



MU News Bureau

Daily Clips Packet

October 10, 2017

MISSOURIAN

Middle school teachers, students to benefit from new MU STEM grant

Story generated by MU News Bureau release: [Supporting Middle School Science: MU Team Receives \\$1.25 Million NIH Grant to Help Teachers](#)

By RACHEL MCKEE TAYLOR

Missouri middle school teachers and their students will learn different ways to study science, technology, engineering and mathematics under a new federal grant.

The National Institutes of Health awarded a \$1.25 million Science Education Partnership Award to a team led by MU professors in the departments of special education and biochemistry.

The grant will be used to lead a program to improve middle school students' STEM literacy and skills and give professional development to teachers.

The Science Education Partnership Award subsidizes innovative STEM and Informal Science Education programs for grades pre-kindergarten through 12, according to the [partnership award website](#).

The focus of the MU program will be on teacher development, said Delinda Van Garderen, director of graduate studies in MU's Department of Special Education. She and William Folk, a biochemistry professor, will lead the team of educators and researchers from MU and other institutions.

Van Garderen said she wants to have middle school science, English language and special education teachers work together to integrate multimodal texts with an area of science. Multimodal texts incorporate two more more elements of communication such as linguistic, visual or audio, [according to the Curriculum and Leadership Journal](#).

In turn, the students will use the readings to learn how to work with the content they are studying better.

The grant will be distributed over five years. Van Garderen said the team will work with five teachers in the first year and 10 teachers in the following years.

The teachers will come to MU for one week during the summer to develop texts they will use in their classrooms. Throughout the following school year, they will have four to five follow-up sessions to check in and address whether materials need to be revised.

Van Garderen said the teachers will help her team identify what content to focus materials on.

She said another goal is to incorporate inquiry-based science into the classroom materials. Inquiry-based science is an investigative style of teaching and learning in which students ask questions, investigate problems and look for answers, [according to the Smithsonian Science Education Center](#).

The team will develop different types of readings for students of all reading levels. The teachers would then connect those readings to inquiry experiences in the classroom.

“This is all focused on helping them develop some critical idea in the topic that they’re learning about,” Van Garderen said.

The first teacher development workshop is scheduled for summer 2018.



[MU Receives \\$1.25 Million Grant to Support Middle School Science](#)

Story generated by MU News Bureau release: [Supporting Middle School Science: MU Team Receives \\$1.25 Million NIH Grant to Help Teachers](#)

By MEIYING WU

[The University of Missouri has received a grant to develop stronger middle school science and math curriculum. The National Institutes of Health awarded the \\$1.25 million Science Education Partnership Award to MU. The program aims to provide professional development for teachers to help students with diverse backgrounds.](#)

William Folk, the MU professor of biochemistry who's leading the program, said science, technology, engineering and math (STEM) literacy elements are important.

"We're focusing upon students in middle school, especially students who are diverse learners from backgrounds where they may not have the adequately preparation for reading and writing that's expected of them to really be able to understand the science," Gaines said.

The program will enlist middle school science, English and special education teachers. Delinda van Garderen, professor in MU's Department of Special Education, said the ultimate goal is to improve diverse learners' interest and capability in STEM fields.

"It's important that we work with students as young as possible to help them get interested in science, engaged about science, but also learn the necessary skills in order to do science. So, what we're trying to do is help the teachers to develop materials and resources and literacy text to build students' skills in science," Van Garderen said.

The team is now looking for teachers interested in the program. The first teacher professional development workshops will begin in summer 2018.



[\\$1.25 million grant awarded to two MU professors](#)

By ALLYSON WALLENTA

Story generated by MU News Bureau release: [Supporting Middle School Science: MU Team Receives \\$1.25 Million NIH Grant to Help Teachers](#)

COLUMBIA – [Two professors from the University of Missouri have received a \\$1.25 million Science Education Partnership Award from the National Institutes of Health.](#)

Delinda van Garderen, professor and director of graduate studies in MU's Department of Special Education, and William Folk, professor of biochemistry in the [College of Agriculture, Food and Natural Resources](#) and the [School of Medicine](#), are using the money for a new program.

The program is going to help strengthen science, technology, engineering and mathematics skills in middle school classrooms, while providing professional development for professors.

“What this will do is help strengthen our students to be able to understand ideas related to science and to read the literature, to comprehend the literature, and to synthesize it, all those skills that are really vital and really critical for higher education and for moving forward in the field into some sort of career,” said van Garderen.

Folk says the program focuses on middle school students because many of them are at a disadvantage when it comes to learning these skills.

“Middle school is about the age where children begin to read to learn, rather than learning to read, and it's very important when they begin to read to learn science,” said Folk.

“Many children are struggling to read in middle schools. Knowing that, we shaped this program to really focus on strengthening the the literacy and conjunction with the science inquiries and that's really where we think this can be important,” he said.

Van Garderen said the program will specifically help students with learning disabilities or those who's second language in English.

Other MU professors and researchers are working with van Garderen and Folk as well, including professors from institutions in Ohio and Nevada.

According to a [press release](#), the group will be working with teachers “to develop multimodal texts connected to inquiry-based activities reflecting current Missouri and national standards, and help identify instructional practices that can support all learners in their classrooms.”

Van Garderen and Folk are looking for middle school science, English and special education teachers who are interested in the program.

“We're helping the teachers integrate these ideas about literacy and science in a meaningful way. And also, we're trying to capture their interest, we want the kids to be interested, we want them to be engaged, ask more questions, and want to find out more about science,” said van Garderen.

The grant will be disbursed over the next five years. The first teacher professional development workshops will take place in summer 2018.

MU receives grant to support STEM education

By THE TRIBUNE'S STAFF

Story generated by MU News Bureau release: [Supporting Middle School Science: MU Team Receives \\$1.25 Million NIH Grant to Help Teachers](#)

The National Institutes of Health have awarded the University of Missouri \$1.25 million as part of the institute's Science Education Partnership Award.

In a news release, MU said the money will be used to strengthen science, technology, engineering and math literacy and skills, provide professional development for teachers and assess materials' value for instruction.

Delinda Van Garderen and William Folk, both professors, are leading the program, the release said. The team, which includes other educators and researchers from MU and institutions in Ohio and Nevada, will develop texts and activities to help support all learners.

The grant will be given out over five years, with the first teacher workshops to be held this summer.



University Staff Under Strain, Says Climate Survey

By MIRANDA MOORE

The University of Missouri conducted a campus climate survey about a year after the resignations of former MU Chancellor R. Bowen Loftin and former UM System President Tim Wolfe. Faculty, staff and students at the Columbia campus were asked questions about their experiences with discrimination, support from campus administration and overall work and study environment. Nearly ten thousand people responded. The results suggested a lack of institutional support for students and employees, especially hourly staff.

At a town hall held in mid-September to discuss the survey, MU Chancellor Alexander Cartwright said that the sub-par findings were not unexpected.

“You know that the past two years have been some of the most difficult and challenging in Mizzou’s 178-year history,” he said. “And going into this survey, we knew that we might be getting feedback that would be difficult to hear. But our leadership felt it was important to collect your input.”

Many of the survey findings from faculty, graduate students and undergraduates mirrored grievances that were voiced during protests in the 2015 fall semester about the University’s response to incidents of racism and sudden cuts to graduate student health insurance.

But perhaps some of the most surprising results came from hourly staff. The university employs about four thousand hourly staff, and about one-third of them filled out the survey.

Staff cited a number of reasons for lower morale. They reported an increased workload without a corresponding raise and cuts to benefits and support services. Some said they felt like cheap labor, with one person saying they were treated like they were “a dime a dozen.”

Nearly two-thirds of staff felt like the workplace hierarchy prevented different voices from being heard equally. About four out of every ten staff members did not believe that faculty and administrators value staff feedback and about half did not feel like there were clear paths for career advancement, according to the survey results.

At the town hall meeting, Dr. Emil Cunningham, a researcher brought in from Rankin & Associates to conduct the survey and analyze the results, said that university staff are often overlooked across higher education, including academic research on campus climate.

“It’s also challenging to know that staff have practically no literature in the higher education field,” he said. “We’ve tried to put articles in. And we were told quite frankly that it’s outside the scope of the journal, because oftentimes staff are forgotten about.”

Hourly staff can be found across campus, from admissions to MU Health Care. They work with faculty, senior administrators and students. Cunningham said staff morale makes a big difference to a student’s campus experience.

“So what happens when that student comes into contact with a staff member for the first time, and that’s the experience that they’re having? It’s not going to be positive, it’s not going to be something they want to do, and that’s going to stay with them because as we always say, first impressions are lasting,” Cunningham said.

The survey was conducted in October of last year – several months before budget cuts were announced in June. With those budget cuts came a number of layoffs at all levels. Staff positions account for the highest number of layoffs - over 170 positions were slated to be cut at Mizzou. Long-term reorganization through fiscal year 2020 may result in further staff reductions to a workforce already under strain.

University spokeswoman Liz McCune said in an email that there are currently no plans to bring back positions that were cut, but that employees who were laid off will receive priority consideration for jobs that open up in the future.

Looking forward, Chancellor Cartwright announced last week that working groups will be formed for faculty, students and staff in response to issues presented in the climate survey. The groups will be tasked with identifying specific goals that could be accomplished within a year.

President Mun Choi cautioned during the town hall that change will take time.

“This is not going to be an endeavor that will take us to a finish line. We’ll always have to keep improving, because there is no finish line. We need to make sure in that process that we’re making progress each and every day,” he said.

MISSOURIAN

Gender, LGBTQ inclusion concerns were major theme in MU climate survey

By KATHERINE WHITE

Inclusion concerns for women and LGBTQ people emerged as a major theme in an MU campus climate survey conducted last fall.

Gender of the respondents was grouped into three categories: men, women and trans spectrum, which includes gender identities such as transgender, non-binary and genderqueer. Nonbinary and genderqueer are terms used by those who identify their gender as outside the categories of man and woman.

Among the findings of the MU survey:

- 68 percent of men, 65 percent of women and 50 percent of trans spectrum respondents said they felt “comfortable” or “very comfortable” with the overall climate at MU.
- When asked if they personally experienced exclusionary, intimidating, offensive or hostile conduct in the past year at MU, 36 percent of trans spectrum students said yes, with 61 percent of them saying it was because of their gender identity.
- For the same question, 20 percent of women said yes, with 32 percent saying it was because of their gender.
- The most common basis for these incidents of hostile conduct was gender/gender identity at 26.3 percent.
- 50 percent of trans spectrum respondents, 34 percent of women respondents and 31 percent of male respondents said they observed exclusionary conduct.
- 48 percent of LGBTQ (lesbian, gay, bisexual and queer) respondents witnessed such conduct while 32 percent of heterosexual respondents did.
- 17 percent of men, 22 percent of women and 44 percent of trans spectrum employees said they’d witnessed hiring practices they thought were unfair or unjust

Inclusion issues for women

Female respondents reported experiencing acts of sexism, such as being called misogynistic slurs, getting cat-called, or being told they “may be starting a family and wouldn’t be worth investing in.”

“Professor made comments on how women couldn’t do field work,” one respondent wrote. “Classmates make comments about women (i.e rape jokes) or mock other identities, etc.”

“Women are treated as second-class members of the community,” another respondent wrote. “Within my department, the gender issues are embarrassing.”

Several respondents reported experiencing a gender pay gap.

“In our dept., a woman pointed out to management that males were receiving higher pay and better opportunities/projects,” one respondent wrote. “She was then denied for promotion and not given a clear path for how to be promoted.”

“My male co-worker and I are a fantastic example. When it came time for promotion, all things equal, I tried to negotiate for a higher salary and was shut down before I could even present a case...later when he was up for the same promotion, he got...more than I did. The explanation is that he negotiated better.”

“I am a woman and am paid \$20,000 a year less than my male counterpart in my department. We have the same job title and similar responsibilities.”

[Being afraid to report sexual assault](#) was another common theme.

“Rape and sexual assault are a huge problem on campus, but the victims don’t usually report it because they are embarrassed and they believe nothing will be done except to tarnish their reputations and drag out the pain,” wrote one respondent.

Incidents of discrimination against men were also mentioned.

“In filling a recent open position in my office, my supervisor chose not to interview qualified male candidates.”

“Right now, only certain demographics are free to express their opinions. White males risk being labeled as sexist/racist, which makes them afraid to even attempt to discuss sensitive topics. This increases hostility and perpetuates divide and exclusion.”

Inclusion issues for trans spectrum respondents

Several barriers to trans spectrum students were mentioned in the report. One of the most common was restroom access, with 20 percent of trans spectrum respondents reporting they experienced barriers regarding changing restrooms within the past year.

“I am terrified to use community restrooms that are more than single toilet individual restrooms for those to call me out that I am in the wrong space,” one respondent wrote. “I will avoid many public restrooms on campus in fear that someone will hurt me or perceive that I am trying to hurt someone.”

Official documents were also reported as common barriers, with 20 percent of trans spectrum respondents reporting difficulty with MU forms, 17 percent reporting difficulty with surveys and 17 percent reporting difficulty with their student ID.

Some respondents touched on this, writing that “All the official documents pertaining to my status as a student here have me listed as the wrong gender” and “It was really nice on this survey to see things like asexual and non-binary. This is the first time I’ve ever seen these options on a Mizzou form.”

Some respondents reported instances of transgender people being bullied or threatened.

“I heard supervisors laughing about a transgendered [applicant] that interviewed for a position,” one respondent wrote. “While I do not know if that person was qualified, I know they were granted an interview (which to me implies they were). I thought it was rude, especially coming from supervisors in a public area.” (The report removed the exact language and used brackets to mark a paraphrase.)

Another respondent wrote, “In one instance I had someone write on my pronoun note so it said ‘it’ was my pronoun.”

Other respondents wrote that “this institution spends too much time trying to please too many subsets of people.”

“Transgenderism is a mental illness, and LGBT is not discriminated,” one respondent wrote.

“This ridiculous hyper-PC approach has gone too far,” another wrote.

Inclusion issues for LGBQ respondents

Many lesbian, gay, bisexual and queer respondents referred to campus and downtown as “not a LGBT-friendly environment,” citing often hearing homophobic slurs.

One respondent wrote, “I had a friend tell me that she no longer wanted to hang out with me because I was gay. I am also a female engineer and feel uncomfortable in a lot of my classes.”

“I’m a gay man,” wrote another, “and I hear homophobic comments like, ‘No, he’s a [homophobic slur against men]’ and ‘they’re disgusting’ on a semi-regular basis while walking on campus.”

About 20 percent of the people eligible took the survey, the results of which [were released in a 578-page report](#) on Sept. 18. In addition to inclusion concerns for women and LGBTQ people, the three other major patterns identified among respondents who experienced hostile conduct by the report were [race-related](#), [unhealthy and hostile dynamics](#) and fear of consequences and retaliation. The report also emphasized that the campus’ and country’s climate during the time the survey was taken affected its results, noting that the campus protests from the previous fall and the then-current presidential race were likely on respondents’ minds.



[Mid-Missouri entrepreneurs share struggles, successes](#)

By MEGAN FAVIGNANO

Mid-Missouri offers budding entrepreneurs and established companies many benefits but also some recruitment challenges, local business owners said at a panel discussion Monday.

During an event at Stephens College’s Kimball Ballroom, Guy Bouchard, who privatized Sinclair Research Center, LLC after working as the attending veterinarian at Sinclair Research Farm in the early 1990’s; Sarah Hill, CEO and chief storyteller of StoryUp VR, and Brant Bukowsky, Veterans United co-founder, discussed what they’ve learned since launching their businesses.

The group shared what benefits and struggles come with starting a company as part of Bringing up Business: Mid-Missouri’s Innovation Week, which concludes Friday.

Hill said startups in Columbia have a lot of people ready and willing to help them. She worked with several local resources including the Missouri Innovation Center when starting StoryUP VR, an immersive media company which sells mind spa kits for workplace, medical or emotional stress. She has a provisional patent on virtual reality therapy.

She said another pro to starting a company in mid-Missouri is the low cost of living, which means the money a new company needs for salaries, goods and office space is less than startups on the east or west coasts.

“Your ability to stretch the dollar as an entrepreneur is great,” she said.

Bukowsky said another benefit to central Missouri are the number of recent graduates from several colleges and universities who often look for work locally. Veterans United is a national lender based in Columbia helping veteran and military families with home buying and the VA loan process. The company, Bukowsky said, has focused on building a workplace culture that makes good employees want to stay.

Having those local job seekers is important, he said.

One struggle Bukowsky said comes with running a business in mid-Missouri is recruiting people with a certain expertise to move to Columbia. He said Veteran’s United has had success in recruiting some people. Hill said she also has noticed that same recruitment struggle. To combat it, she has been able to hire developers across the globe to work for her remotely.

Bouchard said mid-Missouri has many people with a farming background, which has been beneficial for Sinclair Research Center as it recruits employees. Sinclair Research specializes in biomedical research and has the largest herds of miniature swine in the country.

However, Bouchard agreed it’s difficult to find job candidates with more specialized skills who are willing to move to central Missouri.

“It’s very hard to bring people here,” he said.

Bouchard said he also can’t afford to pay some job candidates what they would make working in large cities, which sometimes deters prospective employees.

Hill said better bandwidth could be beneficial as more Internet companies pop up. And, she’d like to see more angel groups locally investing in startups.

Columbia’s location between Kansas City and St. Louis, she added, means startups have other options to find additional funding nearby.

The panel discussion Monday is one of several events this week focused on area businesses and entrepreneurship. The week kicked off with startup weekend and includes a “Shark Tank” style pitch event Wednesday night at the Blue Note and a breakfast on Thursday celebrating women in social entrepreneurship.

University of Missouri Vice Provost for Economic Development Steve Wyatt said the week’s list of events is an example of how the city, county, higher education institution and

others collaborate to let business owners and entrepreneurs know about local resources available.

The week, he added, also is meant to spotlight current businesses.

“Our business community is one of the keys to us being a vibrant community and region,” Wyatt said.

He described Columbia’s business and startup ecosystem as strong. Panelists on Monday also discussed evaluating risks and being ok with uncertainty as necessary skills for entrepreneurs. Bill Turpin, president and CEO of the Missouri Innovation Center, said thinking about the worst case scenario can help entrepreneurs cope with fears related to uncertainty.

“Before I start a company, I ask myself what’s the worst that could happen,” he said. “Convince yourself that even if that happened, you’re going to learn things.”

MISSOURIAN

Passionately P!NKed Out Photo

commemorates eighth year of breast cancer awareness

By GRANT SHARPLES

Tia Spears’ grandmother is the backbone of her family. When Spears’ grandmother was diagnosed with breast cancer, the whole family was worried.

In the end, however, she overcame it. The rest of the family, upon seeing their loved one beat breast cancer, realized they can overcome difficult obstacles in their lives too, Spears said.

“Breast cancer affects a lot of people,” Spears said. “It’s one of those things you never really know, and then when it hits you, it ... hits you really hard. Some people don’t survive, and that can affect their family in a major way.”

In support of her grandmother, Spears attended the eighth annual Passionately P!NKED Out Photo event Monday on Tiger Plaza at MU. People were encouraged to wear pink for a group photo to show support for those affected by breast cancer.

Spears wasn’t the only one in the crowd supporting a loved one.

Mechalla Adams' grandmother is a two-time survivor of breast cancer. Adams' grandmother lives in Texas, so she gets to see her grandmother one or two times a year.

"But every time I do, I'm really grateful to see her," Adams said.

Adams said supporting breast cancer awareness is a worthy cause regardless of how it impacts someone personally. Even if you're not directly affected by it, she said, chances are you know someone who has been.

"Say no one in your family has it, but maybe your friend's grandma might have it," Adams said.

Rebekah Green was there to support her mother, grandmother and great-grandmother who all had breast cancer. Green said she has been raised to be aware of it because it has been prominent in her family.

Both Green's grandmother and great-grandmother were diagnosed twice. Green's great-grandmother, who died a couple years ago, had a mastectomy, while her grandmother did not. Green said this shows the progress science has made and that not everyone needs a mastectomy now.

"We're fighters," Green said.

Green said that although people may be aware of breast cancer, they might not know the specific details. To name some examples, she mentioned the role that overall health plays and the age that people should start taking action to possibly prevent it. Not everyone understands what breast cancer entails, so people should become more aware of the situation.

"I think it's important for overall awareness; to know what's going on, what people are going through and how to help them," Green said.



Missouri AG Josh Hawley announces bid for US Senate

Missouri Attorney General Josh Hawley released a video Tuesday morning announcing his candidacy for U.S. Senate.

Hawley, 37, has emerged in recent years as a top Republican recruit to run against Democratic incumbent Claire McCaskill in 2018.

The [campaign's well-produced video](#) features Hawley, his wife, Erin and their two young boys. In the video Hawley says McCaskill is a part of the Washington D.C. establishment who has been wrong on every Supreme Court nomination over the past 11 years.

The announcement comes after two months of exploring the potential for a candidacy. He is in his first year of public office after defeating Democrat Teresa Hensley in the attorney general's race last November.

Hawley is a former University of Missouri School of Law professor. He has degrees from Stanford University and Yale Law School.

Similar stories ran statewide