



Missouri S&T Magazine, Spring 2001

Miner Alumni Association

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MSM-UMR

ALUMNUS

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SPRING 2001

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Soon you should receive a mailing with instructions on how to register for the MSM-UMR Online Alumni Community. Your main place on the Web, this community is a cutting-edge online forum for MSM-UMR alumni. This service is an exclusive "community of interest" for the interchange of information, ideas, goods and services, support and guidance. At the MSM-UMR Alumni Association Online Community you can find an old friend, network for jobs, make valuable professional contacts, and get the latest news about UMR and its activities. This highly interactive gathering place helps alumni stay connected with each other and with UMR.

The MSM-UMR Alumni Association Online Community includes several valuable features. One of the most useful is a secure, searchable online directory to help alumni quickly locate each other via a database of current biographical data and a powerful search engine. Another useful resource is the Career Center, putting you immediately in touch with professionals who can assist your job search. Other features include permanent e-mail address capability, alumni bulletin boards, personal Web space, and more. Access to the community is limited to alumni who log on from the MSM-UMR Alumni Association's Web site at www.umr.edu/alumni with their user ID and personal password.

WATCH YOUR MAIL FOR REGISTRATION INFORMATION!



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MSM-UMR ALUMNUS

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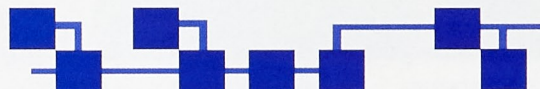
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FROM THE EDITORS

IT'S BEEN A TOUGH 12 months for the Internet economy. A year ago, your *Alumnus* reported about the high demand of our graduating class. And while demand is still great for UMR graduates (engineering and science majors tend to fare well even when the economy sours), things don't appear quite so rosy for technology companies. In this issue's cover story, we've assembled a panel of graduates who are involved in some aspect of the Internet business — from CEOs and entrepreneurs to online investors — and asked them to assess the future of the shaky but transforming information age. We also share the stories of alumni who are shaping the future of the Internet economy.



SHIFTING GEARS a bit, we also want to tell you that UMR, home of the national champion Solar Car Team, has been chosen as the only major stopover site for a new international solar car race to be held this summer. The American Solar Challenge will travel old Route 66 from Chicago to Los Angeles, July 15-25. The dozens of competing teams will stop in Rolla on Monday, July 16, and head westward Tuesday morning, July 17. UMR's team is hard at work on *Solar Miner III*, the successor to *Solar Miner II*, which won Sunrayce 99.



Solar Miner II

FOR MORE DETAILS ON THE NEW RACE

ASC WEB SITE (WWW.FORMULASUN.ORG)

UMR SOLAR CAR TEAM'S SITE (SOLAR42.UMR.EDU).

W

BIG CLUB ON CAMPUS



HOWARD & JOANN
ELOE

hen **Howard Eloe** was searching for an appropriate name for a new group of alumni donors, he wanted to connect it with UMR's strong engineering tradition. So naturally he thought of St. Patrick, whom students and alumni of MSM-UMR have been celebrating as their unofficial patron saint for 83 years.

The core group of alumni donors who would become the group's founding members also liked the idea of tying the club with St. Pat. But they didn't all agree with Eloe's original idea for a name.

"I said, 'Maybe we could call it a saints club,'" recalls Eloe, who was the campus' director of development at the time. "But Mama McNutt said, 'No, we're not saints.'" ("Mama" McNutt, as she was affectionately known, was UMR benefactor **Amy Shelton McNutt**, the widow of **V.H. McNutt**, MinE'10, MS MinE'12.)

Someone among the group suggested the idea of a shillelagh, the oak club or cudgel St. Patrick must have used to fend off enemies and drive those snakes from Ireland.

"A shillelagh is something St. Patrick had to have by his side," Eloe says, "and we came up with the idea of a golden shillelagh as a symbol of support for the campus and the faculty."

And so the Order of the Golden Shillelagh, UMR's premier donor organization, was born.

That was in 1976. As founding member **Alden Hacker**, MetE'40, remembers it, several of the group's 27 founders and spouses met at the Missouri Athletic Club in St. Louis that year to hammer out the group's bylaws.

"We wanted to create a major gifts organization that would recognize those people who wanted to make a lasting contribution to the campus," says Hacker, a retired metallurgist from St. Louis who also was the organization's first chairman. The founders also wanted to create an organization that would strengthen ties between alumni and the university, he adds. "Most of the alumni, after they left the university, that was the last contact they had."

The bylaws described the membership as "a highly distinctive group of generous individuals," and set the membership commitment at \$10,000, payable in a lump sum or at \$1,000 a year for 10 years, or \$25,000 for a planned gift through a will, trust or other estate planning

instrument. According to Hacker, the group thought long and hard about whether the financial commitment was at the right level. "Ten thousand bucks was a lot of money back then," Hacker says. Nevertheless, alumni and parents responded with enthusiasm. "We were actually a little bit shocked at how receptive they were," he recalls.

Now in its 25th year, OGS has grown from that core group of 27 founders to 685 members — currently averaging around 50 new members and spouses a year. According to Hacker, it's become stronger and more influential over the years. "I really think that the Shillelagh has been the incentive and the motivation for many of the major gifts the campus has received over the years," he says.

With the growth in numbers, OGS has become more than a club for major donors. With recent changes allowing students and young alumni to join at a junior level, it's become more of a community.

For 25 years, the Order of the Golden Shillelagh has recognized UMR's strongest supporters and helped strengthen campus programs

"I think it gives us a little more purpose than a 'giving club' might have," Hacker says. "It's an opportunity to help the university and keep in touch with the more concerned graduates. It's also great to see the involvement of our students in OGS. It's quite impressive to meet some of these students."

The OGS celebrates its 25th anniversary April 27-29 on campus. The event will have special significance for Eloe, who served as UMR's first development director from 1973 through 1990. Eloe and his wife JoAnn, who now live in Idaho Falls, Idaho, are among the group's newest members, having recently established the Paul W. Eloe Graduate Fellowship Fund for Mathematics and Statistics in honor of their son Paul, MS AMth'77. "I'll finally become a bona fide member of the Shillelagh."



ALDEN HACKER

25th Anniversary

For more information about the
Order of the Golden Shillelagh
contact Lucy Sutcliffe in the
UMR development office at
(573) 341-4490 or at lucys@umr.edu.

Cover Story

WHERE DO WE GO FROM HERE?

**Alumni panel ponders
the digital economy's future**

BY ANDREW CAREAGA
acareaga@umr.edu

IT'S HARD TO BELIEVE

that only a year ago the future looked so promising for the Internet sector. After the Y2K hysteria passed without a glitch, Internet companies started popping up all over the place, hawking everything from furniture to food delivery. Companies like Priceline.com and Amazon.com were lauded as models for a "new economy," while dot-coms with huge marketing budgets pumped millions to gain name recognition. (And without much success. Remember Super Bowl XXXIV, in January 2000? Seventeen dot-coms spent \$2 million per 30-second spot for some very forgettable TV ads.) Meanwhile, Internet titan AOL, which amassed its wealth on the strength of chat rooms, announced a merger with old-media empire Time Warner — a merger worth \$160 billion in AOL stock at the time. By March 2000, the NASDAQ composite index, a leading indicator for technology stocks, was buzzing along at record highs.

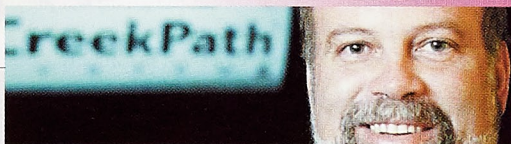
By April 2000, however, the NASDAQ had lost its luster — and nearly 50 percent of its value — and things went downhill from there. By the end of November, according to the Internet site Webmergers.com, 130 dot-coms had shut down since January 2000, resulting in 31,000 layoffs. Even Internet powerhouses weren't immune to the real Y2K bug of deflating stock worth. The drop in AOL's stock value reduced the worth of its merger with Time Warner to \$120 billion by the end of the year. Even Bill Gates sustained a paper loss of \$56 billion — more than the



ROBERT DILLON, MS GGPH'93, PHD GGPH'99, PARLAYED HIS INTEREST IN PERSONAL INVESTING INTO A TIDY SUM OF PERSONAL WEALTH BY RUNNING TWO WEB SITES FOR INVESTORS, PENNYSTOCKPICKS.COM AND HOTSTOCKNEWS.COM, FROM 1997 THROUGH 1999. HE NOW RUNS HIS OWN DOT-COM OF SORTS, GUITARSOLO.COM.



J. PAUL GRAYSON, CSCI'74, PRESIDENT, CHIEF EXECUTIVE AND FOUNDER OF ALIBRE INC., AN INTERNET-BASED 3-D ENGINEERING DESIGN COMPANY.



MIKE KOCLANES, CSCI'79, PRESIDENT AND CEO OF CREEKPATH SYSTEMS, A COMPANY THAT PROVIDES ONLINE DATA STORAGE SERVICES.



JOHN R. LOVITT, CSCI'70, SENIOR VICE PRESIDENT OF PROFESSIONAL SERVICES FOR RATIONAL SOFTWARE CORP.



GREGORY E. UPCHURCH, PHYS'72, MS EE'85, HEAD OF THE INTELLECTUAL PROPERTY AND INFORMATION TECHNOLOGY PRACTICE FOR THE ST. LOUIS LAW FIRM OF THOMPSON COBURN.

Cover Story

gross domestic product of Bangladesh — because of a crash of Microsoft's stock.

Were the events of the past 12 months the early indicators of a recession in an economy increasingly driven by digital technology? Or were they simply the results of a needed correction in an overheated, overhyped business sector? As we enter the spring of 2001, a group of UMR graduates with connections to the Internet industry give us their thoughts on the state of the digital economy, and what the future holds for the Internet sector. Our panelists are:

Robert Dillon, MS GGph'93, PhD GGph'99, of Hot Springs, Ark. A former geologist who worked in the oil industry and later the U.S. Geological Survey, Dillon parlayed his interest in personal investing into a tidy sum of personal wealth by running two Web sites for investors, PennyStockPicks.com and HotStockNews.com, from 1997 through 1999. Thanks to savvy investing, Dillon retired last year at age 41 to pursue his dream of playing classical and new age fingerstyle guitar. Dillon now runs his own dot-com of sorts, GuitarSolo.com, where he sells his first CD recording, "Images from the Heart," and an accompanying music book.

J. Paul Grayson, CSci'74, president, chief executive and founder of Alibre Inc., an Internet company based in Richardson, Texas. Alibre provides three-dimensional computer-aided design capabilities to companies by using the Internet as a platform for distributed computing. Before founding Alibre in 1997, Grayson founded Micrografx Inc., which created the first graphics software to work with the Microsoft Windows operating system.

Mike Koclanes, CSci'79, president and CEO of CreekPath Systems, a Boulder, Colo., company that provides online data storage services. Founded in 2000, CreekPath is a spinoff of Koclanes' former employer, Exabyte, which manufactures tape drive systems.

John R. Lovitt, CSci'70, senior vice president of professional services for Rational Software Corp. of Santa Clara, Calif. Rational, which *The Wall Street Journal* calls one of the digital economy's "mini-Microsofts," provides tools and services for companies that develop the software and products for online business applications, from e-commerce to digital devices.

Gregory E. Upchurch, Phys'72, MS EE'85, head of the intellectual property and information technology practice for the St. Louis law firm of Thompson Coburn.

Upchurch also teaches in the law school at Washington University in St. Louis, where last year he had his students write a mock U.S. Supreme Court brief related to the copyright infringement charges brought against Internet MP3-swapping service Napster.

The downturn: Why the bubble burst

Our experts agree that the downturn in the Internet industry was inevitable. Some of the business models just didn't make sense, they say.

"The environment has changed dramatically over the past year," says CreekPath's Koclanes, whose company got off the ground in early 2000. "There was this unfounded, almost euphoric, attitude about the Internet coming out of 1999."

As an investor, Dillon also sensed that technology stocks were being driven more by hype than by value. "I did invest in many technology stocks during the hyped time period of the second half of 1999 and early 2000 and did very well," he says. "Companies weren't trading on what they were worth by any means, but were just trading on what people would pay for their stock. I realized this period had to end and we got out early enough to put most of this easy money in much lower-risk mutual funds with solid track records."

The shakeout was no shock to Grayson and Lovitt. "I definitely believe there was a bubble that popped," says Grayson. "I actually expected it to pop." Many of those failed dot-coms focused on the "B2C" (business-to-consumer) business model. (Webmergers.com points out that 75 percent of last year's dot-bombs were retail companies.) As Grayson notes, it's one thing to successfully sell books and CDs over the Internet, but quite another to sell furniture, pet supplies or other retail products. It seems people still want to sit on a sofa before they buy one, Grayson says.

"The companies who concentrated on only producing the first asset and getting to market ... are the companies that are falling off the table," says Rational Software's Lovitt.

Likening that rush-to-market approach to the fable of the goose that laid the golden egg, Lovitt says too many companies were trying to produce the first egg (a product) at the expense of the goose (the infrastructure and solid



"Companies began coming to us, wanting to advertise on our sites, and asking us to get their message out to our subscribers. They were willing to pay anything... We were completely wrapped in the Internet blitz."

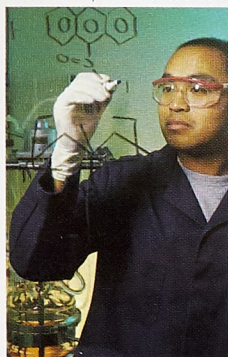
— ROBERT DILLON, MS GGPH'93, PHD GGPH'99

(Continued on page 9)

GLOBALIZATION / PEOPLE POWER HELPS BREWER SCIENCE MAINTAIN ITS GLOBAL COMPETITIVENESS

BY DICK HATFIELD richardb@umr.edu

Photo courtesy of Brewer Science



Manuel (Miko) Arjona, ChE'99, process engineer in the R&D division works on the scale-up of new anti-reflective coating for semiconductor production.

Photo courtesy of Brewer Science



Nick Brakensiek, Phys'96, inspects a silicon wafer in Brewer Science's cleanroom.

EVEN IN TODAY'S HIGH-TECH,

global workplace, it pays for companies to be people-oriented. That's the lesson Brewer Science Inc. of Rolla, one of the major local employers of UMR graduates, is learning and passing on, says **Keith Strassner**, Chem'79.

Strassner, who is a global marketing manager for anti-reflective coatings (ARC) at Brewer Science, says the company may be best known for its high-tech products, but its focus is on its employees. "We do a lot for our employees by letting them grow within the organization," Strassner says. "We are very people-oriented."

Brewer Science, founded in 1981 by Terry Brewer, an adjunct professor of chemistry at UMR, is a prime example of how local companies can compete on a global playing field. The company supplies equipment and materials to companies dealing in semiconductors, computer chip manufacturers, and manufacturers of flat-panel display systems for touch-screen computers.

With offices in the United Kingdom, Taiwan, Boston, Austin, Texas, and Phoenix, Ariz., the company is well positioned to market its products globally. The company has about 185 employees, about 30 of which are UMR graduates.

"Our ultimate goal is to be the world-class market leader in supplying material and equipment to customers and suppliers," Strassner says. "But we only can achieve that goal with quality employees, and we can only have quality employees by being a people-oriented company."

At Brewer Science, Strassner is responsible for developing marketing plans for customers and suppliers who are dealing with anti-reflective coatings. "Basically I look for new customers and new businesses," Strassner says. "We are constantly looking for new people and new products and new markets."

The company is the supplier to many businesses. "We deal with between 50 and 100 other customers and suppliers worldwide," Strassner says. "My job takes me to Europe, Asia and every state in the United States."

After graduating from UMR, Strassner worked for Petrolite Corp., a chemical company, in Tulsa, Okla. "I worked there for 20 years," Strassner says. "But then the company moved to Houston, Texas, and I just simply did not want to live in Houston."

So Strassner decided to come back to Rolla. "I knew something about Rolla because I went to UMR and I feel that I just came back home." He went to work for Brewer Science, "and the company and I fit together," Strassner says. "It is a growing company and it is a very good place for me."

UMR and its graduates have played a major role in the success of the company. "Since I have been at Brewer Science, UMR has been very important in helping our company grow," Strassner says. "We have UMR graduates who are very team oriented and that has helped us considerably."

As for the future of Brewer Science, things look bright, according to Strassner. "We are a rapidly growing company," he says. "We have endless professional growth and I see nothing but success for this company."

The company is launching new businesses over the next few years, Strassner says. "And the opportunities are there."

Note: Brewer Science Inc. is a leader in technology serving the microelectronic and optoelectronic industries with specialty chemicals and equipment. You can visit the company on the World Wide Web at www.brewerscience.com.

Photo by Bob Phelan/Photomasters



"OUR **ULTIMATE**
GOAL IS TO BE THE WORLD-CLASS
MARKET LEADER..."

~ Keith Strassner, Chem'79.

WIRELESS

LOCATION, LOCATION, LOCATION

Dave Wisherd's WhereNet helps keep track of things

BY DICK HATFIELD
richardb@umr.edu



Photo by David Toerge/Black Star

AUTOMATING METHODS FOR

locating warehouse goods, parts and accessories could save companies millions of dollars a year, says **Dave Wisherd**, EE'69. And Wisherd should know. His latest venture, WhereNet, is designed to help companies keep track of things.

"Federal Express spends about one-third of its profits just to handle and locate packages during shipment," says Wisherd, who founded WhereNet, his third start-up company, in April 1997. The goal of WhereNet, based in Santa Clara, Calif., is to help companies quickly find their warehouse inventories.

"I was always intrigued with the supply chain, or the process of moving things around for consumers," Wisherd says. "But I also thought that it might be possible to make it easier to keep track of all those things being shipped."

Today, Wisherd and his 100 WhereNet employees are indeed making it possible for companies around the United States to keep track of every move and part of their supply chain. "We have developed an automated process where a company can look on a computer screen to find out where things are within their warehouses," Wisherd says.

The method involves the transmission of a radio beam that sends signals to fixed antennas located in company warehouses. Inside of these warehouses, the packages or products are specially tagged to be detected by the wireless, Web-based system. "You simply point a handheld, wireless battery operated device about the size of a pocket pager at the antenna," Wisherd says. "You then punch a button on the device that matches the number on the package that you are looking for. The signals are picked up by the antenna and directed to the package, and that number is transferred back to the device in your hand with the exact location of the package."

The package may be packed in a container but the radio signals will still tell you exactly which container the package is in, Wisherd says.

Recently, WhereNet began working with Ford Motor Co. to help the auto manufacturer keep track of its inventory of vehicles, parts and accessories, and to make it easier to find them. "We are using a wireless button to find the parts and containers," Wisherd says. "Ford can now easily find those certain parts that go on those certain vehicles."

Containers are loaded with parts and in past years it has been a problem finding which parts go on which cars."

Ford fills about 1.5 million containers with parts in its myriad of warehouses, Wisherd says. "In the old days, several million dollars a year were needed within Ford's supply chain just to find where things were." Soon, Wisherd adds, this wireless tracking technology will be used as part of each new car sold. "It will be an automated process with each car and it will be used to track all Ford vehicles and their parts."

WhereNet is also working with American Airlines using the same technology to track baggage and freight operations. The company is applying the technology to keep track of people, too, by working with Disney to help family members and friends stay on track at Disney theme parks. "We have developed a wrist strap version to find or locate family members or friends in large crowds of people," Wisherd says.

The technology can also be used in grocery stores and clothing distribution centers. "It just simply is a tool to be used by every company's supply chain," Wisherd says.

WhereNet has sales offices in Detroit, Mich., and a development laboratory in Ghent, Belgium. The company has a digital signal processing laboratory in Knoxville, Tenn., and an applications software office in Detroit. The company also has additional sales offices all across the United States.

"Five billion bar codes are printed every day in the world, so we actually have an endless supply of possibilities," Wisherd says.

Wisherd credits UMR with helping him make the proper decisions with his successful company. "UMR gave me a technical background to understand problems and problem solving," he says.

"Our goal is simply to make the world work better," Wisherd says.

Note: On Oct. 29, 2000, WhereNet was featured on ABC evening news. You can visit WhereNet on the World Wide Web at www.wherenet.com.

"I WAS ALWAYS INTRIGUED WITH THE SUPPLY CHAIN."

~ Dave Wisherd, EE'69

A simple market analysis opened Grayson's eyes to the potential of providing 3-D computer-aided design services over the Internet.

~ J. PAUL GRAYSON, CSCI'74



business plan needed to sustain a competitive edge). "They were saying, 'The goose doesn't matter. All we've got to do is get the product out and we'll be fine,'" Lovitt says.

Moreover, Grayson adds, Internet portals, content-rich media sites and other companies expecting to generate revenues through Web-based advertising ran into problems. Banner advertising failed to catch on, and companies focused on that business model folded. "Some of the dot-coms were trying to envision a world that just doesn't exist yet," he says. "Many of the new media companies were visionary, but didn't have the strong business model."

But investors like Dillon profited from the flush marketing budgets of dot-coms. By February 1998, his two online investment newsletters caught the attention of technology-related advertisers. "Companies began coming to us, wanting to advertise on our sites, and asking us to get their message out to our subscribers," Dillon says. "They were willing to pay anything — I mean anything: stock or cash in extraordinary amounts. We were completely wrapped in the Internet blitz."

The road ahead: taking care of business

Now, that blitz is apparently over. But that isn't necessarily a bad thing. The retail business model of companies like CraftShop.com, the Digital Entertainment Network and Pets.com — all casualties of last year's "dot-bomb" — may not have held up, but business-to-business (or B2B) e-commerce will continue to grow.

That's what Grayson, Koclanes and Lovitt are banking on. Last fall, Grayson's Alibre entered into a huge B2B agreement with General Electric Co. GE itself plans to purchase \$6 billion in materials online this year, saving about \$1.2 billion in the process, according to a December 2000 article in *Newsweek*. Koclanes' CreekPath Systems sees a burgeoning market for his company's Internet data storage services. And Lovitt sees tremendous growth ahead for Rational Software.

A simple market analysis opened Grayson's eyes to the potential of providing 3-D computer-aided design services over the Internet. When he started Alibre in 1997, the computer-aided design/manufacturing software industry was doing \$11 billion in sales annually — and \$7 billion of that was for 3-D CAD/CAM software products.

"One of the strongest themes we heard at that time was that manufacturers had already made a big push to outsource manufacturing," Grayson says. "But their biggest problem was communicating and sharing information and data."

Grayson saw the Internet as an ideal platform for sharing and communicating among design engineers separated by space and time. His approach to using the Internet as a computing platform is remarkably similar to an idea dreamt up by Shawn Fanning, the college student who created the controversial MP3 file-swapping service Napster. Just as Napster allows music fans to exchange digital files of their favorite music (much of it pirated) over the Internet, so Alibre allows for a distributed system that allows engineers to work collaboratively on massive CAD/CAM design projects.

Koclanes took a similar path onto the Internet. Like Grayson, Koclanes saw the value of outsourcing. And like Alibre, which built on Grayson's experience in graphics software, Koclanes' CreekPath Systems, a spinoff from tape drive maker Exabyte, built on the parent company's existing expertise in data storage. CreekPath sells data-storage capacity to Internet companies by placing disk storage systems and tape storage systems into the Internet data centers where dot-coms run their Web operations. That way, cash-strapped start-ups don't have to carry the expense of buying a storage device outright.

"Everything that was out there (before CreekPath) assumed a customer had his own storage devices," Koclanes says. But the demand for online storage services like those CreekPath provides is expected to increase dramatically in the coming years. According to market research firm Dataquest, the on-demand market — CreekPath's niche — will skyrocket to \$7 billion in 2003 from a mere \$10 million in 1999. Outsourcing these storage services is a boon not only to companies like CreekPath, but also to the start-ups themselves. "There's not enough IT people for these companies to run the infrastructures themselves," Koclanes says.

Lovitt's Rational Software is the most established of the three companies, having been in business for 20 years. From the beginning, creating software applications for huge systems has been the company's core business. (One of Rational's early projects was developing software for a battlefield command and control system for the defense industry.) Working on those big projects positioned the company well for the new digital economy, Lovitt says, and Rational has applied many of the principles and practices from its defense-industry days to the Internet.

(Continued on the next page)

Cover Story

"Our business is actually continuing to accelerate," Lovitt says. "We feel like we're at the epicenter of something that's very big."

That "something" is bigger than the Internet as we now know it, Lovitt says. "The way we think of the Internet business is as part of a larger evolving set of technologies — communications technologies, software technologies and semiconductor technologies — that are driving a whole set of evolutions in the way people capture and apply knowledge," Lovitt says. These "evolutions" refer not only to the convergence of Internet, cable, wireless and other communications technologies, but also to the creation of an entire set of new products that rely on the interconnectedness of these technologies.

While not at the epicenter of technological development, attorneys who specialize in intellectual property law are also finding plenty of new business opportunities, thanks to the Internet. Greg Upchurch, who heads the intellectual property division of the St. Louis law firm of Thompson Coburn, says the burgeoning Internet economy has fueled much of the recent growth in intellectual property business. "Intellectual property is the currency of an information economy," says Upchurch, who has been practicing patent law at Thomson Coburn since 1975.

But the real increase in business came with a switch in the way the courts handled patent cases nearly two decades ago, Upchurch says. "There's been plenty of business since about 1982, which is when they put in the federal circuit court of appeals" to handle appeals on patent cases, he says.

The future: a Napster network?

Any discussion of Internet trends of the past year would not be complete without a discussion of Napster and the controversy surrounding it. The San Mateo, Calif.-based company spent much of 2000 entangled in a legal dispute with the Recording Industry Association of America (RIAA) because Napster's file-swapping technology allowed users to share bootlegged digital recordings over the Internet. Recording artists rely on income from royalties based on the sales of their work, and so, the RIAA contends, technologies like Napster cut into potential sales, royalties and profits. The Internet's

very existence raises similar problems for the movie and software industries.

Upchurch likens the Napster controversy to the legal issues that arose in the mid-1970s when the U.S. Supreme Court approved the patenting of microorganisms, and later wranglings over revisions to copyright law as it related to computer software. When those new technologies were first introduced, they also challenged traditional views toward copyright and intellectual property. "You have basically two diametrically opposing views" in such cases, Upchurch says. But in the past, both sides eventually reached a workable agreement, and Upchurch believes the same will happen with Napster and the recording industry.

Napster actually has more to do with the future of the Internet than the copyright controversy indicates. That's because as a business model, Napster incorporates many features that will revolutionize business in the digital economy — features that other companies already utilize on a less controversial scale.

Napster's popularity stems from the way the Internet allows millions of global, interconnected users to share files of digitized music that are stored locally on their computers. When users launch their Napster software, it scans their hard drives for music files, creates lists of these files, and sends the lists to big central computers at

Napster headquarters. A similar distributed computing principle drives Grayson's new business. Design engineers with the Alibre software on their computers can collaborate with other engineers over the Internet, and through this peer-to-peer distributed computing architecture, they do so without hogging bandwidth.

The Napster phenomenon also illustrates the ease with which software tools and content can be copied and distributed over the Internet. The near-zero cost of replicating software, electronic entertainment or other knowledge-based offerings is a driving force in the new economy.

It's a force Lovitt and his partners at Rational Software know well. "Earlier technologies were mostly automation technologies," Lovitt says. "The combination of communications, software and semiconductor technologies now allows knowledge to evolve and be encoded quite rapidly. Once knowledge is encoded, the cost of replicating that knowledge is virtually nonexistent." So while the marginal costs of reproducing and distributing software over the Internet is near zero, businesses can no longer expect to hold market share for long. Too many other companies can duplicate their innovation, then distribute their new product cheaply and rapidly. That's why companies like Lovitt's emphasize



The demand for online storage services like those CreekPath provides is expected to increase dramatically in the coming years.

—MIKE KOCLANES,
CSCI'79

(Continued on page 13)

START-UPS, STOCK OPTIONS, AND ALL THE GOLD IN CALIFORNIA

BY LANCE FEYH

FLASHBACK THREE YEARS. UMR GRADUATE

William Eatherton, fresh out of graduate school, was one of the original employees of Growth Networks, a St. Louis start-up that made computer chips. One day, the company was sold to Cisco Systems. Just like that, Eatherton and his Growth Networks co-workers became the property of Cisco, an Internet communications giant headquartered in California's Silicon Valley.

Just like that, Eatherton, EE'95, and the other Growth Networks employees — who all had stock options — were flush with cash. The deal was worth more than \$300 million.

As part of the acquisition agreement, Eatherton is obligated to work for Cisco. He's obligated to lend his technical expertise, at least for a few more years, where needed. He's obligated to live in California and to do things like jet off to a meeting in Paris at a moment's notice.

"I've got the golden handcuffs on for the next two years or so," Eatherton says. "We'll see what happens after that. I'm really enjoying my work at Cisco right now."

Things move fast in the Internet industry. Three Washington University professors started Growth Networks in 1997. Eatherton, who went to graduate school at Washington University, and two other engineers signed on in 1998 to form the core of the start-up. The acquisition happened less than a year later.

"One day after lunch, one of the original founders came in and said, 'You've been hearing some rumors. Well, they're true.' Then he introduced us to our new group leader from Cisco," Eatherton recalls. "There was the realization that a lot of us were going to do very well financially. Then we had a rapid-fire orientation that afternoon and went to work for Cisco."

Growth Networks had about 40 employees. Cisco has more than 30,000. Eatherton says most start-ups are conceived with the goal of eventually being acquired by a larger company. "In setting up a company, it's important to be acquisition-friendly," he emphasizes. "There is a correlation between the number of engineers in a start-up, for instance, and the acquisition price."

Cisco is essentially making the boxes that computer chips fit into, Eatherton says. "Specifically, we're working on an innovative Internet service router. We are in the design phase. These boxes will be the core of the Internet. Over 80 percent of all Internet traffic should go through this system."

And billions of dollars are at stake. "Cisco is a leader in this," Eatherton says. "But I can't say too much. You have to be secretive in this business."

Eatherton lives in the Bay area with his wife Michelle and their son Keagan. They like the fast pace of life in Silicon Valley, at least for now. And although Eatherton became wealthy at a young age, he still finds more than enough motivation at work. "Your work reflects your abilities and affects your future," he says. "But if I want to take time off, I don't tell anybody. If I

need to work from home, I do. That's the dynamic. That's the way it should be. Managers can't afford to be dictators in this industry. You motivate yourself."

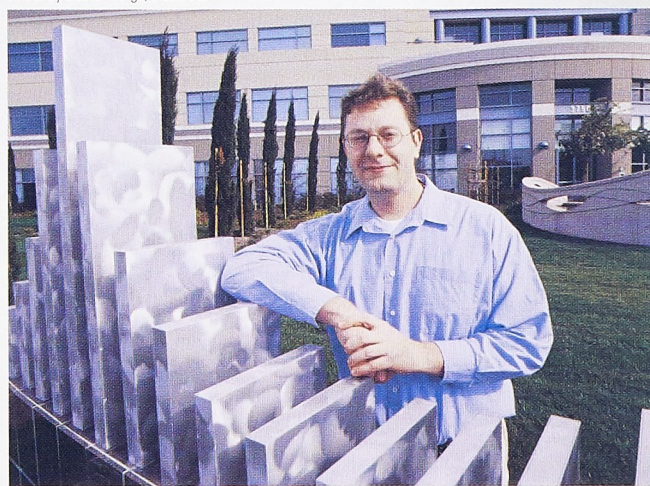
Way back in 1998, Eatherton certainly didn't have to look very far for motivation. "At Growth Networks, the question was, are these stock certificates going to be worth anything? We worked on the weekends and in the middle of the night," he says. "I would get up at three in the morning and turn the computer on because I couldn't sleep."

Those were exciting times and Eatherton recalls them fondly, but he probably sleeps a little better now. He's probably just a little more comfortable in general. Those golden handcuffs don't seem to be bothering him much at all.

"... WE'RE WORKING ON AN
INNOVATIVE
INTERNET SERVICE ROUTER."

—WILLIAM EATHERTON EE'95

Photo by David Toerge/Black Star



FROM JUNIOR HIGH TO HIGH TECH

BY LANCE FEYH

TONY GAINES, EMGT'84, AND KERRY RHEA, EE'84, have known each other for as long as they can remember. "Our parents knew each other before we were born," Gaines says. "Kerry and I used to build model rockets together, setting the occasional field on fire."

In junior high, Gaines and Rhea teamed up with another future UMR graduate, **David Gardner, EE'84**, who was destined to set the high-tech camera industry on fire.

Gardner met Gaines and Rhea at Willard (Mo.) Junior High School. They all went on to earn degrees at UMR. In 1992, Gardner started Silicon Mountain Design, a Colorado Springs, Colo., business that used new technology to create high-performance camera equipment. Gaines and Rhea joined SMD as engineers soon thereafter.

"Kerry and Tony were both the type that knew they would be engineers from kindergarten on," says Gardner, who was a welder for two years before going to college. "I was a late bloomer. I liked tinkering with stuff as a teenager, trying to fix things or make them do things they were never intended to do. Now I am more interested in solving business problems where lots of issues must be juggled at the same time."

Gardner sold SMD to a Canadian company, DALSA, in 1999. But all three of the friends still work for DALSA in Colorado Springs as part of the acquisition agreement.

Although they miss the creative freedom they enjoyed before the sale of SMD, the trio finds work at DALSA rewarding. Currently, they are trying to develop a new digital cinematography camera for the motion picture industry.

"Success depends on developing a suitable prototype of the new motion picture camera in about six months," says Rhea, who once built a working motor out of some iron pipe, old bolts and magnet wire in junior high.

"The quality must be nearly perfect," Gardner says. "From a business point of view, the real challenge is in building a camera which has the acceptance of the Hollywood community."

Gardner and the others need new challenges to motivate them now that the competitive edge they relied on at SMD has been diminished. "The fear is no longer there," Gardner says. "It used to be, if the company were to go under, I would lose my house."

Gardner, Rhea and Gaines all say they will eventually move on to new opportunities. In fact, Gardner is already thinking about the next imaging or high-performance motor company he can start. But that doesn't mean they'll be parting ways anytime soon. If the past is any indication, the three old friends will be working together in some capacity for a long time.

"THE **QUALITY**
MUST BE NEARLY PERFECT."

*David Gardner,
Kerry Rhea and
Tony Gaines at the
Garden of the Gods,
Colorado Springs, Colo.*

Photo by Brian Payne/Black Star

The burgeoning Internet economy has fueled much of the recent growth in intellectual property business. "Intellectual property is the currency of an information economy."

~ GREGORY E. UPCHURCH, PHYS'72



speed and agility. "The importance of getting there (to market) first" with their products and services becomes even greater in the digital economy, "even though you know that your competitors will quickly follow" because of the ease with which new products can be replicated, improved upon and distributed.

The Internet's distributive nature is also a boon to Koclanes' CreekPath Systems. By providing online storage for Internet companies, CreekPath is poised to take advantage of a mushrooming demand for these services. A study by Forrester Research estimated that online storage will grow from an average of 15,000 gigabytes per company in 1999 to 153,000 gigabytes by 2003, representing a compound annual growth rate of 78 percent.

Global swarming and convergence

Finally, Napster embodies what technology journalist Charles C. Mann calls the global "swarm." As Mann explains in a *Yahoo! Internet Life* article last December: "When people are linked without interruption, they will get more of what they want from one another — that is, from other folks in the swarm. Think of an 18th-century village, its inhabitants constantly talking among themselves, borrowing tools, and exchanging favors as they work and play. The wonder of networking technology is that the 21st-century swarm could be just as close-knit and sociable as its predecessor, but contain billions of people." That's why Grayson has faith in the business models of Internet companies like eBay and Yahoo, both of which link millions of people into mini-communities based on their like interests.

Lovitt and Rational Software are taking a slightly different path into the digital future, developing the tools for software companies to create "e-devices" that are interconnected in ways that go beyond the Internet. Consider the global positioning system. Once a tool for the military, the GPS is now a popular addition to new cars. Lovitt envisions a future in which drivers will receive the latest GPS downloads via satellite every time they start their engines.

But there's even more that can be done with this wireless technology. According to Lovitt, Rational is developing software for a manufacturer of over-the-road semi trucks that will integrate with the GPS technology to allow for "dynamically tunable" engines and transmissions. With such a technology, a trucker hauling produce from Florida to Western Canada, for example,

wouldn't have to worry about how the various climates and terrain affect engine performance. The motor and transmission would automatically be optimized to handle the latest conditions — whether in the hot flatlands of Texas or the steep highways of the Rocky Mountains — based on data downloaded regularly via the vehicle's GPS.

Brighter days ahead

According to our experts, the technology sector is alive and well, even though it sustained some blows in recent months. Tech stocks might even be safe for investors again. "I feel they will continue to grow, not at the inflated pace they once were, but at a more realistic rate of growth," says Dillon. "The growth of our nation is highly dependent on future advances in technology. The dot-bomb is only temporary."

The future looks bright, too, for computer scientists, software engineers and budding entrepreneurs. For the latter, Grayson sees plenty of opportunity in this emerging digital economy.

"It's an ideal environment to create a new business model," he says, adding that the World Wide Web provides "a readily available communications and distribution vehicle" for contacting potential customers. The Web's distribution capabilities make it possible for tomorrow's entrepreneurs to build the proverbial garage start-up, just as Grayson did with his first business, Micrografx. "There's low overhead costs in a garage," he says. "You don't have to have a lot of sales in the first year to feed yourself."

Using the Web's distribution capabilities is central to Dillon's new venture, GuitarSolo.com Publishing Co. He plans to expand the business, which currently features his own works.

For those who don't want to start their own Internet business but plan to work in the sector, Lovitt offers simple yet profound advice. "Stay flexible," he says, and "be prepared for continual change."



"The way we think of the Internet business is as part of a larger evolving set of technologies ... that are driving a whole set of evolutions in the way people capture and apply knowledge."

~ JOHN R. LOVITT,
CSCI'70

RALPH LEE CAUGHT A glimpse of the future in the summer of 1956, while working as a senior research mathematician for North American Aviation's plant in Downey, Calif. A member of the mathematics faculty at MSM at the time, Lee took the summer off to work on North American Aviation's ballistic missile program.

"I sat near a computer user of the largest IBM computer system they had," recalls Lee. "She was a very smart programmer, and I learned a lot from her."

One lesson he learned was that the computer was here to stay, and would play a huge role in higher education. But MSM, like a lot of college campuses in those days, didn't even have a computer.

Lee wanted to see that change. "After that summer was over I made up my mind to teach a course on computers," he says. So in the spring of 1957, Lee taught his first computer-related course in MSM's mathematics department. Students were eager to learn all they could about computing. "The enrollment in that course really skyrocketed."

There was just one slight problem: the campus still didn't have a computer. The students in Lee's course used calculators to do their computations. But in 1959, Lee was one of 12 faculty members chosen to attend a National Bureau of Standards program on teaching other professors how to use the computer. "The main thing I got out of that was information on grants for computing from the National Science Foundation."

Again inspired, Lee returned to Rolla and began writing proposals to NSF. He received a \$30,000 grant that fall, "and we selected a computer system we could get for that amount of money."

As big as a desk, the first computer arrived in February 1960, along with two punch machines. The system was installed in a room on the top floor of the Butler-Carlton Civil Engineering Building.

As the campus' de facto computer expert, Lee was stationed in an office just down the hall from the machine.

"A week after it came in, I taught a class on how to use it, and there were about 100 faculty members" enrolled, says Lee, who retired from UMR in 1985 as professor emeritus of computer science and mathematics and director emeritus of what then was called the computer center. "We didn't actually use that computer much, though. Most of our instruction was on theory and how to use the computer to solve scientific problems."

But it was just a short leap from those days to the creation of a bona fide academic discipline for computing on campus. By 1963, the campus had two new IBM 1620 computers. That same year, Lee says, "I suggested to (then-Chancellor) Merl Baker that we should start a master's degree in computer science."

The degree was offered through the mathematics department. The computer science department wasn't established at UMR until 1969. But even in the early days, demand was high.

"The first year we had the master's degree I was awarded two or three graduate assistantships and I got 43 applications for them," Lee says.

A Ph.D. in computer science was established in 1975. By the time Lee retired 10 years later, the program was on solid ground. There was even a network of sorts, with connections from Emerson Hall to the computer center, then housed in the basement of the Computer Science Building. "We had a net here, but it was a slow net," Lee says.

These days, Lee is enjoying retirement in Rolla, where he manages to get by with no personal computer or Internet connection.



A BRIEF history of computing

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Cooperative program bears fruit

Partnership between UMR, Sprint and Metropolitan Community Colleges of Kansas City produces first graduate

When **Kim Kennedy**, ECE'00, walked across the stage to get her degree last December, she became the first graduate of a cooperative program between UMR, Sprint and the Metropolitan Community Colleges of Kansas City. Kennedy took advantage of Sprint's investment to help Kansas City-area minority students earn engineering degrees.

Through the program, which was featured in *The Kansas City Star* in December, Sprint Corp. provides scholarships for students to study at one of Kansas City's Metropolitan Community Colleges, and then at UMR. Sprint also gives them paid internships every summer, then offers those who graduate an engineering job.

Kennedy started her career in January in Sprint's network planning lab. "We're tickled to death," Bill Vest, Sprint's vice president of network engineering for the local telecommunications division, told *The Kansas City Star*. "The main thing we're looking to get out of the scholarship program is being a good community citizen. But we also are selfish in filling our staffing needs. We value diversity."

The program began five years ago. That's when Vest visited Floyd Harris, director of UMR's Minority Engineering Program, and asked how Sprint could help boost the low numbers of minority students going into engineering. Harris suggested the transfer program with Metropolitan Community Colleges. The program is modeled after a successful program UMR developed with St. Louis Community Colleges and Emerson, a major employer of engineers in St. Louis.



Kim Kennedy

Joint admissions program strengthens UMR-East Central College partnership

Students who transfer to UMR from East Central College in Union, Mo., will feel more a part of the UMR family even before they get to campus, thanks to a new partnership between the two schools. UMR Chancellor Gary Thomas and ECC President Karen Herzog signed a "concurrent admissions program" in November, meaning that ECC students who transfer to UMR will automatically be accepted for their junior year at UMR upon completion of the ECC program.

"As partners in higher education in Missouri, East Central College and UMR share a mutual interest in providing a quality education for all Missourians," says Thomas. "With this concurrent admissions program, the students of East Central College who transfer to UMR will see the true seamlessness of their educational experience. They'll see East Central and UMR as true partners in Missouri's system of higher education."

The agreement follows years of close cooperation between the two schools, Herzog says. "The groundwork for the concurrent admissions program has been laid by the very positive experience students have already had when transferring from ECC to UMR," she said. "This new program validates the work that has already taken place between the two institutions, and enhances the opportunity for students to begin their college studies at East Central and complete a bachelor's degree at UMR."

More free time

No one has ever accused UMR students of having too much time on their hands. But at least they're getting a bit of a breather nowadays.

This semester, UMR began a policy of providing an hour of academic free time on Tuesdays and Thursdays. The scheduling change is designed to promote more interaction among students and faculty.

The change eliminates classes between 12:30 p.m. and 1:30 p.m. on Tuesdays and Thursdays this semester and gives students and faculty the chance to participate in campuswide community-building experiences, such as seminars and meetings.

A degree by desktop New systems engineering degree is online

UMR's first desktop degree — one delivered entirely over the Internet — is a master's degree program in systems engineering. The new program is designed to train engineers for complex, large-scale projects, such as aircraft or space shuttle design, that involve several engineering disciplines.

UMR has been working with the University of Southern California to offer systems engineering courses to employees of Boeing Co. Last semester, 80 students — 70 at Boeing sites across the United States and 10 on the UMR campus — were enrolled in the fledgling program.

According to **Cihan Dagli**, director of the new degree program and a professor of engineering management, the degree was a response to an unmet need in industry. "As engineering systems become more complex, we need engineers who are capable of managing these large projects," he says.

More information about the online program is available at www.umn.edu/~syseng/.



Photo by Bob Phelan/Photomasters

A real-world test Students design — and build — products to help disabled kids

A complaint circulating among academics in recent years has been that engineering students don't get enough opportunities to put design theory into practice. For 13 graduate mechanical engineering students at UMR, that no longer holds true.

The students put their product design skills to work last semester, creating products to help teachers in the Rolla public school system teach students with disabilities. In the process, the UMR students learned important lessons about manufacturing products to customer specifications.

Working in teams and in consultation with teachers and students in the public schools, the graduate students designed and built full-scale prototypes of three products: an activity board for special needs students in high school, a set of training steps for preschool students with mobility problems, and a vestibular swing for autistic students.

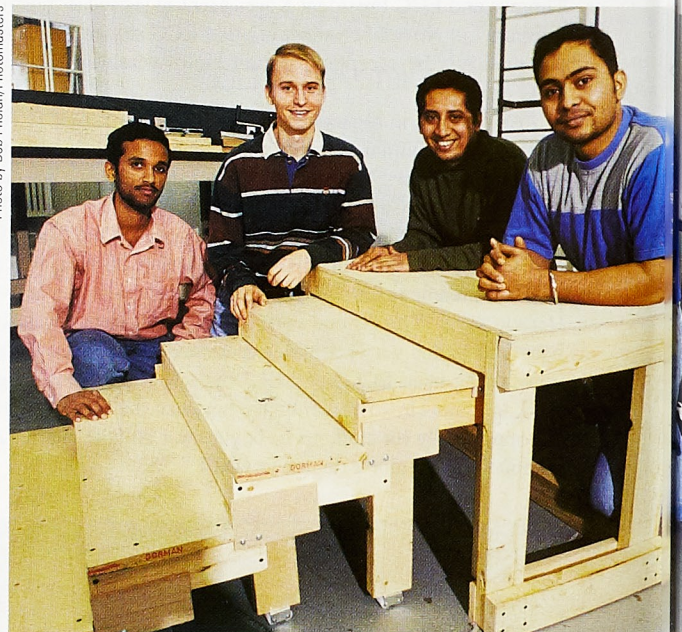
The project was part of an experimental course called Modern Product Design, offered for the first time this year by UMR. Instructors **Robert Stone**, assistant professor of basic engineering, and **Daniel McAdams**, assistant professor of mechanical engineering, plan to offer the course again next fall. They say the course not only provides a service to the local schools, but also teaches students about the importance of designing products to customer specifications. By working with the teachers and students who would ultimately use their products, the students discovered that designs that work on paper don't always translate well to the real world. For example, the student team that designed the training steps had to rework their plans after the original prototype took too long to set up. Their solution: a set of collapsible steps that roll out like bleachers in a gymnasium.

The students also learned about the latest research in manufacturing design. "The fun part is that these ideas coming out of the research community may or may not be that well developed, and we get to try them out here," says McAdams. ■

Above, left: UMR students Karthik Sivaramakrishnan, Zeke Strawbridge and Julie Hirtz with an activity board they created for special needs students in high school.

Below: Aditya Velivelli, Mark Kurfman, Karthik Sampath and Balaji Chandrasekaran designed a set of training steps for preschool students with mobility problems.

Photo by Bob Phelan/Photomasters



Historian looks at race relations

Patrick Huber, an assistant professor of history at UMR, is looking into a dark chapter in his hometown's history. In October of 1930, the murders of two local laborers by three African American migrants sparked a three-day race riot in Huber's hometown of Ste. Genevieve, Mo. Approximately 250 black residents fled during the disturbance. Only two black families, sheltered by the local Catholic priest, remained in town after the riot.

"Although the white townspeople invited black residents to return to their homes a few weeks later, the African American population never reached pre-riot levels," says Huber. "When I was growing up, only one black family lived in Ste. Genevieve. They were direct descendants of one of the families protected by the priest."

Huber's book project, supported in part by a grant from the State Historical Society of Missouri, is an examination of how the 1930 race riot and the exodus of black citizens has shaped race relations in Ste. Genevieve for the past 70 years. ■

Born to be wired Professor examines Web and the art of motorcycle maintenance

Mike Hilgers knows that riding a motorcycle is more of an emotional experience than an intellectual pursuit. But he does believe in quantifying that emotional experience, and he's using the Internet to help one motorcycle company generate feedback from bikers.

"I proposed to Honda that you can quantitatively measure the desired geometry of a motorcycle," says Hilgers, an assistant professor of computer science. "People can become very attached to the way their motorcycle looks in addition to the way it rides." Thanks to a grant from Honda, Hilgers created a Web site (www.umn.edu/~honda) that features an interactive

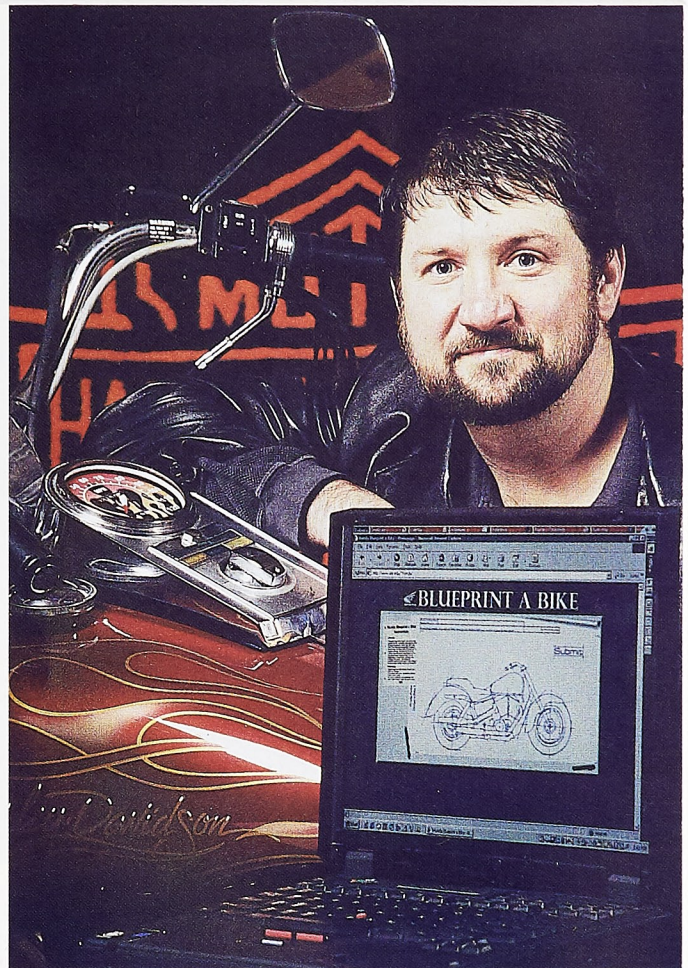


Photo by Bob Phelan/Photomasters

Mike Hilgers's Web site (www.umn.edu/~honda) features an interactive blueprint of a Honda Shadow. Motorcycle enthusiasts can access the blueprint and make changes.

blueprint of a Honda Shadow. Motorcycle enthusiasts can access the blueprint and make changes to various angles by clicking on the handle bars, for instance. Feedback is monitored, calculated and averaged in order to derive quantitative information about the most appealing features of a motorcycle's design. Honda will eventually be able to use the information to make decisions about future designs.

"Architects have long known that rectangles are appealing in buildings," Hilgers says. "In motorcycles, I suspect the triangle is most appealing aesthetically."

The "triangle" is represented by connecting imaginary points from the front fork to the handle bars and the rear fork. On the Internet site, these are the areas of the blueprint most often manipulated by would-be designers. Hilgers, himself a biker (he rides a



Harley-Davidson), says many motorcycle enthusiasts favor the chopper look: elongated handle bars, an extended front wheel, and a longer, lower frame.

Hilgers emphasizes that image and other factors unrelated to performance play an important role in cycle-purchasing decisions. He also maintains that the ultimate way to build a good motorcycle is to bring customers into the artistic phase of its design.

"A motorcycle represents freedom to many riders," says Hilgers, whose love of motorcycles began in fifth grade, when his father put him on his first dirt bike. "The ultimate way to become a safe rider is to grow up in the dirt with a bike while your bones are still fairly elastic," he says. ■

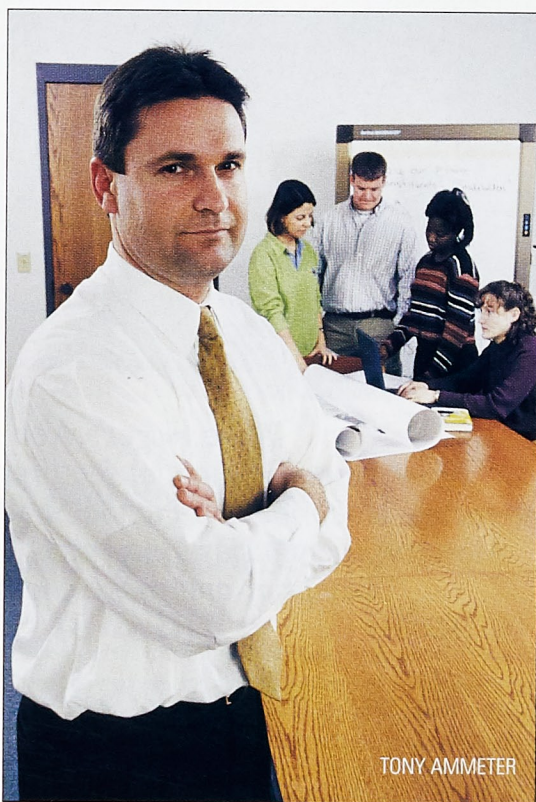


Photo by Bob Phelan/Photomasters

People with similar job backgrounds don't trust each other as much as they do co-workers from other backgrounds.

TRUST US: this story could help you on the job

Think you can trust that co-worker who does the same job as you? Better think again.

Tony Ammeter, an assistant professor of engineering management at UMR, says people with similar job backgrounds don't trust each other as much as they do co-workers from other backgrounds.

Ammeter's observations stem from his study of MBA students working together in small groups. He found that people with similar job backgrounds were less likely to trust others from the same background. "In cross-functional teams, this somewhat curious finding might be explained as a by-product of a desire to be the sole holder of expert power in one's area of expertise," Ammeter says. The levels of mistrust "seemed to dampen as time passed," Ammeter adds, "suggesting that if these undercurrents of competition exist initially, they decrease as the coworkers coalesce to perform their tasks."

In conducting his research, Ammeter studied teams of first-year MBA students who worked together over four months to complete class assignments. Adjusting the teams to maximize diversity of gender, race, age, occupational background, industry experience and undergraduate major, Ammeter surveyed team members to see how demographics, social contact and employment experience affected levels of trust among the subjects.

He found that racial similarity is important in developing trust at the beginning of a relationship in a team environment, and that social contact increased levels of trust. But he was surprised to discover that job similarity had a negative affect on trust.

"Work environments are becoming increasingly diverse in terms of gender, race, work background and experience," says Ammeter. "The increased diversity in project teams reflects this trend."

Increasing the levels of social contact at the beginning of a project through activities such as "kick-off" sessions may help increase trust levels, Ammeter says.

"Similarly, if people with similar work backgrounds or expertise areas feel threatened, clearly detailing the responsibilities of each party so that neither feels in competition with another may help alleviate this problem," he adds. ■



Stepping back in time



Photo by Terrill Story/Publications

A CONSTRUCTION CREW working on the Butler-Carlton Civil Engineering Building took a step back to the past last February, when they uncovered information from the days when Alaska was a brand new state, Fidel Castro was the new leader of Cuba, and the Cold War was escalating.

While working on the CE building renovation, workers discovered a time capsule in the

The cards accompanied half a dozen black-and-white photos from the late 1950s, several departmental and university publications, a map of Rolla, and a copy of the Feb. 27, 1959, edition of the Missouri Miner student newspaper. (The top news of the day included the retirement of Minnie Timberman, the MSM Infirmary's head nurse since 1926; the selection of Ralph

cornerstone in early March 1959. That was the year Alaska and Hawaii were admitted into the union, Castro took over as Cuba's leader, and then-Vice President Richard Nixon and Soviet Premier Nikita Khrushchev engaged in a so-called "kitchen debate" on the merits of communism and capitalism.

Construction workers discovered the time capsule on

The capsule was included in the cornerstone in early March 1959. ...the year Alaska and Hawaii were admitted into the union...

cornerstone set in the building's front entrance. Prior to soldering the copper capsule shut back in 1959, faculty members Ernest W. Carlton, CE'26, '31 (the "Carlton" in the building's name), Leon Hershkowitz, CE'41, '48, and J. Kent Roberts, MSCE'50, inserted their business cards.

Marterie to play at the St. Pat's Masquerade Ball; an upcoming concert by the Schmitz Sisters; and a notice from St. Pat that "snakes are taking over the campus" and "freshmen should have their shillelaghs by Monday, March 9.")

According to Roberts, the capsule was included in the

Feb. 16, 2001. The civil engineering department staff and faculty plan to add new mementos to the time capsule, re-seal it, and bury it prior to completion of the building expansion and renovation project this fall.

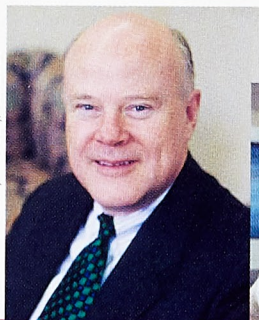


Former U.S. Embassy official picked to lead administrative services

UMR's administrative services division now has an international flavor with **Stephen Malott** at the helm. Malott, a former administrative counselor for the U.S. Embassy in Prague, Czech Republic, became vice chancellor for administrative services at UMR on Feb. 1. He replaces Mohammed H. Qayoumi, who left UMR last June to become vice president for administration and finance and chief financial officer at California State University-Northridge.

Malott was a foreign service administrative officer with the U.S. State Department from 1982-2000. Prior to his assignment in Prague, he held positions in the West African nations of Guinea and the Ivory Coast; in Calcutta, India; in the Netherlands Antilles; and in the Indian Ocean island nation of Seychelles. He's also experienced in higher education, having worked for the University of Alaska, Georgetown University and the University of Southern California before embarking on his career as a diplomat.

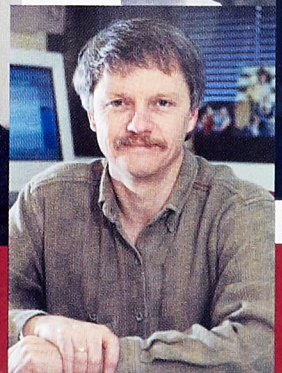
Photo of Steve Malott by Terrill Story/Publications



Changes in ceramic engineering, materials research

Richard Brow, professor of ceramic engineering since 1998, became chair of the department on Jan. 1. He replaces **Wayne Huebner**, CerE'82, PhD CerE'87, who was named director of UMR's Graduate Center for Materials Research, also on Jan. 1. Huebner replaces James O. Stoffer, Curators' Professor emeritus of chemistry, who directed the research center from 1992 until his retirement in 2000.

Photo of Richard Brow by Bob Phelan/Photomasters



Steel center named for Yu

Wei-Wen Yu, Curators' Professor emeritus of civil engineering, has been associated with UMR's Center for Cold-Formed Steel Structures since its founding in 1990. Now that connection is even stronger.

In honor of Yu's contributions to the cold-formed steel industry, the center's founding partner, the American Iron and Steel Institute, suggested the campus renamed the center the "Wei-Wen Yu Center for Cold-Formed Steel Structures." Yu, the founding director of the center, retired in December. Yu's contributions were recognized during UMR's 15th International Specialty Conference on Cold-Formed Steel Structures last October in St. Louis.

The center was established on the UMR campus in 1990 with sponsorship from AISI. The center now has six industry sponsors.

Succeeding Yu as director of the center is **Roger A. LaBoube**, CE'70, MS CE'73, PhD CE'77, Distinguished Teaching Professor of civil engineering.

Photo of Michelle Paulsen by Terry Sharp/Sharpshooters



Photo of Wayne Huebner by Bob Phelan/Photomasters



File photo of Wei-Wen Yu by Dan Seibert

Photo of Andrew Careaga by Bob Phelan/Photomasters



Dirt

Dirt is the second and most recent book of poetry by **Michelle Paulsen**, a UMR lecturer in English. *Dirt* was published recently by Hope and Allen Publishing of Grants Pass, Ore. (For details on the book, visit the publisher's Web site at www.hopeandallen.com.) Paulsen's first book of poetry, *What Wells Up*, was published in 1997 by Edwin Mellen Poetry Press of Lewiston, N.Y. Her poetry also appears in online literary journals such as *2River* (www.daemen.edu/pages/rlong/tworiver/default.html) and *Graveworm* (www.graveworm.com).

eMinistry: Connecting with the Net Generation

Another UMR writer has had a second book published recently. **Andrew Careaga**, news and features editor for the *MSM-UMR Alumnus*, is the author of *eMinistry: Connecting with the Net Generation*, published in February by Kregel Publications of Grand Rapids, Mich. (www.kregel.com). More information is available at the book's Web site, www.eministryonline.com.

Scholarship for Illinoisans

J. Russell Snowden, CE'47, of Louisville, Ky., a native of Cuba, Ill., and his wife **Betty Jo Snowden** recently established a scholarship fund to encourage students in central Illinois to study engineering at UMR.

The Snowdens' gift of \$100,000 creates a scholarship fund targeting students from Cuba (Ill.) High School or other high schools in Fulton County, Ill., who come from single-parent homes. The scholarship will provide up to 50 percent of the recipient's educational fees each academic year.

Snowden is professor emeritus of civil engineering at the University of Louisville's Speed Scientific School, where he received numerous outstanding teaching awards. For more information about the scholarship, contact the UMR office of admission and student financial assistance toll-free at 1-800-522-0938 or at (573) 341-4165, or via the Internet at umrolla@umr.edu.

Petroleum engineers

Back in demand

The rising price of gasoline over the past year wasn't all bad. It has helped to fuel a resurgence in the demand for petroleum engineers in the United States.

"After about a 15-year lull, I really believe that the interest in petroleum engineering is back," says **Leonard F. Koederitz**, ChE'68, MS PetE'69, PhD PetE'70, Distinguished Teaching Professor of petroleum engineering at UMR. He notes that this year's crop of petroleum engineering graduates from UMR will receive an average of five job interviews and four job offers.

"The best part of all this is the salary those graduates will receive," Koederitz adds. "Each graduate will receive a salary of about \$58,400 to start their careers."

Interest in petroleum engineering began to decline rapidly in the mid-1980s, when the Organization of Petroleum Exporting Countries (OPEC) flooded the global market with oil. That created low oil prices and stalled oil exploration, says Koederitz, who also chairs UMR's department of geological and petroleum engineering. "That low price made it impractical for the oil industry to explore new sources for oil. There just wasn't much interest in the oil industry," he says.

The main reason for a renewed interest in petroleum engineering is increased profits for oil companies. Moreover, many petroleum engineers are retiring. "There is a shortage of petroleum engineers because the average age of petroleum engineers is higher now."

Chancellor Thomas restructures administration

Changes are in the works for the UMR administrative structure under **Chancellor Gary Thomas'** leadership. Thomas, who became chancellor last fall, is reorganizing to focus the campus administration on improving the campus' academic reputation and increasing enrollment.

Thomas first presented his plan to the UMR Board of Trustees, an advisory group made up of UMR alumni, last October. He later outlined the plan in a November 2000 meeting of the UMR Academic Council, then presented the plan for input from all UMR faculty and staff.

"In broadest terms," Thomas explained, "the proposed objectives endorsed by the Board are that UMR strive to be among the top-tier undergraduate institutions in the nation and one of the top 50 Ph.D. granting institutions offering engineering programs. ...

"For UMR to obtain further recognition for its outstanding programs, faculty, staff and students, I believe it will be necessary to create a few additional administrative positions and to reorganize the duties of others." The biggest change involves the creation of a provost's position, to replace the vice chancellor for academic affairs. The deans, who currently report directly to the chancellor, will report to the provost under this new structure. UMR's current vice chancellor for academic affairs, Walter J. Gajda Jr., anticipates returning to full-time duties as a faculty member in UMR's department of electrical and computer engineering. Gajda will remain in his current position until a provost is named.

Other changes include:

- The creation of a dean of enrollment management position, to oversee UMR's office of admission and student financial assistance.
- The creation of a vice provost for research position to coordinate campus research efforts.
- The creation of the position of vice provost for information technology. "The information needs of the campus are increasing daily," Thomas says. "If we are to remain in the forefront of technology, we must focus more attention on this area."

FOR MORE INFORMATION ABOUT CAMPUS NEWS,
CONTACT THE OFFICE OF PUBLIC RELATIONS AT 573-341-4328
OR VIA E-MAIL AT NEWSINFO@UMR.EDU.

Miners qualify 11 swimmers for national meet

The UMR swimming team has a good shot at another high national finish this spring.

The Miners qualified 11 swimmers for the NCAA Division II Championships, slated to take place in March in Canton, Ohio. The 11 qualifiers included five who won All-America honors last season at the NCAA Division II Championships — **Dave Belleville, Jeremy Evans, Mike Lach, Josh Jolly** and **Vanja Dezelic**.

Belleville qualified in all five relay events and in two individual events in which he established new school records. Evans made it in four relay events, one of which set a new record, while Lach qualified in two relays including a record-setter and the 50-yard freestyle.

Jolly was a qualifier in the 200-yard freestyle relays and 100- and 200-yard backstroke events, while Dezelic made it in the 800-yard freestyle relay and four

freestyle events. The other six to qualify for the first time included **Cagri Sapmaz, Seth Aldrich, Sean Garceau, Jack Pennuto, Sean O'Donnell** and **Mike Minard** (Lenexa, Kan./Shawnee Mission West). All are freshmen except for Garceau, a sophomore who narrowly missed qualifying last season.

All 11 qualified at the Arkansas-Little Rock Invitational in December.

Something old, something new highlights basketball season

The story of the men's basketball season at UMR has been about a veteran and a rookie — and their impressive play despite the fact that the team has played shorthanded all season.

The veteran is **Kasim Withers**, who had to step into a leadership role after **Scott Holly** suffered a season-ending injury prior to the start of the campaign. Withers averaged close to 19 points a game for the Miners and is second in the conference in assists. In December, he was selected as the MIAA's "Player of the Week" after hitting the game-winning basket in the final seconds of an overtime win over Rockhurst.

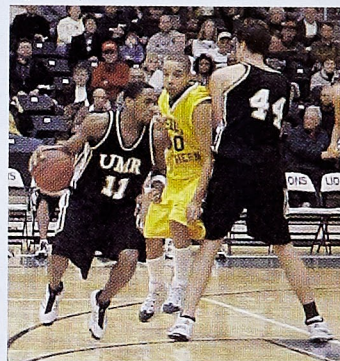
If anyone has been more impressive than Withers, it would be **Brian Westre**, a freshman who has played like one of the

nation's top freshmen this year. Westre has averaged 21.7 points, 10.7 rebounds and more than two blocked shots per game. His scoring average is second among freshmen in NCAA Division II, while the rebounding figure is the best among all freshmen in that classification.

Like Withers, Westre was also named as the league's top player for a week after helping the Miners win their first two conference games of the 2000-01 season.

On the women's side, **Jackie Kelble's** play has been a bright spot in an otherwise inconsistent year for a youthful Lady Miner squad. The senior forward has scored in double figures in all but one game through mid-January and is closing in on the 1,000-point mark, a total reached by only 10 other

Digital file photo from UMR Public Relations



Kasim Withers (11) works the ball.

players in school history.

Kelble was named to the all-tournament team in two events this year, while teammate **Amy Milliken** also won the honor in the Missouri Western Classic.

UMR duo named to Verizon Academic All-District team

Two members of the UMR football team were named to the Verizon Academic All-District VII football team for the 2000 season.

Jason Elrod, a junior linebacker from Rolla, Mo., and **Alex Mendrygal**, a sophomore placekicker from Libertyville, Ill., were named to the third team for the district that covers a nine-state area in the upper Midwest.

Elrod, a biological sciences major at UMR, has started every game for each of the last two years at linebacker for the Miners and finished as the team's second-leading tackler with 93 stops in 2000. He

also made five tackles for a loss, forced three fumbles and recovered two, and has intercepted one pass which he returned 35 yards for a touchdown against Pittsburg State on Oct. 28. He has been a member of the honor roll and dean's list at UMR and was a member of commissioner's academic honor roll as named by the Mid-America Intercollegiate Athletics Association for the 1999 season.

Mendrygal has served as the Miner kicker for the past two seasons and converted 16 of 17 extra points and five of 12 field goal attempts this fall. He made a decisive 24-yard field goal with just over a

minute to play in UMR's 22-20 win over Missouri Valley on Sept. 9 and hit a career-best 47-yard field goal against Pittsburg State during the year.

A mechanical engineering major at UMR, Mendrygal was named to the university's honor roll and to a national dean's list after the 1999-00 academic year. He is also a member of the M-Club, a service organization of student-athletes at UMR.

CORRECTION

In the **Impact of Giving**, which came out with the winter 2000 *Alumnus*, those who gave to the Athletic Department through payroll deduction between July 1, 1999, and June 30, 2000, were inadvertently omitted. We apologize for our oversight as these gift are a very important part of our athletic program at UMR. The amended list is below.

HONORARY COACHES (\$1,000 & UP)

David & Patricia Anderson '51
Keith & Pat Bailey '54
Jerome Berry '45
Robert T. & June Berry '72
Wayne & Helen Broadus '55
Jeffrey & Jane Brunmet '72
David & Lisa R. Burwell '90
Diane Butrus '85
Kathy & Karen Cannon
Central Federal Savings & Loan
Lawrence & Maxine Christensen
N. Les & Georgiana Clark '71
Powell & Pat Dennis '40
Gene & Ann Edwards '53
Bill & Celia Engelhardt '60
Neil & Beth Fiala '56
William & Dorothy Gannon '49
Hebbeler Bottling Company
Gerald Huddleson
Robert & Mary Keiser '65
Fred & Rheta Kossler '42
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Rodney & Nancy Lentz
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Dwight & Patricia Look
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Don & Pat Morris
James M. Murphy '56
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Jack & Marcia Ridley
Gary Roebke '77
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James & Mary Rueschhoff
John & Deborah Schork '47
C. Ann Shelton
Neil & Susan Smith
William & Ruth Ann Stoecker
Armin J. Tucker '40
Norman P. Tucker '40
Tony Wallace
Robert Ybarra

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Jerry & Shirley Bayless '59
Don & Nancy Brackhahn '93
Terry & Rhonda Buzbee '77
David Brian Cadoff '96
Robert E. Dallmeyer
David & Juliet Dearth '68
Donald J. Dowling '51
Paul & Eleanor Dowling '40
Mitchell & Teresa Esquibel
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Fathi & Debbie Finash
Mark A. Irsk
Kerry Philip Kimmel '32
Robert & Sybil Lange '37
Joseph & Elizabeth Long '58
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Joseph & Molly Morgan
Wendell & Sandra Ogrosky
Pryor Appraisal Services Inc.
Gary & Gayle Smith
UnitCorp United Energy One

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Perry & Ann Allison '59
Wayne & Jane Bennetsen '41
Frank & Linda Blum
Charles Bokath
John C. Borthwick
Vincent & Christina Budd '71
Jeff & Lisa Crawford
Robert & Joetta Campbell
Tom & Patricia Casady
Russell J. Crane '76
Robert & Claire Crowley
Gregory & Melissa Doss
Walt & Bob Eversman
Douglas B. Finley '83
John & LaNelle Gardner '51
John J. Glaves '48
Doug & Dyan (Rishi) Grooms
Floyd & Denise Harris '74
Lester & Joann Holcomb '51
Marvin & Mary Hudwalker '59
Timothy & Shan Hudwalker '88
James & Sue Hufham
Bobby J. Ingram '59
Kenneth & Beverly Jinkerson '75
Billy & Naomi Key
Jeffery & Lisa J. Kipp '81
Harold A. Krueger '42
Patrick & Cynthia Laegeler
Frank & Rita Lange
Gregory & Janet McClain '72
John J. Meyers '36
Robert & Janet Milne '73
Missouri Home Care
Jeffrey S. Morris

Lou & Jeanie Moss
Mark & Joanne Mullin
Don Myers '61
Frederick E. Nelson '72
Robert B. & Tommie Ruth Oetting '55
Perkins Lumber Company
Herman & Helen Pfeiffer '35
Charles & Agnes Remington '49
Robert & Becky Riess '79
Paul & Michele Santi
Kevin & Lynn Schwalze '96
Don & Linda Sparlin
Sports Locker
Sprint Foundation
Thomas, Birdsong & Becker
Mark & Julie Turley
Phillip & Sharon West

CENTURY BOOSTER CLUB (\$100 - \$249)

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Dewey & Josette Allgood
William & Shirley Andrews
Brian & Jennifer Andzjewski '87
Charles R. Armistead
Robert & Ruth Ballenger
Edward A. Ballman '38
Elizabeth Christine Barkey '80
Richard & Shirley W. Bauer '51
Howard & Sandra Becker
John & Cindy Beger
Edward J. Bober
George & Betty Bolton
Thomas & Martha Borgmeyer '69
Travis L. Boulware
Steven & Julie Brooks '80
Doug & Beth Brown
Douglas & Ann Brown
Robert & Elizabeth Bruce '69
Mel & Becky Bruemmer
Matthew Leroy Bryant '99
Jeffrey & Sheila Buck '77
Philip & Darlene Bullocks
Max & Jo Ann Burgett '54
Carl & Joyce Burns
James & Jerri Butts '72
Paul & Helen Carroll '50
James & Betty Chaney '48
Raymond Craft
Gary & Regina Christopher '73
Elaine L. Cockerham
Matteo & Kathleen A. Coco '66
Gary & Lauretta Coli
Sidney & Mary Cole '54
Vincent A. Como '98
Camille A. Consovo
Thomas W. Cooper '60
Jennifer Carolyn Cordes '91
Douglas & Leigh Anne Cordier '91
Wallace Craig
John R. Dalton '88
Andy Dial '38
Delbert & Shirley Day '58
Steve & Rochelle DellaRoche '81
Neil & Carla Derrick
David L. Dudenheffer
Calvin & Helen Duke '49
Andrew & Cecilia Elmore '86
Doug England
Cassandra Lee Engstrom '92
Gordon L. Erickson '71
Robert Adrian Etten '97
Armin & Marian Fek '41
Lynan & Esther Francis
Gary Fridley
Michael & Donna Friese '70
Herman Fritschon, Jr. '51
Ovilia Garcia
Lawrence & Catherine George '90
Bill & Judy Gerhart '61
John & Kristie Gibson '74
Roger & Barbara Giles
Raymond & Amber Gill '82
James A. Grace '76
Donald & Judy Hagen
Edward & Barbara Hale
Leon & Penney Hall
Peter & Joan Hansen '53
Steve & Kim Harrison '81
Philip R. Heller
D. Maxine & Fred Helsler
Fred & Doni B. Helsler
John & Linda Henry '66
Kevin & Elizabeth Hensley '85
Herman Lumber Company
Thomas and Mary Hermann '50
John William Hertel '93
Paul & Donna Hodson
Todd & Nancy Hubing
Carl & Eleanor James
Douglas & LeAnne Imrie '87
J & H Distributing
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Lenita A. Johnson
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Hal & Nina Jolly
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Wayne & Yvonne Lewis '70
Victor & Virginia Lomax '73
G. Edwin & Beth Loney
Richard & Nancy Lux '81
Angelo Madrala
Donald & Pat Mahlin
Larry Mahoney
John & Ruth McKee '41
William & Nancy Mengel '50
Mercantile Bank
John M. Moore '44
Hazel Morris
Kimberlee Anne Morris '94
Robert & Elizabeth S. Morrison '71
Richard & Roxi Napper
Michael & Amy E. Noble '91
Dennis Noel
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Stuart & Marina O'Kraski '87
Arlene Olander
Rebecca Elaine Ommen '82
Brian Gregory Panka '98
Ray & Judith Parker '80
Robert & Kay Parks
Mark & Leah E. Pearce
Keith & Cheryl Rackers '89
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Richard & Rachelle Reeg '54
John & Kim Ann Reiter '73
Ronald & Cathy Risher
Ricky Roth
Terrence & Sandra Rudy
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Harry & Katie Sauer '79
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Cindy Schroer
Michael Edwin Scott '96
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Doron Shapiro '84
Mark & Margaret Shilanta '88
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Patricia Martin Simpson
Michael & Rebecca Singleton
Samuel Smart '55
Merle & Judith Southern '61
Frederick & Dale Marie Springer '49
Jonathan Blake Stanley '96
James F. Stanfield '96
Ralph & Martha Staude
William & Clemence Stewart '54
Paul Robert Stricker '82
Thomas & Elizabeth Sunkel '65
Lanny & Maureen Swingle
Ronald & Mary Tappmeyer '47
Albert & Gladys Tetley '39
Jerry L. Turner '88
United Parcel Service
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James T. Van Ilen '99
Alexis A. Vander Horn
Robert Thom Vanderwall '94
Jon & Patricia Vaninger '63
Bret & Kimberly Voyppick '89
Alan Walter
John & Ann Watson
Anne Weller
Newton & Marilyn Wells '59
Louis H. Whitehair '59
Michael Paul Williams '98
John & Margaret Wilson
Brian Paul Wirscheil '92
Alfred Woodyard
Kenton Wright '75
Joanne & Steve Zap
Gerald & Mildred Zarr
Mark David Zarr '88
Donald J. Zeitzinger '82

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Robert & Vickie (Cole) Andree '69
Marvin & Dorothy G. Andrews
Steve Barnes & Lynn Stichnotte
Daniel & Paula Barrack
Barry & Patricia Bass
Mickey Beach
Thomas & Sarah J. (Pogue) Beebe '87
Gary & Catherine Bethke
Earl & Janice Bladel
Brent & Cynthia Blizewski '72
Michael R. Beck
Fred Bodenhamer
Clint Allen Botard '98

James & Helen Bottom '43
Eugene & Betty Boyd '41
Daniel & Kathy Brown '74
James & Cecily Bullard
Barry & Marilyn Cadoff
Rhonda Cameron
Edwin R. Carney '79
James & Betty Clossick '85
Nan W. Coffman
Richard & Beverly Cole '47
James Colench
Brian John Collingham '95
George & Melba Comanich '51
Frank & Leona Conci '54
Christopher & Benit Cook '80
Anna Marie Coplen '98
Shawn & Janie Corbett
William & Sarah Crocker '75
Donald & Sigrid Cronin
Terry & Linda Curry
John D. Daugherty
Michael & Kathleen Delany '48
Kenneth & Phyllis Delap '52
Jeffrey & JoAnn Dietz
William Dodd
Dennis & Nancy Doering '73
Gerard & Elizabeth Dolan '81
Keith Richard Eckenbath
Claude & Colleen Elrod
Kenneth & Kathy Ennis
Ralph & JoAnn Farber '65
Roger & Marilyn Feaster '57
Gary & Connie Fenswold '73
C. Stuart & Jeanie Ferrell '64
Harold & Joyce Fiebelman '66
Paul & Glenda Fish
Mark W. & Stephanie Fitch
Jack & Carolyn Fore
John & Judy Foster
David & Donna Foxley
Lyman & Esther Francis
Darryl Fread '61
Darrell & Patricia Fuesting '68
Archibald & Nancy R. Gallup '71
Jason R. Gastler
Roger G. Gemeinhardt '69
Harriet D. Gibson
Ron Gillett
William & Sabra Graden '58
Joseph & Rita J. Greig '49
David & Pamela Grady
Donald & Ann Grundy
Dwight & Karen Hatfield '65
Martina S. Hahn & Stuart W. Baur
Richard & Maureen Hall '95
Arthur & Victoria Handshy '66
Robert & Mary Hanna '43
Robert & Betty Hanson
Richard & Jo Ann S. Harmon
George & Ann Harris '72
Greg & Cindy Harris
Gregory & Cathryn Haug '76
Jesse & Sandra Haverstick '72
Charles & Peggy Hell
Joseph & Mary Hepp '48
Lewis & Lisa (Madison)
Hickman '95 & '96
Jeffrey & Shari Heller '85
Robert & Dorothy Holley '64
Louis & Helene Holroyd
Timothy J. Hoog '77
Donald & Carolyn Hopper
Kent & Donna Homer '69
Robert & Sally Hubbard '71
Helen "Niki" (Allen) Huffman
Richard & Alice Hughes '56
Donald Hunt '81
Laura & Richard Hunter
D. Fred & Nancy Ippock '76
Ivan Hauser Insurance
J.C. Penney Company, Inc. (Rolla)
Brian W. Jenkins '86
Robert & Betty Jenkins '53
Kirk Jensen
James & Vergene Joiner '62
James H. Jones '71
Martin Judlowe
Gilbert & Cicora Kealey '48
Stan & Cindy Kekac
Betty Kemna
Brenda Kempf '86
Harry & Ann Kennedy '51
Thomas & Eloise Kipp
Eugene & Genevieve Klainsek
Harold & Jeanette Koelling '54
Kurt W. Koelling '88
Alan & Jacquelyn Kofsky
Martin Elmer Kofsky
Ronald & Barbara Kohser
George Everett Kouba '89
Edward & Georgina Kyburz '50
Ronald Lafaver
Dorothy Landers
John & Marilyn Lansberry
James & Patricia Latimer '78
Robert & Linda Laudon
Jeffery & Donna Lewis '79
J. Brad & Mary B. Light
Dorinda Loran
Kathy Lowther
Blaine Luckemeyer

Joseph Eric Lundeen '89
Maid Rite Restaurant
James B. Marble '51
John & Janis McCarthy '55
Charles H. McGrady '67
John & Kristy Meyers '89 & '91
Midwest Orthopedic Specialists
Lawrence & Beverly Miallons '67
James L. Miltenberger '68
Harold G. Moe '48
Montgomery & Jane Ruth Morse '79
David & Cathy Mueller '81
Paul & Frieda Munger '56
Jon & Linda Murphy
Fred & Marion Newman
John & Dorothy Nolan '52
Paul & Mary Null
Clatus & Gayle Nurre
Richard & Julie Okenfuss '58
Ed Oswald
Donald & Beth Overall '62
Ed A. Owsley
William & Nancy Parks '91
Gary & Barbara Patterson '60
Stephen Renald Perillo '88
Michael & Margery L. Perkins '67
Marian Pfeiffer
Kathryn (Masterman) Pimmel '96
Robert & Doris Pohl '42
Ronald & Barbara Pohlman
Genevieve K. Pomeroy
Robert & Janet Pressly '84
Steve & Peggy Purdy
Viola Rapp
T. B. & Mary Ann Rastorfer
John & Peggy Ratliff '59
Lydia N. Reeves
William F. Rhodes
David & Carolyn Robinson '71
Kent & Marsha Robinson
Roddy & Lindy Rogers '81
Beverly Roth
Raymond & Jan Ruenheck '50
Steve & Angela Sabo '87
Jacques & Cindy Sachs '73
Bernard & Lisa Sarcher
Jennifer Sargent
Harry & Patricia Sauer '56
Ken & Joy Schneider
Thomas & Rachel Schneider '75
Donald & Judith Schwalze
Lorraine Schwarz
Matthew & Jan Seabaugh '94
Geoffrey Michael Seavey '95
David Shaw
Alvin Schwartz '48
Mrs. Lawrence K. (Gwen) Sieck
Jeffrey F. Smith '37
LaDonna Smith
Alan Steele
Mary Helen & Bill Stoltz '95
Robert Stone
Marvin & Patty Taska
Thomas & Malinda Tatman '76
Brian & Catherine Tepper '80
Theodore & Nancy Thessing
Craig & Leslie Thomas '84
Phil Thompson & Catherine Rioridan
Bryan & Deanna Tillet '96
Steven & Natalie Tillman '74
Charles & Jeanine Tompkins
John & Kelly Toomey '49
Joe Triplet
Sharon Triplet
Michael D. Turay
Gina L. Turner
Ryan James Unterreiner '98
Robert & June Uthoff '52
William & Vivian Van Bramer '51
William & Roma A. Vose '51
Dale & Sara Wands
Scott Joseph Weiner '95
Jane Welch
Rebecca L. Werdall
Jeremy & Shawna (Clark) White '93
Travice & Michele Whitten '65
Richard & Jane Wicker '59
William & Lynn Wiesles
Stan & Cindy Whitthite
Alden & Lois E. Williams '50
Christopher Michael Williams '97
Lance & Patricia Williams
Sue Williams
Mrs. Floyd (Evelyn) Wills
Richard & Judith Witzel '69
Michael & Linda Womessner '76
Richard A. Wood '71
Roy B. Woods '72
Marvin & Nancy Wright
Mark & Kristin Wuttig '87
Ed & Kathleen Wynn
Gregory Yarrington
Cecil Yates
Ralph & Joan Young '58
T. Alan Zaborac '70

[†] deceased
* Member of Order of the Golden Shillelagh



MEMBER BENEFITS

As alumni of MSM-UMR, you are automatically a member of the Alumni Association and are entitled to:

Travel Tours:

Cruises and Tours that span the globe — 8 trips currently offered. See *Traveling with the Miners* on page 45

MSM-UMR:

chairs, lamps, watches, rings, pendants, Platinum/Gold MasterCard, License plates for Missouri residents

Career Assistance:

UMR's Career Opportunities Center will help you in your job search!

Alumni Association

Services:

Access to Alumni Office via e-mail (alumni@umr.edu).

Alumni locator service to help you find lost friends.

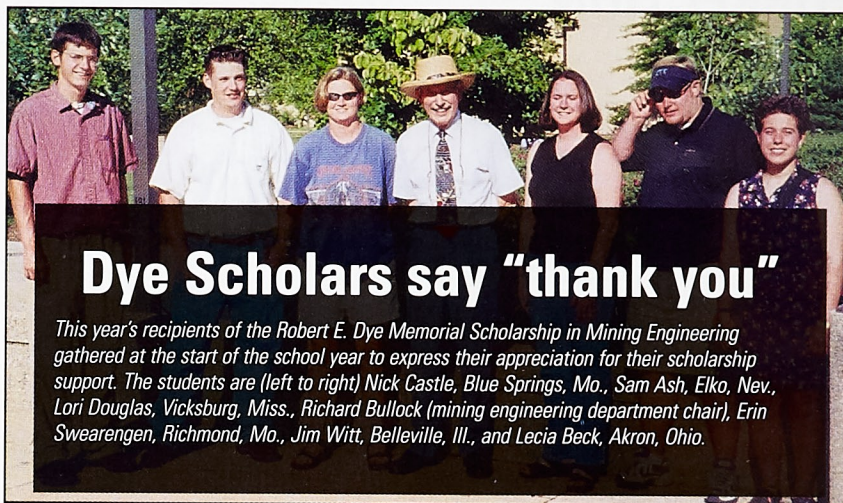
Address update service so you don't miss your MSM-UMR mail.

To take advantage of these offers, contact the Alumni Office:

MSM-UMR Alumni Association
Castleman Hall
University of Missouri-Rolla
1870 Miner Circle
Rolla, MO 65409-0650

phone: (573) 341-4145
fax: (978) 926-7986

e-mail: alumni@umr.edu
www.umr.edu/alumni



Dye Scholars say "thank you"

This year's recipients of the Robert E. Dye Memorial Scholarship in Mining Engineering gathered at the start of the school year to express their appreciation for their scholarship support. The students are (left to right) Nick Castle, Blue Springs, Mo., Sam Ash, Elko, Nev., Lori Douglas, Vicksburg, Miss., Richard Bullock (mining engineering department chair), Erin Swearengen, Richmond, Mo., Jim Witt, Belleville, Ill., and Lecia Beck, Akron, Ohio.

Parents' Association recognizes outstanding parent and teaching assistant

Barbara Robertson, barb@umr.edu

Family Day 2000 festivities on the UMR campus included special recognition for two very special Parents' Association award winners: **Laurie Guffey**, winner of the 2000 "Parent of the Year" award, and **Avinash Ravindranathan**, honored as the 2000 Outstanding Teaching Assistant. Mrs. Guffey, mother of UMR student Matt Lockwood, traveled all the way from Arizona to accept her award. The recipient of this award is chosen from essays submitted to Student Council by currently enrolled students. Ravindranathan made the trip from his job in Indiana to accept his award. Student evaluations of TAs are reviewed by the Academic Council Committee on Effective Teaching for the OTA award. Both awards are funded by the UMR Parents' Association and were bestowed at the Parents' Association meeting at Family Day. Recipients were also honored at half-time of the Family Day football game.

Special thanks go to Len Koederitz, chair of the CET committee and to the Student Council PAR chairs, Jennifer Song and Marty Rust, for their help with the nomination process for these awards.



Laurie Guffey



Avinash Ravindranathan

MSM-UMR Alumni Association Mission and Goals

MISSION

The association will proactively strive to create an environment — embodying communication with and participation by MSM-UMR alumni and friends — to foster strong loyalty to UMR and growth of the association. The association will increase its financial strength as well as provide aid and support to deserving students, faculty, and alumni friends.

GOALS

- Assist campus marketing and admissions office with increasing student enrollment.
- Improve communication with and expand the involvement of alumni — especially recent graduates and current students.
- Increase financial resources of the association and the university.
- Strengthen alumni section activity.
- Increase volunteer support to the university and its students.
- Provide a vehicle for coordination with various alumni organizations.

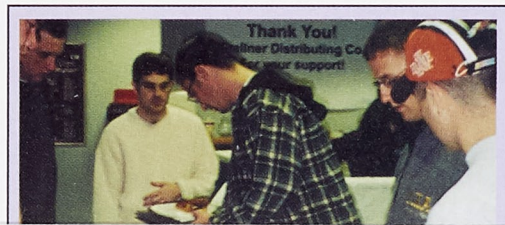
The officers and other members of the association's board of directors provide leadership and actual participation to achieve these goals and fulfill this mission. For their efforts to be a success, they need YOUR active participation as well, in whatever alumni activities you choose.





Last call for the MSM-UMR Alumni Association alumni directory

The telephone verification phase of our alumni directory project, in which each alumnus/a can make a final change to his or her listing, is



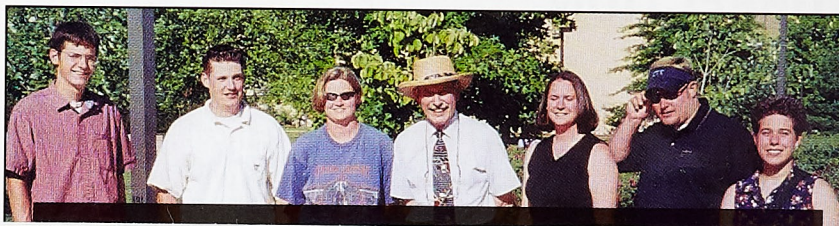
No Premiums

(SEE ATTACHED ENVELOPE FOR DETAILS)



MEMBER BENEFITS

As alumni of MSM-UMR,
you are automatically



NAME
ADDRESS
CITY/STATE/ZIP

UNIVERSITY OF MISSOURI-ROLLA
MSM-UMR ALUMNI ASSOCIATION
CASTLEMAN HALL
1870 MINER CIRCLE
ROLLA, MISSOURI 65409-0650



Your stamp
helps even
more!
THANK YOU

THAT'S RIGHT, NO PREMIUMS!

Many of you have told us you don't feel it's necessary to receive gifts in return for your donation, so this year we've decided to send only the Century Club plaques and year dangles.

If you miss the recognition items we've offered in the past, tell us! Let us know what items you'd like to see us offer in the future. Thanks for your help!

- ☐ No, I don't miss the gift items — I prefer that my entire gift help the association, the campus and today's students.
- ☐ Please don't send the plaque/year dangles, either.
- ☐ I miss the gifts! Here's what I'd like to see offered: _____

CENTURY CLUB GIVING LEVELS:

Please check the appropriate box:

- ☐ PLATINUM (\$1,000+)
- ☐ GOLD (\$500-999)
- ☐ SILVER (\$250-499)
- ☐ CENTURY (\$100-249)

Thank you for your support!





Last call for the MSM-UMR Alumni Association alumni directory

The telephone verification phase of our alumni directory project, in which each alumnus/a can make a final change to his or her listing, is almost complete. Representatives of Bernard C. Harris Publishing Co. Inc., the official publisher of our directory, have just a few more calls to make before final proofreading begins.

Since we are publishing only enough directories to cover pre-publication orders placed at this time, please let the Harris representative know if you are interested in purchasing your own directory. This will be your only opportunity to reserve a copy of the MSM-UMR Alumni Association Alumni directory.

If for any reason you have not heard from our publisher by March 26, you may contact the company directly at Customer Service Department, Bernard C. Harris Publishing Co. Inc., 16 Koger Center, Suite 103, Norfolk, VA 23502 or call 1-800-877-6554.

GOOD NEWS

for UMR job seekers

Alumni and students will be delighted to know that JOBTRAK (www.jobtrak.com) and Monster Board (www.monster.com), two of the nation's premier job hunting sites, have merged. Thousands of job opportunities on the Internet are now available. Alumni who subscribe to JOBTRAK through the UMR Career Opportunities Center will now find the number of job openings advertised on the Internet dramatically increased.

According to the dot-com companies, the decision was made "not to compete head to head but rather to team up to grow more quickly in the U.S. and internationally, as well as to bring to market products that were only dreamed of in the past." This alliance will result in an incredible amount of growth, recognition and innovation in the college recruiting industry. UMR has been using JOBTRAK for more than four years, and has been the catalyst for many matches between employers and alumni.

For the present, JOBTRAK will retain its name, but in the future the two brands will merge their names. To learn more about JOBTRAK, please contact Marcia Ridley in the UMR Career Opportunities Center at mr Ridley@umr.edu or (573) 341-4229. Services available to UMR alumni include the password to JOBTRAK and resume referral. Alumni are given instructions to upload their resumes into the COC database and then those resumes are forwarded to companies for their consideration. For more information, go to the COC Web site at www.umr.edu/~career and click on the alumni door.



Another successful Senior Pizza Party

The alumni lounge was hopping on Nov. 29, as more than 160 graduating seniors enjoyed free pizza, soda and beer at the fall Senior Pizza Party sponsored by the MSM-UMR Alumni Association. Alumni office staff, students and volunteers welcomed the new alumni and presented each one with a "Membership Kit" full of information about the MSM-UMR Alumni Association and how the organization can help them in their new lives. The association also presented each senior with a Hazel pad folder imprinted with the association's logo.

The alumni association holds a Senior Pizza Party every April and November for the seniors graduating that semester.



Four sections receive honors at Homecoming

Alumni Board Sections Committee Chair Ed Midden

Each year the Alumni Board Sections Committee reviews results of the section's annual reports and selects two award winners: the Outstanding Section (best performance overall) and the Phoenix Section (most improved). Due to changes in the timing of the section annual reports, both the 1999 and 2000 awards were made at Homecoming 2000. For 1999, Oklahoma Section took the Outstanding Section of the Year award, while the Phoenix award went to the Mid-Missouri Section. Ark-La-Tex captured top section honors for 2000 with Air Capital (based in Wichita, Kan.) winning the Phoenix award. Thanks go to all the sections for their hard work on the annual reports, and to the sections committee for their diligence, especially Curt Killinger who spent many hours on the project.



OUTSTANDING!

Accepting their Outstanding Section awards from Jim Bertelsmeyer are (left to right) Steven Malcolm '70 of the Oklahoma Section and John Livingston '39 for the Ark-La-Tex Section.



Jennifer Marshall (left) of the Air Capital Section accepts the 2000 Phoenix award from Jim Bertelsmeyer. Several Mid-Missouri Section members attended Homecoming, but schedule conflicts precluded having a representative available to accept their 1999 Phoenix award.

Miners in North Carolina meet to discuss forming an alumni section

Brian Tenholder, Brian.Tenholder@us.ina.com, (803) 548-8906

MSM-UMR alumni in the Charlotte, N.C., area met on Nov. 4, 2000, to discuss forming an alumni section. Miners and guests enjoyed light refreshments and reminiscing at Classic Sports, a pub in Charlotte. Lynn Stichnote of the alumni office offered a campus update and discussed possible section activities. Several attendees expressed interest in serving as officers, as have some of the area alumni who responded to an earlier survey. If you are interested in becoming involved, contact Brian Tenholder '97 at the phone number or e-mail listed above. More events are planned for 2001; watch your mail for invitations. Approximately 780 MSM-UMR alumni live in North and South Carolina, and are distributed throughout both states. Section activities will be planned to accommodate those areas with alumni expressing interest in events, so make your voice heard.

Attending the November gathering were: John '97 and Tara '97 Brocke, Jeannette Jumps '00, Chris Irwin '97, Jim '97 and Kate Kamper, Bill '69 and Sandy Knauf, John W. '70 and Wilda '71 Mitchell, Enoch Moeller, Brian Tenholder '97, Michael '92 and Kathy Tonelis, and Lynn Stichnote.

Society of Petroleum Engineers conference attracts large number of MSM-UMR Alumni

The MSM-UMR Alumni Association hosted a reception Oct. 3, 2000, for alumni and guests attending the Society of Petroleum Engineers conference in Dallas, Texas. Nearly 30 Miners and friends gathered to enjoy old friends and make new ones. It was a great opportunity to reminisce and network professionally. Lucky Miners winning door prizes were Steve Homoky, Glenn Brand and Jim Honefenger. Curt Killinger won the St. Pat's sweatshirt but said it was to no avail, because his wife would take it away from him. Thanks go to Lenn Koederitz '68 and his spouse, Cheryl, who served as hosts of the event.

Attending were: Ed '50 and Barbara Barsachs, Glenn '83 and Mindy '84 Brand, Jim Colliton '78, Raj Chilukuri '99, Ron D. Craig '78, Mark Dieckmann '82, Ken Dunek '00, K.C. Green '99, Steve Homoky '84, Jim Honefenger '72, Marcus A. Huggans '98 and Melanie James, Curt Killinger '73, Greg Praznik '70, Nick Valenti '81, Scott Wehner '80, Jim Chaney '82, Michael McKee '76, Terry Palisch '86, Greg Sanders '86, Herman Vacca '60, Lenn '68 and Cheryl Koederitz.

WE WANT YOUR NEWS!

Deadlines for upcoming issues of the *MSM-UMR Alumnus* are:

Fall 2001
deadline: July 23, 2001

Winter 2001
deadline: Sept. 20, 2001



MSM-UMR Alumni Association welcomes new faculty to Rolla

The MSM-UMR Alumni Association hosted a new and very successful event on Friday afternoon, Sept. 22, 2000. The board's faculty/staff committee coordinated a "welcome to Rolla picnic" for UMR faculty and families who had joined the campus community over the last three years. The afternoon began with a social hour. The formal agenda included a welcome by committee chair Willis Wilson and an introduction of representatives from civic organizations and campus service departments. A dinner of grilled hot dogs and hamburgers (finely cooked by our St. Pat's Committee volunteers) followed the talk. The event was well received by those in attendance.

New faculty (last three years) attending were: Daryl Beetner, ECE; Susan Boettcher, Hist; Bill Fahrenholtz, CerE; Scott Fullwiler, Econ; Gary Gadbury, Math; Yue-Wern Huang, BioSci; Norbert Maerz, GeoE; Cesar Mendoza, CE; Melanie Mormile, BioSci; John Myers, CE; Chetan Parikh, ECE; Mohammad Qureshi, CE; William Schonberg, CE; Eric Showalter, CE, and Polly; Mickey Sweeney, Engl; Akio Tokuhira, NucE; Jee Ching Wang, ChE; William Weeks, ECE; David Westerberg, BioSci; David Williams, Speech. *Other guests included:* Victoria Banales, Tom Akers '73, Kent Bagnall '76, Jerry Bayless '59, John Butz, Andrew Careaga, Gene Gaddy, Walt Gajda, Kim Haas, Lance Haynes, Joe Maul and Cody May (representing UMR Student Council), Bob and Jane Mitchell, Mark Mullin, Don Myers '61, John Ragle, Darlene '84 and Chris '83 Ramsay, Dana Rapier, Kittie Robertson, Neil Smith, Randy and Laura Stoll, Randy Verkamp '72, Willis Wilson '73, Lindsay Bagnall '76, Don and Nancy Brackhahn, Lynn Stichnote, and Renee Stone. *St. Pat's Committee members included:* John Key and Matt Mowers, among others.

Public Radio KUMR streams audio on the WorldWideWeb

Now you can keep up with the campus in a brand new way. Go to www.kumr.org and hear the latest from UMR via KUMR, the public radio voice of the campus. KUMR also brings local features and interviews about the campus every week. The station's newscast also incorporates news about UMR, so you can keep abreast of what's happening back in Rolla, no matter where you may be.

Public Radio KUMR was the first public radio station in Missouri to stream audio on the Internet. It is also the only public radio station to have provided statewide programming (with help from the Boeing Corp., and last year the Missouri Humanities Council) as well as national programming with its syndicated show *We're Science*. You can check out archived *We're Science* programs on KUMR's Web site.

Chancellor Gary Thomas was happy to find out about KUMR's audio streaming when he first came to campus. He finds it the ideal way for alumni all over the world to keep in instant touch with the campus. Alumni across the U.S. and as far away as Singapore agree, and have tuned in to listen.

KUMR will be happy to send you a complimentary program guide. Just e-mail them at kumr@umr.edu with your name and address and tell them you heard about it in the *MSM-UMR Alumnus* magazine.

PUBLIC RADIO
88.5 96.3
kumr



Turkey day in October for Ark-La-Tex

**Kenny Cochran, 1827
Northwood Ct. E, Longview, TX
75606, kdbac@aol.com**

The Ark-La-Tex Section's sixth annual Cajun turkey fry was hosted by Gene and Judy Rand at their home in Longview, Texas, on Oct. 21, 2000. Nineteen Miners and guests enjoyed deep-fried turkeys and covered dishes — it is hard to beat that kind of meal. A raffle for two shirts donated by MSM-UMR, a candle made by Ann Mulyca and Gene Rand's donation of an MSM-UMR 1999 Homecoming mug yielded \$50 for the section treasury. Ardella Browning, Louise Patton, Walt Mulyca and Tammy Poland were raffle winners. The business meeting included reports from John Livingston regarding the Ark-La-Tex Section's 2000 Outstanding Section, and also his "status report" on some of the section's senior members. John Wilson, former UMR chair of mining engineering, discussed his current role as a recruiter for UMR. John was elected an honorary section member by the group. The meeting concluded with discussion of the winter event.

Attending were: Phil '48 and Ardella Browning, Elmond Claridge '39, Ernie '70 and Gerry Green, Loretta Moscar, Walt '65 and Anne Mulyca, Jerry '82 and Tammy Poland, Gene '62 and Judy Rand, Helen Breuning, John Livingston '39, Louis Patton, Roy and D.D. Carmin, and John and Meg Wilson.

**For transcript copies,
please see
the Registrar's Office link
from the UMR Web page,
e-mail registrar@umr.edu,
or call
(573) 341-4181.**



Guests enjoying good food and good conversation at the shrimp feed.

Central Ozarks Section/MSPE shrimp feed

The annual shrimp feed, co-hosted by the local chapter of Missouri Society of Professional Engineers and the Central Ozarks Alumni Section, drew another large crowd on Saturday, Sept. 2, 2000, at Lions Club Park in Rolla, Mo. More than 100 Miners, MSPE members and guests enjoyed all-you-can-eat boiled shrimp, side dishes and refreshments. The event was a terrific opportunity for meeting friends and professional acquaintances, and a significant amount of money was raised for the MSPE chapter scholarship fund. Thanks go to Jerry Bayless for organizing this ever-popular event.

Simplify your giving to the MSM-UMR Alumni Association

Do you want to make regular gifts throughout the year, without the bother of receiving a reminder letter? Let us set you up with a monthly contribution, deducted automatically from your Visa, MasterCard, Discover or American Express account. Contact Renee Stone in the alumni office for details by e-mailing alumni@umr.edu, calling (573) 341-4145 or faxing (978) 926-7986.

Cincinnati-Dayton fall potluck dinner

**Skip Dunham, 2843 Cranbrook
Drive, Cincinnati, OH 45251**

Bill '83 and Kelly Bohnhoff hosted a fall potluck dinner for Cincinnati-Dayton Miners and families on Nov. 4, 2000. The weather was perfect as the 18 Miners and guests enjoyed a delicious meal. Following dinner, everyone adjourned outside to roast marshmallows, catch up with each other's busy lives and share stories of MSM-UMR. Thanks go to Bill and Kelly for the hospitality and to Amy Dunham for arranging the event.

Attending were: Bret '93 and Gina '93 Baldwin, Bill '83, Kelly, Amanda and Curtis Bohnhoff, Matt '92, Becky '92 and Declan Duneheew, Amy, Stone and Luke Dunham, Lamar '95 and Vicky '92 Gerber, James '57 and Betty Johnson, James Jones '71, Suzanne Metzner '91, and Bob '51 and Bev Shields.



Miners and guests — from a newborn to the class of '51 — enjoyed the Cincinnati-Dayton potluck.

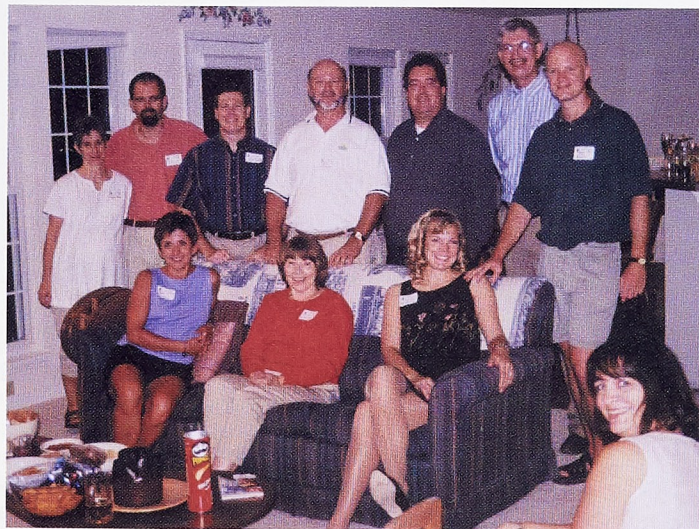


Cincinnati-Dayton Section winery dinner a great success

**Skip Dunham, 2843 Cranbrook Drive,
Cincinnati, OH 45251**

Valley Vineyards of Morrow, Ohio, was the venue for the Cincinnati-Dayton summer activity. On July 22, 2000, 21 alumni and guests enjoyed a delicious steak dinner with local wine. Amy Dunham discussed possible recruitment activities for the section, including attending some spring college fairs. Amy has provided the school addresses to the UMR admissions office. The group then adjourned to the home of Bret and Gina Baldwin for more good conversation and fellowship.

Attending were: Bret '93 and Gina '93 Baldwin, Bill '83 and Kelly Bohnhoff, David Cornell '86, Lamar '95 and Vicky '92 Gerber, Greg '93 and Julie Glodowski, Colin '98 and Anne Marie Hester, James Jones '71, Jay J. Krull '87, Dick '58 and Julie Okenfuss, Bob Shields '51, and Bob '70 and Carolyn Wilmesherr.



MINERS WIND UP A PERFECT SUMMER EVENING AT THE BALDWIN HOME

Front row, left to right, Amy Dunham, Carolyn Wilmesherr, Gina Baldwin and Kelly Bohnhoff. Back row, left to right, Anne Marie Daniel, Colin Hester, Bill Bohnhoff, Bob Wilmesherr, David Cornell, Jay Jones and Bret Baldwin. Not pictured is the photographer, Skip Dunham.

Heartland Section "hoops it up" with UMR basketball team

**Don Fuller, 100 Bentwood,
Paducah, KY 42003**

The Heartland Section coordinated a section event with the UMR men's basketball team on Saturday, Nov. 21, 2000. Seventeen alumni and guests met beforehand to plot strategy with UMR head coach Dale Martin at the Drury Lodge in Cape Girardeau, then joined the team and other alumni at the Show-Me center for the match-up with Southeast Missouri State. Despite a loss by the Miners, it was an enjoyable event. Thanks go to Bob Patterson for organizing the event, and to Mark Mullin for arranging for tickets.

Attending the reception were: Don and Nancy Brackhahn, Don '66 and Jenny Fuller, Gene '53 and Ann Edwards, Barr '65 and Glenda Horton, Tim Hudwalker '88, Jeremiah Jamieson '61, Kevin Lindsey, Mark Mullin, Bob '54 and Martha Patterson, Bill '54 and Clemie Stewart, and Darren Walters '94. Other alumni joined the group at the game.



Tim Hudwalker, Darren Walters and Gene Edwards enjoy the Heartland reception.



Miners (and future Miners) don hard hats for a tour of Olmsted dam.

Heartland Section tours Olmsted Dam construction site

Don Fuller, 100 Bentwood, Paducah, KY 42003

The Heartland Section fall event was a special treat. On Sept. 30, 2000, 19 Miners and guests toured the Olmsted, Ill., dam construction site. The tour was arranged by Tom Tavernaro '87, Massman Construction's project engineer for the project. Nineteen Miners and guests enjoyed learning about the dam's construction. After the tour, part of the group adjourned to lunch. Don Brackhahn of the alumni office gave a campus update. Others enjoyed the many activities available in the Olmsted area, including the Floodwall murals, several state parks and lakes, and local museums. Heartland

is planning a follow-up activity in the spring to Massman's casting site in Paducah, Ky., where massive concrete pontoons will be cast and then floated downstream to the dam construction site.

Attending the event were: Don and Nancy Brackhahn, Gene and Ann Edwards, Tom and Maureen Tavernaro, Chester and Nancy Hager, Max and JoAnn Burgett, Jack Harper, Don Fuller and seven others (sorry we did not get all the names).

Houston Section attends record-setting baseball game

**Nicole Talbot, 4006 Lee Lane, Pearland, TX 77584
nicoletalbot77@hotmail.com, 281-489-0391**

Members of the Houston Section were part of history in the making when they attended a Houston Astros baseball game against the Milwaukee Brewers on Saturday, Sept. 30, 2000. The Astros topped the franchise's previous attendance record and broke the 3 million mark for fan attendance in a single season, the first sports team in Texas to do so. Despite Houston streets being blocked off for the Texaco Houston Grand Prix, 31 alumni and guests attended the game. Everyone enjoyed the action on the field as well as visiting with fellow alumni and friends and participating in a raffle for an MSM-UMR T-shirt. Newton Wells was the lucky winner of the shirt.

Attending were: Wayne '58 and Betty Andreas, Lori '88 and Anthony Crocker, James '92 and Cheryl '92 Erickson, Mike '70 and Donna Friese, David '81 and Lisa Gresko, Dan '73 and Dee '75 Hinkle, Ed May '83, Hugh '74 and Jean Murray, Russ Pfeifle '74, Larry Ragsdale '98, Nicole Talbot '77, Fred '74 and Rosa Thompson, Herman '60 and Carol Vacca, Newton '59 and Marilyn Wells, Elizabeth Willis '00.

Transtar provides high-tech venue for Houston Section prospective student reception

Transtar, the state of the art traffic control facility in Houston, Texas, was the site of a prospective student reception hosted by the Houston Section and the UMR

Admissions office on Jan. 20, 2001. Alumni met with prospective students and their parents in a comfortable, informal atmosphere (made even more pleasant by delicious refreshments). Jennifer Bayless of the Admissions office made a presentation and each alumnus introduced themselves, gave

background on their co-curricular and extra-curricular activities while at MSM or UMR, and then answered questions informally later on. Five students attended, along with 7 parents, and the overall event was quite effective. Thanks to Curt Killinger, Russ Pfeifle, Nicole Talbot and all the other section members who helped coordinate the event. Prospective students attending were: Hakim Benaissa, Matt Jones, Lane Martinez, Marshall Littrell and James Resse.

Alumni and guests attending were: Wayne T. '58 and Betty Andreas, Jennifer Bayless, Lori Stapp Crocker '88, Jon Gibbs '93, Kevin Hagan '80, Mark T. Ingram '92, J. Curtis Killinger '73 '80, Jim Medlin '67, Russ Pfeifle '74, Larry '98 and Elizabeth '00 Ragsdale, Perrin Roller '80, Nicole Talbot '77, Lynn Stichnote, John Wilson (former UMR faculty member) and Dan '89 and Linda '88 Wright.



Houston-area alumni chat informally with prospective students and parents at Transtar.

ALUMNI SECTIONS

AIR CAPITAL

Jarrold Grant '98
2200 South Rock Road
Apartment 1406
Wichita, KS 67207
Jarrod.Grant@Wichita.BOeing.com

ALASKA

John W. Hentges '89
13501 Ebbtide Circle
Anchorage, AK 99516

ARKANSAS

Charles Germer '55
P.O. Box 23267
Little Rock, AR 72221

ARK-LA-TEX

Kenny Cochran '83
1827 Northwood Ct.
Longview, TX 75605

BAY AREA

Kamila Cozort
117 Forest Hill Drive
Clayton, CA 94517

CENTRAL OZARKS

J. Randy Verkamp '72
18112 Highway 8
St. James, MO 65559

CHICAGO

Kerry Knott '96
237 Mantle Lane, #109
Carol Stream, IL 60188
Kerry.Knott@ipaper.com

CINCINNATI/DAYTON

Millard "Skip" Dunham '85
2843 Cranbrook Drive
Cincinnati, OH 45251
msdnakd@one.net

DALLAS/FORT WORTH

Warren Unk '91
1507 Hayfield Drive
Plano, TX 75023

GEORGIA

David R. Ziegler '85
1531 Huntington Drive
Marietta, GA 30066-5907

HEARTLAND

Don Fuller '66
100 Bentwood Drive
Paducah, KY 42003-0998

HOUSTON

Nicole Talbot
4006 Lee Lane
Pearland, TX 77069
nicoletalbot77@hotmail.com

KANSAS CITY

Craig Koenig '86
19100 E. 30th Street S
Independence, MO 64057

LINCOLNLAND

Jerry Hirlinger '86
4100 Lavender Lane
Springfield, IL 62707

MARYLAND/ VIRGINIA/D.C.

Doug Hughes '63
1212 Finneans Run
Arnold, MD 21012
W3ho@aol.com

MID-MISSOURI

Christine Kump '95
1505 Del Cerro Drive
Jefferson City, MO 65101

MIDDLE-TENNESSEE

Christina Cook '95
3100 Arrow Lane
Clarksville, TN 37043

MINER MUSIC

Thomas H. Rogge '93
835B Westbrooke Village
Manchester, MO 63021

MOTOR CITY

Robert L. Seaman '69
29812 Briarwood Court
Farmington Hills, MI
48331-1921

NORTHEAST OHIO

Hugh C. Kind '76
1021 Morewood Parkway
Rocky River, OH 44116

NORTHERN ALABAMA

John P. Dunbar '84
622 Patterson Lane
Meridianville, AL 35759-1028

OKLAHOMA

Jeanne Barkley '96
1512 W. Keywest Street
Broken Arrow, OK 74011

PACIFIC NORTHWEST

Stephen Wright '68
35708 SE 49th Street
Fall City, WA 98024

ROCKY MOUNTAIN

Clarence A. Ellebracht, Jr. '64
7336 S. Glencoe Court
Littleton, CO 80122-2527

SAINT LOUIS

Jennifer Diskin '91
5008 Alicia Drive
Alton, IL 62002

SOUTHERN CALIFORNIA

Kenneth G. Riley '56
3390 Monterey Road
San Marino, CA 91108-1830

SPRINGFIELD, MO

Roddy J. Rogers '81
City Utilities, P.O. Box 551
Springfield, MO 65801

TUCSON

William M. Hallett '55
P.O. Box 64216
Tucson, AZ 85728-4216

WEST TEXAS

J. Michael Party '78
6209 Driftwood
Midland, TX 69707-1603

ATTENTION SHUTTERBUGS

We'll be glad to print photos taken at your events



— just send them in! They need to be good quality, clear pictures, preferably showing some of the fun at your event. Please identify those people in the picture. If you send several, we'll pick the best for publication. Unless requested, submitted photos will not be returned to sender.

Lincolnland Section fall meeting

On Friday, Oct. 27, 2000, the Lincolnland Section hosted cocktails and a dinner meeting at the Springfield Motorboat Club on Lake Springfield, Ill. Area directors Ed Midden and Richard Eimer gave an update on campus activities and events from Homecoming. President Jerry Hirlinger conducted a brief business meeting for the 24 alumni and guests in attendance, followed by a delicious dinner. Thanks go to Jerry Parsons for arranging the event.

Attending were: David Tepen '90 and guest, Sadie Burke '98, Tom '70 and Sue Hoppe, Robert '99 and Lori '98 Bosch, Tom Feger '69, Jim '66 and Connie May, Richard '71 and Cathy Eimer, Emily Wehmeyer '97, Gary '74 and Debra Hutchison, Randy '88 and Jerri Vogel, Ed '69 and Anne Midden, Jerry Hirlinger '86, Jerry '70 and Mary Parsons, and Richard '69 and Carolyn Berning.



Kansas City Section golf tourney participants (left to right): Mary & John Frerking, Matt Ronan, Mac Andrew (kneeling), Bob Ronan, Dave Skitek and Mark Short.

Kansas City Section tees off

Craig Koenig, ckoenig@burnsmcd.com

Longview Lake Golf Course in Kansas City, Mo., was the site of the annual Kansas City Golf Tournament on July 8, 2000. Eight golfers enjoyed a beautiful day and lots of fun and fellowship. Thanks are due to John Frerking for helping to arrange the event.

Attending were: Bob Ronan, Matt Ronan, Mark Short '81, Duane Gowing, Dave Skitek '67, Mac Andrew '68, John '87 and Mary Frerking.

Chancellor Thomas visits Maryland/Virginia/DC Section

Doug Hughes, 1212 Finneans Run, Arnold, MD 21012; W3H0@aol.com

It was a beautiful fall day on the Potomac River at the residence of Earl and Olga Biermann for the MD/DC/VA section meeting on Oct. 21, 2000. Chancellor Gary Thomas spoke about his plans for UMR, both short- and long-term. Earl Biermann '43 received the Frank Mackaman Volunteer Service Award from Don Brackhahn and Chancellor Thomas during the event, as Earl could not attend the awards dinner at Homecoming 2000. Door prizes, including a St. Pat's sweatshirt, were given to attendees.

Attending were: Jeff '88 and Olinda Alexander; Earl '43 and Olga Biermann; Kathy Biermann; Don and Nancy Brackhahn; Cecil '48 and Shirley Branson; Miller '62 and Kathleen Einsel; Ben '81 and Linda Carper Hanking; Sumant Hattikudur '88; Doug '63 and Sandra Hughes; Leonard '43 and Mary Elizabeth Larson; Jim '72 and Barbara Nielsen; John '63 and Marjean Rice; Keith '86 and Veronica Rowe; Bob Scanlon '73; Neil Smith, vice chancellor, university advancement; Gary Thomas, chancellor; Glenn '64 and Dorothy Van Doren.



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Mid-Missouri Section summer picnic

Bob Sfreddo '58, ubes58@aol.com

Between 20 and 25 MSM-UMR alumni and guests gathered for the Mid-Missouri summer picnic for alumni, new UMR students and families. The gathering was held at Niekamp Park in St. Martins on Aug. 4, 2000, and featured barbecue hamburgers, hot dogs and bratwursts, along with covered dishes from the guests. This has become an annual event and was enjoyed by all. Thanks to Kenny Voss and Bob Sfreddo for coordinating the event.



Miners of all age groups, future Miners and even Miner canines enjoy the picnic at Niekamp Park.



Miner Music members enjoy their summer picnic.

Miner Music Section summer picnic

Tom Rogge, rogge@cdmnet.com

Miner Music members gathered for a fun family outing on Sunday, June 25, 2000. Fox Hill Park in St. Charles, Mo., was the perfect venue for a day of good food and fellowship. Don Brackhahn of the alumni office and his spouse, Nancy, joined the group, as did Don Miller, UMR band director and faculty member. Members from as far away as Huntsville, Ala., were part of the picnic. Kudos to Tom Rogge for coordinating the event.

The 8th Annual Chancellor's Cup Golf Tournament

will be held
Oct. 6, 2001,
at the Country Club
at the Legend
in Eureka, Mo.

If you are
interested in
receiving an
invitation, or know
someone who would,

please contact
Lucy Sutcliffe at

573 341 4490,

or e-mail

lucys@um.edu



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- ☐ Discover: Arts & Sciences
- ☐ Aerospace Camp
- ☐ Explore: Space 2001
- ☐ PRIMO Chemistry Academy
- ☐ Summer Transportation Institute
- ☐ Nuclear Engineering Camp
- ☐ Joe Miner Sports Camp
- ☐ Boys Basketball Camp
- ☐ Future Stars (Girls) Basketball Camp
- ☐ Show-Me Games

UMR hosts record numbers at Industry Day

UMR's Career Opportunities Center coordinated its most successful career fair ever with the Fall 2000 Career Fair on Sept. 28, 2000. The all-day event drew a record 238 companies, which distributed information and met prospective employees from among the 2,000 UMR students attending. The evening before the career fair, the COC hosted a reception for recruiters, followed by the Recruiters' Roundtable for students at which three alumni panelists shared "Interviewing Tips from the Pros." At the reception, which the alumni office helped to host, more than 100 MSM-UMR alumni were among the company recruiters who enjoyed the beautiful weather literally at the feet of Edwina Sandy's new sculpture, "The Millennium Arch," outside Castleman Hall.

Those attending included: Rick Arnold '69, Jack Baker '97, Larry Bergner '73, Duane Bequette '75, Neil Book '72, Thomas Brady '86, Jane Brashers '99, Khara Brock '99, R. L. Bullock '51, Tim Bumpus '86, Bill Burton '82, Patrick M. Byrne '73, Christine Carlson '95, Brian Carroll '00, Curt Cauble '98, Samuel Clark '97, Robert Conaway '99, Mark Coburn '99, Mark Crawford '98, Brad Crutcher '82, Ryan J. DeLapp '99, Ed Delgadillo, Scott Diermann '81, Brain Donley '87, David Dorn '99, Jason Doyle '98, Kevin Edgley '81, Ryan Elder '98, Fred Ellermeier '87, Scott Fallert '97, Charles Fiedler '78, Alan Flagg '95, Dean Ford '95, Nathan Fraser '99, P. Scott Gegesky '68, Thomas V. Gibilerra '68, Greg Glodowski '93, Mary Grass, Chuck Grbcich '88, Valerie Green '99, Mike Gross '88, Mahlon Haunschild '83, Bret Hedenkamp '88, David Heidemen, Anne Heltibrand '00, Steve Himmell '70, Greg Hilmas,

Erik Hoffmann '96, Donald Homesley '69, Wayne Huebner '87, Kenneth Brian Jones '85, Mark Junkins '95, Dan Karraker '92, Lucy Knaup '94, Lenn Koederitz '68, Drew Kofahl, Jeffrey P. Krause '99, Julia Kusaski '00, Joe Kuss '70, Ming Lau '80, Lawrence Lee '78, Richard Leung '99, Paula Lutz '76, Nicolette Madison '98, Roger Madry '98, Christopher Maupin '98, Shawn Maloney '99, Peter Manis '96, Dan Marley '84, Robert C. Marshall '60, Jessica Martinez '98, James Mazurek '82, Tim McDermott '90, Melissa McGuire Carr '00, Greg Meitz '83, Rob Mensching '99, Keith Missey '00, Diane Moellenhoff '98, Liz Morris '00, Dale L. Morse '79, Scott Motycka '80, Brent Mydland '98, Donald D. Myers '61, Dustin Olson '98, Narges Omrani '96, Jaime Ostmann '00, Ann Papke '00, Jennifer Parrott '99, Maleika Patterson '99, Hardy J. Pottinger '66, Brian Price '99, Eric Pringer '99,



Richard Leung '99 (left) and Esther Walker '95 (center) of Pepsi with co-op student.



Tracy Jones '98 of Exxon (center, laughing) chats with UMR students.

Todd S. Rastorfer '98, Will Reed '96, David Reinhart '96, Jennifer Remley '97, Chris Rickey '97, Michael Robinson '00, Mary K. Pecora Rolli '89, Dan Ross '85, Karl Schmitt '99, Elmer Schneider '72, John Schoenecker '74, Cindy Schreckenberger '94, Paul M. Simons '99, Derick Skouby '97, Pat Smith '96, Chris Smyser '94, Dan St. Clair '75, Colleen Stemler '99, J.D. Stevenson '92, Mark Stielow '91, Leo B. Stoessel '00, Stephen M. Squibb '98, Steve Thilker '91, Chris Thomason '85, Heather Thompson '98, Bryan Tilley '96, Laura Tobben '99, Angela Todtenhaupt, Dave Visnich '96, Esther Walker '95, Matt Wicks '93, Barb Wilmes '85, Kate Wintjen '00, Sean Wyatt '94, Guangying Xu '00, J.T. Zakrzewski '98.

St. Louis Section cheers on the Cardinals

Jennifer Diskin, jkdiskin@corp.olin.com

Friday, July 7, 2000, 55 Miners and guests enjoyed a St. Louis Cardinals baseball game at Busch Stadium. The section reserved seats in the bullpen game room area, a setting that allowed everyone to socialize with fellow alumni and friends and also provided an excellent view of the action on the field. All had a great time and we look forward to seeing more of our St. Louis area alumni at this event next year.

Attending were: Phil Jozwiak '66, Angie '94 and Mike '92 Castro, Melissa Moore '93, Kelley '91 and Marc '92 Thomas, Christina Sfreddo '94 Doug '94 and Lori Heckel, Les Benoy '71, '75 and guests, Byron Vermillion '69, Gene Haberl '71, John Schilling '43, Jeff Inman '93 and guest, Earl Bage '50, Carol Bennett '92 and guest, Gail Schott '72 and Susan Wyseman, Laura Falletto '98 and guest, Brian and Janice Neary '91, Chris Niehaus '94, David Witt '94, Kevin Burkett '94 and guest, Laura '94 and Joel '95 Rickman, Brett Felton '94, Shannon White, Leroy Alt '61 and guests, Scott Link '95, Milt Murray '64, '80, and guests, Dave Beardsley '70, Susan Fry '99 and Dan Troesser '96.

TO APPLY FOR ADMISSION

call (573) 341-4165 or 1-800-522-0938,
e-mail admissions@umr.edu, or check out
the Web site at www.umr.edu/admissions.

Alumni Kids and Grandkids Come to UMR and \$AVE

If you live out of state, your college-bound child or grandchild could save some significant money by coming to UMR! Accepted students who qualify receive a \$5,500 Alumni Sons & Daughters grant.

The requirements: Student must be enrolled full-time; parent or grandparent must be a holder of an earned degree from MSM-UMR; student must have an ACT score of at least 24 and be in the top 25 percent of his/her high school graduating class; transfer students must have a 3.2 grade point average (on 4.0 scale); and must have completed 30 hours toward a degree; student must apply prior to June 15 of the year student plans to enroll; renewal of the grant, which is limited to four years per recipient, is available to any student receiving the grant who holds a grade point average of 2.75 or above.

For an application or for more information on this grant program, please contact the UMR admissions office at 1-800-522-0938 or through e-mail at UMRolla@umr.edu.

**Please Note: This scholarship will supercede
any other non-resident scholarship.**

UPCOMING MINER ALUMNI EVENTS

SUNDAY, APRIL 8, 2001

Houston Texas Section

Hockey game: Houston Aeros

5 p.m., Compaq Center

Houston, Texas

Wayne Andreas, wandreas@juno.com,
281-324-1485

SATURDAY, APRIL 21, 2001

Houston Texas Section

Baseball: Astros vs Cardinals

1:35 p.m., Enron Field

Nicole Talbot, nicoletalbot77@hotmail.com
281-489-0391

MAY 2, 2001

Maryland/Virginia/DC Section

Alumni Alliance reception for

U.S. Senators & Representatives

Rayburn House Office Bldg

Washington, DC

Lynn Stichnote, lynns@umr.edu

APRIL 21, 2001

Ark-La-Tex Section Spring Meeting

Location/time: TBD

Gene Rand, srand@txu.com
903-836-6553

MAY 16, 2001

Motor City Section, Detroit

SAE Formula Car dinner

Location/Time: TBD

JUNE 2001

Kansas City Section

Golf Tourney

Date/Location TBD

JUNE 21, 2001

St. Louis Section

Golf Tournament at Wolf Hollow

Washington, Mo.,

11:30 a.m.-1 p.m. lunch/registration

1 p.m. Shotgun Start

Phil Jozwiak, paj@geotechnology.com
(314) 878-1285 (h); (314) 997-7440 (w)

SUNDAY, JULY 15

Central Ozarks Section

Solar Car Team Activity

Time/Location: TBD

Rolla, Mo.

Randy Verkamp, 573-265-7141

SUNDAY, JULY 21

Chicago Section

Summer Send-off Picnic

Kerry Knott, knott@ipaper.com



Daniel Jackling's revolutionary idea



Mining pioneer **Daniel Jackling**, MetE'1892, should be a familiar name to most MSM-UMR graduates. Older alumni recognize the name from old Jackling Gymnasium, while newer grads place his moniker with the football field or perhaps a pre-college summer program (the Jackling Institute for high school students). Now, readers of the magazine *American Heritage of Invention and Technology* will know the Jackling name as well.

The story of how Jackling revolutionized the copper industry nearly a century ago is told in the magazine's winter 2001 edition. In his article "The Biggest Mine," Timothy J. LeCain, an adjunct professor of history at Montana State University, describes how Jackling challenged the conventional wisdom of his day and turned a massive mountain of low-grade copper ore into a fortune for his company.

"The hill that became a pit has made billions of dollars for its owners through the years, yet when operations began, many mining experts thought the giant mountain of copper was worthless," writes LeCain.

But Jackling hit upon a revolutionary idea — one born in the industrial revolution of the 1800s. As LeCain notes, "Those experts failed to see that the profitable development of the Bingham mine would be made possible by a new idea, an idea that was put into action by a metallurgist named Daniel Cowan Jackling. Simply put, Jackling believed he could adopt the powerful principles of industrial mass production to create a parallel system of mineral mass extraction. It wouldn't matter that the ore was low in copper, since Jackling proposed to mine and process it in vast quantities. The idea was simple, but its realization would present enormous challenges."

American Heritage of Invention and Technology devotes 10 pages to the story of how Jackling revolutionized copper mining. To contact the magazine, call 1-800-627-4022 or log on to its Web site (www.americanheritage.com/i&t).

1920s

1928

Albert L. Hill, CE: "Still enjoying life at 96."

1930s

1939

Edgar S. Miller, CE: "During July and August 2000, Peg and I took a beautiful boat trip from Amsterdam to Budapest, over 120 locks in 23 days."

1940s

1940

John D. McClendon, ChE: "We have a good life here in the independent living section of Lake Forest Good Samaritan Village; a health center. It is a good place to spend one's declining years and enjoy old memories."

1943

James H. Bottom, ChE: "Just had hip surgery on Oct. 3. Mending OK." • **Albert S. Keevil**, CE: "Since retirement from Conuair in 1986, I have been a volunteer trainman for the San Diego and Arizona Railway, giving train rides to county school children." • **John O. Wilms**, GGph: "Competed in the Senior Olympics in November and won gold medals in two events, the 50-meter and 100-meter back stroke. Everything is easier when you're 80."

1947

James D. Sullivan, MetE: "I retired from AO Smith Corp. in 1985. Ginny and I celebrated our 54th wedding anniversary this past year. We have lived in sunny St. George, Utah, for the past seven years. We play golf a lot."

WHAT'S NEW WITH YOU?

Send us your alumni notes via:

ELECTRONIC MAIL: alumni@umr.edu
FAX: MSM-UMR Alumni Association, (978) 926-7986
MAIL: MSM-UMR Alumni Association, University of Missouri-Rolla,
Castleman Hall, 1870 Miner Circle, Rolla MO 65409-0650

1949

Nick Holloway Jr., ChE: "I retired 12 years ago and now live on an island just off the coast of Georgia. Spend a lot of time on golf courses, and my wife and I travel a lot." •

John E. Stein, PetE: "My wife, Dorothy, and I were planning to take a 50-day cruise on the Crystal Symphony in early February 2001 in honor of our 50th wedding anniversary." •

Harold M. Telthorst, CE: "Playing lots of golf — but not getting any better. Really enjoyed the 50-year reunion. Well done."

1950s

1950

Karlheinz Eissinger, GGph: "The year 2000 was the Golden Anniversary of my MSM graduation and my wedding to my wonderful wife, Lori. We're older, but still enjoy each day. We especially enjoyed our Alaskan Cruise last spring and the tomatoes from our garden last summer." • **Robert H. Erskine**, MetE: "I am thankful that my service in the 88th infantry in World War II resulted in my receiving a degree at MSM thru the GI Bill. It otherwise would not have been possible. God enabled me to survive my gunshot wounds and return to the United States." • **Robert E. Smith**, CE: "We enjoyed our trip to the 50th-anniversary party. Well done by all concerned. It was nice seeing all of the 'Nifty Fifty' friends again." • **Franklin W. Wyatt**, ChE: "Lois and I had our 50th wedding anniversary in October."

1951

E. Donald Schrader, ChE: "Been retired for 15 years now. My wife Wanda and I just celebrated our 50th wedding anniversary." • **Richard A. Thurston**, ChE: "I was a member of the 1950 Corn Bowl football team. I also attended the 50th reunion/Homecoming in October."

1952

Kenneth L. DeLap, CE: "Still working and in good health. We have an employee still working with us who is 92 years old."

1953

William E. Patterson, PetE, has been entered into the Bolivar (Mo.) High School Hall of Fame. Patterson is retired from Shell Oil Co., where he worked in engineering, computer program management and economics in Texas, New Mexico, Louisiana and New York.

1956

Val Gribble, CE: "Have been retired for 12 years. Just play golf. Have a wife, two boys and five grandkids."

1957

Donn G. Ziebell, MetE: "I am in a 2 1/2-year sprint toward retirement while planning marketing of my works of fine art in retirement."

1958

Eva B. Kisvarsanyi, GGph: "In April 2000, I organized 'Hungarian Millennial Days' in Sarasota, Fla., to observe 1,000 years of Hungarian statehood with concerts and exhibits." • **Humbert E. Sfreddo**, CE, retired from the Missouri Department of Transportation on May 31, 2000.

1959

Charles E. Pollard, CE: "Have retired from Missouri Department of Transportation. Enjoying my grandchildren and visiting in Rolla." • **Joseph F. Reichert**, CE, reports that his son, **Ed Reichert**, CE'97, married Jennifer Jankowski on Sept. 3, 2000, in Kansas City, Mo. They now live in Overland Park, Kan. • **Robert T. Stelloh**, GGph: "I am working on a Web site for Azaleas (www.azaleas.org). Check it out!"

1960s

1960

Gerald B. Allen, ChE: "Happily retired from Eastman Kodak 3 years now. My wife and I have had a few health problems: cancer, torn rotator cuff, gall bladder and lupus. God has pulled us through it all just fine and we are looking forward to many good retirement years." • **Carrol Blackwell**, CE: "We are enjoying our retirement in Columbia and Lake of the Ozarks, Mo., where we recently purchased a cabin. Also enjoying our four grandchildren, last one recently adopted from China." • **Karl J. Daubel**, CE: "Enjoying retirement after 26-plus years of active duty in the Army Medical Service Corps as a sanitary engineer and 10-plus years with the University of Cincinnati. Shirley and I live in Chesterfield, Mo." • **B. Douglas Munsell**, CE: "Designing surgical devices at Bausch & Lomb. Nine children, 18 grandchildren. Our daughter, Bernadette, entered the Poor Clare Monastery in Belleville, Ill." • **Don Popp**, EE, MS EE'67: "Retired from the Boeing Co.

in St. Louis on Jan. 31, 2000, after 32-plus years. Upon retirement, I was group manager/team leader for flight control hardware/software for all production programs in St. Louis. My work experience included the F/A-18 A/B, C/D, E/F, the F/15E, the C/17A, and the JSF Prototype aircraft development programs. My wife, Barbara, and I reside at 3613 Collingwood Dr., St. Charles, MO 63301 and are enjoying traveling and grandchildren in retirement. I would appreciate hearing from old friends. My e-mail address is dpopp@mail.win.org."

1961

Richard L. Brake, CE: "Retired from Illinois Department of Transportation in 1991." • **Eugene D. Brenning**, CE: "My wife and I spent 2 1/2 weeks on a trip to Japan and Malaysia with classmate **Bill Mathews** (CE'61), and his wife. Had a great time!" • **Ronald Willenbrink**, ChE: "I am retiring from Ashland Oil Inc. after 32 years of service. Golf is in the picture."

1962

Richard T. Johnson, ME: "Changed jobs last year. Accepted position of dean of engineering and technology at Bradley University." • **James R. Wunderlich**, ME, has joined Renaissance Financial as a registered representative. He is retired from the Boeing Co. and recently sold the ACE Hardware store he owned in Washington, Mo., for 21 years. As a financial consultant, his target market will be individuals and businesses in the Washington area.

1963

John H. Anderson, GGph: "No new news. Still happily retired and singing barbershop in high desert north of Tucson, Ariz." • **William D. Haynes**, CE: "Retired and enjoying my hobbies and interests full time." • **Shafique Naiyer**, CE: "My responsibilities as director of public works have increased. I applied for and received a lot of sizable grants from the state and federal government. We are doing a number of important capital improvement projects. In this fiscal year, we hope to complete a teen center, Shyre Park and several dozen miles of roads and sidewalks."

1964

Lamy J. Chopin, CE: "Lamy, Janis and Sean completed and moved to a new home in Denham Springs, La., in October. Would like to hear from other classmates."

1965

Robert C. Fear, ChE: "I retired in Jan. 2000 from Mallinckrodt Inc. after a 34-year career."

WaterPartners rides *wave* of support

From his home office in Columbia, Mo., **Gary White**, CE'85, MS CE'87, has built a once tiny not-for-profit organization into a global organization. White's WaterPartners International is tackling a problem responsible for 80 percent of all the world's sickness — unsafe water and inadequate sanitation.

After leaving UMR in 1987, White, a Kansas City native, worked for Catholic Relief Services in New York, where he oversaw the planning and implementation of water and sanitation projects for Latin America. Next he worked for an environmental consulting firm in Denver, and in 1990 enrolled in the environmental engineering graduate program at the University of North Carolina. While there, he and a fellow graduate student founded WaterPartners.

Since 1990, White's organization has funded water systems in 30 communities in Honduras, 12 in Guatemala and two in El Salvador. Now, thanks to a collaboration with Clearwater, an organization established by pop singer and songwriter Jewel, WaterPartners plans to expand beyond Central America to Asia and Africa.

For more information, visit WaterPartners' Web site (www.water.org).

1966

Harold E. Fiebelman, CE: "Retired Dec. 31, 1999. Worked for U. S. Geological Survey for 36 years." • **Harvey E. Simpson**, EE, owns Quality Consulting Services. He writes quality manuals and implements quality systems and is a quality auditor. • **Gary M. Turner**, CE: "Became director of St. Charles County government in October 1998. Retired from federal civil service in September 1996. Was vice-president of professional services for Ackerman Architects Inc. from October 1996-October 1998. Retired as a lieutenant colonel in the Army Reserves (416th Engineer Command) in January 1998."

1967



David Flanagan, CE, *left*, has been elected to a six-year term as circuit judge for the Dane County Circuit Court in Madison, Wis. Flanagan served 24 years as an assistant attorney general for the state of Wisconsin, focusing on criminal prosecution as well as civil trials involving construction claims and medical negligence. In 1999, Gov. Tommy Thompson appointed Flanagan to the Circuit Court. • **Henry K. Hachmuth**, ChE: "I am retired from Phillips and have a small consulting company, HKH Inc. Visit me on my Web page (www.hachmuth.com)."

• **Charles H. McGrady**, CE: "Still living in Bowie, Md. Performing consulting civil engineering work." • **Robert W. Whelove**, ChE: "My first and only child, Amy Christine, is in 2nd grade and doing well. Her activities include Brownies, gymnastics, piano and soccer."

1969

Robert C. Vorwith, ME: "My son, Sean, was married on May 12, 2000, to Allison in Fallbrook, Calif. My older son, Cary, bought his first home in 2000 in Vista, Calif."

1970s

1970

Barry R. Romine, CE, and his business partner, Chris Ramsey, have formed Optical Services Group, which does CD duplication, packaging, labeling and fulfillment. They own two other companies, Video Services Group and Take Two Productions.

1971

John H. Atkinson III, EMgt: "Retired from the University of Missouri-Columbia College of Engineering in September 2000. I am now teaching one civil engineering course until new faculty are hired." • **Bryan R. Becker**, ME, was elected by the American Society of Mechanical Engineers International to the grade of Fellow in August 2000 in recognition of his research in the modeling and numerical analysis of heat and mass transport, and freezing phenomena in food storage and refrigeration. His technically diverse research record includes turbine blade cooling, thermal storage, whole building energy consumption, plume modeling, soil thermal properties, industrial process fouling and combustion modeling. He has supervised 38 student theses and authored more than 100 journal articles, chapters in books, presentations and

HEY, CLASS OF 1976

It's your turn next Homecoming — your turn to celebrate your 25-year reunion, that is!

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research reports. • **P. Roger Ellis**, CE, has been selected to receive the Emerson Award for Excellence in Teaching. The award is presented annually by Emerson (formerly Emerson Electric Co.) to teachers who exhibit a high level of ability and commitment to their craft. He is an associate professor of management and coaches men and women's varsity golf teams at Lindenwood University. • **John T. Graham**, CE: "I now work as a senior project estimator for Jacobs Engineering in St. Louis."

1972

Dominic J. Grana, CE, has joined Geotechnology Inc. as vice president of operations. He is responsible for supervision of a staff of more than 35 technical professionals, as well as management of administrative operations for the 80-member environmental/geotechnical consulting engineering firm. • **Donald E. Rice**, Geol: "In 1999, I left Amoco after 26 years due to the BP (British Petroleum) merger. At Kerr-McGee, I am working on exploration of new ventures around the Atlantic margin."

1973

Gary S. Anderson, EE, has been promoted to vice president electrical engineering /Adam's Mark Hotels & Resorts and electrical group leader. He is responsible for coordinating the development of design criteria, electrical standards calculations and construction for all HBE Adam's Mark Hotels electrical systems. • **David N. Motherwell**, CE: "In October, I was given the Alumnus of the Year Award from my high school alumni association in Berryville, Ark." • **Barry W. Schaffter**, EMgt, has been appointed vice president of Agricultural Management Solutions with

John Deere's Worldwide Agricultural Equipment Division. He will be responsible for precision farming, global vehicle communications and the broader business ag-technology development. • **Ronald D. Willoughby**, EE, has been promoted to director of operations at Cooper Power Systems' Thomas A. Edison Technical Center in Franksville, Wis. The center is the only R&D center of its kind in the parent company of Cooper Industries. Cooper Power Systems is a worldwide supplier of electric distribution equipment.

1974

Richard F. Dickerson, CE: "First grandchild, Kayla Nicole Haff, born on July 8, 2000." • **Kerry Stokes**, EMgt, is the construction administrator of the Southeast Correctional Facility.

1975

Thomas B. Ellis, CE: "Have a new position with Sverdrup Civil Inc. in St. Louis, managing projects. Great place to work." • **Charles M. Endsley**, NucE: "After three daughters and one granddaughter, we finally have another boy in the family: a grandson named after me, Jonathan Charles!" • **Donald E. Simpson**, CE: "Recently took a job with U.S. Army Corps of Engineers, as resident engineer at Columbus, Miss., Air Force Base. I am now working out of the Mobile District." • **James H. Williams**, GGph: "Retired in July as director and state geologist from the Division of Geology and Land Survey in Rolla. Was with DNR (the Missouri Department of Natural Resources) for 48 years."

1976

John D. Culter, ChE: "I co-authored a textbook called *Plastics Packaging*, which was published in 2000. Currently I am creating an on-line graduate course for Michigan State University, Polymer Science Applied to Packaging Problems, which was to be offered in February 2001." • **John J. Jaeger**, CE: "I was recently promoted to the chief of the design branch at the Kansas City District, U.S. Army Corps of Engineers." • **James A. Mills**, CE, has a new Web site, Brainchild (www.dirtbanc.com). "Entrepreneurial spirit abounds with Rolla grads." • **Michael E. Sallwasser**, AE, is supporting human resources and financial systems using PeopleSoft application. Recent upgrade project avoided \$20,000 in additional costs by completing effort in house. • **James D. Wood**, ChE: "In August 2000, I retired from the U.S. Army Reserve after 24 years of active duty and reserve service. I still work for the Army as a civilian employee at Aberdeen Proving Ground, Md."

Running RINGS around the competition

Michael F. Bieg, ME'84, co-founder of icon Mechanical of Granite City, Ill., has an unusual but successful business plan called "Rings of Resources." The modular plan puts the goal at the center, with markets and customer as spokes branching out.

Since founding icon in 1995, Bieg and his partner, Joe Parise, have focused on tackling the projects large competitors do not find attractive. As a result, the company has employed some innovative approaches while keeping a low profile. Now well established in the St. Louis market, icon Mechanical is working on high-profile projects such as construction of the Donald Danforth Plant Science Center.

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WEB

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Alumni promoted at Ameren

Two UMR alumni were recently promoted by AmerenEnergy Fuels and Services Co. of St. Louis. **Michael G. Mueller**, ME'86, is now vice president of the company and **Daniel I. Lidisky**, PetE'86, has been named manager of fuel business development.



Michael G. Mueller

Mueller joined the company (then known as Union Electric Co.) in 1986 as an engineer in corporate planning. In January 2000 he became manager of the fossil fuel

department, a position he held until his recent promotion.

Lidisky joined AmerenUE in 1994 as gas supply engineer in the corporate planning area of the organization. He has held positions in gas supply for Ameren Services power trading for AmerenEnergy Inc. and served in business development-fuels for Ameren Services.



Daniel I. Lidisky

1977

Terry B. Bollinger, CSci, received the Third Millennium Medal from the Institute of Electrical and Electronics Engineers for contributions that have helped usher in the new millennium. • **Sandra K. (Turnbough) Marx**, ChE: "Michael, EE, and I moved last year to Naperville, Ill., due to the British Petroleum-Amoco merger. Mike is a transport systems specialist with BP and I am a financial analyst with BP. We have a son, Jason, who is a junior in high school and, a daughter, Stephanie, who is in the 6th grade."

1978

Martin D. Hoffman, ChE: "I am now a professor and residency program director of physical medicine and rehabilitation at the Medical College of Wisconsin in Milwaukee."

1979

John R. Lodderhose, CE: "After graduating from UMR, I returned to school and received my MS in environmental engineering from UMC while working for the Missouri Department of Natural Resources as an environmental engineer in Jefferson City. They have a much better football team there but not much of a St. Pat's celebration. I am now working for the Metropolitan St. Louis Sewer District as the assistant director of the office of environmental compliance. While working for MSD I returned to school one more time to receive my MS in engineering management from UMR's extension at UMSL in 1992. I have been with MSD for 14 years and really enjoy being back in my home town, St. Louis. There are lots of Rolla alumni here and I see many of them on a regular basis. I am married with two children and have dedicated my fall weekends to my kids' soccer games, which is a real sacrifice when the Rams are on TV." • **Gary Pendergrass**, GeoE: "Recently founded Pendergrass & Associates Inc., a firm specializing in hazardous waste remediation, environmental public relations, litigation support and RCRA/CERCLA compliance."

and the scenic commute to Quapaw, Okla., where I manage a specialty minerals lab. We make isotopically enriched materials for the nuclear and semi-conductor industries." • **Martin J. Millman**, ChE: "**Judy (Parker)**, EMgt'81, and I are enjoying life in Seaford, Del., where I work for DuPont. I finally understand the polymerization reaction for nylon 6,6! Our three children, Emma (15), Virginia (13) and Ben (9), help us find ways to fill every few minutes with trips to the soccer field, tennis courts or band recitals." • **Sandra M. (Hoelscher) Simmons**, CE: "I am enjoying life in the Pacific Northwest (Seattle) with my husband and two children. I love my work involving airport construction." • **Mark S. Smith**, CE: "I was recently promoted to assistant vice president at BSI Constructors Inc. in St. Louis."

1981

Patrick J. Becker, CE: "Living in Houston with my lovely wife, Debby, and two children, Kaylyn, 12, and Matthew, 9. Go St. Louis Cardinals and Rams!" • **Robert W. Benson**, EE, was appointed community director of the Affton (Mo.) Banking Center by Citizens National Bank. • **Judy (Parker) Millman**, EMgt: "**Martin J. Millman**, ChE, and I are enjoying life in Seaford, Del., where Martin works for DuPont. Our three children, Emma (15), Virginia (13) and Ben (9), help us find ways to fill every few minutes with trips to the soccer field, tennis courts or band recitals." • **Colleen L. Petosa**, GGph: "My son, Jeremy, is 2 1/2. He is very interested in rocks, fossils and the solar system. With luck he will become a Rolla Miner like his mom." • **Lt. Col. Randall Stagner**, Hist, assumed command of the 3rd Battalion of the 1st Special Warfare Training Group (Airborne) in June 2000. A ceremony for Stagner was held at Fort Bragg, N.C. • **W. James Unverferth**, ChE: "We recently moved within our subdivision this past summer, but still in the Houston area. Synergy Oil & Gas has grown from a start-up to a real company now."

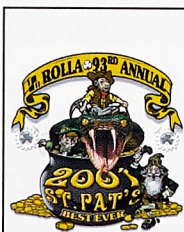
1982

David B. Akers, CE: "Re-joined Huitt-Zollars Inc. as vice president in the Phoenix office."

1980s

1980

Barry D. Fehl, CE: "I left government service in January 2000 after nearly 20 years to join GEI Consultants in St. Louis. It is good to be back in the St. Louis area." • **Ann M. Hagni**, GGph: "I am enjoying Joplin, Mo.,



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Becky, MetE'84, is pursuing her master's in education at Arizona State. Samantha will be 4 years old." • **Lori A. (Looser) Henson**, GeoE: "I made a career change in April 2000 and went from project management for a general contractor to St. Louis Division manager at Atkins Benham Constructors in St. Louis. I head up the design/build operations and love it. Joe and I and the boys, Bryan (13) and Eric (11), still live at 4476 Dantonaire, St. Louis, MO 63128. My e-mail is lhenson@atkinsbenham.com." • **Jeffrey P. Klein**, GeoE, has been promoted within Geotechnology Inc. as a project manager in the geotechnology division. Klein joined the company in 1999 and has more than 18 years of experience in the field of geotechnical and geological engineering. He is responsible for conducting geotechnical and geological investigations, on-site observation/inspection programs and related laboratory testing programs. • **John A. McGill**, ME: "I am still working as the manager of design engineering for RMF Steel Products in Grandview, Mo. As of January 2001, RMF was to add a new company to the mix, RMF Freezers Inc. This should keep me busy." • **Thomas M. Metcalfe**, CE: "Recently added a new son to our family. Now boys outnumber girls, four to two. Consulting continues to be a great way to make a living." • **Michael L. Smith**, ChE: "My family and I are enjoying being back home in St. Louis after some interesting assignments in the semi-conductor industry. Kay and I have 3 children, Matt (14), Angie (11) and Daniel (7)."

1983

Max G. Grogg, CE, has joined Applied Pavement Technology Inc. after 15 years with the Federal Highway Administration. • **Lewis D. and Caroline Israel**, CE: "We love Colorado! I (Caroline) am now working for a software company and loving it. Dan is a division manager for Terracon. Our three kids are growing up. They are 16, 13 and 9." • **Catherine R. Zajchowski**, CE: "On May 4, 2000, Marya Catherine joined our household. We will soon move to Collinsville, Ill."

1984

David D. Ahlvers, CE, has been promoted by the Missouri Department of Transportation to district engineer for the Northwest District, which is headquartered in St. Joseph, Mo. Dave began his career with MoDOT in 1985 and also worked for the department while attending UMR. • **David S. Bardsley**, GGph: "Longbore has started a European operation based in Livingston, Scotland, this

Future Miners

Susan (Koeller) Adams, GeoE'96, and her husband, Tim, had a boy, Tyler Michael, on Aug. 20, 2000.

William Avise, ChE'94, and his wife, **Julie (Gannon)**, ChE'97, had a girl, Leah Katherine, on Aug. 26, 2000.

Krista L. Burnett, CE'94, and her husband, Paul, had a boy, Jacob Duncan, on Aug. 20, 2000. He joins his big sister, Hayley.

Jacob Careaga, CE'98, and his wife, **Anika**, CE'98, had a girl, Katerina Lacey, on Oct. 23, 1999.

Kevin Corwin, CE'98, and his wife, Holly, had a girl, Emma Grace, on Sept. 22, 2000.

William M. Dalton, ChE'86, and his wife, Roberta, had a girl, Katherine Michelle. She joins two other siblings.

Richard F. Dickerson, had his first granddaughter, **Kayla Nicole Haff**, on July 8, 2000.

Robert Fischer, MetE'90, and his wife, **Cynthia (Stover)**, CE'90, had a boy, Blake Henry, on July 9, 2000. He joins his big sister, Audrey, 4.

Stuart Gardner, CE'90, and his wife, **Susan (Evanson)**, CE'90, are the proud parents of Grace Elizabeth, born Apr. 28, 2000. Grace joins her big sister, Emma, 3.

Jeffrey Green, ME'87, and his wife, **Terri (Moore)**, ME'86, had a boy, Sean Joseph, on June 6, 2000. He joins his big brothers Christian, 7 and Eric, 5.

Zhenhao He, GGph'95, and his wife, had a girl, Rachel, on Aug. 11, 1999.

Russell Henke, CE'90, and his wife, Rachele, had a boy, Jack Christopher, in March 2000.

Martin Hesterberg, CE'91, MS CE'97, and his wife, **Pam (Luchun)**, CE'92, MS CE'93, had a girl, Jennifer Nicole, on Nov. 3, 1999.

Robert L. Hormell, III, ChE'95, and his wife, Marissa, had a girl, on Jan. 23, 2000.

Sarah (Peterson) Jamison, CSci'97, and her husband, Jeffery, had a boy, Evan Marsh, on Nov. 6, 2000.

Jason Kirk, EMgt'97, and his wife, Amy, had their first baby, Andrew Wesley, on Sept. 28, 2000.

Todd Parks, MinE'91, and his wife, **Nancy (Wehmeyer)**, EMgt'89, had a boy, Brett Weston, on Aug. 27, 2000. He joins big brother, Cody, 3.

Forrest, CE'86, and his wife, **Meg Marshall-Thomas**, CE'87, had a girl, Emily, on Aug. 9, 2000. She joins her big sister, Haley, 6, and big brother, Nicholas, 4.

Michael J. Thomas, EE'90, and his wife, **Marybeth (Volk)**, EE'92, had a girl, Anna Marie, on Nov. 30, 2000. She was welcomed by Adam, 5, Audrey, 4 and Anthony, 15 months.

Mark Varwig, MetE'86, and his wife, had a boy, Evan, on April 29, 1999.

James D. Whetsel, ChE'81, and his wife, **Alissa Gallagher**, EMgt'81, had a boy, Kevin Quinn, on Sept. 19, 2000. He joins Ryan, 11, Catherine, 7 and Christopher, 3.

Jay (Albert III) Winkeler, EE'93, Engl'93, and his wife, **Deena (Ballinger)**, had a girl, Teegan Marie, on Jan. 19, 2000. She joins her brother, Fox (Albert IV).

Michele (Toner) Youmans, ME'86, and her husband, John, had a boy, Brandon Dean, on Aug. 24, 2000. He joins his older siblings, Stephanie, 7 and Michael, 5.

Catherine Zajchowski, CE'83, and her husband, Richard, had a girl, Marya Catherine, on May 4, 2000.



Jennifer Nicole Hesterberg

If you have a birth announcement or a photo of your new little Miner, send it to us and we'll publish it in an upcoming issue of the magazine.

"Big Brother," clergy-style

Take three recent college graduates interested in entering the ministry, install them in a newly remodeled vicarage, and instruct them to live and serve together in harmony for the next nine months.

Sound like the makings of yet another reality TV program? No, this isn't "Big Brother" revisited, or even MTV's "Real World." It's the *real* real world for **Jonathan Erdman**, Psyc'00, and two other candidates for clergy in the Episcopal church.

Last August, the Episcopal Church of the Resurrection in Omaha, Neb., put Erdman, Jeffrey Huston and Alison Witty together in the church's vicarage to live together to explore parish ministry and communal living. According to an article in the *Omaha World-Herald*, "The hope is that they will find church work and the spiritual life so rewarding that they will consider the priesthood."

Erdman was already on track for seminary. But when his bishop suggested he take a year off to explore urban ministry, he changed course. Now he's finishing up his stint of communal living, which involves 20 hours of parish work a week along with 10 hours of community service and 10 hours of prayer, worship and spiritual reflection. During this time, Erdman has worked at the Church of the Holy Spirit in Bellevue, Neb.

past year. We hope that our horizontal environmental drilling services will be accepted in Europe." • **Robert E. Slenker**, EE, has joined the patent, trademark and intellectual property law department at Armstrong Teasdale L.L.P. • **Craig Tajkowski**, CE, has taken over as St. Louis County engineer. He served as assistant county engineer since May 1998, assisting and overseeing all aspects of the county highway department's operations. • **Charles E. Woodbury**, GGph: "Wondering what has happened to all the folks I used to know. Send me an e-mail: cewoodbury@pclnet.net."

1985

Lindell Huskey, CE, has been named area engineer for the Missouri Department of Transportation. He will be assigned to the western region of the Southeast Missouri districts. • **Edward J. Kammerer**, ChE: "My wife, Sandy, and I have two children: Lauren, 4 and Luke, 2. I am now working in the corporate planning department at Ameren Services in St. Louis." • **Forrest W. Rogers**, CE: "Last April, I took the Illinois EIT exam and passed. I plan to take the PE exam this spring. It's never too late!" • **Greg M. Stowell**, ME, had a photo exhibit and artists reception in October at the Philadelphia Java Company in Philadelphia.

1986

William M. Dalton, ChE: "Roberta and I have our third daughter, Katherine Michelle, 5 months old. I am still with Orscheln Industries and currently working on commercialization of a new process." • **David M. Easty**, EMgt: "I left the army after Desert Storm and went back to school. I received my M.D. degree in

1997. I am back in the army as a battalion surgeon in the 7th Special Forces Group at Fort Bragg, N.C." • **Terri (Moore) Green**, ME: "We are still in Springfield (Mo.). **Jeffrey** (ME'87) is a maintenance manager at Hawker Power. I am still working out of the house. We had our newest addition, Sean Joseph, on June 6, 2000. He joins his brothers, Christian, 7, and Eric, 5. With all of these men I feel like I'm at good old UMR again." • **Larry A. Hofstetter**, ChE: "I am currently working for Premcor Refining Group and living in St. Louis with my wife and our four children." • **Kevin S. Howe**, ChE: "I still work for Eastman Chemical, doing project work." • **Curtis A. Krueger**, ChE: "Krueger Engineering & Sciences recently integrated with Hanson Engineers. Lisa works for Dynegy, and we have relocated to Houston, Texas. I will head up Hanson Engineers' Houston office. We are still getting used to the humidity." • **Stephen J. Meyer**, CE: "I recently changed employers. I am still managing bridge projects." • **Donald Schnefke**, MetE: "Hello from Joe O'Melame. I pray that God will fill all UMR grads with the knowledge of his will through all spiritual wisdom and understanding." • **Mark Varwig**, MetE: "Celebrated the birth of my first born, Evan, on April 29, 1999. Completed an MS in materials science in May 1999. Still working for Boeing in St. Louis, as a metallurgical engineer with the materials and processes group." • **Michele L. (Toner) Youmans**, ME: "For the last 2 1/2 years, my family and I have lived in the Metro Atlanta area. I work for Lockheed Martin Aeronautics Co. as a system safety engineer specialist, working on the C-130J Hercules military transport aircraft. My husband, John, and I were blessed with our third child, Brandon Dean, born on Aug. 24,

2000. He joins Stephanie, 7 and Michael, 5. They all keep me extremely busy! I would love to hear from old friends." • **Kathryn A. Zeigler**, ChE: "Still doing remediation at Mallinckrodt, but part-time now. Have lots of fun keeping up with John, Carey (21), Lauren (18) and Brian(5)."

1987

Clinton T. Ballinger, NucE: "I started my own company making optical switches for the telecom industry. I never knew there were so many uses for the Boltzmann Transport Equation. Thanks D. Ray." • **Brian K. Donley**, ChE: "I'm still living in St. Louis, working at ETHYL, as the health, safety and environmental manager for the saugat plant. I finished my MBA at Washington University in September, and am looking forward to a break." • **Jeffrey Green**, ME: "We are still in Springfield (Mo.). **Terri (Moore)**, ME'86, is still working out of the house. I am maintenance manager at Hawker Power. We had our newest addition, Sean Joseph, on June 6, 2000. He joins his brothers Christian, 7, and Eric, 5." • **Robert R. Holmes**, CE: "Became chief of the Illinois District for U.S. Geological Survey in January 1999. **Joanne** (MetE'91) and I also had baby No. 4, Olivia Rae, in September 2000. All four girls! I may need to add another bathroom in a few years." • **James Scott Riley**, ChE: "Everything is great! In 1996, my company, Teklab Environmental, designed and built a state-of-the-art laboratory. Since then, we are up to 40 employees and have averaged about 25 percent annual growth. The sky is the limit!" • **Jon Schneider**, AE: "1999-2000 proved to be a busy year. With Robin, Sarah and Kevin's support, I earned a second master degree (manufacturing management) and completed the Lake Placid Ironman Triathlon. Best wishes to my fellow AE alums." • **Gene A. Williams**, PetE, recently was promoted to city engineering for Mexico, Mo. He is responsible for supervising many projects and addressing several issues, including road deterioration, drainage problems and new subdivisions.

1988

Richard K. Milner, AE: "Hello all! I was promoted to major in June of 2000. I am switching to a new job at Kirtland Air Force Base, N.M. As of October (2000), I will work for the Defense Intelligence Agency." • **Ramona Tumblin-Rucker**, PetE, is the assistant project manager for M.L. Johnson and Co., a St. Louis construction-management firm. She is currently overseeing the reconstruction of four Cupples Station warehouses into the five-star Westin St. Louis Hotel, plus an office complex, immediately west of Busch Stadium. • **David Wolf**, ME, was promoted by Superior Essex to the

position of plant manager at the company's Florence, Ala., operation.

1989

Aaron J. Ayer, EE, recently received a master of business administration degree from Harvard Graduate Business School. After graduating from UMR, Ayer served in the U.S. Navy as a lieutenant on a nuclear submarine for five years, then worked for Corning Fiberoptic in Wilmington, N.C., for three years. He then decided to apply to Harvard for more business experience. • **Robert G. Ford**, CE: "I am working as a research scientist for the U.S. Environmental Protection Agency in Ada, Okla." • **Gregory S. Hayes**, CE, has joined Engineering Surveys and Services, a Columbia, Mo., firm of consulting engineers, geologists and land surveyors. He is a licensed professional engineer with more than 10 years of engineering design experience in transportation and site development. • **Wayne A. Hopkins**, GGph: "I am working for Carter & Burgess now. Dixie and I just started remodeling our third house." • **Elizabeth J. Trimble**, EMgt: "I'm still a full-time mom to Kristina, 12; Ethan, 9 and Tabby, 4. I love every minute of it! See what we're up to at www.geocities.com/~momuv3 or momuv3@hotmail.com."

1990s

1990

Raymond J. Cologna, LSci, received a diploma from Baylor College of Medicine in Houston, Texas, in May, after being awarded a Ph.D. in molecular virology in January 2000. • **Cory D. Cooksey**, EE, was hired at North Central Missouri College as a full-time information technology instructor. • **Stuart Gardner**, CE: "My wife, **Susan (Evanson)**, CE'90, and I are still in Grand Junction, Colo., where I remain with the Colorado Department of Transportation. Susan is still enjoying her job as a full-time mom. Our Web site can be visited at home.earthlink.net/~ssgardner/index.html." • **Jeff Schauer**, CE, MS CE'90, is a geotechnical engineer with Shannon & Wilson Inc. He has been with the company for 14 years. He has been involved with subsurface exploration, field and laboratory testing, and development of design and construction recommendations for a variety of projects, many of them in southeast Missouri. • **Michael J. Thomas**, EE: "My

Harnessing a fuel to the stars

James Martin, AE'86, MS AE'89, looks at the world a little differently than the rest of us. As a researcher in the Propulsion Research Center of NASA's Marshall Space Flight Center in Huntsville, Ala., he's trying to find a way to harness the power of antimatter and use it in engines that could propel spacecraft to speeds approaching science fiction proportions.

Imagine flying to the moon in 7.5 minutes, or traveling to Mars in a day. Sound far-fetched? Martin and his colleagues at Marshall are trying to make such dreams a very real possibility.

Such flights will rely on the power of antimatter. "Out of all the things we've got ... antimatter is the only one capable of providing true high-speed, interstellar-type flight," says Martin. "But it's with one caveat: you have to have a lot of it." Antimatter is the same as matter, but reversed — like looking in a mirror, Martin explains. On the atomic level, antimatter has an opposite charge and opposite spin. When matter and antimatter collide, they destroy each other and create energy. The annihilation of matter and antimatter is the most energy-dense reaction known in modern physics, Martin adds.

But because so little antimatter exists in the universe, it must be created in labs. It's also difficult to store — and that's the problem Martin is concentrating on as the principal investigator for NASA's High Performance Antimatter Trap. The HiPAT storage system keeps antimatter for only a couple of weeks. Martin's goal is to build a better antimatter trap — one that preserves antimatter longer, increases its density, and can be used as the fuel tank for a hybrid engine.

"The next 10 or 20 years we'll probably prove the theory ... and we'll get to the point where we can build higher density systems," he says.

James Martin
AE'86, MS AE'89

wife, **Marybeth (Volk)**, EE'92, had a girl, Anna Marie, on Nov. 30, 2000. She was welcomed by Adam, 5, Audrey, 4 and Anthony, 15 months. I am enjoying my job as a patent attorney in St. Louis for Senniger, Powers, Leavitt, and Roedel, and Marybeth stays home with the kids."

1991

Glen K. Halley, EE, has been hired as an electrical engineer by Heideman and Associates Inc. • **Jamie R. Page**, CE, has joined Klingner and Associates in Quincy, Ill., as a project engineer in the fields of transportation, industrial and municipal engineering.

1992

Robert G. Becker, CE: "I received my professional engineering license in June 1999." • **M. Drew Rimmer**, ME, has been promoted to associate with Henderson Engineers in Lenexa, Kan. • **Marybeth (Volk) Thomas**, EE: "My husband, Mike, EE'90, and I had a girl, Anna Marie, on Nov. 30, 2000. She was welcomed by Adam, 5, Audrey, 4 and Anthony, 15 months. Mike is enjoying his job as a patent attorney in St. Louis for Senniger, Powers, Leavitt and Roedel, and I stay home with the kids."

1993

Elizabeth (Dare) Baiter, CE: "Still working in St. Louis. Married Steve Baiter on May 20, 2000, and we are the proud parents of two dachshund-beagle pups, Brutus and Cleo." • **Scott A. Brandt**, CE, has been registered as a professional engineer in Missouri. He is employed with the U.S. Army Corps of Engineers' Kansas City District. • **Deborah L. Rackers**, CE: "Mitch (ME'93) recently retired from Caterpillar to start his own corporation, New Design Solutions Inc. He will be designing conceptual parts for the automotive industry. I am still happily at home with our four children." • **Tamara Sonderoth**, ChE: "Jason and I, along with our son, Nathan, moved to San Antonio, Texas, in May. I left my job to become a full-time mom and I love it."

1994

William A. Avise, ChE: "My wife, **Julie (Gannon)**, ChE'97, and I welcomed our first baby, Leah Katherine, on Aug. 26, 2000. I am working as a process engineer at Mallinckrodt and I am going back to work part-time as a biochemist at Lee Scientific." • **Susan E. (Jamboretz) Barry**, CE: "Married James Barry on Sept. 23, 2000. We live in Blue Springs, Mo. I work as a senior highway designer for the Missouri Department of Transportation and am a registered

professional engineer. James is employed by the Missouri Department of Conservation as a naturalist." • **Jason Carver**, EE, is chief engineer at Southwest Electric Cooperative and passed the NCEES principles and practice of engineering examination administered in April 2000. • **James A. Perez**, Phys, has joined the faculty of Luther College, Decorah, Iowa, as an assistant professor of physics. • **Christine (Sheehy) Rousselle**, EE: "I recently got married to Steve R. Rousselle (an EE from Michigan Tech) and we live in Redondo Beach, Calif. I'm an applications engineer for Quickturn Design Systems and Steve works for Ansoft Corp. We have both been busy traveling for work and for pleasure and we will finally took our honeymoon in Aruba. Life is great!"

1995

Winchester R. Falbe, CE, has joined HNTB Architects Engineers Planners as an engineer in the bridge group. • **Sean C. Henry**, CE: "I just got married on October 14, 2000, to Jennifer Sheaffer of Des Moines, Iowa; we live in Carbondale, Ill. I also received my PE in February 2000." • **Mark B. Joersz**, CE: "Both my wife and I finished our master's degrees from Webster University in St. Louis. Mine was a MBA and Jill received a master's in human resource management." • **Sherry King**, Math, has taken a position to teach math at Bourbon (Mo.) High School. She has volunteered to help out with the freshman class at BHS. She teaches geometry, Algebra I and tech math. • **Shelly A. Lane**, CE: "Currently I am a stay-at-home mom with my almost 3-year-old boy, Austin. My husband, **Steve** (ME'94), is working for Southland Metals, which is based in Little Rock, Ark." • **Jeffrey D. Lueddecke**, AE: "Recently married in May 2000 to Lisa Garst." • **Polly G. Robinson-Baxter**, Chem: "Married Michael Baxter in September 2000 and working as a consulting pharmacist in Tulsa, Okla." • **David A. Ryckman**, GGph: "I am with Stillwater Mine Company as a grade control geologist. My first real job. Thanks UMR, I am very grateful."

1996

Mark C. Bross, CE, joined MECO Engineering Co. in Hannibal, Mo., as an engineer-in-training concentrating on municipal projects. He has been designated as a project manager and promoted to the project management team at MECO Engineering. • **Craig A. Findley**, GGph: "Working in Houston with several UMR alumni: **Shane Quimby** (GGph'95); **Sissy Theisen** (GGph'96); and **Dennis R. Lawson** (GGph'96). We are all working for PGS." • **Richard J. Huber**, Math: "I recently got married to Kelli Butcher. She is a graduate of

Southern Illinois University-Evansville and is currently a CPA with Deloitte & Touche. I am currently a health and welfare benefits consultant in Clayton, Mo." • **Susan E. (Harrison) Ivy**, CE: "Married Shawn Ivy on Sept. 23, 2000, in Jefferson City, Mo." • **Kenneth L. Voss**, CE: "I was recently promoted to transportation project designer for the Missouri Department of Transportation." • **James M. Wilson**, CE: "I married Alexandria Garavaglia (University of Illinois) in July 2000 in St. Louis. I am a traffic engineer with the consultant firm of Crawford, Bunte, Brammeier in Maryland Heights, Mo. Alexandria is pursuing a doctor of pharmacy degree at the St. Louis College of Pharmacy, while working in the pharmacy at St. Louis Children's Hospital."

1997

Julie (Gannon) Avise, ChE: "My husband, **Bill** (ChE'94) and I welcomed our first baby, Leah Katherine, on Aug. 26, 2000. Bill is working as a process engineer at Mallinckrodt and is going back to work part-time as a biochemist at Lee Scientific." • **James A. Rinehart**, Hist, joined the staff at Bourbon (Mo.) High School. He is teaching American history, sociology and geography. • **Henry Woods**, CE, is a civil engineer for Bi-State Development Agency in St. Louis. He recently received a master's degree in management from Webster University.

1998

Darren R. Brown, CE: "I am farming over 3,000 acres with my father-in-law and I am a proud parent of a 14-month-old boy named Noah." • **Julie Carroll**, GeoE, has joined the geotechnical services group of SCI Engineering Inc. She is a staff engineer and will be working from the Fairview Heights, Ill., office. • **Seth A. Coggin**, CE: "Married Stacey Lear on April 22, 2000." • **Jennifer L. Delancey**, GeoE, has joined the geotechnical services group of SCI Engineering Inc. in St. Peters, Mo. • **Raymond V. Joggerst**, Chem, graduated from the University of Southern California in May 2000 with a master of science degree in chemistry. • **Daniel Van Anne**, CE: "I recently married **Sheryl (Ziccardi)**, CE'98, in Buffalo, N.Y. I am a lieutenant in the U.S. Army and Sheryl is a project manager with Alberici Construction."

1999

Scott Moll, ChE: "Since June 1999 I have been working in Decatur, Ill., as a production engineer at A.E. Staley (part of the Tate & Lyle North America Group). And I am loving every minute of it! Those of you who know me can e-mail me at samoll@angelfire.com or

let me know when you are passing through Illinois or St. Louis." • **Craig Skoch**, AE: "I am working on my master's at Purdue. The AE department at UMR did a good job of preparing me for these new challenges. I feel very competitive among the grad students here."

2000s

2000

Greg Currington, CE, joined Smith & Co. as a staff engineer. He and his wife, Tiffany, make their new home in Poplar Bluff, Mo. •



Mary Grass, CE, left, joined Paric Corp. as a project engineer. In her new position, Mary assists project managers in Paric's commercial construction group

with estimating, scheduling and project management. • **Derek A. Olson**, CE, began studies at Conception Seminary College for the priesthood of Diocese of Kansas City-St. Joseph. • **Elizabeth Ragsdale**, ChE: "Larry Ragsdale, CE'98, and I were married on Aug. 26, 2000, in Hermann, Mo. Larry works for URS Corp. and I work for Bechtel Corp., both in Houston, Texas. We are enjoying married life and exploring the huge city."

YEARBOOKS

If you've misplaced your yearbook or need another copy, now's the time to get yours. The Rollamo Office has yearbooks available from 1990 to 2000 (there are a few books available from earlier years). To get the book you want, contact Carol Molchan, Rollamo Adviser, University of Missouri-Rolla, 113 UC-W, 1870 Miner Circle, Rolla, MO 65409. There's no charge for the book, just a \$5 shipping/packaging fee to cover costs.

MINER TOURS

The lure of Ireland, the old world charms of Germany, Czechoslovakia and Austria, history and magnificence of Spain and, of course, the dazzling spectacle of Paris are all included in "Traveling with the Miners" for this upcoming year. Miners of every age have enjoyed their tours, shouldn't you be next?

Waterways of Holland and Belgium

"Tulip Heaven" at Schoonhoven, 18th century windmills, Amsterdam, the open-air Zuider Zee museum and the art and architecture of Flemish Bruges highlight this luxurious river cruise and tour. March, April 2001, from \$1,999.

All Aboard for Canada's Beauty and Charm

Spectacular luxury rail trip includes majestic Rockies, Columbia Ice Fields, the Capilano Suspension bridge, Banff national park, the famed Chateau Lake Louis, Vancouver's Victorian charm and Toronto's modern towers. April, May, June, July, August, September 2001, from \$2599.

Switzerland, Provence and Paris

Snow-capped mountains and radiant blue lakes of the Swiss Riviera; a week cruising Burgundy and Provence, and three nights in Paris make this very special. Eighteen cultural and sightseeing tours available, including your choice of the Musée D'Orsay Impressionist collection or the Louvre. April, May, June, July, August and September 2001, from \$3,299.

Germany-Czechoslovakia-Austria

A captivating tour of Gothic and Romanesque German towns, majestic Prague and the charm and magnificence of Vienna. The tour combines riverboat cruising with rail and motor coach tours to fully explore the beauties of the area. April, 2001, from \$1,989.

A Magical Week in Paris

Eight days and seven nights in this incomparable city of history and culture, including accommodations at the deluxe and historic Le Grand Hotel Inter-Continental Paris. November 1-8, 2001

Discover Sunny Spain

Historic Madrid, the sandy beaches and boutiques of Costa del Sol, picturesque Ronda, an afternoon at a Sherry-making Bodega, and finally romantic Seville including the Tower of Gold and the Alcazar Palace. May 2001, from \$1,699.

The Best of the Alps

Experience the splendor of the mountains, the fascinating, cosmopolitan cities and the quaint villages of Switzerland as well as the spirit and charms of Austria. September, October 2001, from \$1,990.

Ireland's Charms Await You

Enjoy stunning seascapes and countryside of unspoiled beauty in this land of a hundred thousand welcomes. Theatre, music, great restaurants and the country's talent for fun and conversation make this a memorable trip. August, September, October, 2001, from \$1,990.

For more information about these tours, please contact Lynn Stichnote in the alumni office, by phone at (573) 341-4145, by fax at (978) 926-7986, or by e-mail at alumni@umr.edu.

Memorials

1927

Ernest Moran, MinE, July 26, 2000



Edward W. Parsons, MinE,
†Oct. 13, 2000

1932



Edward L. Karraker,
ChE, †Sept. 2, 2000

1933

Jack M. Londe, MetE, †Aug. 17, 2000

1936

M. Geraldine Harr, CE, was a retired senior planner for the city of Fort Worth, Texas. †Sept. 5, 2000



Johns R. Hubbard, ChE, was a member of Theta Tau, Tau Beta Pi, Phi Kappa Phi, Blue Key, Kappa Sigma and the Officers Club while attending MSM-UMR. He retired from Lewin Metal Co. †July 12, 2000



Elliott H. Reed, MinE, was a member of Lambda Chi Alpha, Officers Club and St. Pat's Board while attending MSM-UMR. †Dec. 18, 1999

1940



Everett W. Sharp, CerE, was a member of Alpha Lambda Tau and participated in intramural sports while attending MSM-UMR. Everett was founder and owner of BMI Refractories and was a member of the American Ceramic Society. †July 26, 2000

John F. Welch, CE, was a member of ASCE, SAME and Student Council while attending MSM-UMR. †April 5, 2000

1941



Kermit F. Livingston, CE, was a student assistant for the civil engineering department while attending MSM-UMR. He served in the U.S. Army, then spent most of his working days in the Dakotas and the Kansas City area. †Aug. 24, 2000



Joseph O. Strawhun, CE, played football, basketball, track and intramural sports and was a member of M Club while attending MSM-UMR. †March 28, 2000

Ray E. Vaughn, ME, was an NYA assistant, a student assistant and a CAA trainee and was on the Missouri Miner staff while attending MSM-UMR. †June 7, 2000

1942

William R. James, EE, served in the U.S. Navy during World War II, was a member and elder emeritus of First Christian Church, was a member of the Telephone Pioneers of America and the Harry S. Truman Library Institute, and was a former member of the American Legion Post #21. He retired from Southwestern Bell Telephone Co. after 36 years of service. †Oct. 21, 2000



Thomas A. Jones, MinE, was an engineer for the U.S. Bureau of Mines in Little Rock, Ark., mining bauxite ore. He enlisted in the U.S. Navy and served in World War II in 1944. After completing a period of training at Harvard University, he served in the Pacific Theater aboard the U.S.S. Gen. M. L. Hersey as communications officer. Jones then attended law school at the University of Arkansas, graduating in 1950. He began working for the Lion Oil Co., which merged with Monsanto in 1955. He continued his career with Monsanto, moving to St. Louis in 1958. He retired in 1983. †Oct. 8, 2000

1943

John V. Boland Jr., CE, served on the Rollamo board and was a member of Alpha Psi Omega while attending MSM-UMR. He retired from his own business, John V. Boland Construction Co. †Aug. 3, 2000



Paul Osusky, Jr., MinE,
†July 16, 1999

1944

Roger D. Moeller, MetE, was a member of the Shamrock Club, Lambda Chi Alpha and Theta Tau and was on the honor list while attending MSM-UMR. †Oct. 4, 2000

1948



Ralph W. Ruwwe, GGph, was a member of Theta Tau and Blue Key while attending MSM-UMR. He served in the U.S. Coast Guard from 1937 to 1940 and again from 1942 to 1945, finishing as chief quartermaster. He began college between the Coast Guard service periods. After working 10 years for Stanolind Oil and Gas, he returned to Wichita where he established a partnership with Steve Powell. They developed drilling deals and specialized in well-site supervision until 1977. Ruwwe maintained a consulting practice from 1977 to 1984, where he retired. †Sept. 22, 2000

1949



Edward L. Aubuchon, MetE, was involved in several activities while attending MSM-UMR, including rifle club, engineers club, miner board, ASM, glee club and AIME. He graduated with first honors and served as a student assistant in the metallurgical engineering department. †April 23, 2000



Robert C. Booth, ChE, was a paratrooper with the 101st Airborne Division during World War II and participated in the first-night jump on Utah Beach in Normandy, France, during D-Day. He later engaged in combat in Ardennes, France, Holland, and Bastogne. He was also a part of the unit that captured Hitler's Eagle Nest above Berchtesgaden. For his service he was awarded two Bronze Stars and was part of the first Presidential Unit Citation. After the war, he returned to Springfield, Mo., where he attended Southwest Missouri State University before transferring to MSM-UMR, where he was a member of Tau Beta Pi and Sigma Tau Gamma. After graduating he worked for Shell Oil Co. from 1949 to 1956, then co-founded an oil pipe coating business, Plastic Applicators Inc., and in 1957 moved to Texas. Within a few years he started Corrosion Coating Co. Inc., which merged with Igloo Corp. He later started Production Contract Service Corp., then served as senior vice-president of Brianad Corp. in Houston. He returned to Midland, Texas, in 1986 to join Joe C. Neal and Associates, specializing in environmental engineering services for the oil and gas industry. †Oct. 8, 2000

Memorials



Harold R. Coffey, ChE, was a member of Engineers Club, AIChE, Independents and Tau Beta Pi and graduated with first honors while attending MSM-UMR. †Aug. 7, 2000

1950



William J. Angerman, ME, was a member of ASME and was a student assistant in the library while attending MSM-UMR. †June 2, 2000



Robert Joe Cronk, Geol, was a member of Sigma Phi Epsilon, AIMME and Tau Beta Pi, and also served on the honor list while attending MSM-UMR. Joe married his wife, Roxie, on the day of his graduation from MSM-UMR. His career took them to Illinois, Utah and Wyoming. He was employed by United Nuclear and Phelps Dodge before his retirement. †Sept. 30, 2000



Arthur L. Franks, MinE, served on the Miner Board and was a member of AIME while attending MSM-UMR. †Oct. 25, 2000

James C. Hyde Jr., CE, was a member of ASCE while attending MSM-UMR. †Aug. 17, 2000



Raymond E. Lansford, PetE, was a student assistant in the library, a member of AIMME, and was on the honor list while attending MSM-UMR. He was a retired professional engineer and owned Lansford Engineering Co. for more than 40 years. †Aug. 14, 2000



Chester J. Lapinski, MinE, was a member of AIME while attending MSM-UMR. †Oct. 7, 2000



William J. Main, EE, in 1969 went into business representing companies that produced and developed environmental treatment plants and incinerators. He received numerous awards and acknowledgments for his extensive contributions. Bill was vice president of McCallister Equipment Co. of Little Rock, Ark., at his retirement in 1992. †Sept. 23, 2000



Lee W. Powers, ChE, was a member of AIChE and was on the honor list while attending MSM-UMR. †July 28, 2000

1951



Harvey L. Larsen, MinE, †June 7, 2000

Eugene H. Lindsey, GGph, was a member of Lambda Chi Alpha and Sigma Gamma Epsilon, was on the honor list, and served as a student assistant while attending MSM-UMR. †Jan. 7, 2000



Thomas R. Salisbury, GGph, †Feb. 6, 2000

1953



Kenneth E. Ferber, CerE, was a member of Theta Kappa Phi while attending MSM-UMR. †Nov. 3, 1999

Marvin L. Huguen, MetE, was a member of Tau Beta Pi, Sigma Gamma Epsilon, Tech Club and the Foundrymen's Society and was on the honor list while attending MSM-UMR. He also won the Phi Kappa Book Plate Award and the Gold Key Award. †July 23, 2000



William J. Weber, PetE, was a member of Theta Kappa Phi and served on the St. Pat's Board. He retired from the Department of Interior, Eastern States office, in January 1998. †June 8, 2000

1954



Wayne M. Aceto, ME, served as secretary of Automotive Engineers Club while attending MSM-UMR. †Sept. 26, 2000

1956



Charles J. McCoy, ChE, was a member of Glee Club, Tau Kappa Epsilon, Student Council, Blue Key, Alpha Chi Sigma, Sigma Pi Sigma, Miner Board and AIChE while attending MSM-UMR. †Sept. 12, 2000

1959



Robert W. Kassay, GGph, was a member of the ROTC Band and the Shamrock Club and was on the honor list while attending MSM-UMR. †July 28, 2000

Robert C. Thornton, GGph, was a member of several organizations, including the Korean War Veterans Association, American Legion, Houston Geological Society, the Adirondack Mountain Club and the MSM-UMR Alumni Association. He also was a board member of the Veteran Affairs Voluntary Services Advisory Committee. While attending MSM-UMR he served as a student assistant in the geology department and was on the honor list. †Sept. 6, 2000



Carl E. Wulfers, CE, worked for the Missouri Highway Department from 1958 to 1990, serving as resident engineer for District 10 from 1968 to 1990. Wulfers also served in the Army during the Korean War. In addition, he was a member of VFW Post 3838 and Elks Lodge 639. †July 9, 2000

Donald Wyatt, EE, †July 18, 2000

1961



Edwin V. Eppinger, MetE, was a member of Sigma Phi Epsilon, Newman Club, ASM, AFS, Shamrock Club and Glee Club while attending MSM-UMR. †June 20, 2000

1962

James L. Baker, PetE, was a member of AIME while attending MSM-UMR. †April 9, 2000



Roger A. Edmison, CE, was a member of Independents, ASCE and Shamrock Club, and was a student assistant in the civil engineering department while attending MSM-UMR. †March 29, 2000

1963



Orrin A. Stemler, CE, was a member of SAME, ASCE and Lambda Chi while attending MSM-UMR. †April 5, 2000

1964

Paul T. Corcoran, MetE, was a member of Independents, ASM, AIME and SAME and was on the honor list while attending MSM-UMR. †Jan. 17, 1999

1965



James C. Pool, CerE, was a member of Sigma Gamma Epsilon, ACSE, Student Council and Independents and was on the honor list while attending MSM-UMR. †UMR was notified of his death on Sept 15, 2000

1966

James M. Rauer, CE, †July 18, 2000

1967



Charles M. Hansen, ME, was a member of ASME, Blue Key and Interfraternity Council while attending MSM-UMR. †May 25, 2000

1970

James Polcyn, GGph, †Nov. 30, 1998

1971



Donald D. Hall, ME, was a member of SAE, ASME and the U.S. Naval Reserves Unit while attending MSM-UMR. He spent 40 years with Dayco Products Inc. in Springfield. He started out in the plant quality control department and migrated to the technical center where he held positions ranging from application engineer to belt technical director. His career included many years of representing Dayco on technical committees of the Rubber Manufacturers Association and the International Standards Organizations. His first love always seemed to be the hands-on problem-solving challenges of application engineering, where he relished the chance to use his engineering skills to resolve customer and manufacturing problems. †Aug. 23, 2000

1973

Omega Clydene Applebee, Phil, †Sept. 13, 2000

Ronald W. Gray, ME, †March 2, 2000

1978



A. Ray Hopkins, EE, MS EE, served as a research engineer for UMR's Cloud and Aerosol Sciences Laboratory. †Aug. 12, 2000

1983

Steven L. Ward, CE, †January 7, 2000

1986

Tony Gordon Borovic, ChE, †Aug. 21, 2000

William R. Evans, EE, †UMR was notified of death on Oct. 30, 2000

1991

Timothy P. McConnell, CE, had a professional engineering license and was working toward his master's degree in business administration at Williams Woods University. He worked as a transportation project manager for the Missouri Department of Transportation and was a member of the Masonic Lodge No. 58 of Monticello and Park United Methodist Church. †July 20, 2000

1993

Robert C. Doney, MinE, †Aug. 26, 2000

1994

Mark L. Kelly, NucE, †March 12, 2000

1995

Sean M. Baird, CSci, †Sept. 24, 2000

Christopher J. Simmons, EMgt, was a member of Kappa Sigma Fraternity while attending UMR. He completed an internship with General Motors and was employed by Kelly Electric before moving to Lake of the Ozarks. He founded Simmons Logic Computer Service in 1997 and added Lake PC Internet Service shortly thereafter. In August 1999, Chris sold his business to Advertisnet Internet Services while continuing to work for Advertisnet as the system administrator and programmer. †Sept. 4, 2000

Friends

Jennie M. Baumgartner, †Sept. 26, 2000

Steven Robert Brown, a junior in civil engineering and a goalie on the UMR In-line Hockey Team. †Sept. 4, 2000

Marjorie Browngard, wife of Billy R. Browngard, EE'50, †Aug. 11, 2000

Julie Dearth, wife of David Dearth, director of computing and information services at UMR. She was a elementary teacher in the Rolla area for 30 years. †Oct. 24, 2000

Fred Herrman, former owner of Herrman Lumber Co. in Rolla and the husband of Ida (Franklin). He retired from the family business in 1991. †Aug. 1, 2000

Heather C. Hock, a freshman in engineering and a member of the Zeta Tau Alpha sorority. †Sept. 24, 2000

Haiying Huang, a graduate student in electrical engineering. †Sept. 5, 2000

Catherine G. Jenks, a psychology professor at UMR from 1967 to 1980 and later assistant to Chancellor Joseph Marchello until her retirement in 1986. †Oct. 13, 2000

Robert B. Lewis, former director of admissions for UMR. †Oct. 26, 2000

Mary H. McCracken, †Aug. 19, 2000

Louise Roach, wife of Vincent Roach, chemistry professor emeritus at UMR. †Oct. 23, 2000

Edward Sands, †May 8, 1999

Alvin C. Steinbach, an emeritus associate professor of German at UMR and a U.S. Navy veteran of World War II. †Oct. 30, 2000

Dorthea Valerius, wife of Claude Valerius, MinE'25, †Nov. 5, 1999

Louren R. Wood, †April 22, 2000

Policy for Publications of Alumni Notes in the MSM-UMR Alumnus

- We are happy to announce weddings, births and promotions, after they have occurred.
- We will mention a spouse's name if it is specifically mentioned in the information provided by the alumnus/alumna.
- The *MSM-UMR Alumnus* will announce deaths if information is submitted by an immediate family member, or from a newspaper obituary. Notification of deaths that have occurred more than two years before the date of publication will not be published unless a special request is made by a family member.
- Obituary information on alumni spouses will be printed only if the alumnus/alumna specifically requests that we print it.
- We will print addresses if specifically requested to do so by the alumnus/alumna submitting the note.
- We reserve the right to edit alumni notes to meet space requirements.
- We will use submitted photos as space permits.



Helen Lasko

Donor Profile

When her late husband, **Edward P. Lasko**, MetE'50, went to work for Florida Steel Corp. in the early 1960s, **Helen Lasko** decided to purchase "10 or 20 shares" of Florida Steel stock.

"I figured they were a good company. If they were going to hire my husband, then that was the stock I wanted to buy," she says. The company did well, and so did the stocks.

Mrs. Lasko continued to play the market. When she retired from her bookkeeping position with a stevedore firm at the Port of Palm Beach, she took her retirement fund and parlayed it into stocks that make up the Dow 30.

In her investing, Mrs. Lasko followed the philosophy of Peter Lynch, who managed the Magellan Fund for Fidelity Investments for years. She also tried her hand at one of the investment clubs, but decided to pull out of it when she saw she could do better on her own. "I'm a bit of an independent thinker," she says. "In an investment club, you vote on the stocks. And I didn't agree with all of their picks."

Mrs. Lasko plans to leave a significant portion of her estate to UMR through the Edward P. and Helen D. Lasko Endowed Scholarship Fund. Ninety percent of the funds will provide scholarships for metallurgical engineering students, with 10 percent designated for football scholarships. (Her husband played football while attending MSM-UMR through the G.I. Bill of Rights. He started out at Penn State, Mrs. Lasko says, but when they told him he couldn't play football and study metallurgy, he switched to Rolla.)

"He just thought Rolla was tops," Mrs. Lasko says. "That's all he ever talked about."

Although never attaining a college education herself, Mrs. Lasko has a deep appreciation for higher education. "I wouldn't be where I am today if Ed hadn't gotten his education and degree," she says. "I always preach this to all of the college graduates I know: the least you can do is join your alumni association. You're making money because of your education. The least you can do is to give some of it back."

That's advice we all can take stock in.

Photo by Gary Truman/Black Star

Time Capsule Discovered



See page 19 for details.