Graduate studies administrators working to chart office's future

By Ashley Jost

Monday, March 30, 2015 at 2:00 pm

It has been a year since University of Missouri Chancellor R. Bowen Loftin announced the dissolution of the MU graduate school.

In the year since Loftin’s announcement, leadership from the new administrative office, the Office of Graduate Studies, said the office has come a long way in addressing its own future.

About 70 percent of what the former graduate school was doing were responsibilities the new administrative office continues to handle, said Leona Rubin, associate vice chancellor for graduate studies. The bulk of the remaining 30 percent involved interdisciplinary programs that have been moved under the provost’s office.

“We were already pretty efficient — really, we were very efficient at running the graduate student part of” the college, Rubin said. “I think we’ll be more efficient without worrying about interdisciplinary programs, but now they lack a voice.”

Before the transition last year, the dean of the graduate school sat on the Council of Deans, a governing body among academic leaders. Rubin no longer sits on that council, so the provost represents MU’s interdisciplinary programs. Some argue the provost provides a higher voice, Rubin said, but the provost also is responsible for the needs of all of the campus’ academic programs and is spread thin.

“We need to work out the details because we want to, and need to, grow the interdisciplinary programs,” Rubin said.

Some of the interdisciplinary programs, such as the Informatics Institute, have been a challenge because they have budgets larger than the former graduate college’s budget and contain faculty from as many as seven colleges.

Rubin said a task force might be created to discuss what is best for the administrative structure for those programs moving forward.
Among the tasks that remained with the graduate office are management of admissions for most graduate academic programs, management of forms for students and management of graduate students’ faculty committees.

“We’re still doing all of the things we were doing as the graduate school as far as students are concerned and as far as the faculty who train students are concerned,” Rubin said.

When Loftin first announced the dissolution, Rubin said, graduate staff created an inventory of everything the graduate school did and surveyed academic units to see which of those tasks the unit leaders thought should remain. Most of those changes were implemented by June.

From the student perspective, the outlook on the changes during the past year has provided a “feeling like we’re in limbo,” Hallie Thompson, president of the Graduate Professional Council, said.

The biggest concern Thompson said she has heard from students is about a lack of communication and engagement because most of the decisions were made about the new office last summer. Thompson said she hopes a newly created task force comprised of students, administrators and faculty can start addressing specific questions about the structure of the new office.

Loftin appointed Rubin to lead the graduate office — and also named her the UM System’s associate vice president for academic affairs and graduate education — last March.

Chancellor Loftin “says, ‘This is what I want it to look like, and this is what it needs to be at the end, now figure it out,’ ” Rubin said.

Along with working out smaller-scale structural issues, Rubin is collaborating with marketing administrators to recruit students.

“Most” Association of American Universities “institutions have 20 to 25 percent of their enrolled students as graduate students. We’re closer to 18 percent,” Rubin said. “It’s because our undergraduate enrollment has grown so much ... but it still puts us out of alignment with other AAU schools, and we want to work on that.”

Fish don’t want birth control, but scientists say they get it from your pill

By Darryl Fears March 30

(Reuters/Eric Gaillard)
Your birth control pill is affecting more than just your body.

Flushed down toilets, poured down sinks and excreted in urine, a chemical component in the pill wafts into sewage systems and ends up in various waterways where it collects in fairly heavy doses. That’s where fish soak it up.

A recent survey by the U.S. Geological Survey found that fish exposed to a synthetic hormone called 17a-ethinylestradiol, or EE2, produced offspring that struggled to fertilize eggs. The grandchildren of the originally exposed fish suffered a 30 percent decrease in their fertilization rate. The authors mulled the impact of what they discovered and decided it wasn’t good.

"If those trends continued, the potential for declines in overall population numbers might be expected in future generations," said Ramji Bhandari, a University of Missouri assistant research professor and a visiting scientist at USGS. "These adverse outcomes, if shown in natural populations, could have negative impacts on fish inhabiting contaminated aquatic environments."

The study, with Bhandari as lead author, also determined that the chemical BPA, used widely in plastics, had a similar effect on the small Japanese medaka fish used for the research. The medaka was chosen because it reproduces quickly so that scientists can see results of subsequent generations faster than slow reproducing species such as smallmouth bass.

BPA and EE2 are both endocrine disruptors that interfere with hormones and cause developmental disorders. Over the past 12 years, male smallmouth and largemouth bass throughout the country, including the Potomac River basin in the Chesapeake Bay region, have switched sex, developing ovaries where their testes should be, and the two disruptors are prime suspects.
These particular chemicals were employed in the study for good reason. EE2 is a major ingredient in oral contraceptives for women, and up to 68 percent of each dose is released in the latrine through urine and excrement. A full dose is released when some women simply pour unused pills down the drain.

BPA is a chemical used primarily for polycarbonate plastics and epoxy resins. Environmental waste from products containing it "has been a serious concern and potential threat to public and wildlife health," according to a USGS statement about the study. It was published last week in the journal Scientific Reports.

Gender-bending is happening at several locations on the Potomac River, showing up in between 50 and 100 percent of bass caught and dissected. EE2 survives even after wastewater is treated, so it's a safe bet that large doses arrive when sewage facilities dump millions of gallons of untreated wastewater into the Potomac and other waterways during overflow events when pipes are overwhelmed by rain.

Farmers spray enormous amounts of chemicals in pesticides that run into water during every storm. In 2013, Maryland lawmakers sought to make farmers report the amount of pesticides they used, but the rule was fought by the farm lobby and chemical companies.

Vicky Blazer, a USGS researcher who wasn't involved in the study about impacts across generations, said during the fight in the Maryland legislature that chemical reporting was needed because the number of intersex fish keep spreading. “The fish is an indicator that something else is really wrong,” she said. There's a good chance the chemicals "are also affecting people," she said.

No one has found a strong link that sticks, but a growing body of science has found that the sex glands of fish exposed to these and other chemicals in labs change dramatically. Synthetic estrogen such as EE2 is more persistent than natural steroids and present in
higher concentrations in treated wastewater, according to a 2002 study, Coastal and Estuarine Risk Assessment.

"We know intersex is occurring, we don’t understand exactly how that’s occurring," said the recent study's co-author, Don Tillitt, research toxicologist at USGS's Columbia Environmental Research Center in Missouri. "We know that certain endocrine disrupting chemicals can cause intersex from exposure during development or the birth cycle."

But that's not what this study was for, Tillitt said. It was started two years ago as a transgenerational investigation. "We were looking at things that can be important in reproduction and survival, the fertilization rate and the survival of embryos," he said.

"What we know now is it can occur in fish," Tillit said. "Now we know that fish exposed can pass the effects to offspring several generations down."

Tillitt said this is just the beginning of USGS investigations into the impact of synthetic hormones and chemicals on fish. "We do studies with bass and we’re trying to understand what’s causing intersex," he said.

"We have a Fish and Wildlife Service hatchery where we get our fish. We’re starting with fish that have not been exposed. Those studies are happening now, and we’re getting ready to report some of those."

Can this garlic nutrient keep brains healthy?
A nutrient in garlic may offer the brain cells protection against aging and disease, according to new research.

“Garlic is one of the most widely consumed dietary supplements,” says Zezong Gu, associate professor of pathology and anatomical sciences at the University of Missouri School of Medicine and lead author of the study.

“Most people think of it as a ‘superfood,’ because garlic’s sulfur-containing compounds are known as an excellent source of antioxidant and anti-inflammatory protection.

“Scientists are still discovering different ways garlic benefits the human body,” he says. “Our research focused on a carbohydrate derivative of garlic known as FruArg and the role this nutrient plays in protective responses.”

Environmental stress

Gu’s team looked at the nutrient’s ability to inhibit—and even possibly reverse—brain cell damage caused by environmental stress. Environmental stress could include the aging process, smoking, pollution, traumatic brain injury, or excessive alcohol consumption.

“Microglia are immune cells in the brain and spinal cord that are the first and main line of defense in the central nervous system,” Gu says.

“Unlike other mature brain cells that seldom regenerate themselves, microglial cells respond to inflammation and environmental stresses by multiplying. By massing themselves and migrating toward an injury site, they are able to respond to inflammation and protect other brain cells from destruction.”

However, increasing the number of microglial cells won’t provide age-defying protection for the brain, Gu says. In fact, it can do more harm than good.

“Although important to brain cell health, microglial cells also produce nitric oxide in reaction to their function as protectors,” Gu says.

“If we simply increased the number of microglial cells, we also would increase the amount of nitric oxide in the brain. Excessive production of nitric oxide leads to brain cell damage and promotes neurodegenerative diseases such as cerebral ischemia, Parkinson’s disease, and Alzheimer’s disease.

More antioxidants

However, the nutrient FruArg may provide an answer to this reactive dilemma. By creating a cell model of neurological stress and monitoring microglial cell function, Gu’s team was able to study FruArg’s contribution to brain health.
“When stress was applied to the model, there was an expected increase in microglial cells and their byproduct, nitric oxide,” Gu says. “However, once we applied FruArg, the microglial cells adapted to the stress by reducing the amount of nitric oxide they produced.

“Additionally, FruArg promoted the production of antioxidants, which offered protective and healing benefits to other brain cells. This helps us understand how garlic benefits the brain by making it more resilient to the stress and inflammation associated with neurological diseases and aging.”

In the future, Gu and his colleagues hope to study the effects of FruArg on other cells in the body associated with conditions such as heart disease, diabetes, and cancer.

The study appears in *PLOS ONE*. Funding for the research came from the National Center for Complementary and Integrative Health, the National Institute of Environmental Health Sciences, the department of pathology and anatomical sciences, and the university’s South African Education Program.

**Garlic slows ageing and protects the brain from disease, study reveals**

It may be handy for killing vampires, but garlic can keep humans alive in more ways than one, researchers have found.

They say a nutrient in garlic offers the brain protection against ageing and disease.

It could even prevent age-related neurological diseases such as Alzheimer's and Parkinson's.

**The University of Missouri researchers found a carbohydrate in the superfood is key.**

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In the future, Gu and his colleagues hope to study the effects of FruArg on other cells in the body associated with conditions such as heart disease, diabetes and cancer.

Jones Hall demolition brings back memories for former residents

Watch story: http://www.komu.com/player/?video_id=28164&zone=5&categories=5

COLUMBIA - The skyline at MU will soon look dramatically different.

Construction crews started demolition of Jones Residence Hall on Monday as part of a $71 million renovation plan.

The Dobbs Replacement Project will also include two new residence halls and a dining hall.

The University of Missouri Board of Curators approved the first phase of the plan in June of 2014. The all girls residence hall was built in 1957.

The last time MU renovated its dorms was in 2002, when crews addressed water leakage problems and added air-conditioning units to Lathrop, Laws and Jones residence halls.

The project is also a reaction to the increase in enrollment.

Once the project is completed, the Dobbs group will house 1,269 beds by 2020. The upgraded dining hall will seat 750 people, which more than doubles what the current dining hall seats now.

Foreman Aaron Dehn said once they checked for asbestos and cleaned up the trash, they started demolition of the building.

"We've got challenges. We've got pedestrians around and we got a building going up behind it, but no challenge that we can't overcome," said Dehn.

Former Jones resident Madeline Kane said the friendships and memories made in Jones will never be duplicated.
"Jones is definitely the best. Everyone always came to my room. I don't think Jones will ever be replaced," said Kane.

Kari Dowell lived in Jones in 1995. She now lives in Columbia and works as a marketing director for an accountant firm. She remembers watching the MU football games from her seventh floor room with her roommate, who she still keeps in touch with.

"Some of the other women I met, I still keep in touch with them today, almost twenty years later. Some of them were in my wedding. I'm very close friends with them," said Dowell.

Dowell said she's going to miss seeing the Jones structure in the campus skyline when she drives down Stadium Blvd.

The first residence hall of the project is tentatively scheduled to open in the fall of 2016 and the second residence and dining hall will open in the fall of 2017.

COLUMBIA DAILY TRIBUNE
COLUMBIA, MISSOURI

Fallen Columbia firefighter receives public service award

Monday, March 30, 2015 at 2:00 pm

The Boone County Republican Central Committee announced Sunday it has selected fallen Columbia fire Lt. Bruce Britt as winner of the 2015 Dr. Edward H. Robb Award.

Britt was a firefighter with the Columbia Fire Department who died in February 2014 while responding to University Village for a reported roof collapse. Britt died of suffocation from being crushed by debris after a concrete second-story walkway he was standing on gave way, flipped as it fell and landed on top of him.

Britt, who was 48, was the first Columbia firefighter to die in the line of duty since Donald “Hector” Crum was killed Dec. 1, 1986.

“This annual award recognizes public employees who represent the best in public service, and there is no greater sacrifice than that made by Lt. Bruce Britt,” said Rick Rowden, chairman of the committee.

The award honors outstanding service by a public employee.
Full-time, non-elected employees in Boone County are eligible, and political affiliation is not a factor.

**The award is named for Ed Robb, a University of Missouri economics professor and state representative who died in 2011 while serving as Boone County’s presiding commissioner.**

The award will be presented during the committee’s Lincoln Day Banquet at 5:30 p.m. on April 10 at the Courtyard by Marriott, 3301 LeMone Industrial Blvd.

**COLUMBIA MISSOURIAN**

**Firefighter Lt. Bruce Britt selected for 2015 Dr. Edward H Robb Award**

Monday, March 30, 2015 | 5:48 p.m. CDT; updated 10:46 p.m. CDT, Monday, March 30, 2015

**BY DANIELLE ZOELLNER**

COLUMBIA — Lt. Bruce Britt, a veteran firefighter from the Columbia Fire Department, has been selected for the 2015 Dr. Edward H. Robb Award.

**Britt died last year while helping evacuate students from MU’s University Village apartments when the second-story walkway collapsed underneath him. He was the first Columbia firefighter to die in the line of duty since 1986.**

The Robb Award, first given out in 2012, recognizes outstanding work from those who are in public service for the city.

"He was a true testimony of the heart and soul for what these guys do on an everyday basis," said Rick Rowden, Boone County Republicans Central Committee chairman. The committee is responsible for selecting the recipients of the award. Rowden said the decision this year was unanimous.

The award will be presented at the Boone County Republicans' annual Lincoln Day Banquet. Britt’s wife, Leigh, and their daughter, Stormy, plan to attend and accept the award on his behalf.

"I am very flattered that the group chose him," Leigh Britt said. "I have watched from a distance over the years and really respect the people that have received the award."
The award is named after Edward Robb, the late Boone County Presiding Commissioner.

"Ed’s family and I appreciate that the committee has chosen to recognize the late Lt. Bruce Britt," Robb’s wife, Rosa, said in a news release. "Ed’s entire career was in the public sector, and he would be pleased to know that Lt. Britt’s service, dedication and sacrifice to our community is being recognized in this manner."

Those eligible for the Robb Award must be full-time, non-elected Boone County employees. Nominations for the award are made by the general public, managers, supervisors and elected officials.

"It’s important to us to honor his family with this award so his name lives on," Rowden said.

The committee has not yet decided who will give the award to the family.

The banquet will take place at 5:30 p.m. on April 10 at the Courtyard by Marriott. Tickets are available online. A portion of every ticket sold online will go toward the Central Missouri Honor Flight.

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**Students to travel to Jefferson City for International Education Day**

**NO MU MENTION**

JEFFERSON CITY - The Study Missouri Consortium will host hundreds of international and study abroad students and advisers in Jefferson City for International Education Day Tuesday. More than 300 students and their advisers from colleges in Missouri will attend the event.
International Education Day takes place once a year to showcase and encourage discussion about culture. The Study Missouri Consortium is a grassroots organization of colleges and universities across Missouri dedicated to promoting international education.

The communication director for Missouri Department of Higher Education Liz Coleman said, the benefits of the day benefits all the students and helps highlight the importance of cultural exchange.

"The benefits go both ways. It promotes the idea that Missouri is good place to attend college and we do have thousands of international students," Coleman said.

During the event, students will tour the capitol, see Missouri's legislative process, meet with state lawmakers, and share their experiences with other students.

For the first time this year there will be an additional presentation to teach students how to discuss their international education experience during job interviews.

"The presentation will help for future employment activities because a lot of employers are looking for that kind of experience now," Coleman said.

Missouri ranks 12th in the nation for the number of international students enrolled in the state's colleges and universities. Last year over 18,000 international students attended a college in Missouri and 5,000 students studied abroad.

Will Ratings Displace Accreditation?

March 31, 2015
By Judith S. Eaton

NO MU MENTION

With all the extensive consultation about the Postsecondary Institutions Ratings System during the past 18 months, all the meetings and the many conversations, we know almost nothing about its likely impact on accreditation, our all-important effort by colleges, universities and accrediting organizations working together to define, judge and improve academic quality.
All that the U.S. Department of Education has officially said to date is that the system will “help inform” accreditation -- and we do not know what this means.

This is worrisome. Ratings create, in essence, a federal system of quality review of higher education, with the potential to upend the longstanding tradition of nongovernmental accreditation that has carried out this role for more than 100 years. And establishing the system may mean the end of more than 60 years of accreditation as a partner with government, the reliable authority on educational quality to which Congress and the Education Department have turned.

Accreditation is about judgment of academic quality in the hands of faculty members and academic administrators. It is about the commitment to peer review -- academics reviewing academics yet accountable to the public -- as the preferred, most effective mode of determining quality. It is about leadership for academic judgment when it comes to such factors as curriculum, programs, standards and strategic direction remaining in the hands of the academic community.

In contrast, a ratings system is a path to a government model of quality review in place of the current model of academics as the primary judges of quality.

First introduced by President Obama in August 2013 and turned over to the Education Department for development, the ratings system is on track for implementation in 2015-16. Based on the still incomplete information the department has released to the public, the system is intended to rate (read: judge) colleges and universities based on three indicators: access, affordability and student outcomes. Institutions will be considered either “high performing,” “low performing” or “those in the middle.” Ultimately, the amount of federal student aid funding a college or university receives is intended to be linked to its rating.

A federal ratings system is both an existential and political challenge to accreditation.

First, there is the challenge of a potential shift of ownership of quality. Second, new key actors in judging quality may be emerging. Finally, the relationship between accreditation and the federal government when it comes to quality may be shifting, raising questions about both the gatekeeping role of accreditation in eligibility for federal funds and the agreement about distribution of responsibilities among the parties in the triad -- the federal government, the states and accreditation.

A ratings system means that government owns quality through its indicators and its decisions about what counts as success in meeting the indicators. The indicators replace peer review.

It means that government officials are key actors in judging quality. Officials replace academics. With all respect to the talent and commitment of these officials, they are not hired for their expertise in teaching and learning, developing higher education curriculum, setting academic standards, or conducting academic research. Yet using a ratings system calls for just these skills.

A ratings system means that the relationship between accreditors and the federal government, with the accreditors as dominant with regard to quality judgments, may give way to a lesser role for accreditation, perhaps using performance on the ratings system as a key determinant of eligibility for
federal funds -- in addition to accreditation. Or, it is not difficult to envision a scenario in which ratings replace accreditation entirely with regard to institutional eligibility for access to federal financial aid.

We need to know more about what we do not know about the ratings system. Going forward, we will benefit from keeping the following questions in mind as the system -- and its impact on accreditation -- continues to develop.

First, there are questions about the big picture of the ratings system:

Has a decision been made that the United States, with the single most distinctive system of a government-private sector partnership that maximizes the responsible independence of higher education, is now shifting to the model of government dominance of higher education that typifies most of the rest of the world?

What reliable information will be available to students and the public through the ratings system that they do not currently have? Will this information be about academic quality, including effective teaching and learning? What is the added value?

Second, there are questions about the impact of the ratings on accredited institutions:

Are the indicators to serve as the future quality profile of a college or university? Will the three indicators that the system uses -- access, affordability and outcomes -- become the baseline for judging academic quality in the future?

Will it be up to government to decide what counts as success with regard to the outcomes indicators for a college or university -- graduation, transfer of credit, entry to graduate school and earnings?

To claim quality, will colleges and universities have to not only provide information about their accredited status, but also their ratings, whether “high performing,” “low performing” or “in the middle”?

Will institutions be pushed to diminish their investment in accreditation if, ultimately, it is the ratings that matter -- in place of accreditation?

Finally, there are questions about how ratings will affect the day-to-day operation of accrediting organizations and their relationship to the federal government:

Will accreditors be required to collect/use/take into account the information generated by the ratings system? If so, how is this to influence their decisions about institutions and programs that are currently based on peer review, not ratings?

Will performance on the ratings system be joined with formal actions of accrediting organizations, with both required for accredited status and thus eligibility of institutions for federal funds -- in contrast to the current system of reliance on the formal actions of accrediting organizations?
How, if at all, will the ratings system affect the periodic federal review of the 52 accrediting organizations that are currently federally recognized? Will the government review now include the ratings of institutions as part of examination and judgment of an accreditor’s effectiveness?

While we cannot answer many of these questions at this time, we can use them to anticipate what may take place in the approaching reauthorization of the Higher Education Act, with bills expected in spring or summer.

We can use them to identify key developments in the ratings that have the potential to interfere with our efforts to retain peer review and nongovernmental quality review in preference to the ratings system.

BIO

Judith S. Eaton is president of the Council for Higher Education Accreditation.