

MIZZOU

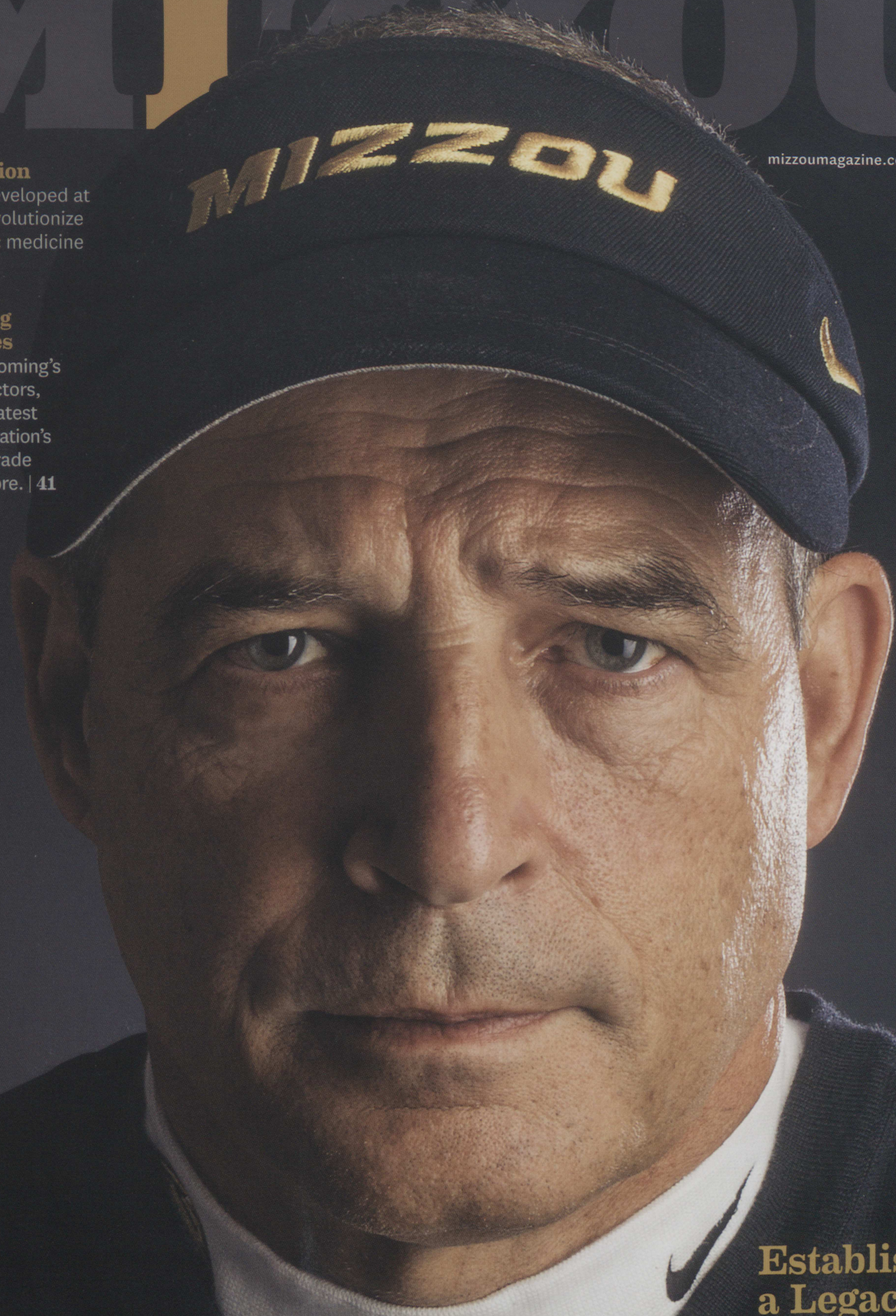
mizzoumagazine.com | Fall 2014

Skinnovation

A product developed at MU could revolutionize the aesthetic medicine market. | 28

Celebrating Our Stripes

Meet Homecoming's student directors, and get the latest on the celebration's activities, parade route and more. | 41



Establishing a Legacy

Gary Pinkel becomes Mizzou's winningest football coach. | 36





FIRST LOOK

BIRD'S-EYE VIEW *Kansas City Star* photographer David Eulitt, BJ '88, took this shot of Maj. Alastair Macartney, an officer in the British Army and a BASE jumping world champion, leaping off the 217-foot-high observation deck of the Liberty Memorial at the National World War I Museum in Kansas City, Missouri. Read a Q-and-A with Eulitt at mizzoumagazine.com/fall2014.

AROUND HERE, THE BEST INTERMISSIONS
COME BEFORE THE FIRST ACT.

Home games at Arrowhead. Saturdays at Faurot Field. In the Show-Me State, the
action at the tailgate matters as much as the action on the field.

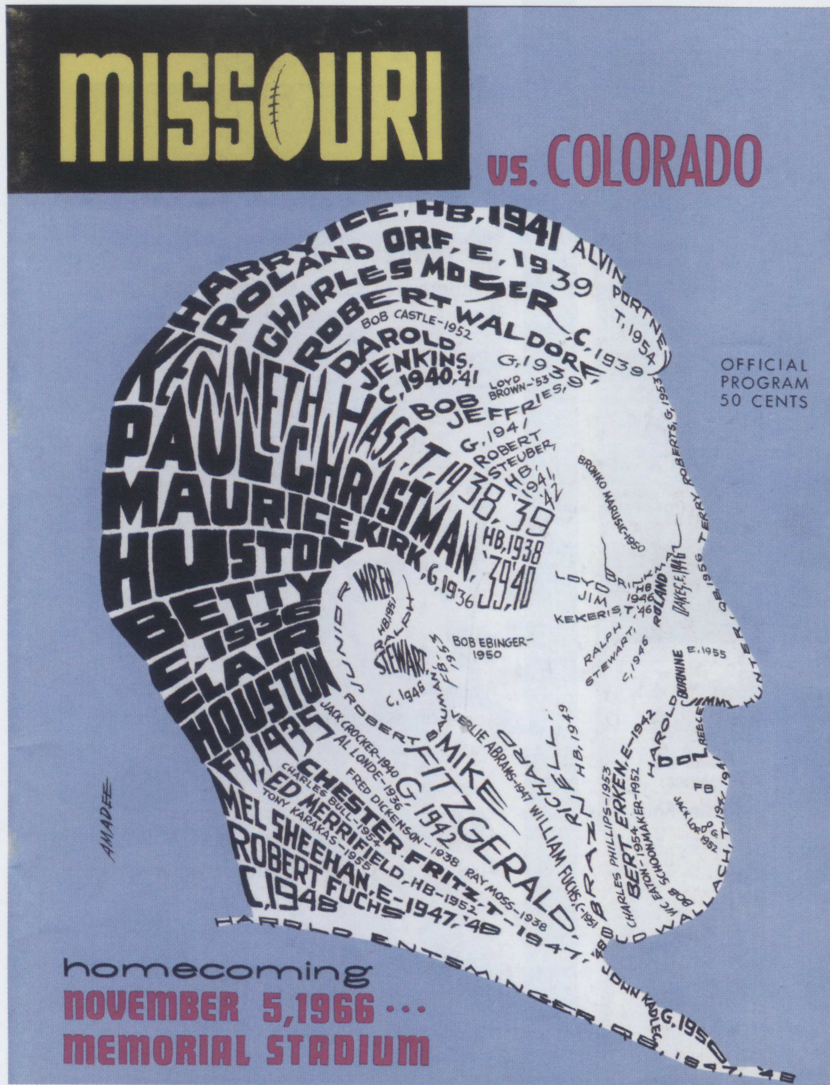
Enjoy the pregame.



Arrowhead Stadium, Kansas City

Start planning your getaway at VisitMO.com

FROM THE EDITOR



← Don Faurot's image — composed of the names of all-conference players and team captains during his coaching tenure — appears on the cover of the football program for Mizzou's 1966 Homecoming game. Sports cartoonist Amadee Wohlschlaeger illustrated football program covers for Mizzou from the 1950s to 1990s. During a career that spanned the Great Depression, World War II, and the Korean and Vietnam wars, Amadee also drew the *St. Louis Post-Dispatch* Weatherbird from 1932 to 1981. He died in St. Louis June 24, 2014, at age 102.

Editorial and Advertising
407 Donald W. Reynolds Alumni Center
Columbia, MO 65211
phone: 573-882-7357
fax: 573-882-7290
mizzou@missouri.edu
mizzoumagazine.com
editor Karen Worley
associate editor Dale Smith
class notes editor Marcus Wilkins
writers Kelsey Allen and Erik Potter
art director Blake Dinsdale
web designer Allison VanSciver
photographers
Nicholas Benner and Rob Hill
editor emeritus Steve Shinn
director of advertising Scott Reeter
phone: 573-882-7358

Mizzou Alumni Association
123 Reynolds Alumni Center
Columbia, MO 65211
phone: 573-882-6611, fax: 573-882-5145
executive director
Todd A. McCubbin, M Ed '95

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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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Bookended by Safeties

This fall, hope springs eternal once again as Mizzou begins its 14th season under the Tigers' winningest football coach, Gary Pinkel.

With a record of 101-63-0, Pinkel matched Don Faurot's wins when the Tigers defeated Texas A&M 28-21 Nov. 30, 2013, on Faurot Field. Pinkel passed Faurot with the Cotton Bowl win Jan. 3, 2014, at AT&T Stadium in Arlington, Texas.

For the trivia fans among us, Tex Noël, executive director of the Intercollegiate Football Researchers Association of Bedford, Indiana, has resurrected a tidbit about Faurot, BS Ag '25, MA '27. Using the May-June 1984 issue of *The Missouri Alumnus* (now MIZZOU) as his source, Noel notes Faurot's career ended in Columbia in 1956 with Missouri winning on a safety on the final play of the game, defeating

rival Kansas 15-13. A safety, worth two points, typically occurs when the ball is downed in the offense's own end zone. Faurot received a standing ovation that day from sentimental well-wishers, including the man from Independence, Harry S Truman.

Decades earlier, as a player for the Tigers, Faurot lost his first game on a safety. In an interview with the magazine, Faurot said, "There was my first varsity game against Iowa State in 1923. Our punter, Forrest Fowler, was hurt. I was the next-best punter and was sent into the game with the ball on the 2-yard line. The pass from center was a little low — but we're not going to say that. I fumbled it, and I lost the game on a safety, 2-0."

— Karen Flandermeyer Worley, BJ '73

MIZZOUMAGAZINE.COM




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Tracey Outlaw, BS, BJ '92, started the Flat Parker Project (think *Flat Stanley*) in 2012 to bring the world to his cousin's 5-year-old son, Parker, who is battling leukemia. Two years later, Flat Parker has become a world traveler.

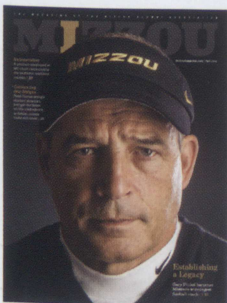
↑ East meets West when Flat Parker finds his way to Nepal.

Philanthropist Dr. Russell D. Shelden, BA '42, BS Med '47, ScD '07, of Kansas City, Missouri, died June 20, 2014, at 92. He and wife Mary funded two endowed chairs in anesthesiology, an academic resource center for student-athletes and a clinical simulation center.

Keep in touch — submit a Class Note online!

 [facebook.com/mizzoumagazine](https://www.facebook.com/mizzoumagazine)

 twitter.com/mizzoumag



About the cover

Gary Pinkel, who begins his 14th season as Mizzou football's head coach this fall, passed legendary Coach Don Faurot in career victories (102) at Missouri when the Tigers defeated Oklahoma State in the AT&T Cotton Bowl Classic Jan. 3, 2014, in Arlington, Texas. Story on Page 36. Photo by Nicholas Benner

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Kansas City Star photographer David Eulitt, BJ '88, takes an inflight shot of a BASE jumping world champion.

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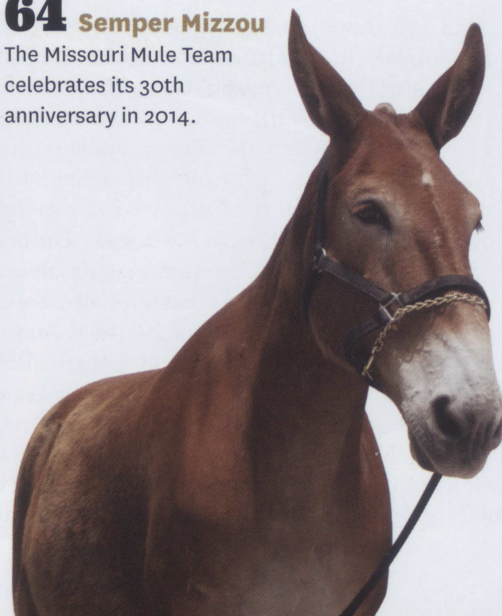
Anniversaries, jobs, weddings and babies — alumni fill us in on milestones.

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Check out books by alumni.

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The Missouri Mule Team celebrates its 30th anniversary in 2014.



FLAT PARKER: COURTESY TRACEY OUTLAW; MULE: ROB HILL

Features



† The SEC ESPN Network, which launched Aug. 14, 2014, treats Mizzou sports fans to premium coverage of the rugged conference.



← Justin Wood created the illustrations for “Skinnovation” on Page 28. His work has been featured in *WIRED*, *The New York Times*, *Fast Company*, *Outside*, *Men’s Health*, *Runner’s World*, *ESPN The Magazine* and *Entertainment Weekly*, among others.

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From Apathy to Apogee

Hardly anyone believed George Rédei’s research mattered — until it transformed plant science.

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Josey Herrera finds a home and a family in CoMo.

STORY BY KELSEY ALLEN

PHOTO BY NICHOLAS BENNER

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Skinnovation

Researcher Sheila Grant’s company is about to launch a product that could revolutionize the multibillion-dollar aesthetic medicine market.

STORY BY ERIK POTTER

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Putting Physics First

Meera Chandrasekhar, an MU faculty member, wins a national award in part for improving high school science education.

STORY BY DALE SMITH

PHOTO BY NICHOLAS BENNER

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Homecoming Special Section

Read about Coach Gary Pinkel, Mizzou’s winningest football coach; meet the students who plan Homecoming; and get the latest on the celebration’s activities and parade route.

STORIES AND PHOTOS BY STAFF

Events

September

- 11**, Mizzou Alumni Association Governing Board
mizzou.com
- 12**, Mizzou Alumni Association Leaders Day and Banquet
mizzou.com
- 16**, Rosario Andino, pianist
concertseries.org
- 18**, Chancellor Loftin inauguration
inauguration.missouri.edu
- 19**, Campaign Cabinet meeting, Columbia
giving.missouri.edu
- 19**, Columns Society Gala, Columbia
giving.missouri.edu
- 27**, Tiger Tailgate, University of South Carolina
mizzou.com

October

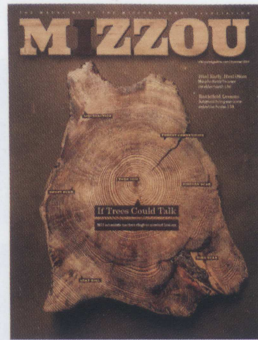
- 1**, Circus Electronica: Singularity, Missouri Theatre
concertseries.org
- 7-8**, Griffiths Leadership Society conference
mizzou.com
- 10**, Faculty-Alumni Awards banquet
mizzou.com
- 18**, Tiger Tailgate, University of Florida
mizzou.com
- 24**, Traditions Plaza dedication
mizzou.com
- 25** Homecoming
mizzou.com

November

- 5**, An Irish Christmas
concertseries.org
- 5-19**, Tourin' Tigers, Southern Africa
mizzou.com
- 22**, Tiger Tailgate, University of Tennessee
mizzou.com

Recognized By Its Peers

From among 70 entries, MIZZOU magazine won one of five editorial design awards, a bronze, given in the Council for the Advancement and Support of Education's 2014 awards program. "If Trees Could Talk" — designed by Blake Dinsdale, photographed by Nicholas Benner and written by Kelsey Allen — was the Summer 2013 cover story. The Society of Publication Designers also recognized the story with a merit award in March. Congratulations to a talented and dedicated staff.



Correction: The map for "Educating the State" (Summer 2014, Page 15) incorrectly located North Central Missouri College. The map should have shown the college in Grundy County. North Central Missouri College is a member of the Missouri Health Professions Consortium with the MU School of Health Professions and the Missouri Community College Association, which recently partnered with Mizzou Online.

Concerns about Construction

In your article on upcoming construction projects ("Building Priorities," Summer 2014, Page 26), you reported that Swallow Hall on the Red Campus is to be gutted. Although I am glad Swallow Hall will not be demolished and the exterior restored, I am amazed that nothing of the original interior is to be retained. I was under the impression that both preservationists and environmentalists advocate retaining as much of the original interior as possible and recycling (in the sense of reusing) original materials when a historical building is updated. This would mean reinstalling, not trashing, the 19th-century doors, door trim, window trim, baseboards, cabinets, shelves, floor tiles, stair banisters and newel posts, and other architectural components whenever possible. I also hope the spacious ambiance of 19th-century classrooms will not be sacrificed for 21st-century energy economy. When I studied at Mizzou (1964-68), I attended classes in new, modern classrooms that were gray, sterile, featureless and claustrophobic. I much preferred my Red Campus classes in old classrooms with their tall windows, high ceilings and varnished woodwork. I would hate to think students attending Mizzou in the future will not be able to have that experience.

In that same article, you also reported that another building on the Red Campus, Pickard Hall, is to be "decommissioned." I assume that it means classes will no longer be held there. Does that

mean Pickard Hall will be demolished? Or is it to be gutted like Swallow Hall?

HAROLD SCHNEDLER, BA '68
Mineral Point, Wisconsin

Editor's note: The university takes stewardship of its historic buildings as well as its financial resources seriously. Swallow Hall's ornamental wood door casings, plinths and transoms will be reused on the first floor, as will four cast iron columns and wood flooring. The stained-glass transoms from the east exterior doors will be combined to create a circular window detail on the new third-floor interior. Doors, a transom window and wood flooring were salvaged to reuse elsewhere on campus. Surplus Property sold Swallow Hall furniture and other items through its online auction. For more information about the renovations, see Page 13.

No decision on the future of Pickard Hall will be made until an open campus dialogue takes place and the U.S. Nuclear Regulatory Commission approves the plan.

Longtime Reader Comments

I really enjoy reading the alumni magazine. I usually read the obituaries first to see if my name is there. Then I start at the front and just read practically everything.

The way the University of Missouri is using disciplines among colleges to assist in research is a great idea. I suppose other universities are doing the same thing.

I have been riding free, receiving the alumni magazine for years, so it is probably time for me to play catch-up.

Please find enclosed my check for \$1,000. I would like to have the contribution directed toward the operating budget of the magazine.

Seems to me the alumni magazine gets better and better with every issue. I hope you all will continue the great work.

JIM STOVER, BS BA '50
New Braunfels, Texas

Targeting Off-campus Students

Concerning your article on Speakers Circle with the photo of Fire Factor ("Speech and Spectacle," Summer 2014, Page 36), the Safe Mizzou Coalition has altered the focus of Fire Factor to be a Mizzou-wide event that focuses on fire safety in any student residence because off-campus students are most at risk for fire emergencies. Also, the room burn is no longer representative of what would actually happen in the majority of residence halls. The coalition is now attempting to target off-campus students with the room burn and associated fire events.

CHATTER

Visit mizzoumagazine.com for online-only content. Comment on Facebook.

Passion for Life

MU alumna and cancer survivor takes Relay For Life experience full circle.

This article gets me right in the heart. So proud of you, Melanie [Dickens Oberkrom, BS HES '08]. Here's to finding a cure!

BENJAMIN THOMAS,
A&S '04
COLUMBIA

Infield Chatter

Mizzou catcher's communication skills translate to the diamond.

From ice to dirt, [Dylan Kelly] surely has the gift of gab and glove! Great article, great quotes. From one communications major to another — you got the skills to pay the bills.

ERIN KELLY-ALLSHOUSE
FULLERTON, CALIFORNIA



† Catcher Dylan Kelly led Middle Georgia College and the Georgia Collegiate Athletic Association with a .429 batting average before transferring to Mizzou in 2013.

Fire Factor is now part of the annual Safe Mizzou week, which includes a personal safety fair, pedestrian and vehicle education event, and the campus safety walk. This year's event will be Sept. 15–19. When complete, the new website safemizzou.missouri.edu will allow students to access safety and bystander-awareness information at Mizzou. Safe Mizzou Coalition members include: MU Police Department, Student Life, Missouri Students Association/Graduate and Professional Council, Department of Student Activities, Residential Life, Environmental Health and Safety, Campus Facilities, Wellness Resource Center, Columbia Fire Department, and Off-campus Living.

LAURA N. MAZUCH

Member, Safe Mizzou Coalition
Columbia

GI Recalls Career Path

I always check the obituaries, and in the 2014 summer issue there are three alumni with BJs from my 1952 class.

I noticed two were U.S. Navy veterans. I served three years in the U.S. Navy during World War II. I was a photographer in the Aviation Repair Unit Navy 145 behind Henderson Field in the jungle of the South Pacific island Guadalcanal, where the U.S. Navy and U.S. Marines won the first land victory against Japan after invading the island Aug. 7, 1942. I spent about 18 months on Guadalcanal. After returning stateside in 1945, I attended the U.S. Navy photo school in Pensacola, Florida. My last duty station was as a member of the U.S. Navy Photo Squadron Two, stationed in Norfolk, Virginia.

Thanks to the GI Bill, I was able to attend West Texas State Teachers College (now West Texas A&M University) in Canyon during the 1947–48

school year and attend Mizzou to earn my bachelor of journalism degree in February 1952.

I worked at newspapers in Decatur, Jasper and Dothan, Alabama, before becoming editor of the USAF Air University newspaper at Maxwell Air Force Base, Alabama.

NASA had just moved to Houston, and I joined the Public Information Office at the Manned Spacecraft Center in 1963. I worked at the end of the Mercury Program, then Gemini, Apollo, Skylab, Apollo-Soyuz Test Project and early space shuttle programs.

I took early retirement in December 1980 and was called back in 1985 to serve as the night news center manager from 3 p.m. to midnight. When the *Challenger Shuttle* exploded on liftoff, my career at NASA ended.

With no job in Houston, I moved to the small town of Brenham between Houston and Austin. I traveled with my wife, Bobbie, for about 10 years in a motor home, attending my Navy and Guadalcanal reunions at cities from New York to California. In 1990, I parked the motor home in a garage I built to house it. My sons and their families use it as a bedroom when they come to Brenham to camp and waterski on Lake Somerville.

My health still permits me to travel by auto as I approach my 90th birthday.

MILTON E. REIM, BJ '52

Brenham, Texas

✉ MIZZOU magazine welcomes your letters, which may be edited for length, clarity, civility and style. Send your letters and news to 407 Reynolds Alumni Center, Columbia, MO 65211; email mizzou@missouri.edu; or visit the magazine's website, mizzoumagazine.com, where you'll find instructions about submitting information online.

Twitter Buzz About #Mizzou

@molliel

If singing "Old Missouri" while Denny Chimes plays the Alabama alma mater is wrong, I don't want to be right. #Heresaealthtothee #Mizzou

@Rottsky_

Just passed Speakers Circle, where a religious nut and a hot dog vendor were desperately competing to yell over the other. #Mizzou

@CandaceGatson

Yep, it is gonna be a great day. The chancellor just told me good morning, and the gorilla is out playing his accordion. #OneMizzou

@NicoleHudson8

How cool is it to come back to your alma mater and have someone shake your hand and say, "Welcome home." This is a special place. #mizzou

@jbc85

It is a point of pride and awesomeness when Siri starts auto-filling in MIZ for words starting with M in a text. #Mizzou

@jzeebz

Don't even like #coffee, but I just chugged a venti cuz I'm in #college and I have a 6 page #paper due tomorrow #sixcolumns #nemizzou

@GabeDeArmond

Best idea I have seen to improve #Mizzou spring game attendance: fan BBQ competition. Our state can make some Q.

Beginning Again



Parents of 5-year-olds know it as the “beginner-dilemma”: whether to enroll your child in kindergarten as soon as he or she is eligible or delay enrollment by a year. Parents weigh the difference between another costly year of day care versus a perceived academic disadvantage that the youngest students in the classroom are more likely to encounter.

Among the possible disadvantages is that the youngest kindergartners are about five times more likely to be retained, or held back, compared to the oldest students, resulting in higher costs for parents and school districts, says Francis Huang, assistant professor in the College of Education.

“Research on retention has been somewhat more consistent in suggesting that holding children back a year is not the most effective practice,” Huang says. “Requiring children to repeat a grade is not only expensive for parents and school districts, but it also can affect children’s self-esteem and their ability to adjust in the future.”

Although anxious parents often wonder if their child is ready for kindergarten, the question should be: Is the school ready for the child? Teachers and schools should be flexible in handling the diverse set of abilities and skills that children of different backgrounds have.

“Because older kindergartners can have as much as 20 percent more life experience than their younger classmates, teachers need to meet students where they are developmentally and adjust instructions based on a student’s ability,” Huang says. “Studies have shown that, while conceptually, teachers agree that they should be flexible in their teaching strategies, only a fraction of teachers actually modify classroom instruction to deal with a diverse set of students.”

NO WASTED ENERGY Benjamin Bolin, Daniel van Hoesen and Dan Paterson were freshmen physics majors when living on the honors floor of Schurz Hall. As sophomores, they decided to start their own company. As juniors in January 2014, they won the Missouri Clean Energy Challenge in St. Louis and a \$10,000 prize. Now incorporated as Imagine Labs LLC, they competed at the Clean Energy Trust Regional Clean Energy Challenge April 3, 2014, in Chicago. Although they didn’t place, they were invited to bring their idea back in 2015.

The trio developed a thermoelectric generator, a device 2.2 inches square that converts waste heat into electricity. It works on any hot surface but is most efficient on pipes that are consistently hot. The entrepreneurs are testing prototypes at two Columbia facilities and have two patent applications pending.

The students started competing on the business pitch circuit in 2013. They were finalists at a Jefferson City, Missouri, competition and placed third in an MU competition, earning a combined \$700, which they invested in research equipment.

“I’ve never been a big charity guy, never been a big service guy,” Paterson says. “But I do want to improve the world, and I want to leave my mark. I think [this] is how I can affect the most people.”

Curators Strengthen Sexual Assault Policy

On June 19, the University of Missouri Board of Curators toughened the university’s Collected Rules and Regulations relating to Title IX and sexual assaults.

Among the changes in the student conduct chapter are replacing the word “rape” with the phrase “nonconsensual sexual intercourse.” Also, the use of the word “nonconsensual” was broadened to encompass instances in which a victim was “incapacitated by alcohol, drugs or other circumstances and, therefore, incapable of consent.”

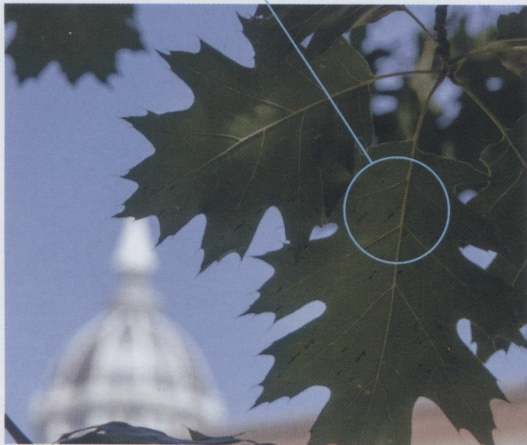
The changes come months after an executive order made it mandatory that all employees (except those bound by confidentiality), report student claims of inappropriate sexual behavior to one of the following Title IX coordinators: Linda Bennett, Noel English, Sarah Reesman or Cathy Scroggs. More: <http://equity.missouri.edu/titleix.php>

In addition, curators approved adding gender identity and gender expression to the UM System’s policy on nondiscrimination.

TIGER'S EYE

Living Legacies

The Mizzou Botanic Garden commemorates its 15th anniversary Aug. 26, 2014, which falls during Mizzou's 175th anniversary year. To celebrate, the garden will plant 175 trees, adding to the 6,000-plus trees already on campus. The first of the 175, an espresso Kentucky coffeetree (*Gymnocladus dioica* Espresso), was planted Jan. 14, 2014, at the northeast corner of Lewis and Clark halls. For the university's sesquicentennial in 1989, a red oak (*Quercus rubra*) was planted south of Tate Hall at Conley Avenue.



TREE TRAILS

Three self-guided tree trails meander through campus: The Jesse Hall Trail features 48 trees, the Lowry Mall Tree Trail 27 and the Memorial Union Tree Trail 37. Each tree is labeled with a QR code that allows smartphone users to learn more about it. A tree even older than the university, a **200-year-old black walnut** (*Juglans nigra*), resides in Peace Park (No. 32 on the Jesse Hall Trail).

STATE CHAMPIONS

Three trees on campus are recognized as state champions by the Missouri Department of Conservation. Based on their height, crown spread (the average width of the tree canopy) and trunk circumference, Mizzou's state champs are a buttonbush (*Cephalanthus occidentalis*), blackhaw (*Viburnum prunifolium*) and roughleaf dogwood (*Cornus drummondii*).

NATIVE TREES

At the corner of College Avenue and Rollins Street stands a collection of **native Missouri trees**, a gift from the late Allan Purdy, BS Ag '38, MA '39, and his wife, Vivian. The stand includes the sour gum (*Nyssa sylvatica*); white fringetree (*Chionanthus virginicus*); sassafras (*Sassafras albidum*); hackberry (*Celtis occidentalis*); and pawpaw (*Asimina triloba*), a small tree that produces fruits with a sweet custard flavor.





Mizzou Paisley

† Deborah Huelsbergen is designing a Mizzou paisley in honor of the university's 175th anniversary in 2014. Two patterns will go public this fall.

Art Professor Deborah Huelsbergen is always doodling — at conferences, during her daughter's piano lessons, while waiting in line. The margins of her notebooks are full of crazy, tangled drawings. So, in early 2014, when MU commissioned a signature Mizzou paisley in honor of its 175th anniversary, Huelsbergen jumped at the chance to design it.

Paisley's distinctive characteristic is its colorful, curved, abstract pattern. "There are icons associated with Mizzou — Jesse Hall, the Columns, tiger stripes — that lend themselves well to repetition," Huelsbergen says. Like the Mizzou plaid created by Lauren Drufke-Mahe, BS HES '06, while a student in the College of Human Environmental Sciences, the paisley could be used on anything from neckties, bow ties and scarves, to ID holders and pajamas. "The idea is that when you look at it, you see paisley, but when you get up close, you would notice that it's the Jesse Hall dome."

Huelsbergen spent the summer researching the history of paisley, sketching patterns, and playing with how the capitals of the Columns and the Jesse Hall dome repeat. She designed two patterns, one predominately black and another gold. The final designs will be unveiled in fall 2014.

NEW COLLEGE, NEW COUNTRY

For many college freshmen, fall semester is their first time living away from home. But when a student's home is across the globe, that adjustment is more profound. Mizzou has had a two-credit learning strategies class to help new students succeed. But Callie Fleming, coordinator of international student services at the International Center, and Nicholas Holladay, academic adviser in the division of biological sciences in the College of Arts and Science, knew international students needed more. The result was a learning strategies class specifically for international students. Fifteen students from seven countries took the first class in fall 2013.

The class covers not only traditional topics, such as test taking and note taking, but also how plagiarism rules are stricter in the U.S. and how it's OK to share opinions during class. They also focused on American culture. Each student was paired with a U.S. student who acted like an older sibling. The pairs met 11 times during the semester, talking about everything from tipping in restaurants to how "recreational" basketball is aggressive and competitive.

FRACKING DOWNSIDE

The controversial drilling technique known as hydraulic fracturing, or fracking, collects oil and natural gas from rock formations by injecting them with water, sand and chemicals to create cracks or expand existing ones. The openings increase the flow of oil and gas out of rocks for extraction. Proponents tout fracking's increased productivity. Opponents cite environmental and health concerns. MU researchers recently found that fracking for natural gas was associated with contamination of ground water and surface waters. "More than 700 chemicals are used in fracking, and many of them disturb hormone function," says researcher Susan C. Nagel, PhD '98, associate professor of obstetrics, gynecology and women's health in the School of Medicine. "Fracking is exempt from parts of key federal regulations to protect water quality. We found more endocrine-disrupting activity in the water close to drilling locations that had experienced spills than at control sites." Chemicals used in fracking could interfere with human reproductive hormones testosterone and estrogen.



Graduate students who work at MU Extension's Community and Entrepreneurial Development program get real-world experience in economic development and rural sociology. mizzoumagazine.com/fall2014



Harvesting Hills and History

Lesley Barker traces the line of Mississippi River towns on a framed 1757 map of "New France." She points to Ste. Genevieve, Missouri; Kaskaskia, Illinois; and Cahokia, Illinois.

No Gateway to the West.

"We are first," she says. "There is no St. Louis."

Founded in 1735, Ste. Genevieve is the oldest permanent European settlement in Missouri. The town is a hub of the Mississippi River Hills Region, one of MU Extension's 11 Community and Entrepreneurial Development (ExCEED) regions. Launched in 2005, ExCEED seeks to improve regional economies by getting businesses, nonprofits and government to encourage entrepreneurship and market the region's unique attributes.

Much of Ste. Genevieve's rich cultural heritage is enshrined in the Bolduc House Museum, which Barker runs. The living history museum testifies to the region's colonial French history and architecture. The Bolduc House employs French-style post-in-ground vertical log construction, meaning that upright logs planted in the ground form the

house's walls. Of the five such buildings still standing in North America, three are in Ste. Genevieve.

Besides history, Mississippi River Hills' qualities include rolling hills whose tops that protect vineyards from puddles of water and pockets of frosty air; local artisans who produce everything from art to goat cheese; and specialty retailers offering organic compost, cured meats and hand-crafted garments from locally raised alpaca.

Cooperation has taken the form of the Mississippi River Hills Association (MHRA), a dues-supported association of those same retailers, artisans and cultural heritage sites such as the Bolduc House. MHRA sponsors farm-to-table agritourism events and produces and maintains a website, promotional map and tourist brochures.

"Rural areas are where the flavor of America is," says Elaine Hoffmeister Mooney, AFNR '96, winemaker at the Sainte Genevieve Winery. "Marketing for a small business costs so much money, and the way we can partner together and collaborate funds — that's huge."

† Lesley Barker, far left, runs the Bolduc House Museum in Ste. Genevieve, the oldest permanent European settlement in Missouri. Elaine Mooney, bottom center, is a wine-maker at the Sainte Genevieve Winery in the Mississippi River Hills Region, one of MU Extension's Community and Entrepreneurial Development regions.



An Army of Two

Jack is a 9-year-old black Labrador retriever who dutifully accompanies his U.S. Army veteran owner throughout daily life as a law student. He's also a charming ambassador who can brighten any room with a wag and a lick.

† Service dog Jack goes to law school with U.S. Army Iraq and Afghanistan war veteran Shawn Lee.

In 2010, when Shawn Lee returned from Afghanistan with post-traumatic stress disorder, his prescribed drug cocktail of seizure medication, mood stabilizers, pain pills and a sleeping aid severely impaired day-to-day function. Discouraged by the daze, Lee opted to forgo most of the drugs, instead seeking psychotherapy and use of a service dog.

"When you walk up and see a friendly Lab, there's always a smile," says Lee, who struggles with anxiety in social situations. "He creates a positive environment and makes interactions with people pleasant, and for someone who has problems interacting with people, that's a great tool."

But Jack, who was trained at Fort Campbell in Tennessee, isn't just a cute, furry friend. If Lee has a seizure, as he did in spring 2014, Jack "goes off like a car alarm." His barking attracts help, and the tags on his collar contain Lee's medical information, including blood type and current medical dosage. Jack also knows to keep Lee's 6-year-old daughter away from Dad should a seizure render him erratic or violent.

Of course, violence is nothing new to Lee, who served two tours. In 2008, his scout platoon in Iraq spent much of its time looking for explosives. Lee's unit in Afghanistan is the subject of the documentary film *The Hornet's Nest* released in May 2014.

Lee's goal as a lawyer is to represent his brothers in arms who struggle with service-connected disabilities.

"Three members of my former sniper squad in Iraq have attempted suicide," Lee says. "Somewhere around 22 veterans per day kill themselves, and that's higher than the combat death rate in Iraq. If we keep on this course, we'll lose more veterans to suicide in 2014 than we will in both the Iraq and Afghanistan conflicts."

GREENER GARBAGE

Nationwide, up to 40 percent of America's food goes to waste. Columbia is no exception. Figuring out what should be done with what's left over is Christine Costello and Ronald McGarvey's task.

Funded by a grant from the Mizzou Alumni Association, the pair has sent undergraduate students to collect and sort food waste from Mizzou's dining halls. During fall 2014, with \$82,000 in Mizzou Advantage funding, they'll gather garbage from University Hospital and Intercollegiate Athletics. The researchers hope to determine the composition of the food waste (how much is grain, meat, fruit, etc.) and calculate the cost of disposal, including how much greenhouse gas the waste would create under various disposal options: landfills, landfills that capture or burn biogas (mostly methane), incineration, composting, and gasification to create biofuel. They also want to measure how much greenhouse gas was released and fertilizer used to produce the wasted food.

Costello is an assistant research professor in bioengineering in the College of Engineering. McGarvey is an assistant professor in the college's industrial and manufacturing engineering systems department and in the Truman School of Public Affairs.

Their plan is to present campus and community leaders with a breakdown of how much each alternative costs in dollars and in pounds of carbon emissions.

Landfills are the current disposal method of choice. "If you don't consider [side effects], that might be the cheapest option," McGarvey says. But would decision-makers be willing to pay anything extra to lower carbon emissions? If so, how much? The duo hopes to show whether disposal alternatives can cut emissions at an acceptable price.



† Industrial engineering students Nicholas Boshonek, left, and Trevion McGhaw sort through food discarded from Mizzou dining halls for a study about food waste.



Shoring Up Swallow

For its first major renovation in more than 120 years, Swallow Hall will be getting an extra dose of TLC.

Earlier this year, field investigators found greater structural repair and reinforcement needs than expected in the 1893 brick building. That pushed the bill for the planned whole-building renovation higher by \$5.4 million. Swallow, which houses the anthropology department in the College of Arts and Science, is one of three buildings, along with Jesse and Pickard halls, included in the Renew Mizzou project.

The University of Missouri System Board of Curators approved the cost increase from \$11.5 million to \$16.9 million June 19. The College of Arts and Science will contribute \$200,000 of the additional funds. The rest will come from Campus Facilities' reserves. Jesse Hall improvements are

currently \$1.4 million under budget, partially offsetting Swallow's increase.

Work covered by the \$5.4 million includes full grout injection of existing masonry walls, additional underpinning of masonry wall foundations, and additional strengthening of exterior walls to stabilize the building shell during construction and comply with wind and seismic load codes.

The project will preserve Swallow's historic brick exterior — important because it is part of Francis Quadrangle, a historic district recognized by the National Register of Historic Places — but will remake the interior. The new code-compliant interior will create 28 percent more usable square footage, upgrade two dry labs to wet labs and convert one lecture hall to tiered seating. Construction began July 2014 and is scheduled to finish February 2016.

Briefly

Dr. Patrice Delafontaine begins work as dean of MU's School of Medicine Dec. 1, 2014. Delafontaine, who comes to MU from Tulane University in New Orleans, replaces **Dr. Robert Churchill**.

National Academy of Sciences member **John Boyer** has accepted an appointment at the University of Missouri College of Agriculture, Food and Natural Resources as a distinguished research professor. He will join the Division of Plant Sciences and serve as a member of the internationally recognized Interdisciplinary Plant Group. Boyer, a plant physiologist renowned for research in grain losses and drought, was elected to the U.S. National Academy of Sciences in 1990 and to the Australian Academy of Sciences in 2005.

The School of Journalism's 2014 Missouri Honor Medal winners are: **Byron E. Calame, BJ '61**, former editor at the *Wall Street Journal* and ombudsman at *The New York Times*; **Audie Cornish**, a co-host of *All Things Considered* on NPR; **The Guardian**, a 193-year-old newspaper; **Steve Kopcha, BJ '63**, former advertising leader at D'Arcy Masius Benton and Bowles/Detroit; the staff of the *Kyiv Post*, Ukraine's leading English-language newspaper since 1995; **Eugene Richards**, a documentary photographer, filmmaker and writer; and **WIRED** magazine.

Admissions Offices Relocated to Ellis Library



While Jesse Hall is being renovated, enrollment-related offices have moved into Ellis Library. The West Reading Room (Room 202), pictured above before and after the move, now houses Cashiers, Registrar and Student Financial Aid staff. The Current Periodicals Reading Room (Room 114) houses Admissions.



A Sober Look at Alcohol Abuse

On April 17, 2014, MU and community leaders met for the Alcohol Summit Think Tank on the MU campus to begin a conversation and develop a strategic plan to reduce high-risk drinking on campus. The plan will integrate MU, Stephens College, Columbia College and community youth prevention efforts, says Kim Dude, BS Ed '74, M Ed '76, director of the MU Wellness Resource Center.

In 2013, of the more than 34,000 students enrolled at MU, 86 percent drank regularly, according to a Missouri College Health Behavior Survey. The study sampled 3,341 MU undergraduates.

Through outreach programs, the wellness center has helped lower alcohol intake on campus, studies show. But some students continue to go too far. Although binge drinking (consuming five or more drinks within two hours for men and four for women) has declined in recent years, 37 percent of MU students still engage in this high-risk behavior, the survey showed.

Punk Rock Potter

In fall 2012, Ginnifer O'Keefe and husband Chad moved to Columbia from Branson, Missouri, to pursue master of fine arts degrees in ceramics. The first pieces O'Keefe fired in the art department kiln were refined and polished. Classmates commented on their beauty.

"And it was really making me mad," she says. That was her spouse's aesthetic, not hers. It wasn't until Professor Bede Clark pushed O'Keefe to explore who *she* was as an artist that she began sculpting pieces like the one accepted into the 2014 National Student Juried Exhibition, sponsored by the National Council for Education in the Ceramic Arts. The piece — five roughly crafted ladles and

a lumpy strainer situated in a crudely fashioned stand — was one of 59 objects selected from 385 submissions for the exhibition.

"My work is based on the philosophy of punk rock, which is this immediate energy and this questioning of 'Why not,' so I try to visually represent that," says O'Keefe, who often blasts Patti Smith's music when she's in the studio. "A lot of the objects I make reference back to the kitchen, like baskets and rolling pins. It goes back to me questioning my placement in the domestic realm."

† Ginnifer O'Keefe, who recently had artwork accepted into a national exhibition, pinches and punches clay to form a basket.

HUMAN TRAFFICKING HITS HOME



The world's 21 million victims of forced labor, coerced or deceived into jobs they cannot leave, include people living in Missouri, says Deb Hume, MA '95, PhD '98, associate teaching professor of public health. Hume co-chaired the American Psychological Association committee that produced the "Report of the Task Force on Trafficking of Women and Girls." For instance, in a recent case in Kansas City, an apparent labor brokerage group brought in internationals on guest worker visas and, in effect, locked them into janitorial jobs by charging high fees and withholding wages. Sometimes take-home pay amounted to pennies a day. Sadly, Hume says, "Human trafficking has always been an element of the human condition."



O'KEEFE: TRAFFICKING; NICHOLAS BENNER; BOTTLE: SHUTTERSTOCK



Tubes on a Hot Tin Roof

On the roof of MU's power plant, 480 black rods installed this spring stand at a rakish angle. Unlike solar panels, one side of the cylindrical tubes always faces the sun, even during the early morning and late evening. Nearby, an identical rod is mounted horizontally atop what looks like a long, narrow bathtub coated in mirrors. The parabolic mirrors track the sun and focus light on all sides of the solar tube for optimal energy conversion. Together, these arrays are helping keep carbon dioxide out of the air and keep money in MU's ledger book.

The power plant's boilers all operate on the same principle: boil water to create steam, which turns a turbine and creates electricity. However, a significant portion of the steam is diverted to campus buildings for heat, equipment sterilization and humidification. About 80 percent of the steam returns as liquid condensate, but 20 percent doesn't come back and must be replaced with make-up water.

But before being added to the boiler, explains plant superintendent Gregg Coffin, make-up water must be warmed, which has been done using coal-heated steam. The new solar thermal arrays allow the sun to share that burden, which Coffin estimates will reduce the energy used to heat the water by about one-third.

Each solar thermal rod is vacuum sealed and

contains a copper heat pipe filled with a water/alcohol solution. When sunlight hits the rod, it boils the solution, pushing steam to the top of the tube, which is mounted in a manifold and surrounded by another fluid. The heat from the rod is transferred to the fluid, which is circulated through a heat exchanger where its heat is passed to the make-up water.

The arrays are expected to last 30 years.

Coffin says the project adds yet another on-campus opportunity for MU students to learn about sustainable energy technologies.



↑ MU's power plant installed a solar rooftop thermal system that reduces coal usage and MU's carbon footprint.

Scoreboard

7 — Years the Southeastern Conference has given the SEC Sportsmanship Award, an honor bestowed upon Mizzou football for its respect and support of Michael Sam, BS '13. Sam came out to his teammates as gay prior to the 2013 season. The All-American defensive end received the Arthur Ashe Courage Award at the 2014 ESPYS July 17.

46 — Draft pick the Washington Wizards used for Mizzou guard **Jordan Clarkson** June 26, 2014. Later that night, the Wizards traded draft rights for Clarkson, A&S '14, to the Los Angeles Lakers.



138-17 — Record of former Huntington [West Virginia] Prep Coach Rob Fulford after five seasons at the institution. Mizzou men's basketball Coach Kim Anderson, BS Ed '79, M Ed '81, hired Fulford as an assistant coach June 23.

8 — Years of coaching experience for former Mizzou center A.J. Ricker, BS '03, the Tigers' new offensive line coach who spent 2013 in the same role at Illinois.



Pat Jones has had a lifetime of involvement in Missouri conservation. Read more about her efforts to pass on her love of nature to a new generation. mizzoumagazine.com/fall2014



Unexpected Kindness

From penning an old-fashioned thank-you note to buying a student dinner, kindness is more common in academia than some might think, according to Rabia Gregory. To prove it, the assistant professor of religious studies launched the Academic Kindness Tumblr, a blog where she shares stories of random and not-so-random acts of kindness sent by students and faculty from around the world.

"There are all sorts of public spaces for venting academics' views, chronicling unprofessional behavior and posting nasty comments people make in peer reviews," Gregory says. "We needed a place to talk about the good stuff."

Gregory started the website in November 2013 after receiving a supportive email from a colleague. Her first post recounted an experience she had at a conference on medieval studies. While in line at a cash-only café, Gregory realized she only had a credit card. A senior scholar behind Gregory paid for her coffee and insisted Gregory pay it forward instead of pay it back. Gregory has since posted more than 70 examples of kindness, including one from a nontraditional student who couldn't afford graduate school until a professor offered to pay for his family's health insurance.

"There are a lot of good people out there who are working hard to help other people," Gregory says. "It's not normal for someone to be so cruel that you're in tears. It's normal for someone to say, 'Here, let me help.' The more people believe that, the more likely it is they'll help, too."

† Rabia Gregory, assistant professor of religious studies, publicizes acts of academic kindness in her blog.

Major Gifts Announced

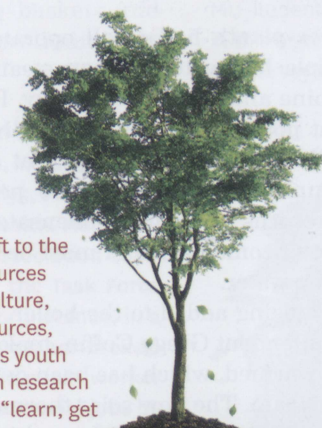
Known as the "Prairie Godmother," Hilda "Pat" Jones, BS Ag '50, was a leader in establishing the statewide Katy Trail and donated the Prairie Fork Conservation Area to the Missouri Department of Conservation in 1997.

On April 22, she donated \$1.6 million to the School of Natural Resources in the College of Agriculture, Food and Natural Resources (CAFNR) to endow research on youth conservation education to more effectively help kids "learn, get dirty and have fun." The gift also will establish a named faculty position within the School of Natural Resources.

Other recent gifts to MU include:

- \$1 million estate gift from Stephen Daniel Barr, BS Ag '72, of Sarasota, Florida, pledged June 9, 2014, for the Barr Opportunities for Excellence Fund in CAFNR
- \$2 million from Mark McAndrew, BS BA '75, of McKinney, Texas, pledged April 4, 2014, for the Francis T. McAndrew Endowed Chair in Oncology in the School of Medicine
- \$1.2 million estate gift from Steven Gerard Lanham, BS Acc '92, M Acc '93, and Gina Ann Lanham, BSN '86, of St. Charles, Missouri, pledged March 17, 2014, to endow professorships in the Trulaske College of Business and the Sinclair School of Nursing
- \$2.1 million from Richard G. Miller, BA '70, LittD '00, of Pittsburg, Kansas, pledged Feb. 7, 2014, for the Performing Arts Building Fund in the College of Arts and Science
- \$1.15 million from the late Melvin Dehovitz, BS BA '40, given Jan. 17, 2014, to fund the Dehovitz Family University of Missouri Flagship Scholars Endowment for St. Francis County
- \$3 million estate gift from Melvin Gerstner, BS Ag '62, DVM '66, and Deena Gerstner, of South Pasadena, California, pledged Nov. 21, 2013, for the Dr. Melvin L. and Deena Gerstner Opportunities for Excellence Endowment in the College of Veterinary Medicine
- \$1 million from the late Donald S. Mozley Jr., BJ '42, given Nov. 4, 2013, for the School of Journalism to benefit the Donald S. Mozley Journalism Scholarship Fund

→ With a \$1.6 million gift to the School of Natural Resources in the College of Agriculture, Food and Natural Resources, Hilda "Pat" Jones hopes youth conservation education research will help young people "learn, get dirty and have fun."



DATA

Making an Impact

Research, entrepreneurship and innovation — creating jobs and products that improve the lives of Missourians and people around the world — is part of what Mizzou does as a flagship, land-grant university.

\$67,000,000

From fiscal 2003 through fiscal 2013, MU's 152 active technology licenses generated **\$67 million in revenue**, which is split among the inventor, the campus and the University of Missouri System.

Source: University of Missouri Board of Curators

\$7.4m

Mizzou received **\$7.4 million in gross licensing revenue** from licensed MU technology in fiscal 2013. Income generators included the heartburn medicine Zegerid, from Salix Pharmaceuticals Inc., and Beyond Meat, the soy-based meat alternatives from Savage River.

Source: University of Missouri Board of Curators

\$53m

Private investors have poured **\$53 million into the startup companies** housed at the MU Life Science Business Incubator at 1601 S. Providence Road, operated by the nonprofit Missouri Innovation Center, since it opened in 2009. Through fiscal 2014, the high-growth startups have created **143 jobs**.

Source: The Missouri Innovation Center

\$475m

Research is the backbone of discovery. Overall, MU spent **\$475 million** on sponsored research, instruction and public service support in fiscal 2013, up from \$323 million five years ago.

Source: Office of Research

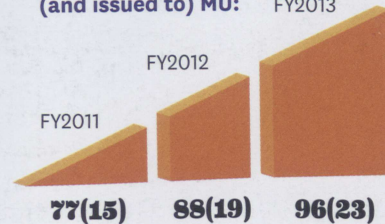
382

Before technology is licensed, it first must be protected. At the end of fiscal 2013, MU held **382 active U.S. patents** and patent applications from the U.S. Patent Office, including 96 applications filed and 23 patents issued in fiscal 2013.

Source: Office of Economic Development



Number of U.S. patent applications filed by (and issued to) MU: FY2011



Source: Office of Research

82


When faculty scientists and researchers think they've found something that might be worth patenting, they file an invention disclosure form with campus. MU received **82 invention disclosures** in fiscal 2013.

Source: Office of Research

9,328

MU Extension's Business Development Program helped its Missouri clients create or retain **9,328 jobs** in fiscal 2013.

Source: MU Extension

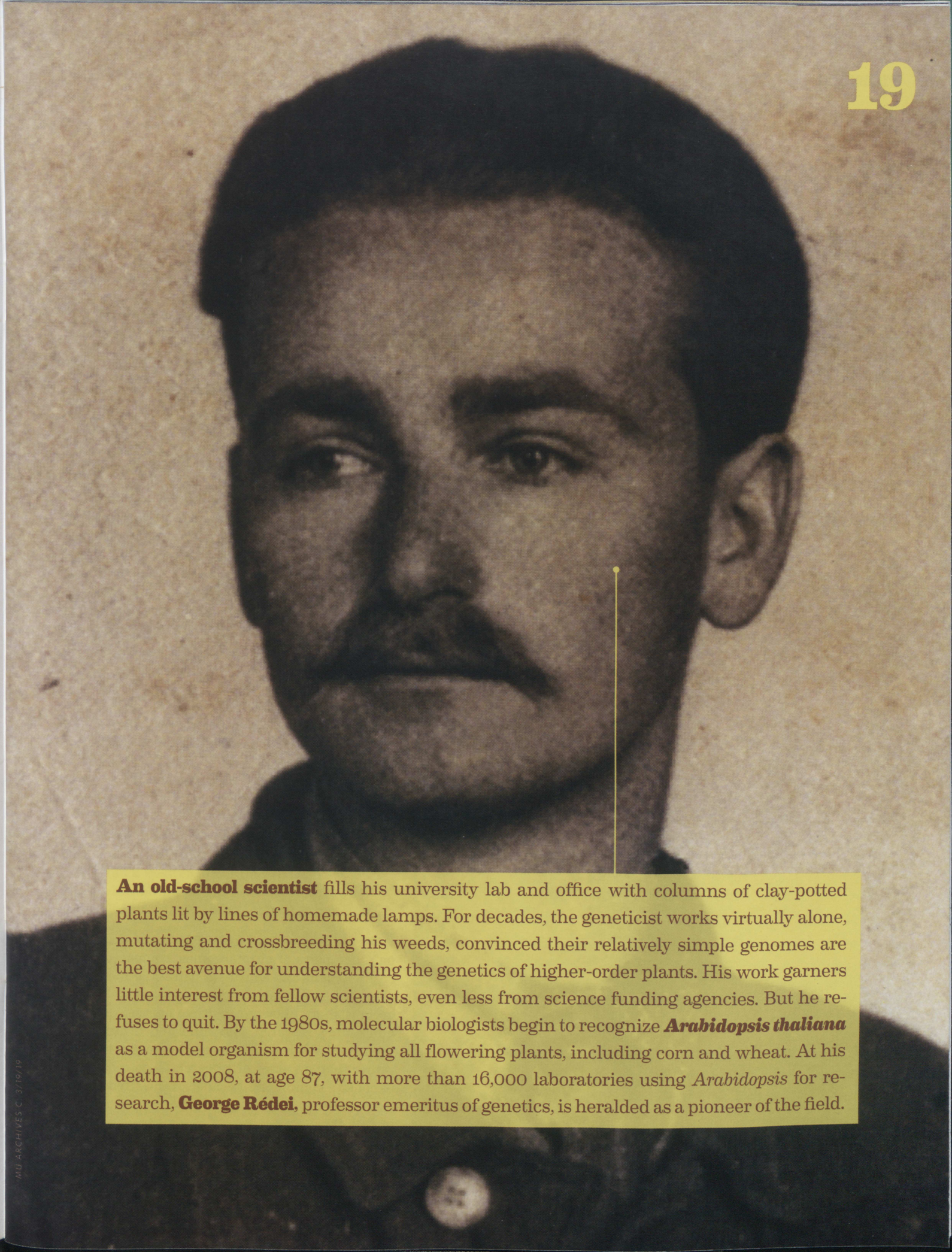


From Apathy

to Apogee

Story by Erik Potter

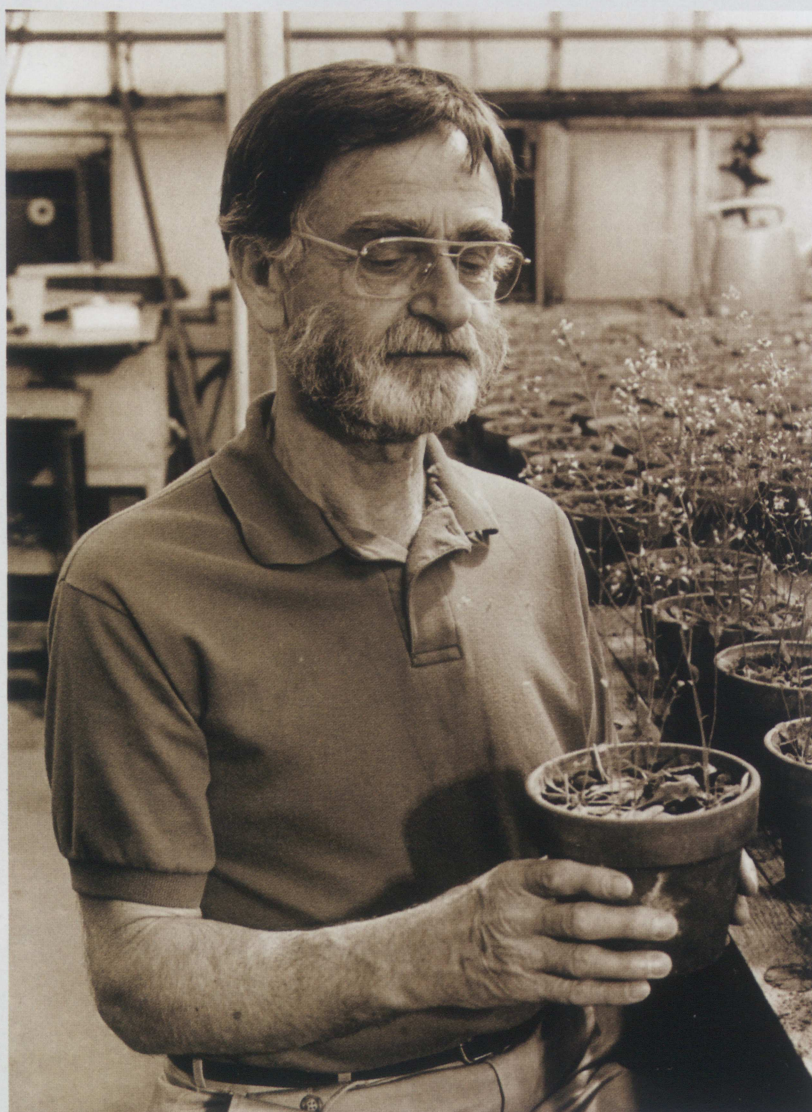
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An old-school scientist fills his university lab and office with columns of clay-potted plants lit by lines of homemade lamps. For decades, the geneticist works virtually alone, mutating and crossbreeding his weeds, convinced their relatively simple genomes are the best avenue for understanding the genetics of higher-order plants. His work garners little interest from fellow scientists, even less from science funding agencies. But he refuses to quit. By the 1980s, molecular biologists begin to recognize *Arabidopsis thaliana* as a model organism for studying all flowering plants, including corn and wheat. At his death in 2008, at age 87, with more than 16,000 laboratories using *Arabidopsis* for research, **George Rédei**, professor emeritus of genetics, is heralded as a pioneer of the field.

György “George” Rédei

was born June 14, 1921, in Vienna. The experiences of his early life were vastly different from his American colleagues. Rédei grew up in Hungary, known then as the breadbasket of Europe, where his father was an agronomist who owned a large estate.



Rédei followed in his father's plant science footsteps, but while in college during World War II, he was deported to a forced labor camp. He toiled the last two years of the war in a coal power plant before narrowly escaping during the Nazi retreat to Germany in the face of the Soviet Union's advance.

He lost his parents to the war. His brother was one of roughly 700,000 Hungarians taken to Soviet prisoner camps but was not among the half who survived. Hungary fell under the Iron Curtain during the Cold War, and in 1948, the family farm was declared too large for one family and was seized and collectivized.

By 1953, Rédei had made his way to Budapest, the capital, and began his doctoral work at the Institute of Genetics of the National Academy of Sciences. Communist restrictions on the study of classical genetics — the Soviet minister of agriculture had staked his reputation on a countervailing theory — limited his dissertation work to prosaic questions such as the inheritance of weight in tomatoes.

In 1956, during the brutal Soviet clampdown following the thwarted Hungarian Revolution, he and his wife, Magdolna “Magdi” Rédei, were among the 180,000 refugees who fled the country. In 1957, he arrived in Columbia as an assistant professor in what was then the Department of Field Crops in the College of Agriculture.

A focused, serious man, Rédei brought with him a European proficiency with language — he spoke English, Hungarian, German, French and Latin — and a belief that *Arabidopsis*, a small flowering plant in the mustard family, was an ideal organism for studying plant genetics.

The *Arabidopsis* genome is simple; it has only five pairs of chromosomes, compared with corn's 10 pairs and wheat's 21 pairs, making it less complicated to identify genes of interest. Its life cycle is short, allowing multiple harvests a year, quickening research into inherited traits. And the plant itself is small enough to grow in the lab rather than on acres of research fields requiring expensive equipment. Because of this, Rédei saw *Arabidopsis* as the plant version of the lab mouse or fruit fly.

However, throughout most of his career, food crop researchers ignored him. Improving the genetics of corn or wheat, it was thought, required

† Ignored by the academic community, the late Professor George Rédei nonetheless persevered for decades in his research on the flowering plant *Arabidopsis thaliana*. His study of plant genetics helped revolutionize the development of food crops.

research on corn or wheat, not on *Arabidopsis*. For 20 years, Rédei was the only scientist in the United States working on the weed. For a period, the National Science Foundation quit funding *Arabidopsis* work. Subsisting on internal funding from MU's Agriculture Experiment Station, Rédei relied on his wife as a lab assistant and often on his own pocketbook for supplies. He began to focus on writing, including textbooks and two influential review articles on *Arabidopsis*. The latter review, in 1975, had the ironic effect of quashing newfound interest in funding *Arabidopsis* work by discrediting a study published in the journal *Nature* that purportedly showed a quick and easy way to mutate *Arabidopsis*.

It wasn't until the 1980s, when a new generation of plant biologists was looking to apply molecular genetics to solve real-world questions, that Rédei's *Arabidopsis* got its day in the sun.

When Chris and Shauna Somerville

discovered Rédei's research, in 1978, they were in Paris searching for a model organism for molecular genetics. The graduate students spent the spring holed up in the small library at the Institut Pierre and Marie Curie near the Seine River, reading books and journals in the morning and discussing them over coffee in the afternoon. They particularly pored over Rédei's articles, including his 1975 review, whose detailed figures and exhaustive methods sections demonstrated his hallmark meticulousness.

Upon the couple's return to the University of Alberta, they arranged for Rédei to visit campus to speak. As his hosts, they spent three days with him, besieging him with questions.

"I remember him being quite patient and willing to talk it through completely, rather than try to find a quick answer to our questions," says Chris Somerville, now a professor of alternative energy at the University of California, Berkeley.

Inspired, Somerville and his friends began to experiment with the plant and quickly encountered the entrenched viewpoint on it. "A friend sent in an article on *Arabidopsis*, and it was sent back as un-reviewed," Somerville says, remembering the reply letter stated: "There was some interest in this plant at one time, but that interest has dissipated."

But in 1980, Somerville used *Arabidopsis* mutants to demonstrate the main pathway of plant photorespiration, the reverse of photosynthesis, which had been subjected to heated debate in molecular biology. Because flowering plants are closely related, the discovery in *Arabidopsis* provided a road map for making the same discovery

† **PREVIOUS SPREAD** *Arabidopsis thaliana* is a small plant in the mustard family. Discovered in the 16th century, experimented on in the early 20th century, it was nearly abandoned by the 1970s. The work of George Rédei, shown as a young man in Hungary, helped spark a revival of interest in the 1980s that has made the weed the model organism for plant genetics.

in food crops. Somerville's finding opened the eyes of the scientific community to the value of *Arabidopsis* as a research tool.

Soon, *Arabidopsis* papers were flooding plant science literature. The National Science Foundation started funding *Arabidopsis* studies again. By 1987, Somerville organized an *Arabidopsis* conference, and Rédei gave an important talk. "A lot of people were happy to see him," Somerville says. "He was a pioneer."

Interest spiked further when, in 1994, a lab at the Salk Institute in La Jolla, California, attempted to make poplar trees flower sooner by inserting an *Arabidopsis* gene that governs flowering (seed production). *Arabidopsis* produces seeds quickly, whereas poplars don't flower until they are about 10 years old. The two species are so different, however, that no one thought the experiment would work — until the poplar flowered while still in a petri dish.

That experiment, published in *Nature* and heralded in mainstream media, showed that *Arabidopsis* was both a model for scientific discovery and a vehicle for scientific manipulation, a way to take developmental control of other plants.

After decades of hardship and discouragement, one would expect Rédei to puff out his chest and glory in his vindication.

"He didn't change," says Dale Blevins, professor emeritus of plant sciences. "He was still George — the same quiet, modest guy."

Daughter Mari Rédei Tenkhoff, BS ChE '83, of Franklin, Tennessee, says her dad was pleased by the accolades about *Arabidopsis*, but he didn't see it as the end of the journey. "He just kept plugging away," she says. "The recognition for him wasn't that important. It was the ability to keep working and doing what he wanted to do."

In 1991, with interest in *Arabidopsis* still growing, Rédei retired and lost his lab space. "It's ironic that this happens at a time when *Arabidopsis* research has become so fashionable," David Perkins, a colleague at Stanford University, wrote him at the time.

Unwilling to stop his research, Rédei took his equipment home and continued his work. He soon accepted a visiting professor position at the Max

'He didn't change. He was still George — the same quiet, modest guy.'



→ Rédei and former colleague and MU Professor Barbara McClintock, who later won the Nobel Prize in physiology or medicine, attend the Stadler Genomics Symposium at MU in 1978.

Planck Institute for Plant Breeding Research in Germany. He spent several months there with another young researcher, friend and fellow Hungarian Csaba Koncz, who later noted Rédei's bitterness at his situation. He continued to publish, and his eight post-retirement papers received more than 1,000 citations.

But as *Arabidopsis* research progressed further into molecular biology terrain, Rédei decided to step away — sort of. In a 2006 chapter of *Plant Breeding Reviews, Vol. 26* that Koncz wrote and dedicated to Rédei, Koncz recalls a conversation the two men had around 1995. “Now I see that the new generation does this job well, and I’m too old to compete,” Rédei told Koncz. “But I think I found something to do [that] might be useful.”

That “something” was writing a first-of-its-kind handbook of genetics.



and professor emeritus of plant sciences.

Rédei continued to expand subsequent editions, the last of which was released in 2008, the year he died. The book remains respected in the field and commands a \$1,100 price tag.

“George was 20 to 30 years ahead of his time,” says Doug Randall, professor emeritus of biochemistry. “He knew the power of *Arabidopsis*, but no one else knew what it could do.”

In 2004, MU dedicated the plant growth facilities section of the Christopher S. Bond Life Sciences Center to Rédei. In 1990, Somerville and a group of scientists launched the Multinational Coordinated *Arabidopsis thaliana* Genome Research Project. A few years later, they obtained a commitment from the National Science Foundation to provide up to \$100 million to sequence and characterize the *Arabidopsis* genome. In 2000, the species became the first higher-order plant to have nearly its entire genome mapped.

“Suddenly, bam! This is the thing to work on,” Blevins says. “It went from obscurity to explosion.”

With a sequenced genome, *Arabidopsis* has become a proving ground for solving the genetic challenges involved in developing food crops that can fight off invasive species, grow in poor soil and survive with less pesticide. The most frequently used lab variant is one developed by Rédei, *Arabidopsis Columbia*.

“Essentially everybody uses it,” Somerville says. The discoveries *Arabidopsis* has allowed are “too numerous to describe. We’ve revolutionized the field.” **M**

‘Suddenly, bam! This is the thing to work on,’ Blevins says. ‘It went from obscurity to explosion.’

Blevins remembers Rédei’s constant presence at Ellis Library during that time, piled deep in books and journals. By 1998, he published *Genetics Manual*, covering 18,000 genetic concepts and terms along with 600 illustrations. Five years later, Wiley-Liss published his expanded *Encyclopedia of Genetics, Genomics, Proteomics and Informatics*, a 2,201-page behemoth that *Nature* called “remarkably clear and up to date” and “one of the best textbooks of general genetics.”

In another testament to his old-school roots, Rédei wrote the two-volume book by himself. Most undertakings of that size would involve several authors, says Ed Coe, a collaborator of Rédei’s

Mark Your Name in Mizzou History on Traditions Plaza

*Where tradition
lives at Mizzou.*

In honor of MU's 175th anniversary, the Mizzou Alumni Association is proud to announce the development of MU's newest campus landmark, Traditions Plaza located in the heart of campus on the Carnahan Quadrangle.

Under the glow of Jesse Hall, Traditions Plaza will include the largest outdoor programming stage in central campus and be a perfect spot for concerts, outdoor movies, spirit rallies, outdoor classes as well as a gathering place for Mizzou family and friends.

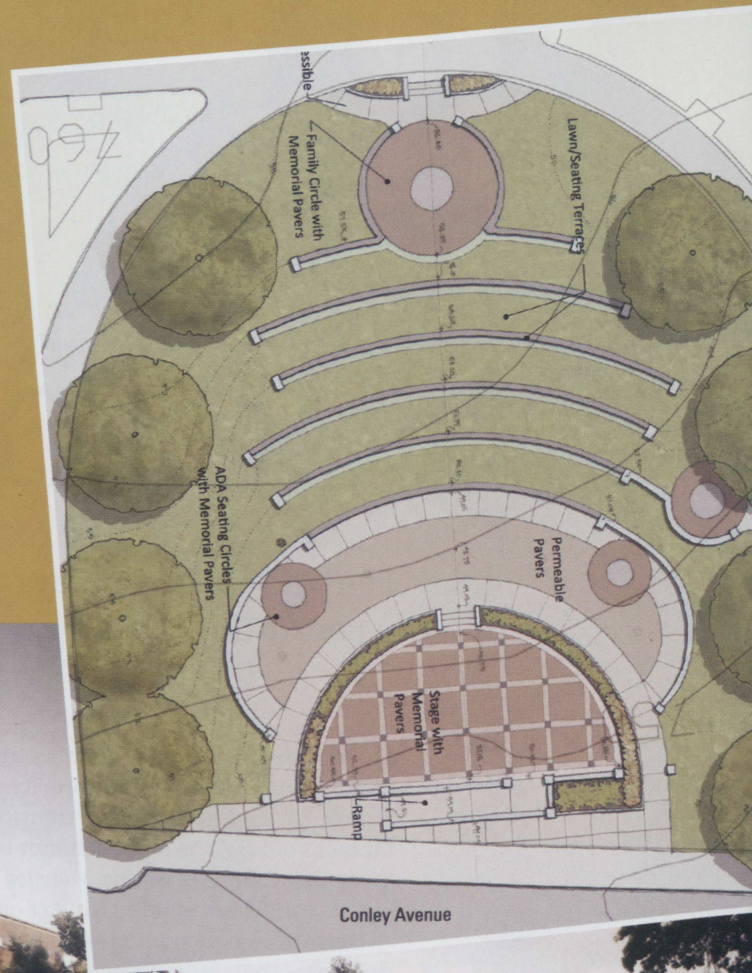
Etched into the granite tiles on the main stage and other locations around the plaza will be markers paying tribute to current and past MU traditions, notable alumni and historical happenings.

A time capsule buried center stage will contain mementos from MU's 175th anniversary and campus life in 2014. Traditions Plaza will serve as a symbol of MU's pride of place and passion the Mizzou family has for Missouri's flagship university.

Be part of MU's newest landmark. Learn more at mizzou.com/traditionsplaza.

MIZZOU ALUMNI
ASSOCIATION

EST. 1820
175
UNIVERSITY
of MISSOURI



Seeing Josey

Josey Herrera hasn't always fit in, but with support from friends, MU and the community, the senior journalism major found self-acceptance.

Story by Kelsey Allen * Photo by Nicholas Benner

Josey Herrera doesn't fit neatly into a box. A former vice president of the sorority Sigma Sigma Sigma. A first-generation American Latino. A member of LSV, the highest honor bestowed upon a woman at MU. A *Vagina Monologues* cast member. A 2013 Homecoming king candidate.

Herrera is not so much either/or as both/and. But even that falls short. Herrera identifies as transgender, an umbrella term for people whose sex at birth differs from their internal sense of gender identity. Herrera doesn't identify as he or she, preferring instead the pronoun "they."

"I'm female because that's my biological sex, but I don't identify as a woman. Most of the time, I feel very masculine, but I don't identify as a man either. I really identify as neither most of the time," Herrera says. "I encompass a space that is not one or the other."

Transgender people make up about 0.3 percent of the U.S. adult population, according to a 2011 report by the Williams Institute, a think tank at UCLA; however, many are not public about their identities. Being different has its challenges. In Herrera's case, not fitting into a male or female

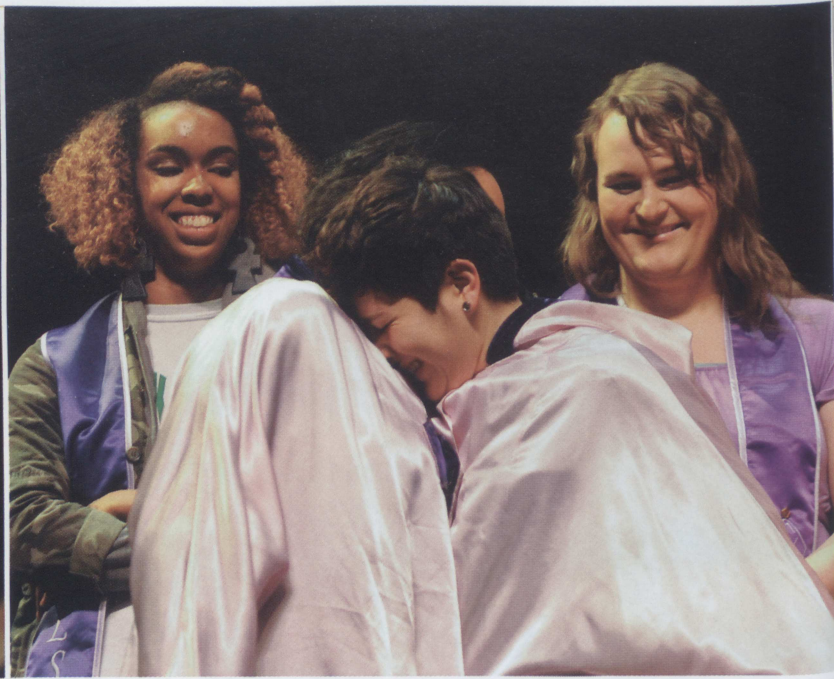
category caused feelings of marginalization that lack of family support exacerbated.

"There are a lot of people who would say to Josey: 'I don't know who, what, how you are. You don't make any sense to me. I can't put labels on you or pin you down,'" says friend and fellow Tiger Sugar Hendrick.

Yet after arriving at the University of Missouri to study journalism in 2010, Herrera began to find acceptance from peers and the community. The Mizzou Alumni Association chose Herrera for the 2014 Mizzou '39 class of outstanding seniors who represent MU's values, and Herrera was tapped by Mystical Seven, one of MU's secret societies, which honors students for selfless leadership. In June, the University of Missouri Board of Curators voted to include gender identity and gender expression in its nondiscrimination policy for the four-campus system.

But most important, Herrera found self-acceptance at MU. "I started exploring the person I could be, realizing I could be strong, passionate and aggressive, and I could also be outgoing, silly and fun," Herrera says.





† Left, Paige Tenkhoff and Josey Herrera are announced as 2013 Homecoming queen and king candidates. Right, Herrera hugs Ashley Carpenter after being unveiled as a member of LSV, a secret honor society dedicated to improving the status of women, during the May 2013 Tap Day ceremony.

Finding Social Justice

Many college students come to Mizzou to explore who they are and who they want to be. That might mean examining religious affiliations, researching different majors, changing political persuasions or investing in various relationships. For Herrera, that also meant examining gender identity and expression.

Associate Professor of Sociology Wayne Brekhuis agrees gender deserves examination. “We should be more open to recognizing that gender identity is malleable like other identities. It’s not something that’s fixed and essential. The degree to which we treat gender as something that’s essential and innate is very different than how we treat other identities, such as political and religious identities.”

Friends and family reacted negatively as Herrera explored different identities during years growing up in Miami. Thinking negative body image and self-esteem issues were those of a typical teenage girl, Herrera now knows those struggles were rooted in the desire to look more masculine. “I remember I hated shopping and would avoid it at all costs,” Herrera says. “My mom and I would go to a store, and I would sneak off to the men’s section, but I’d never come back with anything.”

In Columbia, Herrera felt liberated. “It was a really drastic change, not having to tiptoe around things,” Herrera says. “I was born in Miami but made in Missouri.”

Herrera found a safe space on the rink playing roller derby with the CoMo Derby Dames, trying out different personas, including Josie PulHitsHer, a nod to the American newspaper publisher and Her-

ra’s habit of reading newspapers during breakfast. Herrera also liked the idea of having a first name that sounds feminine but at Mizzou refers to someone who is masculine. Inspiration came from the surname of former Tiger running back Henry Josey (now with the Philadelphia Eagles).

“[Roller derby] built up my confidence and gave me the community support to be myself more,” Herrera says.

Herrera volunteers at the Women’s Center and the LGBTQ Resource Center and is a counselor at Community360, a 24-hour retreat for MU’s student leaders where participants develop awareness, acknowledgement and action steps to promote social justice in the community.

Elisa Glick, associate professor of English and women’s and gender studies, appreciates that student organizations make room for diversity, something the culture as a whole doesn’t do, she says. “The category of transgender only exists because we live in a society that imposes a pink versus blue gender binary on people. We live in a society in which multiple gender identities and expressions are silenced and erased. The problem isn’t those people who don’t fit the binary but rather the cultural imperative to be ‘normal’ with regard to gender.”

Getting involved in social justice organizations and making friends on campus was a way for Herrera to create familial support. Shy since adolescence, Herrera was becoming more outgoing.

Celebrating Stripes

After a news-reporting internship in Boston during summer 2013, which allowed further exploration of gender identity and expression, Herrera

returned to Columbia ready to come out as transgender. Herrera thought it would be fun to participate in one of MU's oldest traditions.

"When Josey started the Homecoming king campaign, it wasn't, 'I'm going to tear down the institution!' says Struby Struble, BA '04, coordinator of the LGBTQ Resource Center. "It was, 'This is where I feel most comfortable. And I'm a student who deserves to be celebrated the way everyone else is.'"

With fondness, Herrera recalls the Memorial Stadium crowd's roar of support during halftime of the Homecoming game Oct. 26, 2013. "Hearing the Women's Center — because it was my sponsoring organization — get announced to a sold-out stadium was the best moment," Herrera says. "All I needed was [to have] people [know] this space existed."

Although Herrera's coming out as transgender in such a public way was positive for the LGBTQ community, it also spawned a personal crisis. It created a deeper schism in Herrera's family. It prompted many questions from family, strangers and the media, and Herrera didn't have all the answers.

"There were these weird internal feelings of turmoil," Herrera says. "I've felt a lot of pressure to identify a certain way. I just wanted time to sit down and think and write about it, but you're a student and you work and you're involved and you're busy, so I didn't really get the opportunity."

What kept Herrera going was community and friendship. Hendrick, BA '13, and Herrera would take road trips to see political and social activist poets Andrea Gibson and Lauren Zuniga. Or after a stressful week, the duo would brainstorm "self-care bombs," such as surprising people with snacks during finals or making Christmas ornaments for friends around the holidays.

"I see it a lot when love is taken away from people, or they're not given love from the sources that society tells us we're supposed to get love from, then they kind of cut themselves off or wall themselves up," Struble says. "But Josey has so much love to give."

Creating Intentional Communities

In April, Herrera led a Mizzou Alternative Break trip to Chicago where the students volunteered at El Rescate, a project of the Puerto Rican Cultural Center that provides housing and support services to homeless LGBTQ youth. The cultural center also offers an HIV and STD education program, a bilingual day care, an alternative high school, a community library and literacy program, and an

'The degree to which we treat gender as something that's essential and innate is very different than how we treat other identities, such as political and religious identities.'

obesity prevention program.

It opened Herrera's eyes to the power of intentional communities, or planned residential cooperatives. "You have all these resources to make people's lives better all on the same street," Herrera says. "Marginalized communities often get moved around because of gentrification, so they built these physical infrastructures so they can't be moved. It's like, 'No, we're here. We're not going anywhere.'"

Columbia will be home after Herrera's scheduled graduation date of December 2014. As a reporter at KBIA and the *Columbia Missourian*, Herrera felt it was important to invest in the Columbia community. It's like what Zuniga says in her poem "To the Oklahoma Progressives Plotting Mass Exodus":

"Tear up the sidewalk. Plant a garden. Bake a squash casserole and invite all your terrified neighbors over. ... Tell them you are staying here for them. Show them how to love someone you don't understand. Just do something with those clenched fists and broken heart. ... Progress is a series of small, bold moves. Don't leave. Here is where we need you."

In August 2014, Herrera and five friends, including Hendrick, planted roots in Columbia and created an intentional living community that includes a house for the queer and transgender community. Herrera is putting down physical things in Columbia to build up the community. "I can't expect to be supported if I'm not supporting other people," Herrera says. "You have to give in order to get." The roommates plan to hold events and workshops and to be a safe space for people in the community.

"When I came to Mizzou, I was like, 'I'm going to go in, four years, and I'm out. Bye,'" Herrera says. "But there are still a lot of things that need to get done somehow. I love the direction Mizzou is moving in. I love it, but there is so much work to be done. Someone's got to stay. Someone has to do the work." **M**

SKINNOVATIO

Five years ago, Sheila Grant helped found a company. It felt strange. As a professor of bioengineering in the College of Engineering, her job and aspirations had always been institutional: perform well in teaching and research, earn tenure, and publish in important journals. Jumping into a startup was a sweaty-palm moment. But she wasn't on her own. She had promising lab research behind her, a host of Mizzou programs to support her and a team of collaborators to bring with her. Five years in, her company has raised \$2 million from investors and is about to launch a product that could revolutionize the multibillion-dollar aesthetic medicine market.

STORY BY ERIK POTTER • ILLUSTRATIONS BY JUSTIN WOOD

Rebecca Rone kept telling her colleagues in the Biodesign and Innovation Program that they had to see Sheila Grant's research. Rone, BS BE '06, had worked in Grant's lab as an undergraduate and knew it had product development potential. So did Grant's husband, Dave Grant, a research engineer who sat on the biodesign program's committee.

The biodesign program is a collaboration between the School of Medicine and College of Engineering. It brings together doctors, engineers and businesspeople for a one-year fellowship, challenging them to identify a medical need in the operating room and develop technology to meet it.

In 2005, Grant published her first paper on how

nanoparticles enhance the structural integrity of collagen, the most abundant protein in the body. By 2009, she was fashioning a promising collagen gel into an improved mesh — a porous patch — for hernia repair surgery but was making slow progress.

When Rone and her biodesign fellows visited the lab, Grant held up her gooey creation to explain what she was trying to do. The surgeon on the team immediately recognized its potential as a dermal filler — injectable solutions that reduce skin wrinkles and folds. The team's business fellow agreed aesthetics was the market to pursue. That same year, with a dream of smoothing fine lines — and ultimately developing therapies for brittle bones and bone loss — EternoGen was born.



SMOOTHING THE WAY

The meeting of Rone, her biodesign team and Grant was no accident. In a way, it had been planned for decades. Just as collagen provides structure to support youthful-looking skin, Miz-zou has developed a network of programs to support successful startup businesses.

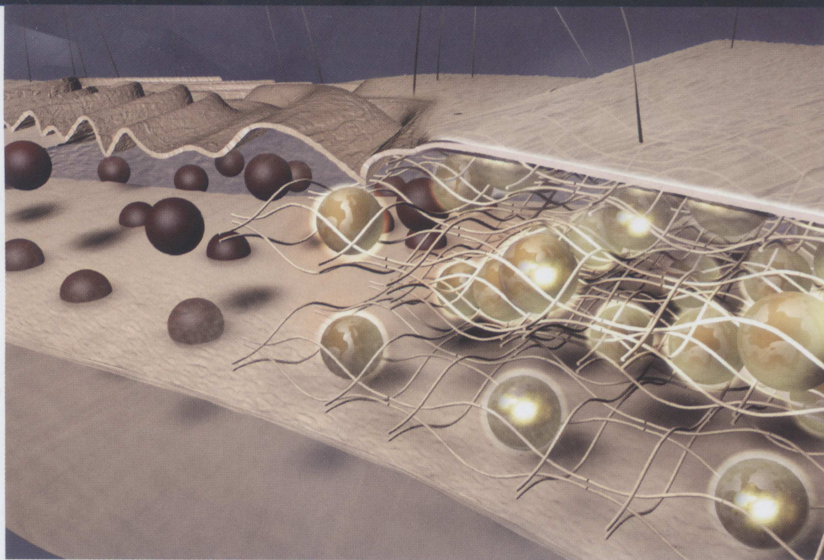
The idea of university-as-economic-development-engine has been around less than a century, and it only became widespread in 1980 with the passage of the federal Bayh-Dole Act. That act allowed universities to own the patents that resulted from federally funded research and to exclusively license the patented technologies to businesses.

Since then, an entire entrepreneurship, innovation and business development ecosystem has evolved at MU. The Office of Technology Management and Industry Relations, directed by Chris Fender, identifies, markets and protects commercially viable intellectual property developed by faculty, including obtaining patents and negotiating license agreements. The office houses teams of intellectual property experts in places of likely innovation — the Christopher S. Bond Life Sciences Center, the School of Medicine and the College of Engineering — to give direct assistance to MU faculty.

In the case of EternoGen, the Biodesign and Innovation Program identified the commercial potential of Grant's research. The Office of Technology Management and Industry Relations assisted with the patent applications, business incorporation and technology licensing. The MU Life Sciences Business Incubator at Monsanto Place, where EternoGen is one of about 20 startups, gave the company a safe place to launch and affordable rent. The Missouri Innovation Center, which runs the incubator, offers back-office support and business mentoring. The final piece was the emphasis on promoting entrepreneurship among students by the Trulaske College of Business, where EternoGen found Luis Jimenez.

In 2011, while a student in the Crosby MBA program, Jimenez, MBA '11, studied high-growth ventures in a business class taught by Jake Halliday, former president and CEO of the Missouri Innovation Center. Students are paired with local startups, and Jimenez teamed with EternoGen to rebrand the company and develop its business proposals.

The collaboration went well. "He was graduating in December 2011, and we said, 'If you want to come on board, you [fundraise] your salary,'" Rone remembers. "And that's what he did." Until that point, EternoGen had not attracted investors. No matter. With Jimenez's leadership, the company raised \$500,000 in 2012, another \$1 million in 2013, followed by \$500,000 in the first months of 2014. The company is now in a position to turn its potential into profits.



† EternoGen's CG NanoMatrix features collagen augmented with gold nanoparticles, which protects the proteins from being quickly broken down. Injected into the face as a dermal filler, it forms a strong nanomatrix that helps rebuild the skin's natural scaffolding and smooths facial lines and folds.

MAGIC WORDS

EternoGen's message was short. It said something like: "We're bringing collagen back to aesthetic medicine. Are you interested in discussing?"

It wasn't delivered by an expensive headhunter or prestigious recruitment firm. Anna Tenstam Lundvall, a Swedish executive and one of the world's foremost experts in commercializing dermal fillers, found it in her LinkedIn account, a social networking site for professionals.

Lundvall didn't care that EternoGen was a two-year-old startup with zero dollars in sales. With the words "collagen" and "aesthetic medicine," the company had her attention.

"Those were the two things I needed," says Tenstam Lundvall, now CEO of EternoGen. "I didn't need any more than that."

Each EternoGen team member had a background in science. Jimenez, former CEO and now chief operating officer, also had expertise in business management. Rone, director of clinical and regulatory affairs, had expertise in health regulations. But with Tenstam Lundvall, the team had a marketer who knew the industry and could get their product in front of the right people — and ultimately under their skin.

BEAUTY IS SKIN DEEP

Tenstam Lundvall's biggest claim to fame is bringing hyaluronic acid to America — the beauty medicine equivalent of introducing the iPod. The product is delivered by syringe into the face to give a quick boost of volume, which smooths deep lines and wrinkles and makes skin look younger. The procedure takes a few minutes to perform, and the effects last an average of six to 12 months. Americans are enamored. They injected their faces with it 1.9 million times in 2013, making hyaluronic acid the second most popular aesthetic medicine procedure to Botox.

But it's no substitute for collagen.

Hyaluronic acid is naturally produced in the body and is found in the extracellular matrix that skin cells sit on. But unlike collagen, which makes up 70 to 80 percent of skin by dry weight, it is not a structural component of the skin itself. The loss of collagen as we age contributes to the condition dermal fillers are trying to correct: skin that has lost elasticity, volume and

developed wrinkles.

Hyaluronic acid inflates the skin with moisture, but the skin soon deflates, whereas collagen is a natural scaffold for the skin that actually helps rebuild it.

But collagen is difficult to work with. Simply injecting it into the skin is not enough. In its natural state, injected collagen would be quickly broken down by collagenase, a natural enzyme found in the body. So what companies have done — and this treatment is only available in Europe — is to “cross-link” it. Collagen is composed of three peptide chains wrapped around one another in a triple-helix pattern. Linking multiple chains together extends collagen’s life, but it also causes it to bunch up, making it more likely that the body will treat it as a foreign object. Typical treatments last three to six months.

EternoGen has two collagen products developed to protect against collagenase. One is based on a technology the company licensed from Dale DeVore, a longtime expert in the dermal filler industry and now EternoGen’s chief science officer. Called Rapid Polymerizing Collagen (RPC), it’s a liquid that, when injected, integrates into the body and forms into tissue — “tissue in a syringe” is what they call it. Treatments are expected to last about a year.

By 2016, CG NanoMatrix, the company’s second collagen product, is expected to be released. Based on Grant’s research at MU, it features a nanomatrix containing gold nanoparticles that shields against collagenase, protecting it from breakdown while preserving its microstructure so the body accepts it. In addition, it further strengthens the collagen structure and promotes tissue regeneration. The team estimates the treatment will last as long as two years.

That’s a big deal in a market where Americans spent \$2.5 billion on injectable procedures, according to a 2014 report from the American Society for Aesthetic Plastic Surgery.

BRIGHT FUTURE

This year has been hectic at EternoGen. In March, the company launched a pilot study in London with its RPC filler. With those results in hand, the team began working with marketers to position it as a high-end, status-symbol product at a premium price. In June, distributors began building global distribution networks. By the end of the year, the team hopes to conclude clinical trials in Europe. By spring 2015, they anticipate they will launch in select markets in Europe and Asia, followed by Canada. Eventually they want to gain federal Food and Drug Administration approval to bring the product to the U.S.

The company has a manufacturing site in Columbia to supply product for the pilot and clinical studies but will likely expand to a site in St. Louis for the commercial phase. “We want to keep it in Missouri as much as possible,” Grant says. “Missouri gave us our start, so we want to hire Missourians to continue production.”

Once sales start, EternoGen’s fillers will join MU’s other licensed technologies that generate between \$7 million and \$10 million a year for the university, Fender says.

But perhaps even more important than revenue is the role that the successful Mizzou startup fills in society. “I really look at it as the evolution of the land-grant mission,” Fender says. “It’s all built off the legacy of service and seeing the research benefitting society.”

And if the fillers, developed and manufactured in the Show-Me State, become the next big beauty trend, Tenstam Lundvall sees a bright new industry here. “Missouri would be the new aesthetic mecca.” **M**

BREAKING BONE RESEARCH

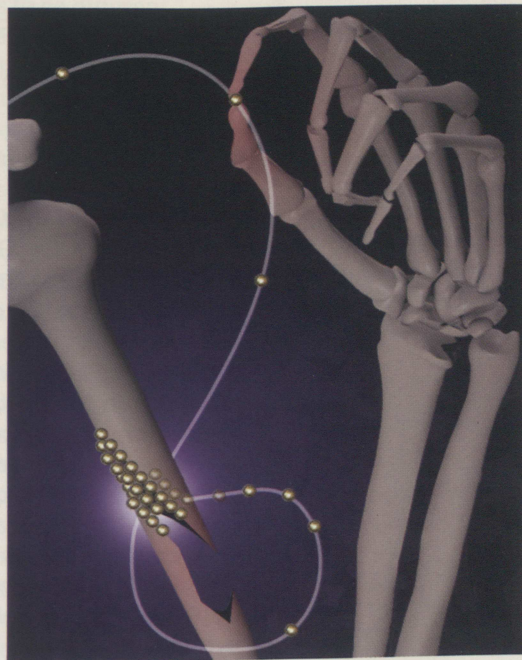
Although the biggest market for CG NanoMatrix is in aesthetics, the future also holds potential for nonaesthetic therapies.

Grant was originally working on improving hernia surgeries by developing a better mesh — like a patch — which helps reduce reoccurrences of the injury. But collagen is also a major component of bone. “We’re really interested in osteoporosis and osteoarthritis,” Grant says. “People always think of the mineral component of bone, hydroxyapatite, which is brittle in tension” as the main component of bone strength. But that tension is usually how bones break. “So you need more collagen, your structural protein, to prevent a lot of those fractures.” Collagen could also combat bone reabsorption around knee, hip or other implants.

Collagen is also a key component in wound healing, which is another area of application. Collagen fortified by a nanoparticle matrix could be useful in chronic wounds where an overabundance of protein-breaking enzymes prevent healing.

“Anywhere collagen is used [in the body], there’s all these other applications,” says Rone.

Grant calls it a “platform technology.” The underlying science is the same, but the product can be tailored for many uses.



† Collagen is the most abundant protein in the body and a major component of bone, giving it its tensile strength. The EternoGen team hopes to use its gold nanoparticle collagen to develop therapies to treat various medical conditions, including the brittle bones of osteoporosis.



Putting Physics First

An MU faculty member wins a national award for improving high school science education as she seeks to increase the pool of students pursuing STEM-related careers.

Story by Dale Smith * Photo by Nicholas Benner

† Meera Chandrasekhar instructs education majors at MU on how to teach science.

It is by definition a rare thing to win what some call the nation's most prestigious collegiate teaching honor, Baylor University's Robert Foster Cherry Award for Great Teaching. The award comes with a \$250,000 prize. MU's Meera Chandrasekhar has all the qualifications one expects of a distinguished professor whose career teaching physics spans three decades. She earned a doctoral degree from a top university (Brown). She built a strong research program and published more than 100 papers to which other academic researchers refer frequently. Private-sector engineers use her findings to design semiconductors and superconductors. She has won Mizzou's top teaching honors, as well as other national honors.

"What struck me about her is that she has this calming effect," says Mike Thompson who leads the Cherry selection committee. "There are some personality types that fear physics and math, and her calming personality says, 'It's OK, this will not hurt you.'" Thing is, this sort of career and charisma are pretty much required of nominees making it to the short list, Thompson says.

What put Chandrasekhar over the top? Thompson says it's her Physics First program, whose Missouri-wide reach is changing when and how high schools teach sciences. Her approach — requiring a hands-on physics course in ninth grade, before biology and chemistry — is designed to give students a better chance of succeeding in college courses as well as careers that involve science, technology, engineering and mathematics, or STEM. Building a 21st-century economy requires these skill sets, and many STEM-related jobs pay well.

But from Chandrasekhar's point of view, the award clincher has its roots in parenthood. Her initial step toward Physics First came in 1992, though she didn't know it at the time. "I was going about my business teaching and doing my research. I had three daughters. The oldest, Tara, was in fifth grade, and the twins, Indu and Rajni, were about to enter kindergarten. So, I was trying to do science with them at home, and one day I saw a request for proposals from the National Science Foundation. The idea was to get girls interested in science. I thought, this sounds like some-



thing nice that one could do.”

Chandrasekhar won the grant and worked with Columbia Public Schools to develop Exploring Physics. It was an after-school program of hands-on activities for students in grades five and six, especially girls, who often lose interest in science around middle school. Over the next few years, Chandrasekhar developed Families Exploring Science and Technology, in which students in grades six and seven built a drawbridge with their parents; Saturday Science, where students in grades eight and nine visited local industrial sites and participated in activities; and Newton Academy, a 10-day residential science and technology program for female students in grades nine to 11.

“I also soon realized that it was not possible for us at the university to conduct programs in K-12 schools with the intensity we needed. We needed a multiplier factor — the public school teachers.” So, she started teacher-training programs to extend her reach beyond the university’s walls. Roughly 200 teachers attended workshops from 1993 to 2004.

The most recent of the teacher-training programs is A Time for Physics First, which launched in 2006. The aim: Help students make their way into STEM professions. The challenge: Nationwide, only 36 percent of high school students take physics, though many more take chemistry (70 percent) and biology (98 percent). But in college that might not be enough. For instance, aspiring engineers and physicians must take two physics courses, and MU enrolls 1,000 students in such courses every semester. These are some of the hardest courses the students will take because the courses move quickly through material, are math-intensive, and require not only four or five hours a week in lab and lecture but also lots of study time.

“If you are part of that 64 percent who never had physics, it’s a killer,” Chandrasekhar says. “It’s almost like 64 percent of the kids are putting themselves at a disadvantage for getting into any STEM program. But if they’ve had physics in high school, they have a much better idea of what they are in for. They know the logic and have some idea of concepts. Research shows that if ninth-graders do well in a physics course like the one we developed, they are better prepared to take not just physics but also chemistry and biology.”

But that ninth-grade course cannot be “a lecture from your book,” Chandrasekhar says. “It needs to be experiential. We found that the ninth-grade teachers needed a well laid out curriculum, so we ended up writing the curriculum with a modeling-based pedagogy and based on activities

I’d done for earlier programs.” The two Physics First professional development programs (2006–08 and 2009–14) have allowed 124 teachers from 53 Missouri districts to complete their training.

Kory Kaufman, BS FW ’83, M Ed ’87, a physics teacher at Rock Bridge High School in Colum-

bia, was an early convert to Physics First. He became a student again as he attended three-week summer sessions for three years beginning in 2006. Instructors taught the new curriculum to Kaufman and his colleagues just as they would later teach it in their own classrooms.

Physics First teachers begin by asking students what they know, Kaufman says. “There are a lot of misconceptions in physics. For example, a lot of people — and I was one of them — believe that gravity affects all objects the same. But in order for heavier objects to fall at the same rate as lighter objects, the force of gravity has to be different.”

Depending on the misconceptions and the topic at hand, teachers assign experiments. “We used to give students an equation and tell them, ‘Go use this.’” Kaufman says. “But now, a lot of what we do is problem-solving. Students develop ideas and then discover answers for themselves. There’s a lot of experimentation. Students buy into it. They feel more engaged, more ownership, like they have done something to gain their knowledge. As teachers, we guide them through the discovery.

Kaufman says other high school teachers noticed the difference right away. “They tell us that kids coming to their classes are much better at solving problems.” He says teachers of those classes adapted their curriculum to build more quickly on the Physics First foundation.

The first group of students trained this way entered college in fall 2013, so no data exist to document a payoff at the college level. But it’s already clear that the program’s reach is long, Chandrasekhar says. In 2013, the most recent year for which data are available, about 84,000 ninth-graders took physics nationwide. Missouri students accounted for about 13,000 of them, of whom more than 10,000 were students in districts enrolled in MU’s Physics First project. **M**



† Chandrasekhar leads an after-school Exploring Physics program in 1993 for elementary-age girls.

Nationwide, only 36 percent of high school students take physics, though many more take chemistry (70 percent) and biology (98 percent).

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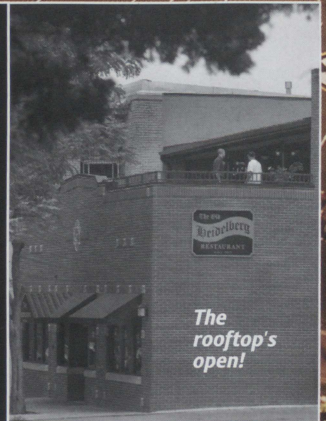
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Years from now, when the Memorial Stadium lights dim on Gary Pinkel's career at the University of Missouri, fans will remember the head football coach for many things: his signature Mizzou visor, his knack for developing recruits, his storied 2007 win against Kansas in the rivalry's most memorable installment, the Tigers' return to national prominence.

He won't, however, be known for his dance moves.

In the early hours of Jan. 4, 2014, after Mizzou's 41-31 AT&T Cotton Bowl Classic win against Oklahoma State, Pinkel jiggled and jived. Amid his elated team's roof-raising arms, the choreography conveyed the joy of a 12-2 record and Pinkel's 102nd victory at Mizzou. The dance video went viral, but football fever had long since taken hold of Tiger nation.

The victory pushed Pinkel (102-63) past Missouri immortal Don Faurot (101-79-10) in career coaching wins at MU. Although Mizzou is the second institution at which Pinkel holds the mark (he also leads the University of Toledo with 73), he remains humble and focused on improving the program he joined in 2001.

"I never had the goal, at Toledo or here, to become the winningest coach," says Pinkel of passing the home field's eponym. "Faurot is legendary, and he's legendary as much as a person as he was a football coach. He was honest, he ran the program with integrity, and that model works for any successful organization. The key is to daily do all the right things." →



Fans will see major updates to Memorial Stadium when they attend 2014's first home game, versus South Dakota, at 2:30 p.m. Aug. 30. mizzoumagazine.com/fall2014

Brushes With Greatness

The son of a General Tire salesman, Gary Robin Pinkel grew up in northeast Ohio's industrial plateau as many children did — a Browns fan. It's a 40-mile drive from his Akron hometown, the Rubber Capital of the World, to Cleveland.

At age 16, Pinkel and his dad made the trip in winter 1968 to see the Browns host the Baltimore Colts in the NFL Championship.

Father and son arrived late, and as they approached a buzzing Municipal Stadium, Pinkel stopped his dad near a stretch limousine. Out stepped famed Green Bay Packers Coach Vince Lombardi, wearing what Pinkel describes as the iconic "Russian hat."

"Everyone knew Vince Lombardi if you watched football on TV, and I did," Pinkel says. "I was awestruck."

Back home in Akron, Pinkel grew up alongside younger brother Greg and older sister Kathy. Both siblings suffered from hereditary spastic paraplegia, a condition that confined them to wheelchairs by adolescence. The genetic disorder skipped Pinkel, who developed an especially close relationship with his sister.

"Some people go through struggles at that age because they have acne or whatever, and she lost the ability to walk," Pinkel says. "When people stared at her, I would walk beside her and stare people down."

For Pinkel, an imposing 6-foot-2-inch receiver with great hands, the game came naturally. He played peewee football from age 7, and his Kenmore High School team won the city championship.

Pinkel parleyed prep success into an athletic scholarship at Kent State University. There he met teammates and fellow captains Nick Saban, now SEC foe Alabama's coach, with four national championships to his credit; and Jack Lambert, the crushing Hall of Fame linebacker for the Pitts-

burgh Steelers. Pinkel arrived at Kent State the fall following the tragic shootings of May 4, 1970.

"During my last month in high school, I was with my girlfriend at Dairy Queen when it came over the news," Pinkel says. "In class after lunch, the teacher put up on the board National Guard 4, KSU students 0. It would take a decade and a half for the university to recover from it, and I had just signed to go to school there five days earlier."

Led by another future Hall of Famer, Coach Don James, the Golden Flashes won the Mid-American Conference (MAC) in 1972 and went on to the Tangerine Bowl in Orlando, Florida. James would become the most influential figure of Pinkel's career and the indirect architect of Mizzou football.

After earning All-MAC honors twice as a tight end and graduating with an education degree in 1973, Pinkel remained at Kent State as a graduate assistant coach. When James accepted a head coaching job at the University of Washington, it didn't take long for him to reach out.

"[James] said he had 80 applicants [for an assistant coaching vacancy] but narrowed it to five, and I was one of them," says Pinkel. "I hadn't even applied. He asked, 'If I offered you the job, would you take it?' That was the interview."

Pinkel spent five years as the Huskies' wide receivers coach and later seven as the offensive coordinator, mixing in a two-year stint as receivers coach at Bowling Green from 1977-78. At Washington, he mentored future NFL quarterbacks Hugh Millen, Chris Chandler and Mark Brunell, among others. In 1991, he took over as head coach at the University of Toledo, while the Huskies, led by a pair of Pinkel-coached quarterbacks, won national championship honors.

Pinkel stayed true to James' strategy for building a winning program. After all, his mentor had laid



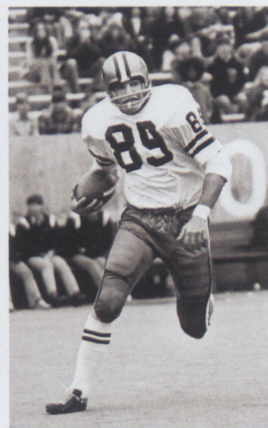
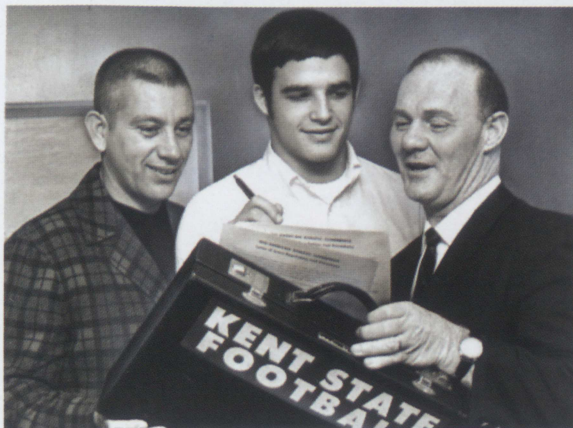
GARY PINKEL'S TOP 10 MIZZOU WINS

Aug. 31, 2002: Mizzou 33, Illinois 20
In a bold move, Gary Pinkel gives redshirt freshman quarterback Brad Smith his first career start in the Arch Rivalry game at the Edward Jones Dome in St. Louis.

Oct. 11, 2003: Mizzou 41, Nebraska 24
Missouri ends a string of 24 consecutive losses to the Cornhuskers, and fans bring down the Faurot Field goal posts.

Dec. 30, 2005: Mizzou 38, South Carolina 31
Brad Smith passes for 282 yards and rushes for 150 to bring back the Tigers from a 28-14 half-time deficit and win the Independence Bowl in Shreveport, Louisiana.

Nov. 24, 2007: Mizzou 36, Kansas 28
With the No. 1 ranking and the Big 12 North championship at stake, the Tigers come out on top in the rivalry's most significant game.



↑ **LEFT** Gary Pinkel (center) signs a letter of intent to play at Kent State beside Kenmore High School Coach Dick Fortner (left) and Kent State Assistant Coach Tom Phillips. **CENTER** Pinkel was an All-Mid-American Conference tight end at Kent State. **RIGHT** The 1981 Washington Huskies coaching staff of Don James (center) included Gary Pinkel (left of James) and Bob Stull (right of James), the head coach at Mizzou from 1989 to 1993.

out the blueprint at Kent State and Washington. The young coach would simply mimic those systems at Toledo. He rattles off the fundamentals of the James philosophy — attention to detail, relentless self-evaluation, hard work, meticulous organization — which now are tenets of Pinkel's Mizzou Made system for developing student-athletes.

Still, James had some sage advice for Pinkel before he returned to Ohio.

"He looked at me with stone-cold eyes and said, 'Gary, when things get tough — and they're going to get tough — you wake up that morning and make it through hour after hour, 100-percent focused on your job,'" Pinkel recalls. "'Don't let anything in. The next day, wake up and do the same thing. If you don't do that, it will chew you up.'"

Rocketing Toward Mizzou

In 10 seasons at Toledo, Pinkel amassed a 73-37-3 record. His Rockets won or shared the MAC title four times, a stretch that included an undefeated 1995 season (11-0-1) and a 1997 MAC Coach of the Year award.

When Mike Alden, Mizzou's director of athletics, composed a list of coaching candidates to take over a Missouri program that had posted eight losing seasons in 10 years, Pinkel's name was at the top.

"Gary has a commanding professional presence, and it was evident in [our] initial introduction he was organized, focused and disciplined in his approach," Alden says. "His work ethic was, and is, outstanding."

Pinkel's first season (2001) in Columbia remains his worst as a head coach. The 4-7 campaign culminated with a 55-7 loss to Michigan State, a game originally scheduled for September but moved to December because of 9-11.

"My guys quit on me at halftime, and I had never had a team quit like that," Pinkel says. "I sat on my bed that night sobbing, emotionally exhausted, and I remembered what my dad used to say to me after a loss: 'Go fix it. Don't be wallering around here. Get going.'"

The next day, Pinkel called a meeting with his staff to inform them practices were about to get more intense. If players were going to quit, he said, it would happen during preseason in February, not in the regular season.

Training camp tweaks aside, nothing could prepare Mizzou for the 2002 arrival of Brad Smith, the electric quarterback from Youngstown, Ohio, with whom Pinkel's legacy and Missouri's resurgence are inextricably linked. The Tigers played in the 2003 and 2005 Independence bowls, and defeated Nebraska for the first time in 25 years, as Smith became the first player in NCAA Division 1A history to pass for 8,000 yards and rush



Faurot Forever

Donald Burrows Faurot was always slim. When he arrived in Columbia from his Mountain Grove, Missouri, hometown in 1921, his slight frame discouraged him from trying out for Missouri's freshman football team.

Now the late Thin Man, following a career as a player, coach, teacher and athletic director, is synonymous with Mizzou athletics.

Faurot's father was the director of an experimental fruit station where Faurot lost two fingers on his right hand in an orchard farming accident. By his senior year at MU, he had overcome the disadvantage and bulked up to 145 pounds to punt and play fullback for Missouri Coach Gwinn Henry.

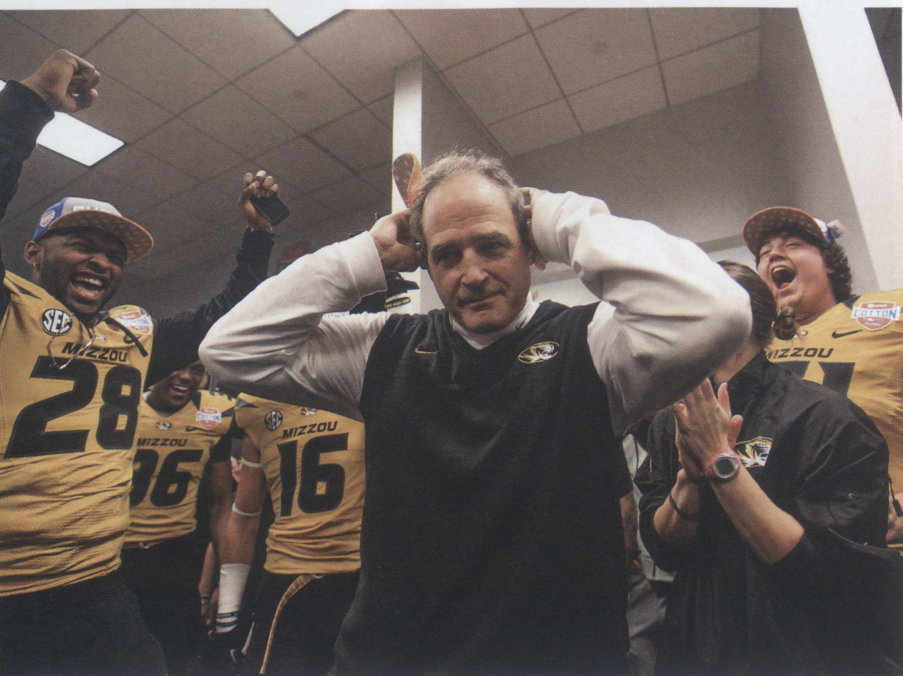
On the recommendation of another Mizzou legend, athletic director Chester Brewer, Northeast Missouri State Teachers College (NMSTC, now Truman State University) hired Faurot, BS Ag '25, MA '27, to coach baseball, basketball, football and track. Faurot's football teams in Kirksville went 63-13-3 and won 26 consecutive games before he relocated to coach and direct athletics at his alma mater in 1935.

When the Tigers defeated Texas A&M Nov. 30, 2013, Gary Pinkel and Faurot each had 101 career wins at Mizzou, but it wasn't the icons' first important parallel. Both coaches spent significant time at another institution where they compiled the best record in that school's history. Both implemented prolific offenses at Mizzou.

Perhaps most memorably, Faurot and Pinkel witnessed dramatic safeties to punctuate signature wins against the reviled Kansas Jayhawks. In Faurot's final game as coach in 1956, Mizzou defensive lineman Chuck Mehrer, BA '58, tackled Kansas running back Bobby Robinson in the Memorial Stadium end zone for a 15-13 victory. In 2007, with the BCS No. 1 ranking on the line, Mizzou defensive lineman Lorenzo Williams, BS '07, sacked Kansas quarterback Todd Reesing to seal a 36-28 victory for Pinkel's Tigers.

Faurot, who died Sept. 19, 1995, and Pinkel are also known for cultivating close relationships with athletes.

"Faurot made a point of going to the rooms of many of his players to keep open lines of communication," former NMSTC player Fred Schwengel told the *Chariton Collector* in 1986. "He truly cared about his players."



↑ After Mizzou defeated Oklahoma State 41-31 Jan. 3, 2014, at the AT&T Cotton Bowl Classic in Arlington, Texas, Pinkel treated the Tigers to some sweet locker room dance moves.

for 4,000 yards in a career.

Yet Smith was only the first in a string of play-makers behind center. Developing quarterbacks remains Pinkel's calling card, as does getting big-time production out of unheralded recruits.

"We look for high-character kids with size and speed potential," says Pinkel of his staff's talent evaluating system. "They don't have to be the greatest football player in the world, but with those things, we can give them to Pat Ivey [associate athletic director for athletic performance] and make them stronger and faster."

The philosophy turned the Tigers into perennial Big 12 contenders, winning the North Division in 2007, 2008 and 2010. That stretch, among Mizzou's other institutional attributes, caught the SEC's eye when the nation's top football conference sought expansion in 2011. In arguably his biggest coup, Pinkel's 2013 Tigers surprised national sports pundits by winning the SEC East in their second season in the league.

Since 2007, Mizzou is the only BCS school to rank in the top 10 in wins, top five in NFL first round draft picks and top five in Academic Progress Rate, which measures graduation and retention. At press time, there were more than 30 Mizzou alumni on NFL rosters, including Carolina Panthers defensive lineman Kony Ealy.

"No excuses — I heard that from Coach Pinkel coming in, and I heard that leaving," says Ealy, AFNR '14. "It means don't come out here and make up some excuse why you can't get your job done, or why you can't be a man. That's from a football stand-

point and a life standpoint. He's like a father to me. He has always been there. Any time I needed him, any time something went down, he's always there."

Pinkel's tutelage has also allowed a few assistant coaches to spread their wings, including former linebacker and Mizzou safeties coach Barry Odom, BS '99, M Ed '04, now the defensive coordinator at the University of Memphis.

"I can still hear coach defining his job: He wakes up every day, worries about the things he can control and does everything he can to make Mizzou football better," Odom says. "Then he wakes up the next day and does it again."

Much of that late night toiling and strategizing is done from the top floor of the Mizzou Athletics Training Complex, where Pinkel's headquarters are appropriately flanked by the Dan Devine Pavilion (named for the third-winningest coach in Mizzou history) to the southwest and Faurot Field to the east. The office is a black-and-gold menagerie of photos, displays, game balls and trophies — emblems of success that span 13 seasons at Mizzou.

Now, in the summer preceding his 14th season, Pinkel shows off a preliminary sketch of a football-shaped trophy he plans to give his dearest coaching assistants and staff who have helped him climb to 102.

"When I got here, I remember putting up the sign [of goals], and one said 'Win the National Championship,'" Pinkel says. "The players weren't allowed to laugh, but you could tell by their body language they wanted to laugh."

"Last year, we were a quarter away from playing for the national championship. In 2007, we were a half away from playing in the national championship game. Two of the past seven years, we were knocking at the door. There's a process to winning." **M**

'Don't let anything in. The next day, wake up and do the same thing. If you don't do that, it will chew you up.'

GP'S TOP MIZZOU WINS

Jan. 1, 2008: Mizzou 38, Arkansas 7

Led by senior running back Tony Temple's Cotton Bowl-record 281 rushing yards, the Tigers cap a historic 12-2 season with a No. 4 final ranking.

Oct. 4, 2008: Mizzou 52, Nebraska 17

With its first win in Lincoln since 1978, senior quarterback Chase Daniel and Mizzou hand Nebraska its most lopsided home loss in 53 years.

Oct. 23, 2010: Mizzou 36, Oklahoma 27

Pinkel is 0-6 against Oklahoma until the Tigers knock off the No. 1-ranked Sooners and celebrate Homecoming with ESPN College GameDay in attendance.

Oct. 12, 2013: Mizzou 41, Georgia 26

Despite losing starting quarterback James Franklin to injury in the fourth quarter, the Tigers upset No. 7 Georgia for Pinkel's first road victory against a top 10 team.

Nov. 30, 2013: Mizzou 28, Texas A&M 21

By beating the Aggies and reigning Heisman Trophy winner Johnny Manziel, the Tigers earn a trip to Atlanta for the SEC Championship.

Jan. 3, 2014: Mizzou 41, Oklahoma State 31

Sophomore defensive end Shane Ray's fumble return for a touchdown seals a Cotton Bowl win, caps a 12-win season in the SEC and ensures a No. 5 final ranking.



Celebrating Our Stripes

Everyone celebrates Homecoming a little bit differently. Some come to CoMo to tailgate and cheer on the Tigers at Memorial Stadium. Others stay up late to tour campus decorations and wake up early to catch the parade. Students put on step shows and talent shows, and alumni reconnect with old friends. But few invest in Homecoming like the 32 students who spend months planning and executing one of the nation's best celebrations of its kind. Meet Homecoming Steering Committee directors Jeremy Essner, Jessica Morrow and Brandon Pilas.



Jeremy Essner

Kelso, Missouri
Senior
Business administration, management

What Homecoming means to me: Homecoming is more than just a football game. Homecoming is a chance for our alumni to come back and relive memories they made at MU. It's also a chance for our current students to make those memories that they will be talking about for years to come.

What the Homecoming theme, "Celebrating Our

Stripes," means to me:

Our student body comes from such diverse backgrounds. This theme gives the students a chance to celebrate what *they* are most proud of here at Mizzou.

Best idea as a director:

Buy a planner

Biggest surprise about college life: How much laundry I have

Favorite class at MU:

Classical mythology because it was like story time as a kid

Favorite place to eat in CoMo: CJ's. I love wings.

Superpower I'd like to have: Time travel, so I

could go back to freshman year and live college all over again

Obsession: I finished a whole season of *Bates Motel* in two days.

Guilty pleasure: El Rancho nachos

Actor who would play me in a movie: Russell Crowe. I like to think of myself as rugged.

First crush: Topanga from *Boy Meets World*

Most people don't know: I've never been on an airplane before.

Dream job: Manager of the St. Louis Cardinals

Jessica Morrow

Waukesha, Wisconsin
Senior
Nursing

What Homecoming means to me: I'm blown away by the spirit and tradition that lies within this campus.

It's incredible to see such passion in the desire to maintain our traditions in the hearts of our students, alumni and faculty.

What the Homecoming theme means to me: Acknowledging the diverse culture Mizzou encompasses. Everyone's "stripes" add to the Mizzou experience.

Most challenging thing about being a director: Coordinating business black-and-gold outfits

Favorite MU tradition: Chanting M-I-Z. I love connecting with fellow Tigers wherever we might be.

Most exciting experience: Getting my acceptance email from Sinclair School of Nursing because it is something I am passionate about

Have always wanted to: Travel to Spain so I can put

my Spanish skills to use

Glad I did it but wouldn't do it again:

Walk across a frozen lake in northern Wisconsin

Most people don't know: I like to be artsy and paint in my free time.

Favorite place to eat in CoMo: Las Margaritas

If I won the lottery: I would buy a nice car and then give my parents a bunch of money because they've put up with me for 21-plus years.

Actor who would play me in a movie: Jennifer Lawrence. She seems pretty cool.

Dream job: Chief of nursing at a level-one trauma center

Ultimate dinner date:

Beyoncé, to figure out how she does it all

Favorite quote: "Whatever the problem, be part of the solution. Don't just sit around raising questions and pointing out obstacles." — Tina Fey

Brandon Pilas

Ballwin, Missouri
Senior
Business administration, marketing

What Homecoming means to me: Homecoming means everything to me. From donating blood to staying up to the early hours of the morning building a parade float, I love it all. It's a celebration where everyone can find an event they are passionate about.

What the Homecoming theme means to me: One of my goals as director is to get everyone involved in Homecoming. "Celebrating Our Stripes" encompasses everything that Mizzou is about. The students at Mizzou are so diverse,

and we want to celebrate everyone.

First thing I thought when I found out I was a director: I thought it was a joke. When I realized it wasn't, I thought, "What am I getting myself into."

Most challenging thing about being a director: Remembering there are 31 capable people willing to help me with anything Homecoming-related

Most exciting experience: Studying abroad last summer in Prague. Encountering so many different cultures and stepping outside of my comfort zone was incredible.

Favorite class at MU: Accounting 2258 because it teaches everything you need to know about Microsoft Excel. It was and will be the most practical class I take at Mizzou.

Favorite place to eat in CoMo: Booche's

Wish I knew as a freshman: To get to know my professors. They are really there for your benefit and want to help you out in any way.

I'm proudest of: Donating bone marrow my sophomore year. It was an incredible feeling to be able to give an individual a second chance at life.

Biggest fear: I don't go into the ocean. I'm afraid of getting eaten by a shark.

Would never: Allow my children to attend the University of Kansas

Perfect day: Attending an afternoon Cardinals game and an evening Blues game

Ultimate dinner date: Chancellor Loftin. I haven't met him yet, and he seems like a pretty cool guy.

Favorite quote: "Be quick, but don't hurry." — John Wooden

SWAB A CHEEK, SAVE A LIFE



At least 1,000 people with blood cancers, such as leukemia and lymphoma, die annually because they can't find a matching bone marrow donor, according to the Institute for Justice (IJ). The Mizzou family is rising to the challenge by making a bone marrow drive a standard at Homecoming.

Olivia Maniaci, BS BA '11, of Washington, Missouri, helps establish bone marrow registration drives across the region for the nonprofit Delete Blood Cancer. Last year, she started coordinating Mizzou's annual Homecoming drive, which began in 2007. During the 2013 drive, volunteers registered 1,644 people, the third-largest college drive the organization has done.

Unlike blood drives, bone marrow drives collect information. Donors complete a questionnaire and have their cheek swabbed. The DNA from the cheek swabs is analyzed for 10 genetic markers that determine compatibility for transplant, and the information is placed on a bone marrow registry. Then the waiting begins. Donors remain on the registry until they turn 61, so an 18-year-old freshman could wait more than 40 years for the chance to save someone's life.

Bone marrow donation can be as simple as taking blood from one arm, removing the stem cells and returning the

blood to the other arm. A more invasive method takes liquid marrow from the pelvic bone using a special syringe.

This year, 133,000 Americans will be diagnosed with a serious blood disease that could require a bone marrow transplant, according to IJ. Transplants are needed after chemotherapy or radiation destroys a person's own diseased bone marrow. However, finding a suitable match is exceptionally difficult. Thirty percent of patients find a donor within their families, but 70 percent must count on the kindness of strangers. Despite a registry of millions, Delete Blood Cancer says 60 percent of patients never receive a transplant.

Maniaci wants to add 2,000 Tigers to the registry this year. Her grand goal is to top Ohio State's single-drive record of 2,500 new registrants. Of the 7,500 MU students registered to date, 58 have donated bone marrow, Maniaci says.

Delete Blood Cancer has made a big push onto college campuses in part because of students' enthusiasm.

"So many people, when you tell them about being a bone marrow donor, their eyes get wide, and they run away," Maniaci says. "You still get some of that at college campuses, but often they say, 'Of course. Why wouldn't I do that?'" — Erik Potter

Celebrate a Landmark Anniversary

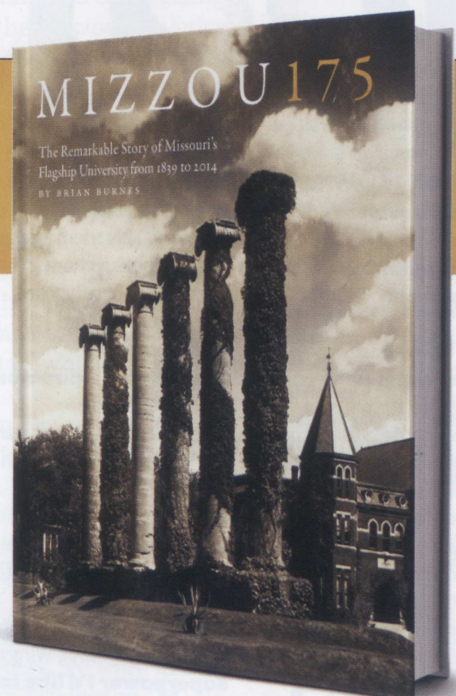
With Mizzou's New Commemorative Book

The University of Missouri has helped shape history within the state and far beyond since its founding 175 years ago. You can explore this fascinating journey in a new coffee-table book written by historian and alumnus Brian Burnes, BJ '76.

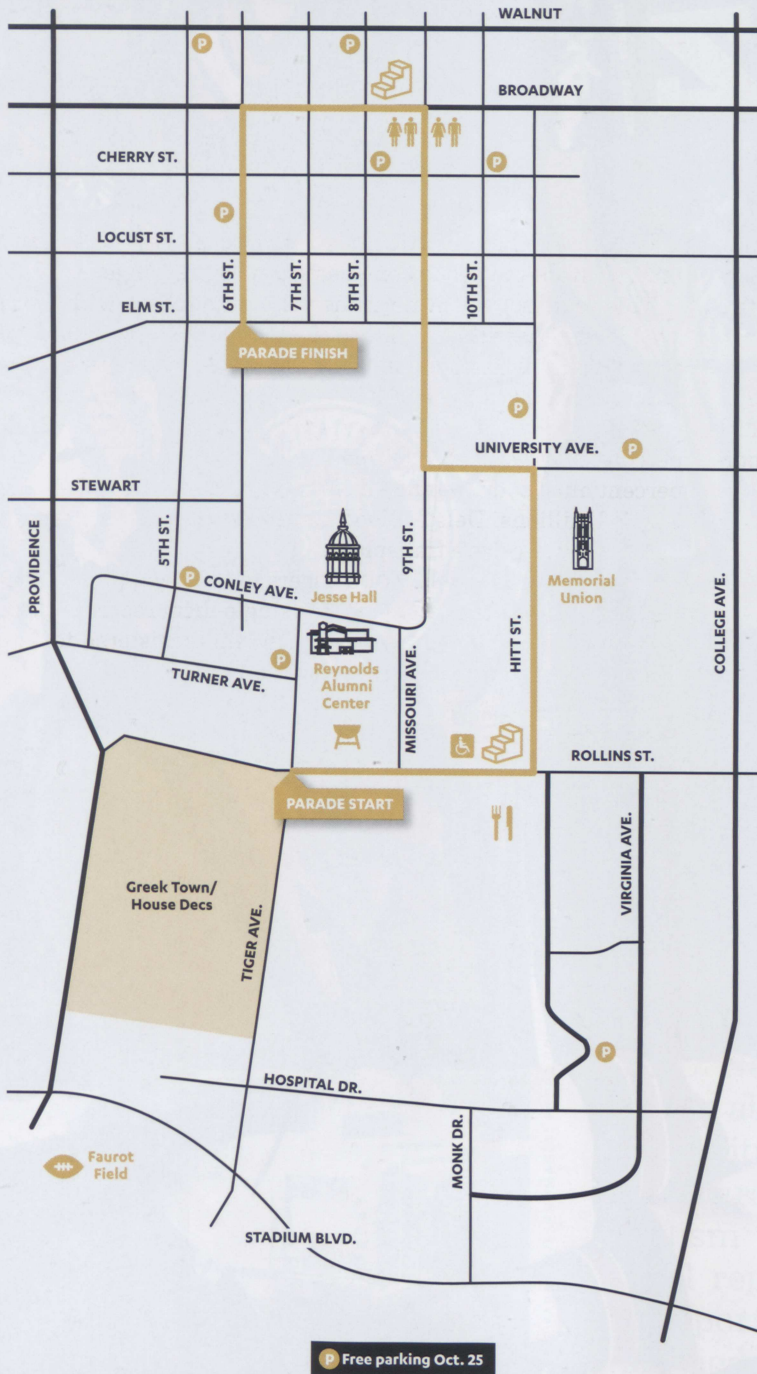
The 224-page book, packed with hundreds of archival and contemporary photographs, uses colorful narrative to chronicle the growth of the first public university west of the Mississippi River — from its modest start in frontier Boone County to its current standing as Missouri's major research, land-grant university.

- ▶ 9 x 11 inches with cloth hard cover and dust jacket
- ▶ Priced at just **\$29.95** plus shipping

Order at MizzouBook175.com or call toll-free 866-834-7467.



2014 Parade Route



P Free parking Oct. 25

KEY

- P** PARKING
- GRANDSTANDS
- ACCESSIBLE SEATING
- RESTROOMS
- ROMP, CHOMP AND STOMP
- BREWER BREAKFAST

Homecoming Events

Oct. 13-16 Homecoming Blood Drive
 11:30 a.m. to 7:30 p.m., Hearnnes Center
 Thousands of students and alumni participate in the Homecoming blood drive, one of the nation's largest college-based drives. Make an appointment to donate in Columbia, or visit mizzou.com to find a satellite drive near you.

Oct. 20-23 Talent Competition presented by Asset Campus Housing
 6:30 p.m., Missouri Theatre
 Check out talented Mizzou students singing, dancing and joking onstage. Purchase tickets online, at the box office on performance day or stream the competition live at mizzou.com.

Oct. 24 Homecoming Headquarters
 Noon to 5 p.m., Reynolds Alumni Center circle drive, Conley and Tiger avenues
 Stop by the Reynolds Alumni Center and Traditions Plaza to check in for the weekend and reconnect with old friends. In the afternoon, catch one of the hourly campus tours.

Campus Decorations and Spirit Rally
 6 to 9:30 p.m., Greek Town
 Tour campus decs, and watch larger-than-life skirts. Food and merchandise will be available. Rev up for the big game at the spirit rally in Greek Town after house decs.

Oct. 25 Homecoming Parade presented by CenturyLink
 TBD
 Enjoy game-day spirit as floats, bands and performers wend through campus and downtown Columbia. Or stream parade coverage live at mizzou.com.

Homecoming game vs. Vanderbilt
 TBD, Memorial Stadium
 The Tigers face the Vanderbilt Commodores. At halftime, watch the Homecoming king and queen coronation. Single-game tickets are on sale at mutigers.com, or call 800-CAT-PAWS.

Check out the Mizzou Alumni Association's new mobile site mizzou.com from your smartphone.





MIZ
MISSOURI ALUMNI ASSOCIATION

MIZ 20th

**MISSOURI
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90 F-ONES



DREAM JOBS

STORY BY MARCUS WILKINS • ILLUSTRATION BY BLAKE DINSDALE

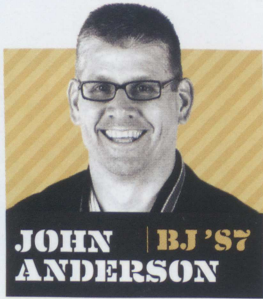
Mizzou sports fans in the digital age have grown accustomed to expansive coverage of their beloved Tigers. On Aug. 14, black-and-gold exposure reached an all-time high with the launch of the SEC ESPN Network.

Airing 450 events in its first year, including approximately 45 football games and more than 100 men's basketball games, the SEC Network will provide 24/7 programming about the Southeastern Conference's 14 institutions.

Naturally, with the nation's foremost journalism school on its campus, Mizzou is well represented at the Worldwide Leader in Sports. But not all MU alumni at ESPN studied primarily at the J-School.

Here, a handful of MU graduates discuss their lives as students, alumni and professionals. ➤➤

PHOTOS BY JOE FARAONI/ESPN IMAGES; PROPS COURTESY THE MIZZOU STORE



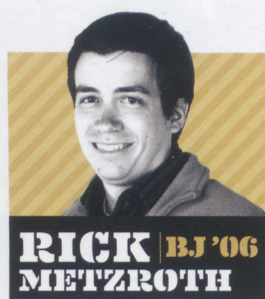
JOHN ANDERSON BJ 'S7

SportsCenter anchor Green Bay, Wisconsin
Favorite Mizzou athletics memory while a student-athlete: "My first Big Eight indoor track meet in Lincoln, Nebraska. We were expected to finish seventh according to the coaches' poll. Mizzou track and field Coach Bob Teel stood in front of the squad, a gentleman in every sense of the word, and informed us seventh would be fine as long as the eighth-place team was — (and then he took a long, long pause). Finally, he just said, 'Men, I would rather spit than be a Jayhawk!' We finished second."



KENDRA WALTER BA '10

Media operator Independence, Missouri
Favorite memory of Mizzou life: "[During a] snow day in 2006, my first-floor Hudson hallmates and I made the most of it. We stayed up all night chatting, daring people to go outside in their swimsuits, taking pictures and avoiding homework. It really helped us build better friendships with the people we had lived with for several months, and it's something we still laugh about today."



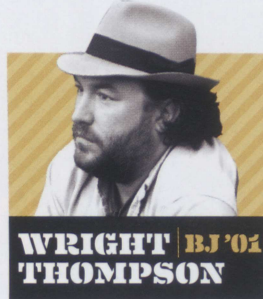
RICK METZROTH BJ '06

General editor, ESPNFC.com (soccer) Agoura Hills, California
The most excitable (rabid, boisterous) alumni — from any SEC institution — at the SEC ESPN Network: "It's hard for me to contain my passion when watching Mizzou at work sometimes, and a lot of people I work with would say I'm the most excitable SEC fan they know. But I have to give that title to Auburn fans — every one of them lives and dies with each game. There's no such thing as a casual Auburn fan."



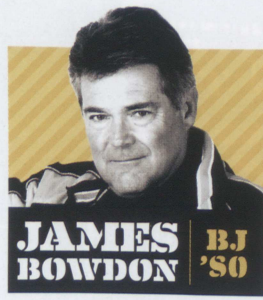
SETH WICKERSHAM BJ '00

Senior writer, ESPN The Magazine and ESPN.com Anchorage, Alaska
Most vivid memories of life in Columbia and at Mizzou: "They're all blurry. That's what made them fun. No, it's not really one memory but rather the collective feeling of an era. It was an era in which we covered the Super Bowl [for the *Missourian*] as college kids. It was an era in which big dreams seemed possible, if we worked hard enough. I was so fortunate for my friends at the sports desk: Wright Thompson and others. We were ambitious and obnoxious and competitive, not against one another, but against the world."



WRIGHT THOMPSON BJ '01

Senior writer, ESPN The Magazine and ESPN.com Clarksdale, Mississippi
What Mizzou brought to the SEC that makes the conference more interesting or fun: "Mizzou has brought a window into the orbit so many students have known and loved: little burgers and Stag longnecks at Booche's, mouth-scalding pizza at Shakespeare's, and music at the Blue Note, bottomless cups at the Fieldhouse, and the way three generations throw a football around the Quad in the shadow of the Columns."



JAMES BOWDON BJ 'S0

Coordinating producer, auto racing coverage St. Louis
Favorite Mizzou athletics memory while a student: "The Mizzou football team beat Notre Dame 3-0 [Sept. 9, 1978] in South Bend, Indiana, but everyone went to Faurot Field anyway, tore down the goal posts and took them to Bullwinkle's."



RUSSELL LAFLEUR BS '11

Software engineer Houston
Favorite Mizzou athletics memory while a student-athlete: "I made my way from Texas by way of a baseball scholarship. Mizzou played Texas Christian University in the 2010 Houston College Classic at Minute Maid Park where I hit my first career home run to lead off the game in front of 50-plus family and friends."



TOM FRIEND BJ 'S3

Senior writer, ESPN TV and ESPN.com Washington, D.C.
What he enjoys most about his job: "I get the chance to tell human interest stories for both mediums. You hear people say all the time, 'I liked the book, but I loved the movie.' Or, 'I liked the movie, but I loved the book.' I get to do both the movie and the book. It's perfect."



THOM GRIFFIN BJ '09

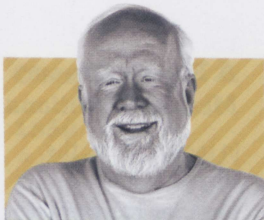
Production assistant Old Bridge, New Jersey
What he enjoys most about his job: "I most enjoy being in an all-sports, all-the-time environment every day. I also love that while everyone on campus takes the job seriously, they also realize that at the end of the day, we are bringing people sports, and it is an awesome privilege."



JULIE TURNER BJ '06

Manager, ad solutions and revenue analysis Emporia, Kansas
Reaction when she first learned Mizzou would join the SEC: "My first thought was what would happen to our rivalry with Kansas. I was at Mizzou Arena for the last home game against KU. The Tigers' win was the perfect ending to the rivalry, for now. I hope they're able to work something out to play again."

LOE-ERIKOW/ESPN IMAGES



JOHN WALSH | MA '69

Executive vice president, executive editor
Scranton, Pennsylvania

Most vivid memories of life in Columbia and at Mizzou: After putting to bed the *Missourian*, “We would go to the Heidelberg and listen to John Fogerty singing ‘Who’ll Stop the Rain’ until 2 in the morning. It was fun. [The late] Jo Ann Dickerson, MA ’71, to this day one of the great mentors in my life, gave us all the confidence in the world. One of the great things about my time at Missouri was to hear [journalism Professor] Jo Ann say, ‘I have been in this business for a while, I see what you’re doing, and it’s really good.’ At my age, to hear that from someone who had spent 15 years in daily newspapers in Texas was the most gratifying and inspirational talk I could ever have.”

‘It was an era in which big dreams seemed possible, if we worked hard enough.’



AMY BRACHMANN | BJ '10, MA '11

Associate editor, ESPN
The Magazine

Crystal Lake, Illinois
Reaction when she first learned Mizzou would join the SEC: “I was excited; it’s more exposure and attention for the school. I knew in the short-term it would be a rough go, but I had confidence Mizzou would get on par with the rest of the SEC sports programs.”



TOM HART | BA '98

Play-by-play announcer for the SEC Network and ESPN Radio

Atlanta
Most vivid memories of life in Columbia and at Mizzou:

“When Notre Dame came to town in 1984, my brother and I sold candy bars in the parking lots for our school fundraiser. I was sent into the ABC production truck by a friendly cameraman to hand one to the producer. I bought my own football season tickets as a 13-year-old, and I passed campus every day on the way to Rock Bridge High School, so it was inevitable I would end up at Mizzou.”



Experience Linkside Community

Time and again people find themselves drawn back to make Columbia their home. They love the active arts community, trails, exceptional medical resources, and the action of Mizzou.

It doesn't take long to discover that Columbia has become much more than a college town - big enough to have lots to offer, yet small enough to have a hometown feel. If you loved Columbia once, you'll love it again.

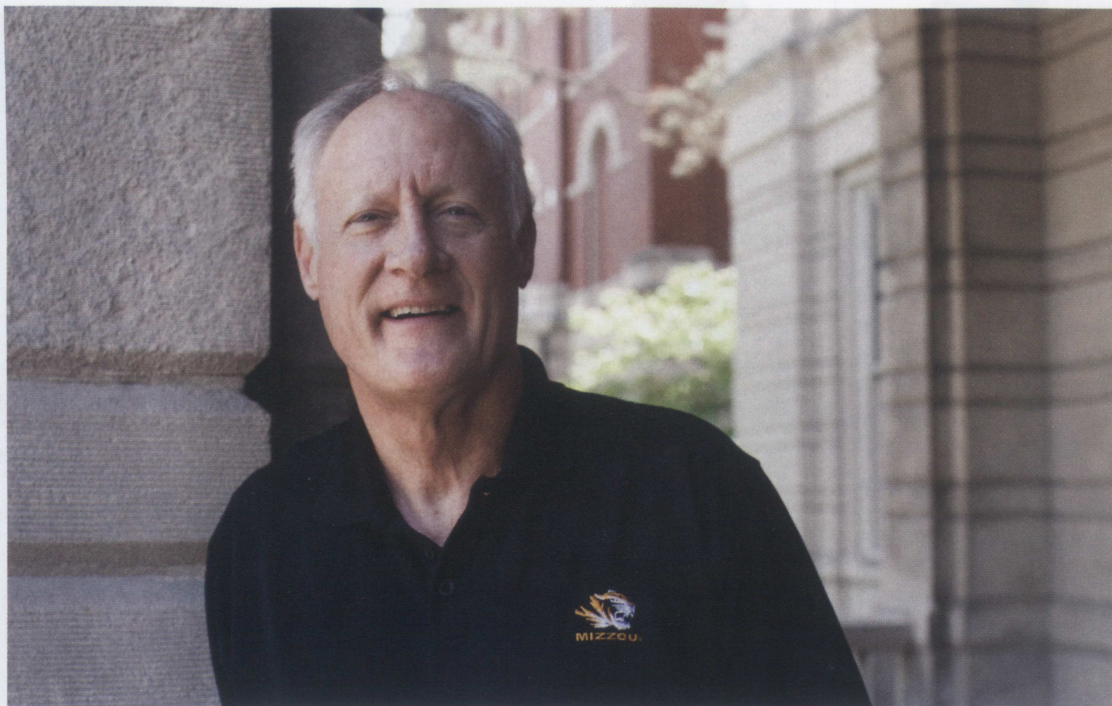
Check out what Columbia has to offer at www.LinksideLiving.com. You'll be glad you did!



Sign up for news and updates at www.LinksideLiving.com

At least one resident must be 55 years of age or older. No residents under 19 years of age.

Linkside
OLD HAWTHORNE



Heart for Mizzou

Dudley McCarter, JD '75, the Mizzou Alumni Association's new volunteer president, had a history with MU years before he enrolled in law school. He'd been smitten with the place as a junior football player at Riverview Gardens High School in St. Louis. "Some older guys from our school were playing at Mizzou, and that spring, our coach brought us to Columbia to watch the Black and Gold Game. I remember riding the bus through campus and thinking how beautiful it was and what a great university."

The hook was set, and a few months later, he was reeled in while attending a weeklong student council convention at Memorial Union. "I was proud that this was the state university, but it's an intangible thing. I fell in love with MU."

McCarter wanted to play football and wrestle in college, but he wasn't good enough to compete in Division I. However, even when he attended Knox College in Galesburg, Illinois, he wore his heart on his sleeve for the University of Missouri. "I used to wear Mizzou T-shirts on campus there," he says with a laugh. "And I remember after our football games, I'd run back to the fraternity house to find out if the Mizzou score had come up yet."

When it came time for law school, Mizzou was McCarter's first choice. And as soon as he was gainfully employed as a lawyer, he repaid the \$400 in scholarships he received during his sec-

ond and third years in the program.

In the decades since, McCarter has served not only in several roles for the Mizzou Alumni Association (law school representative to the governing board, treasurer, vice president) but also as president of the Missouri Bar and chair of the Children's Trust Fund of Missouri.

During his 2014-15 term as association president, McCarter plans to encourage alumni to boost their involvement in the university. He offers several options, including joining the association; giving more money; getting a Mizzou license plate, which supports scholarships; and volunteering time. (Visit mizzou.com for more on these options.)

McCarter's interest in history dovetailed with Mizzou's 175th Anniversary Celebration Leadership Committee, a campuswide committee planning the yearlong anniversary celebration in 2014. He is serving as a committee co-chair. Anniversary initiatives include a weeklong celebration in September focusing on the topic of Thomas Jefferson, whose ideas helped shape public education. The celebration will include guest speakers, a service project and the Sept. 18 inauguration of Chancellor R. Bowen Loftin, where the university's new ceremonial staff, or mace — sponsored by the Mizzou Alumni Association — will be unveiled. Learn more at inauguration.missouri.edu.

— Dale Smith

A Place to Honor Mizzou Traditions

In recent years, the Mizzou Alumni Association has carried out campus beautification projects that also engaged alumni and raised money for association programs — Tiger Plaza and Mizzou Legacy Walk.

For its latest project, the association broke ground in July on the northern half of Carnahan Quadrangle to create Traditions Plaza. The plaza will be a venue where the campus community can enjoy concerts, spirit rallies, outdoor classes and other activities. In addition to a stage with amphitheater seating for about 750, the association's plan calls for tiles describing Mizzou traditions. These could include Homecoming, Greek Week, *Savitar* yearbook and Tap Day. Like Mizzou Legacy Walk, Traditions Plaza will be funded by alumni who purchase inscribed bricks that form parts of the hardscape.

"The success of our earlier projects showed us how much alumni like to leave their name on campus," says David Roloff, BES '78, MA '85, who directs marketing and strategic communication at the association. "Traditions Plaza is where we will honor our pride of place on campus" and raise up to \$3 million to preserve Mizzou traditions.

— Dale Smith



TIGER TALK

Class Notes

1950

★**Joseph Holman, BS ChE '53**, of Towanda, Pa., completed 25 years of ordained service at the Episcopal Church in May 2014. He had previously retired after 31 years at DuPont Co.

Ray Mueller, BS CiE '53, and **Beverly Trescott Mueller, BS Ed '54**, of Nashville, Tenn., celebrated their 60th anniversary Feb. 21, 2014.

Calvin Nelson, M Ed '56, MST '63, of Liberty, Mo., celebrated 20 years of retirement from the Kansas City Missouri School District where he taught math and physics. He also taught at the UMKC-sponsored Math and Physics Institute and served as athletic director for Northeast High School in Kansas City, Mo.

1960

Dick Fischer, BS BA '61, of Centreville, Va., earned a master of divinity in practical theology from Regent University. He wrote *Historical Genesis from Adam to Abraham* (University Press of America, 2008). He is president of Genesis Proclaimed Association, a ministry devoted to finding harmony in the Bible, science and history.

★**Roger Blackwell, BS BA '62, MS '63**, of Columbus, Ohio, wrote *Saving America: How Garage Entrepreneurs Grow Small Firms into Large Fortunes* (Union Hill Publishing, 2014).

Carolyn Mulford, MA '62, of Columbia received the Walter Williams Major Work Award from the Missouri Writers' Guild April 12, 2014, for *Show Me the Murder* (Five Star, 2013), the first book in her mystery series.

H. Roger Grant, MA '67, PhD '70, of Central, S.C., wrote *The Louisville, Cincinnati & Charleston Rail Road: Dreams of Linking North and South* (Indiana University Press, 2014).

Lon Zimmerman, BS Ed '67, of St. Louis, president of Zimmerman Marketing Research, received a Lifetime Achievement Award from the St. Louis chapter of the American Marketing Association.

Mary Ann Jackson McCauley, BJ '69, of Chanhassen, Minn., principal and founder of Catalyst Communications received the International Association of Business Communicators Chairman's Award.

1970

Fred Miller, BS BA '71, of St. Louis wrote *NO SWEAT Elevator Speech!: How to Craft YOUR Elevator Speech, Floor by Floor, with No Sweat!* (Fred Co., 2014), a follow-up to *NO SWEAT Public Speaking!* (Fred Co., 2011).

★★**Steven Harlan, BA '72, MD '76**, of Hickory, N.C., is a fellow in the American College of Radiology.

★★**Joseph McCraith, BS Ed '72, MA '74**, of Hillsboro, Mo., a recent inductee into the Missouri Basketball Coaches Hall of Fame, is chair of the American Legion Premier Boys State of Illinois.

Rhonda Abrams White, BJ '72, of Poinciana, Fla., co-wrote with husband Richard White *Confronting Abortion Distortions* (Xulon Press, 2013) for which they received the 2014 Christian Writers Award.

★★**John W. Brown, BS ME '73**, of Kansas City, Mo., was named an All-

state SEC Basketball Legend and was honored at the SEC Men's Basketball Tournament March 12–16, 2014, at the Georgia Dome in Atlanta.

James McGee, BA '73, M Ed '98, of Columbia wrote *Bricked* (Mizzou Publishing, 2013), a novel about a school for at-risk students.

Suzanne Gladney, BA '74, JD '76, of Kansas City, Mo., received the Mattie Rhodes Center Service Award, given to a person who serves the poor and suffering, primarily in the Hispanic area of Kansas City.

★**James Stone, BJ '74**, of San Diego was named a 2014 father of the year by the San Diego Father's Day Council.

Lisa Cochran, BJ '76, of Winnetka, Ill., senior vice president of marketing at Allstate Insurance Co., was named advertising woman of the year by Advertising Women of New York.

Patrick Farrell, BJ '77, of Webster Groves, Mo., chief marketing and communications officer for Enterprise Holdings, was the keynote speaker at the 2014 Car Rental Show in Las Vegas.

Nancy Roth, BS Ag '77, DVM '89, of New Haven, Mo., is an associate veterinarian at Webster Groves Animal Hospital and is on the board of the Missouri Horse Shows Association.

Roberta Schultz, BS BA '77, PhD '97, of Ada, Mich., is retiring from Western Michigan University and will be a senior lecturer of marketing at the University of Arizona in Tucson starting in fall 2014.

1980

★**Laura Saunders Bernhardt, BJ '80**, of Northbrook, Ill., is a senior

Celebrating Mizzou's 175th

MU's statewide role benefits all Missourians

As MU celebrates its 175th anniversary in 2014, one of the items that strikes me is the profound influence the university has across our state. It starts with our beautiful campus where nearly 35,000 students learn from a world-class faculty. Students from every county in the state come to MU to pursue an education. More than 275,000 Mizzou graduates contribute to commerce and culture in Missouri, the United States and abroad every day. About half of them reside in the Show-Me State where they help drive our economy.

When considering MU's impact, think about MU Extension, which celebrates 100 years of service this year, and how it assists 1 million Missourians with their business or personal lives. As a former 4-H Club member, I know firsthand how extension's programs can shape young people.

Let's not forget MU Health Care and the difference it makes in the lives of our citizens by educating Missouri's doctors, nurses, veterinarians and allied health care providers.

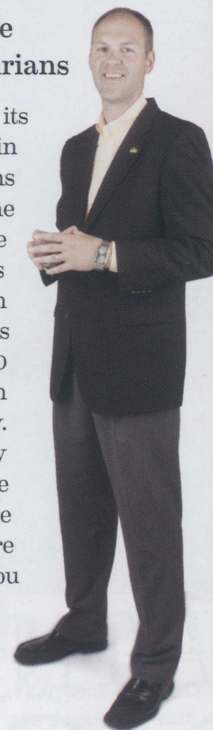
And finally, a fall Saturday afternoon wouldn't be the same without our Tigers. Missourians rally to support Mizzou Athletics, and the official state colors seem to be black and gold most of the year. For Mizzou's next 175 years, let's continue to think of ways to make Missouri a better place to live. Just think what we can accomplish together!

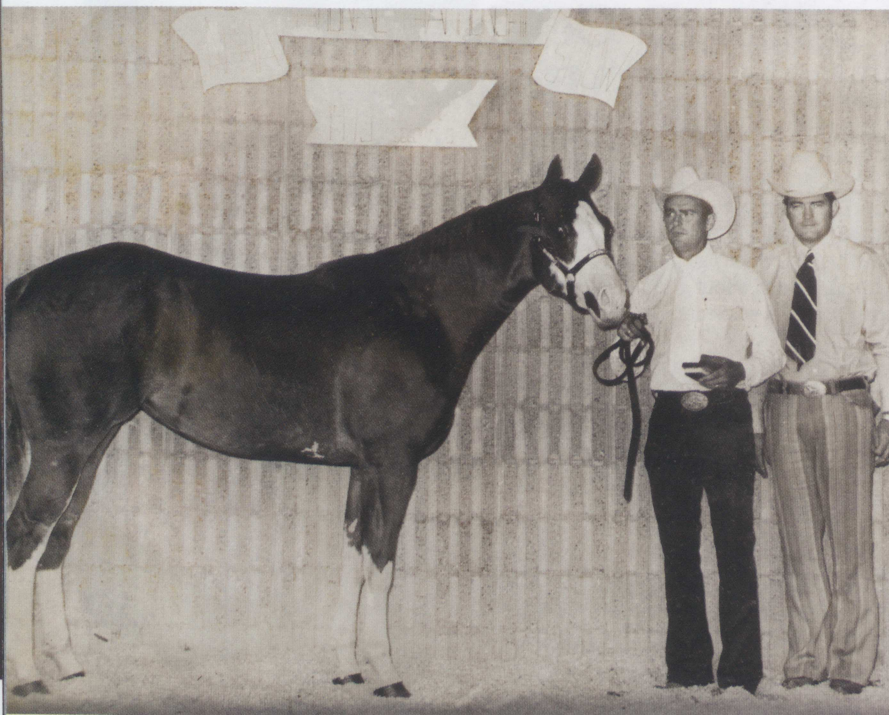
TODD MCCUBBIN, M ED '95

executive director, Mizzou Alumni Association

Email: mccubbint@missouri.edu

Twitter: @MizzouTodd





PAINT HORSE PIONEER

Although Selby “Duke” Neff grew up in Shawnee Mission, Kansas, a suburb of Kansas City, he always had a yen for the rural life. So he was thrilled when, in 1962, as promotions manager for the then-new Kansas City Chiefs, his first task was to buy an American paint horse to be the team’s mascot, Warpaint. By then, Neff, BJ ’60, had served in the military, landed an advertising job at Valentine-Radford in Kansas City, and pounded the pavement as a volunteer, drumming up season ticket holders in advance of the Chiefs’ arrival.

Buying the horse was his first step not only in big-time promotions but also into the world of breeding, buying, selling and judging paint horses. It has taken him, mostly as a judge, to 47 states and 14 countries. In 2009, the American Paint Horse Association gave him its distinguished service award. And in 2012, Neff’s champion stallion Adios Amigo was in the inaugural class of the association’s hall of fame.

But in the ’60s, Neff was busy overseeing production of the Chiefs’ high-light films, building and servicing a network of radio stations to broadcast games, and handling the squad’s personal appearances. “In the beginning, we had almost as many calls to bring Warpaint out for appearances as for players. I had a Mustang sedan pulling a two-horse trailer, which should never have happened. But I pulled that trailer to many events in shopping center parking lots and other outdoor venues. People really identified with Warpaint. So much so that a whole lot of people went to Chiefs’ games and wanted to win, but it was almost as important to them to see Warpaint run the cinder track around Municipal Stadium after a touchdown.” — Dale Smith

† In 1973, Selby “Duke” Neff, far right, poses with Bill James when Neff’s horse The Neighbor Lady won a national championship in Denver.

consultant of the leadership-consulting firm the Oliver Group.

★ **Barry Langford, BA ’80, JD ’83, MS ’02**, of Columbia wrote *Hospitality Law* (Kendall Hunt, 2014), an undergraduate textbook for hospitality management students.

★ **Bobbie Rae Bailey, BJ ’81**, of Los Angeles is managing partner of the LA office of Leader & Berkon LLP.

★ **Stacey Woelfel, BJ ’81, MA ’90, PhD ’06**, of Columbia won a Kansas City Press Club bronze public service award as a KOMU news director for a series on mid-Missouri poverty.

★ **Nancy Kohl, BJ ’82**, of St. Peters, Mo., is director of marketing and strategic planning for Tiger Waterfront Products.

★ **James Mueller, BJ ’82, MA ’92**, of Corinth, Texas, professor of journalism at the University of North Texas, wrote *Shooting Arrows & Slinging Mud: Custer, the Press, and the Little Bighorn* (University of Oklahoma Press, 2013). It was a finalist for the Western Writers of America 2014 Spur Award in the Best Western Nonfiction Historical category.

★ **David Luther, B Ed ’83, MA ’95**, of Jefferson City, Mo., retired after 30 years in public education and created the consulting group Luther Communications LLC.

★ **Jennifer York, BS Acc ’83, MA ’84**, of Ozark, Mo., is a certified public accountant and senior manager at BKD in Springfield, Mo.

★ **Jody Debs, BA, BJ ’84**, of Denver is chief legal officer for ARCADIS North America, a Netherlands-

headquartered engineering and consulting company. She is also a board member of Engineers Without Borders.

★ **Patrick Plaisance, BJ ’85**, of Fort Collins, Colo., a journalism professor at Colorado State University, is editor of the *Journal of Mass Media Ethics*. He wrote *Virtue in Media: The Moral Psychology of Excellence in News and Public Relations* (Routledge, 2014).

★ **Hugh O’Halloran, BJ ’86**, of Bayside, Wis., was named a leading real estate lawyer by Chambers USA: America’s Leading Lawyers for Business.

★ **John Diehl, BA ’87**, of Ballwin, Mo., Missouri House majority floor leader and Armstrong Teasdale partner, received a 2014 Legislative Award from the *St. Louis Business Journal*.

★ **Ted Farnen, BJ ’87**, of Columbia is an editor at the Missouri School Boards’ Association.

★ **Stewart Glenn, BES ’87**, of St. Louis is a captain and 25-year veteran of the Clayton [Mo.] Police Department.

★ **Cindy Buttress, BS Acc ’88**, of Blue Springs, Mo., is the financial services market manager at the Lenexa, Kan., office of Kennedy and Coe LLC.

★ **Laura Craska-Cooper, BA, BJ ’88**, of Prineville, Ore., managing partner of Ball Janik LLP’s Bend, Ore., office, was nominated to become a fellow of the American Bar Foundation.

★ **Jill Branson Hammergren, BJ ’88**, of Raleigh, N.C., owns The Media Pro, a media, marketing and communications agency. The company won four International Telly Awards



REMEMBERING

for its work teaching law enforcement personnel how to recognize and prevent human trafficking.

1990

★ ★ **David Dilley, BS ME '95**, of Royal Oak, Mich., celebrated the 10th anniversary of his company D3 Vibrations, a metal-cutting analysis and consulting business.

Margaret Goodin, BES HES '96, of Charleston, Mo., is a project architect specializing in interior design at HOK in St. Louis.

Darryl Chatman, BS '97, MS '01, MS '07, JD '08, of St. Louis, an Armstrong Teasdale litigator, convinced an administrative law judge to stop the Social Security Administration from collecting alleged overpayments of disability benefits from a Bosnian immigrant who had been held prisoner and tortured in the early 1990s during the breakup of Yugoslavia.

Jovita Foster, BA '97, of St. Louis, a partner in Armstrong Teasdale's litigation practice group, is general counsel to the Urban League of Metropolitan St. Louis.

Dawn Davis Gipson, BJ '97, of St. Louis is senior vice president and creative program director at FleishmanHillard.

★ ★ **Chad Ricks, BS BA '99**, of Dallas is president of the Southwest Mortgage Advisory Council.

2000

John Keller, BJ '01, of Poplarville, Mo., wrote *The Box and the Briefcase, the Moleque and the Old Man and the First Coming of the Second Son of God* (Dr. Cicero Books, 2014).

John Cage, MS '02, of

Bremerton, Wash., is commanding officer of the ballistic missile submarine U.S.S. *Pennsylvania*.

Stefanie Wortman, BA '02, PhD '10, of Cranston, R.I., wrote *In the Permanent Collection* (University of North Texas Press, 2014), a collection of poetry that won the 2013 Vassar Miller Prize.

Andrea Miller, PhD '03, of Geismar, La., is associate dean for undergraduate studies and administration in Louisiana State University's Manship School of Mass Communication. She wrote *Oil and Water: Media Lessons from Hurricane Katrina and the Deepwater Horizon Disaster* (University of Mississippi Press, 2014).

Nicholas Orscheln, BS BA '04, of Rural Hall, N.C., is business services officer for Landmark Bank.

Scott Schaefer, BJ '04, of Columbia won a Kansas City Press Club gold award as a KOMU videographer for a story about a teenager who gained national attention for her shooting skills and a silver award for a feature on a high school class reunion celebrating 70 years.

Damien Martin, BJ '05, MA '10, of St. Louis is a travel advisor with Great Getaways Travel in Leawood, Kan., specializing in customized leisure travel.

Lauren Young, BS BA '05, of Huntley, Ill., is founder and CEO of Freshly Baked Communications. She wrote *Stir: Achieving the Perfect Marketing Mix* (Hot Cakes Group, 2013), a follow-up to *Pour: Marketing Success Starts with the Right Ingredients* (1421 Press, 2011).

John Juettner, BJ '08, of



A Noble Chemist

If Billy Vineyard had signed with the St. Louis Cardinals when he tried out in the early 1950s, he probably wouldn't have been part of the three-man team whose research won the 2001 Nobel Prize in chemistry. A U.S. Army veteran, Vineyard, PhD '59, died in Creve Coeur, Missouri, March 16, 2014, at 82.

Born Sept. 7, 1931, in Clarkton, Missouri, Vineyard joined Monsanto as an organic chemist after graduating from Mizzou. In the late 1960s, working alongside William Knowles and Jerry Sabacky, Vineyard helped invent asymmetric hydrogenation, a chemical process that cheaply and safely separates the toxic part of a molecule from the beneficial part. The breakthrough led to the commercial production of the drug L-DOPA, which is used to treat Parkinson's disease. Today, the procedure is used in the creation of about half of all pharmaceuticals.

In 1981, the trio received an award from Monsanto for their discovery, and in 1985, Vineyard became a Monsanto Fellow, continuing his research in sulfur, boron and bio-organic chemistry. He was also instrumental in designing the technology used to commercially produce the artificial sweetener aspartame.

Vineyard retired from Monsanto in 1993.

On Oct. 10, 2001, Knowles, the team's leader, received a phone call saying he had received the Nobel Prize. "He called me at 5 o'clock in the morning and said, 'We won the Nobel Prize,'" Vineyard said in a 2001 interview with *Chemical & Engineering News*. Knowles, who received more than \$200,000 in prize money, shared his cash award with Sabacky and Vineyard.

Even though the recognition came more than 30 years after the initial finding, Vineyard told the *St. Louis Post-Dispatch* in 2001, "We knew back then that it was a pioneering discovery." — *Kelsey Allen*

† Billy Vineyard was part of the three-man team whose research won the Nobel Prize in chemistry in 2001. From left, team leader William Knowles, Jerry Sabacky and Vineyard pose in their lab at Monsanto.

Inverness, Ill., wrote *The Mother Who Loved Halloween* (BookBaby, 2014).

Brittany Pieper McElroy, BA, BJ '08, of Columbia won a Kansas City Press Club gold award as a KOMU reporter for education beat reporting and a bronze public service award for a series on Mid-Missouri poverty.

2010

★★**Brian Kirn, BA, BA '11**, of New York was named to the Pi Kappa Phi national fraternity Thirty Under 30 list, which honors members

for impact, leadership and service.

★**William Covington, M Ed '12**, West Monroe, La., is chair of the curriculum, assessment and administrative division of the Broadcast Education Association's annual convention in Las Vegas.

Emily Spain Critchfield, BJ '12, of Columbia won a Kansas City Press Club gold award as a KOMU anchor for a story about a teenager who gained national attention for her shooting skills and a silver award for a feature

on a high school class reunion celebrating 70 years.

Adem Bayar, PhD '13, of Amasya, Turkey, is chair of the Department of Educational Leadership and Policy Analysis in the College of Education at Amasya University.

Weddings

★★**Myles Friedman, MA '64**, and Deanna Swift of Fort Smith, Ark., May 14, 2014.

Torey Velloff, BS '99, M Ed '06, and **Bruce Nguyen, BA '00, JD '03**, of Florissant, Mo., March 1, 2014.

Justin Shepherd, BA '01, and **J. Claire Cook, PhD '12** of Nashville, Tenn., May 17, 2014.

Stephen Ganey, BA '07, and **Sandra Bruner, MA '08**, of Cedar Hill, Mo., Aug. 3, 2013.

Christine Golebiewski, BS Ed '08, of Lisle, Ill., and **Bryan Koerner, BS Ed '08, M Ed '13**, of Boonville, Mo., July 12, 2014.

Emily Schmidt, BS '10, MS '12, and **Andrew Goldstein, BS '11**, of St. Peters, Mo., April 26, 2014.

Sasha Whitley, BS HES '10, and Kyle Grabenstetter of Manteno, Ill., May 17, 2014.

Births

Corey Lavinsky, JD '93, and Hannah Lavinsky of New Providence, N.J., announce the birth of Alexander Mo March 6, 2014.

Cathy Senderling-McDonald, BJ '93, and Aaron McDonald of Sacramento, Calif., announce the birth of William David March 1, 2014.

★**Chris Long, BJ '96**, and Sarina Long of Minneapolis announce the birth of Francesca Casey Dec. 23, 2013.

Ricardo Coelho de Souza, BM '97, MA, MM '99, and **Christine Conklin Souza, BM '98**, of Norman, Okla., announce the birth of Daniel Patrick April 7, 2014.

★**Cliff Smith, BS Ag '98**, and ★★**Jenea Fowler Smith, BHS '99**, of Columbia announce the birth of Caleb Duane April 25, 2014.

★**Blake Dinsdale, BA '99**, and **Luci Hilt Dinsdale, BS '00**, of Columbia announce the birth of Miles Anthony June 4, 2014.

Molleen Dupree-Dominguez, BJ '99, and

Marc Dominguez of San Leandro, Calif., announce the birth of Sophia Rosario March 14, 2014.

Shanah Atchley Slaughter, A&S '01, and ★**Eric J. Slaughter, BSN '03**, of Sikeston, Mo., announce the birth of Ryan Gray March 13, 2014.

★**Rockney Taveau, BS BA '01**, and ★**Jessica Chittick Taveau, BA '01**, of Memphis, Tenn., announce the birth of Hope Catharine March 9, 2014.

Lisa Rothstein Goldberg, BSW '02, and Matt Goldberg of Louisville, Ky., announce the birth of Rachel Erica Jan. 5, 2014.

Rachel Busacker Parr, BJ '03, and **Robert Parr, BA '04**, of St. Louis announce the birth of Britton Genevieve May 11, 2014.

Tiffany Cisewski, BA '06, and **James Mross, BS CIE '09**, of Hemet, Calif., announce the birth of Henry James April 11, 2014.

★**Ashley Lyon McDonald, BS '07**, and **Kevin McDonald, BS BA '07, MBA '08**, of Arlington, Va., announce the birth of Charlotte Virginia Sept. 5, 2013.

Megan DeShon-Runge, BA '09, and **Benjamin Runge, BS '10**, of Monroe, La., announce the birth of Sophia Sue Feb. 28, 2014.

Faculty Deaths

Betty Bryant Martin, BS Ed '50, M Ed '62, PhD '73, of Fulton, Mo., Feb. 22, 2014, at 89. She was a professor in the College of Education.

Deaths

Dorothy McIntire DuNard, BJ '39, of Columbia March 29, 2014, at 96. She was an accounts manager at the *Columbia Daily Tribune*.



ST. JOSEPH

Is Naturally Entertaining

★★**ST. JOSEPH MISSOURI**

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Get outdoors in St. Joseph! Take a leisurely stroll along the beautiful Missouri Riverfront Trail, bike along our 26 miles of parkway connecting 48 parks, or cool off at the St. Joseph Aquatic Center. There are many entertaining options to surround yourself with beautiful nature in St. Joseph, MO.

MISSOURI
enjoy the show

800-604-4600 or StJoMo.com

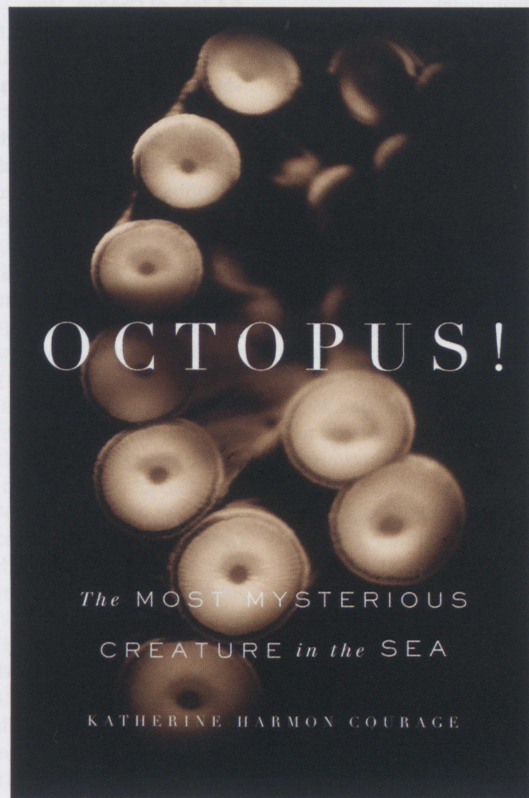


Former *National Geographic Traveler* editor Paul Martin writes about sensational bad guys and gals in his latest book. mizzoumagazine.com/fall2014

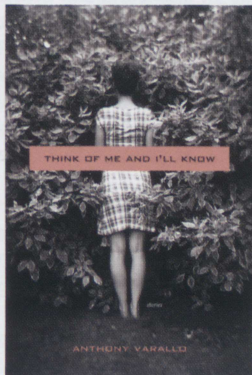
ALUMNI BOOKSHELF

CHECK OUT THESE BOOKS BY ALUMNI AUTHORS

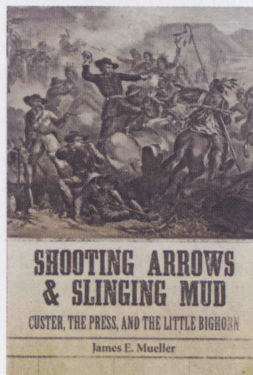
If you wish to be considered for coverage, please mail a copy of your book published in 2014 or scheduled for 2015 to Dale Smith, associate editor, MIZZOU magazine, 407 Reynolds Alumni Center, Columbia, MO 65211.



Octopus!: The Most Mysterious Creature in the Sea by Katherine Harmon Courage, MA '09 (Current/Penguin, 2013)



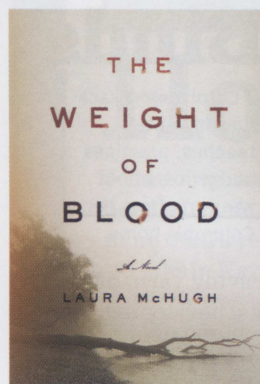
Think of Me and I'll Know: Stories by Anthony Varallo, PhD '05 (TriQuarterly Books, Northwestern University Press, 2013)



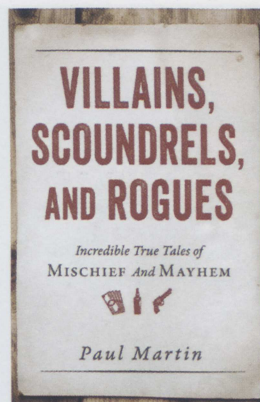
Shooting Arrows and Slinging Mud: Custer, the Press, and the Little Bighorn by James E. Mueller, BJ '82, MA '92 (University of Oklahoma Press, 2013)



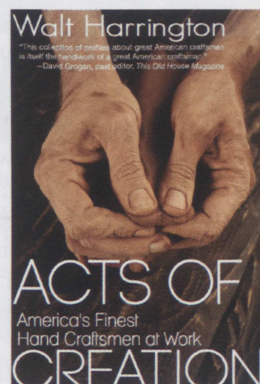
Merle Haggard: The Running Kind by David Cantwell, BA '85, MA '88 (University of Texas Press, 2013)



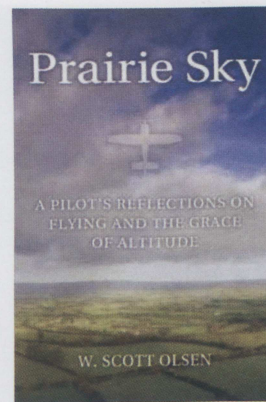
The Weight of Blood: A Novel by Laura McHugh, MA '99, BA '00 (Spiegel and Grau, 2014)



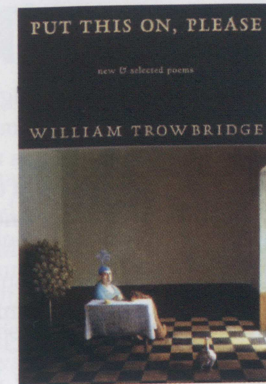
Villains, Scoundrels, and Rogues: Incredible True Tales of Mischief and Mayhem by Paul Martin, MA '73 (Prometheus Books, 2014)



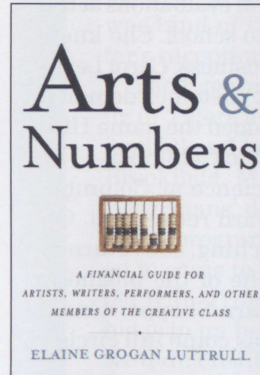
Acts of Creation: America's Finest Hand Craftsmen at Work by Walt Harrington, MA '74, MA '75 (The Sager Group, 2014)



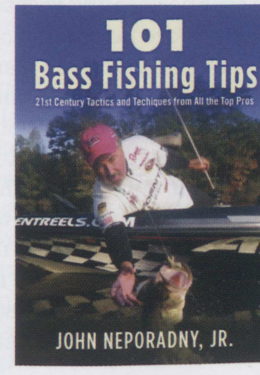
Prairie Sky: A Pilot's Reflections on Flying and the Grace of Altitude by W. Scott Olsen, BA '79, MA '81 (University of Missouri Press, 2013)



Put This On, Please: New and Selected Poems by William Trowbridge, BA '63, MA '65 (Red Hen Press, 2013)



Arts & Numbers: A Financial Guide for Artists, Writers, Performers, and Other Members of the Creative Class by Elaine Luttrull, BS BA, BS Acc, M Acc '04 (B2, 2013)



101 Bass Fishing Tips: Twenty-first Century Bassing Tactics and Techniques from All the Top Pros by John Neporadny Jr., BJ '77 (Skyhorse Publishing, 2013)



Our Beautiful, Fragile World: The Nature and Environmental Photographs of Peter Essick by Peter Essick, MA '90 (Rocky Nook, 2013)



Watch Carol Leigh Brack-Kaiser, BES '79, MS '99, and her daughter, Rebecca Olinger, BS Ed '98, talk about their passion for weaving, dyeing and knitting all natural fibers. mizzoumagazine.com/fall2014



The Fiber that Binds

It wasn't until Carol Leigh Brack-Kaiser graduated from Mizzou that she found the thing that "makes her heart sing." She has never given it up, and now she is working to pass it on to her daughter, Rebecca Olinger, BS Ed '98, and the world. For 35 years, Brack-Kaiser, BES '79, MS '99, has owned her own business spinning, dyeing (with natural dyes) and weaving yarn, designing garments made from that material, writing books, developing user-friendly looms, and teaching all of the above.

Brack-Kaiser spent 17 years at five universities before earning a bachelor's degree in vocational evaluation from MU (life, including marriage and children, got in the way). By then, she wanted to take a class just for the fun of it. She landed in a spinning course at MU's Craft Studio, where her teacher, Sandy Robertson Smith, introduced her to natural dyeing of yarns. At first, Brack-Kaiser helped Smith mount natural-dyeing demonstrations at festivals and fairs. But she loved it so much that she continued on her own.

Brack-Kaiser worked one year performing vocational evaluations at the Columbia Area Career Center before heading back to school. She knew she needed to learn more about fibers and color. Her business, Carol Leigh Specialties, launched in 1982. Not long after, to meet customer demand, she added workshop space to her house and in 1986 added the name Hillcreek Fiber Studio, located at 7001 S. Hill Creek Road in Columbia.

Olinger grew up loving fiber but opted to teach science at Columbia Public Schools. As Brack-Kaiser began looking toward retirement, Olinger took on a role in the business. When she left teaching, she returned to Hillcreek Studio and developed the knitting niche of the business. In July she will again become owner of Hillcreek Yarn Shoppe, a business she founded in 2003 and left in 2007. "So that has come full circle," Olinger says.

When the time comes that Brack-Kaiser no longer takes part in day-to-day aspects of the business, she intends to travel and study other cultures' weaving and dyeing practices. She is at work on a new book about how to obtain colors in each of three different natural dyeing classes. "That way, when I retire, someone else can pick up the book and teach a workshop or dye their own rainbow with natural dyes." — Dale Smith

† Carol Leigh Brack-Kaiser, center, teaches, practices and writes about fiber arts from her Columbia home.

Arthur Hozore, BS BA '39, of Highland Park, N.J., April 6, 2014, at 96. A U.S. Army Air Corps veteran, he was vice president of Trans-Title Agency in New Brunswick.

Frances Wilson Merker, BS HE '39, of Troy, Mich., April 18, 2014, at 98. She was a Pi Beta Phi member.

Darrel Cathey, BS Ag '40, M Ed '78, of Walnut Grove, Mo., March 20, 2014, at 99. A U.S. Navy World War II veteran, he taught agriculture.

Norman Kloker, BS Ag '40, of Madison, Va., May 8, 2014, at 96. He was an ice cream distributor and advertiser who owned a company in Chicago.

Alma Martin Rice, BS Ed '40, of Kansas City, Mo., April 11, 2014, at 96.

Simon Toder, BS ME '40, of St. Louis March 11, 2014, at 97.

Clyde Asbury, BA '41, BS Med '43, of Tallahassee, Fla., March 9, 2014, at 93. A U.S. Army veteran, he practiced medicine in Lakeland.

John Hirsch, BS Ed '42, M Ed '49, of Kansas City, Mo., April 10, 2014, at 95. A U.S. Army Air Forces veteran, he taught high school math.

Jack Kempton, BS BA '42, of Kansas City, Mo., April 1, 2014, at 93. He was a U.S. Navy World War II veteran.

Clarence Kendall, BS BA '42, of Houston April 15, 2014, at 93. A U.S. Navy veteran, he practiced law at Fullbright and Jaworski and later Beirne, Maynard & Parsons.

Ruby Hoppe McCrea, GN '42, of Hamburg, N.Y., April 24, 2014, at

99. A U.S. Army World War II nurse, she was a registered nurse at OLV Hospital.

James Wolfred Taylor, BA '42, of Oregon, Wis., March 31, 2014, at 94. A U.S. Army World War II veteran, he worked for the Wisconsin Department of Natural Resources and edited *Wisconsin Natural Resources Magazine*.

John Donnell, BS Ag '43, of St. Louis April 28, 2014, at 95. He taught at St. Louis Community College.

William Doran, BS Ag '43, of Creston, Iowa, May 5, 2014, at 92. A U.S. Navy World War II veteran, he was district conservationist in Corydon and later Creston.

Betty Sanders Hogeboom, BA '43, of San Marino, Calif., May 31, 2014, at 93. She was a Pi Beta Phi member.

Coyne Lord, BS ChE '43, of Kansas City, Mo., April 14, 2014, at 93. He was a chemist for Colgate-Palmolive.

Beverly Hofland Schroeder, BJ '43, of Center Osage, N.H., May 14, 2014, at 91. She worked in the wholesale book industry.

Margery Habluetzel Slaughter, BS HE '43, of Greenwood, Mo., April 15, 2014, at 92.

Robert Davidson, BS ChE '44, of Marlborough, Mass., March 27, 2014, at 90. A U.S. Army World War II veteran, he worked for McGraw-Hill Publishing and wrote and edited a number of books and magazines.

Paca Kinkead, BS Ag '44, of Farmington, Mo., April 2, 2014, at 92. He was a lifelong farmer.



Mizzou Match features married couples who graduated from MU and are Mizzou Alumni Association members. Email your idea to mizzou@missouri.edu.

MIZZOU MATCH

Charles Schweitzer, BS ME '44, of Dubuque, Iowa, April 12, 2014, at 91. A U.S. Navy veteran, he worked in the industrial engineering department at John Deere.

Martha Remley Rouse, BA '45, of Flint, Mich., April 9, 2014, at 89. An Alpha Phi member, she was an information specialist for the National Oceanic and Atmospheric Administration.

Thomas Wrenn, BS BA '46, of Stockton, Mo., April 19, 2014, at 92. A U.S. Army Air Corps World War II veteran, he co-owned Sac River Lumber Co. and later was president of Sac River Valley Bank.

Vernon Barr, BS Ag '47, of Columbia March 23, 2014, at 97. A U.S. Army veteran, he was a science teacher.

Thomas N. Edwards, BS BA '47, of Spanish Fort, Ala., March 28, 2014, at 90. A Phi Delta Theta member and a World War II veteran, he was a real estate broker.

Lois Liese Hitchcock, BS BA '47, of Lee's Summit, Mo., May 3, 2014, at 87.

Ralph Hook, BA '47, MA '48, of Honolulu Jan. 18, 2014, at 90. A Beta Theta Pi member and a U.S. Army World War II veteran, he was dean of the University of Hawaii's graduate school of business.

Patricia Patterson Paden, BS Ed '47, of Stark City, Mo., Jan. 22, 2014, at 90. She was a teacher.

George Staubus, BS BA '47, of Solana Beach, Calif., March 21, 2014, at 87. He was a professor at the University of California, Berkeley Haas School of Business.

James Stowers, BA '47, of

Kansas City, Mo., March 17, 2014, at 90. He founded American Century Investments in 1958 and later built the Stowers Institute for Medical Research.

Raymond Kastendieck, BS Ag '48, of Washington, Mo., April 21, 2014, at 90. He was the owner of FRM Chemical Inc.

Lucille Carroll Keith, BS HE '48, of Stark City, Mo., May 6, 2014, at 88.

Arthur Murphy, BS CiE '48, MS '49, of Fort Worth, Texas, April 16, 2014, at 88. A U.S. Navy World War II veteran, he was an aeronautical engineer for Lockheed.

Virginia Long Schappe, BA '48, of Kansas City, Mo., April 25, 2014, at 91. She was a newspaper reporter, a ticket agent for Eastern Airlines, an elementary school teacher and a physical therapist for the Children's Rehab Unit in St. Joseph.

Samuel Sherwood, BS BA '48, of Excelsior Springs, Mo., March 20, 2014, at 90. A U.S. Army veteran, he was president of Kansas City Title Insurance Co. and managed its merger with Chicago Title Insurance Co., where he was senior vice president.

Otis Wheeler, BS BA '48, M Ed '65, EdD '71, of Columbia May 1, 2014, at 88. A U.S. Navy World War II veteran, he was an administrator for Columbia Public Schools.

Edward Bach, BS BA '49, of Rockwall, Texas, May 3, 2014, at 91. A U.S. Army veteran, he worked in corporate marketing at Ford Motor Co.

Lola Briner Bourn, BS BA '49, of Columbia March 18,



Hot and Cold

Jean Perry was too busy with her bridesmaid duties to worry about her boyfriend, Leslie Eggerman. They had been dating for a little more than a year but had spent the past six months apart. Jean, BS BA '78, was in Kansas City, Missouri, at an accounting firm, and Leslie, BS AgE '76, was wrapping up job training in Wisconsin.

"We could only afford to call once a week on Sunday when the phone rates were cheap," Jean recalls. "I was getting nervous about where the relationship was headed. He told me that we needed to have a serious talk when he returned."

Leslie was driving to Boonville, Missouri, to meet Jean at the wedding of her Pi Beta Phi sister Pam Morris, BSN '78, to Bob Bloss, BS IE '77.

"At the end of the night, he said he wanted to talk," Jean says. "And he proposed! I was relieved as much as anything. Plus, it was kind of fun to say he proposed at the end of my sorority sister's reception."

The Eggermans married Aug. 4, 1979, and started their own family of Tigers not long after. The young alumni had season tickets to football and basketball games and often carted their children from Brookfield, Missouri, to Columbia for tailgates. In 2007, when the Eggermans' daughter was a leader at Summer Welcome, an orientation program for new MU students, she was asked how she decided to come to Mizzou. "She has a picture of her when she's 2 years old with Truman on the basketball floor," Jean says. "She has this big grin on her face. She says that's when she became a Tiger. But we didn't really give them a choice," she says of Kevin, Engr '02, and Katie, BS '09, MPH '11.

Jean and Leslie have owned Biegel Refrigeration & Electric Co. for 30 years, combining her business background and his technical background. "Some days it's hard [working with your spouse], and I wonder what we were thinking," Jean says. "But we're best friends." — Kelsey Allen



The Essential Drug

When sports medicine physician Jordan Metzl sees patients at the Hospital for Special Surgery in New York, he often writes a prescription that not only reduces the risk for Type 2 diabetes and helps block the progression of dementia but also boosts the immune system and diminishes the symptoms of depression. The miracle drug? Exercise.

“Exercise is the most powerful medicine we have,” says Metzl, BA ’88, MD ’93, who while in medical school at MU noticed that his brain worked better after a run — he could sit longer and study better.

Since then, Metzl has completed 31 marathons, 11 Ironman triathlons and written *The Exercise Cure* (Rodale Books, 2013), a book that recommends fitness programs for health problems, such as getting aerobic exercise for hypertension and practicing yoga for anxiety.

In a country that spends more than \$325 billion annually on prescription drugs, “We need to make sure people exercise every day of their lives,” he says.

Metzl wants medical schools to train students how to prescribe exercise to patients. He also advocates financial incentives, such as tax deductions and lower insurance premiums, to get people off the couch.

Metzl is working on his sixth book, which is about injury prevention for runners. Writing is familiar to the physician, who earned an undergraduate degree in English. “You just give yourself little goals, much like when you’re running a race.” — *Kelsey Allen*

↑ Jordan Metzl has completed 31 marathons and 11 triathlons, including the Ironman Lake Placid in New York.

2014, at 86.

Roger Lee Fisher, BS Ed ’49, of St. Joseph, Mo., April 16, 2014, at 87. He was a U.S. Navy World War II veteran.

John Gibson, BA ’49, JD ’52, of Reading, Mass., April 19, 2014, at 88. A U.S. Army World War II veteran, he practiced trial and appellate law in Kansas City, Mo., before serving as U.S. District Judge for the Western District of Missouri.

Raymond Harbaugh, M Ed ’49, of Douglasville, Ga., April 10, 2014, at 91. He was a city manager of Wichita, Kan.; Galesburg, Ill.; Oshkosh, Wis.; St. Petersburg, Fla.; and Galion, Ohio.

Max Howitt, BS Ag ’49, of Lubbock, Texas, March 10, 2014, at 88. A U.S. Army Air Corps World War II veteran, he worked for DeKalb Seed Co.

Donald Kraft, BS ME ’49, of Leawood, Kan., May 9, 2014, at 89. A U.S. Navy World War II veteran, he worked for Phillips Petroleum Co.

Paul Langenbeck, BS ME ’49, of New Orleans April 20, 2014, at 91. He owned and operated Langenbeck Inc., working as a manufacturer’s sales representative.

Joe Loeber, BS BA ’49, of Springfield, Mo., March 28, 2014, at 91.

Marvin Nelson, BS BA ’49, of St. Joseph, Mo., May 1, 2014, at 87. A U.S. Army World War II veteran, he was CEO and president of Home Oil and Gas Corp.

Howard Soderstrom, BS BA ’49, of Scranton, Pa., May 14, 2014, at 88. A U.S. Army World War II veteran, he was a credit manager with Wilson

Sporting Goods and later Texaco.

Frank Whitsitt, BJ ’49, of St. Louis Dec. 24, 2013, at 86. He wrote for newspapers in Indiana and Texas, and he was an editor of the *Kansas City Star* and *Farmland News*.

Frank Becklean, BS BA ’50, of Kansas City, Mo., May 5, 2014, at 85. He founded Becklean Associates, a manufacturers representative firm.

Anne Roberts Bray, BA ’50, of Charlotte, N.C., March 15, 2014, at 85. She was a Zeta Tau Alpha member.

William Lloyd Davis, BS BA ’50, of St. Joseph, Mo., March 10, 2014, at 89. A U.S. Army World War II veteran, he was the manager of Beneficial Finance.

Wayne Foland, BS EE ’50, of Kansas City, Mo., April 7, 2014, at 87. A U.S. Army veteran, he was an engineer for 25 years before owning and operating a Dairy Queen.

Gordon Hill, BS Ag ’50, of Pleasant Hill, Mo., March 1, 2014, at 87. A U.S. Navy World War II veteran, he was a loan officer at Production Credit.

Anne Dede Hug, BJ ’50, of Decatur, Ill., April 1, 2014, at 84. She was a Zeta Tau Alpha member.

Lela Nibbelink Lanpher, BA ’50, of Longmont, Colo., March 16, 2014, at 85. She was a children’s librarian.

Herbert Maslan, BS BA ’50, of Tulsa, Okla., April 16, 2014, at 84. A U.S. Naval Reserve veteran, he built the Stewarts and Extension 1 Women’s Clothing chains.

Eugene Payton, BS Ed

’50, of Independence, Mo., May 8, 2014, at 90.

Derald Slagle, BS BA ’50, of Prairie Village, Kan., March 16, 2014, at 85. A U.S. Army veteran, he was a commercial loan officer who retired as executive vice president of United Missouri Bank.

Leon Trainor, BA ’50, of Silvis, Ill., April 13, 2014, at 90. A U.S. Marine Corps Vietnam War veteran, he was a reporter for the *Rocky Mountain News* and later worked in advertising with Trainor, Christiansen and Barclay in Kansas City, Mo.

Raymond Wieschhaus, BS BA ’50, of Eureka, Mo., May 1, 2014, at 89. A U.S. Navy veteran, he owned Alpine Printing Co.

Darrell Adams, BS Cie ’51, of Ottumwa, Iowa, April 19, 2014, at 89. A U.S. Army World War II veteran, he worked for the Missouri Department of Transportation and was an engineer for the city of Ottumwa.

Edward August, BS BA ’51, of Joplin, Mo., March 28, 2014, at 85. A U.S. Army veteran, he was a certified public accountant.

Anita Carner Blow, BA ’51, of Columbia April 20, 2014, at 88. A U.S. Air Force veteran, she was an enterostomal therapist at Columbia Regional Hospital.

Thomas Deckman, BS ME ’51, of Mason, Ohio, Aug. 9, 2013, at 83. A U.S. Coast Guard Korean War veteran, he worked for Westinghouse Electric.

Gaylord Morrison, EdD ’51, of Greeley, Colo., March 29, 2014, at 99. A U.S. Army Signal Corps veteran, he was superintendent of schools in Rock

Port, Mo., and later taught at the University of Northern Colorado.

Gene Musbach, BS Ed '51, of Jefferson City, Mo., March 7, 2014, at 87. A U.S. Army World War II veteran, he was an account executive at State Bond and Mortgage Co.

Wayne Nickel, BA '51, of Richardson, Texas, April 4, 2014, at 85.

Virgil Orr, BS Ag '51, MS '52, of Rockford, Tenn., March 19, 2014, at 94. A U.S. Army World War II veteran, he worked for Pet Milk.

Richard Rita, BA '51, of East Orleans, Mass., March 18, 2014, at 87. A U.S. Army Air Corps World War II veteran, he owned and operated an executive recruiting and staffing business.

William Stark, BS BA '51, of Kansas City, Mo., April 14, 2014, at 86. He was a U.S. Army World War II veteran.

Bettie Ogan Washburn, BS Ed '51, of Fort Worth, Texas, Feb. 21, 2014, at 83. She was a Kappa Alpha Theta member.

Eston Dement, BS Ag '52, of Sikeston, Mo., March 22, 2014, at 85. A Phi Kappa Psi member and a U.S. Marine Corps veteran, he founded Dement Farms and served in the Missouri Department of Conservation.

Elizabeth Bennitt Denebeim, BS Ed '52, M Ed '54, of San Francisco Nov. 15, 2013, at 83. She was a lifelong educator and advocate for mental health services and hospice care.

Joe Hanan, BS Ag '52, of Fort Collins, Colo., Feb. 6, 2014, at 83. A U.S. Marine Corps veteran, he was a floriculture researcher

and educator.

Dorothy Diehl Hunter, BS Ed '52, of Nacogdoches, Texas, April 3, 2014, at 83. An Alpha Phi member, she was a teacher.

Anthony Jacobs, BJ '52, of Glencoe, Ill., March 26, 2014, at 83. He owned and operated Wessel Co., a printing business, and eventually formed The Wessell Group, a private equity investment group.

Evelyn Kauffman Smith, BS Ed '52, of Boulder, Colo., Feb. 7, 2014, at 85. She was a teacher.

William Toomey, BS Ed '52, of Oakfield, Wis., April 27, 2014, at 88. A U.S. Marine Corps veteran, he was a teacher and coach.

Theodore Weichinger, M Ed '52, of Maryville, Mo., April 23, 2014, at 88. A U.S. Naval Air Corps World

War II veteran, he taught at Northwest Missouri State University.

James DeMoor, BSF '53, of Colorado Springs, Colo., Feb. 6, 2014, at 83. A U.S. Air Force veteran, he was an insurance adviser for Met Life Financial Services Inc.

Wanda Judah Ely, BA '53, of Columbia April 20, 2014, at 84.

Mynatt Scott, M Ed '53, of Mount Vernon, Mo., March 15, 2014, at 92. A U.S. Army World War II veteran, he was a teacher and principal in Eureka, Mo.

Bernard Smith, BJ '53, of Morton, Ill., March 16, 2014, at 81. A U.S. Army Korean War veteran, he worked in marketing at Caterpillar Inc.

Grauman Wiksten, BS Ag '53, DVM '56, of Johnson City, Tenn., May 1, 2014, at

85. He was a veterinarian with the U.S. Department of Agriculture.

Henry Avondet, BS Ag '54, of Monett, Mo., May 16, 2014, at 81. A U.S. Air Force veteran, he worked in the tire industry.

Ray Bolin, BS '54, of St. Louis May 16, 2014, at 84. He researched polyurethane products with Mobay Chemical Co.

Max Coll, BA '54, of Santa Fe, N.M., March 27, 2014, at 82. A U.S. Army veteran, he was a prominent New Mexico politician.

Forrest Hunt, BA '54, of Oyster Bay, N.Y., May 5, 2014, at 83. A U.S. Army veteran, he worked for Merrill Lynch.

Richard Kerr, BJ '54, of St. Louis Feb. 17, 2014, at 84. He was a teacher and a counselor.

John Milanovits, BS HE '54, of St. Louis April 16, 2014, at 82. A Kappa Sigma member, he worked in promotional advertising; started his own design firm, Creative Associates; and later founded Quest Lithographers.

Barbara Ramming, BA '54, of Dallas April 1, 2014, at 81. She was regional supervisor of personal sales for Liberty Mutual Insurance Co.

Donald Roach, BS '54, PhD '62, of Rolla, Mo., March 23, 2014, at 82.

Russell Ryker, BSF '54, MS '62, of Boise, Idaho, May 4, 2014, at 81. A member of Xi Sigma Pi and a U.S. Army veteran, he worked in forestry.

James Paul Thompson, BS Ag '54, of Los Gatos, Calif., April 6, 2014, at 81. A U.S. Air Force veteran, he

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was a commercial airline pilot for Pan Am.

Herbert Carpenter, BS BA '55, of Kansas City, Mo., April 21, 2014, at 81. A U.S. Army veteran, he worked for Ford Motor Co.

Martin Goldberg, BS Ed '55, of St. Louis March 18, 2014, at 82.

James Lee, BS Ed '55, of Indianapolis May 3, 2014, at 80. A U.S. Air Force veteran who retired from the military with more than 4,000 flying hours, he was a teacher and assistant principal.

David McNeel, BS Ag '55, of Odessa, Mo., Feb. 23, 2014, at 84. A U.S. Army Korean War veteran, he was a cattle buyer for Swift and Co.

Richard Schanbacher, BS BA '55, of Fairhope, Ala., May 15, 2014, at 81. A Phi Gamma Delta member and a U.S. Navy veteran,

he was a salesman and financial adviser with New York Life Insurance Co.

Kelly Taggart, BS CiE '55, of Centertown, Mo., May 7, 2014, at 81. He was a researcher for the National Oceanic and Atmospheric Administration.

Jerry Webb, BS Ag '55, of Elkton, Md., March 6, 2014, at 80. A U.S. Army veteran, he headed the agricultural sciences communications staff and wrote a weekly column for the *News Journal* in Wilmington, Del.

Alfred Godin, BS Ag '56, of Fitchburg, Mass., March 3, 2014, at 86. A U.S. Navy Korean War veteran, he was a wildlife instructor at Rutgers University and a consultant for the National Transportation Safety Board and U.S. Fish and Wildlife Service.

William Glenn Jones, BS ME '56, of Whitewater,

Wis., March 30, 2014, at 80. A U.S. Army Reserves veteran, he worked in the food and beverage field.

Harold Milburn, BS Ag '56, of Aptos, Calif., March 21, 2014, at 79. A U.S. Marine Corps veteran, he worked in insurance.

Ray Robinson, BJ '56, of Honolulu April 14, 2014, at 90. A U.S. Navy veteran, he worked in public relations for the *Dallas Morning News*, headed the Navy press desk at the Pentagon and founded the alcohol studies program at Old Dominion University in Norfolk, Va.

LeRoy Wilbers, BA '56, of Jefferson City, Mo., March 7, 2014, at 82. A U.S. Army Korean War veteran, he was a personal injury lawyer and partner at Strubinger, Dowd, Hazeltine & Wilbers.

Louise Duff Balzer, BJ '57, of Winter Park, Fla., March 1, 2014, at 78. She worked

in cable TV advertising.

Shirley Davis Forgy, BS Ed '57, of Vandalia, Mo., April 22, 2014, at 81. She taught fourth grade in the Van-Far School System.

John Uren, BS Ag, DVM '57, of Urbandale, Iowa, April 6, 2014, at 80. A large-animal veterinarian, he was a technician in the livestock feed industry and drove a bus for the Urbandale School System.

Harold Weymuth, BS ME '57, of Kansas City, Mo., April 17, 2014, at 84.

Andrew Willis, BJ '57, of Memphis, Tenn., Feb. 21, 2014, at 88. A U.S. Marine Corps World War II veteran, he was a TV and radio director and producer.

Bruce Boyle, BJ '58, of Carbondale, Iowa, March 17, 2014, at 82. A U.S. Navy veteran, he published *Successful Farming Magazine*, was president of the Na-

tional Agri-Marketing Association and later head of Meredith Video Publishing.

Harold Burchfield, M Ed '58, of Morton, Ill., May 11, 2014, at 80. A U.S. Army Korean War veteran, he was a teacher at Richwoods High School.

Gene Compton, BJ '58, of Frankfort, Ky., Feb. 16, 2014, at 82. A U.S. Army Medical Corps and Missouri National Guard veteran, he was director of publications and dissemination for the Kentucky Department of Education.

Mabel Bondurant Culpepper, BS Ed '58, of Albuquerque, N.M., Oct. 24, 2013, at 77. A Delta Gamma member, she was an artist.

Arthur Guller, BS BA '58, JD '59, of St. Louis June 4, 2014, at 78. He was the founder and president of Warner Communications and co-owner of BEB Management.

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Gerald McEuen, BS Ag, DVM '58, of Scottsdale, Ariz., May 3, 2014, at 86. A U.S. Air Force veteran, he was a veterinarian.

Homer Steinhoff, BS Ag, DVM '58, of McLean, Va., March 14, 2014, at 91. A U.S. Army World War II veteran, he worked for the U.S. Department of Agriculture.

James Carlyle, BS BA '59, of Columbia Feb. 23, 2014, at 80. A U.S. Army Korean War veteran, he was a controller for Chance/Hubble.

James Ingram, BS EE '59, of Topeka, Kan., March 15, 2014, at 82. A U.S. Navy veteran, he was a company officer for Westar Energy.

Calvin Phillips, BS Ag '59, of Liberty, Mo., April 30, 2014, at 81.

James Sickal, BA '59, JD '62, of Chesterfield, Mo., Feb. 14, 2014, at 75. A Phi Gamma Delta member, he served with the U.S. Army Judge Advocate General Corps and practiced in the U.S. District Courts of Missouri.

Wiley Small, BS Ed, M Ed '59, MA '66, PhD '70, of Hayward, Calif., April 25, 2014, at 81. He was a professor of psychology at California State University, Hayward, Calif.

James Blackwell, BA '60, JD '62, of St. Charles, Mo., May 20, 2014, at 89. A U.S. Army World War II veteran, he practiced law.

John Mooneyham, JD '60, of Fort Walton Beach, Fla., April 1, 2014, at 81. He was a U.S. Army defense attorney, prosecuting attorney, staff judge advocate and military judge.

Marilou Judy Moore, BSN '60, of Fresno, Calif., May 11, 2014, at 86. Her

career included hospital staff and head nurse positions, private duty nursing, and teaching at the Ball Memorial Hospital School of Nursing in Muncie, Ind.

Thomas Edwin Murphy, BS BA '60, MS '61, of Springfield, Mo., May 20, 2014, at 76. A Delta Upsilon member and a U.S. Army veteran, he was a business consultant who taught business classes at Ozark Technical College, Southwest Missouri State University (now Missouri State University) and Washington University.

Lee Sorkin, BA '60, of Overland Park, Mo., May 12, 2014, at 76. He owned

Babyland and Kids' Rooms.

Florence Dean Altrogge, BS Ed '61, of Mexico, Mo., May 2, 2014, at 104. A teacher, she won the Pioneer in Education Award from the Mexico School District.

Brian Hutcherson, BS BA '61, of Columbia April 18, 2014, at 85. He was a U.S. Army veteran.

William Starnes, BS Ag '61, of Bloomington, Ill., May 18, 2014, at 79. A U.S. Marine Corps veteran, he worked for State Farm Insurance.

Robert Cox, BA '62, JD '65, of Branson, Mo., May 14, 2014, at 75. He worked at Shelter Insurance Co.

Richard Birmingham, M Ed '63, of Springfield, Mo., March 4, 2014, at 80. A U.S. Army veteran, he was a teacher and baseball coach at Hillcrest High School.

Max Humphreys, BA '63, of Tampa, Fla., Feb. 26, 2014, at 74. He was a lawyer.

Melinda Miller Rast, BA '63, of Princeton, W.Va., Feb. 23, 2014, at 72. She worked for Ohio Presbyterian Homes, Glenwood Park Retirement Village and Princeton Community Hospital Dialysis Unit.

Daryl Schnitker Bopp, BS Ed '64, of Joplin, Mo., Feb. 19, 2014, at 72.

Carol Kraushaar Callisto,

BS Ed '64, of St. Louis March 20, 2014, at 71.

J. Ross Fleetwood, BS Ag '64, DVM '68, of Montgomery City, Mo., April 30, 2014, at 74.

Warren Griffin, EdD '64, of San Angelo, Texas, March 26, 2014, at 83. He was registrar and later a faculty member at Angelo State University.

Norman Pearson, M Ed '64, of Weston, Mo., May 12, 2014, at 87. A U.S. Army World War II veteran, he worked in education administration.

Felix Robbins, BS EE '64, of Fort Smith, Ark., April 22, 2014, at 72. He was a



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computer engineer with Baldor Electric.

Margaret Kesting Roth, BSN '64, of Springfield, Ill., Feb. 17, 2014, at 72. She was director of infection control at St. Joseph Hospital in Milwaukee and later Memorial Medical Center.

Herbert Wickham, M Ed '64, of Jackson, Mo., March 12, 2014, at 80. A U.S. Army veteran, he was a teacher and coach.

Carolyn Pilcher Agne, BS Ed '65, of Columbia, Ill., April 1, 2014, at 71. A Delta Gamma member, she was

an art teacher.

Thurman Aldridge, M Ed '65, EdSp '71, EdD '73, of Springfield, Mo., Feb. 23, 2014, at 77. He taught at Springfield Public Schools.

Stephen Asher, BS ME '65, of Limerick, Pa., March 11, 2014, at 71. A U.S. Navy veteran, he worked for McDonnell Douglas and later Monsanto.

John Gallagher, MA '65, of San Antonio Feb. 24, 2014, at 73. A U.S. Army Corps of Engineers veteran, he was a petroleum geologist and founding member of Career

Partnering LLC.

James Spieler, BS BA '65, EdSp '76, of Columbia March 21, 2014, at 76. He worked in development and legislative relations for MU and the University of Missouri System and later owned and published *Travelhost* magazine.

Owen Case, M Ed '66, EdD '81, of Springfield, Mo., March 29, 2014, at 81. He was a teacher and administrator for Springfield Public Schools.

Eugene Crews, BA '66, of Atlanta Feb. 23, 2014, at

69. A U.S. Navy veteran and a Missouri Athletic Hall of Famer for shot put, he was associate professor of psychiatry at the University of Alabama at Birmingham.

James Singleton, BS BA '66, of St. Louis March 12, 2014, at 74. He was a real estate appraiser.

Robert Spradling, BS BA '66, of Hutchinson, Kan., May 12, 2014, at 71. A Kappa Sigma member and a U.S. Navy Vietnam War veteran, he worked for Doscocil Cos., Krause Corp. and Food Brands America.

Hollis Daniels, MST '67, of Pekin, Ill., April 23, 2014, at 80. A U.S. Air Force veteran, he taught science at Pekin Community High School.

James Diestelhorst, MD '67, of St. Louis May 11, 2014, at 71. He was a physician at Missouri Baptist Medical Center.

Thomas Lyon, MA '67, PhD '71, of Leawood, Kan., Feb. 24, 2014, at 69. He was a professor at Rockhurst University and served as interim dean of the Helzberg School of Management.

Bettye Eubank McCracken, MS '67, of Salem, Ore., March 13, 2014, at 95. She was a social worker at the Glenwood, Iowa, state hospital.

Ralph Siebert, BS Ed '67, of Florissant, Mo., Feb. 20, 2014, at 71.

Teresa Zander Weddle, BSN '67, of Hillsborough, N.C., Feb. 25, 2014, at 69. She was a registered nurse at Duke Medical Center.

James Harper, BS Ag '68, of Mount Pleasant, S.C., March 11, 2014, at 70. He owned Charleston Bay Builders.

Tommy Koonce, EdD '68, of Denton, Texas, April 1, 2014, at 77. He taught at North Texas State University in the industrial technology department.

Gary Meader, BS BA '68, of Atlanta April 17, 2014, at 67. A Sigma Chi member, he was chief financial officer of Cotton States Insurance Co.

Klyne Nowlin, MBA '68, of Satellite Beach, Fla., April 23, 2014, at 82. A U.S. Air Force Vietnam War veteran, he was a career officer and contracting director of research and development at Wright-Patterson Air Force Base.

Charles Ross, MBA '68, of Appleton, Wis., April 5, 2014, at 74. A U.S. Army veteran, he worked for Aid Association for Lutherans, now Thrivent Financial.

Mary Shelton Skaggs, BS HE '68, of Belton, Texas, Feb. 20, 2014, at 68. She taught first grade.

Donald Steen, BS BA '68, of Dallas May 13, 2014, at 67. He was group vice president of Hospital Affiliates International and later founded the surgical company Medical Care America.

Arthur Anton, MD '69, of Seabrook, Texas, April 24, 2014, at 84. A U.S. Air Force veteran, he was a family physician in the Clear Lake area.

Rory Ellinger, MA '69, of St. Louis April 9, 2014, at 72. He was a Democrat in the Missouri State House of Representatives.

James Freer, BA '69, JD '75, of Farmington, Mo., March 30, 2014, at 67. A U.S. Army Vietnam War veteran, he practiced law and served as Farmington's prosecuting attorney

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as well as assistant prosecuting attorney for St. Francois County.

Beverly Grimes Haley, BS Ed '69, of Lake Ozark, Mo., May 9, 2014, at 66.

Mary Troutman Hedspeth, BS HE '69, of Van Buren, Mo., June 20, 2013, at 65. She worked for MU Extension in Douglas County, Black's Department Store and Fairview Manor Nursing Home in Birmingham, Ala.

Kenneth Kaplan, BS EE '70, of St. Louis March 23, 2014, at 66.

Richard Tapscott, BJ '70, of Clive, Iowa, Dec. 1, 2013, at 65. He was a journalism educator, and an editor and reporter for newspapers in Missouri, Kansas, Iowa, Oklahoma, Delaware, North Carolina and Washington, D.C.

Charles Mathis, BS BA '71, of Overland Park, Kan., April 24, 2014, at 65. He was senior vice president of customer service at UMB Bank.

Irwin Mitchell, BJ '71, of St. Louis March 27, 2014, at 70.

William Kirk, BJ '72, of Overland Park, Kan., March 6, 2014, at 65. He worked for the *Kansas City Star* and then moved to commercial photography.

Eric Nuetzel, BA '72, of St. Louis May 12, 2014, at 63. He was a professor of psychiatry at Washington University School of Medicine.

Mary Aldrich Pierson, BS Ed '72, of St. Louis May 16, 2014, at 64.

Lawrence King, BA '73, of St. Paul, Minn., March 29, 2014, at 62. He co-owned

Larson King LLC, a boutique litigation firm.

David Gordon Wilson, BA '73, of Memphis, Tenn., March 26, 2014, at 62. He was a teacher.

Albert Clem, MS '74, of Lee's Summit, Mo., March 8, 2014, at 74. A U.S. Air Force veteran, he worked for Honeywell.

Jerry Cotton, BS Ed '74, of San Antonio Feb. 22, 2014, at 63. A U.S. Army veteran, he was an administrator for the Army Reserve and Army National Guard.

Linda James, MA '74, PhD '88, of Jefferson City, Mo., March 27, 2014, at 63. She worked for the Missouri Department of Natural Resources.

Linda Kroencke, BS Ed '74, MBA '80, of Concordia, Mo., March 12, 2014, at 61. She worked for Lucent, Science Applications International Corp. and Sprint.

Cathy Bohm Warbritton, BS Ed '74, of Jefferson City, Mo., Sept. 22, 2013, at 62. She worked for the Missouri Division of Employment Security.

Rosemary White, BJ '74, of Boston Feb. 22, 2014, at 61. She was a TV reporter in Laredo, Texas; Tucson, Ariz; Dayton, Ohio; and Philadelphia, and later was business manager at NABET Local 15.

Joseph Wiswell, BJ '74, of Kansas City, Mo., March 21, 2014, at 61. He taught English in Korea for the Peace Corps and later worked in broadcasting.

James Koch, BA '75, of Columbia April 11, 2014, at 66. A U.S. Army Vietnam War veteran, he was an engineering draftsman at

Columbia Water and Light.

Joyce Newman Porter, M Ed '75, EdSp '85, of Columbia May 14, 2014, at 78. She was a teacher and administrator for Columbia Public Schools.

Allan Rahe, MS '75, of Shawnee, Kan., April 23, 2014, at 70. He was an engineer at Bendix and at Honeywell.

James Woodland, BS Ag '75, of New Cambria, Mo., Feb. 23, 2014, at 62. A U.S. Marine Corps veteran, he was an MFA livestock representative who operated the MFA exchange in Marceline, Mo.

Charles Andrews, MS '76, of Kansas City, Mo., Feb. 19, 2014, at 67.

Janis Orth Fries, BS Ed '76, of St. Louis March 21, 2014, at 61. She taught preschool at Ladue Chapel Nursery School.

John Hegwein, M Ed '76, of Mexico, Mo., May 14, 2014, at 66.

Richard Carpenter, BS Ed '77, of St. Louis March 11, 2014, at 65.

James Cochell, BS Ag '77, of Charlotte, N.C., May 1, 2014, at 58. A Farm House member, he worked for Duke Energy.

John Coyne, BS BA '77, MBA '79, of St. Louis March 14, 2014, at 58.

Ellen Wilcox Cunat, BJ '77, of Lutherville-Timonium, Md., April 3, 2014, at 58.

Dianne Peterson Strutynski, MS '77, of St. Louis Feb. 17, 2014, at 61.

Joan Bohn, BS Ag '78, of West Babylon, N.Y., March 15, 2014, at 58.

Thomas Glavinich, MS '78,

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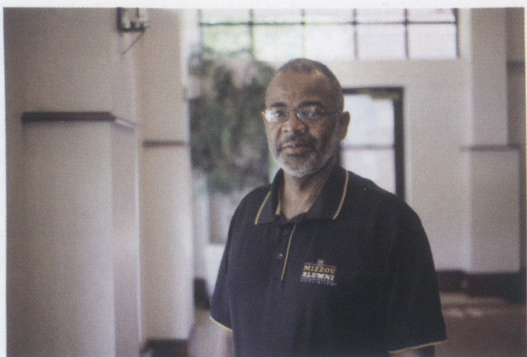
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PUBLISHING SCHEDULE:

Issue	Space Reservation	Materials Due	Publication Date
Winter '15	Sept. 23	Sept. 30	Nov. 25
Spring '15	Jan. 9	Jan. 16	March 5
Summer '15	April 2	April 10	June 5
Fall '15	June 26	July 9	Aug. 28

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Intentionally Inclusive

Inclusiveness is not automatic, says Robert Ross, M Ed '12, coordinator of affinity engagement for the Mizzou Alumni Association. Regardless, he says, "The association prides itself on being inclusive, and I work to be intentional about it." In recognition of his efforts, MU's Chancellor's Diversity Initiative awarded Ross one of its Inclusive Excellence Awards for 2014.

In 2011, Ross helped the association launch efforts to engage traditionally underrepresented students and alumni, and he co-wrote the report *Engaging All Mizzou Alumni: A Plan for Diversity and Inclusiveness*.

Through his role at the association, Ross works with a range of groups, including Marching Mizzou Alumni Band; Army ROTC Alumni; Mizzou Military Veterans Alumni Association; and Varsity M, for former athletes. Some alumni and students have expressed interest in restarting the LGBTQ alumni group. He helps these groups build relationships with students and alumni.

When it comes to African-American alumni, special care is sometimes required, Ross says. "Some alumni had student experiences that resulted in their not keeping a strong relationship with Mizzou after graduation. But the association sees itself as home to all alumni. So, we design engagement opportunities that stand on their own merit, not some quota," Ross says. For instance, the association sponsored two screenings of the documentary *Battle: Change from Within*, about educator Eliot Battle's, M Ed '60, role in desegregating schools and housing in Columbia.

Andrea Allison-Putman, BS BA '85, chair of the association's diversity committee and chief people officer for the YMCA of Greater Kansas City, says Ross' efforts are central to engaging traditionally underrepresented alumni. "He shares his research-based insights and tactics in concrete ways with the Mizzou Alumni Association governing board and so helps ensure that we make it a priority." — Dale Smith

of Shawnee, Kan., April 27, 2014, at 62. He worked at the University of Kansas.

Alan Lucier, MS '78, of Chapel Hill, N.C., March 27, 2014, at 59. He was senior vice president of the National Council of the Paper Industry for Air and Stream Improvement.

Michael Onofrio, BS RPA '78, of Columbia Oct. 20, 2013, at 58.

Carol Robinson, BA '78, MD '85, of St. Louis April 22, 2014, at 57. She practiced medicine in Webster Groves.

Marvin Hickman, BS Ag '79, of Princeton, Mo., March 15, 2014, at 78.

William Israel, BS EE '79, of Oak Creek, Wis., Feb. 13, 2014, at 58. He was an engineer for General Electric and later Cooper Power Systems.

Marianne Mahon, BES '80, of Jefferson City, Mo., Feb. 19, 2014 at 80.

Cynthia Anderson, BA, BJ '81, of Corpus Christie, Texas, May 2, 2014, at 54. She worked for the Missouri Hospital Association and later the Art Museum of South Texas.

Lloyd Fears, BS Ed '81, of Lake St. Louis, Mo., March 12, 2014, at 61.

Scott Noel Wright, BS ME '81, of Greenwood, Mo., May 19, 2014, at 55. He worked at Honeywell.

Marilyn Robinson Braun, JD '82, of Springfield, Mo., April 11, 2014, at 63. She practiced juvenile and family law.

Steven Gregg, BS ME '82, of Mooresville, Ind., Jan. 16, 2014, at 53. He was chief of turbine aerodynamics at Rolls Royce.

James Wade, MBA '82, of Hagerstown, Md., April 19, 2014, at 57. A U.S. Air Force veteran, he was a Washington County commissioner, a manager at Wells Fargo Home Mortgage and owner of Interstate Liquors.

Judith Cumber Alexander-Weber, BS Acc '83, of St. Louis Feb. 24, 2014, at 56.

Martha Hazen Robison, BJ '84, of Schaumburg, Ill., April 3, 2014, at 53. She worked at Leo Burnett advertising agency and later as a legal assistant at Peterson and Ross in Chicago.

Robert Daniel Walker, BHS '84, of Jefferson City, Mo., Feb. 13, 2014, at 63.

David Wootton, BA '85,

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of Old Orchard Beach, Maine, May 15, 2014, at 53.

Jane Dier Russell, A&S '86, of Palm Beach Gardens, Fla., March 6, 2014, at 80. She was an executive staff assistant and later coordinator of special events for multiple MU chancellors.

Imogene Behringer, M Ed '87, of Louisiana, Mo., Feb. 17, 2014, at 83. A Kappa Delta member, she taught typing and accounting at Louisiana R-II High School.

Daniel McLaughlin, MM '87, of St. Joseph, Mo., March 15, 2014, at 56. He was minister of music and missions at McCarthy Baptist Church.

Caroline Talaban Reid, BS BA '87, of Coppell, Texas, March 2, 2014, at 49. She was a budget analyst for Verizon and later a financial analyst for McKesson.

T. Diane Crimson Simpson, MBA '87, of Eldon, Mo., April 19, 2014, at 53. She worked at Modern Business Systems, IBM and the Missouri Hospital Association.

Timothy Lafferty, BS Ed '88, of Overland Park, Kan., April 18, 2014, at 48. He was a teacher.

James Sharp, JD '88, of Republic, Mo., April 16, 2014, at 50. He was a family law attorney at Sharp & Bredezen in Springfield, Mo.

Theresa Terry, BJ '89, of Oviedo, Fla., June 27, 2012, at 59.

Andrea Taylor Wood, BES '89, EdD '03, of St. Joseph, Mo., March 2, 2014, at 47. She held various coordinating positions at St. Joseph School District office.

Michael Hoover, MBA '90, of St. Louis May 3, 2014, at 52.

Shawn Presley, MA '90, of New Albany, Ohio, April 1, 2014, at 49. He was a communications specialist at the University of Iowa.

Stan Wood, BA '91, of Columbia March 16, 2014, at 55. A U.S. Army Reserve and National Guard veteran, he was a support technical with Schuyler House.

Ann Connally Melber, MSW '92, of Austin, Texas, March 6, 2014, at 74. She was an elementary school teacher.

Christopher Hegger, BS ChE '05, of St. Louis April 20, 2014, at 32.

Amy Head, BGS '09, of Moberly, Mo., April 7, 2014, at 42.

Mallory Bush Morton, BA '09, of Hallsville, Mo.,

Feb. 28, 2014, at 27. She was a human resources professional for Boyce and Bynum Pathology Laboratories in Columbia.

Timothy Allen King, BS '10, of Central, Mo., March 1, 2014, at 26.

Corey Schmid, BS BA '12, of St. Louis March 12, 2014, at 24. He was a project analyst at Jordan Lawrence.


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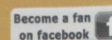


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Mules Rule



↑ Terry, left, and Tim are the current Missouri Mule Team, which celebrates its 30th anniversary in 2014. Each mule weighs about 1,600 pounds.

Mules can be described as steady, powerful, hard working, loyal, sure-footed creatures. But stubborn?

"I'm afraid you're sadly mistaken," says John Dodam, dispelling the cliché about the donkey-horse hybrid. "It's actually intelligence. Donkeys tend to evaluate a situation before reacting, and that characteristic comes through in the mule."

Throughout 2014, the Missouri Mule Team is celebrating 30 years since it was established by former College of Veterinary Medicine Dean Robert Kahrs. The current equine duo of 21-year-olds Tim and Terry — Tim, a more refined-looking mule and Terry with an unusually large head — is the third pair charged with appearing at events around the Show-Me State as ambassadors for Mizzou.

Dodam, a professor of anesthesiology at the college, oversees a group of undergraduate students who exercise, groom and feed the mules, and travel with them by truck and trailer.

"There aren't a lot of mules who make good public relations representatives, but Tim and Terry are unique in that they are extremely people oriented," Dodam says.

Mules are important to Missouri's history partly because of the state's frontier location in the 1800s. The animals were suited to make the journey across the Great Plains, and Missouri farmers could easily grow grass to feed them. Missouri farmers were also the first to breed big draft mares with mammoth donkeys in large numbers, resulting in the useful but infertile Missouri Mule.

Tim and Terry's barnmate, Hilda, a 38-year-old member of the original Missouri Mule Team, also resides in the facility just east of the college. Her teammate, Louise, died in 2011, and Tim and Terry's predecessors, Jill and Shirley, live on the farm of Justin Berger, DVM '98, in Rolla, Missouri.

Through the years, the mules have met governors, chancellors, athletes and 1990 Miss America, Debby Turner, DVM '91. Their next big event is Chancellor R. Bowen Loftin's inauguration ceremony Sept. 18, when they will transport the Loftin family from the Missouri Theatre to Memorial Union.

But it's perhaps the caretaking students who most appreciate hitching their wagon to these stars.

"Every time I have an exam, I come down here to the barn to pet them for good luck," says Darcie Sidelinger from Kersey, Pennsylvania. "I think it relieves a little bit of the tension." — *Marcus Wilkins*

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For years, Dick and Carol Dowdy taught people to eat what is good for them. As a faculty member in MU's Department of Nutrition and Exercise Physiology, Dick taught a general nutrition course to students across campus. Carol promoted good nutrition in her role supervising kitchens for Columbia Public Schools. "We tried to sort out nutritional fact from fiction," Dick says. "We dealt with how good nutrition can help you, and if abused, how it can hinder you."

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A belief that education is an investment motivated the Dowdys to make a gift to the Nutritional Sciences Program in the MU College of Human Environmental Sciences through a Mizzou charitable gift annuity. "Missouri has been good to me, and MU has been especially good to me," Dick says.

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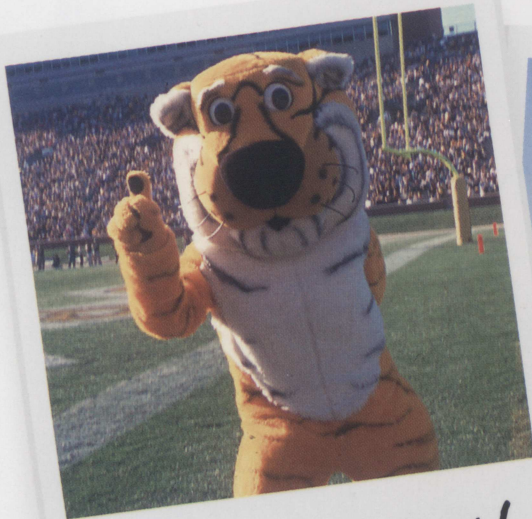
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