Global food security is topic of first Bond lecture

Dino Patti Djalal, Indonesia's ambassador to the United States, jokes Wednesday with panel members, from left, Roger Beachy, president emeritus of the Donald Danforth Plant Science Center; Kit Bond; and MU Chancellor Brady Deaton during a discussion of global food security.

By Jason Sledd

When people are hungry, they revolt, sometimes causing political upheaval, other times putting a nation's or region's security at risk.

"We in Indonesia know that food security is national security," Dino Patti Djalal, Indonesia's ambassador to the United States, told a University of Missouri crowd.
Djalal joined dignitaries from Vietnam and the Philippines to discuss global food security with MU leaders yesterday as part of the first Christopher "Kit" Bond Distinguished Lecture event. The topic is especially of interest to MU Chancellor Brady Deaton, who heads a U.S. board that studies international food issues.

Panelists spent the first 30 minutes of the 90-minute event emphasizing the importance of the topic. While most realize food is a basic need, it might be less clear to Americans how shortages can cause upheaval.

In Indonesia, for instance, the lack of basic staples led to one longtime president's fall from power, Djalal said. In Vietnam, shortages have led to revolutions, said Le Thanh Binh, head of the Office of Science and Technology at the Vietnamese Embassy.

There are several factors complicating the future of food security. It's estimated that the world population is going to grow to 9 billion by 2050, requiring a 70 percent spike in agriculture production to feed everybody, Deaton said.

"The global situation is not so happy," Djalal said.

Delegates blamed climate change for hindering food production. Rising sea levels and heavy rains have caused flooding of crop fields.

There are man-made issues, too. Vietnam's rice bowl is under threat because of hydroelectric dams planned upstream on the Mekong River that would disrupt the flow of water to fields, Binh said. Because Vietnam is a major rice exporter, reducing production would affect not only the country but also the region, he warned.

Indonesia and the Philippines are working toward becoming self-sufficient in rice and corn production.

Josyline Javelosa, agricultural counselor for the Philippines Embassy, said the rice sufficiency goal might be met as early as next year. "Sorry, Vietnam, you'll lose one customer," she told Binh.

There are several strategies in place to try to boost food production, such as empowering women to take leadership roles in agriculture production, Djalal said.

Technology also will have to be better utilized, said Roger Beachy, president emeritus of the Donald Danforth Plant Science Center. He suggested countries that have banned genetically engineered imports review those policies and see whether there's a compromise to be made in order to get currently available food to undernourished people.

Beachy suspects many of the issues could be solved through agricultural research. MU already has numerous studies going on that would help countries address problems such as developing drought-resistant crops. Academics also could help address post-harvest problems such as finding the best way to transport food between islands or across countries, he said.
The Philippines already has partnerships with private sectors in Missouri, such as Monsanto, Javelosa said. "Who knows, maybe we can brew some partnership with the University of Missouri," she said.

"You broke the code," Bond said. "We're interested in partnerships."

Reach Janese Silvey at 573-815-1705 or e-mail jsilvey@columbiatribune.com.
Frustrated at Sex, Flies Turn to Drink

By Josh Fischman

It's the ultimate seedy bar scene: Late in the evening, a guy makes a move on a woman sitting on the next bar stool, who turns him down. Rebuffed, he turns to the bartender and drowns his sorrows in another beer. That scene has now been played out, not in a bar, but in a modern lab at the University of California at San Francisco, and not with people but with flies.

Male fruit flies, rejected in their attempts to mate, turn to alcohol-soaked food, researchers reported today in the journal Science. Scientists think the discovery, along with evidence that the behavior seems to be driven by a small molecule in the brain, may open a window onto the self-destructive actions of alcoholics and drug addicts.

The molecule, called neuropeptide F, "couples frustration and behavior in a way we hadn't known about," says Troy Zars, an associate professor of biological sciences at the University of Missouri at Columbia and an expert in fruit-fly behavioral genetics. A similar molecule has been linked to overeating and a liking for alcohol in mammals. Mr. Zars, who wasn't involved with the research and wrote a commentary on it in the same issue of the journal, says the discovery of the molecule's role "lets you think about drugs that act on it to reduce alcohol-seeking behavior."

Ulrike Heberlein, a professor of anatomy and neurology at UCSF, and her colleagues created their fly-blown bar by putting male flies in containers with females that had just mated. In the cramped space, males pursued the females, but recently mated females are rarely receptive to such advances. The males then were given a choice of food: normal fly food, or a dish laced with 15 percent ethanol (a form of alcohol). They went for the ethanol-soaked food.

Their behavior was a lot different than that of a similar set of male flies who mated successfully. Those males didn't show any preference for food type.

That wasn't the only difference. When examined, the frustrated flies had low levels of neuropeptide F in a few specific neurons. The happily mated flies had much higher levels.
Then the researchers found they could change the alcohol-seeking behavior of the flies not just by changing their mating opportunities, but by changing their neuropeptide F levels. Increasing levels in the frustrated flies cut down on their preference for booze. Decreasing the levels in the mated flies actually made them act like the frustrated ones, and they hit the alcohol much more heavily.

The molecule seems to be a very important switch, notes Galit Shohat-Ophir, a study co-author who is a research specialist at the Howard Hughes Medical Institute’s Janelia Farm Research Center, in Ashburn, Va. No one is surprised that denial of a basic drive, like mating, leads a creature to seek alternate forms of stimulation, but neuropeptide F appears to be the crucial link that connects the two kinds of behavior. And the switch can be turned on and off, affecting the result.

“It’s a pretty complete story,” adds Mr. Zars, who notes that a similar molecule with a similar name, neuropeptide Y, has been found in mammals. But the switch effect hasn’t been found before, he says. The molecules seem to sit in between reactions to denial—in humans, not flies, those might be feelings like anxiety or depression—and behaviors that appear to make creatures feel better. When those behaviors are harmful, like alcoholism, he says that researchers could look for medications that act on the molecules, and use the switch to shut them down.

This entry was posted in life sciences and tagged drinking, neuroscience, sex. Bookmark the permalink.
Male fruit flies that have been rejected by females drink significantly more alcohol than those that have mated freely, scientists say.

In an article in Science, researchers suggest that alcohol stimulates the flies' brains as a "reward" in a similar way to sexual conquest.

The work points to a brain chemical called neuropeptide F, which seems to be regulated by the flies' behaviour.

Human brains have a similar chemical, which may react in a similar way.

The connection between alcohol and this chemical, which in humans is known as neuropeptide Y, has already been noted in studies involving hard-drinking mice.

The new work explores the link between such reward-seeking and the study of social interactions, said the lead author of the report Galit Shohat-Ophir, now of the Howard Hughes Medical Institute in Virginia, US.

"It is thought that reward systems evolved to reinforce behaviours that are important for the survival of both individuals and species, like food consumption and mating," Dr Shohat-Ophir told BBC News.

"Drugs of abuse kind of hijack the same neural pathways used by natural rewards, so we wanted to use alcohol - which is an extreme example of a compound that can affect the reward system - to get into the mechanism of what makes social interaction rewarding for animals."

Working in the laboratory of Ulrike Heberlein at the University of California, San Francisco, Dr Shohat-Ophir and colleagues subjected a number of flies to a wide variety of fates.
In one set of experiments, male flies were put in a box with five virgin females, which were receptive to the males' advances. In another, males were locked up with females that had already mated and which thus roundly rejected the males' attempts at sex.

Offered either their normal food slurry or a version charged with 15% alcohol, the mated males avoided the alcohol, whereas the sexually deprived males went on a comparative bender.

The team then went on a hunt for a chemical that could tie the two parts of this story together, hitting on neuropeptide F (NPF).

They found that the heavy-drinking rejected males had a lowered level of the chemical, and sated, mated males had an elevated level.

"What we think is that these NPF levels are some kind of 'molecular signature' to the experience," Dr Shohat-Ophir explained.

To show that the NPF is actually responsible for the change rather than just associated with it, the researchers actively manipulated just how much NPF was in the flies' brains.

Those with depressed levels acted like the rejected males, and those with elevated levels behaved like the mated males.

"What this leads us to think is that the fly brain - and presumably also other animals' and human brains - have some kind of a system to control their level of internal reward, that once the internal reward level is down-regulated it will be followed by behaviour that will restore it back." Dr Shohat-Ophir said.

It is tempting, given that humans share a similar brain chemical, to imagine that NPF drives human behaviour as well.

**However, in an accompanying article in Science, Troy Zars of the University of Missouri wrote that "anthropomorphising the results from flies is difficult to suppress, but the relevance to human behaviour is obviously not yet established"**.

Nevertheless, he suggested that the work linked "a rewarding social interaction with a lasting change in behaviour".

"Identifying the NPF system as critical in this linkage offers exciting prospects for determining the molecular and genetic mechanisms of reward and could potentially influence our understanding of the mechanisms of drugs of abuse."
Barflies: Sex-deprived male flies go for the booze

By MALCOLM RITTER
AP Science Writer

NEW YORK -- Guys, when your sweetheart says "No thanks" to sex, do you knock back a few stiff drinks to feel better? Turns out fruit flies do pretty much the same thing.

That's the word from a new study that may explain why both species react that way.

In Friday's issue of the journal Science, researchers propose a biological explanation for why "Not tonight, dear" may lead to "Gimme another beer." If it proves true in people, it may help scientists find new medications to fight alcoholism.

In that case, we can thank thousands of frustrated flies.

One by one, these eager Lotharios were put into a container with a female that had just mated. So she was really, really not interested in doing it again anytime soon. She would run away. She would kick the male. She would stick out her egg-laying organ to hold him at bay.

The male flies went through three hour-long sessions of this every day for four days, enough rejection to discourage them from trying any more.

After that experience, rejected flies were put in vials and given a choice of regular food or alcohol-laced food. They consistently went for the alcohol more than did the male flies that had just mated. In fact, they evidently got plastered.
Some rejected males were moved to a different environment, where groups of guys mingled with receptive females. After the guys had sex, their yen for alcohol declined.

The researchers also paired thousands of other male flies with dead virgin females, so that they didn't experience rejection but didn't have sex either. They still hit the sauce.

What's going on here?

The researchers did other work that implicates a substance in the fly brain called NPF. They theorize that pleasurable activities like having sex boost the activity of brain circuits that use NPF, and that feels good. If a fly is denied sex, the system goes into deficit, driving the fly to seek other rewarding activities such as drinking alcohol.

"I think it's a pretty good bet that it will translate to humans," said Ulrike Heberlein of the University of California, San Francisco, who led the research. If so, "one can say we could now understand why a negative experience, such as a sexual rejection, could drive somebody to drink."

**Further research into NPF brain circuitry could shed light on the biology of alcohol abuse and possibly point to treatments someday, said Troy Zars of the University of Missouri in Columbia, who didn't participate in the new work.**

Fruit flies are a favorite lab animal in part because scientists have exquisite control over their biology. Here, the researchers were able to alter brain function to zero in on NPF's role.

Whatever the relevance to humans, the work already pays off when Heberlein meets people at parties.

"It makes for wonderful conversation," she said. "When you tell them this story, they just really can't believe it."
Ron Paul draws student-heavy crowd at MU

GOP candidate stresses message of personal liberty.

Spectators fill the Carnahan Quadrangle on the University of Missouri campus Thursday to see Republican presidential candidate Ron Paul.

By Janese Silvey

Presidential candidate Ron Paul painted a grim picture of America’s future during his hourlong address on the University of Missouri campus Thursday.

But he also encouraged the nearly 1,000 attendees, mostly students, to keep spirits high because most social changes are started by small groups.
The Texas congressman got a rock-star welcome when he took the lectern in blue jeans and a blue work shirt, with students chanting “President Paul” before and after his address.

Paul started by warning young people that their generation is going to “inherit a mess” unless something changes — mainly government’s return to following its own rule book.

“Our Constitution is a pretty good document,” he said. “Too bad we don’t use it.”

Founding fathers would be aghast, he said later, if they could see how far America has slipped from those founding guidelines, especially when it comes to the government’s financial system and laws that have chipped away at individual privacy.

“It’s a risky venture to allow people to decide what to do with their own lives and their own money,” Paul said, adding he’d rather live in a totally free society, even if it meant being poor.

And that would mean undoing laws such as the Patriot Act that allow government searches when authorities believe there’s a security risk. Paul said it should have been called the “Repeal the Fourth Amendment Act.”

The advocacy of personal freedom resonated with attendees, some of whom say they plan to attend Saturday’s 10 a.m. Boone County caucus at Kemper Arena in Columbia.

“Ron Paul talks about freedom,” Spencer Pearson said. “That’s the most important part of our history as a country, freedom from tyranny .... The real message is freedom and personal and civil liberty. That’s something everyone can get behind.”

Local pharmacist Matt Hall also cited liberty as a take-away from the speech. “Who can’t like that part of it?”

Jackson Hayes, a sophomore, said he appreciated Paul’s stance on promoting peace instead of occupying countries or going to war without an act of Congress.

“I have a lot of family in the military, so bringing them home is something close to me,” Hayes said.

Paul chided his fellow Republican candidates for challenging his pro-peace stance. They’ve questioned whether he’s militaristic enough, Paul said, “even though I’m the only one who served any time in the military.”

Paul said he’s against American troops going into foreign countries as a pre-emptive strike — which is basically aggression, he said — or to try to tell other governments how to operate.

“Republicans are going to be in big trouble until they come to our way and decide they want a president who’s more for peace than war,” he said.
The country’s backbreaking debt was also a topic that hit home for college students shouldering hefty student loans.

“We’re going to have enough debt when we get out of college to think about taking on” the country’s, said Tori House, a senior.

Paul warned that military spending, bailouts of companies and other countries and mostly the government’s habit of printing new dollars has made the U.S. a country of debt instead of the richest nation in the world. He said he would cut $1 trillion if elected by simply changing foreign policies and said the government needs to audit the Federal Reserve.

“Knowing where we’re headed with the nation’s debt, that’s not some place I would like to go,” said Ryan Struemph, a freshman.

Struemph wasn’t necessarily paying attention to the presidential race until his friend urged him to attend Paul’s event. “I find myself agreeing with a lot of points he made,” he said.

Attendees also said they agree with Paul’s call to end the so-called war on drugs. Paul questioned why marijuana use is viewed differently than alcohol addiction.

“Besides, if you’re really concerned about addiction problems, why don’t we look at what prescription drugs do?” he asked.

Sophomore Ashley Gross counts herself as one of Paul’s loyal supporters and touted to friends afterward that she got a great photo of him, even though she didn’t get to his vehicle in time to beat the masses seeking an autograph.

“Everything Ron Paul says is like he’s speaking through me,” she said. “To me and through me.”

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COLUMBIA MISSOURIAN

Ron Paul talks about economics, foreign policy at MU

By Hannah Cushman
March 15, 2012 | 7:13 p.m. CDT

COLUMBIA — A crowd of several hundred people assembled Thursday at MU to hear Republican presidential hopeful Ron Paul outline the platform of personal liberty he has maintained for more than two decades.

"It's a beautiful day for liberty," Paul began after nearly 10 seconds of applause. His message was simple: We must return to the America the founders intended.

Paul pointed to the Federal Reserve as the source of many of the United States' economic woes, including price fixing and misplaced bailouts. He called for a "thorough audit" of the institution, though several members of the audience cried out for a more radical solution to "end the Fed."

The congressman also addressed foreign policy, citing the United States' military response to al-Qaida as a prime example of the unintended consequences and unnecessary expenses racked up by the government's "pre-emptive" strategy.

Paul said al-Qaida was provoked rather than discouraged by foreign occupiers. "Why don't we take (their) good advice and leave Afghanistan?" he said.

The crowd roared in response.

Paul also addressed personal liberties.

"On Jan. 1, 40,000 laws went into effect," Paul said. "I'd like to be the president that got rid of 40,000 laws in one night."

The congressman listed numerous governmental infringements on civil liberties made in the name of safety, including the Patriot Act, calling it "the Repeal-the-Fourth-Amendment Act." He also spoke about the war on drugs, saying "The states should have a right to allow sick people to use marijuana."
"It is never necessary to give up any liberty to be safe and secure," Paul said.

A few minutes shy of 1 p.m., Paul wrapped up by telling the crowd that real change occurs at the hands of the "irate, tireless minority."

Paul said he was confident he could win in November.

"We can come out on top of Obama as well," he said.

As Paul made his exit, chants of "President Paul" resounded across the quad.

Mark Jansen, a volunteer and perennial Paul supporter, said he was satisfied with the turnout on MU's Mel Carnahan Quadrangle.

"For two to three days advance notice, this is pretty good," Jansen said.

Pre-registered seating for the event, which was advertised on Facebook and by word-of-mouth, was fully booked, Jansen said.

Among members of the crowd, which began to swell around the reserved seating area even before general admission was slated to begin at 11:30 a.m., economic policy was the buzz phrase.

Some praised Paul for his commitment to reining in government spending.

"He's the only one really serious about cutting the budget," said Harry Hill, Howard County coordinator for Saturday's Republican caucus.

And cuts to the budget weren't the only things Hill seemed pleased with.

Labeling Paul as a non-interventionist, Hill said Paul's policies would "shrink the (American) empire" overseas.

In the sea of pro-Paul signs, MU senior Dakota Beveridge attracted hecklers as she held her own sign opposing Paul's policies on women’s reproductive rights and cuts to welfare programs.

"I just think both sides need to be represented here," Beveridge said.
Paul says GOP rivals itching for another war in Mideast

COLUMBIA, Mo. - Republican candidate Ron Paul refused Thursday to commit to backing Mitt Romney if Romney becomes the party's nominee for president.

An antiwar candidate, Paul said he would need more information about Romney's foreign policy to make that decision.

"I'd talk to him and see what kind of a foreign policy he is going to have," Paul, a congressman from Texas, said after a rally two days before Missouri's presidential caucuses.

Paul hit strongly on his antiwar theme while speaking to about 1,000 people at the University of Missouri's flagship campus. Romney and Santorum also campaigned in Missouri this week.

Paul shied away from naming any of his rivals but suggested they all want to plunge the United States deeper into military conflicts in the Middle East.

"They're just itching, the other candidates are saying: 'When are we going to go get Syria? Why don't we start dropping bombs on Syria? When are we going to hit Iran?' " Paul said. "The Republicans are going to be in trouble unless they come our way and decide they want a president who's more for peace than for war."

Republican candidate Ron Paul refused Thursday to commit to backing Mitt Romney if the former Massachusetts governor becomes the party's nominee for president.

An anti-war candidate, Paul said he'd need more information about Romney's international agenda to make that decision.

"I'd talk to him and see what kind of a foreign policy he is going to have." Paul, a congressman from Texas, told reporters at a rally two days before most of Missouri's counties hold their Republican caucuses. "Mitt's a friend and we talk a lot. We just disagree on the issues."
Paul has pursued a strategy focused on caucus states, but he trails Romney, former Pennsylvania Sen. Rick Santorum and former House Speaker Newt Gingrich in the presidential race and has yet to win any of the states that have already voted.

Missouri's caucuses Saturday are the first step in a lengthy process of awarding the state's 52 delegates to the Republican National Convention. Paul so far has earned just 48 delegates, the least of the contenders, compared to Romney's 495 delegates, according to the latest count by The Associated Press.

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He later added: "If you keep voting for warmongers, yes, this is going to be very negative."

Romney said last week that he was not prepared to support military action against Syria, where the government has cracked down on political dissent. Gingrich also has opposed sending U.S. troops or equipment to Syria.

Santorum has said he favors providing military equipment to the Syrian people but stopped short of backing airstrikes. Santorum has said he would order Iran's nuclear facilities be bombed unless they were opened for international arms inspectors. Romney has said he would combine diplomacy with "a military option" to stop Iran from acquiring nuclear weapons, including returning U.S. aircraft carrier groups to the nearby seas.

Paul told reporters Thursday that sanctions against Iran wouldn't work because they don't hurt the government.

"It hurts the people who are trying to change their government," he said.
Women lag far behind men for elected office in Missouri

BY DOUG MOORE • dmoore@post-dispatch.com > 314-340-8125 | Posted: Friday, March 16, 2012 12:15 am | (4) comments. The status of women in Missouri

ST. LOUIS • There are more women than men registered to vote in every county of Missouri. But when it comes to holding office, men dominate at nearly every level of government.

Notable disparities are in Congress and the Missouri Legislature, where only 25 percent of the state's delegation in Washington and lawmakers in Jefferson City are women. Statewide, less than 30 percent of school board members are women. And of the 330 county commissioners across Missouri, all but 15 are men.

The findings come from a county-by-county analysis of women and how they fare when it comes to holding elected office. The report also looks at health care access and pay equity.

The nonprofit Women's Policy Alliance partnered with the University of Missouri's Office of Social and Economic Data Analysis to create the report, to be discussed during a news conference this morning. The study was compiled from a variety of sources including the 2010 Census and state agencies.

"What we're finding as we work with our legislators at all levels is that there isn't very good statistical information to take to lawmakers or show the public," said Shirley Breeze, a board member of Women's Policy Alliance. "It's available, but it's fragmented here and there."

Combining it into a report makes "things a lot easier to show the inequality that exists in Missouri."

The release of the report comes at a time when issues important to women have moved onto the national stage. For example, presidential candidates have been drawn into a thorny debate over health care coverage of contraception.

GETTING WOMEN TO RUN

Women who hold office in Missouri say all topics concerning voters, including those exclusive to women, benefit from gender equity at the table. And women tend to run when there is an issue that is personal to them.
The challenge, though, is getting women to run, said Dayna Stock, manager of the Sue Shear Institute for Women in Public Life, based at the University of Missouri-St. Louis.

"We know that women have to be asked to run," Stock said. "They don't come into the world and proclaim, 'I'm going to run for office.' The calculation women make is different than men. ... They don't know anyone who has done it, so they don't think it's something they can do."

But it should not be construed that women are politically apathetic, she said.

"Women voter turnout exceeds men in every county of the state, and that's consistent," Stock said. Nationwide, 10 million more women voted in the 2008 presidential election than men, she said.

"If you look at campaigning, volunteering, going to political meetings, women are on par with men on almost every measure," Stock said. "It really is when seeking public office where there's a giant drop-off with women's participation."

That holds true across the country, said Jennifer L. Lawless, a government professor at American University in Washington. She co-authored a report released in January looking at why women do not pursue public office. She said women are not being encouraged to run.

When they do consider it, women often think of themselves as unqualified or they are unwilling to put their family in the glare of public life.

"Despite the emergence over the last 10 years of high-profile women in politics such as Nancy Pelosi, Hillary Clinton and Sarah Palin, we find that the gender gap in political ambition is virtually the same as it was a decade ago," the report states.

Lawless said Thursday that women were turned off by the negativity surrounding the runs for office by Clinton and Palin, "and it sent a signal to a lot of women that this is not something they wanted to do because they couldn't stand that degree of scrutiny or attention."

State Rep. Jeanne Kirkton, D-Webster Groves, said a lack of confidence remains among women to seek office.

"I don't care if they have a Ph.D. behind their name, they often say: 'I don't know enough. Are you sure I'm smart enough to do this?'" Kirkton said.

**41 OF 163 STATE REPS**

Kirkton is one of 41 women among the state's 163 state representatives. So is Cloria Brown, R-south St. Louis County.

Brown said some women don't see public office as an appropriate fit, adding it to the balance of career and family. Others simply don't find it a place for them, period, said Brown, a retired executive from MasterCard.
"When I go door to door (campaigning), if it's an older woman, they say: 'How can you do this? How can you go door to door?' If they are younger, though, I see it in their eyes: 'Maybe this is something I can do someday,'" Brown said.

No other form of government has less representation in Missouri than county commissions, which are similar to county councils in urban areas such as St. Louis and St. Charles counties.

Less than 5 percent of the commissioners are women.

Franklin County Commissioner Ann Schroeder didn't realize she had been elected into a male-dominated world in 2000 until she went to her first commissioners training session in Jefferson City the following year.

"I walk in, and I'd never seen that many men," Schroeder said. "The first question I was asked was, 'Honey, who are you here with?'"

Schroeder said women need to be prepared to brush off such comments. "You have to be a little tough-skinned — OK, a lot tough-skinned — to do it.

**FAMILY ISSUES**

Stock said women who attend workshops given by the Sue Shear Institute often raise family conflicts as an impediment to seeking elected office.

"The reality is that women are responsible for the lion's share of child care or family care," Stock said, and it can be difficult, if not impossible to be away from home during legislative sessions, which run four days a week for five months.

Stock said that although progress has been slow, she can point to one sign of improvement: an increase to 41 women state representatives from 31 in 2007, the highest number to date. But it's not remarkable, considering there were 40 women state representatives in 2001.

"If you would have asked me when we were at 40 if 41 would be great 11 years later, I would have expected it to be a lot more," Stock said.

Women win at about the same rate as men, but for every four men running, there is only one woman, Stock said.

"We're chipping away on gaining seats where we can," Stock said. "There is still a lot of work to be done."
Top U.S. adviser reviews city, MU energy efforts

By Andrew Denney and Janese Silvey

City and University of Missouri leaders took advantage of a visit from a top environmental adviser yesterday to show off energy efficiencies already taking place here.

Nancy Sutley, chairwoman of the White House Council on Environmental Quality, toured Columbia's landfill gas energy plant and heard about renewable efforts happening on campus.

In the morning, Mayor Bob McDavid told her the city maintains a "culture of environmental stewardship," and he outlined the city's renewable energy mandate, which requires 5 percent of the city's energy to come from renewable sources by the end of this year.

The goal is to increase the use of renewable energy to 10 percent by 2018. The incorporation of wind power expected to come from the Crystal Lake III Wind Energy Center in Iowa is expected to put the city 2.6 percent closer to that target.

After hearing from city officials, Sutley toured the landfill's biogas energy plant, another example of renewables in the energy portfolio.

MU's climate action plan calls for greenhouse gas emissions on campus to be 30 percent less than they were in 2008. That's predicted to happen, in part, because a new 100 percent biomass boiler will come online this fall. As of last summer, the campus achieved nearly a 9 percent reduction.

The local efforts are "small-scale but important," Sutley said.

Yesterday afternoon, Sutley addressed a roomful of MU students and employees, fielding mostly questions about national policies and procedures.

Asked about MU's use of coal-fired plants, Sutley said old, dirty plants are going to be required to install the same pollution-preventing technology as new plants — which could prove costlier than finding other methods.

"It's not impossible," she said. "People have to decide whether to write that check or not, but they will be living the same standards. ... We have to think about our energy future and what we want to see as a clean, sustainable economy."
Sutley dodged getting into any skirmishes over global warming, saying science is pretty clear that changes are real and happening. Cities are seeing the effects, she said, pointing to Fort Lauderdale, Fla., which is around sea level.

She compared efforts to protect the environment to tornado insurance: A tornado might not happen, but the risk is strong enough to prompt a need for insurance coverage.

Several asked about proposed federal cuts to environmental education and programs. The national budget is tight, she said, noting that Congress bases its priorities on constituents, not White House officials.

"Congress doesn't listen to us," she said. "They listen to you, the people from their community. I can't tell you to lobby Congress. That would be a crime, but I'll leave it at that."

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Shock campaign on smoking

With adult usage rates stalled, graphic ads seek to raise eyebrows, clear air.

By MIKE STOBBE • Associated Press | Posted: Friday, March 16, 2012 12:05 am | (2) comments.

This image provided on Wednesday, March 14, 2012 by the Centers for Disease Control shows Shawn Wright who had a tracheotomy after being diagnosed with head and neck cancer. Tobacco taxes and smoking bans haven't budged the U.S. smoking rate in years. Now the government is trying to shock smokers into quitting with a graphic nationwide advertising campaign. (AP Photo/Centers for Disease Control)

MU MENTION P. 2

ATLANTA • In a graphic new ad campaign announced Thursday, the government is trying to shock smokers into quitting with the sometimes-gruesome stories of people damaged by tobacco products.
The new effort confronts a hard truth: Despite increased tobacco taxes and bans in many public places, the adult smoking rate hasn't really budged since 2003.

"When we look back on just a few decades to the days of smoking on airplanes and elevators, it can be easy to focus on how far we've come," said Secretary of Health and Human Resources Kathleen Sebelius, at a news conference.

But smoking continues to take a devastating toll on the American public, and the new ads are meant to be "a wake-up call" to smokers who may not truly grasp the dangers that still exist, she added.

The billboards and print, radio and TV ads show people whose smoking resulted in heart surgery, a tracheotomy, lost limbs or paralysis. The $54 million campaign is the largest and starkest anti-smoking push by the Centers for Disease Control and Prevention and its first national advertising effort.

Glenn Leshner, a University of Missouri researcher who has studied the effectiveness of anti-smoking ads, found that some ads are so disturbing that people reacted by turning away from the message rather than listening. So while spots can shock viewers into paying attention, they also have to encourage people that quitting is possible, he said.

The agency is hoping the spots, which begin Monday and will air for at least 12 weeks, will persuade as many as 50,000 Americans to stop smoking.

"This is incredibly important. It's not every day we release something that will save thousands of lives." CDC Director Dr. Thomas Frieden said in a telephone interview.

That bold prediction is based on earlier research that found aggressive anti-smoking campaigns using hard-hitting images sometimes led to decreases in smoking. After decades of decline, the adult smoking rate has stalled at about 20 percent in recent years.

Advocates say it's important to jolt a weary public that has been listening to government warnings about the dangers of smoking for nearly 50 years.

"There is an urgent need for this media campaign," Matthew Myers, president of the Campaign for Tobacco-Free Kids, said in a statement.

Last month, a federal judge blocked the requirement that tobacco companies put the images on their packages, saying it was unconstitutional.

Experts say some waves of anti-smoking ads have been hugely successful. Those that aired in the late 1960s helped drive a 10 percent decline in per capita cigarette consumption from 1967 to 1970. And the American Legacy Foundation's "Truth" ads from the early 2000s deserve substantial credit for a large drop in youth smoking at the time, they say.

The CDC ads are more graphic than spots that have aired nationally before.
The idea behind such ads is to create an image so striking that smokers and would-be smokers will think of it whenever they have an urge to buy a pack of cigarettes, said
A majority of states' teacher retirement funds are underfunded, some significantly below rates considered solvent, according to a recent analysis by the National Council on Teacher Quality, a research and policy group that seeks to improve the quality of teachers. The situation has stoked political fights across the country as state lawmakers weigh options such as moving teachers from a traditional defined benefit pensions to 401(k)-style plans, raising the retirement age or making teachers wait a decade to be vested in their plans.

The shortfalls reflect what's happening with public state and local pensions nationwide, with teacher pensions included in a more than $660 billion shortfall in what's been put aside for such retirement benefits and what is owed, the Pew Center on the States has estimated. Many states offer separate pension plans for teachers, while others include them in broader plans that cover other government workers.

What's happening with public pensions is mirroring private industry. Companies have been abandoning traditional benefits because of the cost and the risk and replacing them with 401(k) type plans, which are more portable but transfer more of the risk to the worker.

In education circles, the issue takes on special significance because of its impact on kids. Pension policies affect the ability of districts to hire and retain teachers, and money used to shore up pension funds can mean tax hikes or come at the expense of other areas like education. As legislators weigh what to do, an estimated 1 million teachers are expected to retire within the next decade. The economic downturn has helped fueled the pensions shortfalls; states in better economic times expanded benefits that today are difficult to pay for and sometimes opted not to make payments into the systems.

One current pension battleground is Kansas, where Republican Gov. Sam Brownback wants to transfer new teachers and other government workers to a 401(k)-style plan. The Kansas Public Employees Retirement System projects an $8.3 billion gap between anticipated revenues and benefits promised to workers through 2033.
In California, where the teacher pension fund has more than $50 billion in unfunded liabilities, Gov. Jerry Brown, a Democrat, has presented a pension-reform plan that would increase the retirement age for new, non-public safety employees like teachers to 67. It would also require employees to contribute to at least 50 percent of their retirement costs and move new public employees into a hybrid plan that blends a traditional pension with 401(k)-style program.

Alabama Gov. Robert Bentley, a Republican, announced a plan earlier this month to set the retirement age for new teachers and others in the state retirement system at 62. Currently, teachers can retire in their 40s.

Teacher unions in statehouses are pushing back against many of these efforts, especially against proposals to move from defined benefit pensions to 401(k)-style plans. They say the strains are exaggerated by critics with an ideological agenda and that the pensions are an important part of compensation for a well-educated population that’s underpaid. They also argue that defined benefit plans are a recruitment tool that helps districts attract good teachers and maintain a stable workforce.

A defined benefit pension plan provides a set benefit for life based on years of service and earnings, with the employer assuming the risk. In a defined-contribution plan, as in a 401(k) account, the employee assumes the risk, and the amount paid at retirement is based on how much was put into the account and investment earnings.

Unions also contend that states might not realize the savings they expect by shifting to a 401(k)-style plan. They point to Alaska, where the legislature in 2005 took the state from a defined benefit program to defined contribution. The projected savings have not yet been realized, and the state has seen its unfunded pension liability rise to an obligation estimated at about $11 billion.

James Testerman, director of collective bargaining and member advocacy for the National Education Association, said for teachers, the issue is particularly emotional. “One of the promises made to them, if they contributed to every paycheck from the very first day that they started working with children, was that they would be provided a modest and secure retirement,” he said.

But, not everyone agrees that traditional pension plans are a good mechanism for ensuring quality teachers are in the classroom. Sandi Jacobs, vice president of the National Council on Teacher Quality, said the pension systems overly reward early retirees and do little to attract and retain effective teachers.

She said the 401(k)-style plans are financially more affordable than defined benefit plans and are attractive to younger teachers who might just want to teach for a few years or eventually move to another state.

"I think they've operated under a model where salaries have stayed lower because of these great pension benefits, but in the 21st century across most professions and industries, people are much more mobile. They don't necessarily plan to be in one profession or job for their entire career."
So, a pension benefit that isn't portable, combined with a lower starting salary, I think to the current generation that's entering the workforce, is much less appealing than it used to be," Jacobs said.

Despite the financial strains on the systems, much of the nation's public teaching force has retirement benefits considered generous in the private sector. In all but six states, it's possible to begin collecting a full retirement before age 65, and three states _ Montana, Alabama and Kentucky _ allow teachers to do so in their 40s, according to the council's analysis.

Typically, a pension plan is considered healthy if it meets an 80 percent funded benchmark. More than 30 states have pension plans for teachers funded below that benchmark, with nine of them funded below 60 percent _ including Illinois, Rhode Island and West Virginia, which are funded below 50 percent, according to the analysis.

In New Mexico, for example, new teachers can start collect a full retirement as early as age 52, which costs on average an additional $734,000 in pay-outs per retiree until the retiree reaches age 65, according to the council's analysis. The state's teacher pension fund is a little more than 60 percent funded and has $5.9 billion in liabilities, said New Mexico state Sen. George Munoz, chairman of a legislative study committee that examined his state's pension systems.

Sixteen states now make teachers wait 10 years to be vested in their pension plan. A few, including Illinois, Maine, New Hampshire and New Jersey have raised the retirement age to fully collect the benefit to 65 or older. Others are slowing the cost of living raises for retirees and asking teachers and employers to contribute more toward their retirement costs.

Michael Podgursky, an economics professor at the University of Missouri who serves on the council's board, said teaching is a job that can physically be done into one's 60s.

"It doesn't make sense in an occupation like teaching to have such early retirement ages," Podgursky said.

In Kentucky, Sharron Oxendine, president of the Kentucky Education Association, said the ability to fully retire before 65 is an important benefit to teachers in Kentucky, and that more than 90 percent of retirees stay in the state.

"When you have the baby boomers who are retiring, that's a really important issue for them, is being able to take care of their parents or other family members and that's an option for them. Is that 27-year retirement going to provide them a quality of life that they've been used to? Absolutely not; in more times than not, those retirees actually go back and find additional work is some other sector," Oxendine said.
Preserving the past

Project aims to record legacy of one-room schools before buildings and memories vanish

Mary Sue Robertson still remembers the names of each of her teachers at Grandview School. She will share those names and her memories of learning in a single room with more than 20 students, ranging from first to eighth grade, when she takes part in an oral history project focusing on one-room schools.

At one time, schools like Grandview, near Republic, dotted the countryside in rural Missouri. They stood by lakes and rivers, along railroad tracks, in the midst of farms, gathering children from miles around to learn their ABCs and basic cyphering. Eventually, all those rural schools were consolidated into districts with large brick buildings that served hundreds of students, each in their own classroom.

Jeff Corrigan, oral historian for the State Historical Society of Missouri at the University of Missouri at Columbia, is collecting the stories of those who attended and even taught at one-room schools for the One-Room School Oral History Project. On March 23, he will be in Springfield to interview people here.

“In another 10 years, we won’t have those teachers anymore,” he said. “And in another 10 years, we won’t have many of the students.”

Robertson, 71 and president of the Republic Historical Society, is among the dozen or so people who will share her stories with Corrigan.

“I remember (the teacher) would give the other kids assignments and then she would start with each class and come and work individually with you,” she said. “You’d learn a lot from watching and listening to the others.”

Creating history

David Burton, Greene County program director with the University of Missouri Extension Service, has coordinated the event. It will also include the program, “Creating an Oral History Project,” to show anyone interested in preserving the past how to organize and record a professional oral history project for family members, individuals or their community.
"This class is open to anyone interested in putting together a collection of oral histories," Burton explained. "This could include oral histories just within your immediate family or among people with a common experience or background ... Really, any person with a love of history or anyone who works with older audiences would be interested in this class."

Barbara Morgan plans to attend the program. She never attended a one-room school, but her mother and grandmother did, and Morgan still remembers their stories. Now, she is the storyteller in her family.

"I want to learn the best way to share these stories," she said. "I would love to be able to tell my stories to my grandchildren."

Morgan and others in the class will have an opportunity to observe Corrigan at work as he interviews a one-room school alum.

Corrigan has a set of questions intended to illicit memories about experiences in school, from how they got to school, what they ate, chores they did and how they learned and played together.

"Some had to share a water dipper, some had individual cups," he said. "Some teachers made lunch, but mostly their brought their lunch. I will ask what they brought, how (they got) to school."

Jackie Schmitt Warfel, 81, remembers bringing her favorite sandwich – fried egg and bacon on a homemade biscuit. "It’s still my favorite sandwich," she said. "Some kids had lunch boxes..... old cigar boxes."

Warfel and her sister generally walked to the Brookline school – a parent was generally at the railroad track to make sure all the kids got across safely – but sometimes they rode in a homemade cart, or sleigh in the winter, behind Pony Boy. "Not everybody had a pony," she said with pride. Later, when she attended a three-room school at Nichols, a boy rode his horse to school every day.

Lola Belle Underwood, 75, will share her stories of attending Oak Hill school in Webster County, but also teaching at five different one-room schools, as well as two- and four-room schools in that county.

"At our rural schools there were a lot of really good students," she said. "One of my classmates went on to be a brigadier general in the Army." Underwood went on to get a masters degree from Drury University.

Keeping memories

Keeping those memories and the culture of a one-room education alive is an important part of the oral history project.