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# contents

FALL 2011

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- around campus **22-26**
- research **27-29**
- sports **30-31**
- association news **32-35**
- homecoming **36**
- section news **37**
- alumni notes **38-44**
- memorials **45-48**

## 140 things we **LOVE** about S&T

Mines & Met pg. 7

History of campus pgs. 8-9

Landmarks - pg. 10

Art - pg. 11

Landscaping - pg. 12

Daily Life - pgs. 12-13



St. Pat's - pgs. 18-19



Student Life - pgs. 14-15

Diversity pg. 16  
Traditions pg. 17

Rolla - pgs. 20-21

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## From the editor



**Mary Helen Stoltz '95**  
News & Features  
Editor

As an English major at Missouri S&T, I spent the better part of my college life in the Humanities-Social Sciences Building. When I think back about my time in school, the place I think of first — the place where I crammed for tests and did most of my writing — was the landing between that tan brick building's two upper floors. It featured two couches, a padded bench, a big psychedelic painting and a giant window with a great view of campus. It was perfect for finding inspiration and for socializing with fellow students and the arts and sciences faculty. If I sat there long enough, nearly everyone I knew would pass that landing.

One hundred and forty years ago this fall, the first classes were held at the newly established University of Missouri School of Mines and Metallurgy. Since then, more than 50,000 alumni, myself included, have come and gone from S&T.

I would be willing to bet that something about the campus stayed with each of you, just like that landing did for me. Maybe it was that special place

on campus where you met your future spouse. Or knocking back a cold one at St. Pat's with your friends at the Grotto (or Brewster's or the Cavern, depending on your era). Maybe it was scaring community members at the annual Haunted Mine, or waiting with anticipation for the party weekends when girls would come to campus. Maybe it was just the knowledge that you got an education that would take you places you never dreamed of going.

To honor the 140th anniversary of Missouri University of Science and Technology, this issue of *Missouri S&T Magazine* celebrates many of the things that made this university so great for all of us. On the pages that follow, you'll find a list of 140 things that your fellow alumni love about Missouri S&T. The list isn't ranked, comprehensive, or scientific, but I hope reading it brings back some memories. And if you think of something that's missing, I hope you'll share it with us. Enjoy!

## member benefits

As a graduate of MSM, UMR or Missouri S&T, you are automatically a member of the Miner Alumni Association and are entitled to:

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**Online Community**, including searchable directory at [mineralumni.com](http://mineralumni.com)

**Access** to alumni office via email ([alumni@mst.edu](mailto:alumni@mst.edu))

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Chairs, lamps, watches, pendants, Joe Miner credit card, license plates for Missouri residents, and the official Missouri S&T ring.

To take advantage of these offers, or for more information, contact the alumni office:

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## Letters to the Editor



*In the Summer 2011 issue, Jerome Denzel, ChE'63, asked about the building housing the Engineers Club. It had two locations while I was a member from 1950-53. The first was on the street opposite Norwood Hall, but it later moved to the former Sigma Phi Epsilon house around the corner. Above is a photo of the house in 1953. I don't recall the street names anymore. It was \$28 per month in 1953. I hope Jerry can find it.*

**John Schemel, MetE'53**  
Richland, Wash.



# → MIKE ECKERT



## ..... GOING FAST AND GOING GREEN

**Mike Eckert** grew up racing go-karts and watching Formula 1 cars on television.

"I was interested in anything with four wheels that required a helmet to drive," says Eckert, ME'10. As a kid, he wanted to be a Formula car driver, but as he got older, engineering became his goal.

"If I couldn't drive such cars, I would build them instead."

Years later, his dream came true.

Two days after finishing his last race as chief engineer of the S&T Formula Car Team, Eckert started a new job as an engineer with Tesla Motors' Advanced Engineering Team. He works primarily on new vehicle platform research and development for the Silicon Valley manufacturer of high-end electric vehicles. Since he's been with the company, the engineering department has quadrupled in size as the once privately owned company went public.

Eckert says his design team experience is what landed him the job, and he uses the skills he learned at S&T every day.

"Quick, informed decision-making, high-level knowledge of every facet of the vehicle, the ability to learn and apply new things very quickly, and extensive knowledge of and reliance upon computer-aided design software are all part of my daily tasks," Eckert says. "My S&T design team experience — often hard, tiring times mixed with the good — has really paid off."

Although he still works long hours, there are perks to the job.

"We have a Tesla Roadster Sport here for employees to use to take to lunch or on weekend drives," Eckert says. "The cars are incredible and attract such positive attention wherever you drive. It does take a fair bit of skill to safely pilot a \$150,000 car through Los Angeles traffic, however."

# Say What?

“Concrete is used 10 times more than any other building material. **It is literally everywhere — buildings, bridges, roads, dams, wastewater treatment facilities, airport runways, railroad ties, water distribution systems, et cetera. ...** Some say it is the foundation of our modern civilization.”

— **Jeffery Volz**, assistant professor of civil, architectural and environmental engineering, in a Feb. 9 article in the *Cape Girardeau Southeast Missourian*. Volz studies the use of fly ash as a concrete additive.

“Even as the economy struggles to recover, it is evident that the future is bright for the science, technology, engineering and math industry. **I encourage students of all ages, as well as career changers, to strongly consider a future in science, technology, engineering and math.**”

— **Kevin Truman**, PhD CE’85, dean of the University of Missouri-Kansas City School of Computing and Engineering, in a May opinion piece in the *Kansas City Star*.

“**I have not yet become tired of gazing out the window** and watching the world go by and looking for interesting things to capture as memories.”

— NASA astronaut **Sandra Magnus**, Phys’86, MS EE’90, in a journal piece quoted in the June 27 issue of the *St. Louis Post-Dispatch*. On July 8, Magnus flew aboard the *Atlantis* on the final shuttle mission to space.

“**The cloud also cuts companies’ hardware investments.** They use the cloud companies’ equipment, and they usually pay only for the capacity they use.”

— **Sanjay Madria**, associate professor of computer science, in a July 1 *St. Louis Post-Dispatch* article about cloud computing’s potential impact on business.

## by the numbers

3

Test wells drilled on campus during the summer for a new geothermal energy project that will replace the campus’s power plant

65

Age of the S&T power plant

\$2.8 million

Projected annual savings by converting to geothermal energy on the S&T campus

447

Number of faculty at Missouri S&T in 2000

452

Number of faculty at Missouri S&T in 2010

4,626

Number of students enrolled at Missouri S&T in 2000

7,206

Number of students enrolled at Missouri S&T in 2010

89,330

Total credit hours taken by S&T students in 2010



# MISSOURI S&T

## MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY



## 140 things we LOVE about S&T



*My second home.  
Love this place.*

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Happy 140th birthday, Missouri S&T! OK, technically we were founded 141 years ago, but the first classes at the University of Missouri School of Mines and Metallurgy didn't begin until Nov. 6, 1871. Campus lore says it snowed that day. A lot. But that didn't stop the group of students — the first-ever Miners — who gave S&T a start.

To celebrate that first class, and all the classes that followed, the *Missouri S&T Magazine* staff set out to list 140 of the things our alumni love best about their alma mater. One for each year.

We asked what you loved most, and boy did you come through. You told us about classes, student organizations, food — both on-campus and off — and hijinks. Many of you told us how great campus life was when you were in school and about how you discovered the true value of your Rolla degree after you left.

The list that follows is in no particular order. It isn't ranked. Read it. Enjoy it. We hope it will bring back memories.



## 01

### Experimental Mine

S&T has its own underground training facility for mining engineering students.

## 02

### Explosives

Fire in the hole! Fire in the hole! Fire in the hole! S&T was the first university in the nation to offer a minor in explosives engineering. We now offer a master's degree, too. And for high school students, S&T hosts Explosives Camp every summer.

## 03

### Fireworks

We're not talking about bottle rockets here. Thanks to our explosives experts, Rolla benefits from big fireworks displays during the summer and at football games and special events. There have even been fireworks at St. Pat's coronation. Indoors.

## 04

### Haunted Mine

Every Halloween, the Experimental Mine becomes the Haunted Mine. S&T students have been scaring the bejeezus out of Rolla kids there for more than a decade now.

## 05

### Miner statue

A gift from the 1950 mining engineering class, the bronze sculpture titled *Today's Miner* found a home in McNutt Hall. Surrounded by tables, chairs and couches in an open area of the building, the Miner watches over students as they study.

## 06

### Mineral Museum

Following the close of the 1904 World's Fair in St. Louis, many minerals that had been exhibited were shipped to Rolla. Housed in McNutt Hall, the collection includes approximately 3,500 specimens from all over the world, including gold, diamonds and meteorites.

## 07

### Hot Glass Shop

Students learn the connections between art and materials science in this on-campus glass-blowing studio.





## History of campus

68

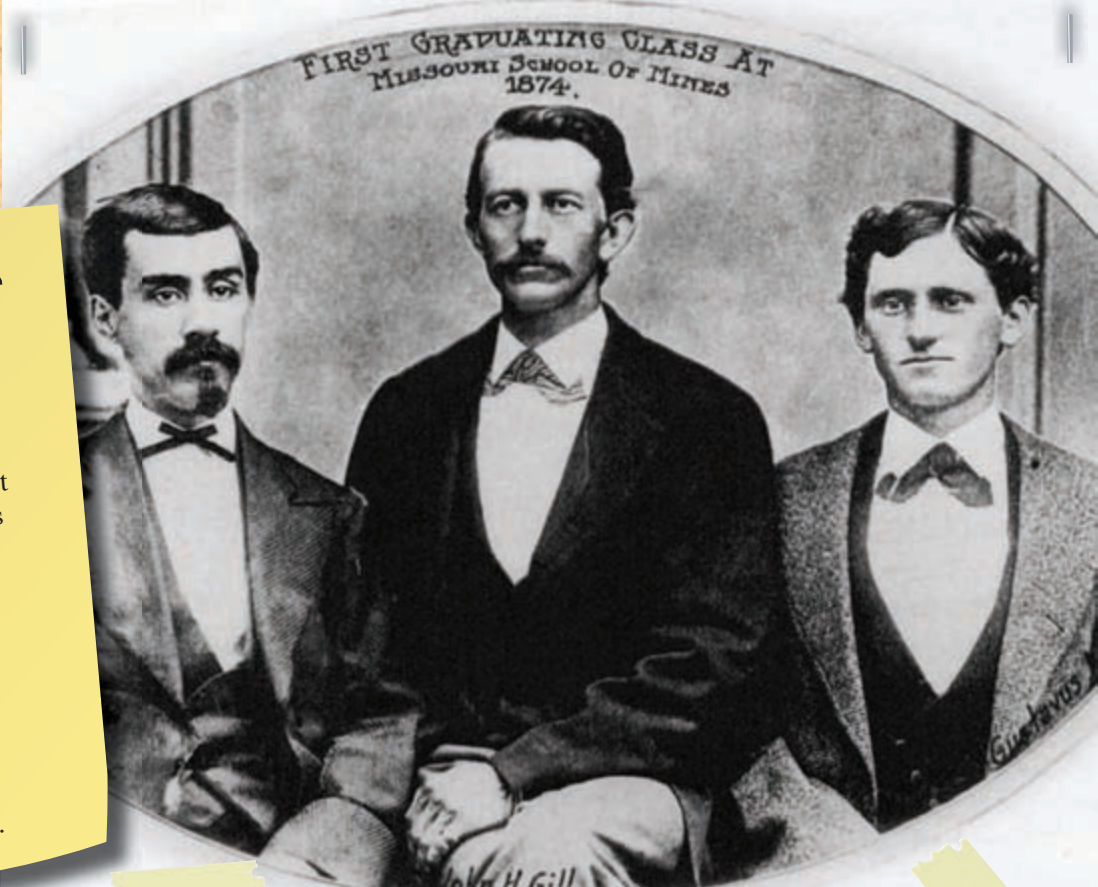
### Three guys: Duncan, Gill and Peck

Today we have an association of more than 50,000 alumni. But it all began with a modest start, as the university's first graduating class in 1874 had three members: **Gustavus A. Duncan**, **John H. Gill** and **John W. Peck**.

09

### Joe Miner

Our mascot carries a gun. And a slide rule.



10

### Silver and gold

Two precious metals and S&T's school colors.

11

1871

The opening date for the School of Mines was planned for Nov. 6, 1871, just five days after the completion of the Rolla Public School building that would provide temporary quarters for MSM. Formal ceremonies to open the school and dedicate the Rolla Building were held on Nov. 23. Despite unfavorable weather and heavy snowfall, a large crowd gathered for the event, which was regarded as historic in its character, and as inaugurating an institution which is to last as long as the state itself, as reported in the *History of the University of Missouri School of Mines and Metallurgy 1871-1946* by Clarence N. Roberts.

12

### Jackling Gym

Built in 1915, the Jackling Gym was named for **Daniel C. Jackling**, MetE 1892, who made a fortune in the copper mining business. It housed a basketball court and an indoor swimming pool, and doubled as a dorm for student-athletes. The gym's original plaque is housed in the alumni office.

13

### Slide rules

Common on campus in the 1950s and 1960s, the slide rule helped students quickly and precisely perform complex calculations. The era of the slide rule ended in the 1970s, when pocket calculators like the TI-30 became more affordable. Today you can still find one propped on Joe Miner's shoulder. There is also a big collection of them in the S&T archives.

14

### Fraternities and sororities

The myth about fraternities and sororities is that they are all about partying. But here at Missouri S&T, Greeks tend to be leaders both in and out of the classroom. Nearly one in four Miners go Greek.

15

### Engineering songs that we can't print the lyrics to

There's a natural connection to mathematics and music. So it's not surprising that many alumni secretly love their engineering songs. We'd love to share them, but they're so raunchy we can't print their lyrics. *There once was a man from Nantucket*





19



### Grid-iron guys

As any college football fan knows, there are legendary successes that stick with a team. Like in 1914, when our Miner football team went undefeated, outscoring opponents 540-0. Or in 1950, when the Miners beat out Illinois Normal, 7-6, to win a bowl title. No, not Pasadena's Rose Bowl or Dallas's Cotton Bowl. In Bloomington, Ill., the annual Thanksgiving Day game was known as the Corn Bowl. You can see the original game program at the alumni office.

16

### MSM

The University of Missouri School of Mines and Metallurgy (MSM) was founded in 1870 — the first technological institution west of the Mississippi, and one of the first in the nation. A product of the Morrill Act of 1862 and the land-grant movement of the late 19th century, MSM was Missouri's response to the acute need for scientific and practical education in the developing nation. During the inauguration of the school, Daniel Read, president of the University of Missouri, stated its purpose: This school is to be a school both of science and of its applications: its purpose is to teach knowledge and art — first to know and then to do, and to do in the best manner.

17

### UMR

In 1964, in recognition of its expanded nature and role, the name of the institution was changed to the University of Missouri-Rolla. UMR, as it quickly came to be called, was one of four campuses comprising the newly reorganized University of Missouri System. The change from school to university sought to expand and strengthen programs in engineering, sciences and liberal arts.

18

### Missouri S&T

In 2008, the university's name was changed to Missouri University of Science and Technology to more accurately represent its focus as a top technological research university.



Not your average Joe. #9



# 20

## Millennium Arch

Forged by waterjet technology, this modern yet somehow Flintstones-like landmark resides in front of Castleman Hall. Students have been known to decorate it for Greek Week and Homecoming. Made of Missouri red granite, the sculpture was predictably dedicated near the turn of the last century.

# 21

## The Puck

Mizzou has its columns. Texas has a tall tower. Georgia has some famous hedges that football games are played between. But S&T has the one and only Puck.

# 22

## Observatory

Each semester the observatory gives the public a chance to see the moon, Jupiter and other celestial wonders (weather permitting).



# 23

## Stonehenge

Approximately 160 tons of granite, cut by waterjet technology at S&T, were used to make this scaled-down replica of the prehistoric English monument.

# 24

## Smart bridge

No trolls live under this campus bridge. Because it's so smart. (It's equipped with sensors for research purposes.)

# 25

## Historic emblem

Hammers, a gear and a chain. The historic emblem conveys the university's mining tradition, the pursuit of knowledge, and the link between MSM, UMR and Missouri S&T.

# 26

## Rolla Building

The oldest building on campus now houses the mathematics and statistics department.

# 27

## Library

The library was named after one of the university's previous leaders, Curtis Laws Wilson.

# Landmarks

# 28

## Smokestacks

Technically they're steam towers. Love them or hate them, when you see them, you know you're in Rolla.

# 29

## Nuclear reactor

The first of three in the state, S&T's reactor is used for teaching and research.

# 30

## Solar Village

Four houses that use solar panels for energy sit on foundations on campus property. (June 21 is the best day of the year for this little village.)

# 31

## Greenhouse

You won't find petunias or cantaloupes in this garden located at the top of Butler-Carlton Civil Engineering Hall. Most of the plants here are grown for environmental research.





# Art



$E = \text{excellence}$

## 32

### Einstein bust

This bronze casting of Albert Einstein was sculpted by local artist Louis Smart and welcomes visitors to the Curtis Laws Wilson Library. Campus lore says that students who touch their foreheads to his will increase their IQ by 10 points for two hours. Einstein, who said “Logic will get you from A to B. Imagination will take you everywhere,” might approve of this last-minute pre-test ritual.

## 33

### Havener Center mural

Located on the second floor of the Havener Center, *MSM/UMR 20<sup>th</sup> Century* depicts scenes from campus history. The 15-foot-long mural, painted by **Jack Guth**, CE’50, was dedicated during Homecoming 2005.

## 34

### Rockwell Kent painting

The artist’s original work, *Might ... To Move Mountains*, is housed in the library, where it illustrates the power of coal and recalls S&T’s mining roots. The piece was painted for the Bituminous Coal Institute and was presented to the university in 1947.

## 35

### Luman Parker statue

Parker Hall’s namesake, Luman Franklin Parker, is memorialized in bronze, seated in a niche on the first floor staircase of the building. The Rolla attorney is remembered for his “untiring efforts” that contributed to S&T’s early growth. During the holidays, the statue sports festive hats.

## 36

### Free film series

On Tuesday nights, every semester, movie-lovers can see award-winning films that otherwise would never make it to Rolla — and admission is free. The series often includes experimental films, shorts, silent oldies with live piano accompaniment, classics and cult favorites. Where else are you going to see *The Brother from Another Planet*?

## 37

### Castleman sculpture

Theater-goers are greeted by a graceful couple in a *Cosmic Dance*. The bronze sculpture by Louis Smart is located in the foyer of Castleman Hall’s Leach Theatre.



# Landscaping

38

## Dogwoods in spring

The dogwoods are in bloom. Can spring break be far behind?

39

## Rocks outside Toomey Hall

A little bit of dolomite right in the middle of campus. This is the same type of rock used to build the foundations of the Rolla Building and Norwood Hall.

40

## Playing Frisbee at the Puck

It s the ultimate way to spend some free time.

41

## Earth Day

St. Pat s isn t the only time we get our green on. Every year, the campus hosts hundreds of kids who come to learn about the environment. Come to Earth Day and you might even get a free tree.

42

## Oak trees outside Toomey Hall

Margie (Dickerson) Gordon, ChE 02, met her husband, John, EE 02, under the big oak tree on the west side of the Puck in front of Toomey Hall during the freshman orientation picnic on her very first day on campus. Years later, they had their engagement photos taken in the very same spot.

43

## Pretty campus

The S&T landscaping team has worked wonders to beautify campus in recent years. They make dirt look good.

44

## View from the Toomey Hall balcony

You can't see Russia from here but you can see Parker Hall.

45

## Sleeping students

Late-night study sessions mean catching Zs whenever and wherever you can. If their timing is right, students can catch the best snoozing spots on the second floor of Curtis Laws Wilson Library.

46

## Fitness center

Thanks to the generosity of donors and students themselves Miners have a fantastic fitness center where they can work off their stress.

47

## Missouri S&T Magazine

You love us. You really, really love us!



Perfect form!

#46



#57

buds 4 life



## 48

### Recycling

Missouri S&T has RecycleMania, an annual contest in which our students compete with other campuses to see how much waste they can recycle. The whole campus has the recycling bug, with recycling stations located in 85 percent of all buildings.

## 49

### Small size

As we say in the recruitment materials, "We're probably bigger than your high school, but we're not too big." At 7,300 students, S&T is the size of a small town. It's a university small enough for one to be an individual, not a number, while at the same time being one of the largest engineering campuses in the world, says **Bob Stevens**, ChE 81. We're kind of like Cheers—a place where everybody knows your name.

## 50

### Walking to class in the snow

Snow days? We don't need no stinkin snow days! Even though S&T canceled classes twice last winter, most alumni remember having to trudge to class through the snow. As one grad posted on our Facebook page last winter,

"I remember having to walk through a blizzard to flunk a calculus test."

At least it wasn't uphill both ways.

## 51

### Chalked sidewalks

Got news to share? Go ahead and put up your flyers and post it on Facebook. But chalking the walk still gets people's attention on campus.

## 52

### Camaraderie

The S&T experience forges lifelong friendships. **David N. Peacock**, GGph 64, MS GGph 66, PhD GGph 70, typifies many alumni. "One thing in particular: Student camaraderie and fraternity life (Delta Sigma Phi), leading to lifelong friendships," he says. "I'm still in contact with friends and brothers I met as a freshman, 50 years ago."

## 53

### Being a geek

Maybe you weren't the most popular kid in high school. But at Rolla, geeks rule. Nerdy types are culturally accepted at S&T, says **Mike Hunter**, Math 99.

What was great was being surrounded by fellow tinkerers and people who wanted to explore the way things work. You can't get that without the focused mission of the university. **Sharon Wingron**, EMgt 87, adds that she loved hanging out with a bunch of smart people, who were also funny.

## 54

### Duct tape

It holds the world together—as well as solar cars, Formula racers and a lot of equipment in our high-tech labs.

## 55

### Informal atmosphere

"I recall with pleasure the informal but get-the-job-done atmosphere," writes **Randall Staponski**, EE 74, MS EE 81. **Clark F. Houghton**, CE 51, agrees:

"The informal atmosphere isn't did not matter whether you were a Greek or indie, you were always treated well."

## 56

### My major

Regardless of your major, chances are you loved it. Maybe not as much during your time on campus as you do today.

## 57

### Friendships of a lifetime

The lifelong friends I made in Rolla are, by far, what I love the most," says **Mike Carlson**, ME 99. This university and the experiences it opened to me have shaped my life and my relationships profoundly, both personal and professional, in ways that words cannot even begin to explain.

## 58

### Imports

Back in the day when the campus was overwhelmingly male, students paired up with imports—couples from other campuses brought in for weekend parties or St. Pat's.



Import weekend

Daily Life



# Student Life



Play on! #80



Go, team, go!

59

## Student design teams

S&T's championship Solar Car Team has driven thousands of miles on zero gallons of gas. And other teams housed in the Kummer Student Design Center have done things like make concrete canoes that float, launch high-altitude rockets and win national titles in human-powered vehicle racing.

60

## Swimming team

A perennial finisher among the top 10 teams in NCAA Division II, Miner swimmers have claimed three top-four finishes in the last five years. The program has had four national championship performances in the last decade.

61

## SUTB entertainment and gaming

From organizing scavenger hunts and gaming tournaments to hosting movies, musicians, poets and comedians, Student Union Board reps work hard to make sure S&T students have plenty to do in their downtime.

62

## The Missouri Miner

Containing news, sports, movie and theater reviews, the ever-popular dot game and cartoons geared toward techy types, this weekly newspaper is written, edited and published by S&T students.

63

## KMNR

Located at 89.7 on the FM dial, this free-format student-run station brings much needed edginess to Rolla airwaves. Listen online at [kmnr.mst.edu](http://kmnr.mst.edu).

64

## KMST

Our public radio station serves up a little bit of everything, including NPR and other national programs, and a wide range of music. Where else can you find bluegrass, classical and talk radio all on one station? Check it out at 88.5 FM or online at [kmst.org](http://kmst.org).



# 65

## *BBQ Club*

Generating delectable aromas on campus since 2007.

# 66

## *Engineers Without Borders*

Helping disadvantaged communities access clean water and making other life-saving improvements, EWB takes students to areas where their skills transform people's lives.

# 67

## *Eating clubs*

They may not be around anymore, but eating clubs kept many a Miner well-fed and happy over the years.

# 68

## *Spelunkers*

Adventurous types can get really intimate with the hills of the Ozarks as long as they don't disturb the critters or cave formations they find.

# 69

## *Miner athletics*

With 13 varsity sports, plus club sports like skydiving and cycling and intramurals like dodge ball and weightlifting, almost every student can find a way to get in the game.

# 70

## *Party weekends*

S&T students have a history of working hard and partying hard.

# 71

## *No. 42*

According to author Douglas Adams, 42 is a nice number that you can take home and introduce to your family. It's also, of course, the answer to everything, which is why it's always the number given to each new solar car built at S&T.

# 72

## *Campus Christian Fellowship*

Offering its members retreats, mission trips and intramural sports, this group gives students a chance to grow outside the classroom.

# 73

## *Research*

S&T faculty are on the forefront of frontiers in a broad array of disciplines from biomaterials that can heal open wounds, to nanotechnology for speedier computing, to the development of an Internet for energy.

# 74

## *Summer camps*

S&T offers almost a dozen academically oriented summer camps for youths age 6 to 18, including Camp Invention, Girls Go Green and Explosives Camp.

# 75

## *Rollamo*

The university's yearbook has been published every year since 1907. And, incidentally, **Jason McHaney**, ChE '91, has a copy of every one of them.

# 76

## *Block Party*

Every April, people around campus get together for food and conversation to celebrate spring (or maybe some of them are celebrating the start of the baseball season).

# 77

## *Lectures*

What do Colin Powell, Lance Armstrong and Margaret Thatcher have in common? They've all visited campus as featured Remmers lecturers.

# 78

## *IFC jackets*

Like St. Pat's Board jackets, only different. (IFC jackets are gray.)

# 79

## *Performances*

S&T brings quality performances, including family entertainment, to town. Thanks to Leach Theatre, the entire community has a chance to enjoy these professional performances.

# 80

## *Band and choir*

Believe it or not, lots of engineers and scientists appreciate music. And many of them are really good at playing it, too.

# 81

## *Student theater*

Just because you're an engineering major, doesn't mean you can't act.

82

*Diwali*

This Hindu Festival of Lights is put on by S&T's student-run India Association. The popular celebration includes a cultural show, multi-course dinner and a fireworks display. India is the home country of our largest international student population.

83

*Celebration of Nations*

Camels. Food. Entertainment. Displays. In collaboration with the city of Rolla, this event showcases cultural diversity in our neck of the woods.



*Celebrate good times*



*High Ho, High Ho...  
it's off to work I go.*

#90

84

*Saudi Nights*

For the past five years, the Saudi Student Organization has celebrated Middle Eastern culture, food and customs.

85

*Chinese New Year*

2012 is the Year of the Dragon and it will be celebrated by our Chinese Students and Scholars Association in an annual Spring Festival. Tickets go quickly for this colorful cultural show and dinner.

86

*International Day*

The largest international event on campus gets bigger every year. Our international students bring their home countries' customs, music and food to Rolla residents and the campus.

87

*Women on campus*

A century after **Eva Endurance Hirdler Green**, Chem 1911, became our first female graduate, record numbers of women are now on campus. Female enrollment has risen by 53 percent in the past decade, but there's still a 3-to-1 ratio. Yes, for S&T women, the odds are still good, but as a student T-shirt proclaimed, the goods are still odd.

88

*Ethnic diversity*

Our student body of future engineers is more diverse than ever. Last year's enrollment included students from 54 foreign countries, thanks in part to programs that attract and support students from under-represented ethnic groups.

89

*Donors*

Without them, we'd be in debt. Increasingly, public universities are relying more and more on private funds than in the past. Thank you, donors!

90

*Career Fair*

Twice a year, 300-plus recruiters from companies all over the world congregate in Rolla to entice the cream of the crop. Rolla grads earn an average of \$58,600 starting out in the real world. Not too shabby.

91

*Astronauts*

Three Miners (**Tom Akers**, Math 73, MS Math 75; **Janet Kavandi**, MS Chem 82; and **Sandra Magnus**, Phys 86, MS EE 90) have flown in the Earth's orbit and one lived on the International Space Station for four months. How cool is that?

92

*Rolla education*

A semester's worth of engineering textbooks = \$300. Student loan payments = \$500. A Rolla education = priceless.

**Diversity**



93

## Greek week

Chariots. Togas. Ruled by Godz. Put on by the Interfraternity Council and Panhellenic Council, Greek Week features carnivals and idi-odysseys.

94

## Bottles on chancellor's fence

If you pass by the Chancellor's Residence early enough during Homecoming or St. Pat's, you might see a collection of empty bottles decorating the fence. Occasionally, revelers will ring the doorbell and leave a full bottle for the privilege of placing the empties upside down.

95

## Outhouse burning

The fire pit on State Street behind the Chancellor's Residence is the site of this Homecoming tradition put on by a local fraternity. Fortunately, no one is using the facilities during the festivities.

96

## "Look to your left"

As the saying goes, years ago freshmen were told on the first day of classes, "Look to your left. Look to your right. One of the three of you won't make it. Today, we still encourage students to take a look at their neighbors, but we tell them they're looking at a future successful graduate."

97

## Beer garden

Pour me a cold one. Preferably green.

98

## Homecoming

Every campus has one. Ours rocks.

99

## Sig Ep rock

A Sigma Phi Epsilon alumnus wrote that "someone would steal the Sig Ep rock every year and drop it off at another fraternity's yard. It would get passed around to several houses until finally there weren't enough people to move it anymore. The best thing was, it was so heavy it had to be dragged behind a truck and would leave a nice mark on the road."

100

## Christmas Tree Joust

"I loved it when the TKEs would wander (stumble?) over to our house (PiKA) in December for their annual Christmas Tree Joust," says **Will Kirby**, ArchE 08, CE 08. "Yep, just a bunch of guys holding Christmas trees and running at one another. Always a friendly and ridiculous college spectacle."

101

## Legacies

"I love how the name is changed every now and then to give each generation a new identity," says **Jim C. Leslie Moore**, ME 65. "My dad went to MSM, I went to UMR and my daughter and son are at S&T."

102

## Ponding

Certain fraternities have been known to celebrate major events like giving their girlfriends lavaliers and getting engaged by ceremoniously dumping the betrothed in Schuman Pond. Ew.

103

## Stepping

Stepping or step-dancing is a tradition among African American fraternities and sororities. Popularized by movies like Spike Lee's *School Daze* and more recently, Sylvain White's *Stomp the Yard*, the practice originated in the mid-20th century, according to **Ron Lytle**, a member of Alpha Phi Alpha fraternity at Missouri S&T. Lytle and his fellow Alphas perform step shows at various events.







#106



#107



#108



#112



104

*Alice*

Alice doesn't live here anymore. But from the early '60s until the late '90s, this vat of goo was an integral part of the St. Pat's experience. Dozens of knights had the honor of being "baptized" into Alice.

105

*Cudgels*

Walk carefully and carry a big, big stick.

106

*George Menefee*

Our first St. Pat ever.

107

*Painted streets*

Fortified by a pre-dawn breakfast of biscuits and gravy, St. Pat's alumni trek to Pine Street on the morning of the parade to paint it green. 6 a.m. never looked so green.

108

*Shillelaghs*

Walk carefully and carry a not-so-big stick. Just don't take it into the classroom.

109

*St. Pat's Ball*

In the big band era, the ball was a big deal. In recent years, this tradition has been revived.

110

*Snake Invasion*

This isn't Ireland, so we have to drive the snakes off campus before St. Pat's arrival every March. Students use their walking sticks to bludgeon the critters — and occasionally bite their heads off. (It's OK. The snakes aren't real.)

111

*St. Pat's buttons*

Button, button, who's got the button?





## 112

### *Sweatshirts*

“Got your green yet?” Every year, St. Pat’s reps hawk this apparel all over town, in all kinds of weather. For many alumni, the sweatshirts become heirlooms, passed down through generations.

## 113

### *St. Pat's Jackets*

When baby reps grow up, they get a jacket and they don’t take it off — at least in public — until they graduate. As the jackets age, they tend to fade ... and ripen.

## 114

### *St. Pat's Board*

Is it a board or a committee? Only the board (or committee) knows for sure. Either way, this is the group that makes St. Pat’s the Best Ever, year after year.

## 115

### *Stooge-a-Thon*

Nyuk. Nyuk. Nyuk. What better way to cap off a day full of follies than to catch the knucklehead antics of Moe, Larry and Curly (or Shemp, Joe or Curly Joe) on the big screen? Those “Three Stooges” shorts we used to watch on Saturday mornings played late nights in downtown Rolla movie theaters during St. Pat’s past.

## 116

### *Queen of Love and Beauty*

Love and beauty reigns. But don’t forget about peace, happiness, chastity, virtue, desire, ecstasy, honor and devotion. (We’re not making this up.)

## 117

### *Follies*

Green people! Green dogs! Sometimes green pot-bellied pigs! Attempts at humor! St. Pat’s Follies are sometimes silly, occasionally crude, and always part of the Best Ever tradition.

## 118

### *Manure spreader*

What other campus has a tradition involving a manure spreader? St. Pat and his crew have been riding into Rolla on such a contraption for more than a century.

## 119

### *St. Pat statue*

For almost 40 years, St. Pat resided in the library under the false pretense that he was bronzed. (The statue was actually made of plaster.) Originally commissioned in 1970, the pattern for the statue was made by St. Louis sculptor Rudy Torrini. Now St. Pat really is bronze and keeps watch over the library from his station north of Toomey Hall.

St. Pat's



# Rolla



## 120

### Maid-Rite

Some folks say you have to be from Rolla to appreciate the loose-meat sandwiches that are Maid-Rite's specialty. But once you've had one, you'll never forget it.

## 121

### Alex's

"Alex's pizza is the best pizza in the world and I have been many places in the world including Italy," says **Michael McMenus**, LSci'81.

## 122

### Burrito Fridays

You wouldn't expect to find huge burritos that are both cheap and delicious in a basement dive bar, but you can. On Fridays at the Grotto.

## 123

### A Slice of Pie

Mmm ... pie. This little slice of heaven has been written up in national guidebooks.

## 124

### Coney dog Tuesdays at A&W

**Jerry**, CE'74, MS CE'76, and **Vicky**, CSci'74, MS EMgt'76, **Maurseth** remember 20-cent Coney Dog Tuesdays at the A&W just off campus. "Talk about cheap eats! For a dollar we could feed ourselves and our baby, Thrusie (no chili for her, but she got a free baby root beer). If we felt really rich, we would buy a gallon of fresh A&W root beer to have there and to take home for the week for about \$2. Those were the days when you could afford the food and the waistline could afford the carbs."

## 125

### Ramey's

No matter the decade, one thing holds true for Rolla Miners — when they're not in class, they like to get out of Rolla for a while. "Remember Ramey's place a few miles out of Rolla to relax on weekends?" No. But **Bob Huck**, EE'59, does. That was before our time.

## 126

### Tim's Pizza

The building has been turned into a Chinese restaurant, but some alumni say that back in the day, Tim's had the best pizza and Super Salads in town.

## 127

### Giddy Goat

Co-owned by **Jennifer Dugas**, Phil'10, since 2005, this little coffee house just off campus has developed quite a following among students, faculty and staff.



# 128

## Tater Patch

You can find a little bit of everything at the Tater Patch, including great food and, well, interesting locals.

# 129

## Grotto/Cavern/ Brewsters/Mine Shaft

Every college town has at least one dive bar. Today it's known as the Grotto, but whether it was the Cavern, Brewster's or the Mine Shaft, generations of Miners have tossed back a cold one (or two) in this Pine Street basement hangout.

# 130

## Bruno's

Even though it isn't close to campus, Bruno's has been a favorite hangout of S&T students since the 1980s.

# 131

## Top Hat

Now known as the Locker Room, this upstairs bar at the corner of 7th and Rolla streets serves great burgers.

# 132

## Wineries

Known as the Ozark Highlands Viticultural Area, the land around nearby St. James, Mo., boasts the greatest number of vineyards and wineries in the state.

# 133

## Schuman Park

If only these pavilions could talk. Schuman is the closest park to campus. And home to Schuman Pond (see No. 102).

# 134

## Beautiful Ozarks

Miners come to Rolla to study, but most find themselves venturing outdoors to hike, bike, camp, canoe or just relax. "The beautiful Ozarks that surround the school were and still are one of my favorite places to be," says Keith Lueck, EE'84, MS EE'92.

# 135

## Lane Springs

Tie on a fly and catch a trout just minutes from Rolla.

# 136

## Lions Club Park

Nearly 200 acres are owned and maintained by the Rolla Lions Club as a local park. It's a great place for students to blow off steam. The park has played host to the Greek Week Carnival, St. Pat's Gonzo and Games, and lots of other student activities.

# 137

## Meramec (with an "a") Springs

The spring averages 96 million gallons of water a day and feeds the Meramec (with an "e") River. It features 1,800 acres of camping, picnicking, hiking and trout fishing less than 20 miles from Rolla.

# 138

## Mark Twain National Forest

Known for its rivers and trails, the Mark Twain National Forest's 1.5 million acres span 20 southern and central Missouri counties, including Phelps County, home of Missouri S&T.

# 139

## Walmart

No, Rolla doesn't have a mall, but we do have a Walmart. And sooner or later, you can see nearly everyone you know there.

# 140

## Pixelated

S&T students tend to share a love of gaming and comic books. Pixelated is the spot to get them.



Peace & quiet

#137



#121

A Rolla tradition.



## EcoCAR lives up to its name

The SUV re-engineered by a group of Missouri S&T students may not have won the top honor at the EcoCAR: The NeXt Challenge Competition Finals, but it did live up to its name. The S&T entry was judged as one of the event's most eco-friendly vehicles.

The Missouri S&T EcoCAR Team finished fifth out of 16 teams in EcoCAR: The NeXt Challenge, a three-year vehicle engineering competition that required student teams to make stock General Motors autos more environmentally friendly. In addition to their top-five showing, the S&T students were named most improved team in the competition and recognized for their efforts to minimize the environmental impact of their entry. They took top honors for lowest tailpipe emissions and lowest petroleum energy usage, and finished second for lowest well-to-wheel greenhouse emissions.

The EcoCAR competition was sponsored by the U.S. Department of Energy and General Motors Co. The 16 teams from U.S. and Canadian schools spent the past three years re-engineering a car to use less fuel and reduce emissions, while retaining its performance, safety and consumer appeal. The finals were held in June in Milford, Mich., and Washington, D.C.

Missouri S&T's EcoCAR, a re-engineered 2009 Chevrolet SUV, is powered by hydrogen fuel cell and lithium ion batteries. "Our car and one other team's were the only hydrogen cars" in the competition, says **Michelle Y. Taylor**, Bus'09, an MBA student and member of the EcoCAR Outreach Team.

A team from Virginia Tech won the competition by designing an extended-range electric vehicle using E85 (ethanol). For Missouri S&T students, however, the big win came from the opportunity EcoCAR provided to showcase hydrogen power as an alternative energy source.

"A large part of our role is spreading the word about hydrogen power," Taylor says. "We spend a lot of time educating youth and the general public."

Missouri S&T has had significant success with several of its hydrogen-powered projects. A team of S&T students recently finished fourth in the 2011 Hydrogen Student Design Contest with its design of a residential hydrogen fueling system. Missouri S&T teams won the competition in 2010 and 2008.

## Flopping for funds

### Student makes a splash in scholarship competition

This was one test **Matt Spreng** didn't want to flop. And he didn't. He aced it.

Spreng, a senior majoring in architectural engineering at Missouri S&T, won a \$1,000 scholarship and the unofficial title of Belly Flop King after scoring two perfect belly flops during the 15th Annual Belly Flop Splashdown, held in June at Water World in Denver. He was one of 27 college students competing for the scholarship and other prizes. In addition to the scholarship, Spreng also won tickets to every summer country concert in Denver for the rest of the season, courtesy of Water World, Colleges in Colorado and 92.5 KWOF (The Wolf).

Spreng was the only contestant to gain a perfect score of 30 in both the first round, flopping from a height of six feet, and the second round, from a height of 12 ½ feet.



Photo by Cory Lamz/Denver Westword





**Conceptual drawing of the future chemical and biological engineering building at Missouri S&T.**

## New building approved for chemical, biological engineering

One of recently retired Chancellor **John F. Carney III**'s parting wishes was to gain approval and funding for a new chemical and biological engineering building. That wish was granted June 17 when the University of Missouri Board of Curators approved financing for a portion of the project.

The curators approved Carney's request to finance \$12.3 million of the \$22.3 million project. Missouri S&T has received commitments totaling \$8 million in private donations for the project and will combine that with \$2 million from campus funds.

Plans call for the 63,542-square-foot building to be constructed on the northwest corner of State and 11th streets, next door to Tau Kappa Epsilon fraternity. Construction is expected to begin in November 2012 and to be completed by May 2014.

"For years, we've had a tremendous need to upgrade facilities for our chemical and biological engineering programs," Carney says. "National interest in these programs has increased significantly in recent years. This new building will greatly improve our ability to provide the classrooms, laboratories and other facilities our students need to become great engineers."

Carney adds that the university's chemical and biological engineering alumni and the Missouri S&T Board of Trustees strongly support this building project. "More than 50 Missouri S&T graduates have made pledges of financial support."

The new building will also benefit the chemistry and biological sciences departments. Those two departments currently share space with the chemical and biological engineering department in Schrenk Hall. Construction of this building will free up space for chemistry and biological sciences.

Major private commitments for the project include a \$5 million pledge from **James E. Bertelsmeyer**, ChE'66, of Tulsa, the retired founder, chair and chief executive officer of Heritage Propane Partners in Tulsa, and a \$1 million pledge from **Bipin Doshi**, ChE'61, MS ChE'63, president of Schafer Gear Works of South Bend, Ind., and his wife, **Linda Doshi**.

More information about alumni support for this project, including a full listing of donors, will be published in the Winter issue of *Missouri S&T Magazine*.

## Cool recognition for environmental sustainability

The National Wildlife Federation thinks Missouri S&T's environmental efforts are pretty cool. So cool, in fact, that the federation picked S&T as one of five universities in the nation to receive its "Chill Out" award for "implementing creative approaches to on-campus sustainability."

The NWF's Chill Out: Climate Action on Campus award recognizes S&T's development of the Solar Village, a neighborhood of four student-designed and -built solar homes adjacent to campus. Each of the structures, limited to an 800-square-foot roof footprint, was built for the Solar Decathlon, a biennial student design competition held in Washington, D.C. Three of the four homes are now inhabited by S&T students or faculty.

Missouri S&T's recognition came in the category of innovative research and design technology.

Missouri S&T has participated in four different Solar Decathlons — in 2002 (the first year for the event), 2005, 2007 and 2009. Each of the solar homes created for that competition is now part of the Solar Village, which is located on west 10th Street, across from the Gale Bullman Multi-Purpose Building.

Missouri S&T Solar House Team member **Patrick Williams**, CE'11, calls the Solar Decathlon "an amazing experience" and praised the camaraderie surrounding the event. "It was empowering to see university students of several nationalities come together for one purpose: to prove that solar technology and sustainable construction is a viable option for homeowners of every walk of life," Williams says. "Throughout the competition and rivalry with other schools, we bring new and exciting ideas to the table that will have a real impact on the world."



## Engineering links science and technology, Petroski says



**Henry Petroski** (pictured above) is the author of *The Essential Engineer: Why Science Alone Will Not Solve Our Global Problems* and a dozen other books on design success and failure and the history of engineering and technology.

In his May 2011 Commencement speech, civil engineer, historian and author Henry Petroski told S&T graduates that engineering is the essential link between science and technology.

"It is sometimes said that engineering is merely applied science," said Petroski, the Aleksandar S. Vesic Professor of Civil Engineering and a professor of history at Duke University. "That is at best a gross oversimplification. ... Wherever there are scientific principles or scientific facts that engineers can use, they do so. But they do not let the absence of scientific knowledge keep them from making new technology. In fact, there have been instances where scientists insisted that something was impossible, only to have engineers rise to the occasion and disprove the scientists."

Petroski also spoke on campus in April as part of the Neil and Maurita Stueck Distinguished Lecture Series.

## Academy inductions

This year 34 Missouri S&T alumni and former faculty were inducted into Missouri S&T academies. Academy membership recognizes a career of distinction and invites members to share their wisdom, influence and resources with faculty and students.

### Academy of Chemical Engineers

- **John R. Campbell**, ChE'74, principal engineer of instrumentation and control systems with ConocoPhillips Co.
- **John R. Knapp Jr.**, ChE'58, MS ChE'60, retired senior vice president of operations and site manager for Zinc Corp. of America
- **Jeffrey W. Sheets**, ChE'80, senior vice president of finance and chief financial officer of ConocoPhillips Co.
- **Jerry L. Stone**, ChE'60, executive at E.I. DuPont de Nemours & Co. Inc.

### Academy of Chemists and Biochemists

- **Bryan E. Breyfogle**, PhD Chem'96, associate professor of chemistry at Missouri State University
- **Nuran Ercal**, Richard K. Vitek/Foundation for Chemical Research Endowed Chair in biochemistry at Missouri S&T

- **Maciej Gazicki-Lipman**, PhD Chem'85, professor and head of the Division of Non-Metallic Materials, Institute for Materials Science and Engineering at the Technical University of Lodz in Poland
- **Janet Lynn Kavandi**, MS Chem'82, director of flight crew operations at Johnson Space Center
- **James R. Knox**, Chem'63, professor emeritus of molecular and cell biology at the University of Connecticut
- **James Stoffer Jr.**, PetE'83, MS Chem'88, technical manager of the North America Division of Becker Acroma
- **Glenn E. Stoner**, Chem'62, MS Chem'63, teacher of undergraduate courses on corrosion and materials science at the University of Virginia since 1976

### Academy of Civil Engineering

- **Wayne Laufer**, CE'67, retired CEO and co-founder of Bois d'Arc Energy Inc.
- **Kent Lynn**, CE'85, senior sales executive with IBM
- **Michael J. McEvilly**, CE'80, MS EMgt'81, senior executive vice president of operations for Spitzer Industries Inc.
- **M. Brad Parks**, MS CE'83, PhD CE'87, senior manager of the Advanced Threat Technology Development and Response Group for Sandia National Laboratories
- **Brad R. Parrish**, CE'77, MS CE'78, president of Palmerton & Parrish Inc.
- **Charles "Chuck" Taylor**, CE'83, group manager of aviation services for Crawford, Murphy and Tilly Inc.
- **Jeff Theerman**, CE'80, executive director of the St. Louis Metropolitan Sewer District



## S&T awards professional degrees

Eight Missouri S&T alumni received honorary professional degrees during Spring Commencement. The degrees recognize these graduates for professional achievement:

- **John Adams**, Chem'70, Curators' Teaching Professor of chemistry at the University of Missouri-Columbia
- **Paul Angel**, CerE'85, MS CerE'87, program manager for propulsion and materials in the advanced aircraft program for Sverdrup Corp.
- **Constance Brown**, Hist'85, an attorney specializing in international regulatory law, with an emphasis on medical device trade regulation, and trademark and technology licensing
- **Paul Fleischut**, MetE'85, partner with Senniger Powers LLP in St. Louis
- **Kent Peccola**, ChE'82, process engineering manager and lead architect of ConocoPhillips' Wood River Refinery expansion
- **Philip McPherson**, CerE'83, senior vice president and general manager of the food, beverage and spirits sector at Verallia/Saint-Gobain Containers Inc.
- **Barton Moenster**, ME'71, retired director of Global Technology Operations for The Boeing Co. in St. Louis
- **Kirk Randolph**, CE'85, president of the Central West division of Oldcastle Materials

## Wray named interim chancellor

Missouri S&T's provost for the last five years, **Warren K. Wray**, became interim chancellor on Sept. 1. He will serve during a national search to find a replacement for Chancellor **John F. Carney III**, who retired on Aug. 31.

Also on Sept. 1, **Robert W. Schwartz**, vice provost for academic affairs since June 2007, became interim provost; **Phil Whitefield**, chair of chemistry since 2005, became interim vice provost for academic affairs; and **Klaus Woelk**, associate professor and assistant chair of chemistry, became interim chair of his department.

### Academy of Computer Science

- **John M. McNally**, CSci'83, director of systems and software for A123 Systems Energy Solutions Group

### Academy of Electrical and Computer Engineering

- **Edward J. Bradley Jr.**, EE'84, an engineer in the distribution and standards division of Ameren
- **William Michael (Mike) Herron**, EE'71, assistant general manager of engineering, systems operations and reliability for Grand River Dam Authority
- **Steven C. McNabb**, EE'83, executive vice president of Allgeier, Martin and Associates
- **James B. Rauckman**, EE'83, founder and managing member of Rauckman High Voltage Sales LLC

- **Joseph A. Ruder**, EE'79, principal control engineer for Nestle Purina Petcare
- **David J. Schepers**, EE'75, vice president for energy delivery technical services for Ameren
- **William M. Thompson**, EE'70, president of Allgeier, Martin and Associates

### Academy of Engineering Management

- **Cary Dunston**, EMgt'88, senior vice president of manufacturing and supply chain services and one of three executive officers at American Woodmark Corp.
- **Dan Hinkle**, EMgt'73, owner of a contract-lobbying firm that represents clients before the Texas legislature and regulatory agencies
- **Rob Johnson**, EMgt'89, vice president of A123 Systems
- **Michael J. McEvilly**, CE'80, MS EMgt'81, senior executive vice president of operations for Spitzer Industries Inc.

- **Michael Mohan**, EMgt'83, an independent technical consultant studying screenwriting at The New School
- **Angela B. Rolufs**, EMgt'84, director of the Missouri S&T office of sustainable energy and environmental engagement

### Academy of Mechanical and Aerospace Engineering

- **Randy Foster**, ME'80, director of product technology for Dayco Products
- **Paul W. Niewald**, AE'85, program manager of F/A-18 A-D International Programs Defense, Space and Security for The Boeing Co.

### Academy of Mines and Metallurgy

- **Michael S. Moats**, MetE'92, MS MetE'95, associate professor of metallurgical engineering at the University of Utah



## Show them the money

### \$58,600 to be exact

Missouri S&T graduates make the big bucks right out of college — more than almost any other graduates in the Midwest.

PayScale Inc., a Seattle-based research firm, released its *2011-12 College Salary Report* in July. The report ranks Missouri S&T second among Midwestern public and private universities in terms of starting median salary for graduates. The median starting salary for S&T alumni is \$58,600. The figure is second only to that of Rose-Hulman Institute of Technology.

The report also ranked Missouri S&T second in the nation for starting salaries among public universities and 15th in the nation among all universities, public and private.

PayScale bases its annual report on surveys with employees who possess only bachelor's degrees. It includes 999 campuses, most of which have more than 5,000 undergraduate students. The report is available online at [www.payscale.com/best-colleges](http://www.payscale.com/best-colleges).

## Chase ends on campus

Missouri S&T was on lockdown for more than four hours in May after a high-speed chase that brought an armed man to campus. Pursued by police through Rolla, the gunman stopped his car on the walkway between the Havener Center and McNutt Hall. He then entered McNutt with his AK-47. The man exited the building almost as quickly as he entered, firing no shots and ditching his weapon before fleeing on foot.

The incident began shortly after 8 a.m. May 12 when the gunman, Cody Willcoxson, 31, tried to drive onto the Army base at Fort Leonard Wood, located about 30 miles southwest of Rolla. Willcoxson then sped east on Interstate 44 with police in pursuit. He took the first Rolla exit and, speeding down Kingshighway, led police on a chase through downtown Rolla while firing at his pursuers.

Willcoxson ended up careening north on State Street, driving past the Chancellor's Residence and Tau Kappa Epsilon fraternity before stopping his car outside McNutt Hall at about 8:45 a.m.

Missouri S&T officials used the campus's emergency notification system to notify students, faculty and staff of the lockdown via text, phone and email. Once Willcoxson exited McNutt Hall, he tossed his gun under a parked vehicle on an S&T lot and fled on foot.

The Missouri State Highway Patrol captured Willcoxson around 1 p.m. south of Rolla in a vehicle he had stolen from a residence in Rolla. Soon after Willcoxson's arrest, Missouri S&T police chief **Christine Laughlin** lifted the campus lockdown order.

The incident occurred on the Thursday following the end of the semester, so few students were on campus at the time and regular classes were not in session.

## Briefly

**Diana Ahmad**, associate professor of history and political science and campus archivist, was named 2011 Woman of the Year in April. The award is presented each year to a female faculty member in recognition of her efforts to improve the campus environment for women and minorities. The award was created by **Cynthia Tang**, Econ'85, founder and former chair of Insight Industries Inc. and a member of the S&T Board of Trustees.

**Missouri S&T's custodial and landscape services department** received the Missouri Arbor Award of Excellence for efforts to improve trees in the community. The award is from the Missouri Department of Conservation and the Missouri Community Forestry Council.

**Walt Eversman**, Curators' Professor of mechanical and aerospace engineering, was named a fellow of the American Institute of Aeronautics and Astronautics in May for his contributions to the aeronautics field.

**Joseph D. Smith** became the university's first Laufer Chair of Energy on July 1. Formerly the manager of advanced process and decision systems for Idaho National Laboratory, Smith holds a Ph.D. in chemical engineering from Brigham Young University. His expertise is in the design of industrial-scale coal gasification systems. The chair was established in 2009 through a \$3.4 million gift from **Wayne Laufer**, CE'67, retired co-founder and CEO of Bois d'Arc Energy Inc., and his wife, **Gayle Laufer**.

**Jay W. Goff**, vice provost and dean of enrollment management at Missouri S&T, recently joined the staff of Saint Louis University to lead that campus's enrollment management efforts. Goff led the S&T enrollment management office from 2001 through August. **Laura Stoll**, S&T registrar, will serve as interim dean.

**Lea-Ann Morton**, director of career opportunities and employer relations (COER) since 2003, was named assistant vice chancellor for development on Aug. 1. **Edna Grover-Bisker**, associate director of COER since 2008, replaces Morton as director of COER.



## Cleaning up after the cleaners

Using a solar-powered water pump, **Erica Collins**, GeoE'10, is cleaning up contamination left behind by a local dry cleaner. She has already cleaned more than 70,000 gallons of water. You could call the project her mission.

For decades, dry cleaning operations, like Busy Bee in Rolla, poured chemicals down the drain. Unfortunately, some of those chemicals ended up contaminating groundwater.

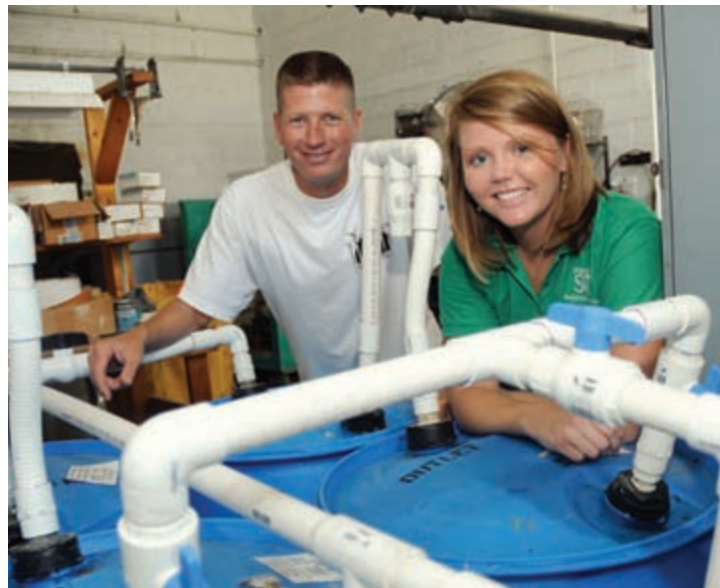
Collins, a graduate student in geological engineering, is working on a comprehensive cleanup of the Busy Bee area. She installed a pump powered by solar energy at the site to pull the contaminated water from the ground. Collins checks on it multiple times a day. The water is treated or "cleaned" and then safely put back down the drain.

Collins says the contaminated water, while an environmental problem, never posed a threat to people. "It's 5 to 15 feet into bedrock," she says. "It was not going to make people sick."

Working with Collins on the project are **Curt Elmore**, GeoE'86, associate professor of geological engineering, and **John Cable**, president of Triangle Environmental Science and Engineering and an adjunct faculty member in the geological engineering department.

Elmore says that drinking water in the United States is among the best in the world, thanks to regulations, monitoring and clean-ups when there is a potential problem.

"Rolla's drinking water is safe from the tap," he says. "You don't have to worry about it."



**Curt Elmore, associate professor of geological engineering, joins Erica Collins, a graduate student in geological engineering, at Busy Bee Cleaners.**

The project is being funded by Busy Bee owner Harold Robertson. He will be reimbursed through the Dry Cleaning Environmental Response Trust Fund, which is administered by the Missouri Department of Natural Resources.

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## Studying how ocean basins formed

Missouri S&T may be hundreds of miles from the nearest ocean shore, but physical distance won't prevent researchers here from studying how ocean basins were formed.

Four S&T researchers, led by **Stephen Gao**, professor of geophysics, will spend the next four years studying how continental rifts create ocean basins. They'll use earthquake-detection equipment in Africa and field studies in the United States in their research, which is supported by an \$873,880 grant from the National Science Foundation.

Gao and his colleagues will investigate how narrow continental rifts separated over time to create basins like the Atlantic Ocean and the Red Sea. They will study current rift valleys in Africa and in the

southwestern U.S. The U.S. rift is located along the Rio Grande River.

"If the current trend continues for millions of years, there will be an ocean separating western and eastern Colorado, western and eastern New Mexico, and western Texas and northern Mexico," says Gao. He adds that geologic history has its share of so-called failed rifts that did not become basins. They include the Reelfoot in southeast Missouri, where the New Madrid seismic zone is located.

A more short-term benefit of the study may be a better understanding of how oil and gas reserves form on continental shelves, where about 70 percent of the world's hydrocarbons are found, Gao says.

In addition to working in the U.S., the S&T researchers will conduct field studies

in Botswana, Malawi, Zambia, Tanzania and Mozambique.

"Fifty earthquake-detecting instruments called seismographs will be installed across the rifted valleys in Africa to image the deep structure of the Earth," Gao says. "The techniques are similar to the methods doctors use to image the body."

During the geophysical study in Africa, waves from earthquakes will be used to gather information. According to Gao, remote sensing data analysis and surface geology observations will also be conducted.

Working with Gao are **Mohamed Abdelsalam** and **John Hogan**, professor and associate professor of geology, and **Kelly Liu**, professor of geophysics.



## Cotton candy-like fibers proven to heal open wounds

Battlefield medics and emergency medical technicians may soon have a new tool for treating open wounds in the field: A cottony glass fiber developed by Missouri S&T ceramic engineers. The same cotton candy-like material also holds promise for helping diabetics, burn victims and others who suffer from hard-to-heal open wounds.

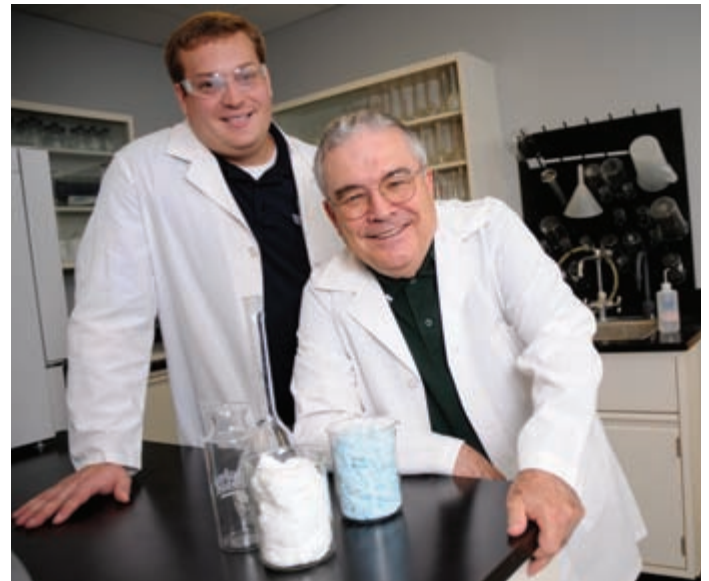
Developed by **Delbert E. Day**, CerE'58, Curators' Professor emeritus of ceramic engineering, the material was found to speed the healing of open wounds (venous stasis wounds) in eight out of 12 patients enrolled in a recent clinical trial.

The nanofiber borate glass was developed in the laboratories of Missouri S&T's Graduate Center for Materials Research and the Center for Bone and Tissue Repair and Regeneration, says Day, a pioneer in the development of bioglass materials. Day and his former student, **Steve Jung**, CerE'05, MS CerE'07, PhD MetE'10, developed the material over the past five years. Jung now works at Mo-Sci Corp., a glass technology company Day founded. Mo-Sci manufactured the material for use in the clinical trial.

Silica-based bioactive glasses have been proven to help stimulate hard-tissue cells for bone repair. But in early lab studies, Day and Jung found that silicate glasses did not respond well to fluids. The borate glasses, however, reacted to fluids at a much faster rate than silicate glasses.

"The borate glasses react with the body fluids very quickly" when applied to an open wound, Day says. "They begin to dissolve and release elements into the body that stimulate the body to generate new blood vessels. This improves the blood supply to the wound, allowing the body's normal healing processes to take over."

Clinical trials at Phelps County Regional Medical Center in Rolla began in the fall of 2010 with 13 subjects. One dropped out early in the process. All subjects suffer from diabetes and had wounds that had been unhealed for more than a year.



**Glass-fiber work by Steve Jung (left) and Del Day may lead to a new method to heal open wounds.**

Depending on a wound's severity, Day says it can heal within a few weeks to several months after the material is applied. "Within a few days, most patients see an improvement," he says.

Day hopes to see clinical trials expanded to include patients with other types of wounds, such as burn victims.

This isn't the first successful medical glass invention for Day. In the 1980s, he co-invented therapeutic glass microspheres to treat liver cancer patients. Now marketed under the name TheraSphere, the product is used to treat patients at more than 100 sites worldwide.

## Managing interruptions

Interruptions are a way of life. They're typically not life-threatening, but for military personnel monitoring unmanned aerial drones, interruptions could have deadly consequences.

That's why S&T researchers are studying the impact of interruptions on such "human-in-the-loop systems." **Susan Murray**, professor of engineering management and systems engineering, and **Muhammet Gulum**, a Ph.D. student in

engineering management, set up a work station in S&T's Engineering Management Building to study how people react to interruptions. The subjects perform monitoring tasks on a computer but are also interrupted periodically to perform other tasks — each designed to engage motor skills, cognitive ability or visual ability.

"We're looking at different types of interruptions to see how people respond,"

Murray says. "We're looking at the impact on time and accuracy. The type of interruption can make a difference."

The results of this research — funded through a grant from the U.S. Army Research Lab through the Leonard Wood Institute — will be used by the military when designing new monitoring systems.



# Giving contaminants the tree treatment

Detecting the presence of contaminants in soil or groundwater is now as simple as tapping a tree, thanks to technology invented at Missouri S&T.

**Joel Burken**, a civil and environmental engineering professor at S&T, says his process of coring tree trunks to gather small samples takes less time and costs much less than traditional methods for detecting contamination. In recent years, Burken and his colleagues have tested this method — called “phytoforensics” — at more than 30 sites in five countries and eight states.

In past tests, Burken and his students collected coring samples in vials to take back to a laboratory at Missouri S&T for analysis. Now they use a specially designed, less intrusive approach that uses a thin filament called a solid-phase microextraction fiber, or SPME, to detect traces of chemicals at minute levels, down to parts per trillion or parts per quadrillion.

“The process of core-sampling plants has been around for a while,” Burken says, “but we’re taking a new approach that will improve the process on multiple levels. Sampling is easy, fast and inexpensive for quickly identifying polluted areas or contamination patterns.”

Trees act as nature’s solar-driven sump pumps, soaking up water from the ground by using the energy of the sun and the air around them, Burken says. Through a process known as “evapotranspiration,” a tree’s extensive root system absorbs all the water it needs. At the same time, the tree absorbs trace amounts of chemicals in that water and transports it above the ground.

Tapping into several trees in an area suspected of contamination can help engineers more rapidly delineate contaminants in the subsurface. “The only damage to the site is taking a piece of the tree about the size of a pencil and just an inch long,” Burken says.

The conventional approach to testing for groundwater contamination is much more expensive, time-consuming, invasive and arduous, requiring the use of heavy equipment to drill in the ground and the creation of sampling wells to draw water from those sites, Burken says.



**Joel Burken, Missouri S&T professor of civil and environmental engineering, works with S&T graduate student Matt Limmer and freshman Amanda Holmes to test trees in Rolla’s Schuman Park.**

# Julie Meyer:

## coming into focus

Story by Luke Rinne ([rinnel@mst.edu](mailto:rinnel@mst.edu)), Photo by B.A. Rupert

**Julie Meyer**, a senior in history and secondary education, started her S&T career as an accomplished athlete in both volleyball and women's basketball. Last season she focused solely on basketball. Her decision paid off as she helped lead the Lady Miners to a share of the Great Lakes Valley Conference West Division title (the first since 1995-96 and the first one as a member of the GLVC) and an appearance in the NCAA Tournament for the third time in school history.

### What is your best S&T sports memory?

"We had many great games and accomplishments throughout last year's season, but my favorite was our victory against Drury, which snapped a 13-game losing streak to them. That win also gave us a share of the GLVC West Division Championship. Drury is always a much-anticipated game, and it was fun to come out and play well and come away with a win."

### How much fun did you have on the court last season?

**(School record 11 straight wins, GLVC West Division co-champs, NCAA Tournament).**

"Last season was probably the most enjoyable sports season of my life. It was fulfilling to set out goals before the season like division champs and NCAA tournament berth and actually go out and accomplish them. During our 11-game winning streak, the team had a lot of fun and it really brought us together. The streak really motivated us to come to practice and get better so we could continue winning. The game came so easy and all of us just knew what our role was and what we had to do to win. As it was happening it was exciting, but looking back now it is even more special."

### How has the end of the season inspired you for next season?

"The losses in the conference and regional tournament last year were big disappointments. That feeling left at the end of a great season took away from some of the accomplishments during the regular season and definitely left us eager to get back on the court next year to prove that we're better than what we displayed in our final two games. We know that ultimately end-of-season games are what really counts, and will look to increase our focus at the end of the season to advance further in both the conference and national tournaments."





## S&T track stands out in championship

**Bryan Kluge** and the S&T 4x100-meter relay team earned All-America honors for the 2011 outdoor season at the NCAA Division II Track and Field Championships.

Kluge, a senior in chemical engineering, placed seventh in the 800-meter finals in rainy and windy conditions with a time of 1:54.96. The relay team of **Sean Martin**, a sophomore in aerospace engineering, **Brett Vessell**, BSci'11, **Mike Wilson**, a senior in computer engineering, and **Adriel Hawkins**, a freshman in civil engineering, earned its first All-America award, posting a time of 41.38 seconds in the finals of that race. The Miners finished eighth.

## S&T honored for community engagement

Missouri S&T received the Great Lakes Valley Conference's NCAA Division II Community Engagement Award of Excellence for the 2010-11 athletic season. The Miner program was cited for its Military Appreciation Day activities in October.

One institution from every Division II conference and one conference as a whole were recognized by the NCAA for work to build bridges in their communities. Each institution that won an award received \$500 from the NCAA.

Missouri S&T won the award for its part in hosting Military Appreciation Day Oct. 30 in conjunction with its home football game against Urbana University. The U.S. Army base at Fort Leonard Wood is located approximately 30 miles southwest of Rolla. Officials from the university, military base and city of Rolla were all involved in the coordination of the event, which is usually scheduled for the home game closest to Veterans Day.

Missouri S&T also played men's basketball and Lady Miner volleyball exhibition games on the Fort Leonard Wood base.

## S&T finishes fifth among GLVC schools in final Director's Cup standings

Missouri S&T's athletic program finished fifth among the 15 institutions in the Great Lakes Valley Conference for the 2010-11 season in the final Learfield Sports Director's Cup standings.

The program finished 92nd overall among the 284 NCAA Division II institutions, putting it in the top one-third of all schools in the division. S&T scored points in five sports in NCAA championship competition during the most recent year, earning points in men's soccer, swimming, women's basketball, men's track and field and baseball. The ninth-place finishes recorded by the swimming and men's soccer teams were the highest among them to help S&T finish with 213 points overall.

Missouri S&T finished behind only Drury, Indianapolis, Northern Kentucky and Lewis among the GLVC schools this year.

## Gronek earns post-season honors



**Zack Gronek**, who set a school record with his 10 wins on the mound this season for the S&T baseball squad, was named to the American Baseball Coaches Association's all-Midwest region second team for the 2011 season.

A junior in mechanical engineering, Gronek posted a record of 10-1 and finished with a 2.38 earned run average. Gronek's ERA was the fifth-lowest single-season mark in school history and ranked fifth in the Great Lakes Valley Conference in 2011.

Gronek also threw a record 87 innings during the season and struck out 64 hitters against just nine walks, setting another mark for fewest walks per nine innings at 0.93. Gronek was a first-team selection to the All-GLVC team and posted a record of 6-1 with a 2.36 ERA during the conference season. He finished the season with six complete games and two shutouts, including a five-hit blanking of defending NCAA Division II champion Southern Indiana in the opening game of the NCAA Midwest Regional tournament. The Miners made their first appearance in the NCAA Division II Tournament in 39 years in 2011.

## PRO leaders ease transitions during Opening Week and beyond



*Missouri S&T attracts some of the best and brightest students, but even these high achievers get anxious when heading off to college.*

*That's where Missouri S&T PRO (preview, registration and orientation) leaders come in. They combine friendly faces with sage advice that can really help get new students off on the right track during Opening Week orientation, the week before classes.*

1. Missouri S&T PRO leaders with Project X vehicles (left to right): Seth Marton, Doris Ditter and Tim Clemon.
2. Joe cheers on new students at Convocation.
3. Teams of students race their vehicles through campus in Project X.
4. Students get a break from Opening Week activities at the ice cream social.

Photos by B.A. Rupert

"I love helping and advising new students," says **Seth Marton**, a junior in architectural engineering from Lake Saint Louis, Mo. "I stress the importance of learning how to study and what to consider when choosing where to live."

"Opening Week orientation is a great program where freshmen get to know a lot of people. It really helps prevent jitters."

In addition to working Opening Week, Marton is coordinator for Transfer Transitions, a one-day orientation for transfer students the Thursday of Opening Week.

**Tim Clemon** tries to focus on putting students at ease. "So many of them have questions but don't want to ask them," he says. "I help draw them out."

A junior in psychology from St. Louis, Clemon says he's maintained friendships with many of the students he's met as a PRO leader during Opening Week. "They come to me frustrated about a test they failed. I tell them it's not the end of the world — you can recover. You just need to learn to study early on in the course."

Clemon ran the mini-Career Fair last year during Opening Week, which gives freshmen exposure to future employment opportunities. This year he's a floater. "I'll be all over the place," he says.

Sometimes it's not just students that may need reassurance.

"I spend a lot of time with parents — they have a lot of questions," says **Doris Ditter**, a junior in chemical engineering from Platte City, Mo. "I tell them Missouri S&T is empowering to students. Students run all the organizations; the faculty mentors are there to supervise."

According to Ditter, her advice to freshmen is to "work hard to play hard." She is leading a "power of communications" workshop this year.

"We take students on field trips all over the Rolla area, then they present to the group about their trip," she says. "In addition to helping them get familiar with the area, they learn helpful skills to talk to recruiters and professors."

Every year PRO leaders dream up the fun and unusual activities Opening Week at Missouri S&T is known for, including Project X, a competition featuring wild-looking remote-controlled vehicles designed and built by student teams. Members of the campus and Rolla community are on hand to cheer on their favorite teams as the vehicles navigate obstacle courses throughout campus on the Friday of Opening Week.



## Join us for the Career Fair

Alumni returning for the Fall Career Fair on Tuesday, Sept. 27, are invited to attend the Pre-Career Fair Breakfast from 8-10:30 a.m. The breakfast, co-sponsored by Students Today, Alumni Tomorrow (STAT), Engineers Without Borders (EWB), and the Miner Alumni Association, will be located on the south balcony in the Gale Bullman Multi-Purpose Building. Be sure to stop by to pick up a Joe Miner sticker to wear during the career fair and to register for door prizes.

## Miner memories

Do you have a fond memory of your Rolla days that you would like to share? As graduates of MSM, UMR and Missouri S&T, we each have our own tales to tell and the Miner Memories section of the online community is the perfect place to post them. Simply go online to [mineralumni.com/minermemories](http://mineralumni.com/minermemories).



# Bonjour Miners!

Visit the waterways of Holland and Belgium, travel to Paris and Normandy, or discover Switzerland. These are just a few of the trips that make up the 2012 Alumni Journeys program.

For more information on these trips, or to view other travel destinations, visit **[www.miner.ahitravel.com](http://www.miner.ahitravel.com)**.

## Calendar of events

For a complete list of campus events,  
visit [calendar.mst.edu](http://calendar.mst.edu)

# October

	SUN	MON	TUE	WED	THU	FRI	SAT
<b>October</b>							
6-9: Homecoming							01
7: Alumni Association Committee Meetings	02	03	04	05	06	07	08
8: Alumni Association Board Meeting; Miner Football vs. South Dakota School of Mines and Technology	09	10	11	12	13	14	15
7: Visitors' Night at the S&T Observatory	16	17	18	19	20	21	22
22: Miner Football vs. William Jewel							
25: Lady Miner Volleyball vs. Drury University	23	24	25	26	27	28	29

# November

4: Founder's Day				01	02	03	04	05
5: Miner Football vs. Saint Joseph's College								
15: Miner Basketball vs. Lindenwood-Belleville University	06	07	08	09	10	11	12	
	13	14	15	16	17	18	19	
17: Lady Miner Basketball vs. Park University	20	21	22	23	24	25	26	
	27	28	29	30				

## December

1: Miner and Lady Miner Basketball vs. Maryville University								01	02	03
3: Miner Basketball vs. UMSL	04	05	06	07	08	09	10			
7: Miner and Lady Miner Basketball vs. Drury										
8: Grad Finale	11	12	13	14	15	16	17			
9: Executive Committee Meeting										
17: Commencement	18	19	20	21	22	23	24			
	25	26	27	28	29	30	31			

## Save the date

Feb. 15, 2012: Spring Career Fair  
March 17, 2012: St. Pat's Parade  
May 4-5, 2012: Spring Commencement



## Miner Alumni Association

The association proactively strives to create an environment — embodying communication with and participation by Miner alumni and friends — to foster strong loyalty to the university and growth of the association. The association represents and serves more than 50,000 living graduates and former students.

Today's association carries on the proud tradition of support to Missouri S&T, providing more than \$500,000 in annual aid to campus students, faculty and staff.

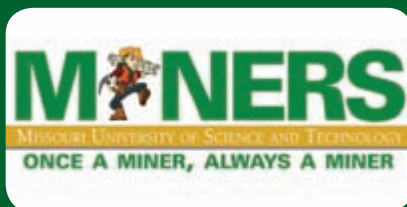


## Vintage Sigma Nu Miners from 1947-55

The Vintage Sigma Nu Miners visited Fort Worth, Texas, in May. With good weather, they toured Cowboy stadium, the Kennedy Memorial, Billy Bob's Saloon, and the stockyards that are part of western history. Although the group loses some of its members each year, it continues to remember the good ol' days at Rolla and drink a toast to then and now. Special thanks to hosts, Edie and Joe '54 Gray, for planning and hospitality.

Pictured: (Kneeling) Joe Reiss '49 (Standing) Bruce Tarantola '51, Joe Gray '54, Anita Tarantola, Ron Tappmeyer '47, Sondra Tappmeyer, Bob Ferris '55, Don Johnson '50, Dick Moeller '50, Maggie Bauer, Jim Chaney '48, Jan Reiss, Charlotte Quinn, Dick Bullock '51, Lorraine Spackler, Jack Guth '50, Denise Guth, Pat Toutz, Jim Toutz '54, Jan Bullock, Edie Gray, Joe Quinn '49, Dorothy Walters, Bill Hallett '55, Jacque Brillos, John Brillos '51. Not pictured: Joan and Bob '53 Vienhage.

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Class  
of **1961**

# Golden Alumni Reunion



**The Miner Alumni Association hosted 53 members of the class of 1961 for this year's Golden Alumni Reunion. With their guests, more than 100 people attended the event, held May 23 and 24.**

In addition to getting reacquainted with each other, members and guests toured the new Kummer Student Design Center, visited their departments and listened to recently retired Chancellor John F. Carney III give a presentation on today's campus. The Miner Alumni Association hosted the alumni and guests and presented programs on the association's history, world events of 50 years ago, and the university in 1961.



During Monday night's banquet, members of the class were entertained in a featured performance by "Elvis" and "Marilyn Monroe." In a grand recognition ceremony, Carney and Darlene Ramsay '84, a past president of the Miner Alumni Association, presented class members with their 50-year pins and certificates on the final day of the reunion.



Celebrating

50  
years



# MINER LEGACY

**HOMEcoming WEEKEND 2011 • For a complete schedule of events visit [homecoming.mst.edu](http://homecoming.mst.edu)**

## THURSDAY: OCT. 6

» **6-9 p.m. Geology and Geophysics Homecoming Banquet, Carver-Turner Room, Havener Center**  
Cost \$25. RSVP to Patty Robertson ([patty@msu.edu](mailto:patty@msu.edu)) or call 573-341-4616 and indicate if a vegetarian meal is desired.

## FRIDAY: OCT. 7

» **1-5 p.m. Experimental Mine Open House**  
12350 Spencer Road, ½ mile down Bridge School Road

» **2-4 p.m. 25th Chancellor's Leadership Class and Academy Silver Anniversary Reception**  
McNutt Hall Commons. Group photo at 3 p.m.

» **2:30-4 p.m. Biological Sciences Department Homecoming Picnic**  
Schrenk Hall front lawn

» **3-4 p.m. Department Open Houses**  
For a current list of participating departments go to [homecoming.mst.edu](http://homecoming.mst.edu)

» **3:30 p.m. Toomey Hall Open House**  
Toomey Hall Balcony

» **5-8 p.m. Silver and Gold Gathering**  
Leach Theatre Lobby, Castleman Hall  
Social Hour 5 p.m., dinner 6-7:30 p.m., social time continues until 8 p.m.

Tickets for event:  
\$20 for adults  
\$10 for children ages 6 to 12  
Free for children under age 6  
Dinner will include glazed chicken and barbecued brisket  
\$1 beer and limited cash bar will be available

» **5 p.m. Sigma Phi Epsilon Alumni Reception and Dinner**  
Zeno's

» **8 p.m. Kappa Sigma Reception**  
New chapter house

» **8 p.m. Perfect 10 Improv Show**  
"Tomorrow's Jokes Today,"  
Black Box Theatre, Room 143 Castleman Hall

## SATURDAY: OCT. 8

» **10 a.m. Sigma Phi Epsilon House Dedication**  
Red Door Entrance, 801 Park St.

» **10 a.m.-noon Kappa Sigma Open House**  
Open to the public

» **10:30 a.m.-1 p.m. and 3:30-5 p.m. Kummer Student Design Center Open House**  
Tour the new facility at 1051 N. Bishop Ave.

» **11 a.m.-1 p.m. Kick-off Tailgate Party**  
Alumni tent outside Allgood-Bailey Stadium  
Tickets for event:  
\$10 for adults  
\$5 for children ages 6 to 12  
Free for children under age 6  
Hot dogs, brats, \$1 beer and other tailgate goodies will be served. Free kids corner.

» **11 a.m. Kappa Delta Ribbon Cutting Ceremony**  
Chapter House

» **11:30 a.m.-1 p.m. Kappa Delta Luncheon**  
Chapter House

» **Noon-2 p.m. Kappa Sigma Chapter House Grand Opening and Lunch**  
New chapter house

» **1-3 p.m. Kappa Delta "Sip and See"**  
Open to the public

» **1 p.m. 1,000th Missouri S&T Football Game Miners vs. South Dakota School of Mines and Technology**

Tickets for event:  
\$8 for adults  
\$5 for students (K-college) and seniors age 65 and older  
Free for children under age 6 and S&T students with a student ID

» **5:30 p.m.-midnight Kappa Sigma Hall of Fame Banquet**  
New chapter house

» **6-9 p.m. Alumni Association Miner Legends Banquet**  
Havener Center. Reception begins at 6 p.m., dinner at 6:30 p.m. Some of our most distinguished alumni will receive prestigious Miner Alumni Association awards. The association's annual meeting will be held during this event.

Tickets for event:  
\$30 for adult dinner with cash bar available  
\$15 for children ages 6 to 12  
Free for children under age 6

» **6-11 p.m. Kappa Delta Gala**  
Matt's Steakhouse

## SUNDAY: OCT. 9

» **1-3 p.m. Chancellor's Advisory Committee for African American Recruitment and Retention Meeting**  
Carver-Turner Room, Havener Center

## REGISTRATION INFORMATION:

**Register online at [mineralumni.com/homecoming](http://mineralumni.com/homecoming) or call 800-JOMINER.**

All alumni should pick up their registration packets at the Homecoming welcome desk.

**Friday, Oct. 7: Castleman Hall, 8 a.m.-7 p.m.**

**Saturday, Oct. 8: Alumni tent outside Allgood-Bailey Stadium, 10:30 a.m.-1 p.m.**



Alumni, family and friends gather in 56 sections around the world. Here is a glimpse of their activities.

## Student Receptions

### Chicago

**April 19 — Naperville Public Library**

*Dan Aiken '06; Jon Carmack '98; Mike '77 and Sandy '77 Marx; and Tommy Mills '02. S&T representative: Courtney Wallace.*

### Lincolnland

**April 20 — Hanson's Professional Services Inc.**

*Rich Berning '69; Tom Feger '69; and Amanda Withers '99. S&T representative: Courtney Wallace.*

## falls of the ohio

**June 17 — Louisville Bats Baseball Game — Louisville, Ky.**

*Dirk '91 and Nickie Gowin; John '63 and Carola Lina; Ray Maag '50 and daughter Karen; Tom Phillips '62; and John Robertson '52 and son Scott.*

## indianapolis

**April 30 — Dinner with Human-Powered Vehicle Team — Ram Restaurant and Brewery — Indianapolis**

*Steve Eveker; Pat Hill; Ross Jensen; Evan Kluesner; Trent Lauer; Trevor Lauer; Tim Mallette; Tracy Mallette; Casy Pruitt; Chris Stephens; and Emily Wehmeyer '97.*



**May 7 — Dinner with Solar Car Team — George's Neighborhood Grill — Indianapolis**

*Justin Dobrynski; Wesley Hacket; Daniel Leafblad; Nicholas Marik; Justin Reynolds; Lawson Tyler Jr. '75; Emily Wehmeyer '97; and Cheng-Hsiao Wu. S&T representatives: Richard Dalton, David Hoffman, Bob Phelan, John Tyler and Letha Young.*

## We want your section news

Submit your section news by Dec. 9 to [alumni@mst.edu](mailto:alumni@mst.edu) for inclusion in the Spring 2012 issue.

## lincolnland

**May 17 — Piper Glen Golf Course — Springfield, Ill.**

*Charlie Bach '68; Kent Bell '63; Rich Berning '69; Bruce Bonczyk '74; Brian Bradley '86; Don Bunchmun; Dave '69 and Mary Daniels; Tom Feger '69; Bob Handsby; Dennis Hervey '71; Jerry Hirlinger '86; David Humke; Danny Kerns '74; Richard Klusmeyer '70; Mark Martin Sr. '68 and Janna; Jim May '66; Ed Midden III '69; Rich Mochel '64; Jerry Parsons '70; Mark Seppelt '78; Harry Vakharla; and Amanda Withers '99. S&T representative: Marianne Ward.*

## motor city



**June 4 — Dinner with Robotics Team — Home of Dale Morse '79 — Milford, Mich.**

*James Anderson; Miriah Anderson; Joe Arnett; Mike Arnett; Tessa Baughman '04; Christopher Bessent; Michael Chrisco; Jason Gassel; Brian Ho; Adam Honse; Dale Morse '79; Christopher Painter; Andrew Reidmeyer; Jeff '10 and Becca Seaman; Andrew Sourk '08; and David Uhlman.*

## northern alabama

**June 9 — Dinner and baseball game — Joe W. David Stadium — Huntsville, Ala.**

*Rob '95 and Rebecca Alferink; James Carter '66; Christian '95 and Christina '95 Cook; Allen Crider '80; Jon '93 and Audrey Fox '93; Jason '96 and Valerie '98 Holschen; Jim '75 and Dorothy Keebler; Kendra King '06; Tom '66 and Bobbie Meier; Jeff Obermark '91; Alex '98 and Erica Storms; and Richard '73 and Roslyn Taylor.*



## Breck Washam: Carrying on the Miner mission

Photo by John Nagel

**Breck Washam, ME'90, pictured in the Burns & McDonnell conference room named for Bob Berry, CE'72.**

**Breck Washam**, ME'90, excelled as a student — and his department noticed. The university rewarded his effort with a scholarship intended for exceptional students.

"It was additional financial assistance and it was completely a surprise to me," says Washam, now associate vice president and general manager of the St. Louis office of Burns & McDonnell. "Between an academic scholarship and my earnings as a co-op student, I still had a few gaps to fill. It allowed me to further focus on my studies and reduced some financial stress."

During his senior year, Washam had an interview with **Bob Berry**, CE'72, then vice president of Burns & McDonnell, for a position in the company. Washam got the job and started in the company's Kansas City office after graduation. Two years later, he moved to the St. Louis office and Berry became his boss.

"He was a mentor to me," Washam says of Berry. "He set an example of giving and giving back to your alma mater and the activities you're involved in."

Washam worked his way up the corporate ladder and in 2006, when Berry retired, Washam took over as vice president and general manager of the St. Louis office.

Washam never forgot Berry's lesson on giving back, and when he joined the Order of the Golden Shillelagh in 2010, a portion of his gift went to help fund the Lewis E. Young Alumni Scholarship — the same scholarship he benefitted from as a student. He also dug into the history of the scholarship.

Washam learned that in 1964, a woman named **Elizabeth Young** left the university \$66,000 in her estate to endow a scholarship fund in memory of her late husband, **Lewis E. Young**, a former director of the university.

Young was only 28 years old in 1907 when the Board of Curators appointed him to lead this relatively new campus. Just a year later, Young was dubbed the first Honorary Knight of St. Patrick on the steps on Norwood Hall, when he allowed students to celebrate the first-ever St. Pat's.

Today, the endowed scholarship has grown to more than \$180,000 and it awards \$8,000 in scholarships each year. In total, more than 60 students have benefitted from Mrs. Young's generosity.

Now, scholarships like Young's are known as merit-based with no restrictions. Not a need-based scholarship, the Lewis E. Young Alumni Scholarship was intended for undergraduates with a record of superior scholastic achievement. It may also be awarded to entering freshmen of outstanding scholastic promise. "I was curious," Washam says of the research into his scholarship. "While I had thanked the alumni association, I don't recall ever directly thanking the person responsible for this scholarship. I had always had a desire to know and an intent to someday be able to give back what had so graciously been given to me."





**Miner Alumni Association**

Missouri S&T  
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Rolla, MO 65409-0650

ADDRESS SERVICE REQUESTED

*Parents: If this issue of Missouri S&T Magazine is addressed to your son or daughter who has established a separate permanent address, please notify us of the new address: 573-341-4145 or [alumni@mst.edu](mailto:alumni@mst.edu).*

**ARE YOU READY FOR:**

# MINER LEGACY

**Register online at  
[mineralumni.com/homecoming](http://mineralumni.com/homecoming)  
or call 800-JOMINER.**

» Cheer on S&T as the Miners battle the Hardrockers from South Dakota in the 1,000th S&T football game during Miner Legacy, Homecoming 2011.

Before the game, stop by the Kick-off Tailgate Party featuring food, beverages and lots of Miner spirit.

And don't forget to bring your future Miners to the free Kids' Corner for fun activities like inflatables, games and popcorn.