Infighting threatens University of Missouri's nuclear program

Inside high-tech engineering labs at Lafferre Hall, University of Missouri students are preparing for the future of nuclear energy production.

By JANISE SILVEY

They're simulating accidents, such as last year's nuclear reactor disaster in Japan, and trying to figure out just how far radioactive particles can travel. Some are testing graphite materials expected to be used in fourth-generation reactors. One student is trying to come up with a formula future engineers might use to predict and prevent problems from happening in the first place.

This is the Nuclear Science and Engineering Institute, a graduate-level program at MU that has been ranked first in the country for productivity and has a worldwide reputation.

It's also the institute MU administrators want to dismantle in exchange for a more interdisciplinary nuclear science program. And it's an example of how politics and personalities sometimes trump achievement in the world of academia.

Administrators this year announced they were closing NSEI, a decision that caught the professors, students and alumni by surprise. Some close to the situation think the decision reeks of retaliation: For more than a decade, one of NSEI's senior professors has been tangled in fights with administrators, namely College of Engineering Dean James Thompson.

"The action was enormously irresponsible, and it was a personal vendetta," said Eddie Adelstein, an associate professor of pathology and longtime observer of MU's administrative culture.

Professionals in a tightknit community of nuclear engineers say the whole state might suffer as a result.

A QUESTION OF COMMITMENT

MU administrators announced March 12 that NSEI would cease to exist as of March 15. Although faculty members were caught off guard, administrators argue that talks about the future of the program have been going on for years.

Students, parents, alumni and professionals complained, though, and the pushback was enough to make administrators tweak their plans. NSEI will stick around until the last student graduates, including those starting next year. After that, it's unclear what will happen. Negotiations between Provost Brian Foster and the four core professors are under way.

A month after the initial announcement, Ameren Missouri and Westinghouse Electric Co. announced a partnership to seek new federal funds from the Department of Energy. As much as $452 million is at stake for entities willing to design, build and operate small modular nuclear reactors.
Among the competitive advantages for the Missouri team was that Ameren’s Callaway Nuclear Plant is located near nuclear engineering degree programs at MU and the Missouri University of Science and Technology in Rolla.

Foster and Chancellor Brady Deaton dismiss any notion that changes to NSEI will hurt Missouri’s chances to receive those grant dollars.

But professionals in the field, speaking as individuals and not on behalf of their employers, say otherwise.

“I don’t think” grant evaluators “are going to care about the nitty-gritty details, but are they going to use the fact administrators made statements that they’re going to dilute it? That’s a reason not to award grants and proposals,” said Christopher Wallace, an MU alumnus who works at General Atomics Aeronautical Inc. in California. “It’s a competitive world out there. If there’s any way somebody could find an excuse not to support you, they’ll use it.”

Any successful organization winning the Department of Energy grants will have access to students from strong nuclear engineering programs, he said. “From my perspective, NSEI is one of the strongest core nuclear engineering programs in the U.S.”

Another MU alumnus, Preston Swafford, is executive vice president and chief nuclear officer at the Tennessee Valley Authority, a power provider owned by the U.S. government and an entity that is also competing for the Energy Department funding.

Asked whether MU’s decision regarding NSEI will hurt Missouri’s chance for the funding, Swafford said he thinks it will “obliterate it.”

“There’s no commitment to it,” he said, referring to nuclear engineering. “They’ve made clear statements that they’ll graduate existing students, then they don’t know what they’re going to do. That’s code to me that that’s a program going away.”

To agencies doling out funding, he said, it sounds like “I don’t have a long-term partner here. I’ve got a short-term partner caught up in politics. It’s a massive warning flag.”

Ameren and Westinghouse could bring other unique competitive advantages to the table, he said. But Swafford and Wallace, who are both on an NSEI advisory board, say MU could improve the state’s chances for the funding by supporting the institute instead of changing it.

“Administrators need to boldly come out and support the engineering program,” Swafford said.

Deaton and Foster are passionate when they talk about their plans for nuclear science at MU. They envision more cross-campus collaboration between MU’s Research Reactor, the medical school and hospital, the College of Engineering and other sciences such as physics and chemistry, both housed under the College of Arts and Science. There’s also the new Sidney Kimmel Institute for Nuclear Renaissance at MU, where researchers are studying low-energy nuclear reactions.

“There’s nothing to suggest the program will be weakened in any way,” Deaton said last month. “All of the dialogue is designed to achieve greater program strength.”

The details aren’t finalized, Foster acknowledged, but he, too, stressed that the goal is to make MU stronger in nuclear sciences.

“Our interest is in increasing our presence in nuclear engineering and nuclear science by bringing together more people,” he said. “What we’re not interested in is diminishing our position in nuclear science and engineering.”

Discussions have included the notion that any future nuclear program might not include the word “engineering,” though. In a meeting with NSEI students, Graduate Dean George Justice said that’s because the College of Engineering doesn’t want MU to have a separate engineering program on campus not under the college’s umbrella.
The name change would make a difference, Swafford said.

"Nuclear science is code for not credible," he said. "Nuclear science degrees are offered at small, two-year colleges. It's the common, run-of-the-mill, technician-level program. Nuclear engineering is a different deal."

HISTORY REPEATED

Administrators have cited a number of reasons to change the structure of NSEI.

Initially, Justice said it was part of a reorganization aimed to move faculty members out from under the Graduate School, which isn't equipped to deal with faculty issues such as tenure and promotions and raises.

Foster also has noted NSEI's core professors are nearing retirement age, although that's a tricky argument to make on a campus where the faculty as a whole is aging. Plus, administrators have thwarted attempts to replace NSEI faculty members who already have retired, hindering its long-term viability.

Administrators mostly hang their hats on a 2010 external review that praised faculty members for productivity but criticized them for not collaborating with other departments.

"We have a strong nuclear program, but it's not linked in with the rest of the sciences," Deaton said. "We sought to reorganize to achieve that."

Professors have said they have strengthened collaboration with others since the report came out.

Swafford doesn't put much stock in the evaluation.

"I read these things for a living, and you can tell when they're motivated and when they're objective," he said. "It seemed motivated. The individuals were probably handpicked."

If so, that's straight from the playbook of nasty academic politics, Adelstein said.

"You bring an outside group of people who are your friends to tell you how bad" a program is, he said. "It's the oldest trick in the book."

Deaton and Thompson have been trying to do away with nuclear engineering for years. In 2000, Deaton, then provost, attempted to split up the nuclear engineering department, which was under the College of Engineering at the time. He told the six nuclear engineering professors they would be shipped to other engineering departments.

But the Department of Energy opposed the move, according to a letter from William Magwood, who was director of the department's nuclear energy office, to then-Chancellor Richard Wallace. So a year later, when Deaton tried to place nuclear engineering faculty under the mechanical engineering department, Wallace intervened and created NSEI.

Even at that time, Deaton opposed using "engineering" in the institute's name, saying it wouldn't be fair to Thompson, the engineering dean.

That administrators are trying to do the same thing again today essentially ignores Magwood's concern and potentially damages relations with the Department of Energy, NSEI alumnus Ryan Meyer wrote in a letter to Missouri lawmakers.

"These actions could erode the DOE's confidence that Missouri is capable of providing a quality workforce over the long haul," wrote Meyer, who works for a private company that contracts with the Department of Energy.

Talks of re-examining the future of NSEI resurfaced in 2006 when Deaton was chancellor. Then-UM President Elson Floyd intervened, asking Deaton to instead evaluate whether NSEI and nuclear engineering at Missouri S&T could be combined administratively.

The latest decision to do away with the institute came one month after Tim Wolfe became UM System president. Wolfe's spokeswoman has said he is watching the situation but leaving decisions to campus administrators.
The political infighting between Thompson and NSEI Curators’ Professor Sudarshan Loyalka dates back even further. According to Tribune archives, when Thompson was first evaluated by his faculty after coming to MU in 1994, he received a D-plus grade. Fifty-nine out of 61 faculty members did not want him to be reappointed.

Loyalka was among the most senior — and vocal — critics. At one point, Loyalka called for his resignation after Thompson tried to hire and grant tenure to a friend, archives show. In another instance, Loyalka returned a $1,000 teaching award as a show of protest over Thompson’s leadership style.

But Thompson had a powerful friend in Deaton, who helped him not only stay in the position but also grow the college. Undergraduate enrollment, for instance, got an immediate boost when a computer science program was shifted out of the College of Arts and Science into the College of Engineering. Thompson also has an unusual stipulation in his contract that guarantees more funding goes to his college than other colleges and schools across campus.

His contract guarantees he receives a higher share of indirect research funds, which are a portion of grant dollars that go into MU’s general operating budget in lieu of providing facilities and other indirect support. The College of Engineering is guaranteed a minimum of 50 percent of those dollars — more depending on total grant dollars awarded to the college — while all other colleges get 25 percent.

The funding gives Thompson more resources to offer raises and other perks observers say have helped him gain allies in the college since his early evaluation.

**SUCCESSES IN SPITE**

A lack of administrative support for NSEI hasn’t seemed to hinder the program’s accomplishments over the past decade.

NSEI is one of the top 10 nuclear engineering programs in the country and is in the company of the likes of Massachusetts Institute of Technology and the University of California-Berkeley. At one point, NSEI was ranked No. 1 in faculty productivity: The four faculty members were responsible for 68 students this year and together conduct $2 million in research.

Loyalka recently was invited to present research at the Institute of Nuclear and New Energy Technology at Tsinghua University in Beijing and also was asked to allow a young faculty member from China to study under him in his lab for a month. Loyalka’s picture graces the home page of the U.S. Department of Energy’s Nuclear Energy University Programs website as an example of the type of research the department supports.

This year, NSEI Professors Tushar Ghosh and Mark Prelas received a Textbook Excellence, or “Texty,” Award for their book on energy resources and systems.

Students share in those successes. This summer, Matt Simones will spend a month in Germany helping set up equipment and experiments similar to what he’s working on as part of his doctoral program. Eben Allen, who started the master’s program this year, credited the professors for helping him snag a scholarship award from the American Nuclear Society this year.

For Swafford, who graduated in 1987, nuclear engineering was instrumental, he said. “It opened up quite a few doors.”

Trying to shut down what many agree is a successful academic program raised eyebrows among MU Faculty Council members, including Chairman Harry Tyrer, a computer engineering professor. He got involved in discussions after NSEI’s website went dark, at that point calling it an “emergency.”

The website has since been restored, but questions remain over whether administrators overstepped their powers. MU is supposed to be operated through a shared governance policy that lets faculty representatives have a seat at the decision-
making table. In this case, neither the Faculty Council nor the NSEI faculty was in the loop when the initial decision to
close the program came out.

When closing or changing an academic program, the process is outlined in Chapter 20 of UM's Collected Rules and
Regulations, the system's rulebook. It requires a program audit committee to examine six criteria before recommending
an academic unit be placed on inactive status, discontinued or merged with other programs. That didn't happen in the
NSEI case.

Foster has said he doesn't think the policy applies in the NSEI case because it was an "administrative" change. The
Faculty Council is expected to review it at a future meeting.

There's another collected rule that also comes into play because Loyaika is a curators' professor. According to Chapter
320, any change of appointment of a curators' professor, such as moving that person from one department to another,
"shall be reported to and approved by the" Board of Curators "before the effective date thereof."

Curators were not involved in discussions of doing away with NSEI or moving Loyaika to a different academic unit. Board
Chairman David Bradley said curators are leaving the matter up to campus administrators but that he has asked Deaton
to provide status updates.

Rep. Chris Kelly, D-Columbia, also is keeping an eye on the issue. He has recently talked to the key parties and is
optimistic. He thinks all involved will ultimately put their differences aside as the state competes for the Department of
Energy funding.

"Everybody's committed to the modular nuclear program," he said. "Is there long-term friction in nuclear engineering? Yes,
there is. Are all sides trying to fix it? Yes. Everybody on campus, the administration, the nuclear faculty, people across the
spectrum are all actively interested in and willing to cooperate on this whole Ameren-Westinghouse deal."
Some University of Missouri students don't mind big lecture halls and the relative anonymity of a large campus. But others seeking a higher education turn to smaller schools that can give a more personal touch to higher education.

Students graduating from Columbia College and Stephens College, which each held commencement ceremonies yesterday in Columbia, said they appreciated the personalized attention they received at the smaller private colleges and the accommodations such schools can make for non-traditional students.

Jessica Beasley, who was the Stephens graduate class speaker this year and graduated with a master's degree in education, said the college's intimate settings were ideal for her as a non-traditional student who went to work in the banking industry after getting an education degree from MU. She said being at Stephens made school easier recently when she had her first child.

Beasley said she wants to be a school counselor, preferably for young children or adolescents.

"If you can help them at that earlier phase, I think they have a greater likelihood for success," Beasley said.

According to U.S. News and World Report profiles for 2011-12, Columbia College had about 1,300 students at its Columbia campus and Stephens College about 1,000.

Justin Pearre, who graduated from Columbia College yesterday with a biology degree, said he used to attend MU but said he did not know at the time what career path he wanted to take.

Instead of paying to make up his mind, he said, he decided to take some time off from school and then later started taking night classes at Columbia College. Now, seven years after he first entered college, he is applying for graduate school and hopes one day to enter the medical field.

For Stephanie Walther, who graduated from Columbia College with a degree in criminal justice administration, it had been about eight years since she first entered college. She said she had taken time off from school to work in the insurance industry.

Walther said that since she was a child, she had been attracted to mystery and detective stories. After some years working in insurance, she realized she was attracted to investigative work and started taking night classes at Columbia College. Now armed with a degree, Walther said she wants to be an investigator, possibly in the private sector.

"I want to do something that can, as corny as it sounds, change the world," Walther said.
Reminders of death can improve life, according to a review of research on how people respond to both the conscious and unconscious awareness of their own mortality.

"The dance with death can be a delicate but potentially elegant stride toward living the good life," write American and Dutch researchers in a study published online April 5 in the journal Personality and Social Psychology Review.

Scientists have suggested, in what is called terror management theory, that awareness of the inevitability of death motivates people to turn to cultural beliefs that give their lives meaning and significance, and to identify with something larger than themselves, such as nations or religions.

Much research in this area has focused on the negative consequences of reminding people of death, for example, increasing hostility toward those who have different beliefs and values, amplifying greed and promoting racism.

But, there is also evidence terror management can have beneficial effects, write the researchers led by Kenneth Vail of the University of Missouri, Columbia.

For instance, catastrophes, such as the 9-11 terrorist attacks, heighten fear and awareness of death with both negative and positive effects, Vail pointed out in a statement.

"Both the news media and researchers tended to focus on the negative reaction to these acts of terrorism, such as violence and discrimination against Muslims, but studies also found that people expressed higher degrees of gratitude, hope, kindness and leadership after 9-11," Vail said.

The conscious awareness of death can motivate people to take better care of their physical health and reprioritize personal goals, while unconscious awareness can motivate people to live up to positive standards and beliefs, build positive relationships, become involved in their communities, support peaceful coexistence, and enrich their own lives, write the authors.
University Hospital is rewarding food service workers of the month by giving them spray-painted Mrs. Butterworth syrup bottles, a mammy-esque symbol that has sparked complaints across the University of Missouri campus.

"It's inappropriate to give our lowest-paid employees an award representing being a faithful slave," said Traci Wilson-Kleekamp, director of diversity and outreach in MU's School of Medicine.

She and others have complained to administrators in emails, several of which were obtained through an open-records request.

To some, including Calvin Rolark, the supervisor of food services who came up with the idea, the awards are simply "a tangible symbol of being appreciated." Rolark said he picked the syrup bottle because his high school in Kansas used to use it to reward student achievements. He thinks it resembles an Oscar.

Deputy Chancellor Mike Middleton told the Tribune he thought Mrs. Butterworth was white. "You can't jump the gun on all of these issues," he said. "Everything is going to offend somebody."

Thelma "Butterfly" McQueen — best known for playing the young mammy "Prissy" in "Gone with the Wind" — was the black actress who modeled for the original Mrs. Butterworth syrup bottle.

The mammy character — typically portrayed as an obese, dark-skinned woman with a scarf covering her head — has been used in history in a number of ways aimed to benefit whites, according to information from the Jim Crow Museum of Racist Memorabilia, which is operated by Ferris State University in Michigan.

They were portrayed through the Jim Crow era as proof that black women were content and happy working in white households. And portraying them as unattractive helped conceal a less-flattering back story: Black female servants often were raped by their white male employers.

"Historically, the mammy is the most potent stereotypical female icon," said Pat Turner, vice provost of undergraduate education and a faculty member in the African-American studies program at the University of California-Davis. "Older African-Americans can remember when it was the only representation of black females in popular culture. ... All kinds of objects have been made to look like a mammy, from cookie jars to tea towels. While popular culture now reflects a range of images, some individuals are offended by evidence that it hasn't disappeared."
After some grumbling about the Mrs. Butterworth Awards, the hospital newsletter Insights published an article in February defending them, saying the bottles provide a good starting point for dialogue about diversity. The story indicated that because workers weren't upset — they took a vote and unanimously supported keeping the syrup bottle trophy — and because Rolark is black, the awards would continue.

Debra Howenstine, a doctor in the department of family and community medicine, told administrators she was disappointed after reading the story. "I believe this response reflects an educational deficit on the part of our institution," she said in the email. "Mrs. Butterworth, Aunt Jemima and other Mammy caricatures represent for some the servile black woman, a female equivalent to Uncle Tom."

Elizabeth Bryda, an associate professor of veterinary pathobiology, wrote administrators, too, saying it’s hard to fathom why a mammy-themed bottle would be used to recognize employee achievement.

"I am especially embarrassed that administration did not see fit to use this as an opportunity to support and promote cultural sensitivity by requiring that a more appropriate token of appreciation be used to celebrate employee excellence," she said.

Some have suggested that the bottle be replaced with a silver spatula or spoon, instead. Rolark argued that he doesn't get a say in other departments' decisions.

"I'll absolutely agree to their requests if I get to make some changes in their departments because I'm offended," he said. "Trust me, I know of things I can find to be offended about that are much deeper than a bottle of syrup."

Patients, other employees and customers see the award, too, because employees of the month have their pictures taken holding the bottle, and those pictures are hung in the Grille restaurant.

"The real conversation is: Is this a symbol that is congruent with our vision and mission about diversity?" Wilson-Kleekamp said.

Rolark said his staff appreciates the awards and pointed out that the bottles aren't given to any other group on campus. "This is ours," Rolark said. "Why don't they just leave us alone? We're not asking them to participate."
Columbia, Mo., begins planning to clean up waterway

ASSOCIATED PRESS | Posted: Monday, May 7, 2012 12:00 am | (0) comments.

COLUMBIA, Mo. • Columbia residents and officials have begun work on developing recommendations for cleaning up a local waterway that has been in violation of federal clean water standards.

The 16-member citizen committee that represents homeowners, developers, environmental advocates and local government officials held their first meeting Tuesday and intend to put pollution-control measures in place for Hinkson Creek, The Columbia Daily Tribune reported.

In March, the Environmental Protection Agency and the state agreed to let Columbia, Boone County and University of Missouri officials take incremental steps toward reducing pollution and restoring aquatic life in the creek that cuts through the city.

Shawn Grindstaff, an EPA facilitator who will guide the committee, said it's a big step to have federal, state and local entities working together. The EPA has called for reducing stormwater runoff into Hinkson by nearly 40 percent.

"It's a pretty big deal," Grindstaff said.

The city, county and university jointly hold a permit that allows for stormwater runoff to discharge into the Hinkson and other area waterways. They sued the EPA after the federal agency issued a Total Maximum Daily Load document for Hinkson in 2011. The TMDL spells out the maximum amount of pollutants allowed in a lake or stream and was required by a federal court order more than a decade ago.

Committee member Diane Oerly, who represents the Stream Team program, said she was pleased to see that the Hinkson cleanup process has moved "beyond the stage of having all the lawyers talking."
Lawmakers consider Mo. fund for college building

Associated Press | Posted: Saturday, May 5, 2012 1:59 pm | (0) comments.

Missouri lawmakers are considering a new way to help pay for construction on college campuses amid ongoing capital improvement needs.

The proposal would create the Higher Education Capital Fund to provide state matching funds for local contributions for new higher education building projects. Colleges and universities would apply for the state money, and the funds would be limited to no more than half the project costs.

Missouri's four-year and two-year institutions would be eligible for the funding. The institutions would need to raise private funds and couldn't count money from their operating budgets, tuition or fees. Money from the capital fund could not be used for athletics facilities or other revenue-generating structures, and lawmakers would need to approve funding for each project.

Sen. Tim Green, who is sponsoring the legislation, said state funding has been tight over the past decade and that offering matching funds could help colleges attract private contributions and lessen the burden of capital improvement needs.

"We're trying to get local communities to take ownership in their public universities by helping fund for the capital because the state of Missouri cannot afford to do it all by themselves anymore," said Green, D-St. Louis.

Missouri officials in recent years have considered proposals to boost funding for campus construction projects.

Lawmakers in 2009 considered seeking approval from voters to issue several hundred million dollars in bonds to cover the top construction needs at each public university and community college. The measure cleared the House but stalled in the state Senate.

In 2007, the Legislature approved then-Gov. Matt Blunt's plan to use $350 million from the Missouri Higher Education Loan Authority to support campus building projects. Some projects were put on hold after the student loan authority was unable to make all its scheduled payments.
Budget documents from the state Department of Higher Education show Missouri's colleges and universities have requested nearly $4 billion for all capital needs, which includes long-range projections for future needs as distant as in the 2028 fiscal year.

Senators approved legislation creating the new capital improvement fund in March, and the proposal has cleared a House committee with a few changes. Lawmakers have two weeks to approve legislation before their constitutionally mandated adjournment May 18.

Rep. Chris Kelly, who is handling the legislation in the House, said the possibility for state matching funds could help spur private donations for much-needed capital improvement.

Kelly, D-Columbia, has been one of the leading supporters of issuing bonds for capital improvements. He said he continues to support the idea, but that "I don't have my druthers, and we do the best we can."
NO MU MENTION
New fund considered for college buildings

JEFFERSON CITY (AP) — Lawmakers are considering a new way to help pay for construction on college campuses amid ongoing capital improvement needs.

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Lawmakers consider Missouri fund for college buildings

By CHRIS BLANK/The Associated Press
May 5, 2012 | 4:04 p.m. CDT

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