

ARTS & SCIENCES



BLOWING THEM AWAY

OSU'S TRUMPET ENSEMBLE
BRINGS HOME THE GOLD ONCE AGAIN





A&S Dean Bret Danilowicz (in front) did a tandem skydive with Sgt. 1st Class Noah Watts of the Army's Golden Knights in January.

PHOTOGRAPHY / COLLEGE OF ARTS & SCIENCES

playbill

10

On The Cover

OSU's Trumpet Ensemble once again brought home the gold from the National Trumpet Competition.



2

A new course is teaching anyone who wants to learn how brewing beer works. Turns out, a lot of people want to learn.

School of Visual and Performing Arts

10

MUSIC: OSU's trip to the National Trumpet Competition

16

ART: New MFA program brings together array of perspectives.

20

THEATRE: Tulsa Ballet star directs new minor in dance.



Arts and Sciences Magazine is a publication of the Oklahoma State University College of Arts and Sciences.

All communications should be mailed to

OSU College of Arts and Sciences
ATTN: Arts and Sciences Magazine
205 Life Sciences East
Stillwater, OK 74078-3015

2016 © OKLAHOMA STATE UNIVERSITY

Oklahoma State University, in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, and Title IX of the Education Amendments of 1972 (Higher Education Act), the Americans with Disabilities Act of 1990, and other federal and state laws and regulations, does not discriminate on the basis of race, color, national origin, genetic information, sex, age, sexual orientation, gender identity, religion, disability, or status as a veteran, in any of its policies, practices or procedures. This provision includes, but is not limited to, admissions, employment, financial aid, and educational services. The Director of Equal Opportunity, 408 Whitburn, OSU, Stillwater, OK 74078-1055, Phone 405-744-5377; email: eeop@okstate.edu has been designated to handle inquiries regarding non-discrimination policies. Any person (student, faculty, or staff) who believes that discriminatory practices have been engaged in based on gender may discuss his or her concerns and file informal or formal complaints of possible violations of Title IX with OSU's Title IX Coordinator 405-744-9154. This publication, issued by Oklahoma State University as authorized by the College of Arts & Sciences, was printed by Heritage at a cost of \$6,619/6,000. #6409 3/16

staff

Editor

Dorothy L. Pugh '83

Art Director

Valerie C. Kisling

Photographers

Phil Shockley
Gary Lawson '83

Writers

Brian Petrotta
Karolyn Bolay
Jamie Hadwin, '10, '15
Shelby Holcomb, '15

College of Arts and Sciences

Dean

Bret Danilowicz

Senior Director for Development

Jayme Ferrell

Communications Coordinator

Brian Petrotta

YEAR INDICATES OSU COLLEGE OF ARTS AND SCIENCES GRADUATES.

From the Dean ...

Editor's Note: We thought a quick Q&A session with Dean Bret Danilowicz would be an excellent way to kick off this year's A&S magazine. Enjoy!

Q You are in your fifth year as dean of the College of Arts & Sciences at OSU. What have you most enjoyed?

A Without a doubt, witnessing the experiences and successes of students, faculty and staff is the most enjoyable part of being dean. Each day, I learn new stories that involve the amazing people of this college; it makes each and every day as dean rewarding.

Q In January, you participated in a tandem skydive with the Army's Golden Knights. Describe that experience.

A It was an absolute thrill! I was partnered with Sgt. 1st Class Noah Watts. He had over 4,000 jumps behind him, and he was funny and good-natured (the number of jumps being his most important quality, of course!). I was apprehensive through training and getting onto the plane — but from the moment I jumped, the nervousness vanished and the 60-second free fall was incredible. It was below freezing, but I never noticed the cold! I appreciate the opportunity to work with our ROTC cadre and future officers here at Oklahoma State!

Q The Council of College of Arts & Sciences (CCAS) elected you to serve as one of 12 deans on its board of directors. How does CCAS enhance arts and sciences higher education across the country?

A CCAS is comprised of deans of arts & sciences across the country, with over 700 members. Deans discuss what worked — and did not work — with administrative initiatives at their institutions, from student success to new academic programs to fundraising. Beyond a traditional conference, there are roundtable discussions of how to implement high-impact practices. You become networked to deans who can help you solve problems on your campus; it is reassuring to know that you are not facing these problems alone.

Q What is your ideal way to unwind after a long day of leading 24 academic departments in the largest college at OSU?

A When it is not too hot, I unwind by going for a long run with my wife, Kay. Yes, running for me is relaxing! Another would be playing board games with my family (e.g. 7 Wonders, Carcassonne, “penny” poker); the laughter from those games is a great tonic!

Q In what ways do you hope to see A&S grow in the coming years?

A Oklahoma State has asked the colleges to focus efforts on student success over the past few years. I've been proud to see the outcome in this college; our majors have had increased retention each year since 2012.

Additionally, all majors at Oklahoma State rely on courses offered through Arts & Sciences, and our departments have really stepped up to enhance student success across the university. A great example would be the Success in Undergraduate Mathematics initiative and its associated Mathematics Learning Success Center; our students are thriving in their mathematics courses, and we have become a national model for best practices in helping students learn math. I would love to see our success with students continue to grow; every student we help graduate is one more student who will have a successful career and help boost the state and national economies.



Brewing Something New

New online course teaches
'why' microbrewing works

By Brian Petrotta



2
COLLEGE OF
ARTS AND
SCIENCES

Tyrrell Conway pulls on his lab coat and prepares to deliver a lecture. It would be an ordinary day for the professor and head of the Department of Microbiology and Molecular Genetics at Oklahoma State University except that instead of interacting directly with college students, Conway is speaking to a camera lens.

He is lecturing on the metabolism of yeast as part of the College of Arts & Sciences' first Massive Open Online Course (MOOC) titled, "Brewing Microbiology." This is new territory for the scientist and the college but the MOOC generated immediate interest as both a credit and non-credit offering. In fact, by making the class available in both formats, it allowed for an unusual makeup of students.

"What I think is really interesting is when I hear a student is enrolled for credit and they're taking it with their parent, who is enrolled in the open course," Conway says.

The idea to teach a course on the microbiology of microbrewing sprouted from two seeds: Conway's growing interest in a rapidly growing industry and his department's desire to build student credit hours. Noting there are "thousands of courses" that teach the *how* of brewing, Conway saw an opportunity to discuss *why* the process works.

It proved to be an easy sell after meeting with Arts & Sciences Associate Dean for Outreach Bobbi Kay Lewis. She saw an opportunity to turn Conway's idea for an online credit course into a MOOC.

"I thought it sounded like a fascinating course," she says. "It went from conception to development very quickly after the initial discussion."

LOCAL TIES

It does not hurt to have a popular local brewery on board with the production. Iron Monk Brewery Company, founded in 2014 by OSU alumni Dave Monks and Jerod Millirons, not only opened their doors for portions of the video shoot but

also worked to promote the class. It just so happens Monks and Millirons share the professor's passion for science.

Monks earned his doctorate in molecular biology and Millirons graduated from OSU with a bachelor's degree in biology before pursuing his MBA. The two met while teaching biology at North Central Oklahoma College in Stillwater and discovered their mutual love of home brewing. Now their product is being broken down to its most basic elements for a worldwide internet audience to witness. Their cooperation proved vital to the project.

"We can't offer this course without those guys," Conway insists.

Part of Iron Monk's corporate ethic is to use grain from Oklahoma, which led Conway to make a connection with J.D. Drennen of 46 Grain Co. in Ames,

Brewing Microbiology: What to Know

Open to OSU students for credit or for free as a non-credit course to anyone with an internet connection.

100 percent online course

- Students who take the course for credit will receive three credit hours of upper division science. There are no prerequisites, though high school or freshman level biology and chemistry is suggested.
- Teaches the science behind microbrewing, covering topics such as microbiology of yeast, biology of grain, biochemistry in malted barley, chemistry of water, preservative nature of hops, and the human physiology of taste and smell.

Inaugural course began in August 2016 and future offerings are in the works.

For current information, visit: <http://asoutreach.okstate.edu/students/online/brew>



The late Dr. Ed Gula (left) offered Tyrrell Conway a spot in his lab, sparking the then-student's love of microbiology. His wife, Mary (right), stepped in to help the department after Dr. Gula's death.

LEARNING

You might think a professor with Conway's years of experience and level of expertise would be content to spit out a lecture and call it day. However, Conway took on the project to be a student himself.

"The MOOC has been a labor of love because I get to study," he says. "I am having the most fun when I'm learning something new."

That love of learning began in earnest his senior year at OSU. The late Dr. Ed Gula offered a spot in his lab, and Conway jumped at the chance. "Big Ed" passed away at age 54 while Conway was still a graduate student, but the beloved professor left a huge impact on the department. So did his wife, Mary.

"She was an amazing, brilliant, strong, sweet woman," Conway says. He recalls her stepping in to try to pick up the pieces in the department just two weeks after Big Ed passed.

Gula's legacy lives on today, thanks to a graduate fellowship he started at OSU. One of his first Ph.D. students, John Whitney, completed the endowment on that fellowship. Whitney retired as vice president of the Eli Lilly and Co. research labs and was honored as the 2016 Arts & Sciences Distinguished Alumni for Microbiology.

Conway stayed in academia. He secured a postdoctoral position at the University of Florida, where he received the U.S. Patent Office's 5 millionth patent (for creating recombinant *E. coli* that made ethanol) — a notable enough event that CNN found time around its Desert Storm coverage for a report.

The University of Nebraska hired Conway out of Florida and granted him tenure. He moved on to Ohio State University before returning to Oklahoma at the other Big XII institution. That move shocked family members; his brothers, aunts, uncles and father all graduated from Oklahoma State.

Oklahoma. He allowed the video crew to record some of the lectures in his rye fields, giving the course a true "on-location" feel.

On-campus collaborations also made Brewing Microbiology a success. Conway is quick to credit A&S Outreach with promoting the class and the Institute for Teaching & Learning Excellence with providing the technical talent and expertise to produce a quality online product.

"The university resources have been great," Conway says. "They think of things from the student's perspective."

Help also came within the department from first-year postdoctoral associate Jerreme Jackson. He handled much of the lab work, which often commanded two or three days of prep before the lecture could be recorded.

"I can't put into words how much groundwork goes into making a course available online for anyone in the world," Jackson says.

LEGACY

Conway just completed his first year as the microbiology head at OSU, where he is building his own legacy. From instituting a tagline, “Think big about small things,” to enlisting his dog, Chunk, in the Pete’s Pet Posse program, he has worked to build an identity for the program. Brewing Microbiology is his latest success.

“The high enrollment in both the credit and free MOOC indicates it will be successful reaching and engaging learners on campus and across the globe,” Lewis says. “The MOOC is an excellent example of the land-grant legacy emphasizing educational access and outreach.”

With the university as a whole trying to manage budget cuts, positive numbers are welcome — especially for one of the smaller departments on campus. Conway feels generating student credit hours through the MOOC serves the microbiology and molecular genetics department as well as Arts & Sciences as a whole.

“I think it’s important for us to contribute back to the college,” he says.

While the MOOC is bringing an unusual amount of attention to the department, Conway knows it is the quality of faculty, students and staff that makes the biggest difference. Just as he has enjoyed learning about microbrewing, Conway appreciates perspectives other than his own, and that quality helps attract talented people like Jackson.

Believe it or not, the Brewing Microbiology MOOC was not part of the sales pitch to entice Jackson to OSU. When he did find out about the course, though, his reaction was similar to many others: “I was going to ask Dr. Conway if I could enroll and take it myself.”

Instead, Jackson became involved in nearly every step of the project including speaking roles on topics he was particularly qualified to talk about “off the dome.” Jackson sees the value of the course is in teaching students to look deeper.

“The whole idea is to encourage students to think outside the box,” he says. “We want them to think of what they can do with the different curricula they’re taking, and that there is a scientific component to the products we consume on a daily basis.”

PHOTO: BRIAN PETROTTA/A&S



Tyrrell Conway (left) and Jerreme Jackson prepare a lesson in Brewing Microbiology for the cameras.

Arts and Sciences? Yes, please

Both sides of OSU's largest college blend perfectly with this study abroad course

By Karolyn Bolay

Many students working toward a science degree rarely have the opportunity to learn how to properly sketch and paint a landscape scene. But a study abroad trip to the Bahamas through the College of Arts and Sciences provides this unique opportunity.

Associate professor Liz Roth and professor Todd Halihan combined arts and sciences for the study abroad course. Students researched the hydrogeology of carbonate platforms for the science part of the class.

"Very few arts and sciences courses are actually both arts and science," Halihan says.

Several parents of participants wondered, why the Bahamas? Halihan says it was the perfect location for students to perform their own hydrogeology research projects.

"There are very few places in the modern world where limestone actually forms, so the Bahamas is one of the few active carbonate platforms in the world," says Halihan, a geology professor. "All on

one island, you have rock being made, rock being dissolved and the water changing from salt water to freshwater, so you have all the reactions."

The research projects led the students to several interesting parts of the islands, including a blue hole that the late Jacques Cousteau — known for his research on all water life forms — dove himself.

The art of the class included sketching and watercolors. The nature and landscape of the Bahamas provided a perfect background for students to learn.

"I was able to teach a quick class for them on how to draw," says Roth, associate professor in the department of art, graphic design and art history.

"Some of the students did really well with the

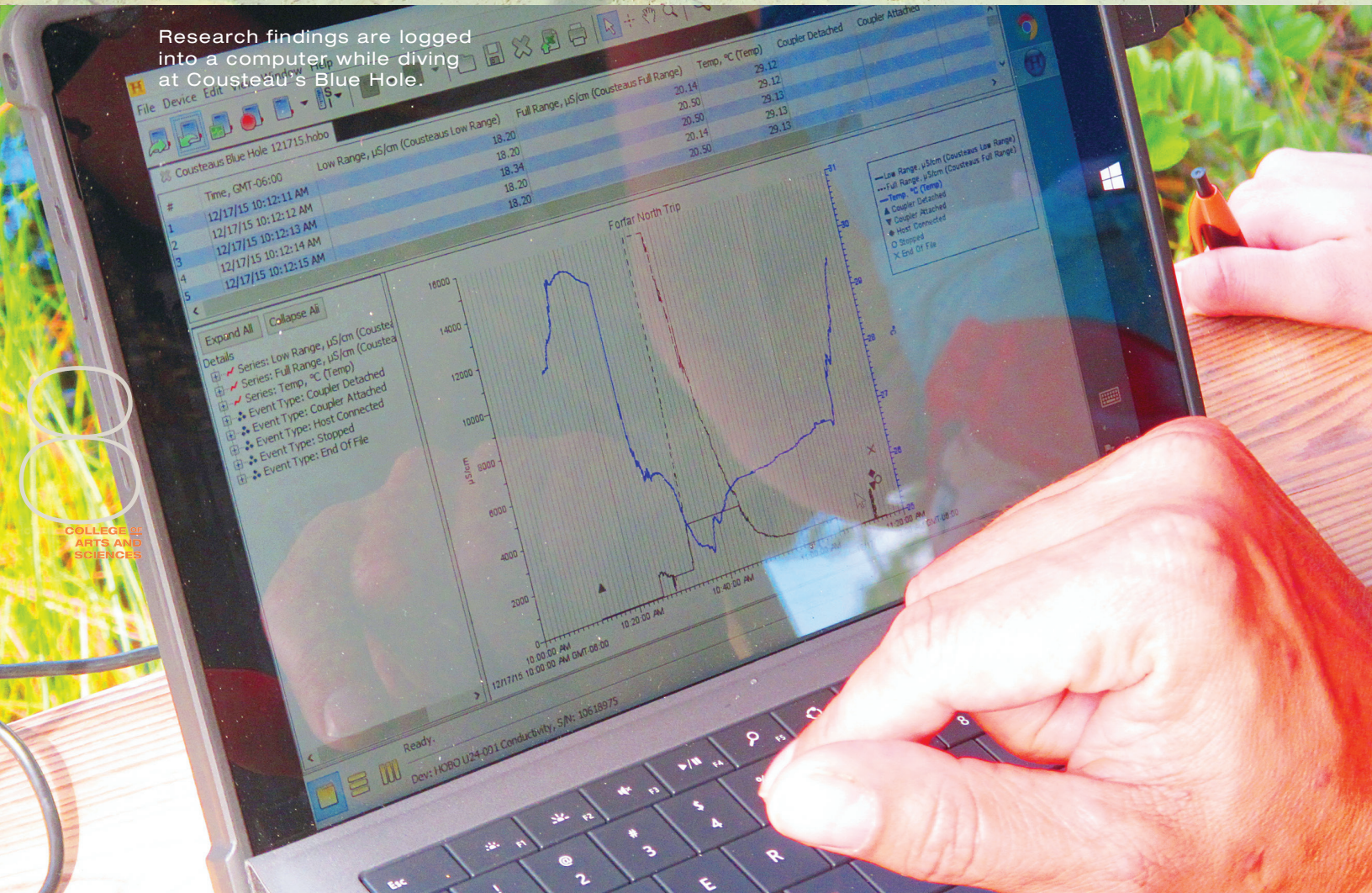
COLLEGE OF
ARTS AND
SCIENCES

A rainbow crosses the sky at the Forfar Field Station, where students stayed during the course.





Students take a break from research to pose for a group photo at Joulter Cays in the Bahamas.



Research findings are logged into a computer while diving at Cousteau's Blue Hole.

“They [students] got to sing in the Christmas pageant because the locals fully expected us to, so it was hard to turn them down.” — Todd Halihan

drawing. At one point, we went to Fresh Creek and some of the students who weren't eating conch were out sketching.”

“She [Liz Roth] actually taught us how to draw and there were plenty of drawing opportunities, especially for landscape,” says Cullen Pickens, graduate student in geology. “I really enjoyed the drawing aspect. It was fun to sit there and sketch and see it [the Bahamas] from that perspective.”

The course also provided a lesson in culture and hospitality.

“We snuck in quite a bit of culture,” Halihan says. “They also got to eat a bunch of food they never had in their life.”

Roth agreed the conch was great, as was the local generosity.

“The folks who work there at the field station were very informative and really assisted people to understand a bit about the unique ecological environment they have there,” Roth says.

The students also took care of the Forfar Field Station — located in North Blanket Sound, Andros Island.

“We stay at the field station, which is somewhere in between because it is not a resort paradise,” Halihan says. “It is a family island. So you're staying in a cabin with no AC and no heat. You're eating cafeteria style — by no means fancy. It is old school, cabin style camping. But the other thing is that the students got to see a different version of life than what you see up here.” That included being responsible for serving the food at the field station.

The students also experienced true island life, which involves importing food and other necessities.

“We ran out of coffee for a day and the reason we did is because one of the storms came by and the food barge couldn't get in to give us food and coffee,” Pickens says. “So half of us had to go without coffee for a day.”

Because the trip took place during the holiday season, students experienced the local holiday traditions, including the annual Christmas pageant.

“They [students] got to sing in the Christmas pageant because the locals fully expected us to, so it was hard to turn them down,” Halihan says.

Pickens says the study abroad trip offered him opportunities to learn about multiple areas, not just hydrogeology.

“It was a whole new world,” he says. “We didn't learn just hydrogeology, we learned everything from marine biology to history to culture to food. They had unique, very interesting food and the snorkeling was great. Going around and just seeing how the island works.”

The course had 10 students. Halihan and Roth are planning to continue the course next year and open it up to the broader university.



Liz Roth's sketch of Cousteau's Blue Hole in the Bahamas.

“This next fall will be a little bit different, since we are adapting it to be an introductory geology class,” says Halihan. “This will allow more students to participate.”

Halihan also has a long-term goal for the hydrogeology course.

“[Forfar Field Station] is a really good facility for geologists, and we have some of the best carbonate geologists in the world in our department,” says Halihan. “So it ties in with our research and teaching efforts. It is also home of the Bahamian Ag School that is trying to get started. It meets well with all the missions of OSU. So if we ended up with a long-term program, where we did work with College of the Bahamas and some of their programs, that would be really useful for both campuses.”

Blowing Them Away

OSU ensemble tops National Trumpet Competition again

BY GRANT HARPER

PHOTOS: PHIL SHOCKLEY



10

COLLEGE OF
ARTS AND
SCIENCES

The National Trumpet Competition Large Ensemble Division Winners:
(from left) Ian Mertes, Lorenzo Diaz, Grant Harper, Noah Mennenga,
Greg Evraets, Daniel Montalvo, and Kevin Kamau.

Editor's Note: Grant Harper is an OSU senior, majoring in trumpet performance and vocal music education. He kept a travel log for A&S magazine during his recent trip to the National Trumpet Competition. The highlights follow:

DAY 1

NTC: The National Trumpet Competition. This year, Columbus State University in Georgia graciously played host. Hundreds of soloists and ensembles ranging from junior high to graduate students showcased their talents for the best players and teachers from across the country.

For us, the students of Oklahoma State University, NTC has become an annual trip. In 2016, four soloists (two undergraduate and two graduate) and three ensembles were competing. Dr. Ryan Gardner, our teacher and ensemble coach, has built an NTC dynasty at OSU.

We have been preparing for this competition since August, and finally the day came for us to depart. Tuesday, March 8, began with every member of the trumpet studio meeting at the Seretean Center to load cars and head to the Tulsa airport. We arrived in Atlanta around 5 p.m. Eastern, rented cars and got on the road to Columbus. My car was filled with a great amount of enlightening conversation as well as the 1979 recording of Leonard Bernstein conducting a performance of *Symphony No. 5* by Shostakovich with the New York Philharmonic. We have to be nerds somehow.

After checking into our hotel and getting dinner, we found a janitor who opened the orchestra room at CSU for our rehearsal. All three groups ran our competition day routine: small spots from our pieces followed by full

runs. The Silver Ensemble, a quartet, begins with their arrangement of J.S. Bach's *Prelude and Fugue in G minor*. Next, the Black Ensemble, a septet that I am in, hits our problem spots and performs a full run, an arrangement of Rimsky-Korsakov's *Russian Easter Overture*, arranged by Dr. Gardner. Finally, the Orange Ensemble, a quintet that is performing "Bacchanale" from Camille Saint-Saens' opera *Samson et Delila*, thought that they would do spot checks, but instead they cranked out the best full run of their piece to date! So we packed up and called it a night.

DAY 2

Day 2 of our trip was much more relaxed, with no flying and minimal driving. The only thing on our minds was the competition. One day left to improve and solidify our ensembles. Morning rehearsals at CSU were simple: spot checks and runs. All three groups came in, acted like it was the actual competition day, and each group performed wonderfully.

After lunch, Dr. Gardner, the four soloists and I returned to CSU to rehearse with pianists. Each soloist had 30 minutes with a pianist to rehearse — the only time the soloists get to work with the pianists until they take the stage on Friday. The times were all back-to-back, and we returned to the hotel around 4:30 p.m.

During our second rehearsal of the day, all three groups performed well, but we each needed to work on intonation and being together throughout the entire piece.

After dinner (capped off by a cookie sundae and a "Happy Birthday" serenade to me on my 22nd birthday), we settled in for the evening, all of us feeling some level of nerves over tomorrow's competition.

DAY 3

Competition day has arrived for the ensemble division semifinalists.

"Next to perform, the Oklahoma State University ensemble performing *Russian Easter Overture* by Rimsky-Korsakov, arranged by Gardner."

Sophomore Kevin Kamau led us onto stage. We looked out into a 2,000-seat hall that dwarfs the Seretean Concert Hall of only 800. Lorenzo Diaz, a second-year master's student, leads our bow. I heard the breathing of everyone down the line: a bit shallow but still confident. Freshman Ian Mertes began the piece, and we took off. Seven and a half minutes later, we finished with our unison D, hearing our sounds resonate for what seems like ages. The audience erupts. Now it was up to the judges to decide if we were good enough to make the cut.

When the OSU quartet finally took the stage, our nerves were a little visible from the audience. Sophomore Bryson Tuttle, who began completely alone, had shaking hands. The performance went



OSU trumpet performance and vocal music education senior Grant Harper celebrated his 22nd birthday at the 2016 National Trumpet Competition in Columbus, Georgia. He helped OSU win a national championship in the large ensemble division.

wonderfully as the group put more music into a Bach prelude and fugue than should be allowed.

We headed back into Legacy Hall to prepare for our quintet's performance. This group being the reigning national champions, the crowd grew. The group was greeted by a large gust of applause and cheering. By the end of the piece, no one could believe what was just heard. The sounds filled Legacy Hall for several seconds after the cutoff. It was phenomenal.

As the opening concert was coming to a close, the audience got more and more antsy, awaiting the results. Finally, an NTC board member took the stage: "The Large Ensemble finalists are the University of Texas, Oklahoma State University and Central Michigan University."

DAY 4

With the ensemble competition over with, we looked forward to a more relaxed day going to the exhibits and listening to solo performances.

The exhibits are a special part of the competition. Companies that produce everything trumpet show up with their shiniest and best products to tout to young musicians looking to push their playing to the next level. Many times, students will walk out with new horns. It is also a good time for teachers to try horns that they may want to buy for their schools. Dr. Gardner goes straight to the source for us. He is a Bach performing artist, so he makes the exodus to the Bach

factory to try out horns that his students will get to play for free when we're at the school. However, this is a great place for the students to try out horns on their own.

With our experiences at the exhibits wrapped up, we began our first of four competitors in the solo division. First up was Lorenzo Diaz, a second-year master's student from Duncan, Okla., who is also a part of the large ensemble. He stepped on stage in a regal purple button-down shirt and played *The American Concerto* by Ellen Taaffe Zwilich. It's not a very well-known piece of music, but it is one of the hardest from the modern repertoire.

Next was Justin Weisenborn, a first-year master's student and member of OSU's quintet. He performed the *Tamberg Trumpet Concerto*, another of the hardest pieces in the modern repertoire. Tyler Murray was the last of the four OSU performers for the day. The senior from Checotah, Okla., filled much of the 2,000-seat concert hall with his sound.

DAY 5

Dr. Gardner asked us to attend the high school semi finals around 11:30 a.m. to hear some prospective OSU students. The three were really talented and impressed us greatly, playing pieces that some of us college students would not dare to play because of their level of difficulty.

A short lunch later, performance preparations swung into high gear.



Dr. Ryan Gardner has built a National Trumpet Competition dynasty at OSU.

PHOTO: BRUCE WATERFIELD

13

We struggled to find an open room suitable for warm-ups, which didn't help the tension level among us. The 10 minutes we were to get in our official warm-up room didn't help that much; room monitors interrupted us every couple of minutes to count down how little time we had left to prepare in there.

The University of Texas Trumpet Ensemble preceded us on stage. Its wonderful performance motivated us further. I took the stage with the ensemble, feeling confident and knowing we would do well.

Ian Mertes began our piece, and from the first note I could tell something was wrong: There was a weird fuzz in his sound. After the longest eight minutes of my life, we finished our run. There were lots of little mistakes (slight timing errors,

chipped notes, chords not as well in tune) but no glaring problems, and for that I was grateful.

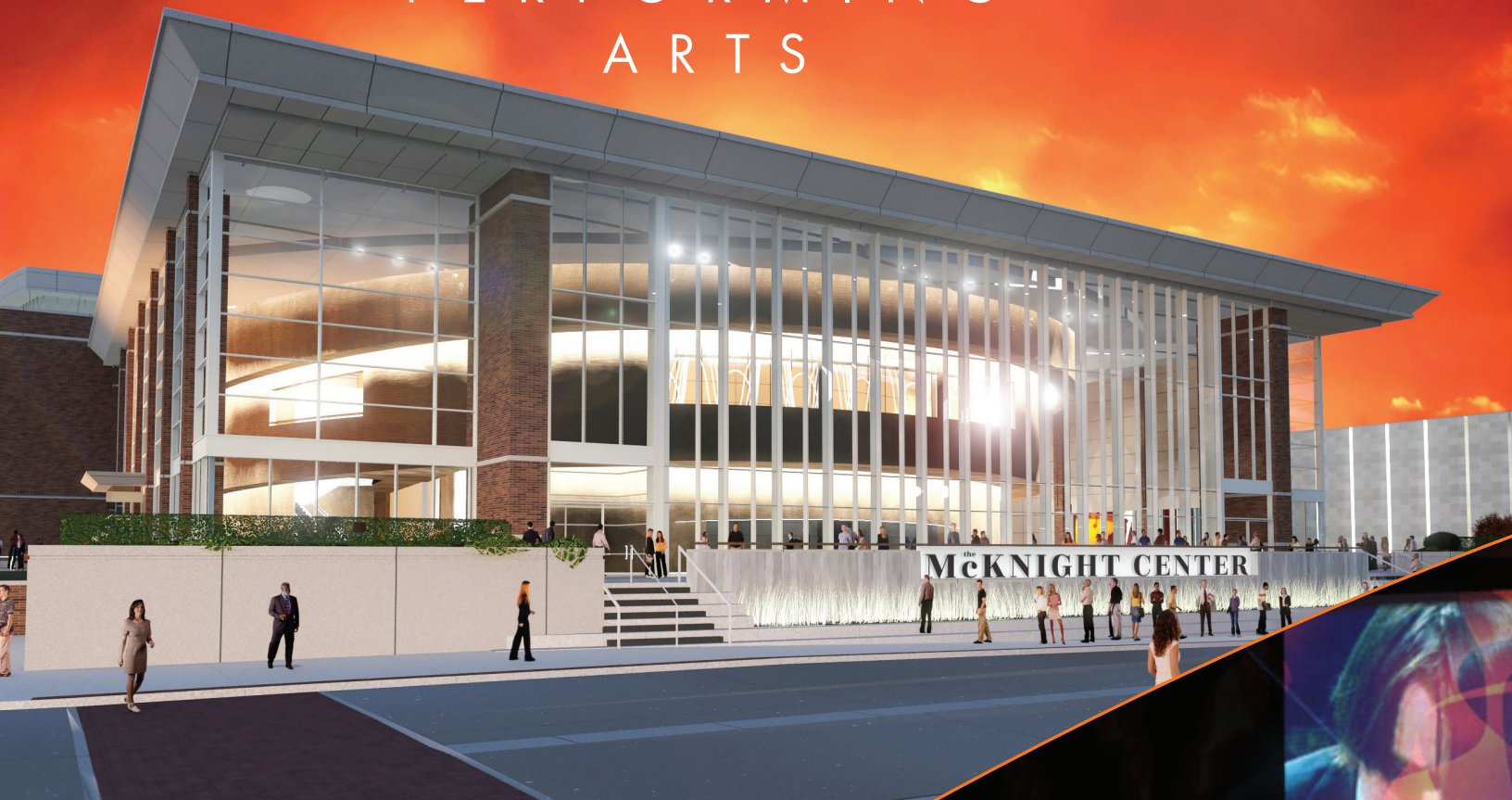
After getting coffee and a little shopping, we returned to the RiverCenter to hear the graduate and undergraduate solo finalists as our Justin Weisenborn was one. His second run of the Tamberg Concerto was even better than the day before. I knew that he would be hard to beat — and he won the Graduate division of NTC.

A little while later, another announcement regarding the Maller Trumpet Large Ensemble Division:

“In first place, with a cash prize of \$5,000, Oklahoma State University.”

the McKNIGHT CENTER

FOR THE
PERFORMING
ARTS



“

We have a tremendous history of music in our state. The McKnight Center will attract distinguished and emerging Oklahoma artists, songwriters and producers not only for performances, but also the opportunity to work with our students and enrich the performing arts culture at Oklahoma State.”

- BURNS HARGIS, OSU PRESIDENT

The McKnight Center for the Performing Arts at OSU will be an epicenter for the arts, attracting celebrated national and international programs, featuring notable performing arts productions.

The center is named for OSU alumni Ross and Billie McKnight, whose \$25 million gift to create a programming endowment was announced in March 2016. They are joined by other arts visionaries who have donated \$1 million or more to the project. Known as the McKnight Center Patrons, the group is growing as fundraising for the project continues.

OSU and the OSU Foundation seek to raise an additional \$25 million to complete the vision for the building and program endowment.

The McKnight Center will **ENCOURAGE** discovery, **PUSH** educational boundaries and **REDEFINE** Oklahoma State's influence in the arts with world-class programming unique to the region. It will be a modern venue for OSU's talented students, accomplished faculty and members of the community to enjoy.

Programming will encompass a variety of musical offerings and theatrical performances. It will celebrate the rich and thriving

Oklahoma music community that produces impressive Grammy, Emmy and Tony Award winners in addition to successful professionals in the music industry.

The new center will serve as a creative melting pot for Oklahoma State. Theatre and music students will interact with touring artists, attend masterclasses and participate in performances and productions.

The McKnight Center will enrich and enhance all aspects of the Oklahoma State family. It will attract and bring together students, professors, performers and the art community around the nation to enjoy and create expressive works of art.

Please contact McKnightCenter@OSUgiving.com or 800.622.4678 to find out how you can support this project.

WHAT PART WILL YOU PLAY?

McKnightCenter.okstate.edu

A Diverse Future — By Design

New MFA program brings
together array of perspectives

By Brian Petrotta



16
COLLEGE OF
ARTS AND
SCIENCES

Associate professor Phil Choo's design of this brochure captured a regional award by Art Directors Club Tulsa and a national award from the University & College Designers Association, who also exhibited the piece at the 2016 UCDA conference.

Jim Hamilton Jr., OSU Spirit Rider © 1984, Estate of Jim Hamilton Jr.

One boy moved from Mexico to the United States at age 12. Another earned a college degree in South Korea before immigrating. And a third left Iran at age 13, finished his high school equivalency in the U.K. and started junior college in the U.S. at age 15. Two things tie the three of them together: taking risks and starting a Master's of Fine Arts in Graphic Design at Oklahoma State University.

Mario Bocanegra, the boy from Mexico, will be one of six newly admitted graduate students in the program. Phil Choo, from Seoul, South Korea, is the graduate program director, and Pouya Jahanshahi is a third-year assistant professor in graphic design. Each brings a fascinating perspective to the discipline, which is exactly what faculty members had in mind when creating the program.

"We wanted a diverse group so they could complement each other," Jahanshahi says. "Much of graduate learning is to learn from each other."

OSU's MFA in graphic design becomes its first graduate program in studio art (there is an existing program in art history). It will encompass three distinct areas: visual communication, motion graphics, and interaction design (sometimes called user experience design or UX design). According to Choo, no other program in the Big 12 Conference has that combination.

With national organizations already noticing OSU's undergraduate work, all six allotted slots were quickly filled. In fact, the goal for 2016-17 was to offer three or four spots and grow the program from there.

"We're very thrilled," Choo says. "Fortunately we have a good group of students from different backgrounds, geographical locations and age groups."

Indeed, with students from India, Korea, New York and Oklahoma, ranging in age from recent college graduate to 44 years old, the student body is a diverse cohort. That level of diversity reflects the faculty and helped persuade Bocanegra to

continue his studies after graduating with his bachelor's degree in fine arts from OSU in May 2016.

"I feel like there will be more surprises," he says. Bocanegra had many of the faculty members as an undergraduate, and he's looking forward to all aspects of the graduate program, including research and teaching. Each student is required to take a teaching practicum during their first year and will be able to teach lower-division design courses.

That is all part of what makes the MFA a terminal degree for the discipline. Graduates of the program will have the ability to work in industry or academia, making the MFA equivalent to a doctorate. Choo is excited by what OSU has accomplished in getting the program off the ground but feels the success of the program ultimately relies on its graduates.

"I want the students to become professors or leaders in graphic design, and our program will grow up with that support," he says.

Both Choo and Jahanshahi feel they grew up during their graduate school years.

For Jahanshahi, this was almost literally the case. He was 15 when he came to the United States to live with his uncle in Los Angeles. At 13, his parents moved him from Iran to London. His father was allowed to leave Iran for business purposes and the whole family migrated to the U.K. to at least temporarily escape the bloody Iran-Iraq War. In his two years there, Jahanshahi studied for and passed all five equivalency exams in the U.K. to qualify for college. All he had to do next was change his country, his language, and start college at age 15.

"Luckily, I was tall," he jokes.

Because Jahanshahi was not born into the family of a master artist, he had no future as one in Iran. In the U.S., he discovered all sorts of careers he could pursue as an artist. Still, he had to sell his parents on the idea.

PHOTO: BRIAN PETROTTA



Pouya Jahanshahi, a third-year assistant professor in graphic design, says the new program is designed with diversity in mind.

“We looked at what we are as a land-grant institution and saw that what distinguishes us from purely fine arts schools is a spectrum of science and knowledge they don't have.”

— Pouya Jahanshahi

“I had to convince my parents, who had sent me across the ocean at great expenditure, that a career in the arts and design had a future,” Jahanshahi says.

He eventually moved on to obtain his master's degree with a focus on motion and semiotics, at California State University, Fullerton, where he was introduced to the first Macintosh computers. Jahanshahi still keeps one of the relics in his office at OSU. That degree led to work with advertising and design companies, but something was missing.

Twenty years after leaving Iran, he returned and came face-to-face with his ethnic visual culture — the missing piece. He pursued his MFA at California Institute for the Arts, keen to develop a hybrid visual identity for his personal graphic voice.

Jahanshahi credits a class called “Image Making” that involved picking a designer and trying to make things like

that designer for taking him out of his “safe space” and pushing him to truly define who he was.

“That's what I needed to do the whole time,” he says. “It brought out the Iranian in me and the immigrant in me, the hybrid visual thinker. It was about both finding my identity and allowing myself to fail to find something new out of that.”

Choo also sees success coming from taking risks. Like Jahanshahi, Choo found work as a professional designer immediately after graduating from college but felt there was more to know. He decided to study in the U.S. and found a home at Iowa State University.

It was not an easy transition for he could read and translate English but speaking the language had not been part of his education. He soon found his American classmates were happy to help him practice his English. He enjoyed researching interaction design, which had just begun to be studied at the time, and especially took to leading a classroom.

“I didn't know I could teach until I had an opportunity,” he says. “Since then it's become a career, and that's been 14 years now.”

Bocanegra never had Choo for a teacher as an undergraduate, but he got to know the professor through an internship with SST Software in Stillwater. Choo pushed the soon-to-be graduate to apply.

“He mentioned the MFA program to me and I was fascinated by it,” Bocanegra says.

The department, under the guidance of Rebecca Brienen (who also serves as the director for OSU's School of Visual and Performing Arts), is justifying such enthusiasm with cutting-edge equipment such as eye-tracker technology, laser cutters, and 3D printers. The department also offers unique opportunities for interdisciplinary collaboration with entities across campus such as the App Center, engineering, broadcast journalism, and fashion

Mario Bocanegra created this poster for his senior capstone graphic design project at OSU.



merchandising. As much as anything, that is what will set OSU apart from the competition.

“We looked at what we are as a land-grant institution and saw that what distinguishes us from purely fine arts schools is a spectrum of science and knowledge they don’t have,” Jahanshahi says.

Bocanegra is one of six who will be the first to take advantage of these opportunities in the new MFA program at OSU. They will be pushed, pulled, and offered a broad range of possibilities and perspectives. What they take from the program will ultimately come from within.

“The most important thing is the curiosity and willingness to take a risk,” Choo says.

PHOTO: BRIAN PETROTTA



OSU student Garrett Adams created these branding materials for a fictional restaurant called “Gigabytes.” These examples were featured at OSU’s 2016 Senior Graphic Design Capstone exhibit.

Shall We Dance?

OSU's Department of Theatre adds a dance minor

By Shelby Holcomb



20

COLLEGE OF
ARTS AND
SCIENCES

This semester, Oklahoma State University's Department of Theatre is turning a new page: Students will finally be able to earn a dance minor, an opportunity that will do wonders for aspiring performers and educators, as well as possibly open doors for future changes in OSU's College of Arts and Sciences.

Powered by department head and professor Andrew Kimbrough and adjunct instructor of dance Alexandra Bergman, the program will be on par with those offered by nearby universities due to this fresh emphasis on the arts.

The program is open to students just beginning their undergraduate journeys as well as those wanting to broaden and further develop their artistic knowledge and skills. Because the program doesn't require an audition process or previous experience, it has already set itself apart from similar programs.

A year ago, OSU began offering dance classes such as modern and ballet — and to say they are a hit is a bit of an understatement.

"Every course has been filled to capacity, and students from every college on campus have enrolled," Kimbrough says. "And this was before the minor was announced. Clearly, students have the desire to continue their education in dance even though they are majoring in other subjects."

A key player in the OSU dance world is Bergman, who came from Tulsa Ballet with an outrageously impressive dance career.

"I cannot overstate just how significant Alexandra has been for dance at OSU," Kimbrough says. "Her background and expertise are not easy to come by, even at the university level. The students have loved her and know that, in her, they have a rare treasure."

Centered on fundamentals and flexibility, Bergman's teaching methods are sound and effective, formulated in such a way that they can be successfully implemented with all levels of dancers. She tends to follow the Russian Vaganova

method — a ballet approach, created by Russian dancer and pedagogue Agrippina Vaganova, that fuses components of traditional technique-driven French style with the strength, artistry and musical proficiency of Italian technique. She also improvises as needed to accommodate students.

"I want my students to walk away with the knowledge of correct working habits in the fundamental exercises used in ballet and modern classes," Bergman says. "This knowledge will allow them to continue to improve while keeping their bodies free from injury in any future dance classes they take."

Full of encouragement, creativity and challenges, Bergman's classroom is a

For students enrolled in ballet, a day in the classroom typically consists of a well-rounded warm-up centered on stretching, *barré*, and center and across-the-floor exercises. Bergman performs alongside the students — with exemplary technique — and often walks around the room providing one-on-one critiques and tips. Students concentrate and work diligently, improving and broadening their overall sense of technique and artistry while performing to a selection of tasteful, complementary music.

Bergman's methods center on helping students learn about and connect with their bodies, as well as understand rhythm, timing and efficiency. Toward the end of the session, the class may occa-



Alexandra Bergman performs a grand jeté in William Forsythe's *Vertiginous Thrill of Exactitude* with Tulsa Ballet.

PHOTO COURTESY OF TULSA BALLET

place where students can focus on themselves, the art and the two combined. Bergman has high expectations, as most of what she knows and has lived is everything ballet and modern.

"I would say that Alexandra's teaching method is challenging but incredibly helpful," says Scarlett Cox, a recent OSU Spanish program graduate who took Ballet II as an elective. "She's a strict teacher but also very understanding and patient. I would definitely recommend her to anyone wanting to take ballet. Her passion for the art is very obvious and contagious!"

sionally learn, review and/or perform a routine or two. The structure of each class is always the same, but the exercises and combinations are ever-changing within the classes' fundamental framework.

"I want students to leave with a greater appreciation for dance as an art form," Bergman says. "I want students to understand the discipline and high expectations necessary to be a professional dancer, and I want them to see those results on stage when they attend live performances by professional companies. I also want them

to enjoy the movement of dance and realize that it is also a wonderful form of recreational exercise and expression.”

Bergman, who retired from the stage in May 2013 after performing and teaching all over the world, was born in Sweden and spent most of her early years on Long Island, N.Y. There, she attended Seiskaya Ballet Academy, where she trained under the great Valia Seiskaya.

Bergman then joined the Huntington (N.Y.) Ballet as a continuation of her

I and II, Jazz, Tap, Dance Ensemble Practicum, Musical Theatre Dance and Choreography.

“I hope the dance minor program will allow students with prior dance experience the opportunity to continue that training at OSU,” Bergman says. “It is hard for many students who have danced through out their childhood to give up that portion of their well-being once they go to college. The dance minor is also a wonderful complement to the Theatre



LEFT: Student Allie Miller ends the Ballet II class repertoire with a final pose.

RIGHT: Ballet II students review class repertoire, a piece they've been working on all semester.

education, before kicking off her professional career with Tulsa Ballet. There, she served as an apprentice and rose through the ranks to principal. She performed lead roles in countless classical and contemporary works by prominent choreographers, including Val Caniparoli's *Lambarena*, Ma Cong's *Carmina Burana*, Nacho Duato's *Arenal* and *Rassemblement*, Balanchine's *Theme and Variations*, and others.

While she serves as an adjunct dance instructor at OSU, she continues to teach for Tulsa Ballet.

The dance minor is composed of a minimum of 16 credit hours — five credits in theory, four credits in required technique courses and seven credits of technique electives. Some examples of classes are Introduction to Dance, Dance Improvisation, Ballet I and II, Modern

Department.”

“President Hargis has been investing so much energy in enhancing the landscape of the Arts at OSU, and we are trying our best to complement his vision,” Kimbrough adds. “The dance minor is our first step toward a more comprehensive vision for performing arts programs, especially in musical theatre and opera.

“We've still got some big obstacles to overcome,” he continues. “OSU Stillwater does not have a dance studio available for classroom instruction, and the budget situation challenges our ability to bring in full-time instructors. But we're working to address these issues.”

For more information about the dance minor program, visit theatre.okstate.edu/minor-in-dance.

“There is a vitality, a life force, an energy, a quickening that is translated through you into action, and because there is only one of you in all time, this expression is unique. And if you block it, it will never exist through any other medium and will be lost.” — Martha Graham



Tell Me a Story

New SMSC head believes in strong foundation for success

By Dorothy L. Pugh

PHOTO: PHIL SHOCKLEY/UNIVERSITY MARKETING



“Being a great storyteller leads to being great in anything we do — being a great journalist, a great PR person, a great ad person, a great doctor, lawyer, president of a company.”

— Craig Freeman

Stories. Where would we be without them? Reading a blank magazine, that’s for sure! Stories form the basis of everything we do: They help us relate to other people, find success in our careers, keep relationships on the level and so much more.

That’s why Craig Freeman, the new head of the School of Media and Strategic Communications in Oklahoma State University’s College of Arts and Sciences, sets his school’s main goal as creating great storytellers.

“I think what we do is make great storytellers,” he says. “Being a great storyteller leads to being great in anything we do — being a great journalist, a great PR person, a great ad person, a great doctor, lawyer, president of a company. Sometimes people change careers, and we want to make sure that they are great communicators, great storytellers every day, in everything they do.”

Think about it, he says: “If you’re an entrepreneur, you have to tell your story. If you’re a journalist, you’ve got to tell the story about the things that you’re covering.”

As prime examples, Freeman cites such alumni as Ziva Branstetter and Cary Aspinwall, who were finalists for the 2015 Pulitzer Prize in Local Reporting for their *Tulsa World* stories on a botched execution in Oklahoma (see the impressive entry at okla.st/2aEdMqj).

Branstetter praises the school: “I wouldn’t be the journalist I am without that education.”

Freeman, who came to OSU two years ago after 14 years at Louisiana State University, sees the skills the SMSC teaches as vital everywhere.

“We stick to the values that are most important: You want to be able to read analytically, you want to be able to write effectively, you want to be able to think critically. And so those are the basics.”

Sticking to the basics is certainly paying off for the SMSC. Two students were selected to participate in the 2016 William Randolph Hearst Foundation’s Journalism Awards, and the Society of Professional Journalists honored entries from the *O’Colly*.

“In terms of potential, our students are nationally competitive right now,” Freeman notes. “But we want to compete on a regular basis. We get amazing students from across the country. We’ve got students from 38 different states now.

“We’re America’s best-kept secret.”

The secret may be out as OSU students are making names for themselves, he says.

“Hands down, in this country, nobody outworks a Cowboy. Nobody. They go to New York (to work), and they just kill. They go to Amsterdam, and they just kill,” he says, noting that their work ethic begins early: “Nobody works harder than our awesome students. The way they work makes us work harder. We can’t coast. These students are going to put in the work, so you’ve got to put in the work to stay a step ahead of them every day — which is a ton of fun.”

Freeman also heaps praise on the “awesome faculty” and the innovations the school is continually devising.

Some are major lower-level changes, such as rethinking the introduction to writing class. “We used to teach our intro class to 150 people. Now we teach

it to 20,” Freeman says. “I don’t think you can teach writing to 150 people at a time. We are making sure students know how to write well.”

Other innovations include a partnership with the Edmon Low Library that focuses on working with virtual reality. Another library partnership focuses on the use of social media in determining what attracts and keeps readers. A student in multimedia journalism is doing her thesis in conjunction with OSU’s Department of Theatre, using analytics and social media to help attract larger audiences for OSU productions. A television show produced on gameday Saturdays at OSU with Tyler Media is opening eyes and doors.

“We want to share our knowledge with everyone, so we can make our community better,” Freeman says.

Barbara Allen, the director of student media, has taken steps to enhance student offerings and experiences, he says, calling her an “edupreneur” who is helping us figure out what’s next.”

“Barbara Allen has turned student media around,” Freeman says. “Student media was losing money; now it’s not. She created Archhouse Media, which does social media, websites and integrated marketing campaigns for local businesses. We’d always get calls, ‘Can you get me a kid who can do a website?’ And now it’s all in-house and somebody is accountable. Student media gets the money and the students, who are paid, gain experience. Our video production is the best in town.”

Freeman doesn’t let alumni off the hook when it comes to supporting the SMSC.

“We need more help from our alums,” he says bluntly. “I need you to come back, to let us come to you or to write big, fat checks. We would rather you come back. It’s in that order for a reason: Come back to us. If you can’t come back, let us come to you. If you can’t do either, write a check.”

It’s vital that today’s students interact with successful alumni, he says.

“When one of our great alums comes back, our students get to see them and get to see, ‘This is what I could do.’ I can tell the students they’re great but when they get a chance to see Ziva Branstetter, that’s like, ‘That’s how I can do this.’

Out of Tragedy, Honor

Homecoming crash coverage
takes 2 O'Colly staffers
to national contest

By Brian Petrotta

Photos: Jakub Moser and Erin Lubin

OSU student reporters Kaelynn Knoernschild and Cody Stavenhagen worked around-the-clock at the 2016 Hearst Foundation Journalism Awards to produce three challenging articles.

“It’s a story you never want to write.” Even if it leads to a national award? Cody Stavenhagen, a recently graduated sports media major from Oklahoma State University, still would have preferred a normal day of covering a Homecoming football game over adding a trophy to his mantle.

On Oct. 24, 2015, Stavenhagen and classmate Kaelynn Knoernschild produced memorable coverage of the car crash at the Homecoming parade that killed four people and injured more than 40. Due to their commendable reporting, the two were selected to compete at the 2016 William Randolph Hearst Foundation’s

Journalism Awards in San Francisco. The annual competition recognizes the finest student journalism in the country.

The fact that two OSU students were among eight finalists in the writing category to attend the competition in California speaks to their mature handling of a tragic event as well as the O’Colly’s surging presence among national heavyweights. OSU finished third in the writing category after placing 10th in 2015 (the first year OSU cracked the top 10).

Barbara Allen, director of student media at OSU, says students who have actively pursued positions in student media are proving to be successful.

“You find that students who take advantage of opportunities in student media tend to get better awards, better internships and when they graduate, there are a variety of job offers out there,” Allen says.

Stavenhagen and Knoernschild were selected from 1,261 entrants from 108 colleges and universities with accredited undergraduate journalism schools. Stavenhagen (who became the first OSU student to compete in the event in 2015) won the Sports Writing qualifier for his article, “And Then There Was a Football Game,” while Knoernschild won the Breaking News Writing qualifier for her article, “‘I can’t recall an incident of this magnitude’: Community mourns after homecoming parade.” In addition to the



invite to San Francisco, they each received a \$2,600 scholarship from the Hearst Foundation.

The week in San Francisco was not all trophies and sightseeing. The Hearst Championships deliver rigorous assignments to competitors. The eight-person writing competition charged the students with interviewing Oakland Mayor Libby Schaaf, then writing both a news story and personality/profile piece. In addition, they were assigned an on-the-spot article about the city's homelessness crisis.

"It is really a test of time management, ability to follow good leads, and acclimate yourself to a beat you're unfamiliar with," Allen says.

In setting out to cover the homelessness crisis, Knoernschild found herself drawing on lessons learned during the Homecoming tragedy. In shock and mourning like the rest of Stillwater, Knoernschild battled to balance her reporting with her own troubled feelings.

"Interviewing people in the community but also being a human was really difficult for me," she says. "I was constantly reminding myself it's OK to be human and to have these emotions as a reporter."

Similar emotions stirred in Knoernschild when she met a homeless woman in San Francisco whose daughter had been kidnapped. The woman lost her job when her efforts to search for her daughter overlapped with her work schedule. It was not a story Knoernschild could have anticipated.

"I did not expect to talk with someone involved in kidnapping and who was so open and honest with me about it," she says.

Both Knoernschild and Stavenhagen look back at the Homecoming tragedy with weary sadness. Not only were they processing their own emotions,

they had to cover an unimaginable subject. Knoernschild, as the *O'Colly* managing editor, coordinated photographers and reporters while working on the story herself. A day that began with notions of tailgating at a football game quickly turned into a marathon shift. She eventually left the *O'Colly* around 1 a.m. for a few hours of sleep before preparing to be interviewed during a live national news broadcast on *Fox & Friends* at 5 a.m. Sunday morning. By Sunday night, she had her story ready for Monday's issue of the *O'Colly*.

Stavenhagen had a similar experience. He was set to cover what everyone thought would be an easy Homecoming football win over Kansas. Instead he was jarred awake by calls and texts from friends and family asking if he was all right. Once he figured out why those calls were coming in, he went straight to work.

"One of the things about being a journalist is you don't have a lot of time to process something like that," he says.

While Knoernschild hunted down details of what happened, Stavenhagen made his way to the intersection of Main Street and Hall of Fame Avenue. He surveyed the scene, paying close attention to each "eerie" detail that gave him chills. By the time he reached the press box inside Boone Pickens Stadium, he had a framework in mind for his story. He also knew he did not want to write it.

"I remember talking with Nathan Ruiz, the sports editor for the *O'Colly*, and telling him, 'I do not care about this football game,'" Stavenhagen recalls.

In his story, Stavenhagen wove the details of the game with the "horrific event that had rocked the entire community." Many people



Cody Stavenhagen won the Hearst Award qualifier in Sports Writing for his article, "And Then There Was a Football Game."

in the crowd of 40,000 at the game probably processed the day's events in similar fashion. Allen feels Stavenhagen's ability to tap into that shared experience caught the attention of the Hearst judges.

"I think the reason he won such a prestigious award is that he was able to put into words what people were incapable of saying at the time," she says.

Knoernschild produced her award-winning piece with a classic style and relentless reporting. Allen





Stavenhagen (far left) and Knoernschild (bottom right) were two of eight national qualifiers in the annual William Randolph Hearst Foundation Writing Competition. They were selected from 1,261 entrants.

gives her the ultimate compliment by calling her an “old-school journalist.”

Thanks to the School of Media and Strategic Communications at OSU and student media outlets like the *O’Colly*, Stavenhagen and Knoernschild have learned “old school” ethics in the age of modern media. Allen believes quality writing bridges reporting and communication.

“We feel that having great writers in a vibrant student media program that is visible on a national level to other academics and professionals is really important,” she says.

The industry seems to be taking notice. Stavenhagen graduated in December 2015 and, after landing competitive internships with MLB.com, *The Oklahoman* and *The Minneapolis Star-Tribune*, began full-time work at the *Tulsa World*. Knoernschild

graduates in May 2017 and spent the summer of 2016 in Washington, D.C., interning for the Student Press Law Center.

Both students secured scholarships before even setting foot on campus in Stillwater. Stavenhagen hails from Amarillo, Texas. He was drawn to OSU for the sports media program and received enough financial assistance to make OSU more affordable than the major in-state Texas schools.

Knoernschild calls Edmond, Okla., home, and both of her parents are OSU alumni. Though they encouraged her to apply to several different schools, they made it clear that wherever she went, she would still bleed orange. As with Stavenhagen, OSU presented her an influential level of scholarship money, and one

visit to the campus sealed the deal. “I felt right at home,” she says.

This fall, she returns to Stillwater as editor of the investigative team at the *O’Colly*. Knoernschild heaps praise upon Allen, her SMSC professors and the student editors who preceded her for helping an inexperienced freshman blossom into an award-winning student journalist.

“As an editor in the fall, I hope I’ll be able to do some of the same and give back to the organization that helped me fall in love with journalism,” she says.

Stavenhagen is similarly fond of his time at OSU, calling the *O’Colly* his most rewarding student experience.

“You’re out there and doing stuff that matters and can have an impact on this campus,” he says.

28

COLLEGE OF
ARTS AND
SCIENCES

2015 A&S Hall of Fame



Ziva Branstetter

Ziva Branstetter first became known for her unwavering investigative journalism skills in journalism school at Oklahoma State University, where she earned a bachelor's degree in 1988. She and reporting partner Cary Aspinwall were named finalists for the 2015 Pulitzer Prize in Local Reporting for their coverage on the botched execution of Clayton Lockett.



Edwin Chappabitty

Dr. Edwin Chappabitty graduated from OSU in 1967 with a bachelor's degree in zoology. He was also a member of Scabbard and Blade for the OSU Army ROTC. He has gone on to demonstrate incredible support for Native American education, a record of distinguished service to his country and to the field of medicine and has brought distinction to OSU.



Bradford Gray

Bradford H. Gray, Ph.D., earned a bachelor's degree in business in 1964 and a master's degree in sociology in 1966 from OSU. He was a member of the inaugural class of U.S. Office of Education fellows. He is also a senior fellow at the Urban Institute in Washington D.C., editor emeritus of leading health journal *The Milbank Quarterly*, and a senior adviser to the Harkness Fellowship Program and the Commonwealth Fund in New York.

2015 A&S Rising Star



Kendall Gipson

Kendall Gipson graduated from OSU with degrees in communication sciences and disorders, her bachelor's in 2005 and her master's in '07. She has enjoyed working as a speech-language pathologist for Green Country Rehabilitation in Tulsa for the past six years.



Students in OSU's *Juntos* program use model kits developed by assistant chemistry professor Chris Fennell.

A Summer of Science

OSU assistant professor's volunteer work expands minds

By *Jamie Hadwin*,
OSU High Performance
Computing Center

In the short time Oklahoma State University chemistry assistant professor Chris Fennell has been in Stillwater, he has already built a notable history of outreach, including two programs he volunteered for this past summer.

"As you know, new faculty, we probably don't know any better, so we volunteer for everything under the sun," Fennell jokes, describing how he became involved with one of those programs, the OSU Alumni Association's Grandparent University.

For the past 13 summers, GPU has welcomed "legacies," children or grandchildren of OSU Alumni Association members, aged 7-13 and their grandparents to spend a few days on the Stillwater campus to engage kids in academics at OSU and create fun family memories.

In the fall of 2013, the OSU Alumni Association began recruiting faculty and staff from the chemistry department for GPU's summer 2014 session. Fennell, in his first faculty position after finishing three years as a research fellow, immediately volunteered.

Since 2014, Fennell has gone from hosting the GPU welcome sessions to teaching his own course for the

past two summers titled "Molecular World Building," which he describes as "Minecraft for molecules."

By improving upon existing molecule-building model kits, Fennell has been able to show the importance of molecule shape and size within molecular systems in his outreach efforts over the past few years. This summer, he went a step further, using the chemistry department's 3D printers to make model kits that each student could take home.

"I'm trying to push the limits on how small we can get the kits, so we can build them for many students in a reasonable amount of time," Fennell explains. "They get to take something away from the event and actually have it be useful later in life. Also, building new teaching tools with 3D printing is all sorts of fun."

Just after this summer's GPU, Fennell had even more "fun" when he began modifying the course and model kits for a July workshop he would be teaching for OSU's *Juntos* ("Together") program.

Formed in 2007, *Juntos* is a partnership between the OSU Cooperative Extension and Family Consumer Sciences programs that seeks to help Oklahoma's at-risk Latino youth graduate from high school and enroll in higher education.



Fennell describes his Grandparent University course as “Minecraft for molecules.” Students who took his class left with model kits produced by the chemistry department’s 3D printers.

“I view science as telling stories. You can do something that is very exciting to you, and, if you do a good job of telling that story, it can open up new doors for others.” — Chris Fennell

Dr. Ronald Cox, director of OSU’s *Juntos* program, said the program addresses three areas that research shows can increase educational success in Latino youth:

- Enhance family support through workshops and community events.
- Provide success coaches who serve as liaisons between the family and the education system.
- Engage students in fun and positive learning activities with their peers.

The third area is where professors like Fennell come in. At the end of an eight-week summer academy, Latino middle school students spend two days on the OSU campus participating in workshops in various disciplines. The purpose isn’t to have the students walk away as experts but to envision themselves being at and succeeding on a college campus.

“We are looking for people like Chris, who see themselves as more than just a professor or researcher,” Cox says. “They

see themselves as a link to help the next generation of students become interested in the sciences.”

It’s obvious that outreach is important to Fennell, but he points out that as a land-grant institution, it is also important to OSU’s mission to serve the community. A big push from national funding agencies has also elevated the importance of outreach in higher education and research.

The result ensures researchers can continue their work while also getting out of their labs and into the community. For the past two years of GPU, Fennell recruited another new chemistry faculty member, Dr. Gabriel Cook, and has had several of his lab students help with the course. This also develops their appreciation for future outreach.

“I probably do a little too much of it, but you can get addicted to it to some degree by wanting to continue to make it

better,” Fennell says. “It’s something I care about for teaching and research purposes, and it’s just fun, too.”

31

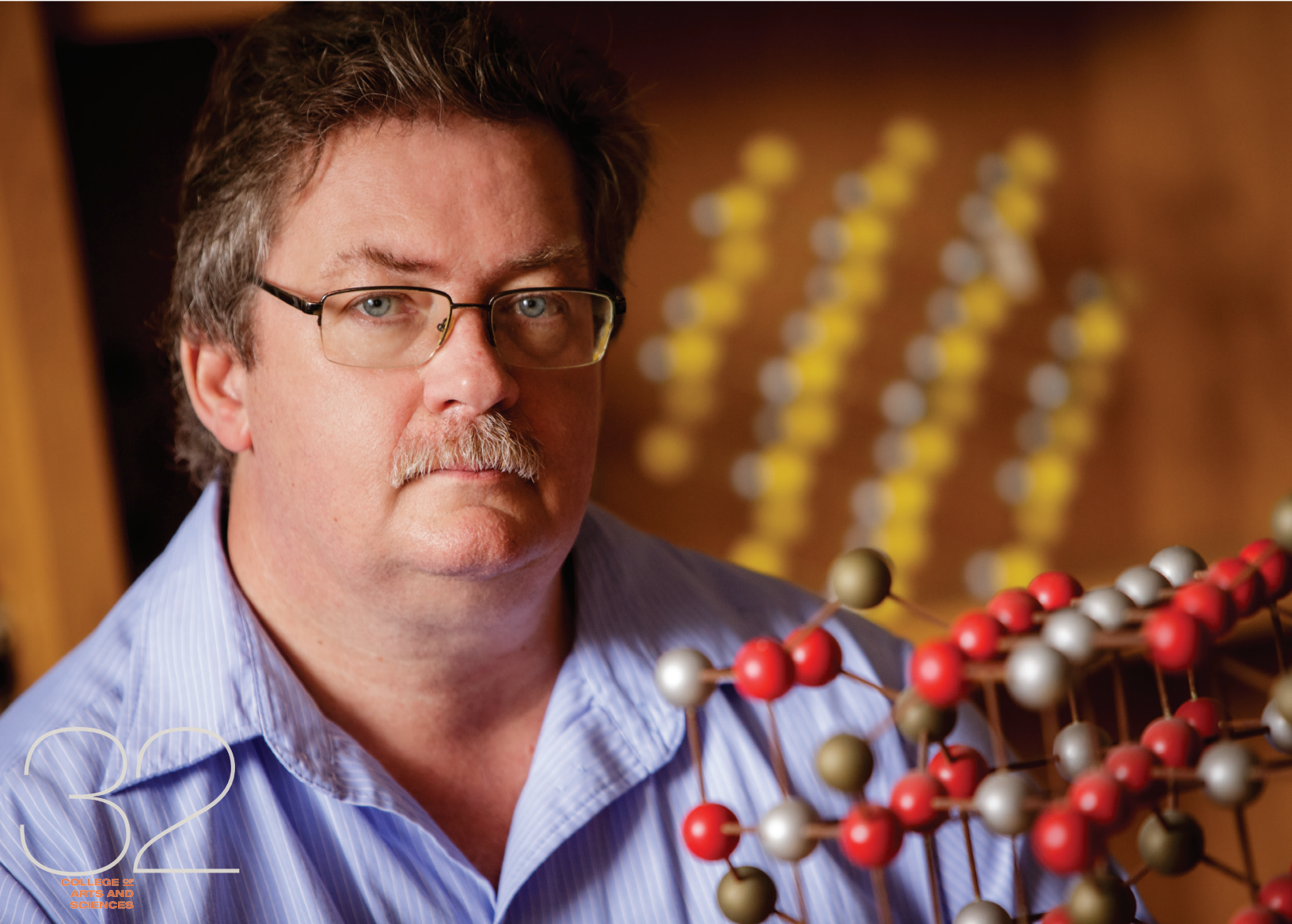


Fennell is “more than just a professor and researcher,” says Ronald Cox, director of OSU’s *Juntos* program.

20 Years On ...

OSU proves to be fertile ground for Apblett

By Brian Petrotta



32
COLLEGE OF
ARTS AND
SCIENCES

Dr. Allen Apblett was recently inducted as a fellow of the National Association of Inventors. He is currently working on projects ranging from aircraft to solar energy harvesting.

PHOTO: GARY LAWSON/UNIVERSITY MARKETING

When Allen Apblett was growing up in the Canadian provinces of Alberta and New Brunswick, his father often put on Merle Haggard records for the Sunday soundtrack. However inspirational the music, it was not “Okie from Muskogee” that brought Apblett to Oklahoma. Instead, it was a restless curiosity rooted in chemistry. As he enters his 20th year at Oklahoma State University, Apblett has proven himself as an educator, researcher and inventor.

The National Association of Inventors inducted Apblett as a fellow on April 15 at the U.S. Patent Office in Washington, D.C. Though he has garnered an enviable number of awards and grants throughout his career, the NAI ceremony was humbling for Apblett.

“I wasn’t sure I fit the crowd,” he laughs.

NAI fellows produce an average of 33 patents and Apblett lands on the lower side of that number. But quality over quantity counts: “A patent does not really mean much unless somebody uses it,” he notes.

He co-founded (along with OSU chemistry department head Nick Materer and OSU graduate Shoaib Shaikh) Xplosafe, which primarily produces products to test for and neutralize explosives and to purify water.

Just as importantly in Apblett’s eyes, Xplosafe has helped attract several Small Business Innovation Research grants from Homeland Security, USDA and the Department of Defense, creating opportunities for his OSU students. These grants provide seed money for small businesses specializing in technology commercialization. Apblett calls the grants critical to innovation because of their flexibility.

“With SBIR grants you can make the argument that an idea should be tried, instead of having five people tell you something won’t work,” he explains.

The availability of such seed money was a major attraction for Apblett when he arrived at OSU in 1997. Much of his

“I thought if this place was willing to support research like that, it was the place to be.”

— Allen Apblett

— success has come from seeking an answer to a question and simply following where it leads.

“My research has taken me so many different ways,” he says.

For example, how could he have guessed delivering a lecture in Texas would land him in Saudi Arabia for a week each year? That journey began when Apblett’s post-doc advisor at Harvard University went to Rice University just as Apblett was moving from Tulane University to OSU. On the way to Stillwater, Apblett gave his lecture at Rice, and an attendee from Saudi Arabian Basic Industries Corp. soon sent a student to study under him at OSU.

The relationship has since blossomed, and Apblett has welcomed a stream of Saudi students.

Apblett estimates the number of his former students in academia and industry at 50-50. One of the latter includes Cody Cannon, a senior research scientist at Magnesium Products in Tulsa, who credits Apblett’s success as a researcher and instructor to the academia-industry duality of his approach.

“He gives students a broader understanding of chemistry through different methods of instruction,” Cannon says. “He has so many different ideas, if you’re ready to take on more projects, he will encourage you.”

Cannon recalls Apblett always making time for students, even those in other groups.

“He’s very open and helpful,” he says.

Following a career in chemistry must have barely registered on young Apblett’s radar, though. His father was a military man (Apblett is a self-described “base brat”) who thought his sons could only be successful in one of two ways — sports or the Air Force.

“Unfortunately, I inherited his ability for sports and I can’t take orders,” Apblett jokes. While his brother followed his father into the military, Allen earned a degree with honors at the University of New Brunswick and a doctorate from the University of Calgary. Following a two-year postdoctoral fellowship at Harvard, he landed at Tulane in New Orleans.

Though he enjoyed his colleagues and the school itself, Apblett began to search for a place he could comfortably raise his family and a university where he could really dig into research. OSU proved to be the perfect place. He recalls learning the chemistry department had obtained a new piece of equipment but they needed more space — so OSU built a building.

“I thought if this place was willing to support research like that, it was the place to be,” Apblett says.

He quickly found the research infrastructure (help with budgets, paperwork, etc.) a welcome change. Additionally, the quality instrumentation available to undergraduates and the availability of seed money proved that OSU was dedicated to research. Even better, he was able to step into a lab tailored to his interests from the start and quickly built collaborations with the engineering college.

“At this point in my career, nobody will chastise me for working on a little bit of everything,” Apblett says. As of mid-2016, he was trying to solve problems with aircraft, production of chemicals for medical applications and working on kits for measuring chemicals in oil fields. He is even collaborating with faculty members from other universities on solar energy harvesting.

“There’s nothing like going in having little clue what the people are doing and then trying to solve their problems. You both learn something new and manage to accomplish something that will make a lasting impact.”

Safety First

Physics doctoral candidate presents solutions to extreme risks of deep space travel

BY SHELBY HOLCOMB

It's no question that great risk is involved in successfully getting people to deep space for extensive missions.

In the 2030s, NASA is planning to send people outside Earth's orbit — specifically Mars — but much must be done before it can happen.

Of course, keeping astronauts safe — especially when they face exposure to high doses of radiation — is a top priority.

Kahli Remy, a physics doctoral candidate, addressed this issue in her presentation, "High Dose Radiation Effects in Tissue Equivalent Materials." She won first place in the 2016 College of Arts & Sciences 3 Minute Thesis Finals and second place universitywide.



“It is no surprise to me that Kahli did so well,” says Stephen McKeever, a MOST Chair of Experimental Physics, Regents Professor and Noble Research fellow who served as Remy’s research adviser throughout the entire process. “Her enthusiasm shines through in the lab.”

McKeever along with Eduardo Yukihara, associate professor in OSU’s physical sciences department, and others helped Remy prepare her thesis, attended her competitions and gave her beneficial feedback.

Remy’s thesis centered on the high levels of radiation that could be found in space and identifying and testing materials that could absorb radiation like human tissue does. In her 3MT talk, she defined radiation as “simply waves or subatomic particles that transport energy to another entity, whether it’s an astronaut or spacecraft component.”

To Remy, the 3MT was more of an application-based presentation, which is much more than simply explaining the science of what one’s doing — a concept that can be difficult to play out in the realm of science.

“This really broke the ice for me regarding presenting in front of people I don’t know,” Remy says. “It was a good first step in gathering information, organizing it in a concise manner — what I want to talk about and why I want to talk about it — and hitting important points, which is hard sometimes in science.”

She focused on relaying her message to the audience in a conversational manner — in a way that is relatable, easily understandable and publicly relevant. It left the audience with a call to action — and she did it all in three minutes with only one static slide.



Above: Physics doctoral candidate Kahli Remy hopes her research will lead to more concrete safety measures for astronauts traveling to deep space. She won first place in the 2016 A&S 3MT Finals and second place universitywide.

Left: Sheryl Tucker, associate dean provost for OSU’s Graduate Education and dean of the Graduate College, stands with forensic science master’s student Dane Robertson and Remy. Both students tied for second place and were awarded \$750 at the fourth OSU 3MT competition for thesis master’s and Ph.D. students held on March 3 in the Student Union Theater. This was the first tie in an OSU 3MT finals.

In particular, she spoke about the kinds of particle radiation doses that astronauts would experience during prolonged deep space missions and why it’s an important, relevant issue that needs to be addressed and resolved.

It’s no question that space radiation exposure is extremely hazardous, but it becomes even more so when we’re not entirely sure what levels will be encountered.

The bottom line is that high dose radiation exposure passes through the body’s cells and DNA and can kill them — the higher the dose, the faster cells die along with a lower probability of surviving.

Remy highlighted the bigger risks of exposure, such as increased risk for cancer and the possibility of acute radiation sickness during an actual mission — including the risk of cognitive issues if particles were to directly affect the brain.

She explained the process of how she would dose specific materials with various types and high levels of radiation, and then devise an energy deposition profile to study how particles deposit

energy and thus damage materials, i.e., human tissue. The big picture: she’ll be able to equally compare how such materials/tissue are damaged by certain types of radiation at differing levels with what will happen to the astronauts and how much radiation they can endure.

Remy hopes her research will lead to more concrete safety measures for astronauts.

Originally from Leona Valley, Calif., Remy completed her undergraduate degree at Southern Arkansas University, where she majored in engineering physics.

Soon after, Remy ventured to OSU for graduate school — a simple choice she made after visiting campus for the first time.

“She is a leader among the students and is always ready with a smile and a laugh,” McKeever says. “Her hard work, persistence, patience and communication skills — and her grasp of the ‘big picture’ — mean that she is on her way to becoming a very capable research scientist and educator. With her positive personality, she will be a great success.”



Easy Does It.

Beginning August 23, you'll be able to access the world with two daily hassle-free flights to D/FW from Stillwater. Factor in free parking and quick boarding with short lines. Factor out travel time and expense to either OKC or Tulsa, and you'll see the convenience and simplicity of Stillwater Regional Airport and American Airlines.

Time is money. Save both.
Fly Stillwater.



Oklahoma State University
College of Arts & Sciences
201 Life Sciences East
Stillwater, Oklahoma 74078-3015

NON-PROFIT
ORGANIZATION
**U.S. POSTAGE
PAID**
STILLWATER, OK
PERMIT NO. 191



Alumni Association membership is an easy and affordable way to stay connected and impact the university every day.



A portion of your dues are returned to the College of Arts & Sciences to support our alumni activities and services.

Loyal Members are True Cowboys

ORANGECONNECTION.org/join | [f](https://www.facebook.com/okstatealumni) [i](https://www.instagram.com/okstatealumni) [t](https://www.tiktok.com/@okstatealumni) [y](https://www.youtube.com/okstatealumni) [/okstatealumni](https://www.linkedin.com/company/okstatealumni)