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COLUMBIA MISSOURIAN

House committee to consider Nixon's higher education budget

NO MU Mention

By Jordan Shapiro

February 21, 2011 | 4:19 p.m. CST

JEFFERSON CITY — A House committee is expected to endorse the governor's proposed higher education budget cuts later this week.

Gov. Jay Nixon's 2012 proposed budget calls for a 7 percent reduction in state higher education funding. The House Education Appropriations Committee will meet Tuesday to mark up the budget. The committee chairman, Rep. Mike Lair, R-Chillicothe, said he expects the slashed budget will pass unamended through the committee.

"As of right now, it is going to be a 7 percent cut," Lair said.

One Democrat on the committee said there is a way to avoid the funding reduction.

"There are other things to do beside cut," said Rep. Mary Still, D-Columbia.

Still said a cigarette tax would be one way to increase the state's revenue.

Lair warned that nothing is certain until the markup session ends on Tuesday.



Nuisance tree might have new use

Eastern red cedars could curb infections.

A chemical found in the needles of a common Missouri tree could be used to treat stubborn bacteria, University of Missouri researchers have found.

Although the research is years away from commercial use, early tests show Eastern red cedars have an antibiotic component that's effective against methicillin-resistant *Staphylococcus aureus*, or MRSA, a type of staph bacteria resistant to common antibiotics.

Chung-Ho Lin, a research assistant professor in MU's Center for Agroforestry in the College of Agriculture, Food and Natural Resources, began the study by building on previous research that revealed medicinal properties in the tree. "My assignment was to find a new commercial application from these trash trees," he said.

As soon as he identified a potentially pharmaceutical use, Lin teamed up with George Stewart, chairman of the pathobiology department in the College of Veterinary Medicine.

The benefits are twofold: Not only could a treatment help doctors fight staph infections, but also having a use for an otherwise-pesky tree could provide an additional income source for property owners, Lin said.

MRSA shows up in two forms: as a skin infection in the community and a more severe infection in health care settings. The latter was responsible for nearly 19,000 deaths in 2005, according to the Centers for Disease Control and Prevention.

"Antibiotic resistance is a huge problem because there haven't been that many new antibiotics coming through the pharmaceutical pipeline over the past 20 years," Stewart said. Although MRSA in the community is not yet resistant to all antibiotics, "we're afraid they will be soon. So we're interested in finding new compounds that replace existing antibiotics when they're no longer useful."

The researchers identified, isolated and tested 17 compounds and found a relatively small concentration of the tree chemical was effective against MRSA. Because the compound is found in the tree's needles, it can be collected annually without having to cut down the trees.

There are about 500 million Eastern red cedar trees in Missouri. The aggressive-growing trees are considered a nuisance, Lin said, and farmers are typically encouraged to get rid of them because they can be a fire hazard.

“If we can make use of these waste materials and turn them into something valuable, we could bring an economical benefit to local land users,” he said. “I’m happy to see this finding.”

The researchers have not published their findings, but they recently presented their work at an international conference on pathogens. The team is now working to prove the compounds are safe for humans in hopes of getting pharmaceutical companies interested, Stewart said.

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Oregon

Chemical Compounds in Trees Can Fight Deadly Staph Infections in Humans, MU Researchers Find

Salem-News.com

"We found this chemical from the cedar needles, an abundant and renewable resource that can be collected annually" - co-researcher Brian Thompson

(OXFORD, Mo.) - **Most people would never suspect that a "trash tree," one with little economic value and often removed by farmers due to its ability to destroy farmland, could be the key to fighting a deadly bacterium. Now, a University of Missouri researcher has found an antibiotic in the Eastern Red Cedar tree that is effective against methicillin-resistant Staphylococcus aureus (MRSA), a "superbug" that is resistant to most medications.**

"I wanted to find a use for a tree species that is considered a nuisance," said Chung-Ho Lin, research assistant professor in the MU Center for Agroforestry at the College of Agriculture, Food and Natural Resources. "This discovery could help people fight the bacteria as well as give farmers another cash crop."

MRSA is an evolving bacterium that is resistant to most medications. For most people, the infection is isolated to the skin. However, it can spread to vital organs causing toxic shock syndrome and pneumonia, especially in people with weakened immune systems. The incidence of disease caused by MRSA bacteria is increasing worldwide. Thirty years ago, MRSA accounted for 2 percent of all staph infections. By 2003, that number had climbed to 64 percent. In 2005, more than 94,000 people developed life-threatening MRSA infections in the United States, according to a Centers for Disease Control report. Nearly 19,000 people died during hospital stays related to these infections.

While the Eastern Red Cedar has few commercial uses, it is present in the U.S. in large numbers and its range extends from Kansas to the eastern United States. An estimated 500 million trees

grow in Missouri. Lin began his investigation by building on existing research showing the antibacterial potential of chemical compounds derived from the tree.

Lin, George Stewart, professor and department chair of Pathobiology in the College of Veterinary Medicine, and Brian Thompson, postdoctoral fellow in the Bond Life Sciences Center, identified, isolated and tested 17 bioactive compounds and has plans to analyze more compounds. Scientists found that a relatively small concentration of a chemical compound found in the Eastern Red Cedar— 5 micrograms per milliliter – was effective against MRSA. The team tested the compound’s effectiveness against many versions of MRSA in a test tube with promising initial results.

“We found this chemical from the cedar needles, an abundant and renewable resource that can be collected annually,” co-researcher Brian Thompson said. “Because the compound is in the needles, we don’t have to cut down the trees.”

In addition to its potential use in fighting MRSA, researchers found that some chemical compounds in the tree are able to fight and kill skin cancer cells present in mice. It may also be effective as a topical acne treatment. Stewart said the compounds are years away from commercial use, as they must go through clinical trials. The team’s research was presented recently at the International Conference on Gram-Positive Pathogens.



UM plans public forums on president search

University of Missouri curators will be making the rounds across the state early next month to hear what citizens want to see in the next system president.

The Board of Curators search committee will host a series of seven forums, which will be open to the public. In Columbia, the forum is slated for 3 p.m. March 14 in Room 208 of the Reynolds Alumni Center.

Forums run from March 3-15 and will be held at all four campuses and also in Portageville, St. Joseph and Springfield. From the four campuses, the forums will be recorded and posted to the UM System Presidential Search website at www.umsystem.edu.

The forums mark the first step in what's expected to be yearlong search for a new president. Gary Forsee stepped down from that role in early January. Steve Owens, the system's general counsel, is filling in as interim president.

COLUMBIA MISSOURIAN

Public forums part of UM System curators' president selection process

By [Alex Keckeisen](#)

February 21, 2011 | 7:25 p.m. CST

Seven public forums will be held across the state in March to gauge public opinion on finding the next president of the University of Missouri System.

Four of the forums will be held on the campuses of the system's universities, with the remaining three in Portageville, St. Joseph and Springfield.

The UM System Board of Curators is seeking comments from Missouri residents about the qualities, characteristics and background they would like to see in a university president.

“It's important to have these public forums because I, for one, would like to get public input on the job description and the kind of person we're looking for,” Chairman Warren Erdman said during the curators' January meeting.

Members of the presidential search committee, the search advisory committee and university and search firm representatives will attend the forums.

“It's important that we bring the public into this process as best we can,” Erdman said.

The public forums are as follows:

- Thursday, March 3, 11 a.m. — Delta Center, Portageville.
- Monday, March 7, 11 a.m. – University of Missouri-St. Louis Millennium Student Center, Century Room.
- Tuesday, March 8, 11 a.m. - University of Missouri-Kansas City Student Union, Theatre.
- Tuesday, March 8, 3 p.m. - Missouri Western University Blum Student Union, Hoff Conference Room, St. Joseph.
- Monday, March 14, 3 p.m. - University of Missouri Reynolds Alumni Center, Columns Room 208, Columbia.
- Tuesday, March 15, 11 a.m. - Missouri S&T Havener Center, St. Pat's Ballroom A, Rolla.

- Tuesday March 15, 4 p.m. - The Discovery Center Auditorium, Springfield.

Gary Forsee stepped down as president of the UM System on Jan. 7 to focus on his wife's recovery from cancer.

General counsel for the UM System Steve Owens was appointed interim president, but he has said he does not want to be considered as a candidate.



Journalism legend dies at 95

Taft recalled for humor, devotion.

By [Janese Silvey](#)

Bill Taft, a longtime Missouri School of Journalism faculty member, died this morning, but you haven't heard the last from him.

His final book, "The Last Book Written by Bill Taft — No. 6," is now in the hands of his children, who plan to get it in print this year. It still needs a round of editing, but Taft "very much finished it," his son, Bill Taft Jr., said.

Taft, 95, penned 13 other books, most of which documented the history of Missouri journalism.

"Missouri's newspaper history just wouldn't be documented the way it is if it weren't for him," said Doug Crews, president of the Missouri Press Association.

Taft's career spanned 25 years at the University of Missouri, where he taught "History and Principles of Journalism." Because it was a 100-level course required of all students, Taft taught more than 10,000 students over the years in some 65 sessions. For most of those students, memorizing and reciting Walter Williams' Journalist's Creed was a must to pass, Crews said.

In comments Taft prepared for a journalism student writing about him in 2009, Taft quipped that his teaching experience taught him "that one must have some humor to keep a class of 200-300 awake."

And Taft had quite a sense of humor, friends agreed. Crews said he'd often stop by the Missouri Press Association, where he served as a historian, and always "had a joke in his pocket."

Keith Sanders, a professor emeritus who served as the chairman of the editorial department in the journalism school, said Taft always had a joke, funny saying or pun. He kept his students "in stitches," Sanders said.

But Taft was serious about student successes.

"In my perspective, he was a major factor in establishing the graduate program as a quality program," Sanders said.

Outside of work, Taft was a “deeply religious man,” Crews said. He attended Missouri United Methodist Church, a church that “meant so much to him,” Crews said. Taft documented the church’s history in 2006.

Two years later, he wrote a love letter of sorts to his wife, Myrtle. “Created in Heaven: A Love Story” was a 200-plus-page tribute to Myrtle. The couple just celebrated their 70th anniversary.

Taft was inducted into the Missouri Press Association Newspaper Hall of Fame in 2001 and received the Missouri Honor Medal for Distinguished Service in Journalism in 2004. He also spent 30 years as the executive director of Kappa Tau Alpha, a journalism honor society.

Taft also was known for his love of walking. “He did it for exercise but also the social element,” Sanders said. “He got to know other walkers.”

In January 2010, Taft’s health took a turn for the worse. He had a palsy condition similar to Parkinson’s and last week slipped into a coma, Bill Taft Jr. said. His mind “was sharp until the end,” his son said. “He had a great 94 years. This last year’s been pretty tough, but he adapted well.”

Services will be at 3 p.m. Saturday at Missouri United Methodist Church, 204 S. Ninth St., with visitation from 1 to 3 p.m.

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COLUMBIA MISSOURIAN

William Taft, historian and journalism educator, dies at 95

By [Ally Appelbaum](#)

February 21, 2011 | 8:26 p.m. CST

COLUMBIA — One requirement that sticks out in students' minds of William Taft's history and principles of journalism class was to memorize and recite the Journalist's Creed written by Walter Williams, founding dean of the Missouri School of Journalism.

“Bill Taft was a man who cared deeply about the craft of journalism and cared deeply about the school,” said Professor Emeritus George Kennedy, a former student and colleague at the Missouri School of Journalism. “He knew his material well and insisted that you master it.”

Taft, credited with teaching more than 10,000 students in a career as a journalism educator that spanned 25 years, died Monday, Feb. 21, 2011, at Lenoir Woods. He was 95.

Taft first came to the Missouri School of Journalism in 1956. Brian Brooks, associate dean, said that Taft influenced two or three generations of Missouri journalism students “in a very positive way.”

Taft served as historian for the Missouri Press Association and wrote 12 books, many of which focused on the history of Missouri newspapers.

Doug Crews, executive director of the Missouri Press Association, said Taft was “constantly documenting Missouri newspapers.” He was inducted into the Missouri Press Association Newspaper Hall of Fame in 2001 for the work he did for the organization.

“He was a family man who was very devoted to his wife and family and a religious man who was very dedicated to his church, the Missouri United Methodist Church,” Crews said.

Don Ranly, professor emeritus of the Missouri School of Journalism, described Taft as his friend and mentor.

"He took me under his wing and was my adviser all through my doctorate. I can't say enough good about my relationship with him and his wife, Myrtle."

Ranly talked about the loving relationship Taft and his wife shared.

"They were two people madly in love all their lives, and it was wonderful to watch."

Taft wrote a book in 2008 about his wife called "Created in Heaven: A Love Story." His daughter, Alice Taft-Fisher, said that spending time with his wife was his favorite thing to do. The couple celebrated their 70th wedding anniversary on Jan. 18.

Taft-Fisher also described her father as the "ultimate multitasker" and said he was always grading high school yearbooks while waiting in the car for her to finish her horse riding lessons. "He never did just one thing at a time."

Taft was active in the community as past president of the Columbia Kiwanis Club and Boone County Historical Society. He edited the Kiwanis Club newsletter for 14 years and was recognized as Kiwanis Churchman of the Year and Kiwanian of the Year.

He was also a member of the Columbia Track Club and was known for his race walking. He also enjoyed walking his dog, Penny.

Taft served nearly five years in World War II. As an intelligence officer in 1945, his group was headed for the Pacific arena when President Harry Truman ordered the dropping of the atomic bomb. According to biographical information compiled by the family, Taft credited Truman's decision with possibly saving his life — along with millions of others.

Survivors include his wife, Myrtle; three children, Marie Margolin of Portola Valley, Calif., Bill Taft of Prairie Village, Kan., and Alice Taft-Fisher of Campbell, Texas; four grandchildren, Larry Taft of Kansas City, Michael Taft of Austin, Texas, Linda Medina of Dallas and Matthew Margolin of New York; and four great-grandchildren.

Services will be held Saturday at Missouri United Methodist Church, 204 S. Ninth St., with visitation from 1 to 3 p.m. and a memorial service at 3 p.m. His body was donated to the MU anatomy department; his ashes will be buried in the family plot at Columbia Cemetery.

COLUMBIA MISSOURIAN

Pictures of the Year International judging wraps up at MU

By Kathryn Landis

February 21, 2011 | 9:24 p.m. CST

COLUMBIA — Seated about 10 feet away from the screen, judges of the 68th Pictures of the Year International competition critiqued photos in about two seconds as the images moved on and off the screen Monday.

"If it's a good photograph you can see it very, very quickly," judge Mike Zerby said. "Really fine photography, part of the reason it is fine is because it is easily seen, assimilated and digested."

The annual competition started Feb. 7 and will go through Tuesday. Director Rick Shaw said 11 judges were brought in to critique and discuss photographs in 44 different categories. Upwards of 40,000 images will be displayed during the competition.

Each judge spent about five days in the Fred W. Smith Forum in the Reynolds Journalism Institute at MU critiquing news pages, photographs, stories, portfolios, and multimedia pages.

On Monday, judges selected winners from the following categories:

- Series and special sections for newspapers.
- Series and special sections for magazines.
- Portfolios for newspaper editing.
- Portfolios for magazine editing.

- Best use of photography for an online publication.

Winners are listed on the event's website.

The room is kept dark and silent so the judges are able to focus on the images.

"It is very stimulating work to look at," Zerby said. "It's a good arrangement. We have a level of intimacy that is just stunning."

Judge Meg Theno said that the long hours in the dark don't bother her.

"This is in some ways sort of like a sabbatical," Theno said. "A five-day sabbatical where you get to just immerse yourself in great stories and great pictures, and it's a pretty special thing to be a judge."

Judge Kim Grinfeder, like some of his fellow judges, has had work judged in the competition. After experiencing the process, Grinfeder said he had a new respect for the judges.

"I poured my heart and soul into that work and to have it recognized means a lot, Grinfeder said. "And I have to give that same respect to entries that are here this year and make sure I recognize excellence."

Theno said that she was disappointed that more work had not been entered.

"It would seem like we would have more interest in some categories," Theno said. "I know there is good work being done out there."

On Tuesday, judges will select winners from the following categories:

- Best use of a photograph in newspapers.
- Best use of a photograph in magazines.
- Documentary project of the year award.
- Multimedia portfolio of the year award.
- Angus McDougall Overall Excellence in Editing award.

Live streaming video of the judging is available on the [Reynolds Journalism Institute website](#).

St. Louis Business Journal

Washington University endowment grows by \$400M

St. Louis Business Journal - by Rebecca Hoyle

Date: Monday, February 21, 2011, 2:28pm CST

Washington University grew its endowment by \$392 million last year, an increase of 9.6 percent.

Helped by an increase in gifts and rebounding financial markets, Washington University grew its endowment by \$392 million last year, an increase of 9.6 percent.

Nationally, Washington U. ranks 17th overall, with an endowment worth \$4.47 billion as of June 30, 2010, according to NACUBO-Commonfund Study of Endowments, a survey of 850 institutions conducted by the National Association of College and University Business Officers and the Commonfund Institute.

The largest endowment belongs to Harvard University — \$27.6 billion. Northwestern University in Evansville, Ill., has the nation's ninth-largest endowment and the biggest in Illinois, ringing in at \$5.95 billion. Among other area schools, the University of Missouri System ranked No. 65 with an endowment of \$975 million, and Saint Louis University ranked No. 88 with \$708 million.

Contributions from reserves, ramped-up fundraising efforts and improving financial markets drove double-digit increases in endowments for nearly all Missouri and Illinois schools. It's a far cry from the prior year, when the recession drove endowments down by as much as 30 percent. Washington U.'s endowment is still about 20 percent off its June 2007 high of \$5.6 billion. Construction, which Washington U. delayed after its endowment took a hit, has been resumed but at a slower pace, according to spokeswoman **Jessica Daues**. And effective July 1, 2010, the university's board of trustees restored voluntary pay cuts Chancellor **Mark Wrighton** took Jan. 1, 2009, and July 1, 2009, each of 5 percent from his base salary.

Nationwide, university endowments returned an average of 11.9 percent for the 2010 fiscal year, according to the study.

Returns were positive for all major asset classes except real estate, a marked improvement over the previous year, the study found. The increases are for the year ended June 30, 2010, so values don't reflect the recent run up in the stock market.

Washington University added to its endowment using reserve funds, and saw an increase in gifts to the endowment in the last year, said **Kim Walker**, chief investment officer. The endowment returned about 12.7 percent last year, but withdrawals for operating expenses reduced the fund's total growth to 9.6 percent, she said.

"Just as the market drove (the value) down, it also drove the increase in the past year," she said.

Among the endowment gifts received by Washington University last year include: \$48 million of a \$60 million gift from **John McDonnell** and the JSM Charitable Trust; \$3 million from The William T. Kemper Foundation; and in January 2010, developer **Alvin Siteman** pledged to fund an endowment that will provide at least \$1 million a year for research on cancer at the **Siteman Cancer Center** at Washington University.

Saint Louis University's endowment received the benefit of \$1.5 million of a \$5 million gift from **Alberici Corp.** last April.

In December, Bruce and **Jane Robert** gave \$1 million Webster University and \$500,000 to SLU's School of Law to endow chairs.

Endowments' three-, five- and 10-year returns remained below the levels necessary to support long-term goals, according to NACUBO. But still, the increases signal a welcome turnaround for the country's higher-education community, said NACUBO President and Chief Executive **John Walda**.

For the purposes of the study, the percentage change in an endowment's market value reflects the impact of withdrawals to fund operations and capital expenses; payment of management and investment fees; additions from gifts; and investment gains or losses.

In Missouri, the largest increase was a hefty 30.8 percent jump at Columbia College in Columbia, Mo. Illinois' biggest jump came from an unrelated institution of the same name — Columbia College Chicago, a private, not-for-profit arts and media school that saw its endowment rise 30.5 percent.

While those percentages are big, it's all relative — they represent increases of a few million dollars, much smaller than the net growth at larger institutions. The surge at the nonprofit Columbia College in Missouri amounted to an increase of \$13.8 million.

Compared to other institutions, Columbia College's endowment has been tiny, noted **Bruce Boyer**, its chief financial officer. In an effort to grow the endowment, the college's board of directors has contributed millions of dollars of the institution's own money, he said.

"Your endowment will grow based on fundraising efforts and also based on your investment earnings, and in our case it grows because of the money we put back into it," he said.

In 2010, the college contributed \$10.1 million of its own funds, and received about \$990,000 in gifts to the endowment. The endowment also earned about \$3 million.

When Boyer started work there in 1999, the endowment was worth \$5 million; at the end of January 2011, it was worth more than \$71 million, he said.

“That’s huge growth. That’s still smaller than the average endowment across the country, but that notwithstanding, it’s definitely headed in the direction we want to see it go,” he said.

Along with adding their own earned cash, other institutions have enjoyed growth from an infusion of gifts, including **Lindenwood University** in St. Charles. Through January, the university has seen an increase of almost 50 percent in endowed scholarships this fiscal year, said **Lucy Morros**, vice president for institutional advancement. Much of that increase has come from alumni, whose participation rate is 13 percent, she said.

At **Maryville University**, the endowment’s 10.3 percent increase reported in the NACUBO-Commonfund study reflects changes in the economy as well as the institution’s own re-investment strategies, said **Larry Hays**, Maryville’s CFO. During the height of the economic collapse in 2007-2008, some endowments lost 30 percent or more of their value, he noted. The increase over the past year reflects the economy’s slow climb out of the recession.

“It depends very heavily on how each university will have its assets allocated and what sectors they’re investing in,” he said. “Probably most endowments are still not back to where they were when they were at their peak when the market went south. Ours is more than 80 percent back to where it was at its peak.”

Growth over the past year reflects cautious spending practices as much as careful investing, Hays said. Maryville limited its endowment spending to 2 percent of its budget, while other institutions rely more heavily on endowment funds to cover operational costs.

“Instead of taking it out of the endowment, we’ve left it in there, so there is more there to participate in the rebound,” he said.

The study also reported in the St. Louis metro area. Saint Louis University’s endowment rose 9.7 percent, from \$645.8 million to \$708.3 million; St. Louis College of Pharmacy’s endowment rose 17.1 percent, from \$76.9 million to just over \$90 million; and Webster University saw a 26.5 percent increase, from \$49.9 million to \$61.9 million. In Illinois, the Southern Illinois University Foundation at Carbondale experienced a 17.5 percent increase, from \$64.9 million to \$76.2 million. **SIU-Edwardsville**’s endowment rose 12.8 percent, from \$11.9 million to \$13.4 million.

Many institutions declined to discuss their endowments’ performance in the months since the survey concluded. But the recent upswing in the financial markets likely means there’s even better news ahead next year.

“The market has been kind to us and we’ve participated in that, so we’ve had strong returns,” Washington U.’s Walker said. “It’s hard to forecast what’s going to happen in the market going forward.”

Pet therapy provides benefits for everyone

Research shows that interacting with animals generates hormones that affect mood

By Mario Garrett

Tuesday, February 22, 2011 at 12:01 a.m.

The story that older adults benefit from pet therapy is misguided. EVERYONE benefits from pet therapy. Who ever thought that a four-legged bundle of soft fur or a smiling dolphin could make you feel better and actually healthier?

Pet therapy, also known as animal assisted therapy, is a broad technique involving any interaction that patients have with animals to make them feel better. In 1859, Florence Nightingale wrote that a small pet “is often an excellent companion for the sick, for long chronic cases especially.” Apart from the possibility of small pets causing falls for frail older adults, pets provide multiple benefits to their companions. It not only feels good to be around pets, but it makes you healthier. Emerging studies show that pet therapy translates to positive clinical outcomes.

Even just owning a pet has been found to be beneficial. Dog ownership is associated with lower heart attack risks and increased survival one year after a heart attack. Older pet owners walk significantly farther when they walked with a dog, which might contribute to their making fewer visits to the doctor.

And it is not just having a companion—talking to a pet rather than a person was associated with lower heart rate. Even in nursing homes, the presence of a dog is associated with reduced need for medication, improved physical functioning, and improved vital signs—even when patients are suffering from dementia. The list of benefits includes reductions in loneliness, agitated behaviors, and depression, and increases in engagement, well-being, nutritional intake, and social interactions.

It sounds like a panacea. But what is the reason for these health-boosting outcomes?

One line of aging research that shows great promise investigates how pet therapy generates hormones that affect mood. The University of Missouri-Columbia, currently conducting research in this arena, suggests that hormonal changes that naturally occur when humans and dogs interact could help people cope with depression and certain stress-related

disorders. Preliminary results show that a few minutes of stroking a pet dog prompts a release of a number of these “feel good” hormones in humans, including serotonin, prolactin and oxytocin. In addition, decreased levels of the primary stress hormone cortisol, the adrenal chemical responsible for regulating appetite and cravings for carbohydrates, occurs.

If you already have a pet, one of the hidden added benefits is that you can share them and help others. This is not only beneficial to patients but also to the volunteer on a number of fronts. Older adults can volunteer by going to nursing homes, hospice, clinics or schools and providing pet therapy with their pet.

Before heading out the door with your little puppy you need to make sure that you are certified. The San Diego Humane Society and SPCA has been bringing the joys of animals to people for more than 30 years through its Pet-Assisted Therapy Program. For more information contact them at (619) 299-7012, ext. 2271, or

pat@sdhumane.org. Paw'sitive Pals is another well-established program in San Diego, and can be contacted at paws@pawsteams.org. More information about the Pet Therapy Program at San Diego Hospice can be accessed at sdhospice.org/pdf/PawsitivePals4-ColorFlyer.pdf.

By training your dog to become a service dog you not only become better engaged with your pet and the community, you will become part of the therapy for frail older adults.



Cold Fusion: It May Not Be Madness

By Mike Martin
TechNewsWorld
02/22/11 5:00 AM PT

A handful of intrepid scientists are reigniting interest in work that was dismissed as junk science more than 20 years ago, claiming to have found a way to create more energy from less. The most recent excitement was generated by Italians Sergio Focardi and Andrea Rossi, who demonstrated a device that turned 400 watts of heat power into 12,400 watts. If their results are reproducible, the implications could be monumental.

Cold fusion -- the largely discredited science of making more energy from less -- may be making a comeback.

Controversial yet high-profile demonstrations in Italy last month purported to show a cold fusion device turning 400 watts of heat power into 12,400 watts. The eye-popping 31-fold increase -- also known as an "excess heat effect" -- illustrates why lay observers say cold fusion is the "holy grail of energy independence" and why many scientists doubt, some to the point of apoplexy.

Twenty-two years ago, University of Utah chemist Stanley Pons and University of Southampton chemist Martin Fleischmann made similar but ultimately unreproducible claims that turned their 15 minutes of fame into banishment from the scientific community.

Since he's only seen second hand accounts of this latest project, University of Missouri Vice Chancellor for Research Robert Duncan, Ph.D., an expert in low-temperature physics, said he "can neither criticize nor endorse" it.

"But I do know that excess heat effects are real, and although we do not fundamentally understand their origins, the world's scientific community would be remiss if it does not seriously pursue these fascinating new observations," Duncan told TechNewsWorld.

The Italian Project

The reactor demonstrated in Italy is the brainchild of University of Bologna physics professor emeritus Sergio Focardi, Ph.D., and Andrea Rossi, who manufactures biofueled electric generators at his Bedford, N.H.-based Leonardo Corporation. It reportedly fuses nickel and hydrogen atomic nuclei at room temperature, producing copper -- and copious energy.

The process is also green, giving off neither coal-fired carbon dioxide nor radioactive waste, the two men said at a standing-room-only January 14 demonstration/press conference in Bologna. A nuclear physicist associated with the Italian National Institute of Nuclear Physics, Giuseppe Levi, examined the procedure and told reporters he was 100 percent convinced.

"Very few researchers in this field have ever claimed the ability, let alone tried, to demonstrate an effect like this on demand," *New Energy Times* (NET) publisher Steven Krivit told TechNewsWorld. "Given that, there is probably something very real about the Rossi claim, and there are probably some aspects that don't hold up."

From this month's International Conference on Condensed Matter Nuclear Science in Chennai, India, where buzz about the Italian project was everywhere, industry observer Jed Rothwell said, "the claims are very important, and I think it is very likely they will be confirmed."

Commercial reactors that would make energy for less than one US cent per kilowatt hour -- far cheaper than competing sources -- will ship in three months, Focardi and Rossi said.

That is "a major reason for the intense interest," explained MU's Duncan.

"Pons and Fleischmann only had a laboratory model, but Focardi and Rossi are claiming immediate commercial viability," he noted.

"If the results are confirmed, they are indeed a huge step toward commercialization," Rothwell -- who runs LENR-CANR.org, a comprehensive library of cold fusion research -- told TechNewsWorld.

Attempts to contact Focardi and Rossi were not successful.

King Caution

Despite all the excitement -- online chatter and news reports about the demo still haven't died down -- "the history of the cold fusion controversy teaches us that caution is king," said *New Energy Times'* Krivit.

Ever cautious, peer-reviewed journals and a patent examination have rejected the claims. The Rossi-Focardi reactor, the patent examiner wrote, "seems to offend against the generally accepted laws of physics and established theories."

Undeterred, the researchers have turned to options unavailable to Pons and Fleischmann, including a digital dandy: their own online Journal of Nuclear Physics, which they've staffed with an advisory board that includes Naval Postgraduate School physics professor Michael Melich, Ph.D.

The eyebrow-raising move has met with only mild condemnation, however, partly because evolving attitudes have thawed the ice around cold fusion since 1989. The science even has a more respectable name: "low energy" or "chemically assisted nuclear reactions" (LENR-CANR).

"Fleischmann and Pons really did discover something nuclear, but it doesn't pass the 'duck test' for fusion," NET's Krivit explained. "It's far more accurate and scientific to call the set of phenomena 'low-energy nuclear reactions.'"

Old Prejudices, New Techniques

Alongside the nomenclature change, serious scientists want to re-examine old prejudices with new, more sophisticated methods.

"An unprecedented and widespread failure of the scientific method is partly to blame for the failure of Pons and Fleischmann," explained MU's Duncan, a former director of the Los Alamos National Laboratory Institute for Advanced Studies. "It made sense to question their results, but only insofar as the methods of the day were capable of reproducing them."

SRI International electrochemist Michael McKubre, Ph.D., has sought better techniques to check the Pons-Fleischmann approach, which reacted deuterium -- a close hydrogen relative -- with the metal palladium instead of hydrogen and nickel.

Along the way, McKubre, "a very respected scientist," Duncan said, has observed some critical experimental challenges researchers will have to overcome before they can even *try* to reproduce past experiments.

The Icy Cold Journey of Julian Schwinger

McKubre isn't the only respectable researcher to tackle cold fusion in recent years, Duncan added. Osaka University physics professor emeritus Yoshiaki Arata, who in 2006 received Japan's highest honor, the Order of Culture, reported excess heat effects with palladium nanoparticles.

Particularly remarkable was the (decidedly chilly) cold fusion journey of Julian Schwinger, who with Richard Feynmann and Shinichiro Tomonaga won the 1965 Nobel Prize in Physics for one of the greatest ever physical theories, quantum electrodynamics or QED.

After studying the Pons-Fleischmann experiments, "Julian had a theory that a process tantamount to cold fusion was occurring, but even as a Nobel laureate, he couldn't get reputable journals to publish it," Duncan told TechNewsWorld.

"My first attempt at publication was a total disaster," Schwinger recalled during lectures and seminars. He had devised a hypothesis about the effect "to suggest several critical experiments," but because cold fusion had become what Duncan calls a "pariah science, poison to all who touched it," Schwinger -- graduate advisor to four other Nobel laureates who also won the U.S. National Medal of Science -- was summarily ignored.

"What I had not expected was the venomous criticism, the contempt, the enormous pressure to conform. Has the knowledge that physics is an experimental science been totally lost?" he wondered.

"Temporarily misplaced" perhaps, Duncan said, urging that scientists leave peer pressure behind and return to their methodological roots.

"Cold fusion, or low-energy nuclear science, has benefited from exciting innovations and outstanding minds, yet massive, destructive 'group think,' has given it a checkered past," Duncan explained. "Now, however, it is of paramount importance that science proceed boldly, with a determined yet dispassionate focus, on the objective study of these fascinating phenomena."

SOUTHEAST MISSOURIAN

Is the governor smarter than an 11th grader?

Posted Monday, February 21, 2011, at 2:12 PM

If you're looking for reasons why the Jackson School District has had so much academic success over the years, Ken Markin's AP American History class is a good place to start.

During his tour of Jackson High School last week, Gov. Jay Nixon paid a call on the class of Jackson High juniors.

The Democrat, in town to pitch the expansion of Missouri's A+ scholarship program, struck up a conversation with students about the Show Me State's own John Joseph "Black Jack" Pershing, a historical character with which the class is quite familiar.

Nixon fired off a number of facts about the famous general, seemingly impressing Jackson assistant superintendent Rita Fisher, who at an assembly of students later in the day jibed that the governor was smarter than Markin. The comment garnered some laughter, some oohs, and perhaps an "Oh No She Di'n't!" or two.

"Oh, there's Mr. Markin. Hi." Fisher sheepishly said, pointing to the teacher sitting in the back of the auditorium.

But Markin's AP students were up to the day's test, asking Nixon a series of tough questions concerning state government and their future.

AP student Caitlyn Bess seemed to "Stump the Gov." when she asked the chief executive whether the state could enforce a tuition cap. With the two-year tuition freeze rapidly thawing at Missouri's institutions of higher education and student education debt at an all-time high, the question was perhaps as much plea as it was inquisitive.

Nixon explained that, indeed, there is a cap, that colleges and universities can't raise tuition beyond the consumer price index unless they are granted a waiver to charge more.

The governor told Bess he has written a letter to the Missouri Coordinating Board of Higher Education expressing his concerns about the University of Missouri's push for a 5.8 percent average tuition increase.

"I think that's too high," he said. "I'm going to take your opinions to the commissioner" of higher education.

Southeast Missouri State University expects tuition increases could be as high as 4 to 5 percent.

Harkening back to the good old -- or at least less expensive -- days of college, Nixon told the class he paid \$356 for his first semester of law school -- more than a few years ago, of course.

"This is the quality of lawyer you get for \$356," joked Nixon, who served a record four terms as Missouri's attorney general.

The AP history class' questions were well thought out, and the students seemed particularly engaged in the dialogue.

They were respectful, but didn't seem overly impressed that their conversation was with arguably the most powerful man in the state of Missouri.

They asked questions, this Jackson high class. They sought answers. And even Mr. Markin can tell you that's how you live and learn.