

**That's No Blarney**  
 Engineers' Week 2006 kicks off March 13. A complete schedule of events is at [www.engineering.missouri.edu](http://www.engineering.missouri.edu)

**The Fabric of Mizzou**  
 Students develop Tiger Tartan in problem-based learning project.  
**Page 2**

**March 9, 2006**  
 University of Missouri-Columbia

## Mizzou with a view

**TOP GUN** Campus roofers tend to potential leaks

**B**rian Evans gets a different view of campus than the rest of us; he gets a birds-eye view from atop most every building at Mizzou. Evans is roofer for Campus Facilities' maintenance department. He and co-workers Rick Kempker and Paul Martin maintain and repair more than 250 roofs around campus.

They work everywhere, from the heights of Memorial Union tower to the steep slopes of Pickard Hall, which has the steepest pitch of any roof on campus. All in all, the Campus Facilities roofing crew maintains more than 2.7 million square feet of roofs that are made of slate, asphalt, rubber, metal, PVC and standard shingles.

One of two Scotsmen who works at Campus Facilities, Evans has been with MU for six years. Raised in Glasgow, Scotland, the easy-going Evans joined the British merchant marine at the age of 15 and was a deckhand on cruise ships. He returned to Glasgow when

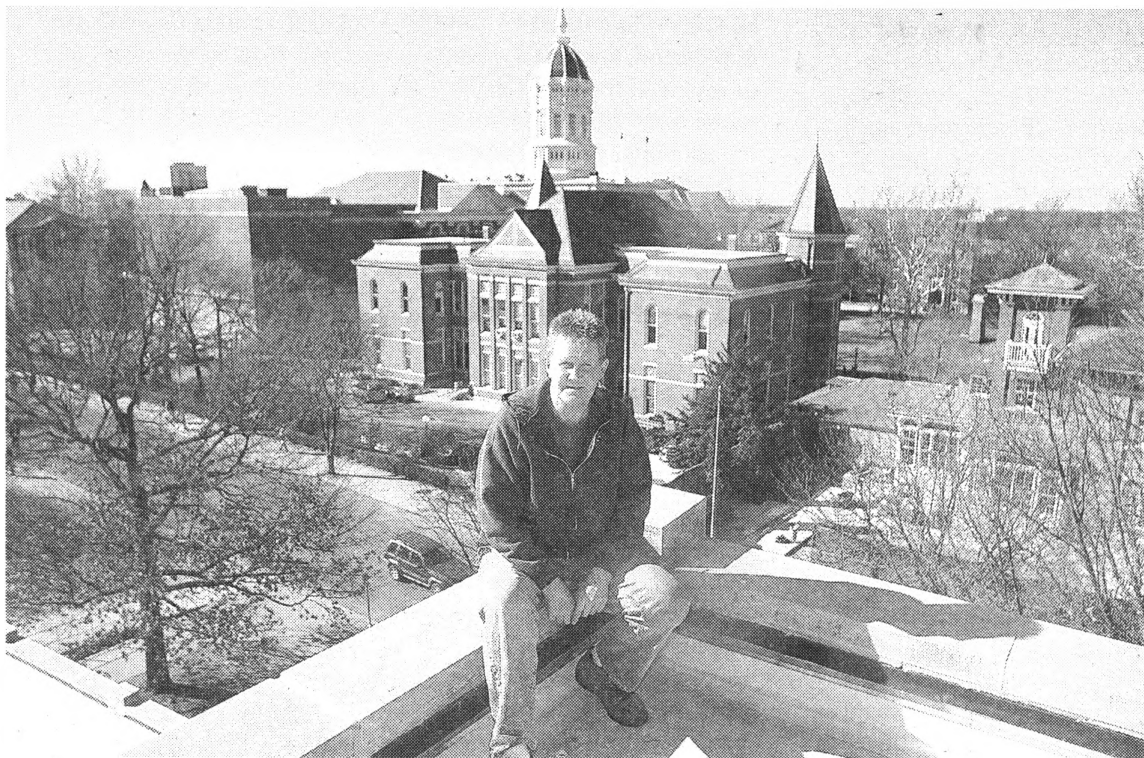
he was 17 and began working as a roofer with his brother.

One evening, after they had finished a roof and were enjoying a pint at a local pub, the pair decided to move to the island of Jersey in the English Channel. They packed and left the next day, and Evans ended up living there for the next 25 years.

"The Jersey cow gets its name from the island. They are all milk cows and no other cows are allowed on the island. Another island nearby is called Guernsey and that's where the Guernsey cow gets its name," Evans says.

Jersey is about five miles wide and nine miles long. Eighty thousand people are packed into those 45 square miles, and the population doubles during the summer months. Evans met his wife, Sheila, on the island. Their daughter, Heather, now 22 and about to get her nursing degree, was born there.

Evans' sister lives in Jefferson City, and after spending several holidays with her the family decided to move here in 1993. He worked for Missouri Builders, a commercial roofing



Steve Morse photo

**TAKING IT TO NEW HEIGHTS** Brian Evans is one of three roofers at Campus Facilities who help maintain more than 2.7 million square feet of roofs at MU, like this one on Middlebush Hall. Swallow Hall, with the distinctive "witch's hat" towers, is in the background, with Jesse Hall behind it.

contractor, before coming to MU in 2000 and taking his career to new heights.

The view might be nice, but roofing is not all fun and games. Just ask Evans after he's chopped through a foot of ice to find and repair a leak in the

middle of a Missouri winter. Or when he's working out on rooftops and a violent mid-Missouri thunderstorm blows in.

It's not always fun, but to Evans it's well worth it. Ask him what he likes most about his job, and he'll reply in his deep

Scottish brogue. "Going home at 5 o'clock on Friday night," he says with a laugh. "Seriously, I like being outdoors, I like the great views we get to see every day, the people I work with — and the steady paycheck."

## Forum examines the value of basic and applied research

**GLOBAL LABORATORY**

Chancellor's forum pulls together 'absolute best thinking we have on campus'

**W**hat's the difference between basic and applied research? Chancellor Brady Deaton posed that question at a Feb. 28 campuswide forum on research issues. The answer, many academics have discovered, "is that basic research has more applications than some of the applied research," Deaton said. "At land-grant universities, maybe that is a false dichotomy in the first place."

His comment drew a laugh and nods of agreement from many in the audience of more than 100 who attended the Chancellor's Global Issue Forum in Ellis Auditorium. Basic research "just keeps

spreading out knowledge," Deaton said. "People pick it up and use it in new ways, some of them unanticipated."

A panel of distinguished MU faculty researchers reinforced that point as they discussed "Old Problems and New Knowledge: The Value of Basic Research Today and Tomorrow."

"Frequently, the best applications come from work that was done simply because it was deep and interesting and challenging," said forum panelist Steve Hofmann, professor of mathematics. He gave a number of examples where basic research was put to use long after its discovery.

For instance, Hofmann pointed to classical Greek mathematicians whose work on the geometry of cross sections of cones was picked up nearly

2,000 years later by Isaac Newton when he studied planetary motion. That knowledge now is used to put satellites into orbit. He cited work by the German mathematician G.F.B. Riemann in the 1850s that later played a crucial role in Einstein's theory of general relativity, which in turn was essential for developing global positioning systems.

Hofmann's own research might have similar unanticipated applications down the road. Last year, he and an international team of collaborators made headlines for their 2001 solution of a 40-year old math problem, called the Kato Conjecture, which has applications to certain problems in wave propagation.

In each of Hofmann's examples, the scientific problem was compelling and challenging, he said. "It is not often that you

see an application come from something that is trivial."

Finding a cure for eye diseases that can potentially blind hundreds of thousands of Americans is anything but trivial. Forum panelist Kristina Narfstrom, professor of veterinary ophthalmology, and her colleagues around the world are making breakthroughs in treating human retinal diseases by studying similar diseases in dogs and cats.

She and her team discovered that the underlying cause of retinitis pigmentosa — a disease that gradually leads to total blindness — is a specific gene mutation. The scientists have been pioneering a gene transfer treatment in dogs that is showing tremendous promise and could have applications for human disease. Now, the

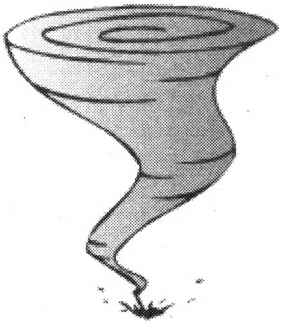
team's research is growing in directions they couldn't have predicted when they began.

"We know that there is new hope for the treatment of these devastating retinal diseases," Narfstrom said.

Randy Prather, the third forum panelist, also described how his research has expanded and evolved during his years at MU. "Sometimes we don't perceive where our research is going to go," said Prather, professor of animal sciences.

When he first arrived on campus, his research was focused on better understanding early development in animal reproduction. That problem led him to develop new techniques in nuclear transfer that resulted in cell lines that are being used in laboratories around the world.

**SEE Research on Page 7**



**Stormy weather**

As Missouri's tornado season approaches, MU will participate in the annual statewide severe weather drill at 1:30 p.m., Tuesday, March 14. Environmental Health and Safety urges all University departments to

participate in the exercise by implementing existing evacuation plans to the fullest extent practically possible. These plans should include at least the following steps:

- Move to interior corridors away from doors and windows, preferably in a basement or lower floors;
- Avoid auditoriums, gymnasiums or other areas having a wide, free-span roof
- If you're caught outdoors, lie flat in the nearest depression, such as a ditch or ravine. If there is time, move away from the path of the tornado at a right angle.

The outdoor warning sirens

will be sounded as only one part of the local warning network and are used only as an attention-getting device; no all-clear signal will be sounded.

In an actual emergency, specific information will be broadcast by the local media. KFRU 1400 AM Radio is the local emergency broadcast station with a direct link from the City/County Emergency Operation Center. With questions about the March 14 drill, contact David Dorth at 882-7018. In the event of inclement weather, the drill will be held March 16.

**Mizzou on a roll**

Shooting baskets, racing through an obstacle course and navigating a minefield is difficult enough. But what if you had to compete in those events while using a manual wheelchair? Those will be among the challenges teams face when they compete in the Wheelchair Relay 2006 that will be held from 1 to 3 p.m., Saturday, March 18 in Brewer Fieldhouse. This annual fundraiser is sponsored by MU physical therapy students, the Four Winds Learning Community and Tiger Wheelchair Basketball. This relay will pit four-

person teams from the campus and community in competition over a course of events. Organizers hope to increase awareness of the daily challenges that face those who use wheelchairs. Through sponsorships and entry fees, the event also will raise money to benefit the Tiger Wheelchair Basketball program.

Teams or individuals interested in competing can get more information and an entry form by contacting Carmen Abbott at 882-7103 or by e-mailing Rebecca Schallert at rjs98f@mizzou.edu.

**Weaving the fabric of Mizzou culture**

**TIGER TARTAN**

Students develop official MU plaid in problem-based learning project

At ol' Mizzou, tradition begins with a T. And when fall 2006 rolls around, the campus will introduce a new one — the MU Tiger Tartan.

A tartan, steeped in Scottish tradition, is wool or worsted fabric woven in a range of checked or plaid patterns with alternating bands of colored threads woven at right angles to each other. The blocks of color repeat vertically and horizontally in distinct patterns of squares and lines. Tartans are officially

registered and associated with a particular clan, military regiment or other organization.

In January, the textile and apparel management department in the College of Human Environmental Sciences sponsored a Tiger Tartan project in which students worked together to produce an official plaid for MU. Students from four courses — computer-aided design, branding, consumer research and analysis, and product development — came up with 12 designs that were evaluated by a focus group composed of alumni, students and campus officials.

The group selected the top

four patterns based on design, marketability, longevity and visual appeal. The designs were then displayed in February through a Web survey. MU students, faculty, staff and alumni have an extended deadline of March 15 to vote for their favorite design at tigertartan.missouri.edu.

Linda Gilbert, program administrator for MU's licensing and trademark office, was among the staff judging the project. "I believe that all the focus group members were very impressed with the amount of research and work that went into each design and presentation," she says. "They were all good and it was hard to narrow the designs down to just a few."

Jana Hawley, assistant professor, says more and more universities around the country are starting to weave tartans into their history. She credits her friend at the University of Tennessee, a former MU professor, for inspiring the textile and apparel

management department to develop this problem-based learning project at Mizzou.

Students, armed with some historical background from the MU Alumni Association, scoured the campus for inspiration that represents tradition.

In each design, the dominant colors are black and gold. Some students included a white thread running through their creations, symbolizing either the columns or the white campus. Some designs contain red and navy threads, standing for the red campus or crimson, one of the original colors of the University. Navy ties in the women's basketball uniforms of the past and, of course, red and blue represents the University's strong rivalry with the University of Kansas.

"Plaids are more interesting if they have some color in them, and these are just one thread in the grand black-and-gold predominance," Hawley says.


The winning pattern will be licensed to the University. The winning student will have her name attached to it in

perpetuity and she will receive a scholarship in lieu of turning her design over to the University.

Hawley says products featuring the official Tiger Tartan will be in University Bookstore in time for the fall football season. While the students developed a lengthy list of product suggestions, nothing has been set in stone. "Anyone can take the tartan and develop whatever they want because it is a licensed plaid," she says.

A few ideas include stadium blankets, tote bags, checkbook covers and the cover of the Tiger Guide, the student handbook and planner published annually by Residential Life. "We will start small and offer new products periodically," Hawley says.

MU has approximately 380 licensees that produce several hundred items using the University's marks, names or logos. Royalties fluctuate from year to year depending on the collegiate market. Gilbert says in fiscal year 2005 the University grossed nearly \$850,000 in royalties.



**Parking & Transportation Services**  
Turner Avenue Garage  
Level 2  
882-4568

There will be a number of prospective students and their families on campus March 17, 2006 for Black and Gold Friday. Please be helpful to these visitors and use caution during this busy event.

[parking.missouri.edu](http://parking.missouri.edu)

**Building eco-friendly roads**

Constructing a new road can sometimes destroy homes in the process, and wetlands and wildlife habitats are in the path of danger when roads are planned. The Environmental Protection Agency has awarded a grant to MU to work with the Missouri Department of Transportation to remedy this problem.

"Collaboration with MoDOT ensures that real-world issues are a part of the research protocol and increases the likelihood of actual implementation of the resulting construction and maintenance guidance," says Kathleen Trauth, assistant professor of civil and environmental engineering and co-investigator.

In order to maintain wildlife habitat, compensatory wetlands must be constructed when natural, protected wetlands are affected by construction. Trauth hopes this interdisciplinary research project helps to determine where roads can be built with the least impact on the ecosystem.

"The most perfect wetland possible could be constructed, but if it is in the wrong space and not in an ecologically correct setting, the project will not be successful," says co-investigator Raymond Semlitsch, professor of biological sciences.

The project will examine existing mitigation wetlands and design test wetlands.

**MizzouWeekly**

**Volume 27 No. 23**  
A publication for the faculty and staff of the University of Missouri-Columbia, published every Thursday during the academic year and twice a month during the summer by Publications and Alumni Communication, a department of University Affairs, 407 Reynolds Alumni Center, 882-7357. News deadline is noon Thursday the week before publication. Annual subscriptions are available for \$30.  
**Editor** John Beahler  
**Advertising** Mike Baxter, Scott Reeter  
**Photographers** Rob Hill, Adam Masloski, Steve Morse  
**Writer/designer** Sue Richardson

**Excellence rewarded**

MU is working to make college education more affordable to students by awarding larger scholarships to a greater number of eligible incoming freshmen from Missouri next school year. Beginning in fall 2006, the Excellence Award, a scholarship granted automatically to eligible incoming first-time college students upon admission to MU, will increase to \$2,000 per year, up \$500 from last year.

The award is renewable for a maximum of four years for qualified students who maintain a 3.25 cumulative grade point average at

Mizzou. In addition, incoming Missouri students in the top 25 percent of their graduating class will be eligible for the scholarship, rather than in the top 15 percent under the previous requirements.

"The expansion of the Excellence Award reflects our ongoing effort to ensure that MU continues to attract the best young scholars in Missouri," says Ann Korschgen, vice provost for enrollment management.

With the most recent change, the scholarship will be awarded automatically to students meeting the following qualifications: be

in the top 25 percent of high school graduating class; have a composite ACT score of 27 or SAT score of 1200; be a U.S. citizen or permanent resident and a Missouri resident graduating from an accredited high school, and be enrolled at MU for the first semester following high school graduation.

**Celebrating women's history**

Mizzou's observance of Women's History Month is in full swing and includes lectures, panel discussions, art exhibits, films and discussion groups.

"Women in the Arts," an annual juried and invitational exhibit that features women artists from MU and the Columbia communities, is on display in the Craft Studio Art Gallery in Brady Commons through April 7. From 6:30 to 7:30 p.m. this evening, March 9, in N222/223 Memorial Union, the MU Multicultural Center sponsors a panel of female international students

who will talk about their experiences coming of age in their home countries.

Another panel discussion at 7 p.m. March 16 in 204 General Classroom Building will focus on "Gender, Equity and Schools: Where Are We Now?" The following day, at 7 p.m. March 17 in S304 Memorial Union, both well-known and up-and-coming women poets and spoken word artists from the area will celebrate the 10th annual Women's Poetry Night. A complete schedule of Women's History Month events is available online at [www.missouri.edu/~women/womenhistory.html](http://www.missouri.edu/~women/womenhistory.html).

**Plant to plant: Can we talk?****EAVESDROPPING**

Scientists find two-way conversation in plant pollination

Like animals, most plants avoid mating with close relatives, but how plants decide who is a relative has been a mystery to science. New research by MU scientists suggests that this decision-making process is more intricate than previously considered.

In plants, some of the important mating choices are made through an intimate "conversation" between the pollen — the male part of the flower — and the pistil — the female part of a flower. The conversation is completed with molecules instead of words. One molecular-level conversation on which scientists have been eavesdropping for a long time is the conversation a plant may have with itself to avoid self-mating, or inbreeding. How this conversation occurs is now turning out to be quite complex.

"We've known that there is a molecular conversation going on between S-RNase, a protein on the pistil side, and SLF, a protein on the pollen side, and that the result of this conversation is a decision about whether or not the pollen will be allowed to fertilize the plant—in other words, which mate is rejected and which one is ultimately selected as a mate," says Bruce McClure, associate director of the Life Sciences Center and the lead investigator for the research. "We used to think these two proteins interacted pretty directly."

In the Feb. 16 edition of *Nature*, McClure and fellow Mizzou investigators found that S-RNase is put into a compartment inside a growing pollen tube.

"That S-RNase is sequestered in a compartment—away from the SLF protein—really changes how we think about

this interaction," McClure says. "It means the conversation is a lot more intricate and two-sided than we had thought."

McClure, who received funding for the research from both the National Science Foundation and the MU-Monsanto Plant Biology Program, says the finding is important for a basic understanding of plant biology, but also might offer insight into other issues, like the spread of transgenes from genetically modified crops to wild relatives.

In studies in 1989 and 1990 that also appeared in *Nature*, McClure showed that S-RNase causes rejection of pollen from close relatives by acting as a cytotoxin, or a toxic substance, inside the cytoplasm of the growing pollen tube.

What scientists know now is that pollen keeps S-RNase safely stored in a bag-like compartment where it cannot cause damage unless it is released. The molecular conversation between S-RNase and SLF controls this release. With this new finding, scientists now envision the pollen-pistil conversation as involving a whole new set of interactions.

"It's as much where the molecules are as what they are," McClure says. "We used to think that the important molecular decision made between mating partners was whether or not to degrade S-RNase. We now know the important decision is whether or not to release the S-RNase from this compartment. This takes us in a whole new direction of research."

For their studies, the MU team used *Nicotiana glauca*, a relative of tobacco commonly grown in home gardens as "flowering tobacco." The advanced microscope facilities in the Molecular Cytology Core at the Life Sciences Center were critical for discovering the S-RNase compartment.

**Meet and greet****HANDS-ON TRAINING**

Meeting planners are in demand by lodging industry

**W**anted: clients in need of convention and meeting planning. Will work for free. That might be an ad for a new conference and event-planning class offered by MU's hotel and restaurant management program.

"The convention and meeting industry's multi-billion dollar market segment offers students outstanding career potential," says Julie Hosmer, class instructor. "About half of the lodging industry's total receipts are derived from the meetings market."

The MU class, now in its

third year, prepares students to be professional planners dealing with a spectrum of the meeting details from location choices, hotel contracts, travel negotiations, liability insurance down to what to serve at the evening banquet.

To put that knowledge to work, students formed the Missouri Meeting Planners Association. Students offer prospective clients their services in any phase of planning and preparing for a convention or event in an effort to gain hands-on training.

Each student is required to complete a meeting event as part of the class. "These are very dedicated, high-energy students. We now are part of 12 events, including the Missouri

School Association's board of directors meeting and the local lodging and restaurant associations," Hosmer says.

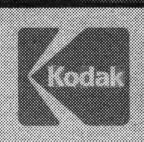
Currently, 59 students are enrolled in the class. Several trips are part of the training. Career opportunities exist as independent meeting planners, travel agents or planners for hotels, convention centers, even cruise ships, she says. Every field has conventions to bring members together, she said.

The class looks at new trends in the meetings industry. One trend is the growth of the meeting industry in smaller, or second-tier, cities. Revitalized infrastructures have given these communities the facilities to accommodate large groups comfortably at reasonable prices, she says.

**Ellis Library Copy Service****NEW KODAK PICTURE MAKER**

*prints from smart media, compact flash, memory stick, USB, CD-ROM and even floppy disk.*

- Zoom and crop pictures
- Remove red eye
- Restore color
- Adjust color
- Add borders and text
- Sepia, and black & white prints available.

**Picture Maker**

prints wallet size, 4x6, 5x7, 8x10, and package prints.

# calendar



## Concerts & Plays

### Sunday, March 12

**UNIVERSITY CONCERT SERIES:** The Helikon Opera of Moscow will perform *Die Fledermaus* at 7 p.m. in Jesse Auditorium. For ticket information call 882-3781.

### Monday, March 13

**FACULTY RECITAL:** Darry Dolezal on cello will perform at 8 PM at the Whitmore Recital Hall.

### Thursday, March 16

**JAZZ SERIES CONCERT:** The Cuban jazz band Tiempo Libre will perform at 7 p.m. at the Blue Note. Cuban dance lessons for concert-goers begin at 6 p.m. For ticket information, call 449-3001.

**THEATER SERIES: *Vieux Carré*** by Tennessee Williams and directed by Brett D. Johnson will be presented at 8 p.m. today through March 18 and March 21 to 23 and at 2 p.m. March 19 at the Corner Playhouse. For ticket information, call 882-PLAY.

### Friday, March 17

**GUEST ARTIST RECITAL:** Vincent DiMartino and Wolfgang Guggenberger on trumpet will perform at 8 p.m. in Whitmore Recital Hall. Suggested donation: \$5.

## Courses & Workshops

### Saturday, March 11

**GENEALOGY WORKSHOPS:** The State Historical Society of Missouri will sponsor two genealogy workshops in the

society's headquarters in east Ellis Library. Librarian Timothy Dollens will present "Beginning Genealogical Research" in the morning workshop, and author and teacher Pamela Boyer Porter will present the afternoon workshop, "Using the Internet for Genealogical Research." The workshops are free for society members; for nonmembers the cost is \$10 for one or \$15 for both workshops. Registration is required, call 882-7083.

**COMPUTER TRAINING:** "Introduction to SAS Enterprise Guide" will be offered at 1 p.m. in 003 Cornell Hall. Registration is required; call 882-2000 or register online at training.Missouri.edu.

### Tuesday, March 14

**COMPUTER TRAININGS:**

- Photoshop CSS2: Selections & Layers" will be offered at 8:30 a.m. in N3 Memorial Union.
- "Creating PowerPoint 2003 Presentations" will be offered at 1 p.m. in 4D11 East Ellis Library.
- "Formatting with Cascading Style Sheets" will be offered at 1 p.m. in N3 Memorial Union. Registration is required; call 882-2000 or register online at training.Missouri.edu.

### Wednesday, March 15

**COMPUTER TRAINING:** "InDesign CS2: Modifying Documents, Workflow & Drawings" will be offered at 8:30 a.m. in 4D11 East Ellis Library. Registration is required; call 882-2000 or register online at training.Missouri.edu.

## NEW EMPLOYEE

**ORIENTATION:** An orientation for all new staff members will be held from 1:30-5 p.m. in S207 Memorial Union.

### Thursday, March 16

**COMPUTER TRAINING:**

- "Photoshop CS2: Advanced Techniques" will be offered at 1 p.m. in 4D11 East Ellis Library.
- "Illustrator CS2 1: Shapes & Paths" will be offered at 8:30 a.m. in 4D11 East Ellis Library. Registration is required; call 882-2000 or register online at training.Missouri.edu.

## Exhibits

**BINGHAM GALLERY:** The Senior Show will be on display March 20-April 13.

## MUSEUM OF ART AND ARCHAEOLOGY:

- "American Regionalism: Images from the Heartland" focuses on mid-20<sup>th</sup> century American Regionalist painters such as Thomas Hart Benton, John Steuart Curry, Grant Wood and Fred Shane. The exhibit is on display through June.
- "Dressing the Part: Fashion in Art in the Nineteenth and Twentieth Centuries" will be on display through May 21.
- "Art In Bloom," an exhibit of floral displays created by local florists and inspired by art in the museum's collection, will be on display from 7 p.m. March 17 through March 19. The museum, located in Pickard Hall, is open from 9 a.m.-4 p.m. Tuesday-Friday and from noon-4 p.m. Saturday and Sunday.

**STATE HISTORICAL SOCIETY:** "Selected Photos of Missouri by Oliver Schuchard" displays black-and-white and color images of the emeritus art professor's home state through May 26 in the main gallery. The main gallery is open 8:30 a.m.-4 p.m. Monday to Friday.

## Lectures & Seminars

### Thursday, March 9

**WRITING PROGRAM LECTURE:** Marilyn James-Kracke, associate professor of medical pharmacology and physiology, will present "Scientific Writing: Tapping the Scientific Process to Perfect Writing Skills" at 3 p.m. in 217 General Classroom Building.

**MICROBIOLOGY LECTURE:** Deanna Koepp from the University of Minnesota will present "Regulation of DNA Replication by a SCF Ubiquitin Ligase Complex" at 1:15 p.m. in M437 Medical Science Building.

**RACIAL JUSTICE LECTURE:** Kimberly Jade Norwood, professor of law at Washington University and an MU law alumna, will present "Blackthink: Who and What is Black?" followed by a question-and-answer session at 7 p.m. at the Gaines/Oldham Black Culture Center.

### Friday, March 10

**CHEMISTRY COLLOQUIUM:** Alison Frontier, assistant professor of chemistry at the University of Rochester, will present "Recent Developments in Nazarov Cyclization Chemistry" at 3:30 p.m. in 103 Schlundt Hall.

### Saturday, March 11

**SATURDAY MORNING SCIENCE:** This lecture series, designed for those without an extensive science background, will present Paul Miceli, professor of physics, discussing "What is Superconductivity?" from 10:30-11:30 a.m. in the Life Sciences Center's Monsanto Auditorium.

### Monday, March 13

**EUROPEAN UNION LECTURE:** Visiting Fulbright scholar Cas Mudde, professor of political science at the University of Antwerp, will present "Populist Radical Parties in Contemporary Europe" from 3-5 p.m. in the Faculty Lounge, S304 Memorial Union.

**ARCHAEOLOGY LECTURE:** Susan Alcock from the University of Michigan will present "Power Lunches in the Eastern Roman Empire" at 5:30 p.m. in 106 Pickard Hall.

### Tuesday, March 14

**BIOINFORMATICS SEMINAR:** Postdoctoral fellow Jeffrey Bryan will present "In Silico and In Vivo Identification of a Novel Methylated Canine Cancer Gene," and predoctoral fellow Sara Stewart will present "IRBs and the Use of Computerized Databases in Medical Research" at noon in 426A Clark Hall.

### Thursday, March 16

**ARTS AND HUMANITIES SALON:** Beverly Jarrett, director of the University of Missouri Press, will present "The Secrets of Getting Your Work Published" at 5:30 p.m. in the first-floor parlors of the Conley House.

**LITERARY ARTS READING:** Naturalist and writer Terry Tempest Williams will read and discuss her work at 7:30 p.m. in Memorial Union's Stotler Lounge.

**NURSING SEMINAR:** Ruth

Anderson from the Duke University School of Nursing, will present "Health Care Organizations as Complex Adaptive Systems: Applications to Research about Outcomes of Management Practice" at 1:30 p.m. in S342 Sinclair School of Nursing.

## INTERNATIONAL BUSINESS

**LECTURE:** Michael Marks, chairman of Singapore-based Flextronics International, will present the John Schram Lecture in International Business, titled "Winning in the Global Economy: High Quality and Low Costs," at 3:30 p.m. in Bush Auditorium at Cornell Hall.

## MATH EDUCATION

**LECTURE:** Francis "Skip" Fennell, professor of education at McDaniel College and president-elect of the National Council of Teachers of Mathematics, will present the annual Richard Andrews Lecture titled "Highly Qualified Teachers? What Does This Mean?" at 5 p.m. in the Life Sciences Center's Monsanto Auditorium.

### Friday, March 17

**MARKETING LECTURE:** Steven Shugan, professor of marketing at the University of Florida Warrington Business School, will present "Brand Loyalty Programs: Are They Shams?" at 11:00 a.m. in 205 Cornell Hall.

## Meetings

### Thursday, March 9

**STAFF COUNCIL:** The Staff Advisory Council will meet at 1 p.m. in N243 Memorial Union.

**FACULTY COUNCIL:** MU's Faculty Council will meet at 3:30 p.m. in S203 Memorial Union.

## Special Events

### Thursday, March 9

**LAWNMOWER CLINIC:** Students in MU's Agricultural Systems Management Club will hold their annual lawnmower tune-up clinic. Mowers can be dropped off at the east end of the Agricultural Engineering Building from 4-6 p.m. today or from 7-9 a.m. and 4-6 p.m. March 10. Cost: \$30; with questions, call 882-2731.

### Monday, March 13

**ENGINEERS' WEEK:** Cindy Brinkley, president of AT&T Missouri, will kick off Engineers' Week 2006 when she helps dedicate the University Center for Innovation and Entrepreneurship from 7:30-9:30 a.m. in Lafferre Hall atrium. A complete schedule of the week's events is at [www.engineering.missouri.edu](http://www.engineering.missouri.edu).

### Saturday, March 18

**CANCER CENTER MEMORIAL:** The staff of Ellis Fischel Cancer Center will sponsor a memorial ceremony to celebrate the lives of loved ones lost to cancer and honor their care-givers at 9:30 a.m. in the center's first-floor lobby. To register, call Debbie Self by March 10 at 882-8804.

# Shopping for Light Bulbs?

MU General Stores offers

- ✓ Lowest Prices
- ✓ Special Bulb Ordering
- ✓ Free Delivery

## MU GENERAL STORES

*It's a great way to save!*

Stop by and shop at MU General Stores located at 1400 Rock Quarry Center or browse our entire selection of products online at [mugeneralstores.com](http://mugeneralstores.com). University Purchasing Card MoCode/PeopleSoft accepted.

Phone: 882-6906 • Fax: 884-1803  
[www.mugeneralstores.com](http://www.mugeneralstores.com) • Free Delivery

# High expectations



**SELF-MOTIVATED** To make time for near constant training, ice skater Debbie Knubley, left, is enrolled in MU High School, a Web-based independent study program. Knubley's coach, Julie Binz, is on the right.  
Chuck Adamson photo

## SCHOOL DAYS MU High School lets students learn anywhere, any time

Fifteen-year-old Debbie Knubley is in school when she's riding in her mom's sport utility vehicle and sometimes while doing leg lift exercises on her bedroom floor with a textbook in hand.

An aspiring professional figure skater needs to fit her schooling in when she can. It needs to be done during the car trips between daily practices at two ice rinks and on the road to places like Colorado and Iowa for competitions. School has to come between physical therapy appointments, ballet lessons and gym workouts.

Knubley, of the St. Louis

suburb Warson Woods, is a student in MU High School, a Web-based diploma granting high school that serves more than 8,100 students internationally. It appeals to students for various reasons, says Kristi Smalley, MU High School principal. There are up-and-coming musicians and children of world-traveling missionaries and military personnel. There are adults who never graduated from high school. Some students have medical conditions that prevent them from attending traditional campuses. There are child actors and professional athletes. U.S. Olympic skier Lindsey Kildow was an MU High School student from 2001 to 2004.

The school is an independent study program but with testing,

grading and, unlike home schooling, an accredited diploma at graduation. "Literally, they can do this from anywhere and at any time," Smalley says. "If they want to do their course work at 3 in the morning, they can do that."

But Smalley says it's not for every student. A teen must be disciplined and self-motivated to study. Course work conforms to Missouri state education standards.

"If people are thinking this is an easy way out, it's not," Smalley says. "We have very rigorous course work."

Knubley tried the middle school version of the MU Extension program in the eighth grade - courses for grades three through eight are offered, too - as a sort of trial run, says her mom, Cheri Knubley. After a successful year, the family decided to commit to MU High School, though Debbie always has the option of returning to traditional school if she wants. "She is totally self-motivated. My only contribution is going to the library with her to take exams," Cheri Knubley says.

The regimen offers flexibility, Debbie Knubley says, for things like skating at 10 a.m. instead of after school when the ice is crowded. "I can get more done without having to dodge people," she says. "I'm out of town a lot for competitions. If I went to regular school, I'd have to miss half the year."

Knubley has competed in regional, sectional and national competitions in the Novice Ladies level. Next year she plans to advance to Junior Ladies level, which is just one level from the highest tier of competition, Senior Ladies. Her dream is to skate professionally and internationally. "The Olympics, yeah, that's part of it. It's just one thing at a time," Knubley says.

Smalley said that nationally

more and more high schools are going online and that Missouri is not unique in administering its program through its public university system. MU has been offering high school courses since 1913, Smalley says, and began its online high school classes in 1997. The diploma-granting program began in 1999.

Only about a third of the students are from Missouri; the remaining students come from all 50 states and two dozen countries, Smalley said.

Some are diploma seekers, but most students use the program to supplement their traditional education.

The high school, part of MU Extension's Center for Distance and Independent Study, offers 180 courses. Courses cost \$135 per semester-length course, plus textbooks. Enrollment can be done year round. For more information, go to [www.cdis.missouri.edu](http://www.cdis.missouri.edu).

# EAT MORE PAY LESS

Save \$1.00 with this coupon for Breakfast, Lunch or Dinner at any of these All-You-Care-To-Eat locations



For information call 882-FOOD (3663)  
View menus at [mufood.missouri.edu](http://mufood.missouri.edu)

# \$1.00 OFF

**Breakfast-Lunch-Dinner**  
(reg. \$5.00) (reg. \$6.50) (reg. \$8.00)

at any of the five  
**All-You-Care-To-Eat locations**



Coupon required Offer ends March 17, 2006

## Accessible gardening hints online

### GROWING SEASON

Web site helps disabled cope with limitations

More than 78 million Americans enjoy gardening, according to the National Gardening Association. But as spring approaches, elderly or disabled gardeners may want to try a hand at virtual gardening before doing the real thing.

"Elderly or persons with disabilities should not have

to give up gardening if it is something they really like," says Karen Funkenbusch, an MU specialist in working with disabled persons. "There are different levels of gardening that may provide the same level of satisfaction."

Helpful hints for the elderly or disabled persons are available online at [fsb.Missouri.edu/gardenweb](http://fsb.Missouri.edu/gardenweb). The Web site—called Gardens for Every Body—includes a tool shed showing

ergonomic and enabling garden tools designed for disabled gardeners that require less energy to use and help keep proper body alignment, Funkenbusch says.

The Web site also gives tips on how to safely transport tools to work in a garden and has areas that demonstrate container gardening using window boxes, hanging baskets or miniature gardens for greater accessibility.

## Making learning more relevant

### CLASS CRITIQUE

Study suggests in-class learning has little impact on outside interests

**W**hile students spend a chunk of their day inside the classroom, a key purpose of schooling is what students do outside of school with what they've learned. For example, did a lesson on the Revolutionary War motivate a student to pick up a book on the subject at a local library, or make a trip to the history museum to learn more? A new study by an MU education researcher found little research exists on the topic and suggests that school learning has less of an influence on life experience and interests than school professionals expect.

"We are concerned with how students use their academic learning to enrich their lives," says David Bergin, associate professor of educational, school and counseling psychology,

who conducted the study with Kevin Pugh, assistant education professor at the University of Toledo. "Do they get so interested in anything in school that they learn more about it outside of school? Do they learn something that makes them see the world in a new way?"

Bergin and Pugh examined research on the effect a subject matter had on a student's everyday experience outside the classroom.

Current research suggests some students do acquire interest in school-based content, Bergin said. For example, some students might become interested in the civil rights movement through school instruction and then read books like *Roots* and *The Autobiography of Malcolm X*. Other students might become interested in literature and read unassigned plays and novels. However, the rate of such school-prompted interest

appears to be relatively low.

Bergin says this article serves as a critique of educational research, which has done little to study what students do with their learning.

"How can we know what students do with their learning if we don't ask that question?" Bergin says. "In today's environment of testing, researchers and parents want to know what student test scores were, not if there has been any influence on students' interests or activities."

Bergin and Pugh think that much more attention should be focused on transfer of school learning to the out-of-school setting. A general finding in transfer studies is that students are often unable to apply their in-school learning to real-world problems or novel contexts. Bergin and Pugh's study was published recently in the *Educational Researcher*.

## IN *brief*

### Zweig will lead MU aging center

Steven Zweig, professor and associate chair of family and community medicine, has been named director of the MU Interdisciplinary Center on Aging. "He has set a goal of bringing together the great strengths of faculty members on this campus who work on aging issues," says Jim Coleman, vice provost for research. "This group will join efforts to create innovative educational programs, attract and support scholars, and build patient-oriented models of health care for older adults. To accommodate some of the changes that occur as our population ages, he is poised to help position MU as a vital state and national resource for insights on aging."

The Center on Aging was developed in 2003 to unite the efforts of MU's health providers, researchers and educators who are focused on the needs of the rapidly growing older adult population. Through the center, researchers and educators from different disciplines - the health sciences schools, arts and sciences, social work, engineering and others - work together to advance elder care including optimizing function and health, enhancing quality of life and improving quality of care for the growing aging population.

Zweig says MU "has a unique opportunity to emerge as a national leader using the insights of science, social science and the humanities to inform our aging society."

### A lifetime of faculty achievement

A longtime MU faculty member recently received a lifetime achievement award for scholarly accomplishments in his field. Christopher "Kit" Salter, professor emeritus and former chair of geography, received the 2006 Lifetime Achievement Award from the Association of American Geographers. The association credited Salter with laying the early foundations upon which the renaissance in geographic education was launched and for training and mobilizing an army of "geo-evangelists." The award cited his "extraordinary vision and sweeping transformation of geographic education that served to inspire teachers and restore the teaching of geography in the nation's schools."



# Is there a baby in your future?

Taking good care of yourself during pregnancy is very important. But, just as important are the months before you become pregnant. Let the experts from University of Missouri Health Care answer your questions as you prepare for pregnancy.

During the free seminar, Mistie Mills, MD, Missouri OB/GYN Associates, and Andrea Fick, MD, Missouri Perinatal Center, will discuss the latest information regarding preconception, such as prenatal vitamins, diet and exercise, in order to help you prepare for the big event.

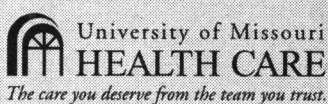
### Preconception seminar

Tuesday, March 14

11:30 a.m. to 1 p.m.

T.O. Wright Conference Room  
Reynolds Alumni Center

For more information or to register, please call 499-6028.



Environmental Health & Safety

web: ehs.missouri.edu  
ehs@missouri.edu  
(573) 882-7018



The annual severe weather drill will be March 14 at 1:30 p.m.

For more information see:

[ehs.missouri.edu/other/er/severe-weather.html](http://ehs.missouri.edu/other/er/severe-weather.html)

"Working with the campus community to provide a safe and healthful environment."

# MU's research spending tops record \$179 million

## PASSION FOR DISCOVERY

Campus infrastructure adds to research successes

**T**his past fiscal year, Mizzou's research expenditures - money spent on research - grew by 10 percent to more than \$179 million, the largest number ever recorded at MU. The University also ranked in the top 15 institutions in the nation in the amount of awards for life sciences from the National Science Foundation. The MU Department of Biochemistry also is ranked eighth in the nation for biochemistry research grant money received by public medical schools.

"This upward trend is due chiefly to funders' increasing

recognition of the energy and expertise of faculty investigators who, thanks to a multi-year program of constructing and upgrading facilities, are now taking full advantage of MU's world-class research infrastructure," says Chancellor Brady Deaton.

Of the \$179 million in expenditures, \$141 million was from federal sources such as the National Institutes of Health and the National Science Foundation. The College of Agriculture, Food and Natural Resources, School of Medicine and College of Veterinary Medicine spent the most money on research.

"Many of the most promising innovations will likely emerge

from the life sciences, where investigations into human health, food production and environmental science are already improving the lives of millions," says Jim Coleman, vice provost for research at MU. "However, life sciences researchers have not cornered the market on MU's scientific success stories."

Some examples of recent awards and research projects on the MU campus include:

- \$8.5 million from William and Nancy Thompson to fund the new Thompson Family Center for Autism and Neurodevelopmental Disorders. The center's focus is research, service and teaching.
- \$5 million from the

National Science Foundation to Gabor Forgacs, professor of biological physics, to fund research into unanswered questions in biological sciences using innovative approaches.

• \$2 million from the National Science Foundation to Douglas Grouws, professor of mathematics education, to fund a program designed to help scholars find better

ways of teaching math. "Our researchers share a common passion for discovery, a sense that creativity and innovation are the engines of human progress," Coleman said. "Our researchers' commitment to scientific excellence ensures that in the next fiscal year, and for years to come, MU will further advance its place among the world's most vital institutions of higher learning."

## RESEARCH from Page 1

Much of his research now focuses on making pig cells less visible to the human immune system, so that pig organs one day may be transplanted into humans.

The panelists' presentations sparked a freewheeling audience discussion that ranged from research funding issues to the global role of U.S. research universities in higher education. A group of faculty asked the panel to discuss what impact the growth of corporate funding and Congressional "earmarks" will have on basic and applied research.

Earmarks are a type of federal research funding that is approved by Congress outside the peer-review process normally used by many federal agencies.

Hofmann argued that corporate funding could cause a potential conflict because private companies might demand "first dibs on anything that comes out of the research." That could limit a researcher's publication options, he said, and urged that research institutions have policies on corporate funding in place to ensure that "the tail isn't wagging the dog."

Prather said he didn't see conflict of interest concerns because the MU campus does have policies that protect researchers. Narfstrom said that she wouldn't be opposed to private funding for her research "if it is in line with what I am doing myself."

Jim Coleman, vice provost for research, said that at MU slightly more than 5 percent of research funding comes from industry and that less than 10 percent is from federal earmarks.

The peer review process used by the NIH and the NSF is "the gold standard," said Doug

Randall, professor emeritus of biochemistry. But he questioned whether enough support is given to bold but risky research projects that could revolutionize a discipline and change the entire direction of research.

"How do we sell to the public and to Congress that the risk is going to go up when we start funding these paradigm-shifting proposals?" Randall asked. "How do we convince them to take risks that are going to pay off one in 20 times or one in 80 times?"

Jim McCartney, professor of sociology, asked the panel what impact national debates over the moral implications of research might have on scientists. In previous decades, he said, researchers became familiar with the "political nature of science" because of its implications for the Cold War and the space race.

Now, he said, there seems to be "a new era of the moral politics of science" that is manifested in the debate over issues such as cloning and stem cell research. In some states, lawmakers have proposed legislation that would limit scientists' research options. How should they respond?

Hofmann had a straightforward answer: "Protest it," he said.

"I would disagree," Prather replied. "I think the scientist's role is to educate the public."

"I think both Steve and Randy are right. You protest it by educating the public," said Doug Randall, professor emeritus of biochemistry. "We have not taken our science to the public and explained it."

Robin Remington, professor emeritus of political science, had another take: "To educate the public, first educate the media," Remington said. She urged

expanded scientific education in journalism programs.

Several faculty members questioned whether the national research effort is focused too narrowly on specific projects, rather than on building teams of talented scientists. "To what extent is research driven by requests for proposals?" asked Paul Wallace, professor emeritus of political science.

Andrew Twaddle, professor emeritus of sociology, recounted his frustration as a peer reviewer for NIH grants. Sometimes, he said, funding ran out before all the analysis was completed on a research project. But, because they needed continued funding, team members already had moved on to other projects.

"That represents, frankly, an important dilemma," Deaton said. "Cycles of funding can rip apart a research team." He said that at MU he's worked with deans to provide bridge funding — often through the campus Research Incentive Fund — to keep laboratories together and productive between grants.

Bart Wechsler, director of MU's Truman School of Public Affairs, asked about the global role of American research universities. He noted that other countries are beginning to invest more in their national research programs. That's a step forward for science, Wechsler said, but what impact does it have on American research universities?

"Around the world, American higher education is viewed as the best in the world," so other nations have started emulating the U.S. model," Hofmann said. "I think it would be a shame if we are not able to maintain American research universities at a time when other countries are enhancing theirs."


If you can dream it we can print it

There's a place in your mind where only dreams are allowed where everything is the way you want it to be

Now those dreams have become a reality

The iGen3 Digital Color Press

Exceptional full-color prints for just 35¢ each



Call Kelli for a sample or demonstration today!  
882-5948  
digiprint.missouri.edu/dreamit

MU PRINTING SERVICES  
Digiprint Centers

# Science writers' perceptions impact coverage

## SPIN ON SCIENCE

Reporters think they have to dumb down science stories

While topics such as "genetics" and "biotechnology" have become part of the public's general vocabulary, some researchers believe these issues receive far less media coverage than they once did.

Does the lack of coverage stem from general public disinterest? Does it come from the inability of scientists to publicize their findings? Does the blame rest with the reporters themselves? A new study by MU researchers examined the role of the scientific reporter, who acts as the gatekeeper of scientific information.

"While scientific reporters seemed to have a generally positive approach to biotechnology and shared these beliefs with friends and peers, they were not so optimistic about the beliefs of the general public," says Glen Cameron, professor of advertising, who conducted the study along with doctoral candidate Mugur Geana.

"Science reporters and editors believed citizens wouldn't be able to acquire and process the information about biotechnology and the sources of information used to trigger science stories," Geana says.

Geana and Cameron surveyed 304 science and medical reporters. Four main areas of research were addressed: the level of interest in biotechnology held by reporters, their beliefs about biotechnology, the perception of public/peer attitudes toward biotechnology, and the sources of information used to trigger science stories.

They found that 92 percent of reporters were interested

in advances in medicine and 82.5 percent were interested in biotechnology. Geana and Cameron also found that 89.5 percent of reporters also believed biotechnology benefits humankind.

"Reporters believed only about half of U.S. citizens would favor biotechnology use," Cameron says. He added that 74.7 percent

of reporters believed they had to simplify their scientific message.

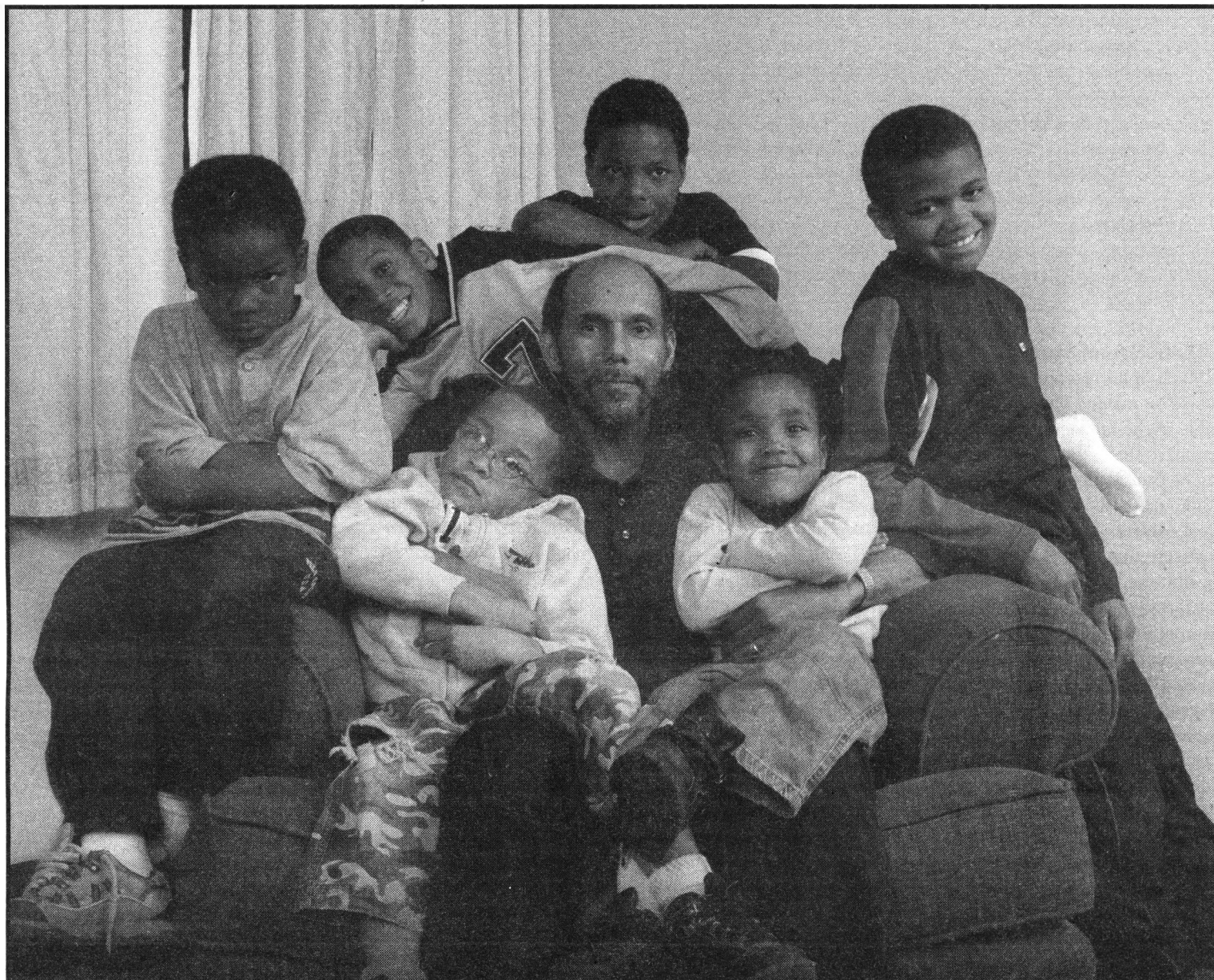
"Contrary to findings by other researchers, we found that science reporters and editors had a high regard about the quality of their scientific sources, which also carries a lot of weight in how they approach their stories," Geana says.

Cameron says this study

has implications for the public because reporters will either not cover certain material or believe they have to simplify it extensively. The researchers also found that reporters were concerned that popular culture has a negative effect on the public's perception of science.

Geana stresses that popular culture, such as the movie

industry, might create confusion with inaccurate information while also having a powerful emotional effect. The researchers found that science reporters perceived pop culture as being negative to scientific advancement. Reporters criticized the tendency by novel writers and movie producers to exploit the negative while failing to include well-documented facts about scientific research.



## Just call him Poppi

University Physician Ellis Ingram, MD, is well known among his colleagues for his achievements in pathology.

Also, he has received special recognition from the President of the United States for his mentorship of minority students.

But at home, he's proud to be known as Poppi, a mentor at Granny's House ... a center for children in inner city Columbia. Granny's House was founded by Dr. Ingram's wife, Pamela, as a home-away-from-home and a place kid's potential is recognized and nurtured.

"Columbia is a good place to raise a family," Dr. Ingram says. "I love the people here. I plan on being involved forever."

For more information about University Physicians or to make an appointment with one of our doctors, please call (573) 884-2401.

 **University Physicians**  
University of Missouri Health Care  
[www.findadoc.muhealth.org](http://www.findadoc.muhealth.org)

World-class care in your own backyard.

## classifieds

### INCOME TAX PREPARATION

Retired CPA with large University of Missouri clientele will assist you with your income taxes. Evening appointments available. Call 442-7856.

The classified advertising section is open to faculty and staff members and retirees.

No refunds for cancelled ads.

Mizzou Weekly Classifieds: Make check payable to University of Missouri and send to Classifieds, Mizzou Weekly, 407 Reynolds Alumni Center, Columbia, Mo. 65211



University Libraries  
University of Missouri

### Digitization Information Page

Local identifier                      MizzouWeekly(print)

### Source information

Format                                      Newspaper  
Content type                              Text with images  
Source ID                                  Duplicate copies University Archives weeded out  
Notes

### Capture information

Date captured                              July-December, 2022  
Scanner manufacturer                      Plustek OpticBook  
Scanner model                              A300 Plus  
Scanning system software                      Book Pavilion  
Optical resolution                              600 dpi  
Color settings                              8 bit grayscale for majority of pages;  
    24 bit color for color illustrations/portraits/photographs  
File types                                      tiff  
Notes

### Derivatives - Access copy

Compression                              Tiff: LZW compression  
Editing software                              Adobe Photoshop 2022  
Resolution                                      600 dpi  
Color    same as captured  
File types                                      pdf created from tiffs  
Notes    Images cropped, straightened, and brightened.