University of Missouri campuses seek tuition increases

University of Missouri’s four campuses grapple with more proposed cuts in state aid.

By MARÁ ROSE WILLIAMS

Members of the University of Missouri Board of Curators winced at the numbers they heard.

A full 9 percent increase in tuition needed for the science and engineering campus at Rolla, three times the rate of inflation.

But it was the even higher percentage that was not discussed Thursday — although everyone present was only too aware of it — that caused most of the pain: the proposed 12.5 percent cut in state funds for the 2012-13 school year.

Both numbers might shrink before the budgeting process is done, but neither will go away.

Students and their parents will have to shoulder a larger part of university revenue through tuition checks.

At the University of Missouri-Kansas City — which has asked for the smallest increase, 3 percent — tuition would go from $7,737 to $7,968 for an in-state undergraduate student. Add the required fees, also higher, and the price tag to attend is $8,926 a year.

In 1977, Jefferson City provided nearly 47 percent of the university system’s operation revenue. This year, 15 percent.

Consider UMKC, where state appropriations per student have fallen from $9,004 in 2010 to a projected $5,742 in 2013, when Gov. Jay Nixon’s office would snip an additional $50 million from the university system.

“These tuition increases are in every way related to the reduction of state funding.” Curator Warren Erdman of Kansas City said.
No decisions were made Thursday at the new Student Union, where the board spent hours listening to the administrators: Columbia needed 7.5 percent more in tuition; the St. Louis campus, 8.2 percent.

“The justification is that it is just what it takes to keep the university going,” said Columbia Chancellor Brady Deaton. “These increases are all coming with great sacrifice.”

Those sacrifices will continue, as the board suggested that the schools begin looking for non-academic programs to eliminate.

UMKC Chancellor Leo Morton said his school opted to hold the increase down to 3 percent and instead shoot for recruiting more students. He said if the university raised tuition too high, the student UMKC is going after to boost its enrollment probably will go elsewhere.

Tuition at UMKC is already higher than at nearby public four-year schools, including the University of Kansas and Kansas State University.

In Kansas, state appropriations account for 22 percent of KU’s budget this year, about half of what it was 30 years ago. Tuition and fees now account for 21 percent, up from 8.3 percent in 1981.

If Missouri legislators approve Nixon’s proposal, the universities will have seen about 25 percent of their state aid evaporate in three years.

Deaton said his campus already had cut spending by $8 million by reducing staff and administrative costs.

“But you just can’t keep chopping,” he said. “We have to ensure quality. It is what our students and our parents demand.”

In her presentation, Nikki Krawitz, university system vice president for finance, noted:

• Administrative costs have been cut the last four years, and they are lower than at other public doctoral institutions.

• Most students don’t pay the sticker price on tuition. Because of financial aid, 80 percent of students pay about half.

• The average tuition increase over the last five years has been 2.7 percent.

“We have done a great job of trying to keep tuitions low for our students,” Krawitz said.

That low average, however, stems in part from past deals that curators made with the governor not to raise tuition.
“I voted for it, but I’m beginning to wonder about those two years we agreed not to raise tuition,” Erdman said, referring to the 2008 agreement.

He called the tuition proposals he heard Thursday “hard to digest.”

“I’m not looking forward to voting on a tuition schedule such as this,” he said.

Missouri law now caps tuition hikes at the rate of inflation, unless the state commissioner of higher education grants a waiver, which was done last year. Under the proposals heard Thursday, all campuses but UMKC will need one again.

Although tuition’s share of the revenue pie has only risen by 4 percent over the last 25 years, other sources, such as grants, service sales and endowments, have grown.

Patient revenues from the system’s medical schools, for example, made up just 7 percent of income in 1977. Today, it’s 25 percent and represents $664.7 million of the system’s $2.6 billion operating budget. Much of that revenue though goes back into the medical schools to pay doctor salaries, Deaton said.

The majority of tuition revenue goes to instruction, scholarships and student services. Salaries for faculty and staff eat up the largest chunk of the budget.

Although most tuition dollars help pay those salaries, they alone cannot cover the payroll. Consider UMKC, where tuition and fees in 2011 brought in $141.1 million. At the same time, salaries and wages for 4,018 members of the school’s faculty and staff were $179.2 million.
UM curators take time on tuition increase plan

BY TIM BARKER • tbarker@post-dispatch.com • 314-340-8350 | Posted: Friday, February 3, 2012 12:05 am | No Comments Posted

KANSAS CITY • The University of Missouri Board of Curators on Thursday took its first look at a proposed 6.5 percent increase in tuition and fees for the four-campus system.

Curators took no action on the proposal by system administrators, while stressing the importance of taking some time to consider the hefty increases that would offset some of the funding that Gov. Jay Nixon plans to cut from the state's higher education spending.

No curator spoke against the tuition hike Thursday, though several expressed dismay over the state's funding cuts.

"This is going to be a painful year," said Curator Don Downing, who urged the system to find a way to preserve pay raises for faculty.

Earlier plans called for a smaller, 3 percent, increase to be voted upon at the regularly scheduled meeting, on the University of Missouri-Kansas City campus.

But that timetable was scrambled by Nixon's announcement last month that he will trim 12.5 percent from higher education, or $50 million from the UM budget.

"I'm glad we are going to take some time to digest on this," said Curator Warren Erdman.

Still, the board is working on a fairly short timetable, given the need by the universities to set tuition in time for the summer session.

One time-consuming factor is the system's likely need to seek approval, in the form of a waiver, from the commissioner for higher education, to avoid financial penalties. A waiver is required whenever the tuition increase exceeds the rate of inflation, which was 3 percent last year.

That process could take as much as a month to complete, meaning the new tuition rates would need to be established in February or early March, said Nikki Krawitz, the system's vice president of finance.

Under the proposal, tuition hikes would vary by campus. Tuition and fees would increase 7 percent at the University of Missouri-Columbia, 7.7 percent at the University of Missouri-St.
Louis, 8.3 percent at the Missouri University of Science and Technology and 3 percent at the UMKC.

Curators also were given a report from system administrators, detailing a host of cuts and efficiency improvements that saved $75.2 million last year. Nixon has urged schools to deal with his cuts by becoming more efficient.
Mo. curators wary of proposed tuition increase

University of Missouri curators want to see more spending cuts in non-academic programs before they agree to increase tuition at the system's four campuses.

The seven remaining members of the 9-person governing board responded coolly Thursday to a proposed 7.5 percent tuition increase for Missouri residents attending the Columbia campus. The suggested increases are even higher at the St. Louis (8.2 percent) and Rolla (9 percent) campuses. The Kansas City campus would see a 3 percent increase.

But they also realize that administrators may have little choice given Gov. Jay Nixon's call for a 12.5 percent cut in state funding for higher education. That would create a $50 million hole in the system's budget and reduce the university's share of state money to its lowest levels since 1995, provided lawmakers agree with the governor's recommendation. During that same time, campus enrollment grew by more than 50 percent.

"It's hard to digest," said curator Warren Erdman. "It's hard to accept."

Erdman and his colleagues asked campus leaders and incoming President Tim Wolfe to further tighten spending, just as the university issued a news release touting its cost-cutting efforts in advance of a Friday briefing to the Board of Curators at the University of Missouri-Kansas City.

"We have been steadfast in our commitment to be responsible stewards of university assets and resources," said Nikki Krawitz, vice president of finance and administration. "We have been doing more with less for years, with the ultimate beneficiaries being our students and the citizens of our state."

The proposal would boost the cost of tuition and student fees at the Columbia campus to $9,539, a $622 increase, starting in the fall. Students at Missouri University of Science and Technology in Rolla would pay $9,773 next year, a $749 increase.

But those numbers don't reflect the actual sticker price of attending college after financial aid is taken into account. The average student in Columbia will receive nearly $4,000 in grants, officials pointed out Thursday. The same report from Krawitz noted that Missouri's 14.3 percent cumulative tuition increase over the past five years is easily the lowest compared to state
universities in eight surrounding states. Those hikes ranged from 23.4 percent at the University of Arkansas to 49.3 percent at the University of Tennessee.

The board didn't vote on the tuition proposal Thursday but plans to hold a special meeting before its next scheduled session in April.

Nixon has already warned university leaders to avoid hefty boosts in tuition and instead explore administrative spending reductions, and could impose further cuts if the Missouri system's tuition increase exceeds the Consumer Price Index, which is 3 percent. Under Missouri law, public institutions need state approval to increase resident undergraduate tuition beyond the inflation rate.

The university received such permission from the state Commissioner of Higher Education last year, and then saw Nixon withhold an additional 1.1 percent of the system's budget after lawmakers approved a 5 percent spending cut.

This time around, university leaders are more vocal with their displeasure. The four campus chancellors and the acting system president, Steve Owens, sent a dire letter to professors and other university employees last week outlining the possible ramifications. Chancellor Brady Deaton sent his own follow-up warning to the Columbia campus a day later.

Nixon's budget cuts would likely scuttle a promised 3 percent pay raise to campus workers. said University of Missouri-St. Louis chancellor Tom George. And the proposed tuition increase would still not be enough to avoid additional reduced spending.

"At some point, you're no longer defined as the institution that you are. You change," he said. "Right now we have a super product. You can't keep whittling away at it."
KANSAS CITY — Fees will likely increase across the four University of Missouri System campuses next year.

The UM System Board of Curators are expected to approve increases to information technology fees, special course fees and e-learning fees during its meeting at the University of Missouri-Kansas City on Friday.

Thursday the board also discussed an average tuition increase of 6.5 percent proposed for the UM System's four campuses, with a 7 percent increase in tuition and required fees for in-state undergraduate students at MU.

The decisions are part of a process to balance the system's budget after Gov. Jay Nixon proposed a 15.1 percent cut in state support for next year.

Curator Warren Erdman said he's heard from people asking why the cost of higher education is rising so quickly, but he argued that it's not the cost of education rising but the declining state support that's driving up costs this year.

Increasing tuition and required fees won't cover the entire gap left by cuts in state support. According to Nikki Krawitz, UM System vice president of finance and administration, if the board accepts the increases as proposed, the system will still have to account for another $54.2 million in its budget.

"Even with the proposed tuition increase, we are not trying to make up the gap that we have," Interim System President Steve Owens said. "We'll have to make it up through other things, not on the backs of students."
Curators proposed the possibility of cutting nonacademic programs from each campus but didn't identify any programs in particular and made no decisions Thursday about cuts.

'Kicking the can'

In his State of the State address, the governor singled out "administrative overhead" as one area public colleges and universities could focus on to save money and recover from state funding cuts.

The system responded Thursday in a presentation by Krawitz which touted $222 million in cost reductions over the last several fiscal years. The cost reductions include administrative efficiencies, cost management and cost avoidance measures.

But in some ways, Krawitz said, cost avoidance is just a way of "kicking the can down the road." Those costs will eventually catch up with the system and effect the teaching mission of the campuses.

In fiscal year 2011, the system deferred more than $30 million in maintenance and repairs. The system now faces nearly $1.3 billion in total facilities needs, including $576 million in deferred maintenance projects.

Deferring maintenance has been one way the system has balanced previous year's budgets without raising tuition. Over the last five years, the system has raised tuition an average of 2.7 percent per year, including two years where UM campuses saw no tuition increases. With tuition increases below the national average, Erdman questioned whether the previous lack of increases has put the system in financial handcuffs.

"This is really hard to digest, it's hard to accept," Erdman said. "I think we've got to keep in mind we're not balancing our budget gap in just tuition. Under this proposal, we're not even covering the reduction in state support." Curators Erdman, Don Downing and Wayne Goode debated where cuts must be made to close the system's budget gap.

Downing said that he hopes the merit salary increases for faculty can still become a reality and that he feels for the chancellors forced to make tough decisions about campus programs.

"This is going to be a painful year, regardless of what we do with tuition," Downing said.

E-learning gets new system interface

The system also introduced a new online-learning portal at the board's meeting Thursday.
In the past five years the number of MU students enrolling in distance online courses has almost doubled. With this portal, all system students will be able to take online classes from any of the four UM campuses.

UMKC Vice Provost Mary Lou Hines said she believes online classes offer a way for students who also work to manage their schedules on their own time. She said many UMKC students “take classes in a hybrid mode,” meaning they take both classes in person and online.

Through the portal, students can take some online classes or, for some programs, take all classes online. At the undergraduate level, these online classes will cost the same amount per credit hour as traditional classes and in- and out-of-state rates will still apply.

On the portal students can evaluate their teachers through an application or by posting a video with feedback. Future students considering enrolling in the class can look at the videos and statistical feedback from past students. However, Hines said the adjustment would be less difficult for students than it would for teachers and that there are systems in place to provide teachers with skills to instruct the online classes.

So what's next?

The board was without Judith Haggard and Craig Van Matre during Thursday’s meetings. Van Matre’s name was once again withdrawn from the Missouri Senate on Thursday, when it became clear he would not be confirmed before this week’s deadline.

Both open curators positions will have to be filled by appointments from the governor.

The board meets again Friday morning and will hear reports from the board chairman and interim system president as well as a panel discussion among the chancellors before completing its regularly scheduled business.

Curators do not plan to vote on tuition increases Friday.

Krawitz said the board will have to meet in the next couple of weeks to approve the proposals which would require submitting a waiver request to the Coordinating Board for Higher Education to raise resident, undergraduate tuition above the rate of inflation.

Making a firm decision on the increases soon is essential, Krawitz said. Once her office can count on revenue from tuition and fee increases, the system can make recommendations on how to cover the remaining budget gap.
Higher education leaders describe effect of state cuts

By Rudi Keller

Thursday, February 2, 2012

JEFFERSON CITY — In a little more than 10 years, the state and students have changed places as sources of money for University of Missouri operations, school officials told lawmakers yesterday.

In fiscal 2001, state appropriations paid 55.4 percent of costs while students paid just more than one-third through tuition. This year, according to a report given to the House Appropriations-Education Committee by the UM System, students will shoulder 54.7 percent of operating costs while the state share will be less than one-third.

The gap will grow in the coming year if Gov. Jay Nixon’s budget is approved. The House committee is the first group of lawmakers to review Nixon’s spending plan, which calls for a 12.5 percent cut in funding for UM and all other state colleges and universities. The UM Board of Curators is meeting today and tomorrow to consider an increase in tuition and fees averaging 6.5 percent across the four campuses.

Interim President Steve Owens explained the university’s role and needs in terms job-conscious lawmakers understand — he labeled the university “the second-largest nongovernmental employer in the state.”

The university employs 28,000 people, with four campuses, 10 research stations and business incubators and extension outposts in every county. It paid $1.3 billion in salaries and wages last year, Owens said, and paid $46 million in payroll taxes to the state. Faculty landed $338 million in research grants, and the university owns 31 patents and has 58 pending approval, he said.

Five companies marketing University of Missouri technology produced $8 million in licensing income, Owens said. He cited the statistics to show that the university has become more self-reliant as state support has eroded, including financing building projects once considered a state responsibility. “We feel we are good stewards of the money you have appropriated to us,” Owens said.

The report to the committee said, “If we balanced the budget using jobs alone, which we can’t and won’t, a reduction of $50 million would translate into 800 jobs.”
The real effect of the cuts, Owens said, will be limitations on the university’s ability to serve a growing student base. Missouri University of Science and Technology in Rolla is full and cannot expand at this time, he said.

“The cuts will only make the situation worse,” Owens said.

There are 700 university jobs open now, and the cuts will make filling the positions difficult, he said.

Owens’ appearance capped a day when college and university presidents from across the state explained how Nixon’s cuts would affect their operations.

At Lincoln University, President Carolyn Mahoney said, clearing deferred building maintenance would cost $350,000, and work is done only in emergencies. The school’s most popular program, nursing, has an 18-month waiting list, she said.

Employees will have to pay a bigger share of their health insurance, she said. “We don’t want to, but it seems almost unavoidable.”

Near the end of Owens’ presentation, Rep. Mary Still, D-Columbia, said the issues raised during the day should open legislators’ eyes to the need for more revenue.

“You all have done, and universities throughout the state have done, what they can to make college affordable and provide an appropriate education,” she said. “I apologize that we have not done our part.”
COLUMBIA MISSOURIAN

Missouri schools discuss 15 percent funding cut to higher education

By Danielle Carter/Missouri Digital News
February 2, 2012 | 10:50 a.m. CST

JEFFERSON CITY — The proposed 6.5 percent tuition increase to UM campuses received little attention at a state House committee hearing on Wednesday to discuss Gov. Jay Nixon's proposed budget cut to Missouri higher education.

Interim UM System President Steve Owens testified in front of the Education Appropriations Committee, saying the increase is not set in stone. The Board of Curators for the UM System are meeting Thursday and Friday at the Kansas City campus.

While Rep. Mary Still, D-Columbia, asked Owens to clarify the specifics of the tuition hike, no one else questioned the increase.

While other school presidents testified about the effects of Gov. Nixon's 15 percent higher education budget cuts on their schools, Owens spoke about the value the University of Missouri adds to the state.

Owens also said UM campuses serve around 74,000 students and 64 percent of the state's graduate students. He said Missouri residents voted that support for higher education was the third most important issue facing the state.

In spite of the budget cuts, Owens said he thinks the UM System has made sure to take care of staff and students.

"We feel we've practiced good stewardship in keeping our administrative costs low, directing resources to instruction and assisting families with the cost of a college education," Owens said.

The 15 percent cut estimate accounts for the withhold Nixon applied to higher education after the legislature approved the budget.
Rep. Mike Lair, R-Chillicothe, the chairman of the committee, said after the hearing that the budget cuts will surely be detrimental to Missouri's public education.

"It's getting to the point where we're not cutting fat anymore," Lair said. "We're cutting muscle."

The committee also listened to representatives from other higher education institutions in Missouri such as Lincoln University, Harris-Stowe State University and Moberly Area Community College. Each representative gave the committee a presentation on what the budget cuts meant to their school.

Some representatives from Harris-Stowe said they cannot raise tuition, while other school representatives said they will have to eliminate some academic programs. Moberly Area Community College representatives said they will have to cut classes, which will lead to bigger class sizes.

The university representatives stressed the importance of keeping their school's academic integrity intact.

The committee will be meeting at a later date to further discuss the budget cuts.
DED director quits; Senate nixes vote on curator

By Rudi Keller

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Columbia attorney Craig Van Matre lost his seat on the University of Missouri Board of Curators on a day of high-profile rebukes to Gov. Jay Nixon over several appointments.

Along with Van Matre's defeat, Jason Hall resigned last night as director of the Department of Economic Development when it became clear he would not be confirmed.

Van Matre's confirmation fight had been drawn out for more than a year. After Sen. Jim Lembke, R-St. Louis, made clear today he would lead a daylong debate if necessary, Sen. Kurt Schaefer, R-Columbia, withdrew Van Matre's name. "I think it is pretty obvious, you have laid out the road map, and it is an insurmountable hill," Schaefer said of the opposition. "The road map laid out shows that expressing that opinion will take us into the evening."

Lembke and Sen. Kevin Engler, R-Farmington, began the filibuster. They objected to opinion pieces written by Van Matre critical of GOP leadership in the General Assembly, including suggestions that plans for the Missouri courts could bring an Iran-like theocracy to the state.

"If this guy is going to say this stuff about us, he shouldn't expect us to approve his nomination."

Engler said.

During a visit, Engler said Van Matre promised to temper his future comments and writing. "I told him you won't have to worry about that because if it is up to me and several of my colleagues, you won't be on the Board of Curators."

Earlier, as the Senate began work today, Nixon issued a news release announcing Hall had stepped down and that Chris Pieper, deputy counsel in his office, would become acting director of the department.

"With his strong professional background and extensive experience in helping Missouri businesses create jobs, Jason Hall is exactly the type of strong leader Missourians need at our Department of Economic Development," Nixon said. "This inaction by the Senate will not dissuade me from continuing to work relentlessly with business and community leaders to create jobs and keep our economy moving forward."
But it was the 36-year-old Hall’s age and lack of experience in private industry that sank his nomination, several lawmakers said during discussion of nominations. Failures at the department, including the embarrassing Mamtek project in Moberly, require someone with business experience, said Senate President Pro Tem Rob Mayer, R-Dexter.

“He’s articulate and has shown a lot of ability,” Mayer said. “But he is very young, and there have been some things happen over in the Department of Economic Development that should concern everybody. Now is not the time to put somebody in there who lacks experience in the private sector.”

Because Hall and Van Matre were appointed before this year’s legislative session began, a Senate decision on their fate was due by tomorrow. Because lawmakers generally don’t meet on Fridays, that made today the deadline.

Nominees not approved are barred for life from accepting the same post. Nixon’s decision to withdraw nominees to the Public Service Commission, the Highways and Transportation Commission and the Northwest Missouri State University Board of Regents gets around that constitutional rule. It was unclear what impact Hall’s resignation had on his future ability to hold the top job in economic development.
The Tribune's View

Confirmation

In the state Senate, not so much

By Henry J. Waters III

Thursday, February 2, 2012

Republicans in the Missouri Senate are using their confirmation power to stick it in the eye of Gov. Jay Nixon. Under the rules and traditions of the body, senators have unusual power to block nominations by the governor to jobs ranging from members of the University of Missouri Board of Curators to directors of state departments and commissions.

This year the Senate Gubernatorial Appointments Committee has been dragging feet even though a Friday deadline looms for final confirmation by the entire body.

The ordeal suffered by Jason Hall is a good example. Gov. Nixon appointed Hall to head the Department of Economic Development, a hot seat in the wake of the Mamtek debacle in Moberly. The DED has been criticized for seeming to endorse the shaky project even though the state grant the department approved never was paid because the company failed to produce jobs as promised.

A hard look and even some criticism are warranted because the DED’s lighthearted approval gave Moberly officials reason to think the state was recommending the project and might have encouraged them to unwisely issue bonds in the name of the city to be repaid with unsure revenue from the company. The revenue never came, and the city is defaulting on the bonds, damaging its credit rating.

When Hall took the stand before the appointments committee, he was at a loss to answer some of the questions that were attempts to embarrass the governor more than determine the qualifications of the nominee. The session was a roundhouse questioning about a gamut of policies beyond the pale of the prospective DED director.

Sen. Brad Lager of Savannah, who is running on the GOP ticket for lieutenant governor, said he and other senators have not been diligent enough questioning the governor’s appointments, but one wonders whether he and his fellow partisans would be as worried if nominations were coming from a Republican governor. Of course, they would not.
Senators should be diligent in evaluating gubernatorial appointments, but the chief executive is due a degree of deference. At state and federal levels, hearings should be about confirmation, not excuses to block a chief executive of a different political stripe.

Today in Missouri the whole issue of economic development incentives should get a hard look, but a hapless nominee for director of the DED should not be automatically disqualified for past policies the legislature helped craft and was happy to endorse until high-profile questions arose.

Hall said he did not know how to answer several questions nobody in his position could have or should have answered about “right to work,” prevailing wage, minimum wage and other legislative policy decisions. Committee members wanted to know Hall’s opinion about the effect on economic development of Nixon’s cuts to higher education, an attempt to embroil the poor nominee in a poke at the governor.

Hall said state economic development tools should be used to attract business but protecting taxpayers is equally important. The committee chairman said Hall should have had “more opinions.”

The atmosphere today in Jefferson City is toxic. In a divided government, leadership entails blocking the other side rather than moving forward. Warfare to the death is the tactic of choice.
MU paleontologist finds distinctive head gear on extinct crocodile

By MARÁ ROSE WILLIAMS

A prehistoric crocodile with an unusual appendage on its head has been newly identified by a University of Missouri paleontologist, who nicknamed the extinct creature "Shielderoc."

Casey Holliday, assistant professor of anatomy at the MU School of Medicine, said the shield-headed species, found in what is now Morocco, represents the oldest ancestor of modern crocodiles to be found in Africa.

"Along with other discoveries, we are finding that crocodile ancestors are far more diverse than scientists previously realized," Holliday said in a release.

Working with researchers from Marshall University, Holliday studied the fossilized piece of skull held by the Royal Ontario Museum of Toronto. The specimen, formally Aegisuchus witmeri, dated to the Late Cretaceous period — approximately 95 million years ago. Blood vessel scarring indicated the 30-foot creature would have had the identifying structure attached to the top of its head, similar to the sheaths on some dinosaurs skulls.

"It's fairly certain that it belonged to a group of crocodyliforms—including the flat-headed crocs—that had really thin, weak jaws and weak chin joints," he wrote. "So they weren't wrestling dinosaurs on the water’s edge. They would have been quick, snap feeders waiting for prey to come by and then grabbing it and swallowing it with large, basket-shaped mouths—something like a pelican would do."

Details about the discovery were published this week in PLoS-ONE, a digital Public Library of Science peer-review journal.
Ancient crocodile dubbed 'Shieldcroc'

COLUMBIA, Mo., Feb. 2 (UPI) -- U.S. researchers say they've identified a new species of prehistoric crocodile and dubbed it "Shieldcroc" due to a thick-skinned shield on its head.

"Aegisuchus witmeri or 'Shieldcroc' is the earliest ancestor of our modern crocodiles to be found in Africa," Casey Holliday, co-researcher and assistant professor of anatomy at the University of Missouri, said. "Along with other discoveries, we are finding that crocodile ancestors are far more diverse than scientists previously realized."

Shieldcroc dates to the Late Cretaceous period, approximately 95 million years ago, part of the Cretaceous Era often called the "Age of the Dinosaurs."

But a number of recent discoveries have led to some scientists calling the era the "Age of the Crocs," Holliday said in a UM release Thursday.

The shield structure on the croc's head was likely used as a display structure to attract mates and intimidate enemies, and possibly as a thermo-regulator to control the temperature of the animal's head, he said.

The new species had a flatter skull and longer, thinner jaws than other known species.

"We believe Shieldcroc may have used its long face as a fish trap," study co-author Nick Gardner at Marshall University said. "It is possible that it lay in wait until an unsuspecting fish swam in front of it. Then, if it was close enough, Shieldcroc simply opened its mouth and ate the fish without a struggle, eliminating the need for strong jaws."
At first, David Oliver ignored the bump on his neck that he noticed while shaving. The medical school professor assumed it was calcified scar tissue from a previous surgery.

But the growth didn't go away, and his sore back grew more painful. A doctor's diagnosis confirmed the worst: He had a form of upper throat cancer called nasal pharyngeal carcinoma. It had spread to his lymph nodes and bones.

Then Oliver, who has spent a career teaching medical students and hospital workers how to care for dying patients, took an unusual step. He made a video to break the news to colleagues. And when the clip spread far beyond this Missouri college town, Oliver undertook a bigger mission: documenting his treatment in regular videos and promoting an unusually public conversation on medicine and mortality.

"If there was ever a time to be a good teacher, this is it," he said. "I've got a chance."

Oliver, a 69-year-old specialist on aging and a former health care executive, at first struggled to absorb the diagnosis in September. His cancer is considered treatable but not curable.

He wanted to avoid the inevitable stares from colleagues at the University of Missouri's medical school, even those whose jobs often required them to confront terminal illness. He knew there would be whispers in the hallway and uncertainty about how — or even whether — to discuss the disease.

Oliver's initial video was meant to "put them at ease when they saw me. I'm still David," he said. "I might have five years. I might have six months. But I want you to be comfortable."

The video quickly spread after Oliver's five adult children shared the three-minute clip with Facebook friends, who in turn shared it with their own friends. A short time later, he started a video blog and a YouTube site.

For his followers, the updates alone weren't enough. Questions soon followed.
A viewer from Japan, his stepdaughter's former study abroad teacher, wanted advice on how to comfort his own friend with cancer. Medical students probed for suggestions about patient care. A college professor in Florida asked permission to use the video in class.

A former Vietnam War protester who four decades ago entered the then-nascent field of gerontology, Oliver spent decades sharing lessons on how to die. Now, buoyed by the power of social media, he was showing others how to live.

Anyone who expected to feel sorry for Oliver was quickly disabused of that notion after watching his first diary entry. A die-hard Missouri Tigers fan, Oliver made sure to highlight the two "puke buckets" he planned to obtain for chemotherapy and radiation treatments: one emblazoned with the rival Kansas Jayhawks logo, the other bearing an Oklahoma Sooner, another foe.

Beyond the humor, Oliver realized his illness provided a chance to help prepare patients and their loved ones, to trade whispers for matter-of-fact observations, to push the conversation from the shadows into the virtual public square.

The second video installment featured Oliver getting his head shaved, his full crop of grayish-blond hair falling to the salon floor before the chemo drugs took their toll.

By the third video, his bald head was gleaming. Oliver stood behind a dozen pill bottles containing a wide range of drugs _ from the steroid dexamethasone to morphine. He talked about dealing with "chemo brain," the persistent mental fog that trails the otherwise lucid professor post-treatment.

In mid-December, a noticeably subdued Oliver appeared on camera to chronicle the 21 days between his three chemotherapy treatments to that point. He talked about the highs of the first few days, fueled by energy-boosting steroids that made him feel "ready to run a triathlon." Then comes the crash, Oliver explained, five days of agony marked by dizziness, diarrhea, constipation, mouth sores, confusion, tingling, hand cramps, rashes and disorientation.

"It's a trick," he said about the initial euphoria. "The Kryptonite comes. Superman is dead on the fifth day." Ever the professor, he used a bar graph to illustrate his three-week cycles.

Four months of treatment have also given Oliver a window into modern health care from the patient's perspective. He hasn't liked all that he's seen, particularly the limited interaction between doctors and nurses. He makes sure that his caregivers are also watching his video dispatches.

"I'm in a position to be extremely critical while they're giving me treatment," Oliver said. "They consider me an advocate. They want me to help with their patient training."
Oliver, a former executive at Heartland Health System in St. Joseph, knows he can engage with his doctors on a level of familiarity that most patients cannot. That's another motivation for his videos, to help level the playing field.

"I'm not intimidated by physicians. I realize they are people like everybody else," he said. "They make mistakes like everybody else. ... This is my opportunity to talk about these flaws and disappointments."

As the disease lingers, he and his wife of 16 years, Debra Parker Oliver, must also plan for life after his death.

A few short months ago, that talk consisted mostly of retirement, visits with the grandchildren and their next ocean cruise. Now it means stressful sessions with financial advisers and making plans for his memorial service.

"I am not afraid to die," Oliver said. "I am a gerontologist. I know that none of us get out of this alive."

His wife, an associate professor and former hospice worker who also works in the family and community medicine department, is less certain.

"Maybe he's not afraid to die, but he's afraid of dying," she said, her husband by her side. "The idea of this man being confined to a bed, maybe not being able to speak, is much more scary than what you are willing to admit."

On a recent visit to the Ellis Fischel Cancer Center, the couple received some encouraging news: A scan showed no visible lesions, meaning all were less than 1 centimeter in length. He will return later this month for two final rounds of chemotherapy followed by three months of freedom from medical procedures before getting another scan.

Best of all, the good news buys him time.

Time for a long-awaited cruise to Istanbul and Rome. Maybe time to travel to the NCAA basketball tournament in March to watch his beloved Tigers as the team seeks its first-ever Final Four berth.

The cancer is "still there. It will grow back," he said. "Eventually it will grow back and kill me."

No one knows how much time remains. If it's more than a year, he added, "we can produce a lot more videos."