 21, 1984, nearly streaking through the outstretched hands of the obstetrician. In a sense, he never slowed down.

COURTESY LOSTTABLES.COM



† Ron and Honoree with Dean, left, and Kevin at the Bread Loaf Writers' Conference, circa 1985

We'd moved into a house north of the city by then. Kevin loved velocity: high arcs on the backyard swing, tearing around the downhill curve full tilt on his mobile bulldozer, his yellow curls flowing behind him; years later, skiing at breakneck speed down Vermont slopes with his graceful brother. One summer day in his first year, as he sat watching his mom from his highchair in the kitchen, Honoree hummed some musical scales. Kevin startled her by shrieking with laughter. Honoree hummed the scales again; another shriek of delight. Again. Another shriek.

Musical genius was roiling in Kevin, probing for a way out.

■ ■ ■

Schizophrenia is rare. It strikes between 1.5 and 4 percent of the world population. Yet it is far from benign, nor just another form of "mental illness." It is not a product of depression or alienation or alcoholism or any other complaint of the "worried well," to use Freud's term.

It is a disease not of the metaphorical "mind" but of the physical brain. Its victims are usually adolescents in the final dangerous phase of the brain's cell reformation and carriers of a rare cluster of inherited, flawed genes stimulated to destructive action by an overflow of normally protective chemicals such as serotonin or dopamine. This overflow can be triggered by "environmental" upheavals such as severe stress. The resulting brain destruction can be largely stabilized by accurately prescribed medication. It cannot be cured.

Some neuroscientists, including Nancy Coover Andreasen of the University of Iowa, have established that a high correlation exists between creativity and madness. Writers show significant incidences of schizophrenia.

And musicians.

■ ■ ■

Honoree and I never saw any of it coming. In those lamb-white days (as Dylan Thomas phrased it), we remained as clueless and heedless as anyone about this disease. Schizophrenia happened to other people.

Our family embarked upon a hegira of happiness that lasted for 20 years. We departed New York for Middlebury, Vermont, where I taught each summer at the Bread Loaf Writers' Conference. Honoree and I received appointments at Middlebury College — she in the biology department; I in creative writing.

Dean and Kevin floated in arcadia. The seasons enveloped our small town in their New England rhythms: football and foliage in the fall, neighborhood caroling at Christmas, the big community bonfire and ice-skating and hot chocolate on New Year's Eve, the Festival on the Green in summer. Swim team (Dean's relay team set a state record, with rangy Dean swimming backstroke). Community theater. And the Bread Loaf conference in August, held on its manicured 19th-century mountain-meadow campus. Our family was assigned Robert Frost's clapboard summer cabin, where my sons fell asleep to the organ-stop of howling coyotes from the nearby forest.

Kevin talked his way into guitar lessons at age 5; within a year, his college-guy instructor confessed that he had nothing more to teach our son. We persuaded a seasoned but skeptical town musician ("*Six* years old?!") to take him on. The instruction melted into exercises of call-and-response sessions, which melted into thrilling duets, which melted into wondrous improvisational guitar concerts, sadly confined within Michael Corn's little studio down an alley from the town bagel bakery. These concerts had an audience of one: me, sprawled and enraptured on the linty carpet.

At 14, Kevin won *DownBeat* magazine's Student Music award in two categories, jazz and rock.



† Jumpin' Jack Kevin, 1991

COURTESY RON POWERS

Books

Ron Powers is a *New York Times* best-selling author of 16 books, most recently ***No One Cares About Crazy People: My Family and the Heartbreak of Mental Illness in America*** (Hachette, 2018). Other titles include:

Flags of our Fathers (2000), a No. 1 *New York Times* best-seller co-written with James Bradley

Mark Twain: A Life (2005), a *New York Times* best-seller

True Compass (2009), a No. 1 *New York Times* best-seller co-written with Ted Kennedy

Awards

Pulitzer Prize for television criticism, 1973

Emmy Award for media commentary, 1985



† Kevin, age 17, jamming with a jazz combo on the town green in Middlebury

Dean, after years of looking on with interest, now requested his own instruction. He would never match Kevin's musicianship — few would — but he unveiled a genius for lyrical songwriting. The image of the two of them jamming at some festival or open mic around the state — heads bent over their instruments, knees touching, shoes crossed, nodding subtle signals to each other, grinning sheepishly at the applause — this image has become part of my DNA.

This was hardly the sterile life I had read into those blameless people inside that long-ago station wagon crawling along Gaslight Square. And speaking of DNA, had something in my own brain, perhaps itself a host to that rare yet un-activated cocktail of flawed genes, been trying to warn me not to go there?

■ ■ ■

We sent our sunny younger son off to the Interlochen Arts Academy in 1999. In that same year, Dean enrolled for a postgraduate prep year at the Gould Academy in Maine, before embarking on his collegiate years at Colorado State University.

I drove Kevin across Canada and south to the beautiful Michigan campus. He arrived full of anxiety about how to talk to girls. He graduated three years later under this benediction from his guitar teacher: "Kevin is the most talented musician I have encountered in my years at Interlochen."

From our Vermont vantage point 900 miles away, it was impossible for Honoree and me to analyze our son's growing mood swings, expressed in emails and telephone calls. Had we witnessed them in person, we probably would have interpreted them as the normal turmoil of an adolescent. We would have been wrong.

It was at the Berklee College of Music in Boston, in the fall, that Kevin came apart.

A phone call to our Middlebury home one predawn morning: "Mom, Dad, I'm going to Russia! My guitar instructor invited me on a tour with a combo!" We innocently gushed congratulations, not picking up on the strain in his voice until we noticed that he was no longer on the line.

> By then, a great amount of Kevin's personality had deserted him. Normally an impish chatterbox, he now was mute at home, staring at something the rest of us could not see.

We tracked him down at a hospital in Syracuse. He'd boarded a Greyhound in Boston after the call, intending to cross the country to Los Angeles and get a job as a rock star. Unthinkably for our gentle, happy-go-lucky son, he'd been thrown off the bus after accosting the driver and taken to the hospital by state police. We brought him home, sedated.

The three years that followed remain emotionally difficult for me to recount in detail. Here goes an attempt at the essential moments:

COURTESY RON POWERS



← Dean at 35, a couple winters ago in Vermont

At the hospital, we asked one another: Was it a bad reaction to a drug trip?

Nothing that hopeful. We soon learned that Kevin had been stricken with bipolar disorder.

A summer of recuperation at our house, then back to Berklee.

A call from him one autumn night as we prepared a pasta dinner: "Come and get me!" We abandoned dinner, jumped into our car and sped the 200 miles to Boston.

We found Kevin shivering and gaunt on a street corner near his apartment. He slept in the back seat all the way home.

And then a new and more horrifying psychiatric diagnosis: schizophrenia.

A rehabilitative summer in Colorado Springs in Dean's care, a summer of sublime music-making and recording. And a medication regimen.

Then a cataclysmic mistake: Kevin begged to stay on in Boulder by himself when Dean came home for Thanksgiving. Honoree telephoned him a recipe for roasting a turkey, a fact that still breaks my heart. Dean returned to their apartment after three days and found his brother slumped and gazing at what he said was a large blue musical note suspended in midair. He had stopped taking his medication. His untreated psychosis had almost certainly deepened.

■ ■ ■

Back to Middlebury. Kevin lived with us, still sleeping with his socks on as he had from childhood, and in the company of his cat, a feline pillow of a Maine coon named Spikey. He took classes at nearby Castleton State College, where Honoree was now dean of education. He played the best jazz guitar of his life — the last year of his life — in a combo led by the college's music instructor, at Vermont bars and jazz clubs.

But by then, a great amount of Kevin's personality had deserted him. Normally an impish chatterbox, he now was mute at home, staring at something the rest of us could not see. The sounds from him were mainly giggles: He was listening to the voices in his head.

Honoree and I were ravaged by the realization of our own powerlessness. There was nothing we could do, except shepherd our beautiful son, and . . . shepherd our beautiful son.

■ ■ ■

Then came July 15, 2005, a week before his 21st birthday. Kevin had informed us a few weeks earlier that he had gone off his meds again and would not resume them: He was fine. We pleaded. He remained adamant. This resistance is tragically common to schizophrenia sufferers. It has a name: anosognosia, Greek for "lack of insight."

Honoree and I knew well that stabilizing medications were the only hope for people in Kevin's condition. We understood the consequences of anosognosia. But we could not make Kevin understand. He was fine.

We were not fine. We lived in helpless dread.

Friday, July 15, was a recycling day. On my second early-morning trip through the basement with a vinyl bag in either hand, I grew aware of a presence behind my right shoulder. I turned and saw Kevin. His head was bowed. His yellow hair was illuminated by light from a dirty window. This was his trademark guitar-playing posture. But Kevin was not playing the guitar.

Forever Young.

■ ■ ■

It seems unfair to Dean to conclude my family story with but a brief summation of his own ordeals with schizophrenia. Yet Dean himself, a private soul like his mother, prefers it this way.

Dean was stricken a few years after Kevin's suicide. The loss of his brother had been just one of several contributing stresses he had suffered. The dark years commenced again in our family, years that included Dean's own suicide attempts.

This time, we were all spared the worst.

The psychiatrist who rescued Dean understood the menace of anosognosia. He devised a strategy to help our son surmount it: Instead of oral medications, he assigned Dean to a monthly injection of a drug called Haldol. This made Dean directly accountable to a clinician. The doctor warned our son that if he missed appointments, he would end up in a hospital bed for an indefinite period. Dean loathes hospitals even more than he loathes needles. His treatment has worked for five years, and his re-entry into the light is a blessing in our lives.

■ ■ ■

The three of us now form a small, loving universe in a house on a hillside above Castleton, Vermont. We gather each evening on our front deck or, if it's cold, in our living room, to celebrate a period of quiet conversation organized by Dean, who calls it "Happy Hour." It is a happy hour indeed.

Honoree has finished writing up the results of her 40-year investigation into cell growth and movement, with its implications for understanding cancer. They are pending publication. I give talks and write blog entries that advocate for drastic reform of our country's shockingly dilapidated mental health-care systems. Dean writes and spends time with his beloved companion, the amiable pit bull/boxer known as Rooster the Wonder Dog.

And somewhere, I like to imagine — somewhere as far away as a guitar chord played years ago and now spiraling through the heavens — a brown and yellow Ford Country Squire station wagon makes its way resolutely from the dark gaudiness of Gaslight Square, toward the light. **M**

WILL PARINI



It's Time To Wake Up

As a student, Alex Lindley learned through grieving the death of two friends how the stigma of mental illness keeps people from seeking help. In response, he founded a project that has become a mission for the newly minted lawyer and a group of committed alumni. Story by Kelsey Allen, BA, BJ '10

By the time Alex Lindley was 22, he had delivered two eulogies for close friends who had died by suicide. He wasn't going to give a third.

In September 2014, a few months after his childhood best friend and Mizzou classmate Ryan Candice took his own life, Lindley, BA '15, gathered a group of friends and shared his vision: a documentary film that not only would tell Candice's story but also work to eradicate the stigma of mental illness, illustrate the importance of suicide awareness and prevention, and expose the inadequacies in mental health funding, legislation and available treatment.

With that, the nonprofit Project Wake Up was born.

The Documentary

Lindley was senior psychology major at Mizzou when he launched a crowdfunding campaign that overnight raised $10,000 to create the documentary film. "Man, that was way low," says Lindley three years later. "We didn't know anything about real filmmaking."

He does now.

Although the campaign far surpassed its goal, raising more than $25,000, it was only enough to produce a 12-minute film in 2015 that previewed the full-length feature and helped raise the more than $500,000 for what he envisioned.

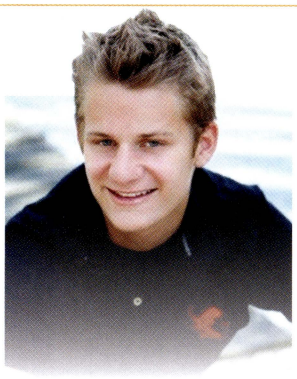
Significant support came from alumni of Lindley's fraternity, Sigma Chi, including Larry McMullen, BA '53, JD '59. As a longtime adviser to the fraternity, McMullen had gotten to know Lindley and was impressed by his determination, dedication and passion. He could also relate to the unrealistic expectations placed on fraternity members to put on a façade of toughness. "Male pride being what it is, oftentimes, if a young man wants to talk about feelings he's having of hurting himself, that's viewed by him as a sign of weakness," McMullen says. "It's a challenge to break through that."

† The Project Wake Up documentary production team films in New Orleans. They are, from left, director Nate Townsend, founder and executive producer Alex Lindley, and director of photography Kyle Krupinski.

After McMullen successfully represented a family who sued the Department of Veterans Affairs for inadequate medical treatment of post-traumatic stress disorder that led to their son's suicide, the Husch Blackwell attorney was even more committed to supporting Lindley's cause. "He's a very effective leader," McMullen says. "He has wonderful instincts to try to help people."

Filming of the full-length documentary began in December 2017 with suicidology expert Thomas Joiner of Florida State University, followed by former Rep. Tim Murphy of Pennsylvania, health care negligence attorney Skip Simpson, American Association of Suicidology president and suicide exposure researcher Julie Cerel, Rep. Joe Kennedy of Massachusetts, and executive director of the National Center for Veterans Studies Craig Brian.

COURTESY ALEX LINDLEY



† Ryan Candice

Serving as executive producer has been Lindley's mission and labor of love. In between law school classes at St. Louis University, where he graduated in 2018, he contacted psychologists and mental health experts and booked flights and hotels so renowned scientists and politicians could be filmed for the doc.

Lindley expects the film to be completed in May 2019, and he hopes to make it available on streaming services. During the past two years, Netflix has released both a TV series (*13 Reasons Why*) and a movie that have been criticized for their depictions of mental illness. In the horror film *Bird Box*, monsters drive people to kill themselves — unless they have a mental illness. Instead of taking their own lives, those with mental illness are consumed with evil and help the monsters destroy humanity. The film was released a month and a day after the journal *Psychiatric Services* published evidence that the series *13 Reasons* heightened suicidal thoughts among youth viewers who were already contemplating taking their own lives.

"We want to use the documentary as a compassionate, science-based vessel to remedy that situation and put out something that will help," Lindley says. "Our film shows this issue really touches everybody in one way or the other. It shows how ridiculous it is to stigmatize it."

Wake Up Chapters

Project Wake Up vice president and *Wake Up* executive producer Danny Kerth, BJ '15, lost his father to suicide when he was in fourth grade and never talked about it to anyone. When Candice died by suicide, "It was a wake-up call for me," Kerth says. "We need to do something about this."

As students in 2015, Kerth, Lindley and their friend group participated in RESPOND, an eight-hour training the MU Counseling Center offers to cover symptoms associated with mental health problems and ways to respond. "It helped us figure out what we, as friends, could be doing better to help one another and figure out how to approach friends who might be going through things," Kerth says.

Inspired by the experience, the students formed the Mizzou Student Suicide Prevention Coalition, which continues to raise awareness and funds that connect students to campus suicide prevention resources; provide a voice to individuals, families and friends who have been affected by suicide; and stage events as outlets for healing.

As production on the documentary wraps up, Kerth is spearheading the expansion of the coalition's model to college campuses nationwide via Wake Up chapters. More than a dozen schools are interested.

Ryan J. Candice Memorial Scholarship

Project Wake Up also awards scholarships to students who plan to provide mental health care in Missouri. According to the Robert Wood Johnson Foundation, Missouri's approximately 17 mental health providers for every 10,000 residents is below the national average and insufficient to serve the population.

So, on Mizzou Giving Day 2018, Project Wake Up pledged $25,000 to create the Ryan J. Candice Memorial Scholarship. In 2019, the nonprofit added $20,000 to the fund, which Mizzou Advancement projects will award between $1,000 and $1,500 a year to an MU social work student. "People typically think of psychologists or psychiatrists, but social workers are actually the largest group of mental health services providers in the U.S.," says Dale Fitch, who directs the School of Social Work. The nonprofit continues fundraising to increase the number of students receiving such scholarships as well as the size of the scholarship endowments.

Lindley, an attorney in St. Louis, also pushes for legislation to boost mental health care funding in Missouri. "The stigma surrounding mental health at Mizzou is already better," he says. "You can see on social media. The students are more receptive, more compassionate. Our goal is to keep encouraging people to destigmatize mental illness and to start conversations so that others feel comfortable reaching out for help."

More: projectwakeup.org. **M**



† Project Wakeup's board includes, front row, from left, Elise Leifeld, Mary Rudelic, Molly Wilson, Libby Hudson. Middle row, Denise Kung, Kim Lindley. Back row, Nick Kossmeyer, Jack Meyerhoff, Alex Lindley, Danny Kerth, Nicholas Lindley. Not pictured are Susan Kerth, James Moffit.

Mental Health at Mizzou

For years, MU hosted Suicide Prevention Week. But one week a year wasn't enough. "We want this to be in front of our campus all the time," says Christy Hutton of the MU Counseling Center. Here's a look at programs and services supporting students' mental health:

The Counseling Center offers in-person on-call services during the day and 24-hour crisis services and consultation to parents, students, faculty and staff who are concerned about a student.

The Take Action for Mental Health workshop provides guidance on how to start a conversation with a student who may be experiencing a mental health problem. More than 2,500 students received training in 2018.

RESPOND trains faculty, staff and students how to react to mental health problems.

Mind Over Mood, a seven-week skills therapy group, teaches students skills for managing symptoms associated with depression and anxiety.

The Anxiety Workshop helps students develop coping skills.

The Contemplative Practice Center offers meditation, yoga and online self-help resources for students feeling stressed or anxious.

More: wellbeing.missouri.edu.

CANDICE: COURTESY ALEX LINDLEY; BOARD: JULIAN BANDALOS


MY LIFE AS A GODDESS
AMY POEHLER
YES PLEASE

Halfway through her college studies, a J-School student walks into a bar and discovers that her greatest love and talent is making people laugh. Because you can't major in comedy, we asked Marina Shifrin to tell us: What is the career path of funny, and what, in the end, does it have to do with college?

THE SCHOOL OF HARD KNOCK-KNOCKS



Essay by Marina Shifrin, BJ '10

Photo by Aaron Fallon

"MIZ-ZOU!" magazine Spring 2019

I WAS 30 YEARS OLD AND LIVING IN LOS ANGELES WHEN MY CAREER STARTED OVER... AGAIN.

I consider the start of career number three as the day a book arrived in my mailbox. As I surveyed the rushed handwriting on the package, my neighbor's chihuahua-piranha mix began nipping at my ankles. I protectively pressed the thick manila envelope to my bosom, hissing at the dog as I passed.

Safely back inside my shoebox-sized apartment, I grabbed scissors and sank into the couch where I'd spent much of the past year avoiding things like sunlight, exercise and conversations starting with, "So, what have you been up to?" I incised the squishy envelope, and, with the delicacy of a neonatal nurse, gently removed the book from its padded case. White and orange letters stood out on the wine-colored background. I ran my fingers down to the title, subtitle and blurb, finally landing on the bottom of the cover to find my name. Inside the pages of that book lived a collection of vulnerable essays comedically detailing the hits and (many) misses of my riotous 20s. The essays were terrifying to write — and even scarier to publish.

With the book's spine pressed into my palm, I flipped through all 318 pages, inhaling the intoxicating processed-tree smell. Sitting in the stillness of my apartment, holding my first book, I sighed. "Here we go," I quietly said to no one.

For many people, the outline of their career begins to take shape in college. I am no different. I vividly remember my first moments as a freshman, feeling the tense anticipation of what's to come, feeling the palpable opportunities at my door, feeling like I'd just been hit by a truck. The last one most likely due to the fact I was actually hit by a truck.

IT happened in the summer of 2006, during the last 10 minutes of my seven-hour trek to the University of Missouri from Boring Suburb, Illinois. I'd been sleeping off a late night of goodbyes, stretched across the back seat of my minivan when my dad called me up to the front. I was the first person in my immigrant family to go to college in the U.S., and he didn't want me to miss my introductory moments as a freshman.

So, I crawled over my worldly possessions, packed into the middle of the van like Tetris pieces, and plopped into the front seat. As we took the exit off of I-70, a man driving an 18-wheeler behind us fell asleep. An odd time to take a nap if you ask me. He lost control of his truck and drove through my beloved Nissan Quest minivan. The windows blew in. The tires blew out. And the car lurched forward. We slid past our exit, naked axles scraping across the asphalt. My minivan was totaled. We, luckily, were not.

I was crushed about the loss of what my friends lovingly referred to as "The Shaggin' Wagon." My car got that nickname because it looked like it was decorated by a disgruntled *Austin Powers* set designer; quintessential fuzzy dice hung from the mirror and a zebra cover hugged the steering wheel. My drug-resistant acne and gun-toting Soviet father made sure that no actual shagging was had in that wagon.

The minivan was more than just transportation — it was my temple. The middle seats were removed, creating a roomy, most likely illegal space where teenagers piled inside during restless suburban nights. My friends and I spent hours in the cavernous van eating Milky Ways, drinking AriZona iced teas and waxing poetic about the future. An endless assault of big 'n' scary questions infiltrated the pheromone-filled air: Who will I be? What will I do? Where will I go? The future never felt as close as it did that summer after high school.

Answering those types of questions about your future is nearly impossible when you're as indecisive as I am. I always felt as if I was looking at my adult



† Marina Shifrin gushes to friends, family and fans at her *30 Before 30* book launch party in Los Angeles.

KYLE ESPEI ETA

life through a View-Master. There was a grainy image of me as a teacher. Click. Now I was a lawyer. Click. Now I was a politician. Click. Now I was a bartender. Click. Now I was a teacher again.

As my friends began applying to colleges, I felt pressured to settle on one of the many nebulous careers I'd fantasized about. My vocational interests at the time included a local radio personality named Roe Conn, waitressing and gossip. Only one of those things was something I could study in college, so I settled on a degree in gossip. Just kidding, I wish. I chose journalism.

Right around the time I should have been walking through the J-School arch, I was instead standing in the middle of I-70, with bits and pieces of my teenage sanctuary littering the roadway. I began to wonder if maybe I'd made a mistake. Click. Maybe I should be a bartender.

That first night at Mizzou, as I changed into my pajamas, tempered glass fell from my underwear and onto the green-tiled dorm room floor. I crawled into the bottom bunk, turned to my "Monkey in Headphones" poster and began to cry.

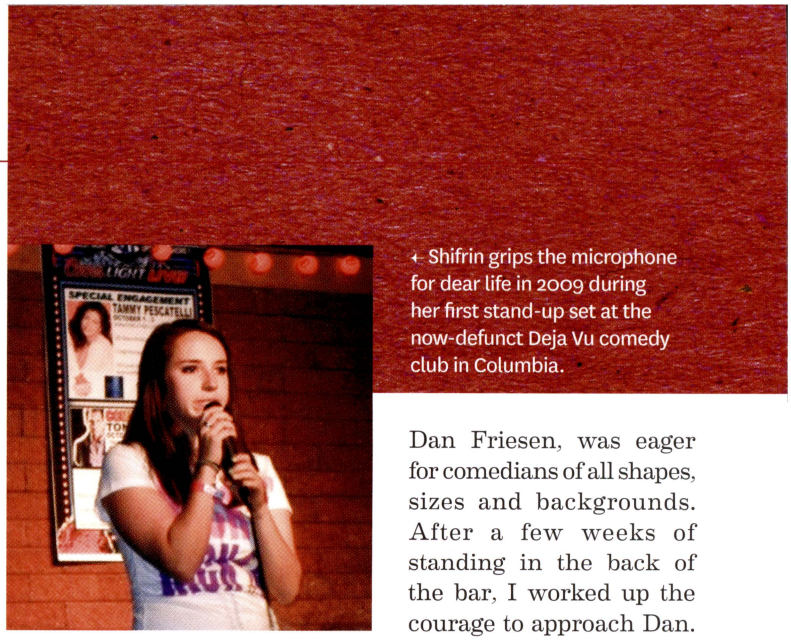
TO distract myself from the accident and horrendous homesickness, I threw my mind, body and soul into classes. The more I studied, the more excited I got about journalism. My dorm was packed with other journalist wannabees, making it easy to develop a sense of kinship with the people on my floor. We did everything together: eat, sleep and even shower. I still miss having echo-y conversations in shared bathrooms. I loved living in the dorms so much that I spent the next three years working in Residential Life.

As my mind expanded in lecture halls and discussion sections, a bigger lesson unfolded outside the classroom: I discovered that I was funny. Like really funny. I'd spent most of my teen years too angry at the awkward and misshapen way my body was developing to notice that I had a sharp tongue, rapid wit and jokes coursing through my blood.

The first hints of humor began with my job as a peer adviser. Standing in the middle of Lathrop Hall's common area, looking out over a group of more than 70 fidgety freshmen, I addressed the room with a small joke. "Hi, my name is Marina, like where you park a boat." Then I heard something incredible: 70 people laughing in unison. It wasn't fall-out-of-your-chair laughter but rather more of a good-natured chuckle. I didn't care. I wanted to hear it again. This was my first audience. Sure, it was a captive bunch of 18-year-olds who didn't want to hear about fire drills or our zero-tolerance policies, but it didn't matter. The powerful feeling of undivided attention began to infect my brain.

Soon, I began craving a real audience, not one that had been lured to me with pizza bribes. So, I tried stand-up. Ugh, that makes it sound like an easy, breezy next step. In reality, it took nearly three years to go from thinking about stand-up to actually taking the stage.

The nice thing about living in The Mizzou Bubble is that it's soft, delicate and well-connected — a perfect place to explore nagging interests. I soon found out about Eastside Tavern's The As Yet Unnamed Comedy Show, whose host, Dan Friesen, was eager for comedians of all shapes, sizes and backgrounds. After a few weeks of standing in the back of the bar, I worked up the courage to approach Dan. He said he'd give me five minutes, and if I did well, I could do seven minutes the next week.



← Shifrin grips the microphone for dear life in 2009 during her first stand-up set at the now-defunct Deja Vu comedy club in Columbia.

Eastside wasn't like the other CoMo bars mostly co-opted by the tanning-bed bods of Greek Life. It was a smoky dive where comic book nerds sang karaoke, straight-edge kids threw dance parties and dramatic, artsy weirdos tried their hands at comedy. It was easy to disappear in the dark corners, what with their dim lighting and creature-feature posters. Mike Myers, Chuckie, Freddy Krueger and other horror movie monsters hung overhead, watching the debauchery below. There was so much to look at, your eyes never landed anywhere for long — except when someone inhabited the stage, the small but well-lit perch I soon came to think of as the eye of the horror hurricane.

I have yet to find another bar like Eastside, one that simultaneously makes me feel so close to invisibility and even closer to exposure.

And so, on the second Tuesday in September of 2009, I willingly entered the vortex of the horror hurricane. The attendance at Eastside was about a tenth of the size of what I was used to in the dorms, but I didn't care. Those people came to hear my jokes ... probably not my jokes, but still, they were a real live comedy audience. As per local tradition for first-timers, Dan instructed the crowd to boo me. Unintentionally — or maybe a little intentionally — this forced me to step into a living nightmare.

"This is really exciting for me," I ventured as the boos died down, "I'm used to telling jokes into a hairbrush." I began pantomiming brushing my hair with the microphone. The audience fell silent. Behind me, Dan whispered something to the DJ that made her laugh. My throat shriveled up, and I considered hurtling my body out the window. With enough force, I can make it onto Broadway, I thought.

I began vamping. "Let's see, what did I want to talk about?" Tightening my grip on the mic cord as if it could pull me to safety, I hid behind the comfort of a joke I'd been telling my residents for years. "I met a girl who had a lily tattoo on her foot, and when I complimented her on it, she said, 'Thanks, it's a lily because that's my name.' That's so cool. My name is Marina. I can't get a harbor tattoo on my foot ... 'Thanks, it's a marina because that's my name.' "

A smattering of giggles rippled through the audience. I continued. "As a Russian person, I've grown so tired of the stereotype that all we do is sit around drinking vodka all day. That is not true. We don't just sit around drinking vodka ... we drink

COURTESY MARINA SHIFRIN

tequila and whiskey, too." Giggles turned into laughter. Dan let out a small "Ha!" and put a cigarette into his mouth. I loosened my grip on the mic cord.

My next joke was about my dad: "My friends ask me how I have the courage to try stand-up. You guys have to realize that I grew up in the suburbs with a Soviet father. He wore a speedo to the local water park. When there's a thin piece of material separating you from your father's sausage and eggs, nothing ever scares you again." Laughter exploded from the audience, and this time, it was followed by an applause break.

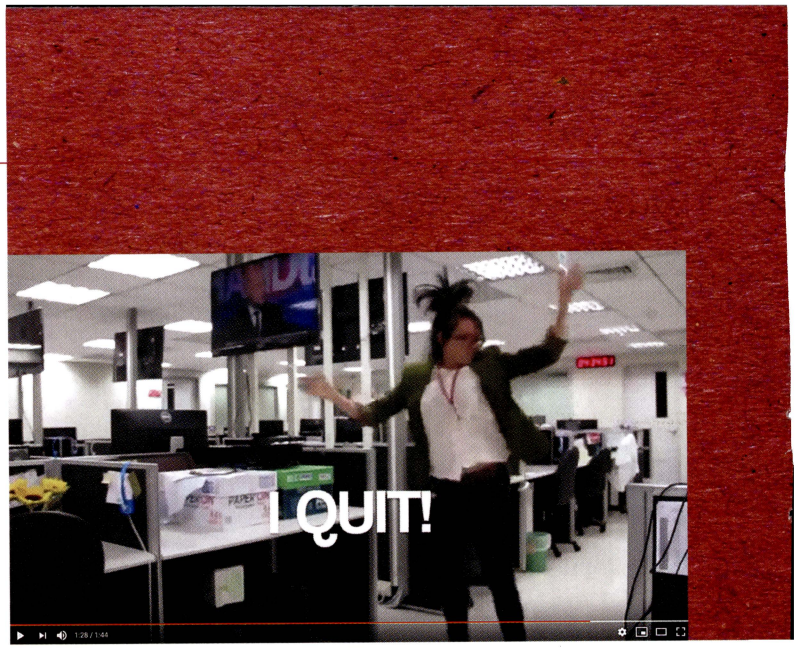
At the end of the night, Dan invited me back to perform the next week and then the week after that. I began doing stand-up at Eastside every Tuesday, occasionally fitting in gigs at dance-comedy club hybrid Déjà Vu. Both venues offered generous college crowds and weekly opportunities to hone material. My set began to evolve as I grew more confident on stage. A few months later, my jokes had beats, tags and segues: "My parents really want me to settle down, so they sent me this Jewish dating site. I'm not sure if you've heard of it ... it's called LinkedIn."

Amid the cheap drinks, monster posters and bighearted laughter, a small shift occurred within me. So slight, in fact, that I barely felt it. I ignored the sensation and continued to do so for the next four years. Instead, I graduated from Mizzou and began job hunting. It was imperative that my work title match what was written on my diploma because if it didn't, then, well, what did all that effort amount to?

AFTER a lengthy search, I managed to secure a financial reporting job at an unknown blog in Brooklyn. My employers were impressed with my degree from Mizzou and willingness to move to New York despite the essentially nonexistent salary. Even though I knew nothing about finance and was barely getting paid, it was a relief to have a job in journalism.

So, how did I go from budding journalist in Brooklyn to first-time author in Los Angeles? To begin, I failed as a journalist. The starting gun sounded, and I immediately tripped over my shoelaces. After a year as a reporter, I still wasn't making enough money to survive in New York, so I quit to pursue a more creative job. If I wasn't going to make money, I was at least going to try to have some fun.

A few months into trying to have some moneyless "fun," I caved and began looking for journalism jobs again, stumbling upon a listing looking for a "Journalist with a sense of humor." Instead of a cover letter, I offered up videos of myself doing stand-up and was hired almost immediately. And so began my stint in one of the strangest positions I've ever had. My main responsibility consisted of writing scripts based on trending news stories. Simple enough. However, my scripts were then translated into Chinese, animated and uploaded to YouTube. My official title — international content editor — made me feel cosmopolitan and important, like a modern-day Murphy Brown. The job was odd, creative and still fell under the umbrella of journalism, which made it feel like all my interests and dreams



† A screenshot from Shifrin's viral (19+ million views) "I Quit" YouTube video in 2013.

collided into one perfect position. A six-week visit to the company headquarters in Taipei persuaded me to leave New York and move to Taiwan. My future, it seemed, belonged in Asia.

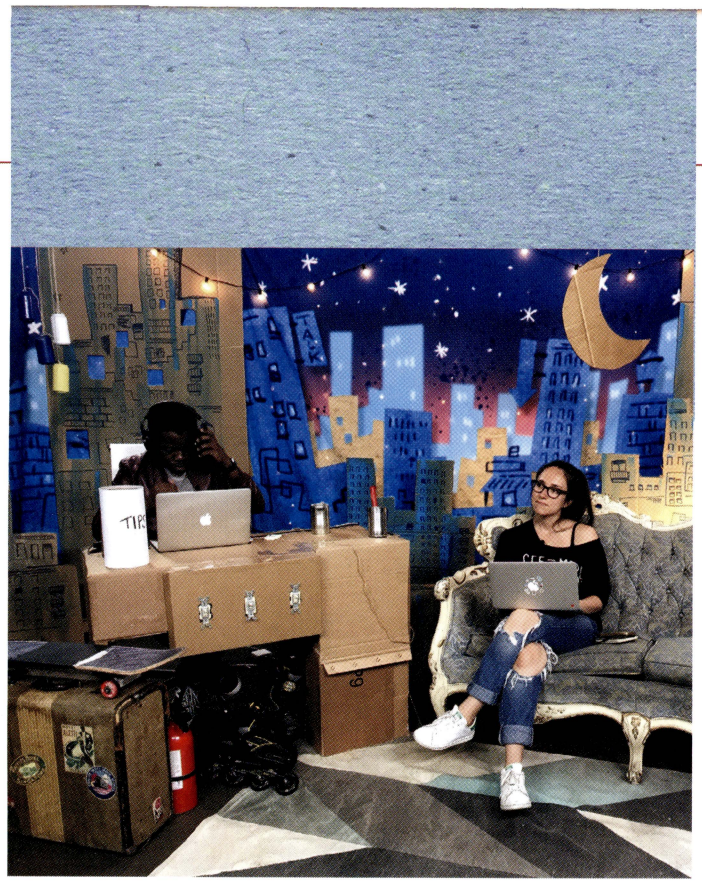
I have since learned the harsh lesson that buzzy job listings touting free beer and an office gym may well be hiding an otherwise horrendous work environment. But at 24, I was too naïve to see the monsters lurking in the corners of the corporate life. These weren't as easy to spot as the ones plastered to the walls at the Eastside Tavern. As my responsibilities increased, I started noticing unsavory personnel and business practices at the company. Soon, the gnawing feeling that I'd chosen the wrong career began to envelop my entire being. For years, I'd had one foot in the journalism world and one foot in the comedy world. At this job, those worlds began to drift apart. I can't do the splits, so I had to choose one.

On Sept. 29, 2013, I posted a YouTube video in which I quit my job: I danced across pristine desks and empty cubicles. I shimmied in bathroom stalls and skanked (it's a dance, I promise) under a digital clock reading 4:29 a.m. My arms flung wildly from side to side as I lived out the dream that everyone in a merciless job has had at one point or another.

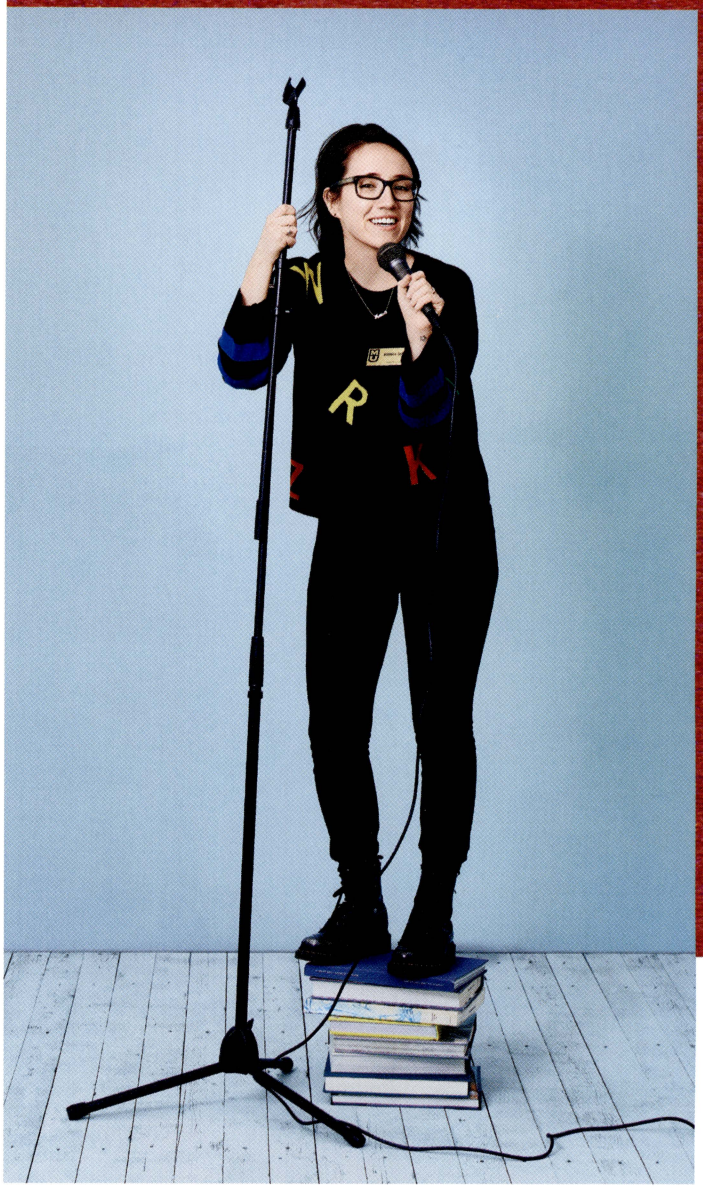
I spent the week prior cleaning up my digital footprint, creating a website and posting samples of my best work. Even though I expected no one to see the video, I prepared for everyone to see it. Because the internet, like Eastside, can make you feel so close to invisibility and even closer to exposure.

The day after I posted the video, the view count climbed to a couple million. Before I could process what was happening, I was flown out to Los Angeles to do the talk show circuit, starting with *The Queen Latifah Show* and ending with *Today*. Before each appearance, producers asked what I wanted my lower-third to read. "Comedian," I sheepishly replied as make-up artists hustled to hide my subtle mustache from the unforgiving studio cameras.

JUST like that, I pulled the emergency brake on my journalism career and screeched into the world of comedy.



† Shifrin with friend and comedian Demi Adejuyigbe on the set of "Talk Show Talk Show," a program they co-created that is in preproduction.



Click. Now I'm a comedian. By the time the excitement was over and my video waned, a few months later, it had received over 19 million views. I spent those few months answering tens of thousands of emails and setting up interviews with strangers who were curious to see if I was as crazy as the internet made me seem. (I'm not, I don't think.) One of those interested strangers was a talent manager who insisted I move to Los Angeles. Click. Now I'm in Hollywood.

The decision to start over was a hard one. I knew if I wanted a fighting chance for a life in comedy, I had to pay my dues. I spent the next four years working entertainment jobs where my main responsibilities included pouring coffee, resetting the Wi-Fi and wrestling copiers. In between taking notes and lunch orders, I was occasionally asked for joke or segment ideas. In those fleeting moments, I began to prove myself as a comedian. Slowly, glacially rather, I began to get offered writing jobs on comedy shows. I wrote for a lot of incredibly smart and hilarious people, and then I wrote for myself. This writing led me to sell a book of essays based on my experiences as a rambunctious and insatiable 20-something — a possibility I never imagined when I was making those big 'n' scary career decisions as an 18-year-old. After that, the opportunity came along to option that book for television. And now, as is customary in Hollywood, I wait to see what happens next, my future just as indefinite and exhilarating as the day I left for college.

I never would've expected Columbia, Missouri, to be at the heart of my journey as a comedian, but that's where I found my voice and figured out how to use it. It turns out, in addition to homework assignments, projects and tests, college is also about sneaking kisses between the Columns, mixing cereals at Plaza 900, free pizza, gawking at people confident enough to lay out in their bathing suits at the rec center, more free pizza, burning bagels in the dorm microwave, study sessions with your crush, quieting your caffeine buzz at Ellis, taking photos of Memorial Union (she always looks so dang pretty), wearing sweatpants in the snow and unexpectedly discovering what makes you tick as a human. These collegiate moments and countless others contributed to my evolution from angry teenager to funny lady. It turns out not pursuing what you studied in college doesn't mean that you can't still apply what you've learned in college. Oh, how I wish I'd known that earlier.

Opening the package containing my first book made the future feel clearer than ever. Click. Author. Holding my tangible words gave me the kind of nervous excitement that I had at the beginning of my time at Mizzou — back when uncertainties of the past melted away to expose endless opportunities ahead.

I've stopped trying to figure out which direction my life will go. There's no use. I've realized that sometimes the road to success lays outstretched before you, and other times a truck wallops you from behind. Either way, you should always wear your seat belt and never try to predict what the future holds. **M**

TALK SHOW: COURTESY MARINA SHIFRIN





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for
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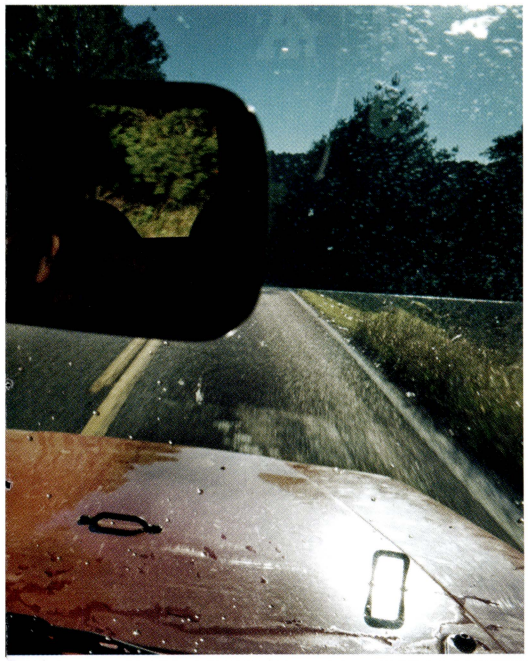
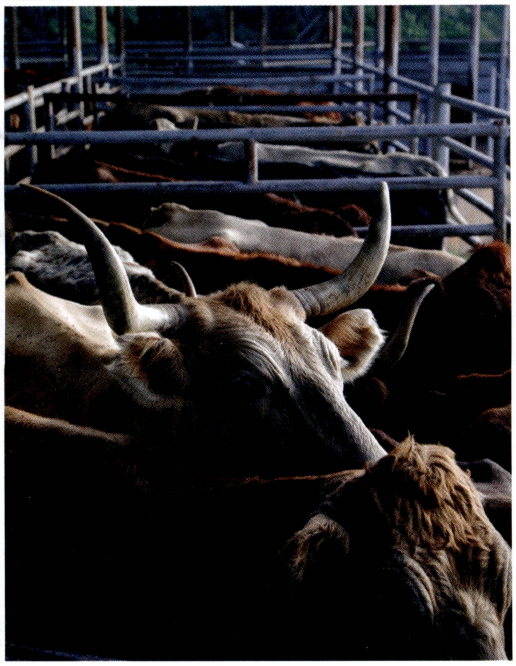






400 frames

After 70 years, the School of Journalism's Missouri Photo Workshop still hews to its founder's dream of making pictures that tell the truth. **STORY BY TONY REHAGEN, BJ '01**





The black Mazda rental

turns abruptly off First Street, right onto Vaughn Avenue and then another breakneck right onto Business 60, circling back toward the town square of Mountain Grove, Missouri. From behind the steering wheel, Becca Skinner scans the blocks for a specific house. A townsperson who gave her the tip mentioned no address or intersection, just the landmark of two motorcycles sitting in the yard and the notion that inside might be a story about a Vietnam veteran for Skinner to photograph — not a lot to go on, even in an Ozarks town of fewer than 5,000 people.

← Previous pages: Photographs from the 70th Missouri Photo Workshop in Mountain Grove, Missouri. Top row, from left: "Double Overtime" by Carlton Ward, Jr.; "Ethan Noble/Wheels on the Road" by Javier Aznar; "The Liars Club" by Troy Enekvist; Middle row, from left: "Hands On: Morgan's Life with Animals" by Yasmin Tajik; "Golden Days" by Daniel Carde; "The Huntress" by Jennifer Guyton; Bottom row, from left: "Quiet Is the Enemy" by Sarah Ann Jump; "My Favorite Farm" by Becca Skinner; "Sale Barn" by Chase Castor; "Raleigh Says Goodbye to Raleigh" by Angus Mordant.

→ Part of Skinner's job was to capture the extraordinary in daily routine of her subject, Ernie Ehlers, a 53-year-old co-owner of Ehlers Cattle Company. "With 200 head of cattle, 1,100 acres and side jobs at neighboring ranches," Skinner wrote in her captions, "to make ends meet, there's never a lack of things to do."

Skinner continues driving in circles, peering less and less frequently out the window — almost as if, deep down, she doesn't really want to find this house. She seems uneasy, a bit out of her element. She's been a freelance photographer for almost a decade, but most of her work has been commercial, where the subjects are often paid models who come to her. This is different. Skinner is one of 39 photographers from around the world attending the 70th Missouri Photo Workshop, a weeklong boot camp sponsored by the University of Missouri School of Journalism. Each year, shooters converge on a small Missouri town, and the first task on Monday morning is finding a person or place or event that merits a photo documentary. Skinner has to inject herself into the subject's home or place of work, into a stranger's personal life. Her story must ring true, so she'll have to prove herself, earn their trust, help them feel comfortable opening up to her lens.

She is also working on a second idea, one that plays to her strengths as someone from rural Montana who lives and works among ranchers. She spent this morning at a ranch 15 minutes outside of town fleshing out that lead — a husband-and-wife team who raise cattle. It's the story she wants to tell, but she's worried that her workshop faculty advisers, the professionals from places such as *National Geographic* and the *Washington Post* who must sign off on her idea, will think that it won't challenge her.

Skinner's meeting with faculty is at 2:20 p.m. The digital clock on the Mazda's dash flashes 11:52. As she looks for a parking spot along the town square, where the city has provided an empty storefront as a makeshift headquarters, she passes more than a dozen men and women, Nikons or camera bags slung over their shoulders, as they approach citizens on the sidewalks and in the street, rush to the Meadowbrook Natural Foods store to chat up the clerk or customers while they sip their midday coffee, or just sit in and around the square's gazebo and regroup.



Now parked, Skinner grabs her camera and ejects the data card containing the morning's photographs from the cattle ranch. She hopes she has her story.

As much as any Russian-

made Facebook meme, dishonest images can damage public discourse. But unlike the stream of propaganda flashing across our TVs, phones and computers, a photograph honestly and expertly rendered captures a moment in all its complexity. The beholder has time to parse the scene, peel back the layers, reflect and hopefully see some part of themselves. Making such images requires

PHOTOS BY BECCA SKINNER

a journalist with a passion for storytelling and the instincts to know where to be and whom to follow. It asks the patience to wait out the instant that frames more than just a scene. The mission is to capture what workshop founder Cliff Edom called "truth with a camera."

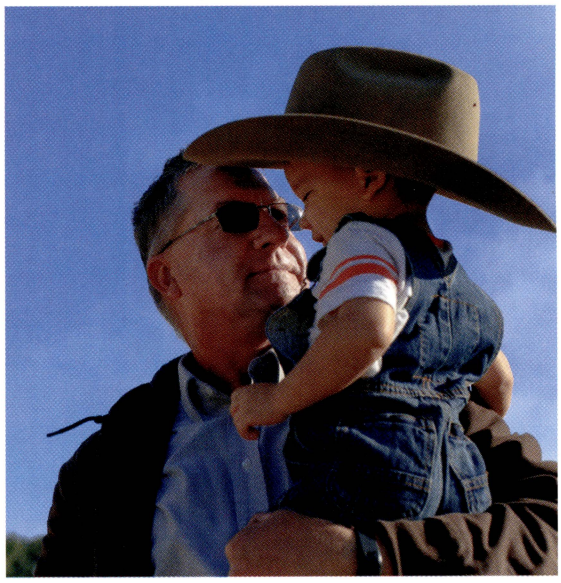
The workshop seeks to nurture this type of photojournalist. Technical know-how is almost a prerequisite. Most attendees have been in the field for years, if not decades. The workshop's goal is to push those skilled shooters in new directions. Co-director Jim Curley told participants as much in his welcoming address on Sunday night. "Expect and be willing to be challenged," he said. "This week will change your whole life if you pay attention."

Curley speaks from experience — not just his own 17 years as co-director but also the institutional experience of a workshop that has withstood the test of seven decades. In fact, during









† The challenge for photographers like Skinner is to get below the surface of her subjects. "Show us not just two people having breakfast together," says Skinner's faculty mentor Torsten Kjellstrand, "but let us see their relationship through *how* they have breakfast together."

PHOTOS BY BECCA SKINNER

his address, he told workshoppers that they were part of "one ongoing 70-year-long documentary project." That project was initiated in 1949, by Edom, a veteran newspaper photographer whom J-School Dean Frank Luther Mott had recruited six years earlier to lead the school's new photojournalism sequence. Edom had worked in small towns in Wisconsin and Missouri during the Great Depression, and he was mesmerized by the stark and gritty images that the photo unit of the Farm Security Administration had published. His idea was to instill that spirit into a weeklong workshop and to illuminate the extraordinary in the seemingly ordinary facets of everyday life in rural Middle America.

Down the decades, most of the 50 destinations have tended to be smaller towns. Despite differences with their big-city cousins, country folk face many of the same problems, such as unemployment, rising health care costs, racism, sexism and political division. And people in these rural outposts tend to be approachable and open to letting a stranger into their homes, workplaces and lives. This certainly seems to be the case in Mountain Grove.

Almost every year, the town hosting the workshop holds some sort of mixer, a Sunday-afternoon picnic advertised weeks ahead of time in the local paper, a chance for curious townspeople to mingle with the camera-toting visitors. Of course, it's also a prime market for story ideas. Skinner was waiting in line for a hamburger (grilled personally by Mountain Grove's city administrator) when she mentioned to a resident that she was interested in farming. Skinner is from the outskirts of Bozeman, Montana, knows a lot of ranchers, and she looks the part, dressing in blue jeans and cowboy boots. The resident introduced Skinner to Kim Ehlers, BS Ag '86, DVM '89, and Ernie Ehlers, BS Ag '87, who had always dreamed of owning a farm, and now balance day jobs — Ernie working on other ranches, Kim working at a veterinary clinic — while trying to keep their 1,100-acre dream from fading.

Intrigued, Skinner took down Kim's phone number and promised to call.

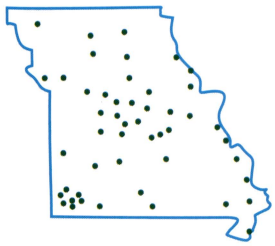
On that frantic Monday morning, Skinner scouted the Ehlers' farm, snapping some sample photos. She knew there was a story there. Her primary concern was that after all the talk about pushing photographers out of their comfort zones, her faculty mentors — Torsten Kjellstrand, a photojournalism professor at the University of Oregon; and Kathy Moran, a senior editor with *National Geographic* — might think a rancher story was a little too much like the portfolio Skinner submitted with her application. To Skinner's surprise, the opposite turned out to be true. "We thought her experience was an asset," Kjellstrand says. "Judging from her portfolio, she was clearly interested in the topic, and we tend to focus more when we're interested. It was also an opportunity to ask her to walk past what she had always done in those staged situations and develop a new skill." Kjellstrand and Moran approved the Ehlers' idea on Tuesday afternoon.

Skinner immediately realized how much she had to learn. Not only did it take some time for the Ehlers to get comfortable in front of the camera, but it was also difficult for Skinner to ease up behind it. Although she had been around and photographed ranchers back in Montana, they were always posed. It was anathema to Edom to control the setting. "Ideally truth is a matter of personal integrity. In no circumstance will a posed or fake photograph be tolerated," he said. Workshop shooters are forbidden from staging photos or even manipulating the lighting with an electronic flash. They are also limited in the number of photos they can take —only 400 digital frames for the entire week. And they're not allowed to go back and delete undesirables. This way, photographers are obliged to slow the mind and think before squeezing that shutter button. "If the photo is bad when you push the button," Curley says, "it'll be bad when we see the picture."

The photos Skinner brought back to her team that Wednesday were not good. She'd been nervous, afraid she'd miss openings to make a telling image. She had been reluctant to get close. "It's not at all unusual to have first photographs be something of a scramble," says Kjellstrand. "Most of us don't constantly succeed. We fail our way forward. She tried stuff. It didn't work."

Frustrated, Thursday's shots saw Skinner backsliding to the more fabricated style she was used to. The results, though aesthetically pleasing, still missed the story she was trying to tell. That evening at the group's nightly meeting, both Skinner's advisers and her fellow photographers urged her to let go. "Once we photographers get technically proficient, there's a strong sense that we can just shoot our way out of problems by simply making beautiful photos," Kjellstrand says. "Kathy and I kept encouraging her to get below the surface. To photograph who they are, not what they do. That sounds simple. But it challenges you to see more closely. Show us not just two people having breakfast together, but let us see their relationship through how they have breakfast together."

Skinner had one more day to get her story. She had accepted the Ehlers' offer to move from the Days Inn into one of the bedrooms abandoned by



Covering the State

Every year since 1949, the Missouri Photo Workshop has documented citizens' lives in one of the state's towns. Hundreds of images across many locations may be viewed at mophotoworkshop.org.

1949 Columbia
1950 Forsyth
1951 Hermann
1952 Jefferson City
1953 Boonville
1954 Mexico
1955 Rolla
1956 Lexington
1957 Hannibal
1958 Sikeston
1959 Columbia
1960 Aurora
1961 Cape Girardeau
1962 Joplin
1963 Chillicothe
1964 Neosho
1965 Carthage
1966 Louisiana
1967 Marshall
1968 Salem
1969 Forsyth
1970 Bolivar
1971 West Plains
1972 Washington
1973 Kirksville
1974 Warrensburg
1975 Nevada
1976 Forsyth
1977 Cassville
1978 Lebanon
1979 Monett
1980 Sedalia
1981 Neosho
1982 Clinton
1983 Mount Vernon
1984 Forsyth
1985 Poplar Bluff
1986 Hannibal
1987 Caruthersville
1988 Jefferson City
1989 Maryville
1990 Osage Beach
1991 Ste. Genevieve
1992 Lexington
1993 Bolivar
1994 Washington
1995 Trenton
1996 Salem
1997 Carthage
1998 Boonville
1999 West Plains
2000 Lebanon
2001 Kearney
2002 Fulton
2003 Louisiana
2004 Hermann
2005 Marshall
2006 Moberly
2007 Chillicothe
2008 St. James
2009 Festus / Crystal City
2010 Macon
2011 Clinton
2012 Troy
2013 Trenton
2014 Platte City
2015 Perryville
2016 Cuba
2017 Eldon
2018 Mountain Grove

† At the close of the weeklong workshop, the photographers' work is on display at the local gymnasium, where the subjects, like Ernie Ehlers, can come and see their neighbors, their towns and even themselves with an outsider's perspective.



BARN: BECCA SKINNER; SKINNER: SARAH MENZIES

the Ehlers' two grown daughters. Only on Friday morning did this stranger's room start to feel like home. She rose with the Ehlers that Friday before dawn and shared a breakfast of granola, yogurt and strong coffee. Then she grabbed her camera and trailed her subjects as they trudged out into the thick Ozark morning fog.

On Saturday, the workshop

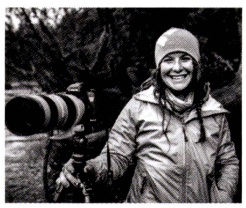
shifts across town to the Mountain Grove High School gymnasium. Folding tables are spread out across the front corridor, the wooden floor and even around the upper mezzanine, each one displaying an array of prints. Between 10 a.m. and 2 p.m., community members file in and quietly peruse the documentaries, pointing at the faces and places they recognize as seen from afar. They are tourists in their own town.

Skinner's table contains the 11 photographs of her story, entitled "My Favorite Farm." Some photos are atmospheric: a weathered barn, a dried cow skull, farm trucks aiming their headlights into the foggy fields. But the spine of the feature are the frames of Ernie wrestling a calf to get its ear tag attached; carrying buckets of feed; putting his cowboy hat on the head of his little nephew; arm around a smiling Kim at the dinner table; and leaned up against his four-wheeler, hands in his pockets, staring at the ground. One of the captions quotes the farmer: "You have to leave the land and cattle better than you started so the ranch continues past your time here as a steward of God's gifts."

The faculty were pleased with Skinner's final work. Rather than showing the cliché of farmers simply gritting through their daily trade, Skinner's photos show a married couple working hard to pay the bills through several jobs while trying all the while to keep their farm afloat. The vibrant color photos show a working husband and wife just trying to survive while doing something they love — even on the days they don't feel like doing it. "There was a point where [Skinner] let go of what she thought it should be," Kjellstrand says. "There's a romance to cowboys and ranching in America that is not all that connected to the reality. Skinner knew this, but she finally let them be themselves."

For her part, Skinner learned a lot over the week. "I wanted to get back in touch with the storytelling that I had started my career doing," she says. "It was good to flex those muscles again and also to practice pausing with a limited amount of frames. I think that made me a better photographer."

But today, the real seal of approval comes from the Ehlers. As they looked over Skinner's images, Kim cries and Ernie beams with pride, seeing themselves and each other as they never had before. **M**



† Becca Skinner is a freelance photojournalist from just outside Bozeman, Montana, and now she's a graduate of the Missouri Photo Workshop.

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Sabrina Quick
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Mary Rademacher
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Sheena Rice
Jake Rice
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Pamela Jane Riedel
Marla Trussell Riley
Michael Riley
Severin Roberts
Michelle Rodemeyer
Todd Rodemeyer
The Honorable Wes Rogers
Henry Rothenberg
Matthew Rothermich
Kevin Routh
Linda Routh
Professor Michael Rovetto
Sandra Ruiz
Louesa Runge Fine
Richard Ruppert
Jessicah Renee Sanders
Jared Sartain
Kristi Savage-Clarke
Alexander Schalla
Dale Schenewerk, Sr.
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Patty Schertzer
Carol Ann Schilb
Fredrick Schilb
Sharon Degen Schleinat
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R. Mark Schlimme
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Ryan Schmidt
Kristina Marie Schmidt
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Honoring Higher Ed Champions

Lt. Gov. Mike Kehoe believes that education is critical to Missouri's future. "The success of our economy depends on an educated workforce," says the longtime supporter of higher education, explaining his passion from a "policy perspective."

From a personal perspective, the root of his passion is surprising given his position but no wonder given his past. From age 15, Kehoe worked and gave his paychecks to his mother, a single parent of six. In what seemed at the time like an either-or decision, he continued to work and help out rather than go to college. "I wish I had figured out a way to go," says the man who has since spent his career making it easier for high school graduates to do just that.

It's a commitment he shares with David Russell, PhD '08, former state commissioner of higher education. Both men received 2019 Henry S. Geyer Awards, named for the St. Louis representative who in 1839 introduced a bill to establish the University of Missouri. The Mizzou Alumni Association's Legislative Network Committee annually presents the awards to one state-elected official and one citizen for public service to higher education.

Before he became lieutenant governor last year, Kehoe, serving as a state senator, helped restore bone-deep funding cuts to the University of Missouri System. For his part, Russell "pushed for colleges and universities to prioritize affordability, and throughout his tenure, Missouri was recognized as having the lowest rate of tuition increase in the nation," writes Zora Mulligan, current commissioner of higher education, in her nomination letter on his behalf.

Having also improved first-year retention and graduation rates, Russell sees himself as both a bridge builder and a wrecking ball, "knocking down barriers and forming alliances in order to build public and political support for higher education funding and reform," as he explains it.

† For their support of higher education, David Russell, former state commissioner of higher education, left, and Lt. Gov. Mike Kehoe, right, received 2019 Henry S. Geyer Awards from the Mizzou Alumni Association. They are shown here at the presentation event with Gov. Michael Parson at the governor's mansion in Jefferson City.

Russell served the University of Missouri System in several senior-level positions prior to his commissioner appointment from 2010 to 2016. Before his 27-year career in higher education, he served for 22 years in the U.S. Army, achieving the rank of lieutenant colonel and winning numerous awards and decorations including the Legion of Merit, Bronze Star and Purple Heart medals. With such a record, he deeply appreciates the Geyer Award's significance and meaning. "People tell me they respect the Geyer Award because it recognizes dedicated public servants who work hard in the public interest," he says, "and I am proud to be associated it."

In retirement, Russell continues to serve higher education and, coming full circle, now helps student veterans through MU Chancellor Alexander Cartwright's Military and Veterans Standing Committee. In office, Kehoe provides "the leadership to ensure our higher education institutions can equip the skilled workforce Missouri needs for decades to come," Gov. Michael Parson writes in his letter of nomination.

Both the governor's confidence and the Geyer Award mean a lot to Kehoe, whose four children are all college grads. "I've received a lot of awards," he says. "This one is going on the top shelf." — *Dawn Klingensmith, BA, BJ '97*

BILL GREENBLATT



MICHAEL CALI

Help Make It Right

In March, Mizzou celebrated a successful Giving Day by encouraging alumni and friends to go "all in" for the university (See Page 14). The theme had been released a few weeks earlier when the MU community, alumni base and state of Missouri decried sanctions the NCAA leveled against Mizzou's softball, football and baseball programs. The outrage was swift, not only because Mizzou cooperated with the NCAA's investigation of an athletics tutor but also because the punishment seemed excessive to many. As a result, student-athletes and coaches not involved with the situation are being punished severely (See Page 6).

Board of curators Chair Jon Sundvold, BS BA '83, summed it up: "A dangerous precedent has been set. Why would an institution be punished unjustly after doing the right thing?"

The university's appeal is under way. In the meantime, alumni often ask how they can help. Here are some ideas, in keeping with the "Make It Right" campaign launched by athletics:

- Several local, regional and national articles have been published about the case. Share these articles using the #MakeItRight hashtag.
- Communicate with your legislators. Mizzou has received support at the state and federal level.
- Support the Tigers. Nothing demonstrates alumni support better than showing up at games and cheering for our Tigers. Check out mutigers.com to see how Mizzou Athletics is encouraging engagement with the Tiger Stripes ticket program and the 18,039 campaign.

Through the years, I've learned that athletics is an important tie that binds the Mizzou family. Although the result of our efforts may be in doubt, let's go "all in" once again and fight for what is right.

TODD MCCUBBIN, *M ED '95*
executive director, Mizzou Alumni Association
Email: mccubbint@missouri.edu
Twitter: @MizzouTodd

Class Notes

1960

★★John P. Miller, BA '65, of Toronto wrote *Love and Compassion: Exploring Their Role in Education* (University of Toronto Press, 2018).

★Timothy Jeffries, BS BA '69, of Moberly, Mo., was elected to the board of directors of the Bank of Cairo and Moberly.

1970

★Neil Douthat, MBA '72, of Kansas City, Mo., was co-president of the Snow Ball charity event, which raised $3 million to support programs and services offered by Catholic Charities of Northeast Kansas.

★★John W. Brown, Jr., BS ME '73, of Lee's Summit, Mo., MU basketball player from 1970 to 1973, was honored with a number retirement ceremony of his No. 50 jersey March 9 at Mizzou Arena.

Pamela Ingram, BJ '75, of Columbia, Mo., was named Most Impactful Executive Director by Impact COMO 2018. Ingram is the founder of Granny's House.

★Robert Maxey, BS BA, BS Ag '75, of Columbia, Mo., retired from his position as Health Physics Technician for the MU Research Reactor.

★★C. Patrick Koelling, BS IE '76, MS '77, MBA '78, of Blacksburg, Va., associate professor of industrial and systems engineering at Virginia Tech, was named associate professor emeritus by the Virginia Tech board of visitors.

Roger Schiffman, BJ '77, of Tallahassee, Fla., founded Fairways for



Events

May
2, Mizzou Tiger Ball, Springfield
mizzou.com

3, Chase Daniel and DFW Mizzou Golf Tournament, Keller, Texas
mizzou.com

10, Tiger Prowl and Senior Sendoff
mizzou.com

17–19, Commencement
missouri.edu

June
1, St. Louis Black and Glow
mizzou.com

8–July 28, Small Art/Big Stories exhibit, Boone County Historical Society
boonehistory.org

29, Mizzou Night at Petco Park in San Diego
mizzou.com/PadresCards

July
1, Mizzou Alumni Association President Steve Hays, BS BA '80, takes the reins
mizzou.com

12–19, Tourin' Tigers, Alaska *mizzou.com*

August
18, Tiger Walk
mizzou.com

September
7, Tiger football vs. West Virginia
mutigers.com

21–22, Columbia Heritage Festival
visitcolumbiamo.com

Freedom, which funds trips to Ireland and Scotland for injured U.S. veterans.

1980

★Harry Bozoian, BA '85, of Columbia, Mo., joined Klingner & Associates as a business development manager.

1990

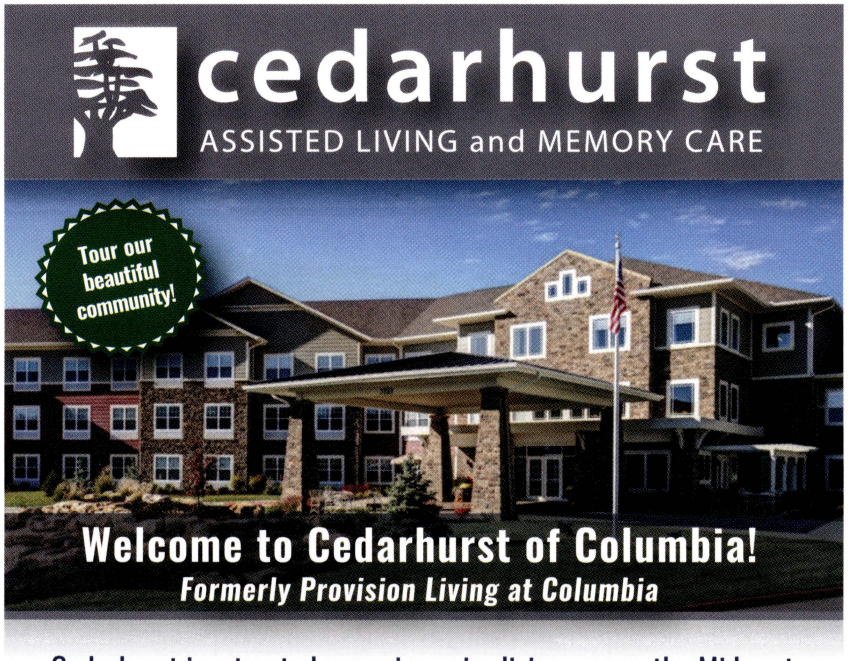
★★John Glascock, BS CiE '90, of Columbia, Mo., was named interim city manager for the city of Columbia.

Kerri Linder, BS Acc '90, of Columbia, Mo., wrote *Iconic Restaurants of Columbia, Missouri* (Arcadia Publishing, 2018).

★★Mark Wilkins, BA '90, of St. Louis was named by *Barron's* as one of its Top 1200 Financial Advisors in America in 2019.

★★Christopher Gier, BS BA '92, of Angleton, Texas, is president and general manager at BSCOS Office Technologies.

★Todd Ripper, BS BA '92, of Ankeny, Iowa, is a vice president and information security manager for Wells Fargo.



Jason Birnbaum, BS BA '93, of Elmhurst, Ill., is vice president of operational and employee technology for United Airlines.

Mamata Reddy, BA '93, BJ '93, of Evanston, Ill., chef-owner and lead instructor at Spoonfoolery Creative Cooking & Baking, offered free meals to federal employees during the February 2019 government shutdown.

★Pat Fanning, BA '95, JD '98, of Kansas City, Mo., is a co-founder of PEAK Litigation.

Jon Nash, BS BA '96, of Wichita, Kan., is president of Cargill Protein.

★★Derrick Goold, BA, BJ '97, of St. Louis was named Missouri Sportswriter of the Year by the National Sports Media Association.

★★Kathryn Feather, BJ '99, of Garden Grove, Calif., is director of communications for TLC Public Charter School.

Toby Teeter, JD '99, of Carl Junction, Mo., is president of the Joplin Area Chamber of Commerce.

2000

Matthew Burkemper, BS BA '00, of St. Louis is senior vice president of corporate development at Commerce Bank.

Derrick Chievous, BGS '00, of Columbia, Mo., MU basketball player from 1984 to 1987, was honored with a number retirement ceremony of his No. 3 jersey Feb. 19 at Mizzou Arena.

★★Jay Lindner, BS BA '02, of Columbia, Mo., was named to the *Columbia Business Times'* 20 under 40.

GIVING SPIRIT



Gordon Spainhower, BS EE '70, and **Joyce Spainhower** loyally serve their community of Columbia, Mo. by volunteering to train service animals as a way to help others. In the same giving spirit, they also support students with educational opportunities and scholarships through the University Of Missouri College of Engineering. The Spainhowers will endow their scholarships through beneficiary designations from their IRAs.

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★★**Jean Colbert, BS Ed '52,** of Riverside, Calif., Dec. 19, 2018, at 88. She taught elementary school for 10 years and was an avid traveler.

★**John F. Eyler, BJ '52,** Columbia, Mo., Nov. 16, 2018, at 88. He was a member of Kappa Sigma.

★★**Beverly Miller O'Rourke, BA '52,** of Crawfordsville, Ind., March 25, 2018, at 90. She was a member of Chi Omega.

★★**Betty Spaar, BJ '54,** of Odessa, Mo., April 11, 2018, at 85. She was the owner and publisher of *The Odessan* from 1960 to 2018 and a past president of the Missouri Press Association.

★**Gustav "Gus" Lehr, Jr., BA '57, JD '59,** of Columbia, Mo., Dec. 1, 2018, at 89.

★**W. Thomas Morgan, Jr., BA '57, MD '61,** of Columbia, Mo., Nov. 29, 2018, at 83. He was a member of Phi Beta Kappa and served in the U.S. Army.

★★**Philip Huff, MS '59,** of Torrance, Calif., March 17, 2018, at 88. He served in the U.S. Army and worked as a civil engineer.

★★**Vaugh H. Yost, BS ME '59,** of Huntsville, Ala., Jan. 10, 2019, at 82. He was a member of Delta Upsilon, served in the U.S. Army and worked for NASA at the Marshall Space Flight Center.

★**Donald Eugene Chaney, JD '60,** of Springfield, Mo., Nov. 16, 2018, at 86. He was one of 25 U.S. cadets to participate in a foreign exchange program with the Royal Air Force in Great Britain.

★★**Scott G. Lentin, BS BA '60,** of Phoenix, Ariz., Dec. 30, 2018, at 80. He was a member of Zeta Beta Tau and served in the U.S. Army Reserves.

★**Harvey Levine, BA '61,** of Rancho Santa Margarita, Calif., Sept. 9, 2017, at 78.

★**Robert Von Talge, BS BA '61,** of Festus, Mo., Oct. 17, 2018, at 79.

★**Robert Wilson, BA '61, JD '63,** of Edwardsville, Ill., Dec. 12, 2018, at 79. He was a member of Phi Gamma Delta and worked as an attorney for 50 years.

★**Niki Blacklock, BS Ed '62,** of Williamsburg, Mo., April 20, 2018, at 77. She was a special education teacher.

★★**Martha "Marty" Hall, BS Ed '62,** of Racine, Wis., Oct. 20, 2018, at 79. She was a member of Chi Omega and worked as a teacher and secretary.

★**Dwight Douglas, BA '65, JD '68,** of Neosho, Mo., July 29, 2018, at 75. He was a U.S. Army veteran.



★ MIZZOU ALUMNI ASSOCIATION ANNUAL MEMBER | ★★ LIFE MEMBER

Randy Cole, BA '03, MPA '05, of Columbia, Mo., was named to the *Columbia Business Times*' 20 under 40.

★★Lara Pieper, BS BA '03, of Columbia, Mo., was named to the *Columbia Business Times*' 20 under 40.

Jennifer Fuller, BJ '04, of Kansas City, Mo., is a senior vice president of FleishmanHillard.

Michael Lichte, BS '04, of Kansas City, Mo., is a vice president and general manager at Dairy Farmers of America.

★Liz Tucker, BS HES '04, of Columbia, Mo., was named to the *Columbia Business Times*' 20 under 40.

★Jason Batt, BS BA '05, of San Diego, is vice president at Nelson Pension Services.

Krista Kippenberger, BGS '05, of Columbia, Mo., was named to the *Columbia Business Times*' 20 under 40.

Amy Stewart, JD '06, of Dallas is a founding partner of Stewart Law Group PLLC.

Amanda Yoder, BS BA '06, MBA '07, JD '11, of Kansas City, Mo., has been promoted to partner at Lathrop Gage.

Josh Devine, JD '07, of Columbia, Mo., was named to the *Columbia Business Times*' 20 under 40.

Kelley Frink, BS Acc, M Acc '07, of Columbia, Mo., is chief financial officer at Veterans United Home Loans.

Natalie Ebel, BS BA '08, of New York is co-owner and co-founder of Backdrop.

Trevor Flannigan, BS BA '09, of Lee's Summit, Mo., is co-owner of ProfessionalChats.

Timothy Holtsman, BS IE '09, MBA '10, of Columbia, Mo., was promoted to the role of engineering manager at MidwayUSA.

Therese Shain, M Ed '09, of St. Louis, Mo., received the Milken Educator Award.

2010

Jolyn Sattizahn, MPA '10, of Columbia, Mo., was named to the *Columbia Business Times*' 20 under 40.

Jason Steingraber, EdD '10, of Springfield, Mo., was nominated by the Springfield Association of Elementary Principals as Missouri Distinguished Principal. Steingraber is the principal of Wilder Elementary.

Jose Caldéra, JD '11, of Columbia, Mo., was named to the *Columbia Business Times*' 20 under 40.

★Peter Hofherr, PhD '14, of St. James, Mo., was named the 2018 Agricultural Leader of the Year by the Agricultural Leaders of Tomorrow.

Sarah Cochran, BS '15, of Columbia, Mo., was named to the *Columbia Business Times*' 20 under 40.

Grant Boone, BS Acc '16, of St. Louis is a staff accountant at SFW Partners, LLC.

Payton Head, BA '16, of Chicago is a program coordinator at Obama Foundation Scholars.

Births

Samantha Friedman Kupferman, MA '07, and Nate Kupferman of Bethesda, Md., announce the birth of Max Julian Kupferman June 2, 2018.

Faculty Deaths

★Allen W. Hahn, BS Ag, DVM '58, of Columbia, Mo., March 20, 2018, at 84. He was a professor emeritus in the MU College of Veterinary Medicine.

Deaths

★Joe Cooper Keith, BS ME '48, of Malvern, Ark., June 20, 2018, at 94. He was a member of Phi Gamma Delta and a U.S. Navy veteran.

★★James Morrissey, BA '48, BJ '49, of Louisville, Ky., Dec. 29, 2018, at 95. He served in the U.S. Army.

Frank William Van Luik, Jr., BS ME '48, of Schenectady, N.Y., Jan. 30, 2019, at 95. He was a U.S. Army veteran.

★Willard Larsen, BJ '49, of Round Rock, Texas, Sept. 24, 2018, at 93. He was a member of Tau Kappa Epsilon and a U.S. Army veteran.

★John Morehead, BS Ag '50, MS '65, of Warrensburg, Mo., Jan. 13, 2019, at 91. He was a U.S. Navy veteran.

★★Pauline Pollock, BS Ed '50, of Fountain Hills, Ariz., Jan. 25, 2019, at 91.

★Claude Sparks, BJ '50, of Huntsville, Ala., Sept. 19, 2018, at 89. He was a member of Tau Kappa Epsilon and established *The Franklin Citizen* newspaper in Alabama.

★Donald McCurdy, BS Ed '51, M Ed '52, EdD '67, of Overland Park, Kan., Dec. 12, 2018, at 89.





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THE ODESSANS

Odessa, Missouri, sits 40 minutes east of Kansas City, straddling Interstate 70. In 1979, the year Jim Fitterling and Brett Begemann graduated from Odessa High School, the town was home to 3,000 people, and you'd likely have seen as many tractors as cars in the school parking lot. Although not close friends in high school or at the University of Missouri, the men kept in touch as they climbed in their respective careers — Begemann, BS Ag '83, is chief operating officer at Bayer Crop Science, and Fitterling, BS ME '83, is CEO of Dow. Say what you will about chance, but to dismiss as luck the success of these two Odessa graduates could overlook much of what made their rise possible. — *Erik Potter*



Brett Begemann

Begemann grew up on a farm outside Mayview, a town of 300 near Odessa. He did a variety of chores; by age 10, he was driving tractors, balers and moving hay. He was a smart kid who earned good grades without much studying. He didn't consider himself a natural leader, and the thought of speaking to a group nearly made him ill. But he had a passion for farming and loved his school's Future Farmers of America chapter — especially its mentors, all three of whom were members of Alpha Gamma Sigma, traditionally an agriculture fraternity.

When Begemann enrolled at Mizzou, he followed their example. The combination of Mizzou and Alpha Gamma Sigma proved transformational. His fraternity brothers taught him the study habits he needed to succeed in college. Begemann says he would have washed out in a year if not for his house's mandatory study halls. Navigating classes, campus and the fraternity also helped him overcome his public-speaking anxiety, which would be "incredibly valuable" in his career. "I have no hesitation going into a crowded room and coming out knowing people," Begemann says. "I couldn't have done that in high school."

After graduation, Begemann took a sales job with Monsanto. Hard work and a connection to customers helped him advance. When Bayer bought the company in 2018, he was named the chief operating officer of Bayer's crop science division. With all that, Begemann's most challenging leadership role was his time serving as fraternity president. It was there he realized that it didn't matter how smart he was or how hard he was willing to work: He couldn't do everything. He needed help, and to get it, he needed to animate people behind a common vision. That lesson shapes his leadership style to this day. "I've never viewed my role, ever, as telling people what to do," Begemann says. "I have the opportunity to include and guide them and provide context to what we're trying to do."

Jim Fitterling

Fitterling also grew up on a farm. He and his parents, who were both teachers in the Odessa school system, raised cows, hogs and chickens. Fitterling did morning chores, evening chores and school activities, which kept him busy and instilled in him a strong work ethic. He and his father built every building on the farm. At school, he excelled in his vocational-education classes, learning how to weld, bend sheet metal and operate a four-color printing press. In the school electronics shop, he made an oscilloscope, which displays the waveform of electronic signals.

He also had a head for numbers and had won a couple accounting competitions in high school. So at Mizzou, he chose to major in accounting. Fitterling joined the Farmhouse fraternity as a freshman and, during that first semester, queried upperclassmen in the house about their majors and intended career paths. He quickly realized there were better options for him than accounting. Like engineering. "One of the things engineering does is, every problem is a little different, so you have to tackle every situation on its own," Fitterling says. "If I had stayed in accounting, I believe I would have become bored with it."

Fitterling also received formal leadership training from Farmhouse, which helped set him on an executive path. "The first courses I got in leadership, time management and management-by-objective came from the fraternity and the leadership program they had," he says.

Fitterling joined Dow in a technical sales role the year he graduated. He changed jobs many times but never companies. In 2018 he was named CEO. "The biggest way to get ahead is to make an impact," Fitterling says. "No one gives you the next opportunity until you've demonstrated you can do it in your current job."



COURTESY BRETT BEGEMANN AND JIM FITTERLING

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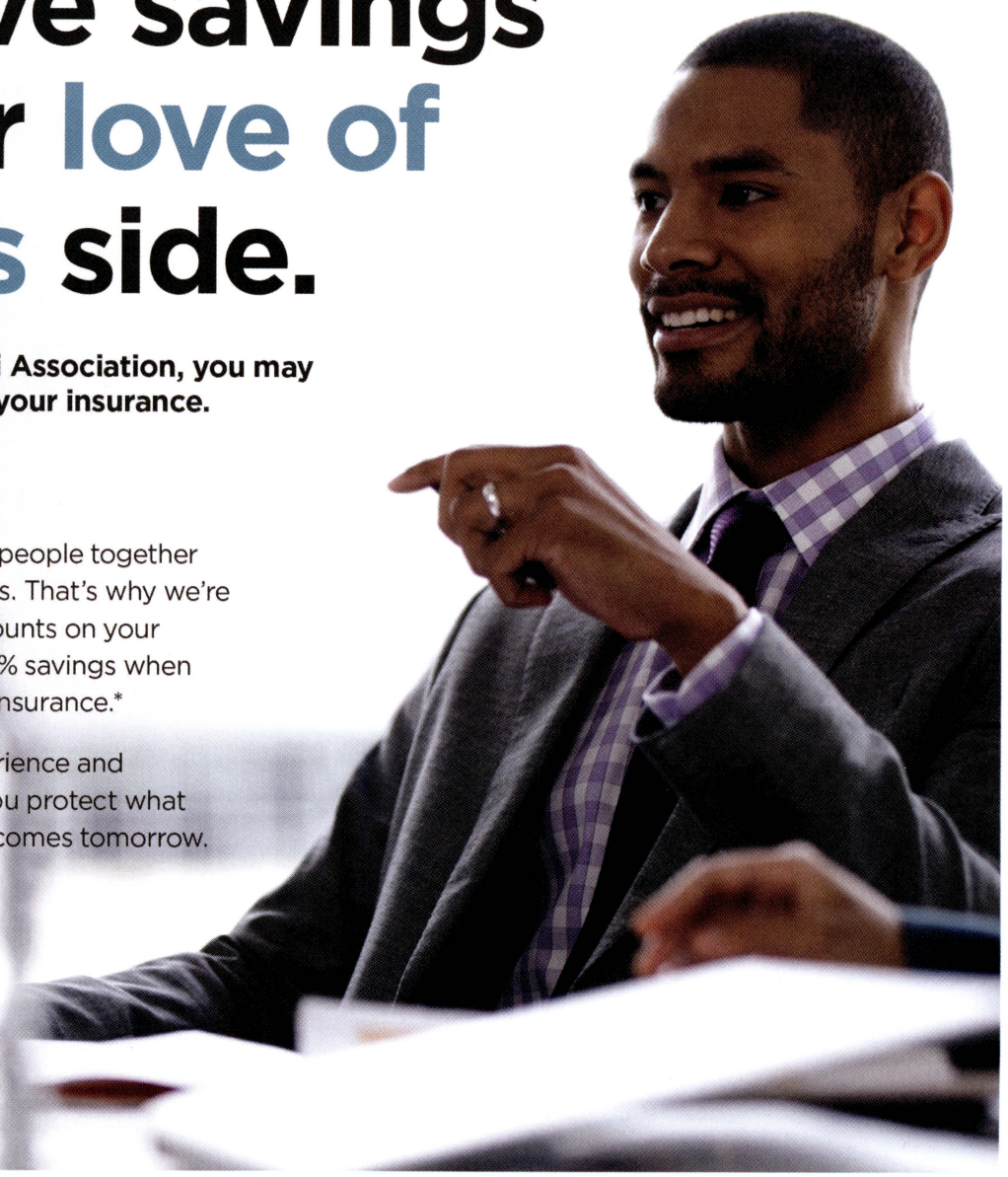

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MIZZOU ALUMNI NEWS

★★**Mable Grimes, BS HE '65, MS '68, PhD '76,** of Columbia, Mo., Jan. 31, 2019, at 75. She worked for MU Extension for 37 years.

★**Dwight Hall, BS Ag '69,** of Mound City, Mo., April 22, 2018, at 71. He was a member of Phi Kappa Psi and served in the Army National Guard.

★**Joseph Earl Donaway, BS Ag '72,** of Kansas City, Kan., Jan. 16, 2019, at 72.

★★**Rodney Kelly, BA '72, MEd '90,** of Columbia, Mo., July 19, 2018, at 67.

★**Lester T. Boggs, BS BA '73, MBA '74,** of Arlington, Va., Oct. 11, 2018, at 67. He was a member of Marching Mizzou and Air Force ROTC.

★★**Bonita Campbell, M Ed '74,** of St. Louis March 7, 2018, at 77. She worked in public education for 37 years.

★★**Donald Larkin Foster, MA '74, Phd '82,** of Columbia, Mo., Dec. 4, 2018, at 86. He was a U.S. Army veteran.

Douglas Furtek, BS RPA '74, of Ansonia, Conn., Jan. 10, 2014, at 63.

★**Barbara Brazos, BA '77,** of Fulton, Mo., Sept. 21, 2018, at 67. She was a psychiatric nurse for more than 30 years.

★★**Paula Gage, BSN '77,** of Columbia, Mo., Aug. 29, 2018, at 71. She was a surgical heart nurse for 30 years.

★**Ann Janyce Kellett, BSN '77, JD '87,** of Kansas City, Mo., Aug. 4, 2018, at 63.

★**Mary Pettigrew, BSW '77,** of Corrales, N.M., Jan. 5, 2019, at 63.

Dean Ray Longmore, PhD '80, of Mapleton, Utah, Oct. 14, 2018, at 77. He was a professor at Brigham Young University and Idaho State University.

★★**John Allen Houchins, BS Ag '83,** of Osceola, Iowa, April 29, 2018, at 57.

Carolyn B. Bellanca, BS BA '83, of Westerville, Ohio, Aug. 27, 2018, at 57. She was a member of Marching Mizzou.

★★**Frances Kendall, PhD '89,** of Salisbury, Md., Nov. 21, 2018, at 64. She taught at Salisbury University in the Communications Art Department for 28 years.

★**James Schrock, BS BA '90,** of Aurora, Colo., Dec. 3, 2018, at 82. He served in the U.S. Army.

★**Cheryl Hoemann, MA '92,** of Montgomery City, Mo., Sept. 20, 2018, at 67. She was a high school librarian.

★**Joel Christopher Mersmann, BS '92,** of Denver Aug. 8, 2018, at 52.

★★**Steven C. Walli, BS '92,** of St. Albans, Mo., March 18, 2018, at 58. He worked at United Health Care for almost 20 years and was the CEO of the Houston office.

Amelia Gray, BS BA '13, of St. Louis May 26, 2018, at 27.

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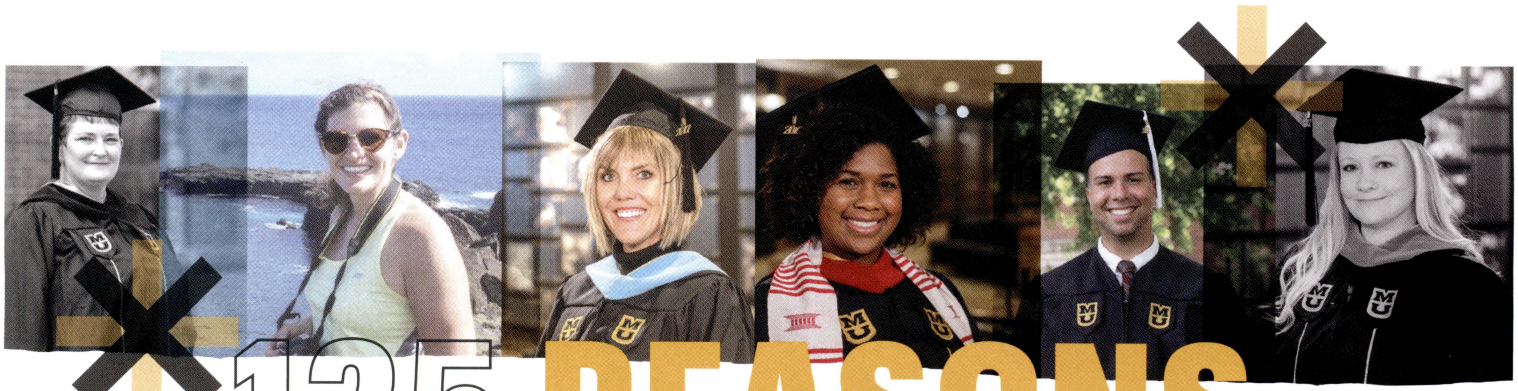

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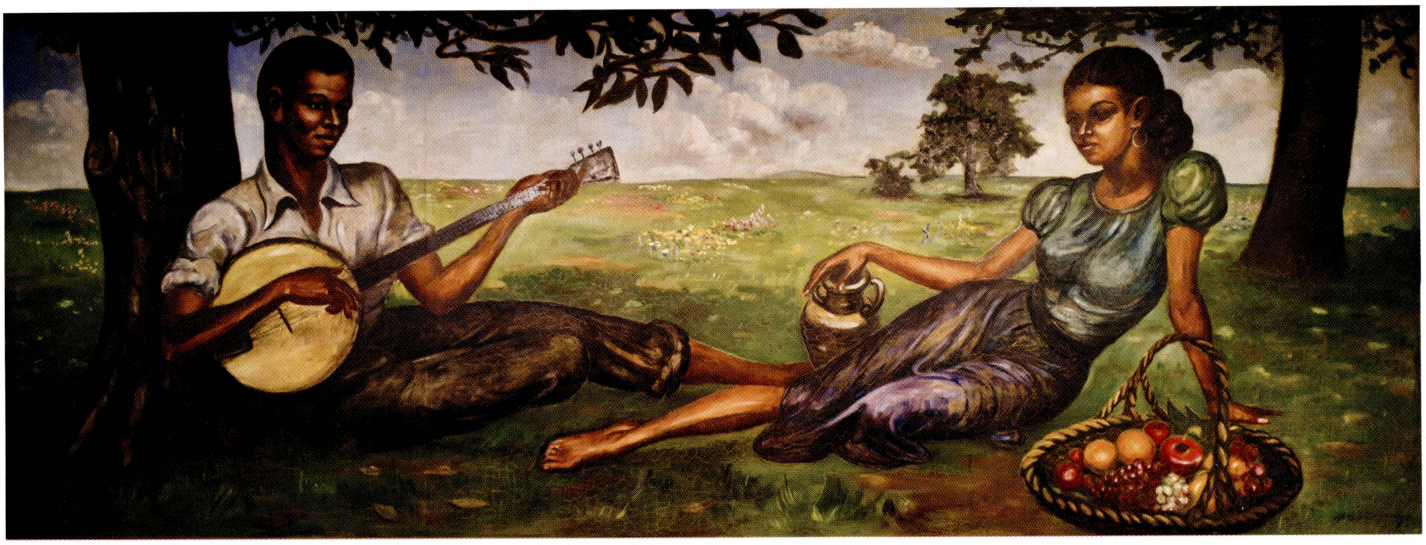

Countee's Eden



† A team of MU faculty and an alumnus helped preserve a valuable mural by African-American artist Samuel Countee. The painting hangs in a renovated World War II-era building, originally a black officers' club, at Fort Leonard Wood near Waynesville, Missouri. The team, clockwise from top: Kristin Schwain, Charlie Nemmers, Mike Trial and Candace Sall.

During World War II, painter Samuel Countee served as a staff sergeant in the U.S. Army protecting the Persian Corridor, a route through Iran that funneled aid to the Soviet Union. After two years of that duty, he was posted to Fort Leonard Wood in southern Missouri. There, he attached three pieces of plywood to the wall above the fireplace of the black officers' club and painted his version of an African American Eden. The hastily built structure saw numerous modifications and eventual desuetude, but Countee's mural endured. "It's one of the only murals by a black artist for a black officers' club that remains in its original location," says Kristin Schwain, associate professor of art history. "That this piece has survived is remarkable." It was a group of MU faculty and an alumnus that stepped up to ensure that this work of African-American art would be preserved.

The officers' club was on the list in 2014 as Fort Leonard Wood and the U.S. Army Corps of Engineers examined old buildings for possible demolition. Fortunately, research from the 1990s led by Richard Edging surfaced to establish the painting's value and the building's historical significance. Charlie Nemmers of MU's Department of Civil and Environmental Engineering then offered to assemble a group to preserve the work: He and Mike Trial, BS ME '69, a U.S. Corps of Engineers retiree, helped navigate governmental rules. Candace Sall, BA, BA '01, PhD '18, associate curator of MU's Museum of Anthropology, served as liaison to the fort and the State Historic Preservation Office. Schwain, a scholar of African American art, researched the artist and the mural, locating both in their cultural contexts.

In October 2015, the team sought funding from the fort and the corps' Kansas City district. With that in hand, they hired art conservator Rick Strilky, who dismantled the mural in June 2016 and, in his Chicago studio, painstakingly removed decades of grime and touched up areas of paint loss. He returned the painting to the fort museum in February 2017 for safekeeping while the officers' club was being renovated.

Countee's painting of a young black couple in a grove of trees portrays a man playing a banjo as a woman lounges on the grass, her right arm lying gracefully on an amphora. "Countee's figurative style and visual references to Greek democracy and the Christian tradition underscore the middle class values shared by European and African Americans alike," Schwain says. The banjo and coiled basket, items most Americans considered African in origin, celebrate black contributions to American culture. "Countee's mural confirms black equality and distinctiveness to a group that faced racial discrimination on all fronts on a daily basis," she says.

On Feb. 26, 2019, with the building renovation completed, Countee's Eden was mounted in its original position above the stone fireplace. Home again.

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