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Dec. 6, 2007

University of Missouri-Columbia

This is the last issue of Mizzou Weekly for the fall semester. See you again Jan. 24.

A gift of joy

MAKING A DIFFERENCE

There's still time to make a United Way donation

Wrapping Christmas presents for friends and family might seem like a chore, but how about wrapping gifts for 13 families? That's how members of the College of Agriculture, Food and Natural Resources student council spent the afternoon of Nov. 28. The student group gathered in a lab at the Animal Sciences Research Center to wrap presents that the college's student organizations were donating to less fortunate neighbors in Columbia through the Voluntary Action Center's



Steve Morse photo

CHRISTMAS CHEER MU students Nick Guntli and Kim Cottrell took part in a gift-wrapping session Nov. 28 sponsored by the College of Agriculture Food and Natural Resources student council. The gifts are destined for less-fortunate families in Columbia through the Voluntary Action Center's adopt-a-family program.

adopt-a-family program.

Many departments around campus take part in that program, and they bring Christmas cheer to dozens of

local families. But they also help out the Columbia social services agency all year long with their contributions to United Way. The Voluntary

Action Center is one of 34 local agencies funded in part by the Columbia Area United Way.

The 2008 United Way campaign is winding down, and

so far it has raised \$3.1 million. That's a record-setting number, but it's still a little short of reaching the \$3,160,738 goal. The University's campaign is in a similar situation. As of Nov. 28 it had raised more than ever before, \$539,155, or 93.7 percent of its goal.

Although the campaign has officially closed, volunteers at the University are still scrambling to raise donations. It's never too late to give, says John Murray, one of three campaign co-chairs. "We knew we had an ambitious goal this year, especially because of some of the economic challenges we knew were out there," Murray says.

Donations typically continue through December and later. Contributions can still be made through your divisional representative or by sending them to Patsy Higgins at 311 Jesse Hall, Murray says.

Name restoration takes Mizzou back to the future

HISTORIC SIGNIFICANCE

Curators endorse action to allow MU to use 'University of Missouri'

When the University of Missouri was founded in Columbia in 1839 it was still on the frontier — the first public university west of the Mississippi River. It held on to that name for the next 124 years, until legendary University President Elmer Ellis, helped engineer the formation of the four-campus University of Missouri System in 1963. At that point, MU was given the name University of Missouri-Columbia to differentiate it from UM System institutions in Kansas City, Rolla and St. Louis.

But in recent years, a number of supporters have argued that the "-Columbia" sold MU short. The geographic designation made Mizzou sound like a regional institution, instead of acknowledging its national prominence, they said, and the name wasn't consistent with MU's statewide mission as Missouri's flagship, land-grant university.

Those supporters pointed out that Mizzou is still a frontier university. But instead of being on the frontier of a vast new territory, as it was in 1839, today it is on the frontier of a universe of new knowledge. Bringing that knowledge to the people of Missouri and the world gives this university a unique role in the state, they said, and the name should reflect that role.

The University of Missouri Board of Curators recognized MU's historic status at the board's Nov. 29 meeting in Kansas City. Curators at that meeting unanimously voted to amend the University's collected rules to allow MU to be identified simply as the University of Missouri.

The amendment, which is effective immediately, said:

"For purposes of official correspondence, first reference to the UM campus in Columbia shall be to the University of Missouri-Columbia. Second and subsequent references may be to the University of Missouri, MU or Mizzou. In recognition of the historic status of the Columbia campus as the first campus to bear the name of the University

of Missouri, the University of Missouri-Columbia may use the form 'University of Missouri' in written communications (print and electronic" relating to student and faculty recruitment, advancement (fundraising, alumni relations, marketing), intercollegiate athletics, and other similar public relations functions."

Chancellor Brady Deaton says the name restoration recognizes that MU is a university of enormous national significance. "The role of a research and flagship university is very powerful," Deaton says. "You can't ignore that and still be honest about what your position is in higher education. We feel it's important that the state recognizes that, and the name restoration was one symbol of a forward step in higher education for the state."

Deaton says the policy revision was a compromise between MU's original request and several concerns raised by administrators and faculty at other UM System campuses. "We're very grateful to the Board of Curators for recognizing the historical significance of

this name restoration," Deaton says. "We feel that it honored the other campuses and their concerns; we don't see anything about the name restoration that takes anything away from the other institutions.

"We feel strongly that this will elevate the overall stature of the four campuses of the University of Missouri System. It will make a stronger system, one that can speak to the nation with a more unified voice based on the outstanding quality of our AAU public research, land-grant university here at MU," he says. The AAU — Association of American Universities — is a prestigious group of the nation's top research universities. MU was among the first public university members when it was invited to join in 1908.

Deaton adds that MU will continue to use the "-Columbia" designations in situations spelled out in the curators' amendment and other cases where it is appropriate, such as in legal documents. The curators' action also provides that "UM System officials may have occasion from time to time to refer to the entire university

as the University of Missouri."

There was enormous support for the name restoration by all of MU's constituent groups, Deaton says. "Their calling attention to it has enabled us to take this step." Endorsements came from the For All We Call Mizzou national campaign steering committee, the Mizzou Alumni Association governing board, and MU's faculty council, staff council, Jefferson Club trustees, retirees association and the Council of Deans. Student groups, such as the Missouri Students Association Senate, the Residence Halls Association Council, the Graduate Professional Council and the Legion of Black Collegians also supported the action.

Supporters say the name restoration should cost very little. MU will simply replace letterheads and other publications when the time comes to reorder. In fact alumni have offered gifts to cover any costs of the restoration.

"We feel this name restoration will add clarity in communications, both within the state and across the country," Deaton says.

Curators elect new leaders

The University of Missouri Board of Curators unanimously elected new officers for next year at the board's Nov. 29 and 30 meeting in Kansas City. Cheryl Walker of St. Louis was elected chair. She will succeed Don Walsworth of Marceline, who will remain on the board. Bo Fraser of Columbia was elected vice chair, the position currently held by Walker.

Walker received a bachelor's degree in electrical engineering from UM-Rolla and a law degree from Washington University. She is president and general counsel of Obasi

Enterprises LLC. She also has served as counsel in the St. Louis office of Bryan Cave LLP, an 850-attorney international law firm specializing in commercial law, as well as Deutsche Financial Services Corp., now GE Distribution Finance.

Fraser received his bachelor's degree in business from Benedictine College and is a graduate of the Southwestern School of Banking at Southern Methodist University. He is chairman of the board of Boone County National Bank in Columbia and previously was the bank's chairman and CEO for more

than 20 years. He is a founding member of the Community Development Cooperative, which addresses Columbia area housing issues.

Recycling success

This year's successful Tiger football season brought a victory of a different sort. As festive fans tailgated near Memorial Stadium, they kicked in to the Tiger Tailgate Recycling program to the tune of 24 tons of cans and bottles during the six home games this season.

"That's up five tons over last year's total, and we had one less home game this

year," says Steve Burdic, MU's coordinator of solid waste and recycling. "We want to thank the fans for doing their part." The recycling program is a joint project sponsored by Sustain Mizzou, Intercollegiate Athletics, Campus Facilities-Landscape Services, Anheuser Busch Recycling and the city of Columbia.

Sponsors provided 250 recycling bins, and student organizations circulated among the tailgaters, passing out recycling bags and encouraging tailgaters to recycle. After the games, volunteers emptied bins and bags into

city containers, which were sorted and baled for resale.

Recycling reduces the amount of energy used in beverage container manufacturing and the pollution it causes, Burdic says. And the tailgating areas around the stadium are noticeably cleaner.

Celebrating service

Each year, MU celebrates the ongoing contributions of retired faculty and staff when it presents the Retiree of the Year Awards. One award goes to a retired staff member, and another is presented to a

MU study finds that people should stand up for health

INACTIVITY

Sitting stimulates disease-promoting processes

Most people spend most of their day sitting with relatively idle muscles. Health professionals advise that at least 30 minutes of activity at least five days a week will counteract health concerns, such as cardiovascular disease, diabetes and obesity that may result from inactivity.

MU researchers say a new model of physical activity recommendations is emerging. New research shows that what people do in the other 15 and a half hours of their waking

day is just as important, or more so, than the time they spend actively exercising.

"Many activities like talking on the phone or watching a child's ballgame can be done just as enjoyably upright, and you burn double the number of calories while you're doing it," says Marc Hamilton, associate professor of biomedical sciences whose work was recently published in *Diabetes*.

At an international conference in Amsterdam, Hamilton, post-doctoral researcher Theodore Zderic and their research team will present a series of studies that looked at the impact of inactivity among rats, pigs

and humans. In humans, they studied the effects of sitting in office chairs, using computers, reading, talking on the phone and watching TV.

They found evidence that sitting had negative effects on fat and cholesterol metabolism. The researchers also found that physical inactivity throughout the day stimulated disease-promoting processes, and that exercising, even for an hour a day, was not sufficient to reverse the effect.

There is a misconception that actively exercising is the only way to make a healthy difference in an otherwise sedentary lifestyle. However, Hamilton's studies


found that standing and other nonexercise activities burn many calories in most adults even if they do not exercise at all.

"The enzymes in blood vessels of muscles responsible for 'fat burning' are shut off within hours of not standing," Hamilton says. "Standing and moving lightly will re-engage the enzymes, but since people are awake 16 hours a day, it stands to reason that when people sit much of that time they are losing the opportunity for optimal metabolism throughout the day."

Hamilton hopes that creative strategies in homes, communities and workplaces can help solve the problem

of inactivity. Some common non-exercise physical activities that people can do instead of sitting include performing household chores, shopping, typing while standing and even fidgeting while standing.

Given the work of muscles necessary to hold the body's weight upright, standing can double the metabolic rate. Hamilton believes that scientists and the public have underestimated common activities because they are intermittent and do not take as much effort as a heavy workout.



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PARKING STRUCTURE #7 UPDATE

As of today, 80 percent of earth work is complete. Within the next four weeks, earth work activities for the structure should be completed, and excavation and placement of concrete for footings will commence.

parking.missouri.edu

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MizzouWeekly

Volume 29 No. 15

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 Lauren Gosling, Scott Reeter

Photographers Benjamin Reed, Nicholas Benner, Rob Hill

Writer/designer Sue Richardson

30 words

9 dollars

Mizzou Weekly Classifieds

Contact Lauren at 884-1278.

retired faculty member for their continuing contributions since retirement. The 2008 awards, which include a \$1,000 stipend, will be presented at the annual chancellor's luncheon for retirees April 23, 2008.

The selection criteria are simple. The awards are presented for accomplishments since retiring; activities prior to retirement are not considered. The nominee must be retired for at least five years. His or her accomplishments may include service to the University, career or professional activities, volunteer work or other achievements.

The deadline for

nominations is Feb. 1, 2008, and nomination forms are available from Patsy Higgins in 311 Jesse Hall. Nominations should include a letter outlining the nominee's accomplishments, his or her personal information and a summary statement. Up to three supporting letters are encouraged.

Glasses help the disabled communicate

EYES HAVE IT

Students in capstone course design assistive device

They look like a pair of everyday eyeglasses, but MU students have turned them into a device that allows people without speech capability to communicate.

"For people with amyotrophic lateral sclerosis (Lou Gehrig's disease), traumatic brain injury, stroke or spinal cord injury, speech can be impossible, leaving them essentially trapped in their own bodies," says Nathan Granneman, a recent MU graduate from Milan, Mo.

The eyeglasses are equipped with tiny sensor switches on flexible wires that attach to the user's cheek and chin muscles. Activated by the slightest facial twitch, the switches relay messages to an on-screen computer keyboard, which allows the input of text and a synthetic voice that speaks the message typed.

While there are many assistive speech communications devices on the market, limitations exist with the technology, and no single device can suit all users. The eyeglass design allows for user customization by extending down the temples to preferred facial muscles.

The design project was a semester-long project in a senior capstone course, which requires students to apply what they have learned in the classrooms and laboratories to a real-life situation, says John Viator, assistant professor

of biological engineering.

The device had to be aesthetically pleasing, affordable, easy to use and designed to have multiple sensors placed upon it, Viator says. Students testing their device found it to be comfortable for a client to use over an extended period of time and 96 percent accurate.

The production cost of the device is estimated to be about \$130. A suggested retail price of \$260, not

"For people with amyotrophic lateral sclerosis (Lou Gehrig's disease), traumatic brain injury, stroke or spinal cord injury, speech can be impossible, leaving them essentially trapped in their own bodies."

— Nathan Granneman, a recent MU graduate

including the cost of the computer, would allow the device to be competitive with similar products. While the current model of the device allows for chin and cheek sensors, future

versions could incorporate eyebrow twitches, eye gaze sensors and sip and puff switches. Other students involved in the project were Emily Longwith of Columbia, Caleb Rich of Keane, Mo., and Andrea Erler of Wildwood, Mo.

Yuletide blooms

If your home or office still needs a little bit of Christmas cheer, there's still time to pick up some traditional yuletide blooms at the Horticulture Club's annual poinsettia sale. Today is the final day of the sale in the lobby of the Natural Resources Building. Club members will be selling the plants in a variety of colors and sizes until 4:30 p.m. Checks and cash will be accepted, and sales will support club activities.

Say adieu to the flu

The flu season will be here soon in full force, and getting your flu shot might be a wise move. Healthy for Life: The T.E. Atkins UM Employee Wellness Program will host an employee flu clinic Tuesday, Dec. 11, in the lobby of the Reynolds Alumni Center. Benefit-eligible employees will be able to receive a shot at no co-pay from 12:30 p.m. until 3:30 p.m. or while supplies last. Employees not eligible for benefits can receive a shot for \$10, payable by cash or check. With questions or comments, call Healthy for Life at 884-1312.

Good timing

Mizzou Weekly will be publishing the winter 2008 semester calendar in the Feb. 7 edition. That might seem a long way off, but it's never too early to submit your event. The deadline is noon, Jan. 24, and entries should include a name and the phone number of a contact in case we have questions.

Events for the calendar may be submitted electronically to publications@missouri.edu or to beahlerj@missouri.edu. You can also submit items to Mizzou's online calendar through a link at the top of the MU home page at www.missouri.edu.

Take a right turn at Saturn

ORBITAL TRICKS

MU-developed software plots complex space journeys

Sending an unmanned spacecraft to the outer fringes of the solar system requires extensive planning. MU engineers have developed an efficient and highly sophisticated mathematical algorithm (implemented as software) that determines the most efficient path for a spacecraft's journey from point A to point B — no matter how many worlds or years away.

In testing and validating the algorithm, Craig Kluever, professor of mechanical and aerospace engineering, and Aaron Olds, a former MU graduate student who collaborated on the project, focused on the 1997 Cassini Mission. That mission was one of the most complicated explorations ever. During a seven-year journey from Earth to Saturn, the orbiter flew past

Venus, Earth and Jupiter. Along the way Cassini performed numerous gravity assists, which are close fly-by maneuvers that borrow energy from the planet and increase the aircraft's speed.

The trajectory generated by Kluever and Olds matched the one created by scientists at the Jet Propulsion Laboratory (JPL), which developed Cassini's route. Their mission-design software, which relies on optimization methods patterned from genetic evolution, makes sending a rover to Mars look relatively easy, Kluever says.

"You don't need complicated mission software for Mars missions," he says. "If you look at the trajectory, it doesn't require a lot of twists, turns and gravity assists. It's a straight shot. You need complicated mission software for ambitious missions to a comet, asteroid, moon of Saturn or beyond. We're talking about missions where an unmanned spacecraft would fly by Venus to do a gravity assist and then fly by Jupiter to do a gravity assist.

Before that, it may have to coast a year and half to come back to Venus for another gravity assist. These very high-energy targets require orbital tricks. Timing all of these maneuvers to find the optimal solution is complicated."

Kluever said complex missions are launched roughly every three years with the goal of learning more about the origins of the universe. He said the mathematical principles behind the mission software developed at MU have been embraced primarily by the European Space Agency but thinks it could attract NASA's attention. He said when NASA begins planning future robotic missions "it will need software like this to solve those types of problems. But a lot of it depends on what NASA's going to do with human space travel over the next 10 to 15 years."

The study, "Interplanetary Mission Design Using Differential Evolution," was published in the Journal of Spacecraft and Rockets.

The Staff Advisory Council would like to extend their wishes to everyone for a Joyous holiday season and a new year full of peace

Angel Anderson
Rebecca Bergfield
Chris Delbert
Dianne Delbert
Marijo Dixon
Marianne Friedman
Chad Heckman
Stanley Hughes
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Suzanne Lippard
Alan Marshall
Bill McIntosh
Lawanda Rogers
Stephanie Sinn
Linda Turner
Rusty Westfall



Staff Advisory Council
University of Missouri-Columbia
27 Jesse Hall - 882-4269

calendar



Concerts & Plays

Sunday, December 16

UNIVERSITY CONCERT SERIES: The Kenny G Holiday Tour 2007 showcases the spellbinding talent of America's best-selling instrumental artist at 7 p.m. in Jesse Auditorium. For ticket information, call 882-3781.

Exhibits

MUSEUM OF ART & ARCHAEOLOGY:

- "Daumier's Paris: Life in the 19th Century City" features lithographs by France's most famous printmaker and caricaturist. The exhibition, to be shown in three installments, runs through June 2008.
 - "Fifty Golden Years: Highlights from the Permanent Collection" celebrates the museum's 50th anniversary with an exhibit that represents a cross-section of the museum's major collections through Dec. 23. 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.
- BINGHAM GALLERY:**
Graduating Seniors Exhibit is on display through Dec. 14. A closing reception will be

held from 5-7 p.m. Dec. 14.
STATE HISTORICAL SOCIETY:

- "Picturing Native Americans in the 19th Century: Lithographs from McKenney and Hall's *History of the Indian Tribes of North America*" features hand-colored lithographs of 19th century Native-American leaders in the society's main gallery through March 15.
- "Missouri Cities: Images From the Permanent Collection" includes photos, engravings, drawings and watercolors from the 19th and 20th centuries through April 18 in the north-south gallery.

Conferences

Thursday, December 6

NURSING CONFERENCE:

The annual Gerontology Nursing Conference will present a clinical update for health care professionals in hospitals, long-term care facilities, and in community and home settings today and tomorrow in the Peachtree Conference Center in Columbia. For cost and registration information, call 882-0215 or go online to nursing/outreach.missouri.edu/gerontology07.pdf.

Courses & Workshops

Friday, December 7

COMPUTER TRAINING:

"Excel 2003: Charts & Graphics" will be offered at 8:30 a.m. in N3 Memorial Union. Registration is required; call 882-2000 or register online at training.missouri.edu.

Monday, December 10

COMPUTER TRAINING:

"Dreamweaver 8 1: Getting Started, Text & Publishing" will be offered at 1 p.m. in N3 Memorial Union. Registration is required; call 882-2000 or register online at training.missouri.edu.

Tuesday, December 11

COMPUTER TRAINING:

- "Excel 2003: Formatting and Printing" will be offered at 8:30 a.m. in N3 Memorial Union.
 - "Photoshop CS2: Retouching" 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, December 12

COMPUTER TRAINING:

- "Excel 2003 Function Fun" will be offered at 8:30 a.m. in 4D11 East Ellis Library.
 - "XHTML 1 Links, Graphics & Lists" will be offered at 8:30 a.m. in N3 Memorial Union.
- Registration is required; call 882-2000 or register online at training.missouri.edu.

Thursday, December 13

COMPUTER TRAINING:

- "Access 2003: Macros & Data" will be offered at 8:30 a.m. in N3 Memorial Union.
 - "Word 2003 Long Documents" will be offered at 1 p.m. in 4D11 East Ellis Library.
- Registration is required; call 882-2000 or register online at training.missouri.edu.

Thursday, December 14

COMPUTER TRAINING:

"Taking Control of Your Calendar With Outlook" will be offered at 8:30 a.m. in N3 Memorial Union. Registration is required; call 882-2000 or register online at training.missouri.edu.

Lectures & Seminars

Thursday, December 6

DIVERSITY IN ACTION

SEMINAR: Michael Lambert, the Millsap Professor in Human Development & Family Studies and adjunct professor of psychology, will present his research on "Strength-Based Assessment and Intervention Procedures for Children and Adolescents of African heritage" from noon-1:15 p.m. in S304 Memorial Union.

INTERNATIONAL AFFAIRS

SEMINAR: A critique and discussion of the Iraq war and the Middle East peace talks will be held from noon to 1 p.m. in N222/223 Memorial Union.

ARTS & HUMANITIES

SALON: Alex Barker, director of the MU Museum of Art

and Archeology, will present "Cultural Property, Ethic, and the Future of the Past: Museum and Antiquities in the 21st Century" at 5:30 p.m. at the Conley House.

Saturday, December 8

SATURDAY MORNING

SCIENCE: Carsten Ullrich, assistant professor of physics, will present "Has the Universe Been Made For Us?" from 10:30-11:30 a.m. in the Life Sciences Center's Monsanto Auditorium.

Tuesday, December 11

LIFE SCIENCES SEMINAR:

Chris Lorson, assistant professor of veterinary pathobiology, will present "Developing Therapeutic Targets for Spinal Muscular Atrophy" at 1 p.m. in the Life Sciences Center's Monsanto Auditorium.

Wednesday, December 12

MEDICAL SEMINAR: Karen Dodson, editor of Academic Publishing Services at Washington University School of Medicine, will present "Responsible Authorship in Biomedical Publishing" from 1 p.m. to 2 p.m. in Acuff Auditorium, MA217 Medical Sciences Annex.

COPING WITH HOLIDAY STRESS

Holiday stress presents in many forms. For some, the demands are financial. For others, holiday stress creates emotional discomfort. Additionally, stress surfaces when we attempt to meet a variety of family or social demands connected to the holiday season such as parties, caring for loved ones, cleaning, shopping and the like.

Four fundamental categories often activate holiday stress: physical demands, relationships, finances and intensified work demands. The interaction among these factors can make holiday stress very difficult to manage. Listed below are a few ways to better manage holiday stress.

1. Approach the Holiday Season with Practicality

Recognize limits along financial, time and social domains. Utilize resources wisely.

2. Plan

Set aside specific days for required activities such as shopping, visits with relatives and friends, and meal planning. Plan your menus. Make one big food-shopping trip. Carve out needed time for travel and expect travel delays, especially if you're flying.

3. Adhere to Healthy Routines

Get plenty of rest and sufficient physical activity. Enjoy the holiday feast in moderation.

4. Carve Out Personal and Reflective Space

Create time and space for yourself. Take a walk. Listen to soothing music. Find something healthy that reduces stress by clearing your mind, slowing your breathing and restoring inner calm.

5. Implement Reasonable Resolutions

Return to basic, healthy lifestyle routines. Set small, specific goals with reasonable time frames.

6. Promote Acceptance

Understand that family and friends may experience the holiday season as stressful. Attempt to accept family members and friends as they are, even when they do not meet expectations. Practice forgiveness. Set aside problems until a more appropriate time for discussion. Accept imperfections in self and others.

7. Acknowledge and Express Feelings

Recognize the variety of emotions connected to holiday demands. Take time to reflect upon feelings and share your thoughts with family and friends.

8. Seek or Give Support

A variety of support networks exist to deal with holiday stress such as family, friends, religious institutions, various social service agencies and your Employee Assistance Program. Consider a volunteer role at a community function. Helping others is one way to lift spirits and develop additional meaningful interpersonal connections. Ask for assistance where needed. Even with best effort, we may find ourselves feeling sad or anxious, plagued by physical complaints, unable to sleep, irritable and hopeless, and unable to face routine chores. If these feelings last for several weeks, talk to your doctor or a behavioral health professional.



Employee Assistance Program
EAP

102 Parker Hall • 573.882.6701 • counseling.missouri.edu/eap/

For disability etiquette questions, video says 'Just Ask!'

PAINFUL ASSUMPTIONS

Occupational therapy students produce a new video

Should someone who is visually impaired be touched or offered a handshake? Should the door be opened by someone else for a person in a wheelchair? To help answer these sometimes touchy questions and many others, eight MU occupational therapy students interviewed people with disabilities for answers. The students created an informational video about disability etiquette, *Just Ask!*, covering such topics as visual, mobility, hearing and speech impairments and how to act when a situation feels uncomfortable.

"A lot of these questions really hit home to us, and we're occupational therapy students who should know many of these answers," says Jordan Bunn, an MU senior. "I wonder how many people out there are totally clueless about this topic and looking for guidance."

One of the most surprising findings, according to the students, was the wide variety of responses that the participants gave to similar questions, leading to the overall theme and title of the video. *Just Ask!* demonstrates how the same situation could affect a person differently depending on his or her type of disability, comfort level and perspective. The video advises people that it is best not to make any assumptions and that simply asking can be the most effective way to help an individual with a disability.

"Don't assume anything," say Katie Kittle, an MU senior.

"Take all of the stereotypes out of your mind because assumptions can just be so painful."

For Steve Cox, a video participant who uses a wheelchair, people who go out of their way to open a door for him can be more upsetting and frustrating than helpful. For Christy Welliver, who also uses a wheelchair, nothing could

make her happier than to receive help from someone, which gives her the opportunity to express appreciation.

"There was a time in my life that I thought I could do everything myself and many people with disabilities still say they can do it all on their own," Welliver says. "But I love just looking up and saying thank you

all day long and smiling at people and they smile back. I just love it."

The students and their instructor, Giulianne Krug, assistant clinical professor of occupational therapy and occupational science, will make the video widely available to help people become more comfortable communicating

to people with disabilities. In the next several weeks, they hope to have an online ordering link on the School of Health Professions Web site. For more information, e-mail Krug at krugg@health.missouri.edu.

"I think that many people who think they are comfortable find that they have something to learn from the video," Bunn says.

History was made on October 19...

... when the University of Missouri proudly announced that the MU business school would from that day forward be named the:



Robert J. Trulaske, Sr.
College of Business
University of Missouri-Columbia

The naming recognizes the unprecedented support of the college by Bob and Geraldine Trulaske and the personal and business achievements of Bob Trulaske. The Trulaskes' support provides scholarships, endows faculty positions, and funds the strategic priorities that are integral to the college's commitment to be one of nation's top 20 public business schools.



Recipients of Trulaske Scholarships helped Mrs. Trulaske celebrate the naming of the college.

After graduating from the MU business school in 1940, Bob Trulaske worked for Procter & Gamble and then served as a combat pilot in World War II. In 1945, Mr. Trulaske co-founded a company that is now the leading manufacturer of refrigeration equipment for the foodservice and soft drink industries. Mr. Trulaske, who passed away in 2004, was a wonderful husband, father, and grandfather, a successful business owner, and a proud alumnus of MU.



"We are extremely pleased that our college will be forever associated with Bob Trulaske, an ethical, caring, and remarkable Missouri businessman." – Dean Bruce Walker

See more photos and a video of the announcement ceremony at business.missouri.edu/naming

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classifieds

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Rates: 30-word maximum \$9
Deadline: Noon Thursday of week before publication.

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

Whether dry cat food or canned, study finds that the amount is key

PORTION CONTROL

Obesity is detrimental to cats, too

Although society is accustomed to seeing Garfield-sized cats, obese, middle-aged cats can have a variety of problems including diabetes mellitus, which can be fatal. The causes of diabetes mellitus in cats remain unknown although there has been a strong debate about whether a dry food diet puts cats at greater risk for

diabetes. A new study by an MU veterinarian suggests that weight gain, not the type of diet, is more important when trying to prevent diabetes in cats.

Because dry cat food contains more starch and more carbohydrates than canned cat food, some have argued that a diet containing large amounts of carbohydrates is unnatural for a cat that is anatomically and physiologically designed to be a carnivore. Carbohydrates

constitute between 30 percent and 40 percent of dry cat food. Some have been concerned that this unnatural diet is harmful to cats and leads to increased incidence of diabetes. Wet cat food, on the other hand, is high in protein and more similar to a natural carnivore diet.

In the study, Robert Backus, assistant professor and director of the Nestle Purina Endowed Small Animal Nutrition Program at MU, and his team of

researchers compared a colony of cats in California raised on dry food with a colony of cats in New Zealand raised on canned food.

After comparing glucose-tolerance tests, which measures blood samples and indicates how fast glucose is being cleared from the blood after eating, researchers found no significant difference between a dry food diet and a wet food diet. They also compared the results

between cats less than three years of age and cats older than three. The MU veterinarians say that allowing cats to eat enough to become overweight is more detrimental to their health than the type of food they eat.

"Little bits of too much energy lead to weight gain overtime," Backus says. "We did find that cats on canned or wet food diets have less of a tendency towards obesity than cats on dry food diets."

Forty percent of all cats in middle age are overweight or obese. According to Backus, male cats should weigh between 10 and 11 pounds, and female cats should weigh between 5.5 and 7.7 pounds. Besides diabetes, overweight cats are prone to other conditions such as skin diseases, oral diseases and certain cancers.

When cats are spayed and neutered, they have a tendency to eat more and gain weight. Backus suggests monitoring the food even more closely at this time and not allowing the cat to eat in excess.

"The most effective thing you can do is be the one who determines how much your cat eats," Backus said. "We have been conditioned to fat cats, but cats should have only between 18 percent to 20 percent body fat." His research was presented recently at the American College of Veterinary Internal Medicine Conference in Seattle.

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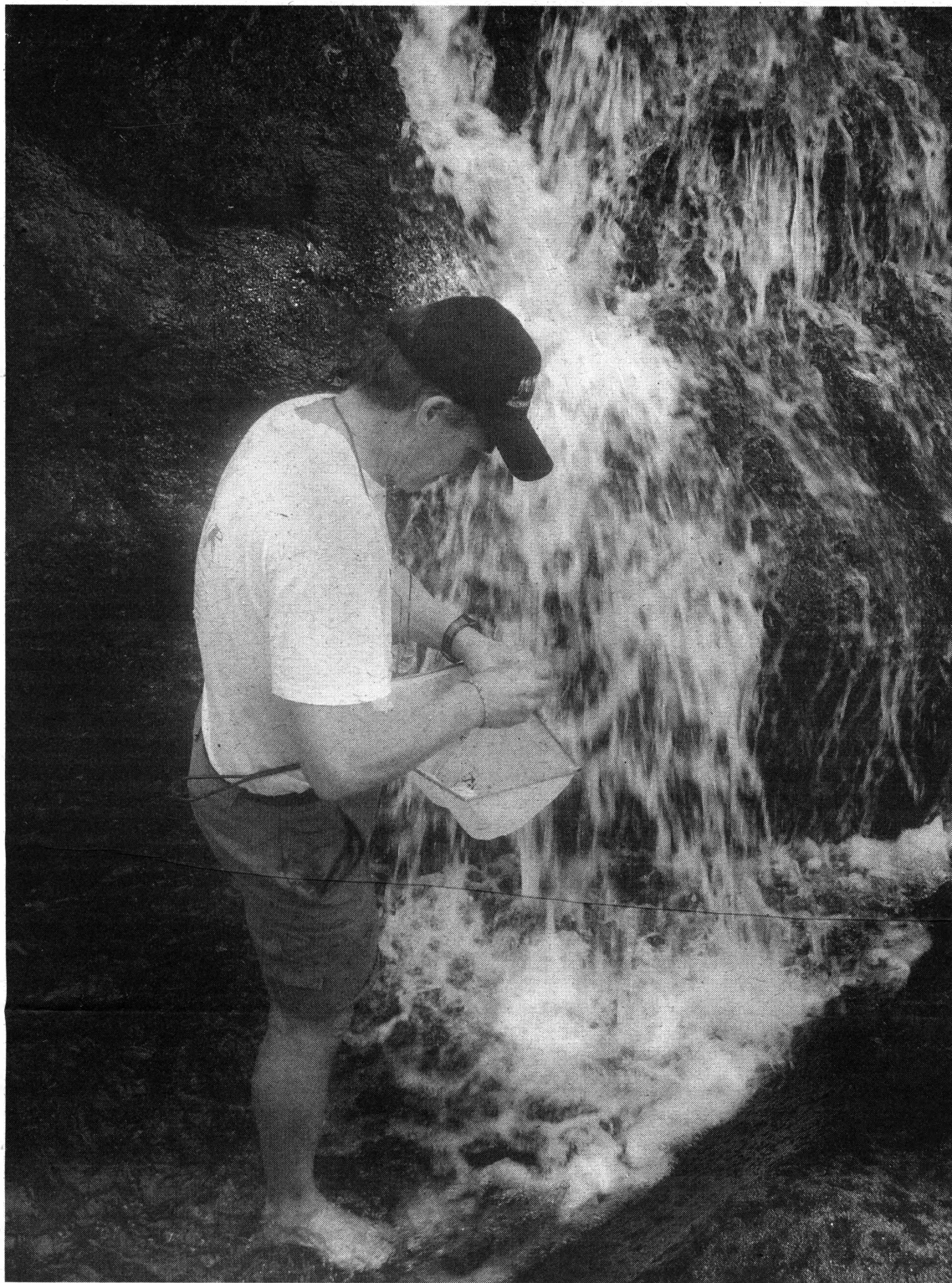
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MU researcher makes aquatic acquaintances



Akekawat Vitheepadit photo

NICHE SCIENCE Some of the 50 new species of aquatic insects that MU entomologist Bob Sites and his colleagues discovered on trips to Thailand occupy unique niches in the environment, such as rocky cliff faces behind tumbling waterfalls.

To say you're an entomologist — a bug scientist — means your subject area is so vast it's almost incomprehensible. When it comes to bugs, there are billions and trillions more of them than there are of us.

"Nobody knows how many there are," says MU entomologist Bob Sites. "There are in the neighborhood of one million insect species that have been described. Estimates of the total number are as high as 30 million, and most of the undescribed species are in the tropics."

The legendary bank robber Willie Sutton once said he robbed banks because that's where the money was. Sites travels to the tropics because that's where the bugs are. Since the mid-1990s, he has made more than 20 trips to Thailand working on various research and training projects and keeping an

eye out for new insect species.

Over the past few years, he and fellow researchers and graduate students from Thailand and around the world have hit a biological bonanza. They've discovered more than 50 new bug species during collecting trips around the country.

In particular, Sites is interested in aquatic insects that live in Thailand's streams, rivers, waterfalls and ponds. The Latin name for one family of these bugs is *Gerridae*, but they're better known as water striders or pond skaters. Some people even call them Jesus bugs because they walk on water.

Anyone who has spent any time around creeks and lakes knows what they look like. They're the small, long-legged critters that skitter across the water's surface without sinking. This seemingly miraculous buoyancy comes from microscopic hairs at the tips of

their legs that trap air to repel water and keep them afloat.

These little guys are speedy, too. They've been clocked at 1.5 meters per second, practically supersonic for something so small. Their speed helps these aquatic raptors hunt down their prey. They eat almost anything: mayflies and fly larvae, water beetles and even small fish. They've been known to cannibalize members of their own species. Water striders are found all over the world; some have adapted to live far out on the ocean.

The National Science Foundation (NSF) has funded Sites' insect quest as a biodiscovery project to catalog aquatic insect species in northern Thailand. He and his fellow researchers have traveled to national parks and natural areas all the way from the southern tip of Thailand's Kra Peninsula to its borders with Burma, Laos and

Cambodia. This part of the Indo-Burma region has incredible biodiversity, Sites says. "The northern mountain region is an area where the faunas of different regions overlap and come together. It's squarely within one of Conservation International's 'biodiversity hotspots.'"

The area's remoteness often keeps scientists from conducting vital research that could help preserve these areas. "Some of those countries, you just can't get into them," Sites says. "It's difficult to do research there, and it can be very dangerous."

Often, local government officials are suspicious of any outsiders and put up bureaucratic roadblocks. Researchers also have to watch out for unexploded ordnance and landmines left over from decades of war and revolution. In some parts of northern Thailand, Sites and the research team have to dose themselves with pills to fend off malaria.

Traipsing through tropical forests has other potential dangers, such as running into illegal timber cutters or poachers hunting for rare animals. "I was more worried about snakes than anything else," Sites says. "I'm not a big fan of snakes."

There was even one time that a research subject turned on him. On one collecting trip, Sites picked up a water bug that bit him on the pad of his little finger.

These bugs inject toxins into their prey to immobilize them and liquefy their internal tissues. "It was much, much worse than a bee or wasp sting," he says. "I felt intense pain all the way to my elbow for a good 30 minutes."

For the most part, though, Sites has nothing but good things to say about his experiences in Thailand. The research team typically stayed in national park guesthouses where there was always simple, tasty food and comfortable accommodations, he says. They took Thai-style showers by ladling water over themselves from a bucket. At night, they set out black-light bug traps to see what varieties of nocturnal insects they could discover. His genial Thai hosts made the project even more enjoyable. "The Thai people invariably are wonderful," he says. "There's nobody like them on the planet."

Their collecting journeys took them to parts of the country that not many outsiders get to see. They walked forested mountain trails to set collecting traps on the rock faces behind tumbling waterfalls. They waded up streambeds with collecting nets at the ready to pounce on their tiny quarry.

"These are beautiful, clear rushing streams, maybe knee deep, with rocky, gravel bottoms. You get in there and collect until you don't find anything

SEE Bugs on Page 8



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BUGS from Page 7
new," Sites says. "You don't really know what to expect. In some places you're amazed at the proportion of new things. In one creek, every species we pulled out was undescribed."

Scientists look at a number of distinguishing characteristics to tell one type of water strider from another. They take into account size, variations in color patterns, differences in reproductive organs and wing shape, among other factors.

It takes a scientist to love the lingo. Here is part of Sites' description in an academic journal article of a new water strider, *Ptilomera jariyae*, the research team discovered in western Thailand: "This species can be recognized by the well-developed median lobe of the proctiger in the male and the absence of a ventrolateral lobe of abdominal segment VII in the female."

Researchers often get to name the species they discover. They use the classification system that Swedish botanist Carolus Linnaeus developed in the 1700s and that children still learn in school today: kingdom, phylum, class, order, all the way down to species. Linnaeus certainly didn't have any self-esteem issues about his system. He once famously observed, "God created.

Linnaeus organized." He was known for naming especially unpleasant plants and animals after his scientific adversaries.

Sites and his colleagues named most of their Thai discoveries after the geographic areas where they were found. But he did get even with that bug that gave him such a savage bite. That species will be named *horribilus*, a name usually reserved for particularly nasty characters. The grizzly bear, for instance, is *Ursus arctos horribilus*.

Sites also is helping Mizzou students and other scientists discover academic opportunities in this part of the world. In summer 2007, he was on a panel of international scientists that advised the Vietnamese government on establishing ecological research plots in a national park in that country. Since 2001, he has led MU undergraduates on annual study-abroad trips to Thailand, and graduate students often work with him there on research projects.

Just months after the 2004 Indian Ocean tsunami, Sites led a NSF-funded team to look at fresh-water ponds along the devastated Thai coast. The sea's surge had killed all fresh-water insects in the ponds, and scientists wanted to know how quickly they would come back.

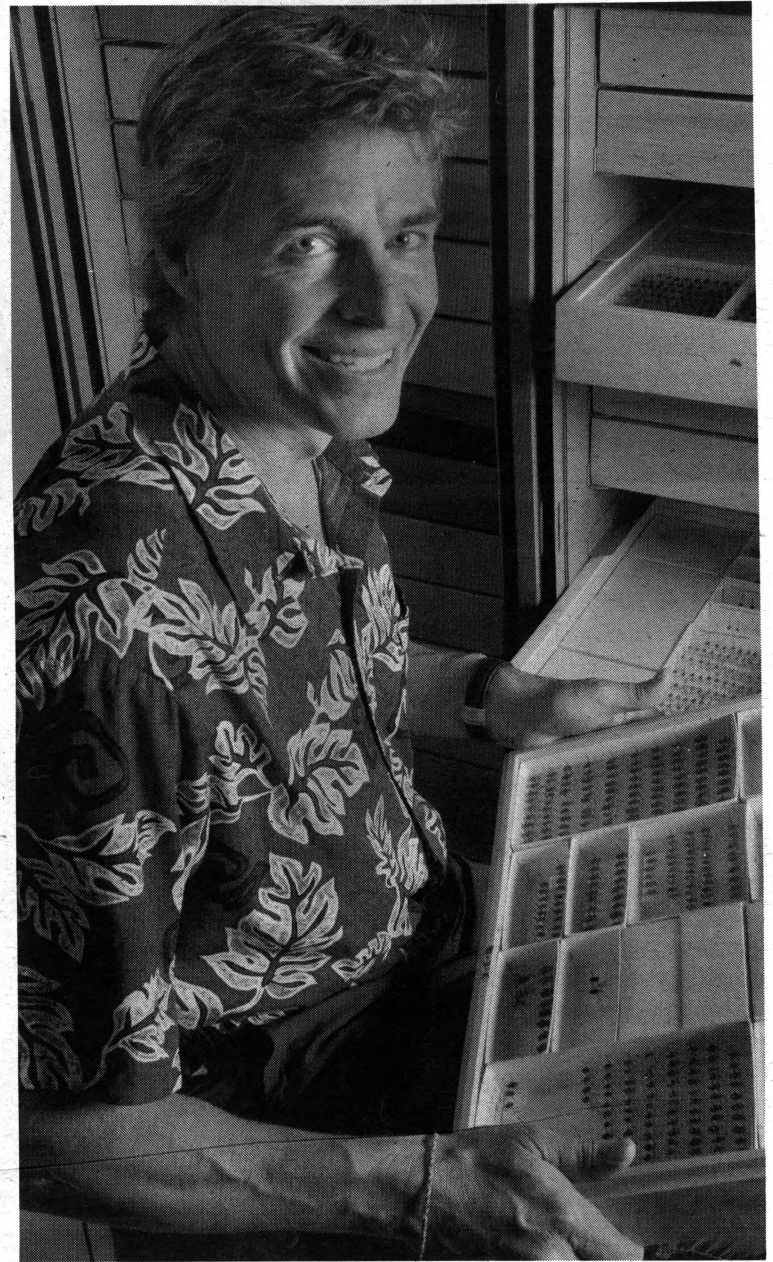
The environment had been completely destroyed, and Sites' team had the chance to see what happened next. "The last Indian Ocean tsunami of this magnitude occurred 30,000 years ago," he says. "So these opportunities don't come very frequently." The researchers are still collecting data.

Although his tsunami research might seem obscure, it has important practical applications, Sites says. Rice makes up a big part of the Thai diet, and this research could provide clues about how quickly a rice paddy can recover after it's been inundated by salt water. But what is the practical application in discovering new aquatic insects?

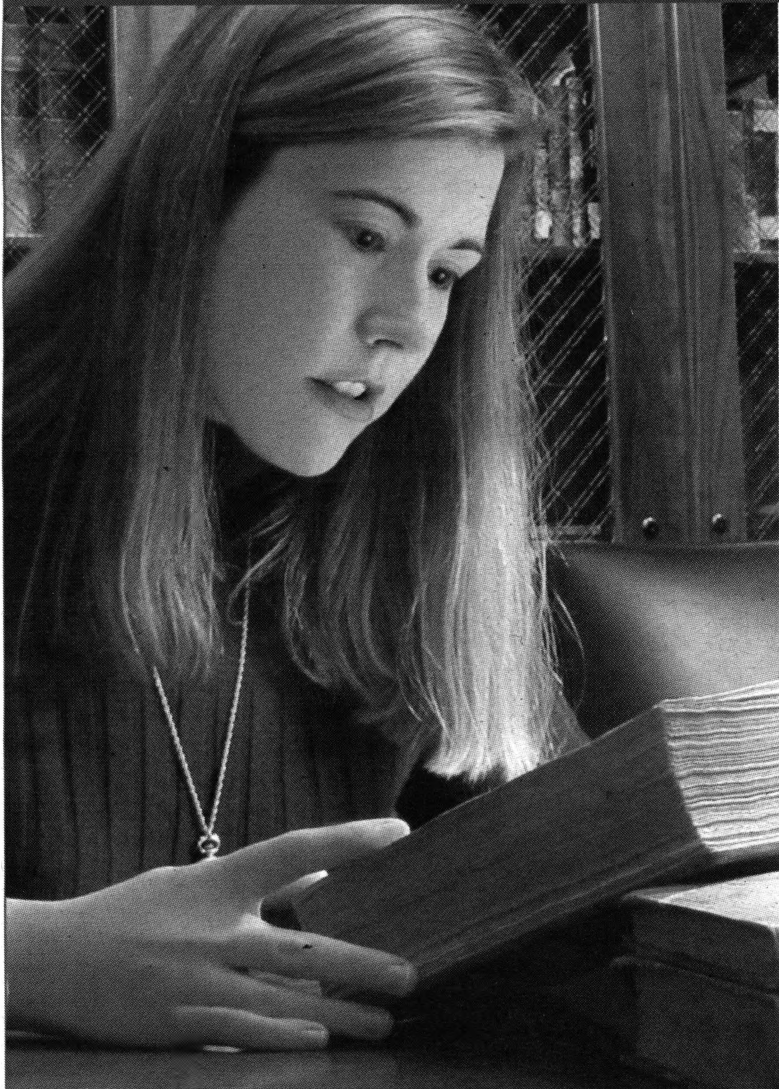
That question doesn't make much sense to Sites. Science, after all, is science. "Why go into space? Why go to the moon?" he counters.

For that matter, why slog through the streams and forests of Thailand looking for new aquatic insects? "Because we don't know what's there," he says. "We want to know."

COLLECTIBLES As director of MU's Enns Entomology Museum, Sites rides herd on 5.75 million insect specimens, some of which were collected more than 100 years ago.
Rob Hill photo



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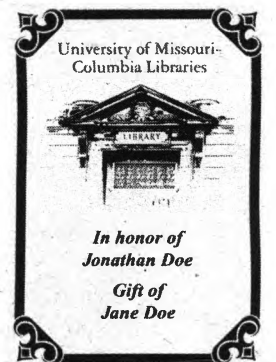


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