

Spring 2019

# Shillelagh

For members of the Missouri S&T Order of the Golden Shillelagh

newsletter

DOUBLING THE SPACE  
WHERE DREAMS  
ARE DESIGNED

page 2

---



Count down to

# CHICAGO

Ready to join OGS for a weekend in the Windy City?

June 6-8, 2019

Our itinerary is packed with Chicago's best: an architectural river tour, a Cubs vs. Cardinals game at Wrigley Field, the Art Institute of Chicago, deep-dish pizza at Gino's East, and an evening at the Museum of Science and Industry's Henry Crown Space Center with some of S&T's own astronauts. We'll wrap up the weekend by welcoming new OGS members.

Visit [give.mst.edu/OGSWEEKEND2019](http://give.mst.edu/OGSWEEKEND2019) for a full itinerary.

## Questions?

Contact **Sarah Jones**, senior manager of donor relations, at 573-341-6359 or [jonesarah@mst.edu](mailto:jonesarah@mst.edu).







## Dear Friends,

This issue of the *Shillelagh* celebrates the groundbreaking of an 8,000-square-foot expansion of our Kummer Student Design Center, the former Holsum bread bakery where building dreams has become a way of life for S&T's 20 student design teams.

A number of OGS members made it possible to break ground on this much-needed expansion, just as OGS members laid the foundation for the dedication of the student design center in 2011. We thank every contributor who has supported this hub where ideas lift off, set sail and race to the finish line.

Our donor profiles section features OGS members who are making a difference. **Joan Woodard**, Math'73, and her husband, **James Woodard Jr.**, have established a new professorship in support of mid-career faculty members on the path to full professor. **Carey Bottom**, Chem'72, MS Chem'75, PhD Chem'79, has funded an endowment supporting undergraduate chemistry research.

**Robert Williams Jr.**, ME'74, and his family have stepped up in support of the new Classroom Learning Center with a gift naming the 300-seat lecture hall. We are grateful to these OGS members for investing in S&T in such a significant way.

On many other fronts, the spring semester was filled with good news. Our 111th Best Ever St. Pat's celebration lived up to its name as Miner alumni put on their green, paraded their pride, and welcomed University of Missouri System President **Mun Y. Choi** as an Honorary Knight. Our first-ever Miner Giving Day raised more than \$700,000 in support of the Finish Line Scholarships that help S&T students in the home stretch finish their degrees. We thank every OGS member, and the many alumni and friends, who made April 24 a megathon for Miner pride.

Our Spring Career Fair set a record for the number of participating companies, and our online graduate degree programs once again ranked among the best in the nation in *U.S. News & World Report*.

Square co-founder **Jim McKelvey** visited campus to talk technology, startups and innovation with our students — and we were delighted that he was accompanied by his father and Miner alumnus **James McKelvey Sr.**, ChE'45, dean emeritus of the School of Engineering and Applied Science at Washington University in St. Louis. Hundreds of high school students converged on campus in March to battle their bots in the FIRST Tech Challenge. TEDxMissouriS&T returned in April with nine remarkable speakers sharing their thoughts on the power of the "Overlooked."

It was also a time of sadness for our university community with the loss of two great leaders, former chancellor **Jack Carney** and former Miner Alumni Association executive director **Don Brackhahn**.

I'd like to encourage every OGS member to nominate a Miner for our 2021 Alumni of Influence. We'll be celebrating the 10th anniversary of our first class of Alumni of Influence, as well as the university's 150th anniversary, so we need "all OGS hands on deck" to help us honor a new group of distinguished alumni. You'll find a roster of past honorees on page 13, and an online nomination form at [influence.mst.edu/nominate](https://influence.mst.edu/nominate).

In just a few days, OGS members will gather for a weekend filled with spacewalks, a skyscraping river tour, baseball at Wrigley Field and a little Miner time on the Magnificent Mile. We'll conclude OGS Weekend with a founding tradition — welcoming new members as they receive their shillelaghs.

See you in Chicago!

Joan Nesbitt  
Vice Chancellor for University Advancement

# DOUBLING THE SPACE WHERE DREAMS ARE DESIGNED

W

hen *Valkyrie's* robotic arm refused to budge, members of the Mars Rover Design Team kept their cool. In front of a room full of people gathered to celebrate the groundbreaking of the Kummer Student Design Center expansion, team members searched for a solution. Finally, they resorted to a reboot. And the rover sprang to life, lifting her arm and pulling a brick from the design center's west wall.

"The expansion is officially underway," said **Chris Ramsay**, MetE'83, MS MetE'85, assistant vice provost for student design and experiential learning. "We've been working toward this day for a

long time and it's great to finally be here."

More than 100 alumni, donors, students and friends gathered on April 26 for the groundbreaking on the expansion, which will add 8,000 square feet to the design center, home of Missouri S&T's 20 student design teams. The honor of launching demolition went to *Valkyrie*, the newest Mars rover designed and built by S&T students, which will compete May 30–June 1 in the University Rover Challenge at the Mars Desert Research Station in Hanksville, Utah.

"I can remember when there were only a few design teams operating in an overcrowded Quonset hut-type building over on State Street across from the old power plant," said trustee and major donor **Mike Bytnar**, ME'68, MS EMgt'73. "Watching the design center grow has been amazing. I want to tell all the student design teams how proud you make us feel as alumni."

In the eight years since the dedication of the Kummer Student Design Center in 2011, the number of student design teams has doubled, while the number of students participating on teams has tripled to more than 1,200. The expansion will include additional manufacturing and fabrication bays, a larger machine shop, upgrades to the welding, waterjet and composites labs, new labs for electronics and synthetic biology (iGEM), and a remodeled innovation suite.

"The design center has by far been the most significant and defining part of my time here at S&T," said **Jonas Buxton**, a senior physics major and founder of S&T's Multirobot Robot Design Team. "I can remember my first time visiting campus, walking into this design center, and being truly awestruck at what I saw. Everywhere I looked, I was surrounded by incredible engineering achievements. I left that day knowing that S&T was the place for me."







## WITH APPRECIATION

Missouri S&T gratefully recognizes the major donors to the Kummer Student Design Center expansion and thanks them for their support.

- **Richard**, CE'69, MS EMgt'73, and **Nancy Arnoldy**
- **Keith**, ME'64, and **Patricia Bailey**
- The Boeing Co.
- Brinkmann Constructors
- **Michael**, ME'68, MS EMgt'73, and **Joyce Bytnar**
- **Gary**, Math'62, and **Judy Havener**
- **Frederick**, CE'55, and **June Kummer**
- **Roger**, CE'70, MS CE'73, PhD CE'77, and **Karen LaBoube**
- **Chris Ramsay**, MetE'83, MS MetE'85, and **Darlene Ramsay**, MetE'84
- The Estate of **John Schork**, MetE'47





1. Missouri S&T trustee **Mike Bytnar**, ME'68, MS EMgt'73, speaks on behalf of donors.
2. Brinkmann Constructors project director **Kendrick Lathum**, CE'03, and his son, **Brady**, get a closer look at *Valkyrie*.
3. Toolkit takeaways commemorate a special day for the student design center.
4. Members of the Mars Rover Design Team visit with guests.
5. Multirotor Robot Design Team founder **Jonas Buxton** speaks on behalf of all S&T student design teams.



## There wasn't much exposure to engineering when **Joan Woodard**, Math'73, was in high school. But the world of engineering opened up at Missouri S&T.

"Once I got to Rolla, I had many friends studying engineering," she says. "I knew that's what I ultimately wanted to do."

When Woodard graduated in 1973 with a degree in applied math, she joined Sandia National Laboratories in Livermore, Calif., later transferring to Albuquerque, N.M. Nearly 40 years later, she retired as executive vice president and deputy director.

Now Woodard and her husband, **James Woodard Jr.**, have established a \$1 million faculty endowment in electrical and computer engineering. The Woodard Associate Professorship for Excellence will support a mid-career faculty member on the path to full professor by providing research funding and other resources.

### LAUNCHING A CAREER AT SANDIA NATIONAL LABS

"I started at Sandia as a member of the technical staff, under the condition that I

earn a master's degree," says Woodard. "I was allowed a 12-month leave to work on it."

Woodard earned a master of science degree in engineering economic systems from Stanford University and a Ph.D. in mechanical engineering from the University of California-Berkeley. She also continued to take on new challenges at Sandia, advancing from research scientist to senior positions in nearly every major program.

"The work was exciting and cutting edge," says Woodard, whose first project was in energy research, developing a solar thermal electric power generation system. During the assignment, she met a Ph.D. graduate of MIT, James Woodard, her future husband. Their two sons, **Thomas**, EE'06, and **Mark**, PhD CpE'17, are both Miners.

"We were working on a \$110 million federal investment in the 1970s, so there was a lot of pressure," says Woodard. "Using our

research, the government built a plant to test advanced concepts in power generation."

Woodard is a member and past president of the S&T Board of Trustees and a member of the Academy of Computer Science, and she and her husband are members of the Order of the Golden Shillelagh. She was recognized among the university's Alumni of Influence in 2011.

In addition to consulting for two national labs, Woodard mentors newly tenured faculty members selected to participate in a Department of Defense mentoring program funded by the Defense Advanced Research Projects Agency.

"Most of the mentors in the program are retired generals, but a handful of us are from other parts of the national security community," says Woodard, who credits her experiences in the DOD program with influencing the focus of the Woodard Professorship.

"The professorship will support excellent faculty members who teach because they love students, do research because it keeps them at the frontier of their fields, and serve because they are leaders," says Woodard. "And hopefully the endowment will encourage all faculty on that path."





Carey Bottom, who began routine lap swimming after the loss of his wife, is pictured at the nearby natatorium on the Indiana University - Purdue University Indianapolis campus, where many U.S. Olympic and national championship swimming and diving trials are held.

Photo by Liz Kaye

# INSPIRING NEW GENERATIONS OF TEACHERS AND SCHOLARS

**C**arey Bottom, Chem'72, MS Chem'75, PhD Chem'79, chose Missouri S&T because it was close to home, strong in science and relatively small.

"I wasn't keen on big universities," says Bottom, who grew up in Waynesville, Mo. "At smaller schools you're more connected to professors. You can roll up your sleeves and get involved."

And that's exactly what happened in a chemistry special projects course one summer.

"That class had a huge influence on my career," says Bottom. "I had the chance to conduct research under the guidance of a biochemistry professor."

Bottom spent the summer and beyond studying a mysterious purple compound excreted by a fungus — an anomaly because the excretion was usually yellow.

"It took years to isolate and characterize it, with instrumentation much less advanced than today," says Bottom, who published his findings as a young research chemist in the journal *Phytochemistry* in 1975.

Last year Bottom established the Carey and Christine Bottom Endowed Scholarship for Undergraduate Research in Chemistry. This past summer, the first recipient, **Rachel Nixon**, a junior chemistry major, spent 10 weeks conducting research on DNA nanostructures with the potential to deliver anti-cancer drugs to target cells.

"I'm very thankful for Dr. Bottom's support," says Nixon. "It allowed me to concentrate on my research."

Bottom was pleased to see his gift's impact.

"I'm proud to support Rachel's work, especially since it has applications in cancer drug delivery," says Bottom, whose wife, **Christine**, died of a rare form of cancer in

2013. "Students jump to a new level when they have the freedom to learn through research. That's how I found my calling."

After finishing his Ph.D., Bottom joined Bristol-Myers and went on to a 35-year career, primarily in the pharmaceutical industry. He worked for Marion Laboratories and Schering-Plough before leaving Big Pharma for the startup sector, where he guided a number of emerging companies before retiring in 2014.

Bottom holds U.S. patents, has published widely in scientific journals, and was honored by the Food and Drug Administration with the Commissioner's Special Citation.

"The FDA award was a big deal and hugely beneficial to the pharmaceutical industry," says Bottom, who led a study of a gelatin capsule quality problem. "I and a colleague in Switzerland were the first 'civilians' (non-FDA employees) to receive the award."



to give back to Missouri S&T. He serves on the board of the Academy of Mechanical and Aerospace Engineers. He and his wife, **Kathy**, are members of the Order of the Golden Shillelagh. The Williams family has contributed to many university initiatives, including the pneumatic tool and machine labs, Product Innovation and Creativity Center, and the Student Design and Experiential Learning Center.

“It is important to give back to the university that provided me with a world class education.”

Now they have stepped up in support of a new Classroom Learning Center, which will add 15,900 square feet of space to S&T's Computer Science Building. Their gift will name the facility's largest space, a 300-seat lecture hall, as well as a major area in the main lobby.

“It is important to give back to the university that provided me with a world-class education,” says Williams, who received an Award of Professional Distinction from S&T in 2007. “We owe it to students to better the world however we can.”

Photo courtesy of Williams Patent Crusher and Pulverizer Co.

# A FOURTH-GENERATION FAMILY BUSINESS LEADER FUNDS A NEW LECTURE HALL

**R**obert Williams Jr., ME'74, was 14 when he started working at Williams Patent Crusher and Pulverizer Co., the St. Louis business his great-grandfather founded in 1871.

“I swept the floors,” says Williams, who was promoted during high school to the test plant, where he says he learned the most about the business, a 148-year-old manufacturer of hammer mills, pulverizers, crushers, refuse shredders, granulators, chippers and other heavy-duty machinery used for size reduction.

“Today we provide customized solutions for processing needs in many industries,” says Williams. These processes include

drying, sizing, classifying and conveying, metering, and bulk loading. “Our strength as a family business is that we listen to our customers' needs, and most of our employees remain at Williams throughout their careers.”

After graduation, Williams worked in the company's engineering and sales departments. By age 46, he was president of the company. Today his son, **Robert Williams III**, works in the company's information technology department, and daughter, **Ashley Williams**, ChE'09, is a project and design engineer — the fifth generation to work in the family business.

While running a global business takes him around the world, Williams makes time





# THE 111TH BEST EVER

Miner alumni put on their green, proclaimed their pride, and converged to celebrate the 111th Best Ever St. Pat's across the country on March 16. In Rolla, campus festivities culminated with a pre-parade breakfast at Hasselmann Alumni House, the traditional parade down Pine Street, a pig roast and more than a few toasts to the patron saint of engineers.

1. University of Missouri System President **Mun Y. Choi**, a 2019 honorary knight, celebrates with **Hope Burken**, wife of **Joel Burken**, chair and Curators' Professor of civil, architectural and environmental engineering.
2. Missouri S&T Interim Chancellor **Chris Maples** and his wife, **Sara Marcus**, honor the patron saint of engineers.
3. Left to right: St. Pat's guest **Dana Bussen** visits with **Mark Simecek**, EMgt'94, and

**Scott Birdsong**, ME'89, MS ME'98, in the Bauer Bar at Hasselmann Alumni House.

4. **John Eash**, AE'79, MS EMgt'90 (left) and **James Nelson**, ME'99, MS ME'03, celebrate at Hasselmann Alumni House.
5. Left to right: Key Sport Shop owner **Tom Green**, **Mike Gross**, ME'88, MS ME'94, and Mike's guests **Justin Strauss**, S&T student **Eli Massar** and **Sammy Mains**.
6. **William A. Watson II**, ME'83, with his wife, **Collette**, show their 111th Best Ever spirit.





Left: Kathleen Sheppard, 2019 Woman of the Year Award honoree

Right: Katie Shannon, 2019 Dr. Elizabeth Cummins Women's Advocate Award honoree

## S&T honors Woman of the Year and Women's Advocate Award winners

A science historian and a cell biologist were honored in April with Missouri S&T's Woman of the Year Award and the Dr. Elizabeth Cummins Women's Advocate Award.

**Kathleen Sheppard**, associate professor of history and political science, was named the 2019 Woman of the Year. A science historian who brings a diversity of perspectives to her teaching and scholarship, Sheppard holds a bachelor's degree in anthropology and sociology from Truman State University, a master's degree in Egyptian archaeology from University College London, and a master's degree and doctorate in the history of science from the University of Oklahoma.

Sheppard joined the S&T faculty in 2011 after completing a post-doctoral teaching fellowship at the American University in Cairo. Her major publications include a biography of Margaret Alice Murray, a pioneering Egyptologist at University College London. Sheppard is also a contributing editor for *Lady Science*.

**Katie Shannon**, associate teaching professor of biological sciences, was honored with the 2019 Dr. Elizabeth Cummins

Women's Advocate Award. Shannon joined S&T in 2005 as an assistant professor in biological sciences, after completing a post-doctoral fellowship at the University of North Carolina, where she earned her bachelor's degree in biology. She holds a Ph.D. in cell and developmental biology from Harvard Medical School.

Shannon directs S&T's cytokinesis lab, where more than 40 undergraduate and graduate students — most of them women — have conducted research leading to conference presentations, academic publication, and acceptance to graduate and medical schools.

The awards, which are funded by S&T alumna and trustee emerita **Cindy Tang, Econ'85**, recognize members of the S&T community for their contributions to strengthening diversity, inclusion and the role of women on campus. The Woman of the Year Award was established in 1997, and the Dr. Elizabeth Cummins Women's Advocate Award was established in 2017. It is named for the first female faculty member to chair an academic department at the university.





### BATTLE OF THE BOTS

Tech-savvy high school students from Missouri and surrounding states converged at S&T in March for FIRST Tech Challenge, a regional robotics competition challenging student teams to design, build and program robots capable of performing skills challenges. The challenge is sponsored by FIRST (For Inspiration and Recognition of Science and Technology), a nonprofit dedicated to promoting next-generation STEM leadership. The annual competition has become a powerful recruitment tool: approximately 400 members of S&T's 2018–19 freshman class participated in the robotics competition as high school students.



### TEDx LOOKS AT THE “OVERLOOKED”

In April, a local version of the world-renowned TED Talks took the stage in Leach Theatre. With the theme “Overlooked,” TEDxMissouriS&T’s nine speakers shared how their lives had been impacted by the act of noticing the overlooked, from the behavior of ant colonies to the unseen perils of dangerous jobs. Visit [tedxmst.com](http://tedxmst.com) for more information.



### MAKE A DIFFERENCE WITH THE MINER MATCH

Missouri S&T’s greatest asset is our talented students. And their greatest need is scholarships. That’s why the Miner Match will double every dollar you contribute to annual scholarships. Whether you choose to help a senior in the home stretch to graduation with a Finish Line Scholarship or a brand new Miner with a merit scholarship, the Miner Match will double your impact with matching funds from the University of Missouri System and Missouri S&T. Together we can help students graduate and succeed.

➔ For more information, contact **Joan Nesbitt**, 573-341-7808, [nesbittj@mst.edu](mailto:nesbittj@mst.edu), or **Tory Verkamp**, 573-341-6090, [verkampv@mst.edu](mailto:verkampv@mst.edu).





## OUTSTANDING ONLINE

Fifteen S&T online graduate degrees have been ranked among the best in *U.S. News & World Report*. Our programs recognized in the 2019 Best Online Programs include 12 online graduate degrees in engineering, the online MBA, and online degrees in non-MBA business and computer information technology. S&T launched its first online degree in 1998 in engineering management. For more information, visit [dce.mst.edu](http://dce.mst.edu).

## MARS ROVER DESIGN TEAM UNVEILS *VALKYRIE*

Watch out red planet, because the Miners are coming! S&T's Mars Rover Student Design Team unveiled the newest rover, *Valkyrie*, in March. Named for the powerful female spirits who soar over the battlefields of Norse mythology, *Valkyrie* is preparing for another kind of combat zone: the rocky terrain of the Mars Desert Research Station in Hanksville, Utah, where the 2019 University Rover Challenge will be held May 30–June 1. S&T's team won the international competition in 2017 with *Gryphon*, and defended the world title in 2018 with a second-place finish for *Atlas*. Now the team hopes that *Valkyrie* will live up to the hashtag that defines her predecessors, #RoveSoHard.



## SPRING CAREER FAIR SETS RECORD

Miners are in high demand, and the record turnout at our Spring Career Fair proves it. More than 250 companies participated in the recruitment event on Feb. 19 — a record and 6% increase over last year. "This is one of the largest events on campus and has the potential to shape the future of so many students and alumni," says **Will Zwikelmaier**, director of career opportunities and employer relations (COER), which sponsors the career fair. This semester, COER posted nearly 5,200 positions from employers seeking full-time employees, co-op students and interns. The average starting salary for S&T undergraduates is approximately \$66,000, while the average starting salary for graduate students exceeds \$80,000.

PHILANTHROPY MONTH  
CROSSES THE FINISH  
LINE WITH A WIN FOR  
MINER GIVING DAY

Missouri S&T alumni and friends came together on April 24 to contribute more than \$700,000 to Finish Line Scholarships on Miner Giving Day. A total of \$350,788 donated was matched dollar for dollar by the University of Missouri System and Missouri S&T, bringing the total raised to \$701,576. Every dollar will support the Finish Line Scholarships that help S&T students in the home stretch to finish their degrees, graduate and launch their careers.

Miner Giving Day was a first for Philanthropy Month, which is celebrated every April at S&T. Throughout the month, the members of Students Today Alumni Tomorrow (STAT) and Blue Key joined forces with the chancellor's office and university advancement to sponsor games, giveaways donated by local businesses, special events, and social media and crowdfunding campaigns spotlighting the spirit of giving.

Thank you for making a difference on Miner Giving Day and every day of the year.



SQUARE CO-FOUNDER JIM MCKELVEY VISITS S&T

St. Louis-based entrepreneur and philanthropist **Jim McKelvey**, co-founder of the mobile payment platform Square, visited S&T on March 7 to share his thoughts on technology and innovation with S&T students during a presentation in Leach Theatre. His visit was sponsored by Sigma Phi Epsilon fraternity. McKelvey co-founded Square in 2009 with Twitter CEO and former S&T student **Jack Dorsey**. A master glass artist who also toured the Hot Glass Shop, McKelvey visited campus with management team members from Cultivation Capital, the venture capital firm he co-founded, and his father, **James McKelvey Sr.**, ChE'45, dean emeritus of the School of Engineering and Applied Science at Washington University in St. Louis, which was recently named the James McKelvey School of Engineering.





## ALUMNI OF INFLUENCE

### NOMINATE A MINER FOR 2021

**Missouri S&T is seeking nominations for our 2021 Alumni of Influence, the highest alumni honor bestowed by the university.**

Since the tradition began in 2011, S&T has honored 38 alumni. Now we're preparing to recognize a new group of honorees during the university's 150th anniversary. Use the online nomination form at [influence.mst.edu/nominate](https://influence.mst.edu/nominate) — or forward nominations to **Darlene Ramsay**, executive vice president of the Miner Alumni Association, at [ramsayd@mst.edu](mailto:ramsayd@mst.edu). Visit [influence.mst.edu](https://influence.mst.edu) to read about past honorees.

#### 2011 HONOREES

<b>Thomas Akers</b> , Math'73, MS Math'75	<b>Thomas Holmes</b> , MinE'50
<b>Dick Arnoldy</b> , CE'69, MS EMgt'73	<b>*Vernon Jones</b> , CE'53
<b>Keith Bailey</b> , ME'64	<b>Fred Kummer</b> , CE'55
<b>Robert Bay</b> , CE'49	<b>John Mathes</b> , CE'67, MS CE'68
<b>Jerry Bayless</b> , CE'59, MS CE'62	<b>*George Mueller</b> , EE'39
<b>Jon Bereisa</b> , EE'67, MS EE'70	<b>Zebulun Nash</b> , ChE'72
<b>Jim Bertelsmeyer</b> , ChE'66	<b>Mariana Rodriguez</b> , CE'80
<b>Philip Chen</b> , MS ME'65	<b>Richard Stegemeier</b> , PetE'50
<b>Delbert Day</b> , CerE'58	<b>Steve Sullivan</b> , EE'89
<b>Farouk El-Baz</b> , MS GGph'61, PhD GGph'64	<b>Cindy Tang</b> , Econ'85
<b>John Fairbanks</b> , EE'71	<b>*John Toomey</b> , ME'49, MS ME'51
<b>Gary Forsee</b> , CE'72	<b>*Ed Tuck</b> , EE'53
<b>Gary Havener</b> , Math'62	<b>Ted Weise</b> , EE'67
	<b>Gary White</b> , CE'85, MS CE'87
	<b>Joan Woodard</b> , Math'73

#### 2016 HONOREES

<b>Joe Ballard</b> , MS EMgt'72	<b>Don Gunther</b> , CE'60
<b>Bob Brackbill</b> , Mine'42	<b>Sandra Magnus</b> , Phys'86, MS EE'90
<b>Bob Brinkmann</b> , CE'71	<b>Dick Vitek</b> , MS Chem'58
<b>Matt Coco</b> , CE'66	<b>Roy Wilkens</b> , EE'66
<b>Roger Dorf</b> , ME'65	
<b>Bipin Doshi</b> , ChE'62, MS ChE'63	

*\* deceased*



### IN MEMORIAM

- John F. "Jack" Carney III**, former Missouri S&T chancellor, died on April 24. Dr. Carney served as chancellor from 2005 until his retirement in 2011. He led the university through a name change, a comprehensive campaign that raised \$127.8 million in charitable gifts, and major campus expansion projects including the construction and renovation of Toomey Hall, the completion of the first building in Innovation Park, the construction of the Miner Dome and Kummer Student Design Center, and fundraising for Bertelsmeyer Hall. Dr. Carney held three degrees in civil engineering: a bachelor of science from Merrimack College and a master of science and Ph.D. from Northwestern University.
- Donald G. Brackhahn**, former executive director of the Miner Alumni Association, died on March 31. Mr. Brackhahn joined the S&T staff in 1985 and retired in 2002. He was named an honorary life member of the Miner Alumni Association in 1993. Mr. Brackhahn was a graduate of the University of Missouri-Kansas City with bachelor of arts and master of arts degrees in history. He served as director of development and alumni relations at UMKC, and was the first president of the UMKC Alumni Association.





Missouri University of Science and Technology  
1100 N. Pine St.  
Rolla, Missouri 65409

NONPROFIT ORG.  
U.S. POSTAGE  
PAID  
PERMIT NO. 170  
ROLLA MO 65401

# Stay connected to the Miner Alumni Association everywhere you go.

The MinerConnect app brings the Miner Alumni Association to your mobile device for at-your-fingertips access to your alumni community.

- Find and register for events
- Access your giving history through myMinerboard
- Learn what's trending with alumni and the S&T community
- Read stories from the latest issue of the *Missouri S&T Magazine*
- Easily update your contact information and much more

**Download the new MinerConnect app available on Apple iTunes and the Google Play Store.**

■ Now it's easier than ever to be a proud Miner.

