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MU wellness center puts Pinkel cash to work

By Janese Silvey

The University of Missouri's Wellness Resource Center will use some of its unexpected funding boost to expand a new program that urges students to buddy up before going out.

Missouri head football Coach Gary Pinkel is donating \$40,769, one week's worth of his salary, to the center as part of a punishment for his driving while intoxicated arrest last week.

Kim Dude, executive director of the wellness center, said the money will enhance the "Life Is Not a Spectator Sport" program.

"Perhaps we'll work with the athletics department to enhance that, not only with the use of this money but use of staff there to be able to create educational campaigns about the importance of not only making safe choices for yourself but also looking out for each other," she said.

For the past year, Dude has been developing and presenting the program. It's not just about having a designated driver; it's about having a designated friend — someone who will encourage you to drink water between alcoholic beverages, stay away from dangerous situations and get home safely.

Dude and her staff have hosted some 80 presentations this semester helping students also recognize signs of trouble. When students suspect someone has had an excessive amount to drink, they're taught to use physical tests, such as a pinch, to see whether a person responds to slight pain. If someone doesn't yelp or complain, it's time to call 911 or take the person to the hospital, she said.

Dude suspects greater awareness might explain why a University Hospital doctor saw more students coming to the emergency room with alcohol-related conditions earlier in the semester.

An ER doctor emailed Chancellor Brady Deaton twice in September with concerns about intoxicated students.

Dude said she doesn't think that reflects an increase in binge drinking, but rather more students calling for help when they suspect alcohol poisoning.

“I don’t know that we have more students drinking at high risks or more students doing something about it,” she said.

The Wellness Resource Center also will use some of Pinkel’s donation to plug gaps left by an expiring NCAA grant. The three-year grant funded a project that aims to educate sports fans about safe behavior during tailgating.

The MU Wellness Resource Center can’t solve all alcohol problems alone, Dude said. The center collaborates with law enforcement, bar owners and student organizations, but the community, landlords and parents also need to be on board, she said.

“We all need to try our best to be on the same page,” she said. “If students walk out of our program into an environment that encourages abusive drinking, it makes it difficult for us.”

Deaton last week called on faculty members to play a role in the battle against bingeing, too. He told professors to think about scheduling more morning and Friday courses to curtail weekday drinking.

Dude supports that, saying students cite academic obligations as the No. 1 reason they decide not to drink.

The Trulaske College of Business uses Fridays for special events, speakers, workshops and internship opportunities, so there are few Friday classes. After Deaton’s comments, Dean Joan Gabel said her staff might review the situation when they begin scheduling courses for next year. She stressed that she thinks the school already keeps students busy on Fridays, though.

“What we’re doing also creates that motivation and incentive,” Gabel said.



Booze at the game

By Henry J. Waters III

Sports reporter David Briggs did a dandy piece Thursday explaining policies at a number of major universities concerning sales of alcohol at sports venues.

A number of major colleges sell liquor at games and make a lot of money from the enterprise. At the University of Louisville, a person in the athletic director's office said drinking is acceptable in the general community and should be allowable in an athletic venue. He says selling beer at football and basketball games has "worked out fine for us."

At the University of Missouri, drinking at the game is an energetic occupation, but not in the stadium seats. The booze flows in sky boxes and in the parking lots, where many fans come just to party, never setting foot inside the gates. Many others come inside then leave at halftime to join tailgate parties. MU has rules about parking lot tailgating but none that interfere seriously enough to spawn rebellions.

Yet MU and most other colleges have not taken the next big step: selling beer in stadium and field house concession stands.

Why not?

As Briggs reports, institutions that do sell booze make a lot of money. It seems unreasonable to assume consumption would be greater than with the present tailgate system. At \$8 or \$9 a pop, how much will a person drink in the stands?

Enough to produce a lot of revenue, other venues report.

Professional sports stadiums and arenas have sold booze successfully for years. Mizzou allows major sponsorship by Anheuser-Busch with plenty of signage in university locations.

I'm having a hard time figuring why it makes sense not to sell under university auspices at football and basketball games. Certainly, it would be easier to control underage access inside than outside in the parking lots. And since big-time college sports these days is all about the money, alcohol sales would be a rich new source.

If the ban is intended to protect an image of intolerance for allowing drinking on university premises, that sodden cat is out of the bag.

HJW III

Today's college students are more punctual than yesterday's. If they don't get to the parking lot early, they won't find a space.

BUSINESS JOURNAL

University of Missouri, Blue Springs prepare for first phase of innovation park

Kansas City Business Journal by Steve Vockrodt, Reporter

Date: Tuesday, November 22, 2011, 12:31pm CST

The University of Missouri on Monday signed a letter of agreement with Blue Springs to start the first phase of the Missouri Innovation Park.

The inaugural phase of the science and technology park is expected to cover 63 acres and include an 80,000- to 90,000-square-foot building, which will have MU as the anchor tenant.

Blue Springs Mayor Carson Ross said in a written statement that with the agreement letter signed, building construction is expected to begin in September, with an opening ceremony tentatively slated for early 2014.

The Missouri Innovation Park is expected to host 40 companies with 3,700 employees, bringing an annual payroll of \$190 million.

“The Missouri Innovation Park is a multiparty collaboration and partnership that represents a shared strategy to complement the economic opportunities of the region,” Brien Starner, president of the Blue Springs Economic Development Corp. , said in a written statement. “With this signed agreement, the first phase of EDC’s partnership with the city and MU will come to life, which is what we’ve all been working toward since 2008.”

Missouri Innovation Park, southeast of Interstate 70 and Adams Dairy Parkway, is intended to draw science and technology firms and tie them to a higher education institution that promotes scientific research and entrepreneurship.

More acres are slated for future phases. Upon completion in 15 to 25 years, the park is expected to represent \$340 million in capital investment.

MISSOURIAN

Increasing number of patents garners revenue, prestige for MU

Tuesday, November 22, 2011 | 12:37 p.m. CST; updated 8:19 p.m. CST, Tuesday, November 22, 2011

BY LAURA DAVISON and CHENFEI ZHANG

COLUMBIA — **MU was issued 21 patents in the 2010 academic year, more than ever before.**

Columbia entrepreneur Brian Thompson believes one day his research might be the cure for polluted rivers, lakes and streams. Until then, he waits with more than a million other inventors and researchers whose patents are pending at the U.S. Patent and Trademark Office.

Thompson's enzyme research began at MU after the completion of his dissertation at Kansas State University. The researcher he worked for there was brought by MU to Columbia to increase life science research on campus. Thompson followed his boss to work at MU.

MU, and the rest of the academic research world, measures a university's success in part by the number of patents it is issued each year.

For about the past five years, most Big 12 universities, MU included, have been issued fewer than 10 patents. Last year, MU was issued 21 patents, jumping into third place in the conference.

"Patents signify the results of the intellectual pursuits of our faculty. Patents are significant because they allow the opportunity of commercialization of research results that will benefit society," said Chris Fender, director of the MU Office of Technology Management and Industry Relations.

The increasing resources aimed at Fender's office benefit the university in two important ways. First, the number of patents generated contributes to the university's prestige. They are also increasingly seen as potential revenue generators in lean budget years.

"The university has put a premium in the last few years on protecting the intellectual property of their researchers," Thompson said. MU decided that this was an area in which it was lagging behind a lot of different schools, he said.

After a patent is issued, revenue comes from licensing the research to companies or entrepreneurs such as Thompson. MU owns all of the research done on campus, so when Thompson left his position to start a business based on the research he developed at MU, he paid the university a fee.

MU received \$9.5 million from licensing agreements last year. That's an increase of nearly \$7.5 million since fiscal year 2006. Even though only about 10 percent of patents will go on to generate revenue, the university has used the additional money to offset budget cuts from the state.

Thompson said that licensing agreements create a revenue stream from universities that can be used to offset budget cuts.

"The university doesn't get hit as hard. The tuition hikes don't have to be as high. They can help the university as a whole."

According to Paul Bateson, a business counselor at the Missouri Small Business and Technology Development Center, the licensing agreements are beneficial for MU, Columbia and entrepreneurs.

"The university is a draw when businesses are looking for places to go. There are several businesses that came to Columbia because of the proximity to the research being done here," Bateson said.

The intentional focus on patenting more intellectual property started about four years ago. Since 2008, the Office of Technology Management and Industry Relations has grown from six employees to 11 this year. That has led to an overall increase in the number of patent applications.

"We take our job as stewards very seriously, making sure those innovations get to market and seeing they're protected," Fender said.

Fender said MU hopes to keep increasing the number of patents issued, especially as state funding looks uncertain. He also said he hopes to see a 5 percent to 10 percent increase each year in the number of patent applications filed and in the revenue from licensing agreements.

"You have all these Mizzou researchers making all these discoveries resulting in patents," Thompson said. "It says, 'Hey, this happened at the University of Missouri.' It says we've reached upper echelons of research universities."

Thompson said he hopes his patent will soon join the ranks of those issued to MU. Until then, he develops his business around his research — patent pending.

MISSOURIAN

MU student artwork of Thanksgiving dinner destroyed

Tuesday, November 22, 2011 | 2:42 p.m. CST



BY Elizabeth Pearl

COLUMBIA — There are forks, knives and wineglasses in the salad. The potatoes have been upended onto the table's white surface, now stained with purple wine and brown gravy. Two pieces of cranberry sauce are left in their dish; the rest have disappeared.

All that's left is the turkey, brown and wet with rain in the middle of the soggy mess.

The ravaged faux feast is a part of a piece of art that used to depict a tissue-paper Thanksgiving meal for eight. After being vandalized over the weekend, the food and tabletop are now on the grass; the table's legs have vanished.

A sign with the artwork's title is still there, though: "Happy Wastegiving."

The piece, which stood outside MU's Fine Arts Building, was damaged Saturday afternoon or evening, said Hannah Reeves, director of the George Caleb Bingham Gallery and teacher of the 3-D design class that created the installation.

Reeves said the piece was meant to show the waste associated with holidays and our culture in general. It was made of colorful tissue paper on top a white table so that when it rained or snowed the colors of the food would run down and paint the table over time. Now, however, the table will be colored only by the stains left after the damage was done.

That the artwork will never be finished "is a little bit infuriating," Reeves said.

This is not the first time that art projects outside the building have been vandalized.

In August, intoxicated pedestrians were caught trying to move two large pieces of student art. Another of the pieces from that collection was stolen and never found, Reeves said.

Jenna Brown, a junior graphic design major at MU, created the green bean and sweet potato dishes for the most recent installation. She was upset by the destruction of her work, adding that the possibility of vandalism had been a class concern during the project's creation.

"I just don't believe that someone would do something like that," Brown said. "Even if it's not the best thing in the world, ... we worked hard on it."

Reeves reported the incident to the police on Monday after an officer informed her of the destruction. He suggested that she put future art inside on football weekends to avoid such occurrences, she said.

Reeves has considered several means of protecting the artworks, including moving them on game days or bolting them to the ground. However, she doesn't want to have to accommodate people who break the law.

"It's not just something that we need to work around — this public drunkenness and vandalism," she said.

The installation won't be rebuilt. Reeves said that a new piece of art hasn't been chosen to fill the lawn, where the remains of the feast created as a symbol of waste now lies destroyed.

THE ST. LOUIS AMERICAN

Multisystemic Therapy stems juvenile delinquency

Posted: Wednesday, November 23, 2011 12:00 am

More than 20 years ago, Charles Borduin, a University of Missouri researcher, developed a treatment for juvenile offenders that has become one of the most widely used evidence-based treatments in the world. Now, he has found that the treatment continues to have positive effects on former participants more than 20 years after treatment.

Throughout the course of his career, Borduin, professor of psychological sciences in the College of Arts & Science, has pioneered the treatment called Multisystemic Therapy (MST) as a way to prevent serious mental health problems in children and adolescents. MST interventions involve the offender's entire family and community, as opposed to the more common individual therapy, where the offender visits a therapist who offers feedback, support and encouragement for behavior change.

Borduin followed up with clinical trial participants that completed treatment nearly 22 years earlier, on average. He found the following differences between participants who received MST and those who received individualized therapy:

- **Violent felonies:** Since completing treatment, 4.3 percent of juveniles treated with MST were arrested for a violent felony, compared to 15.5 percent of individual therapy participants.
- **All felonies:** Overall, 34.8 percent of MST participants committed a felony, compared to 54.8 percent of individual therapy participants.
- **Misdemeanors:** MST participants committed five times fewer misdemeanors than individual therapy participants.
- **Family problems:** Individual therapy participants were involved in family-related civil suits two times more often than MST participants.

"This research shows that Multisystemic Therapy has long-lasting effects," said Borduin.

"Nearly 22 years after treatment, juvenile offenders treated with MST still see positive effects.

This treatment has protected many potential victims, and I hope this research helps to encourage further use of the method."

MST is used in 12 countries around the world, as well as in 34 states. In Norway, it is the national model for juvenile offender treatment. Borduin said MST is the most widely used

evidence-based treatment for juvenile offenders in the U.S.; however, only 1 to 2 percent of juvenile offenders receive the treatment.

The study follows an original clinical trial that took place between 1983 and 1986. In the original trial, the 176 children who participated in the study were randomly selected for treatment with MST or individual therapy. For this study, Borduin located records for more than 80 percent of participants. On average, the follow-up occurred 21.9 years following the conclusion of treatment. Borduin said this is one of the longest post-treatment period follow-ups ever done for a psychological evidence-based treatment of any disorder.

In a previous study, Borduin found that the net cumulative benefit of providing MST to a single juvenile offender resulted in a savings to taxpayers and crime victims of \$75,110 to \$199,374 over nearly 14 years. Borduin now plans to study savings over the course of almost 22 years following treatment. Borduin's findings were recently published in the *Journal of Consulting and Clinical Psychology*. He collaborated with Aaron Sawyer, a graduate student in the Department of Psychological Sciences.



Canned soup raises BPA levels

November 22nd, 2011
04:36 PM ET

Eating even moderate amounts of canned soup significantly increases exposure to Bisphenol-A according to a new study published Tuesday in the Journal of the American Medical Association (JAMA).

The chemical BPA, suspected of causing damage to human health, is used in the interior lining of the vast majority of canned soups and vegetables.

For the study, researchers at the Harvard School of Public Health fed fresh soup made without any canned ingredients to a group of students and staff for five days in a row, and fed 12 ounces of canned soup to a second group for the same five days.

Researchers measured BPA urine concentrations in both groups, then after a two-day cleansing period, switched groups, feeding the canned soup to those who previously received the fresh soup, and vice versa. 75 volunteers participated in the small study.

The results show that after consuming one can of soup per day for five days, BPA urine concentrations were approximately 13 times higher on average than after consuming non-canned soup.

A similar study published two years ago, also led by Jenny Carwile at the Harvard School of Public Health, found a 69% increase in BPA urine concentrations among Harvard students assigned with using polycarbonate plastic water bottles for one week.

Although BPA leaches into food and drink at room temperature, the higher rates found in canned soups and vegetables has to do with how they're manufactured, says Frederick vom Saal, Professor of Biological Sciences at the University of Missouri-Columbia.

"Canned vegetable products are all coated with BPA and they're sterilized in the can for hours at very high heat," explains vom Saal, "the problem is that BPA is heat sensitive in terms of breaking the bonds apart in the resin lining and releasing BPA into food."

A separate study release last month found a greater risk of behavioral issues like hyperactivity, anxiety, and depression among the daughters of mothers with elevated concentrations of BPA in their urine during pregnancy.

Still, that study shows a correlation, not causation.

John Rost of The North American Metal Packaging Alliance, which represents the canned foods industry, says the elevated BPA levels following consumption of canned soups only shows that people are well suited to metabolize the chemical, and get rid of it in urine.

"BPA does leave your system quickly and efficiently," says Rost. "Your body can handle it."

Vom Saal points out that many chemicals leave the system at similar rates as BPA, but are able to greatly alter physiology - an example he gave was birth control pills that also are excreted in urine.

"In order for it to be in urine, it has to have gone through blood," explains vom Saal. "And when we look at serum levels of BPA in people we find free BPA in blood, and so have over a dozen other studies."

DISCOVER[®]

M A G A Z I N E

6 Servings of Thanksgiving Science: Ideal Turkey Diet, Black Friday Sales Tricks, Turkey-Phobia...

by [Valerie Ross](#) November 23rd, 2011 8:17 AM

It's almost Thanksgiving here the US. Before you tuck into your stuffing, pumpkin pie, and cranberry sauce, save a little room for a big helping of science. Here are a few of our favorite Thanksgiving science stories from around the Internet, detailing the research behind fattening turkeys, giving thanks, post-holiday shopping, and more:

- **Discovery News takes a look at what turkeys have for dinner before becoming dinner. Typical feed pellets are made of, among other things, "soybean meal, animal by-products, [and] distillers' grains." But a professor at the University of Missouri has developed "the Missouri Ideal Turkey Diet," carefully designed turkey food that costs 8 to 10 percent less than typical feed pellets while packing the same nutritional punch. Yum.**
- As you think about what you're thankful for this year, the *New York Times* offers one more thing to add to your list: the very act of giving thanks is good for you. Even a little bit of gratitude, scientists have found, makes people happier and healthier. If you're thankful for health and happiness already, you've got the start of a nice little feedback cycle there. And if you're not feeling particularly grateful, as you sit sandwiched between arguing relatives and choking down a slice of soggy pie, don't worry: psychologists suggest some practical tips for gratitude beginners.
- Let's remember that not everyone enjoys the Thanksgiving bird. In addition to vegetarians, the nation's alektorophobics aren't crazy about poultry, either. A writer to Slate's Dear Prudence advice column details how she can't stand "their fleshy heads, their huge feathery bodies, the noises they make..." I literally startle if I accidentally see a picture of a turkey, never mind the panic that rises in me when I see one in real life." Be kind to your guests, and don't seat the family turkey-hater next to whoever's carving.
- A video at *the Wall Street Journal* asks, "Will My Turkey Dinner Make Me Sleepy?" Answer: yes, though not necessarily because it's turkey. Scientists can't seem to agree on why; the explanations for such postprandial somnolence range from food-induced hormone changes to feeling weighted down by enormous mass of food you somehow managed to ingest.
- Come Friday, you may still be stuffed, but retailers nationwide will be salivating over the biggest shopping day of the year. LiveScience details seven tricks stores use to bump up sales on Black Friday, including short-lived discounts, free samples, and alluring scents.
- And last year, Emily Anthes investigated of the genomes involved in the traditional Thanksgiving meal. She found, for instance, that turkeys are especially prone to cancer, possibly more than any other known animal.



EMTs design a kid-friendly ambulance

By Janese Silvey

Tuesday, November 22, 2011

A few years ago, University of Missouri Children's Hospital's pediatric transport team picked up infant twins who both needed ventilation.

The ambulance had room for a mobile incubator for one baby, but a nurse had to manually help the other during the hours-long ambulance ride.

That's when emergency medical technicians John Wood and Dan McGavock got an idea for a custom ambulance that would have room for two patients and keep emergency crews safer.

This morning, the team unveiled that new state-of-the-art ambulance.

Unlike traditional ambulances — which have rear-loading access for patients who then lie with crews on one side and supplies on the other — the new ambulance has a side-loading door on each side. That means patients lie with two swivel seats in between them and cabinets of supplies on both sides.

Wood said it's safer for nurses and crews who provide help in the back of an ambulance.

In the past, side seats for care providers had only a lap belt, and those providers often would have to stand up and reach over the patient to get supplies — not safe if the driver has to swerve or make a quick stop for a deer or other obstacle in the road.

The new setup allows providers to be buckled up with lap and shoulder belts and to stay seated even if they need to reach for supplies.

The custom-made ambulance cost \$142,000; traditional ambulances cost about \$100,000. Twelve Mid-Missouri Walmart and Sam's stores held fundraisers last year to pick up the costs for one, and the hospital paid for a second.

The pediatric transport team annually averages 500 patients, most of whom are being taken from other emergency rooms to MU Children's Hospital for a longer stay. Patients come from all over

Missouri and neighboring states, which means the ride can be long for youngsters who already aren't feeling well.

To make it more comfortable, the ambulance is kid-friendly: with windows, not standard in traditional ambulances, a seat for Mom or Dad, colorful cartoon paintings and a flat-screen TV.

"That's anesthesia, right there," McGavock said, pointing to a "Shrek" movie playing in the ambulance this morning.

"A 5- or 6-year-old is already scared," Wood said. "They don't understand being sick; they're around new people; they've been poked on by nurses in the emergency room. We want to make this portion a little bit of an adventure for them."



Canadian guidelines support no routine mammograms until 50

MU MENTION PAGE 2

The Canadian Task Force on Preventive Health Care on Monday issued new recommendations on breast cancer screening, and they're similar to controversial guidelines issued in 2009 by a U.S. governmental panel.

As the U.S. Preventive Services Task Force (USPSTF) recommended two years ago, the government-appointed Canadian panel of experts is also suggesting that women aged 40 to 49 who are at average risk for breast cancer not get routine mammograms.

The Canadian task force has also dropped recommendations for breast self-exams and clinical exams for women with no symptoms.

The new guidelines, replacing those issued in 2001, are for women at average risk of breast cancer only. The new guidelines also recommend longer mammogram screening intervals for women aged 50 to 74 -- to once every two or three years. Previous guidelines had recommended mammograms once every two years for women aged 50 to 69 and did not address women aged 70 to 74.

The earlier guidelines had said women between 40 and 49 could be screened, but they were not to be actively recruited for screening, noted Patrice Lindsay, an expert in "best practices" for medical care and an appointed member of the Canadian task force.

According to Lindsay, "there has been a considerable amount of evidence out over the past few years looking at the benefits and harms of screening practices. The evidence really doesn't support more frequent screening in terms of having an impact on the outcome." The outcomes considered, she said, are a diagnosis of breast cancer and breast cancer death.

The guidelines are published Nov. 21 in the Canadian Medical Association Journal.

The new guidelines may rekindle the debate on mammography among experts in the United States.

"I believe the U.S. and Canada recommendations have much in common," said Dr. Michael LeFevre, co-vice chair of the USPSTF and vice chair of family and community medicine at the University of Missouri, in Columbia.

In 2009, the USPSTF recommended every-other-year mammograms for women aged 50 to 74. They advised women under 50 to discuss the test with their doctor and only then decide whether to get a mammogram, based on patient preference and other factors. They also recommended against teaching breast self-exam. The USPSTF said evidence was insufficient to assess the benefits and harms of doing clinical breast exams in women aged 40 and older.

LeFevre believes that both panels' recommendations hinge on a balancing of risks and benefits to women. Benefits include finding tumors early; harms include the risk for a false-positive test and then unnecessary worry and over-treatment.

"Both Canada and the U.S. recommendations recommend regular screenings for women 50 to 74, although the U.S. task force recommends every two years and theirs (Canada's) provides the option of every two or three," LeFevre said.

"The (U.S.) task force assessment for those 40 to 49 was that the benefits do outweigh the harms but only by a small amount, and the decision must be weighed individually," LeFevre said.

Not everyone agrees with the USPSTF on that assessment, however. The American Cancer Society, for example, continues to recommend annual mammograms beginning at age 40.

In a commentary that accompanies the Canadian guidelines, Dr. Peter Gotzsche of Copenhagen contends that, "The best method we have to reduce the risk of breast cancer is to stop the screening programs." He focused on the problem of "overdiagnosis," defined as treating a cancer that would never have caused problems in a patient's lifetime. Gotzsche contends that the level of this type of overdiagnosis in countries with organized screening programs is now about 50 percent.

Other experts took a different view of the Canadian guidelines.

"These are ridiculous recommendations," said Dr. Stamatia Destounis, a radiologist in Rochester, N.Y., and a managing partner at Elizabeth Wende Breast Care.

Among her criticisms, she said, is that doctors simply cannot predict which of the women would have had a cancer that remained harmless during her lifetime. As for not screening women aged 40 to 49, she said, "They are the moms, the worker bees, the women who have several decades left of working, and we want to find these things (tumors) as small as possible."

Still, the experts did agree on one piece of advice for women: All women should discuss screening with their doctor to decide what is best for them.

LeFevre said that when he talks to other U.S. doctors about mammography screening, he tells them: "At age 40, discuss. At age 50, recommend or encourage. At age 60, strongly encourage."