2017-2018

# Oklahoma Louis Stokes Alliance for Minority Participation

# **INSTOE...** Program news, exemplary scholars and **MUCH MORE**!

# **Contact Information**

Oklahoma State University 401 Scott Hall Stillwater, OK 74078

# The Annual OK-LSAMP Newsletter





## MESSAGE FROM THE PI Dr. Jason F. Kirksey

Greetings from the OK-LSAMP Program!

OK-LSAMP continues to excel in the number of underrepresented minority students (URMs) pursuing degrees in Science, Technology, Engineering, and Mathematics (STEM) across the state. The Oklahoma Alliance is in the final year of Phase Five of National Science Foundation (NSF) funding. The staff is vigorously compiling information for the upcoming submission for future support. We are proud to experience scholars flourishing in their work. From diligently conducting research in the lab or fervently out in the field, OK-LSAMP scholars are achieving excellence. Throughout Phase Five, more than 60 scholars participated in international research experiences. The Alliance staff, including campus program managers and faculty mentors provide exceptional support and motivation for the

approximately 315 OK-LSAMP scholars across the eleven campuses throughout Oklahoma. OK-LSAMP scholars have earned awards, scholarships, fellowships, and competitive grants. Scholars were also admitted into some prominent research experience for undergraduates (REU) and mentoring programs in the nation.

The significant impact of the OK-LSAMP program on our scholars continues to yield compelling results. Alliance scholars are seamlessly and successfully transitioning to graduate programs, including some of the country's most prestigious institutions. Others are embarking on careers in the public sector and private industry. Additionally, a number of OK-LSAMP scholars are Fellows in the NSF LSAMP Bridge to the Doctorate program, which covers tuition, as well as provides an annual stipend or \$32,000 for two years of their graduate education. Several scholars have also distinguished themselves by earning the NSF Graduate Research Fellowship Program (GRFP) award. These, and other, spectacular achievements of our scholars are often attributable to the dedicated and self-less support and commitments of the Alliance campus program managers and faculty mentors. We are grateful for their willingness to encourage and inspire our scholars to achieve excellence. I would also like to announce, with heartfelt gratitude, the retirement of Dr. Carl Rutledge of East Central University (ECU). Dr. Rutledge served as one of our outstanding OK-LSAMP campus program managers for for 24 years with great poise and high-esteem. We admire and revere Dr. Rutledge's devotion to the scholars he mentored over the past guarter-century as the OK-LSAMP program manager at ECU. I would also like to thank our Program Director, Brenda L. Morales, and Program Data Coordinator, Darlene Croci for their tireless efforts to enrich and fortify the experience of OK-LSAMP scholars, and the support given to the campus program managers, our program evaluator, and other campus administrators and staff across the Alliance. Our goal of increasing the number of baccalaureate and graduate degrees awarded to URMs in STEM disciplines across the Alliance is certainly in good hands.

There are many success stories and scholars' accomplishments within this newsletter and as principal investigator for OK-LSAMP, I look forward to continue working with all the campus program managers, faculty, staff, scholars and Bridge to the Doctorate Fellows to excel within diversity in science, technology, engineering, and mathematics. The accomplishments across the Alliance are noteworthy and I look forward to greater success in the future.

Sincerely.

7. Kley Jason Kirksey, Ph.D.

Vice President for Institutional Diversity and Chief Diversity Officer Principal Investigator for the Oklahoma Louis Stokes Alliance for Minority Participation Principal Investigator for the Oklahoma Louis Stokes Alliance for Minority Participation



Jessica Everett at her international experience in Ireland.

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#### About OK-LSAMP

**Oklahoma Louis Stokes** Alliance for Minority Participation (OK-LSAMP) is funded by the National Science Foundation and it is a partnership of Oklahoma Colleges and Universities working together to develop programs aimed at increasing the number of students from underrepresented populations who receive degrees in STEM disciplines.

Current goals of the program are to focus on:

- Undergraduate
  research experiences
- International experiences
- Graduate school preparation

Activities include:

- ♦ Faculty mentoring
- Conference and presentation travel
- Meetings focused on professional development and networking
- Performance based stipends for students

# SCHOLAR REQUIREMENTS

#### **Eligibility Requirements**

- 1. Minimum GPA 3.00
- 2. US citizen or permanent resident
- 3. Able to participate in and contribute to program activities
- Full time student in an approved STEM field (see approved majors next page)
- Demonstrated intent in pursuing investigative studies and a graduate degree in STEM
- Demonstrated desire to promote the efforts of LSAMP and NSF in underrepresented communities

# Requirements for Continued Support

- 1. Maintain GPA of 3.00 or higher
- 2. Regular class attendance
- Retain full-time status (Immediate notification of any drop/add changes required)
- Remain in eligible STEM major (Immediate notification of major change is required)
- Continued active participation in the required program activities. Any scholar whose participation rate is below 75% may be dismissed from the program the following semester.

# Required Activities for All Participants

Scholars Meetings – once a month unless specified otherwise

**Mentoring Component** - Under the guidance of faculty mentors, all scholars are expected to participate in 5-10 hours of research-related experiences per week. Enrollment in 3 hours of departmental Special Problems permitted.

**Graduate School Preparation** - Scholars will be involved in vigorous preparation for graduate studies. Specific activities will be based on academic classification. By the end of the semester BEFORE you graduate, you are required to submit a minimum of five applications for admission to graduate school.

**Summer Research Internships** – All scholars will be involved in a two-month summer internship and must present their research at the annual research symposium held at OSU.

Occasional leadership, peer-mentoring, or other program activities - This will not interfere with your academics.

Acknowledgement of support by OK-LSAMP and NSF - (Cooperative Agreement HRD-1408748) in appropriate publications and public events is required. Display of the OK-LSAMP and NSF logos on posters and on last slide of PowerPoint Presentations is required. Logos will be provided by the OK-LSAMP office.



#### **Engineering and Engineering Technologies**

-Aerospace and Aeronautical Engineering -Agricultural Engineering -Architectural Engineering -Chemical Engineering -Civil Engineering -Computer Engineering -Electrical, Electronics and Communication Engineering -Materials Engineering -Mechanical Engineering -Nuclear Engineering -Petroleum Engineering -Construction Engineering -Geological/Geophysical Engineering -Mechatronics, Robotics, and Automation -Biochemical Engineering -Biological/Biosystems Engineering -Construction Engineering Technologies -Nanotechnology

#### **Biological Sciences**

-Biology

- -Biochemistry and Molecular Biology
- -Botany/Plant Biology
- -Cell/Cellular Biology and Anatomical Sciences
- -Microbiological Sciences and Immunology
- -Zoology/Animal Biology

-Genetics

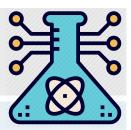
-Physiology, Pathology and Related Sciences

- -Bioinformatics and Computational Biology -Biotechnology
- -Neurobiology and Neurosciences -Biological and Biomedical Sciences

#### **Business and Management**

-Management Sciences and Quantitative Methods

# APPROVED MAJORS



#### **Agricultural Sciences**

-Animal Sciences -Food Science and Technology -Plant and Soil Sciences

#### Natural Resources and Conservation

-Natural Resources -Wildlife and Wildlands Science and Management

#### Architecture

-Architecture-Environmental Design-Architectural Sciences and Technology

#### **Computer and Information Sciences**

-Computer and Information Sciences-Computer Programming-Computer Software and Media Applications

#### Mathematics

-Mathematics -Applied Mathematics -Statistics

#### **Physical Sciences**

-Physical Sciences

- -Astronomy and Astrophysics
- -Atmospheric Sciences and Meteorology
- -Chemistry
- -Geological and Earth Sciences/Geosciences -Physics
- -Materials Science

\*Above is a condensed list of approved majors. If your major is not listed, visit with the program staff.

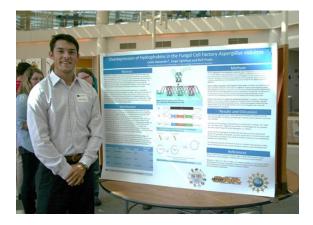
### SCHOLAR PRESENTATIONS

#### 14th Annual Research Symposium in Biological Sciences Presented by BMBGSA

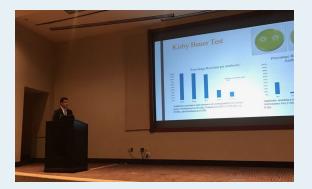
The Graduate Student Research Symposium is an annual event hosted by the Biochemistry and Molecular Biology Graduate Student Association. The Symposium has the specific goal of giving OSU students in diverse areas of the biological sciences a chance to present their scholarly work.

Participating in the Research Symposium allows students to learn about what other students are doing and get ideas for future projects.

Caleb Alexander, senior majoring in Physiology, had the opportunity to present his research poster on "Overexpression of Hydrophobins in the Fungal Cell Factory *Aspergillus nidulans*" at the 14th Annual BMBGSA Symposium September 14 and 15th, 2017.



#### 5th Annual Emory University-Laney Graduate School STEM Research and Career Symposium



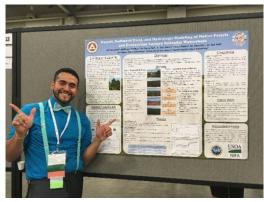
The Symposium is designed for students whose primary interest is pursuing a doctoral degree in the biomedical, biological, behavioral, or natural sciences and public health. It is organized by the Laney Graduate School. The symposium welcomes students and faculty advisors from diverse backgrounds for two days of research presentations and networking.

William Colby Starr, majored in Microbiology/Cell & Molecular Biology, attended this symposium and conducted an oral presentation on his research on "Antibiotic Resistance of *Pseudomonas aeruginosa* Recovered from Various Cystic Fibrosis Patients".

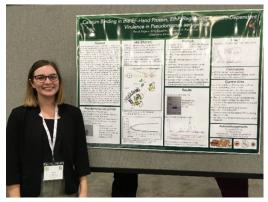
#### SACNAS 2017 The National Diversity in STEM Conference

SACNAS is the largest broadly multidisciplinary and multicultural conference in the country. With about 115 student and professional chapters and 4,137 research presentations since 2014, it continues to excel. The SACNAS conference provides a unique experience through its cultural events, multidisciplinary sessions, keynote speakers, and student research presentations.

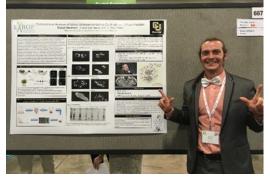
Below are images of our scholars and faculty who attended the conference.



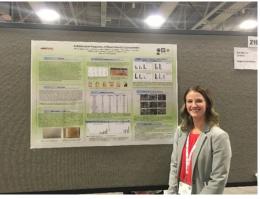
Adrian Saenz - OSU



Rendi Rogers - OSU



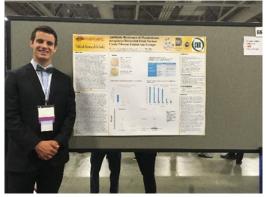
Daniel Henthorn - OSU



Erin Gallaway - OSU



OK-LSAMP Scholars and Faculty



Colby Starr - OSU

#### LSMCE 5th Annual Conference 2017

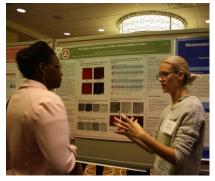
Take Action: Reaching Deeper into the Nation's Diverse Pool of STEM Talent



The 5th Annual LSMCE Conference, Take Action: Reaching Deeper into the Nation's Diverse Pool of STEM Talent, was held October 6-8, 2017, at the Sheraton Indianapolis Hotel at Keystone Crossing in Indianapolis, Indiana.



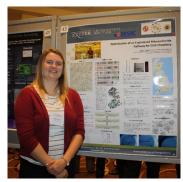
OK-LSAMP Scholars and faculty



Jordan Moore — OSU



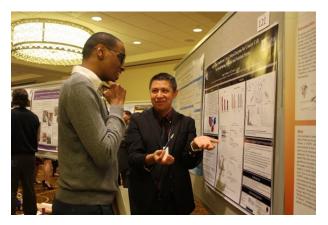
Marly Fixico-Hardison -OSU



Jessica Ames — OU



Geir Hareland Jr. — OSU



Jesse Velasco — SWOSU

#### 32nd Annual National Conference on Undergraduate Research 2018

CENTRAL

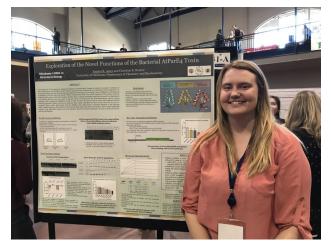
OKLAHOMA

APRIL 4-7, 2018

OF

UNIVERSIT

OK-LSAMP scholars from Langston and OSU pictured with Brenda, Program Director and Darlene, Program Data Coordinator.

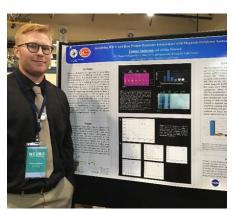


Jessica Ames - OU

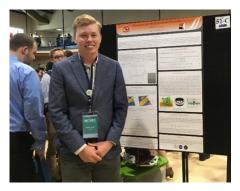
This year NCUR was proudly held at the University of Central Oklahoma, to some it is considered home and to others it was a great opportunity to experience the charming town of Edmond, OK.

NATIONAL CONFERENCE ON UNDERGRADUATE

RESEARCH

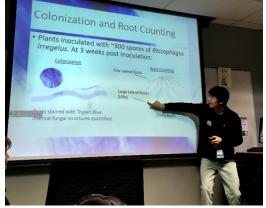


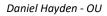
Conner Anderson - ECU

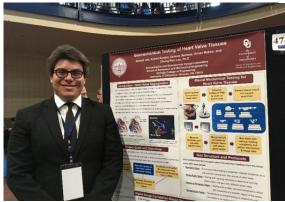


Matthew Henry - ECU





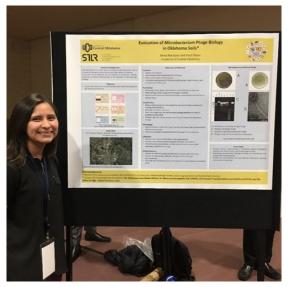




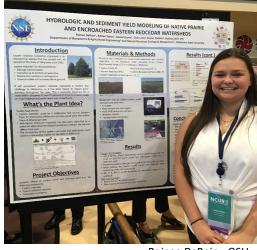
Octavio Serrano - OU



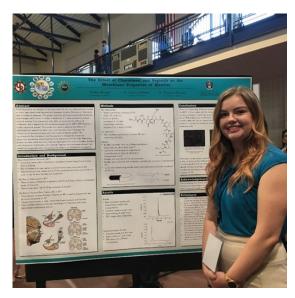
Alfredo Velasco II - TU



Alma Marquez - UCO



Rainee DeRoin - OSU



Amber Morgan - OU





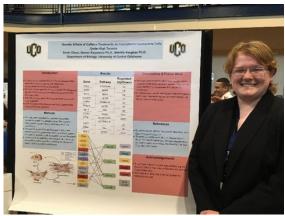
Brittiana McDowell - LU



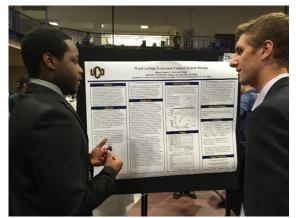
Juan Alvarado - TU



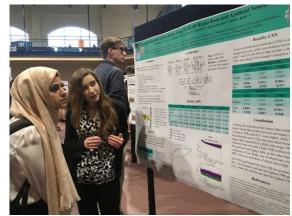
Catherine White - OSU



Sarah Olson - UCO

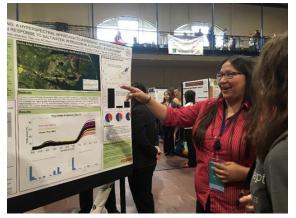


Brent Gaddis II - UCO



Katherine Avery - OU

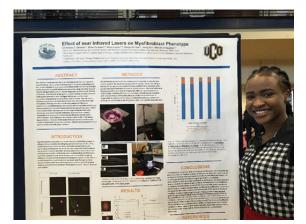




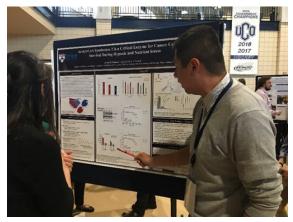
Lizzie Lightning - NSU



Alexandra Bejarano - TU



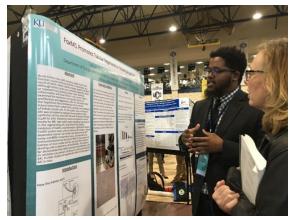
Christiana Obioma – UCO



Jesse Velasco - SWOSU



Marly Fixico-Hardison - OSU



LaQuan Johnson - LU

#### Oklahoma Research Day 2018



Darlene and OSU scholars.

Oklahoma Research Day is a premier annual event celebrating student and faculty research, creative, and scholarly activities. The 2018 Oklahoma Research Day took place March 9th, at Northwestern Oklahoma State University. The event had over 1,000 registered students, faculty, and guests and featured over 550 unique poster presentations.

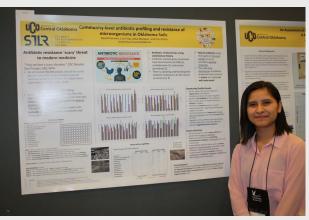
Below some pictures of OK-LSAMP Scholars participating.

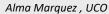


Langston University scholars.



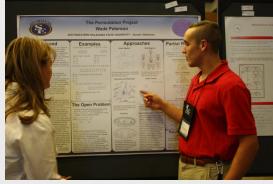
East Central University scholars.





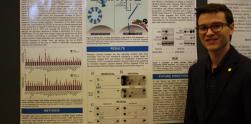


Sean Jesse , ECU

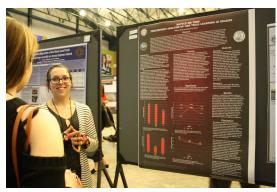


Wade Peterson, SOSU

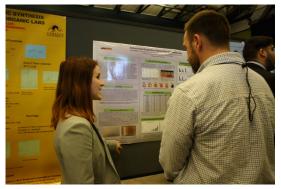




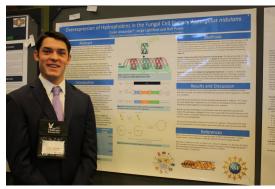
Matthew Maxwell, SOSU



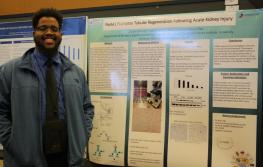
Willow Gahr, NWOSU



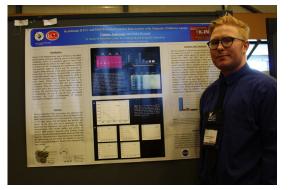
Erin Gallaway, OSU



Caleb Alexander, OSU



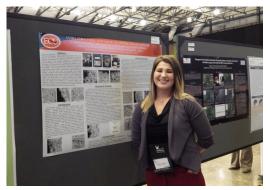
LaQuan Johnson, LU



Conner Anderson, ECU

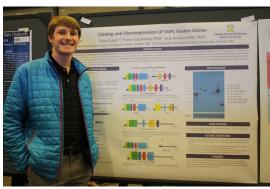


Tiana Sanders, OSU



Madison McNeil, ECU

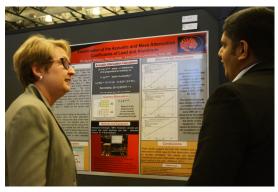




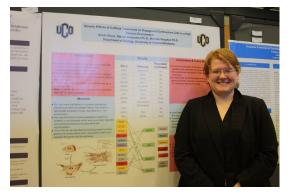
Casey Love , SOSU



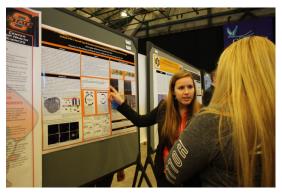
Marly Fixico-Hardison, OSU



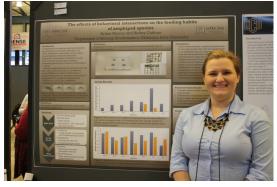
Dr. Karen Williams, ECU



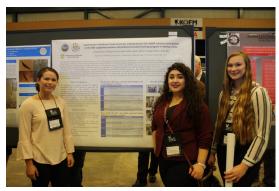
Sarah Olson, UCO



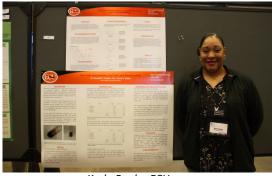
Alicia Aguilar, OSU



Arissa Mercer, SWOSU



Brianna Cole, Linsday Perez, and Erika Costain, SEOSU (left to right).



Karla Banks, ECU

#### OSU-HHMI's 3rd Annual 2017 Fall Social "I'm Proud to Be a Life Scientist!"





Program Director, Brenda Morales, and OK-LSAMP scholar and employee Casandra, promoted OK-LSAMP at the OSU-HHMI 2017 Fall Social by discussing research opportunities within the STEM field.

#### 20th Annual Women in Science Conference 2017



(Left to right) Molly F., Brynn D., Michelle K., and Alexis D.



Maranda Clymer and Dr. Rutledge - ECU

The conference is hosted and presented by the NSF OK-EPSCoR. It is dedicated for students in grades 6-12 to show them that careers in STEM are attainable and rewarding.



Timothy Black, Ana Chicas-Mosier



(Left to right) Darlene Croci, Tanya Lowery, Brenda Morales, and Dene Roseburr-Olotu

#### **OK-LSAMP 23rd Annual Research Symposium**



Our 23rd Annual Research Symposium was held in the Noble Research Center of Oklahoma State University on September 16th, 2017. The day was filled with poster and oral presentations, a graduate student panel, along with encouraging messages from our OK-LSAMP Director, Brenda Morales, keynote speaker Darron "DJ" Lamkin, and Dr. Jovette Dew assistant vice president for Institutional Diversity. At the end of the Symposium, we presented 1st, 2nd, and 3rd place awards for Life Science Poster presentations, Non-life Science Poster Presentations, and Oral Presentations.

#### **Award Winners**

#### Life Sciences

- ♦ 1st place Garrett Eakers (OU)
- ♦ 2nd place Jordan Moore (OSU)
- ◊ 3rd place Jesse Velasco (SWOSU)

#### **Non-Life Sciences**

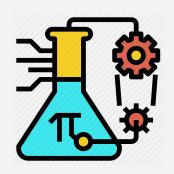
- ♦ 1st place Amber Morgan (OU)
- 2nd place Elisabeth Allbritton (SWOSU)
- ♦ 3rd place Nate Richbourg (OU)

#### Oral

- ♦ 1st place Alicia Aguilar (OSU)
- 2nd place Matthew Maxwell (SOSU)
- ♦ 3rd place Maranda Clymer (ECU)

Below some pictures of award winners. Also pictured keynote speaker Darron "DJ" Lamkin, and Dr. Jovette Dew.

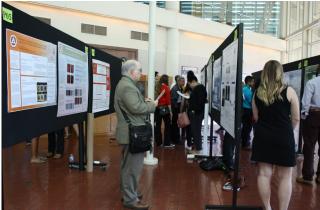








OU Scholars and Dr. Walden



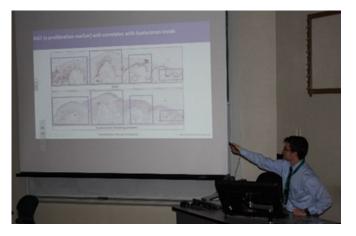
Students and faculty during the poster presentations.



Jonathan Bernal - OSU



Alicia Aguilar - OSU



Matthew Maxwell - ECU



Ana Chicas-Mosier, Jorge Lightfoot, and Adrian Saenz - BD & GRFP Panel

# INTERNATIONAL EXPERIENCES



#### Jessica Ames OU Scholar



During the summer of 2017, Jessica conducted research at the University of Exeter in the U.K. thanks to a supplemental LSAMP grant. Her experience helped her identify what she wanted in a graduate program and meet many amazing colleagues and friends.

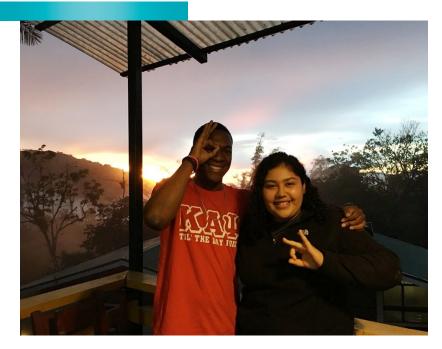
#### Casandra Salinas OSU Scholar

Casandra Salinas , a junior majoring in Biochemistry and Molecular Biology, had the opportunity to participate in a short term study abroad trip summer 2018. The course *Italy and Switzerland: An Exploration of Agriculture, Culture and Science* allowed her to visit a Piedmont Farm to learn about the organic food production, a Parma ham factory learning the time-honored tradition of



curing prosciutto and to meet with one of the leading businesses in Milan, Italy. She also had the opportunity to walk along the River Limmat in Zurich and visited one of the most scenic towns in Europe: Luzern, Switzerland. "My research focus *La Dolce Vita* allowed me to place close attention to the lifestyle and culture of one of the oldest wine-producer regions in the world, Italy, and to evaluate the correlation of wine consumption habits and wellness. I am blessed by the support given to me by my family, friends, mentors and University". Once back she also participated in the McNair Scholars program, a summer research internship that prepared her to begin her research project this Fall. She is working with *Pseudomonas aeruginosa*, a gram negative opportunistic human pathogen and a leading cause of severe acute and chronic lung infections, in Dr Patrauchan's Lab.





#### Austin Carriere and Karina Flores OU Scholars

Both students are majoring in Biology, they had the opportunity to participate in the Organization for Tropical Studies REU program in Costa Rica for summer 2018. In this intensive program, they conceived, designed, executed, and reported a research project accomplished in the jungle nature preserve Las Cruces.



#### Jessica Everett OSU Scholar

Jessica Everett is a senior majoring in Microbiology at Oklahoma State University. During summer 2017 Jessica had the opportunity to study abroad at the University of Ulster located in Northern Ireland.

During her time abroad she had the opportunity to visit Portrush, the Titanic in Belfast, the Cliffs of Moher, and the Old Bushmills Distillery and Giants Causeway.

Currently she is part of the National Society for Collegiate Scholars, the Native American Student Association, Pre-SOMA and the Microbiology club here on campus.



Jessica (back row, last one left to right) pictured with classmates.

## SCHOLAR HIGHLIGHTS

#### Tiana Sanders OSU Scholar

Tiana Sanders was at Indiana University in Bloomington working in Dr. Kimberly Rosvall's lab. "My mentor was Sarah Wolf, a PhD student and my project was researching if telomeres could predict lifehistory trade-offs in wild female tree swallows. Specifically, I was studying if telomeres could predict a trade-off between selfmaintenance, parental care, and aggression."

For the month of June she was primarily doing field work, collecting data, and for most of July she was in the lab. "Our results found that females with longer telomeres had a tradeoff between aggression and parental care in that those with higher aggression had lower parental care and vice versa, however we didn't see this trade-off in females with shorter telomeres."

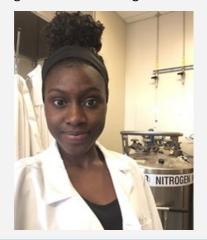






#### Haifah Sambo OU Scholar

A first-year electrical engineering major, Haifah attended an REU program at University of Alabama in power engineering. She was quite fortunate to find and be accepted to an REU that directly aligns with her career goals.



# Payton Whitehead SOSU Scholar

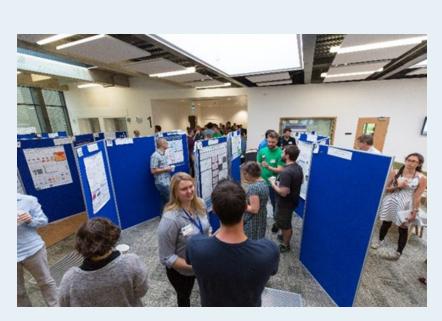
Payton graduated this past spring with a Bachelor of Science in Chemistry and a minor in Biochemical Technology. Payton has been accepted into the Biochemistry and Molecular Biology graduate program at the University of North Texas. He also took first place in the Regional and Community Colleges division for his entry in

enzyme biochemistry research. He received a certificate and a \$500 cash prize for his winning efforts, based on his presentation to a team of judges.



#### Jessica Ames OU Scholar

Jessica Ames, OU LSAMP Scholar enrolled in the Chemical Biosciences degree program (will be an August 2018 graduate), is the recipient of a prestigious international fellowship for doctoral study in the European Union. The program is a specific implementation of the Marie Curie Fellowship program and generally is only awarded to candidates who have completed a MS degree.



Jessica competed with candidates from around the world for fifteen fellowships awarded to begin fall 2018. Her specific program is: ViBrANT=Viral and Bacterial Adhesion Network Training. This program takes an innovative approach to doctoral education where each project is multidisciplinary, international, and intersectoral. Her training will include workshops, seminars, collaborative work in industry and several institutions other than her primary laboratory. The program emphasizes maximizing scientific impact and public engagement, in addition to research excellence. Jessica's home laboratory will be that of Professor Michael Nilges at the Institut Pasteur, Paris, France, with her degree program housed at the Sorbonne University.



#### Jaron Holden OSU Scholar

Jaron Holden is a junior majoring in Chemistry with minors in Spanish and Chinese. Last summer he was at the University of North Dakota doing a National Science Foundation IREC (Interdisciplinary Renewable and Environmental Chemistry) REU. At Oklahoma State he is involved in Afro-Am and member of the Spanish Club.



#### Alma Marquez UCO Scholar

Alma is a Biology student University of Central Oklahoma. During the past academic year, she has been involved and instrumental in the success of research activities in the Department of Biology at UCO. "Ms. Marquez began with an open mind, strong work ethic and has philosophically change over time. Throughout the year, Ms. Marquez has been exposed to scientific research, including methodologies of science, working safely in the laboratory, importance of attention to detail, and patience required in scientific inquiry. Ms. Marquez has taken this opportunity that few students will ever encounter and progressively has become an independently competent researcher", states Dr. Paul Olson. "None of Ms. Marquez's experiences and subsequent growth could have been possible without the belief and generous support of the University of Central Oklahoma Student Transformative Learning Record (STLR), UCO Office of High Impact Practices (OHIP), and The Oklahoma Louis Stokes Alliance for Minority Participation (OK -LSAMP, NSF)", Dr. Olson continues.

Alma presented at Oklahoma Research Day and NCUR Spring 2018.



#### Nathan Richbourg OU Scholar



Nathan Richbourg graduated from OU this past spring with a Bachelor of Science in Chemical engineering: Biotechnology.

He also received the NSF Graduate Research Fellowship and additional scholarship support from University of Texas Cockrell School of Engineering. Nathan will begin his full time study toward a PhD in biomedical engineering in the fall at the University of Texas-Austin. This past summer, he volunteered in the biomaterials lab of Dr. Peppas at UT since he will most likely work with him for his PhD.

While at OU, in addition to his course and research work, Nate founded the OU Rock-Climbing Club that competed in intercollegiate events.



#### William Colby Starr OSU Scholar

Colby Starr, a recent graduate of OSU in Microbiology and Molecular Genetics, was featured in the College of Arts and Sciences Student Spotlight. . The article "From the Court to the Lab", by Lonna Freshley, features the excellent OK-LSAMP scholar and gives an insight of Starr's trajectory from high school to becoming part of the Cowboy family.



The following is a synopsis of the article, "Colby transferred from a top Christian College in Oklahoma to OSU so that he can pursue more opportunities on campus such as, volunteering and leadership. During Colby's three years at OSU, he was a Niblack Research Scholar, an OSU Outstanding Senior, and an OK-LSAMP scholar. Colby has been able to present his research in Salt Lake City, Atlanta, Dallas, and Chicago, which he gives thanks to OK-LSAMP. Colby started medical school at the University of Oklahoma this past summer where he is pursuing his goal of becoming a physician."



2017-2018 Outstanding Seniors including William Colby Starr (eighth one from left to right).

The Outstanding Senior award recognizes seniors who excel through academic achievement; campus and community activities; academic, athletic or extra-curricular honors or awards; scholarships and work ethic during their time at OSU. We are really proud of your accomplishments.



#### Maranda Robin Clymer ECU Scholar

From article "ECU physics major nets top OAS awards" by Carl Lewis.

East Central University students left their mark on the 106th Technical Meeting of the Oklahoma Academy of Science, collecting a total of six top awards at the 2017 Collegiate Academy Awards.

Robin Clymer, 22, of Pauls Valley won Best Undergraduate Paper and the Outstanding Undergraduate Oral Presentation Award for Physical Sciences. Clymer's winning presentation was

titled "The Effects of Temperature on the attenuation Coefficient of Ultrasound." "It has given me the confidence I need to move forward with grad school," Clymer said of the awards Thursday by phone.

Clymer credited Williams' tutelage as being an integral part of her success.

"Everything I've learned on these topics was taught by her in an enthusiastic way that made it easy to apply," Clymer said. "I wouldn't be where I am without her."

Ultimately, Clymer credits her 3-year-old son, Hayden, as being the driving force behind her work ethic and her success.

# Matthew Maxwell SOSU Scholar

Matt Maxwell received a Bachelor of Science in chemistry this past spring. He accepted an offer of admission from a joint PhD program between the University of California, San Diego and the Salk Institute for Biological Studies to study cancer biology, which is fully funded.

Also, Matt won 2nd place for his Oral Presentation at the OK-LSAMP Research Symposium last year. The OK-LSAMP program is very excited to see what the future holds for you!





#### Taylor and Alexis Coles OSU Scholars

Twins Taylor and Alexis Coles are both sophomores majoring in Entomology. Fall 2017 they were featured in the article "Native American twins at OSU to research insectrelated diseases" by Aubrie Bowlan. A grant provided by the Center for Sovereign Nations at OSU allowed them to join Dr. Hoback in a research program that is exploring reasons Native Americans suffer twice the rate of certain insect-related diseases, such as Rocky Mountain spotted fever, than non-natives.

Summer 2018 Taylor had the opportunity to internship with the USDA Animal and Plant Health Inspection Service, a partnership between OSU and the University of North Carolina. Meanwhile, Alexis participated in research in Dr. Bruce Noden lab, one of Dr. Noden current projects includes "Ticks and tick-borne pathogens". Both twins par-



Taylor Cole pictured with Dr. Hoback

ticipated in the program Native Explorers. The educational Currently they are both active members of the program promotes partnerships that increases the num- Native American Student Association and part ber of Native Americans involved in science and medicine. of Alpha Pi Omega Sorority Inc.



Jonathan has not only had very good internship experiences but has also presented his research here in Oklahoma, and in another states including Nevada, Montana and Maryland. Bernal is very involved in the OSU community serving as a CEAT Ambassador, an exec for SHPE and as a member of Sigma Lambda Beta International Fraternity Inc.

# Jonathan Bernal OSU Scholar

Jon is a junior double majoring in Fire Protection & Safety Engineering Tech and Mechanical Engineering. He has completed two internships in the past. The first one with the Department of Energy CCI Brookhaven National Laboratory in NY as a Fire Protection Engineering Intern and the second one with Jensen Hughes Inc. also in NY as an Engineering Intern. This past summer he completed his third one with Cincinnati Insurance Company in Fairfield, OH as a Loss Control Intern. He aid in developing of an internal SprinkCalc3 user training program that will be delivered to all property specialist. Additionally, he provided a presentation to Loss Control consultants on different types of occupancy hazard classifications of NFPA 13. Lastly, Bernal created a dust fire and explosion fact sheet on different industry test and collection methods to maintain OSHA compliance.





#### Alexandra Lopez OSU Scholar

Alexandra Lopez Betancourt is a Senior majoring in Biosystems Engineering. Summer 2018 she had the opportunity to intern with GRDA (Grand River Dam Authority). She is mostly working in Pensacola and Kerr Dam located on Grand Lake, Oklahoma. At Oklahoma State, Alexandra is a member of SHPE, the Society of Hispanic Professional Engineers.

#### Garrett Eakers OU Scholar

Garrett is majoring in Microbiology, he studied abroad for part of the summer and then returned to his research lab at OU. He also won the 2017 Undergraduate Research Summer Symposium award for Best Effective Communication Presentation.



#### Logan Abshire and Tristan Thrasher OU Scholars



Logan and Tristan spent summer 2018 as research interns at the NASA Glenn Research Center in Cleveland, Ohio. They worked in the Photovoltaics Research Lab, extending work they have done with photovoltaics in their home department, the OU Homer L Dodge Department of Physics and Astrophysics. They are both astrophysics majors, desiring to pursue a PhD after graduation from OU.

#### Rendi Rogers OSU Scholar



OSU OK-LSAMP Scholar Rendi Rogers (third one, second row L to R).

"Top Oklahoma State University undergraduate students have been selected as Niblack Research Scholars. The 13 recipients earn \$8,000 scholarships and the opportunity to conduct supervised research. Dr. John Niblack and his wife, Heidi, have funded the Niblack Research Scholars program at OSU for 14 years. The program allows undergraduates to perform cutting-edge research in various fields. During the award presentation, Niblack commended the students for their scientific interests in a time when "disillusionment with science is growing." The 2017-18 undergraduate Niblack Research Scholars cover a wide variety of research fields and came to OSU from across the United States. One of the 2017-2018 scholars is Rendi Rogers, who recently graduated with a Microbiology/Cell & Molecular Biology degree.

Article from Oklahoma State University News and Information

#### Sergio Mares OSU Scholar



Sergio Mares was featured in an OSU's Student Spotlight: "Mares' decision to major in biochemistry at Oklahoma State was a natural fit with his selected career choice, to be a physician. Several factors contributed to Mares' decision to devote his life to medicine, including a mission trip and an internship. The mission trip occurred during Mares' sophomore year in high school. He returned to Mexico and worked as a translator for a medical team from the University of Kentucky. Following the mission trip, Mares worked as a translator at the Stillwater Health Clinic. After that he received an internship at Stillwater Medical Center. He describes this opportunity as heart shaping, and the point at which he fully committed to studying the art of medicine. Mares is on an accelerated research track. Last semester, he participated in research with Dr. Wouter Hoff of the Microbiology Department on the Microbial Diversity Project. Research is an essential component of the university experience for Mares, and a way to open new experiences and knowledge."

Article, "Mixture of Cultures, One Vision for the Future" by Christine Nichols, From College of Arts and Sciences News.

#### Paul Delgado OU Scholar

OU LSAMP Scholar majoring in Biology, was accepted to over 10 graduate programs. She accepted a fellowship to enroll in the Master of Science in Molecular Microbiology Immunology program at Johns Hopkins Bloomberg School of Public Health. She presented her research at three national conferences during 2017-18. She represented University of Oklahoma – Norman Campus at the Oklahoma EP-SCoR Research Day at the Capitol in March 2018. During her last year at OU, Paul worked with other students (including OU LSAMP Scholars Daniel Hayden and Karina Flores), faculty and staff to successfully charter a chapter of SACNAS at the University of Oklahoma.



## PROGRAM NEWS

#### **Oklahoma Mentor Day**

Dr. Sharon Lewis, Associate Professor of chemistry at Langston University, has been recognized as the outstanding mentor for Langston's OK-LSAMP. Nicholas Simon Jr., a doctoral student in integrative biology, nominated Lewis for the honor, recalling how she first warmly welcomed him to Langston as a visiting freshman and spoke to him and other students about opportunities in the chemistry department. "As an



LSAMP mentor, Lewis ensures that each student within the association knows about opportunities for growth, whether they be internships or graduate school programs. She is a blessing to the LSAMP community, and I hold her to the highest regard," Simon said.

Article from Oklahoma Foundation for Excellence

#### Dr. Karen Williams

An article in The Ada News by Carl Lewis features Dr. Karen Williams and her journey as a cancer survivor. "She currently teaches courses in a medical physics program she helped develop, at least in part because she wanted to learn more about the tests being used to diagnose and treat her own illness.

For now, Williams said, the number of students enrolled in the program is kept inten-



tionally small. 'We can't overload the medical physics program because there are only so many slots available for graduate students at OU and OSU,' she said, adding that those graduate programs are more or less required to pursue most careers in medical physics.

She also has high hopes for the impact of medical technologies originating within the field, like proton beam therapy — a highly targeted form of radiation therapy being used to treat children who cannot undergo traditional radiation therapy because of the damage it causes to their still-developing bodies.

'They say that medical physicists are the only ones who, if they're successful - if they cure cancer - they'll work themselves out of a career,' she said. "

Article from The Ada News

#### OSU Honored as National Role Model for Diversity and Inclusiveness



*Dr. Jovette Dew (left), Assistant Vice President for Institutional Diversity accepts the award on behalf of OSU.* 

"Oklahoma State University has been recognized for serving as a national role model in promoting diversity and inclusiveness throughout its system. The Washington, D.C. based nonprofit agency Minority Access, Inc., honored OSU at its 18th Annual National Role Models Conference, held in the nation's capital. Dr. Jovette Dew, Assistant Vice President for Institutional Diversity at OSU, attended the conference and accepted the award on behalf of the university.

This latest honor comes just months after OSU was recognized as one of 11 Diversity Champion colleges and universities in the nation, a designation is given by INSIGHT into Diversity magazine to denote an unyielding commitment to diversity and inclusion throughout campus communities, across academic programs, and at the highest administrative levels.

More than 70 diversity-related student organizations at OSU empower students to promote their heritage and become leaders. The university also supports K-12 programs that facilitate students' ability to successfully transition to college. A capital campaign within the Division of Institutional Diversity at OSU has raised \$3.7 million over the past three years, which includes 25 new endowed, privately-funded scholarships, and anticipates an additional 10 in the near future, all focused on promoting a culture of inclusion.

Earlier this year, Dr. Jason Kirksey, vice president for the Division of Institutional Diversity and chief diversity officer at OSU, was recognized with the NADOHE 2017 Dr. Frank W. Hale, Jr. Distinguished Service Award. The award honors an individual who is distinguished in higher education, through a robust record of consistent service, for inclusive excellence; exercising innovative and courageous leadership; serving as a visionary in the field; and exemplifying the philosophy, principles, and practices of National Association of Diversity Officers in Higher Education, while contributing substantially to diversity and inclusive excellence in higher education."

#### OSU Tops in Native Americans Earning Bachelor Degrees in Engineering



"OSU has the highest number of Native Americans earning bachelor degrees in engineering, as well as engineering technology degrees, among all the engineering schools in North America, according to data from the American Society of Engineering Education (ASEE). "We're proud to be leading the way nationally, but what's really important is that we're making progress and Native American students are responding to our invitation to earn highly-skilled degrees that offer real promise for success in their chosen fields of

engineering," said Dr. Paul Tikalsky, Dean of the College of Engineering, Architecture and Technology (CEAT) at OSU. In addition, national surveys continue to show that OSU is the leading land grant university for Native American student enrollment in the United States. The university founded the OSU Center for Sovereign Nations in 2015 to build relationships among American Indian Nations and implement initiatives across the OSU system. In 2014, the U.S. Department of Education designated OSU as a Minority Serving Institution, based on its enrollment of Native American students. According to data from the Office of Institutional Research and Information Management at OSU, the latest undergraduate statistics show that, as of last September, the number of American Indian students enrolled at OSU had grown by 50 percent since 2009 with a total of 2,323 enrolled last fall."

Article from Oklahoma State University News and Information

# UCO Receives Oklahoma House and Senate citation for NCUR 2018



"The Oklahoma House of Representatives and Senate recently cited the University of Central Oklahoma for its efforts in showcasing Oklahoma and Oklahoma City, while engaging thousands of students, as it hosted the National Conference on Undergraduate Research (NCUR). "

Article from University of Central Oklahoma Communications and Marketing

#### Dr. Kirksey Elected to National Board of Directors for Diversity Officers

Dr. Jason F. Kirksey, Vice President for Institutional Diversity and chief diversity officer at OSU, has been elected to a three-year term on the board of directors for the National Association of Diversity Officers in Higher Education (NADOHE), a preeminent voice for diversity officers in the United States. NADOHE, which recently awarded Kirksey one of its highest honors, has a stated vision to lead higher education toward inclusive excellence through institutional transformation. The organization currently has approximately 300 institutional members and 700 individual members.



Article from Oklahoma State University News and Information

#### TU receives 2017 Higher Education Excellence in Diversity Award



The University of Tulsa has received the 2017 Higher Education Excellence in Diversity Award from INSIGHT Into Diversity magazine, the oldest and largest diversityfocused publication in higher education. As a recipient of the annual HEED Award— a national honor recognizing U.S. colleges and universities that demonstrate an outstanding commitment to diversity and inclusion — TU was featured, along with 79 other recipients, in the November 2017 issue of INSIGHT Into Diversity.

Article from Commitment the University of Tulsa

#### East Central University Dr. Rutledge

Dr. Rutledge, a physics professor within the College of Health and Sciences at East Central University retired May 2018. The OK-LSAMP recognizes all your amazing work and wishes you the best in future endeavors.

Dr. Carl Rutledge has been a part of OK-LSAMP since 1994. He served as the Program Director at ECU. During his more than 20 years he also served as a research mentor to hundreds of students.

According to Dr. Karen Williams, a professor in the East Central University Physics Department, Rutledge spent countless hours in his office, advising biology, chemistry, cartography, sociology and other majors. He has guided them where to present research papers or helped them find schools with bridges to a doctorate, or ordered chemicals or 'critters' for their research projects in biology.



"Many students don't have the confidence that they can go on for that advanced degree without a program like LSAMP and a leader like Dr. Rutledge who always filled the students with complements. Dr. Rutledge believed that nothing was impossible with a little hard work." Dr. Williams stated.

# OK-LSAMP SCHOLAR GRADUATES

#### Fall 2017

**Robert Luera, Cameron University Animal Science** Amber Ward, Cameron University Physics Sarah Cruz, Northeastern State University Cellular Biology Ryan Farney, Northeastern State University **Biology Fish & Wildlife** Suzi Barboza-Pacheco, Oklahoma State University **Biochemistry and Molecular Biology** Harwinder Birdi, Oklahoma State University **Management Information Systems** Jasmine Diaz De Leon, Oklahoma State University **Nutritional Sciences** Jalen Golphin, Oklahoma State University Mechanical and Aerospace Engineering **Daniel Henthorn, Oklahoma State University Biochemistry & Molecular Biology** Isiah Hill, Oklahoma State University **Electrical Engineering** Elisa Mercado, Oklahoma State University Mechanical Engineering Technology Eulojio Sanchez Vasquez, Oklahoma State University **Industrial Engineering & Management** Caleb Gunnar Teague, Oklahoma State University Electrical Engineering Ashane Woody, Oklahoma State University Mechanical Engineering Mary Ozor, University of Central Oklahoma **Computer Science** Mary Hoover, University of Oklahoma **Chemical Biomedical Engineering** Karina Jedry, University of Oklahoma **Chemical Engineering** 



#### Spring 2018

Eduardo Aguayo, Cameron University Chemistry Katelyn Locy, Cameron University Agriculture **Claire Noel, Cameron University** Biology **Erik Perez, Cameron University** Mechanical Engineering Patrick Perez, Cameron University **Computer Science** Scott Wilson, Cameron University **Mathematics** Maranda Clymer, East Central University Medical Physics Matthew Henry, East Central University Physics Ida Nicks, East Central University **Computer Science** Chase Tillar, East Central University Physics Briana Anderson, Langston University Biology Derricka Arnold, Langston University Biology **Raven Daniels, Langston University** Biology Sadia Farah, Langston University Biology **Beautiful Fields, Langston University Mathematics** Morgan Givens-Mayhue, Langston University Chemistry **Tierra Harris, Langston University** Biology Imani Jackson, Langston University Biology Laguan Johnson, Langston University Biology

## OK-LSAMP SCHOLAR GRADUATES

#### Spring 2018

Sierra Luis, Langston University **Computer Science** Mikal Sanders, Langston University **Computer Science** Alexander Smith, Langston University Agricultural Science Kristopher Vine, Langston University Biology Alexis Armon, Northeastern State University **Mathematics** Edgar Delgado, Northeastern State University **Mathematics** Lisa Lawson-Bonser, Northeastern State University Molecular Biology Lizzie Lightning, Northeastern State University Chemistry/Environmental Matthew Shinn, Northeastern State University **Mathematics** Priscilla Avalos, Northwestern Oklahoma State University Chemistry Willow Gahr, Northwestern Oklahoma State University Biology Alicia Aguilar, Oklahoma State University Chemical engineering and Biochemistry Tatiana Chatman, Oklahoma State University **Computer Engineering** Brendan Ennis, Oklahoma State University Mechanical Engineering Technology Erin Gallaway, Oklahoma State University Microbiology/Cell & Molecular Biology Tabitha Gunnars, Oklahoma State University Zoology Geir Hareland Jr., Oklahoma State University **Biochemistry & Molecular Biology** Ashlee Hawkins, Oklahoma State University Microbiology/Cell & Molecular Biology Mykale-Jamal Holland, Oklahoma State University Aerospace Engineering

**Dillon LeDoux, Oklahoma State University Computer Engineering** Alexander Meador, Oklahoma State University Biochemistry Malik Miller, Oklahoma State University Animal Science Clay Patterson, Oklahoma State University **Computer Engineering** Rendi Rogers, Oklahoma State University Microbiology/Cell & Molecular Biology Chazz Schapansky, Oklahoma State University Aerospace Engineering Sydni Smith, Oklahoma State University Microbiology/Cell & Molecular Biology William Colby Starr, Oklahoma State University **Microbiology and Molecular Genetics** Ross Walker, Oklahoma State University Microbiology/Cell & Molecular Biology Casey Love, Southeastern Oklahoma State University Chemistry and Biology Matthew Maxwell, Southeastern Oklahoma State University Chemistry Patrick Sharp, Southeastern Oklahoma State University **Biology and Chemistry** Payton Whitehead, Southeastern Oklahoma State University Chemistry Dustin Davilla, Southwestern Oklahoma State University Chemistry Donnie Jones, Southwestern Oklahoma State University Chemistry Jesse Velasco, Southwestern Oklahoma State University **Biomedical Sciences** Payden Cloud, University of Central Oklahoma Biology. Brent Gaddis II, University of Central Oklahoma Mechanical and Electrical Engineering Shelby Garcia, University of Central Oklahoma Biology

### OK-LSAMP SCHOLAR GRADUATES

### Spring 2018

Alma Marguez, University of Central Oklahoma Biology Christiana Obioma, University of Central Oklahoma **Biomedical Sciences** Mary Thetford, University of Central Oklahoma Biology Raistland Valenzuela, University of Central Oklahoma Biology Jessica Ames, University of Oklahoma **Chemical Biosciences** Eivy Arroyo Diaz, University of Oklahoma **Electrical Engineering** Taylor Calvert, University of Oklahoma **Chemical Biosciences** Bree Cooper, University of Oklahoma Chemical Engineering/Biotechnology Ariel Cross, University of Oklahoma Chemical Engineering Paul Delgado, University of Oklahoma Biology **Covenant Elenwo, University of Oklahoma** Biology Samuel Elenwo, University of Oklahoma Biology Austin Gothe, University of Oklahoma Biology Julius Marshall, University of Oklahoma Aerospace Engineering

Montana Minnis, University of Oklahoma **Chemical Engineering** Amber Morgan, University of Oklahoma **Chemical Engineering: Biotechnology Raquel Redshirt, University of Oklahoma Environmental Engineering** Nathan Richbourg, University of Oklahoma Chemical engineering: Biotechnology Octavio Serrano, University of Oklahoma Mechanical Engineering Monica Stevenson, University of Oklahoma Chemistry Tekenari Tienabeso, University of Oklahoma Biochemistry Giovanni Tolentino Ramos, University of Oklahoma Biology Carlos Villanueva, University of Oklahoma Mathematics Michaela Flonard, University of Tulsa Biology Alyssa Hernandez, University of Tulsa Mechanical Engineering Armond Kelley, University of Tulsa **Electrical and Computer Engineering Evelin Lopez, University of Tulsa** Mechanical Engineering

Congratulations! This is just the beginning!





Amber Morgan - OU

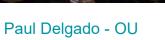


Matthew Maxwell - SEOSU



Alicia Aguilar - OSU







Jesse Velasco - SWOSU

# Current Bridge to Doctorate Fellows

### Bailey Whitman, MS Industrial Engineering and Management

Bailey Whitman, master's student in industrial engineering and management (IEM), placed first in the Institute of Industrial and Systems Engineers (IISE) South Central Regional Student Conference Competition at Texas A&M University on March 3. She also competed in the national competition in Orlando on May 19-22. Whitman developed a mathematical model to determine an optimal inventory mix for a regional manufacturer. Her work reduced the number of stock bar types by 33 percent, yield loss from 12 percent to 6 percent, and the number of die changes. It also allows the company to make additional sales. All these changes have the potential of generating new revenues and cutting expenditures for a total value of \$427,800 annually. The work done by IEM students such as [Whitman] help the bottom line for profit and non-profit organizations alike. They help companies be more productive, efficient, and effective. After completing her



master's program, Whitman plans to pursue her doctoral studies in humanitarian logistics. Bailey has been engaged in research since her first year as a freshman research scholar and is interested in applying operations research models for the betterment of society. In this case, her efforts will help a regional company save or earn almost \$0.5 million each year.

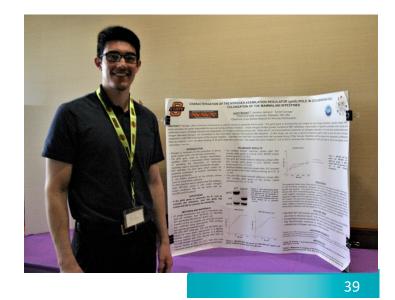
### Ana Chicas-Mosier, PhD Zoology

Ana is pursuing a PhD in Integrative Biology (Zoology). She conducted research last summer of 2017 in Puerto Rico, and then this past summer she did research in France.



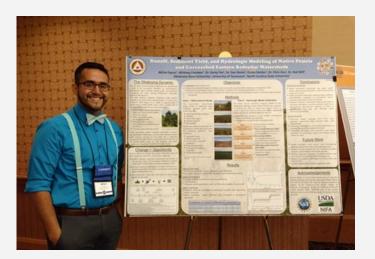
### Justin Bowen, MS Microbiology/ Cell and Molecular Biology

Justin won the 1st place poster at the American Society for Microbiology Regional Meeting on April 20.



### Adrian Saenz, MS Biosystems Engineering

Adrian is pursuing his Master of Science in Biosystems Engineering . He has over 5 years of research experience in water quality and quantity focus projects. Beside his strong research and academic abilities, Adrian is very active in community oriented organizations.



### Zachary Ridge, MS Forensic Sciences

Zachary is an alumnus of Oklahoma State University. He is currently pursuing his MS in Forensic Sciences at the OSU Center for Health Sciences Graduate College.



### Kichelle Henderson, MS Mathematics

Kichelle is an alumna of Langston University. She is completing her MS in Mathematics , her research emphasis is applied math.



### Nicholas Simon Jr., MS Integrative Biology

Nicholas, alumnus of Langston University is pursuing a MS in Integrative Biology. His research emphasis is cardiovascular physiology.



### Michael Joseph Gorbet, PhD Veterinary Biomedical

Michael is an alumnus of Southwestern Oklahoma State University currently completing PhD. His research emphasis is cancer therapy.

### James Nolan Craun, MS Natural Resources Ecology and Management

Nolan is alumnus of Oklahoma State University. Nolan's research focuses on Cattle grazing behavior on rangelands. He has presented his research at the Society for Range management and the Oklahoma Natural Resources convention.

### Giovanni Tolentino Ramos, Biology

Giovanni is an alumnus of the University of Oklahoma completing a Biology graduate program.

### Alexander Meador, Biochemistry

Alexander graduated from Oklahoma State University and is now completing a graduate program at the University of Oklahoma.

### Eivy Arroyo Diaz, Electrical Engineering

Eivy is an alumnus of the University of Oklahoma and continues there for the completion of his graduate program in Electrical and Computer Engineering.

### Carlos Villanueva, Mathematics

Carlos is pursuing a graduate program at the University of Oklahoma in Mathematics.

### Steven Bittner, Biology

Steven is an alumnus of the University of Massachusetts—Amhurst, currently he is pursuing a graduate program in Biology at the University of Oklahoma.

### Jasmine DeHart, Computer Science

Jasmine is an alumna of Philander Smith College, now she is completing a graduate program in Computer Science at the University of Oklahoma.

### Luis Figueroa, Chemical Engineering

Luis is an alumnus of the University of Central Oklahoma and is now pursuing a graduate program in Chemical Engineering at the University of Oklahoma.

### Donald Jones, Chemical Engineering

Donald received his undergraduate degree from the University of Oklahoma and continues there now completing a graduate program in Mathematics.

### OK-LSAMP and Bridge to Doctorate Alumní

- **Brandon Postoak** Received his Master of Science in Biomedical Science from OSU this past May and currently he is a medical student at OSU-COM in Tulsa.
- Hope Askew Attending Mercer University College of Pharmacy. She is an ambassador for the college of pharmacy, and when she is not in class she is usually studying or out in the community doing Service Learning activities like blood pressure screenings or nutrition support. She is looking into an internship back in Oklahoma with the Indian Health Services as a pharmacy intern in their hospitals on the reservations or just staying in Atlanta and working in a community pharmacy or a drug company.
- Dr. B.J. Bench Recently switched from the Sr. Chemist role at Tyson Foods, Inc. to Director of Food Safety & Quality Assurance for the Animal Nutrition Group. He received his B.S. in Chemistry from Southeastern Oklahoma State University, Ph.D. from Texas A&M University, and was a NIH (National Institute of Health) post-doctoral fellow at The Samuel Roberts Noble Foundation. B.J. has been happily married to his wife Lara for over six years and they have two biological daughters, Madi and Kate, four and one years old, respectively. They are also raising their cousin Lauren, who is seventeen.
- Bradford Bolt Currently a Design Engineer at Pratt & Whitney, a company he discovered at a career fair at Oklahoma State University, Bradford is working on Pratt & Whitney's Advanced Engines Program. He has recently designed a front frame for a potential military propulsion system, and his design provides a low cost, low weight, and low part count solution that is being manufactured for validation testing.
- Jorge Lightfoot Currently working part-time until he graduates with his PhD in Microbiology and Molecular Genetics. He won the Edward A. and Mary M. Grula Fellowship from the Department of Microbiology & Molecular Genetics for the 2017-2018 Academic Year.
- **Matthew Takyi** Leading a project overseas. He works for SJH Sheffield Aerospace, a company providing specialized engineering consulting services to the aviation industry, as an engineer.
- **Kimberlee Campbell** Currently working with Cox Enterprises, she has been there since she graduated in 2005. She is the Senior HR manager at Manheim Dallas.
- **Brook Romine -** Accepted into the Arkansas College of Osteopathic Medicine.
- Cortes Williams III OU LSAMP Bridge to the Doctorate Cohort VI Fellow Cortes Williams III (now a Postdoctoral Fellow, Technology Transfer) was awarded the Fall 2017 Growth Funds Award for Development of In Vitro Tumor Models for Chemotherapeutic Drug Testing. The goal of this program is to allow researchers to bridge the gap between academia and industry by providing funding to answer market-driven questions.

- **Kimberlee Campbell** Currently working with Cox Enterprises, she has been there since she graduated in 2005. She is the Senior HR manager at Manheim Dallas.
- Skylar J. Calhoun Defended his Master of Science thesis on "Evaluation of rolling-type isolation systems for seismic hazard mitigation" in early July. He has one article published and another under review. Skylar is working at Wallace Engineering in Oklahoma City.
- Robyn Doughtie Attended Oklahoma State University 1995 1999 as Robyn Taylor and participated in the OKLSAMP program. She left the program to major in MIS, which at the time wasn't an option. Robyn's current position is Applications and Systems Programming Manager for Fort Bend County Information Technology department. Her team is responsible for all software application development and implementation (vendor and in house apps), database, website and mobile app. The applications range from ERP systems to Judicial Court systems including law enforcement applications.
- **Dwayne Gardner** He was a part of the Alum Class of 2001 and is now a Biomedical Sciences Instructor for Tulsa Technology Center .
- Angelo Majike Currently a Medical Technologist for St John's Tulsa, and has been for three years!
- **Gretchan Moore -** Completing her second year in medical school at OSU
- Cari D. Quick Recently graduated in August with Masters of Microbiology degree from The University of Oklahoma. She is currently the Assistant Coordinator at the Langston University NASA Advanced Research in Biology Center.
- Linzi Thompson Graduated from Stanford University with a Master of Science in Environmental Engineering. During her time at Stanford, she worked as a research assistant and conducted studies on the effectiveness of new drinking water treatment methods in Bangladesh and India by analyzing tap water samples for disinfection byproducts.
- Cammi Valdez OK-LSAMP fellow at SWOSU from 2006-2008. Earned her PhD in 2014 in Biological Chemistry and Molecular Pharmacology from Harvard University. Since then, she has been working at Harvard College as Assistant Director of Undergraduate Research and Fellowships.

### PROGRAM STAFF



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### UPCOMING EVENTS



Emerging Researchers National Conference in STEM

> February 21-23, 2019 Washington, D.C.

Determine the National Diversity in STEM Conference Hawai'i Convention Center | Honolulu, HI October 31 - November 2



See You April 11-13 2019!

ncur.kennesaw.edu

2019 Research Day at the Capitol Tuesday, March 26, 2019 8:30am - 12:00pm



Southwestern Oklahoma State University March 8th, 2019 Celebrating 20 Years of Undergraduate Research Successes

### Thank You!

This publication would not be possible without the hard work of a dedicated design team. Appreciation goes to Casandra Salinas who took on the task of organizing this effort. This document would also not have been possible without Tabitha Gunnars and Andrew Gonzales. A huge thank you goes to these OK-LSAMP students for their amazing design talent.

### **LOUIS STOKES & LSAMP**



In 1991, the National Science Foundation created six multi-institutional Alliance for Minority Participation (AMP) programs. In 1998, **Congressman Louis Stokes'** name was added to the program.

Louis Stokes (1925 - 2015) was an American attorney and politician. He served 15 terms in the United States House of Representatives and was the first black congressman elected in the state of Ohio. Congressman Stokes played a pivotal role in the quest for civil rights, equality and social and economic justice throughout his tenure in the United States Congress. You can read all about Congressman Stokes' career at:

http://history.house.gov/People/Detail?id=22311

**Dr. A. James Hicks** was named LSAMP program director in 1997. He received a Ph.D. in biology from the University of Illinois at Urbana

and additional training at Harvard University, the National Institutes of Health, and the Missouri Botanical Gardens. When Dr. Hicks took over LSAMP, there were 25 Alliances in the nation. Today, there are more than 40 active LSAMP alliances with over 800 colleges and universities involved in increasing the quality and quantity of students from underrepresented populations who receive degrees in science, technology, engineering, and mathematics.



# **A Brief History of OK-LSAMP**

In 1992, the Oklahoma State Regents organized the Oklahoma Alliance for Minority Participation in Science, Engineering, and Mathematics (OKAMP SEM). Dr. Earl Mitchell, Oklahoma State University (OSU) Professor, was chosen to serve as Chair of the Alliance. In 1993, Dr. Mitchell, with the help of Dr. Ann Ackerman from South Oklahoma City Junior College, wrote and submitted an AMP proposal to the National Science Foundation (NSF). Included in the proposal was additional matching support for the program at the regional universities provided by the Oklahoma State Regents for Higher Education. In 1994, OSU, as the lead institution, along with seven partner institutions was awarded the grant. The OKAMP program was established to address the critical undersupply of minority students pursuing BS degrees in Science, Mathematics, Engineering, and Technology (SMET).

Today, 11 Oklahoma institutions of higher education make up the Oklahoma consortium. Through the years, many changes have been made including the addition of Congressman Louis Stokes' name to the AMP programs nation-wide, and the change of SMET to Science, Technology, Engineering, and Mathematics (STEM). A graduate school initiative - the Bridge to the Doctorate (BD) program was implemented with Oklahoma providing graduate support for 9 cohorts of BD Fellows since the BD initiative began.

Throughout the 2017-2018 academic year, the Oklahoma alliance increased the number of scholars by 16% in comparison to the 2016-2017 academic year. Of those 314 Scholars, 88 completed Bachelor of Science degrees and 24 of the graduates were admitted to graduate schools for a total of 27% of scholars. During the academic year 151 (48%) of the alliance scholars participated in research activities, and 96 (31%) of the scholars, participated in summer internship experiences at national and international locations.

### **OK-LSAMP Overview**

The Oklahoma Louis Stokes Alliance for Minority Participation (OK-LSAMP) is designed for students majoring in Science, Technology, Engineering and Mathematics (STEM) fields. Funded by the National Science Foundation (NSF), the LSAMP program began in 1994 when Oklahoma institutions of higher education joined forces to significantly increase the recruitment, enrollment and retention of underrepresented minority students in STEM disciplines. The LSAMP program is named after late Ohio Congressman, Louis Stokes, who is responsible for numerous minority-focused programs through NSF and the National Institute of Health (NIH). The Oklahoma program nurtures and assists students through the undergraduate program while creating opportunities for students to pursue graduate degrees in their selected STEM disciplines. OK-LSAMP scholars are provided opportunities to interact with faculty and scientists, participate in research activities, present at national conferences, and prepare for the transition into graduate programs and/or become leaders in the STEM workforce.



### Student Spotlights

**Catherine White**, Biological Sciences undergraduate, conducted research abroad in Costa Rica.

Brianna Cole, Biology undergraduate, conducted research abroad in China.

Erika Costain, Biology and Chemistry undergraduate, conducted research abroad in China.

Riley Smith, Microbiology undergraduate, studied abroad in Peru.

Marly Fixico-Hardison, Industrial Engineering and Management undergraduate, participated with Native Explorers.

Jordan Moore, Microbiology undergraduate, was awarded Point Foundation Scholar.

William Starr, Microbiology undergraduate, received the National Goldwater Honorable mention.

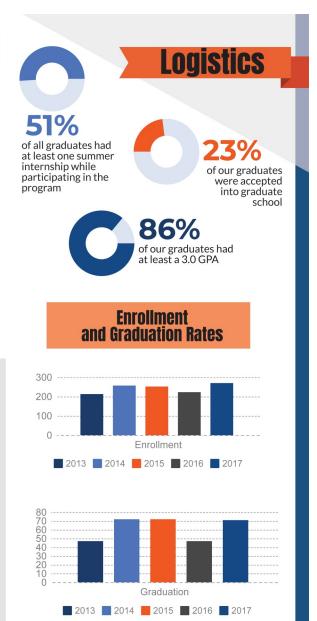
Melissa Chanderban, Microbiology graduate, was awarded NSF Graduate Research Fellowship for 2017-2022.

Akanimoh 'Sanmi Adeleye, Computer Engineering graduate, was awarded NSF Graduate Research Fellowship for 2017-2022.

Autumn Only A Chief, Nutritional Sciences graduate, received Senior of Significance and Gates Millennium Scholarship.

**Jordan Fleming**, Microbiology graduate, received a Wentz research grant.

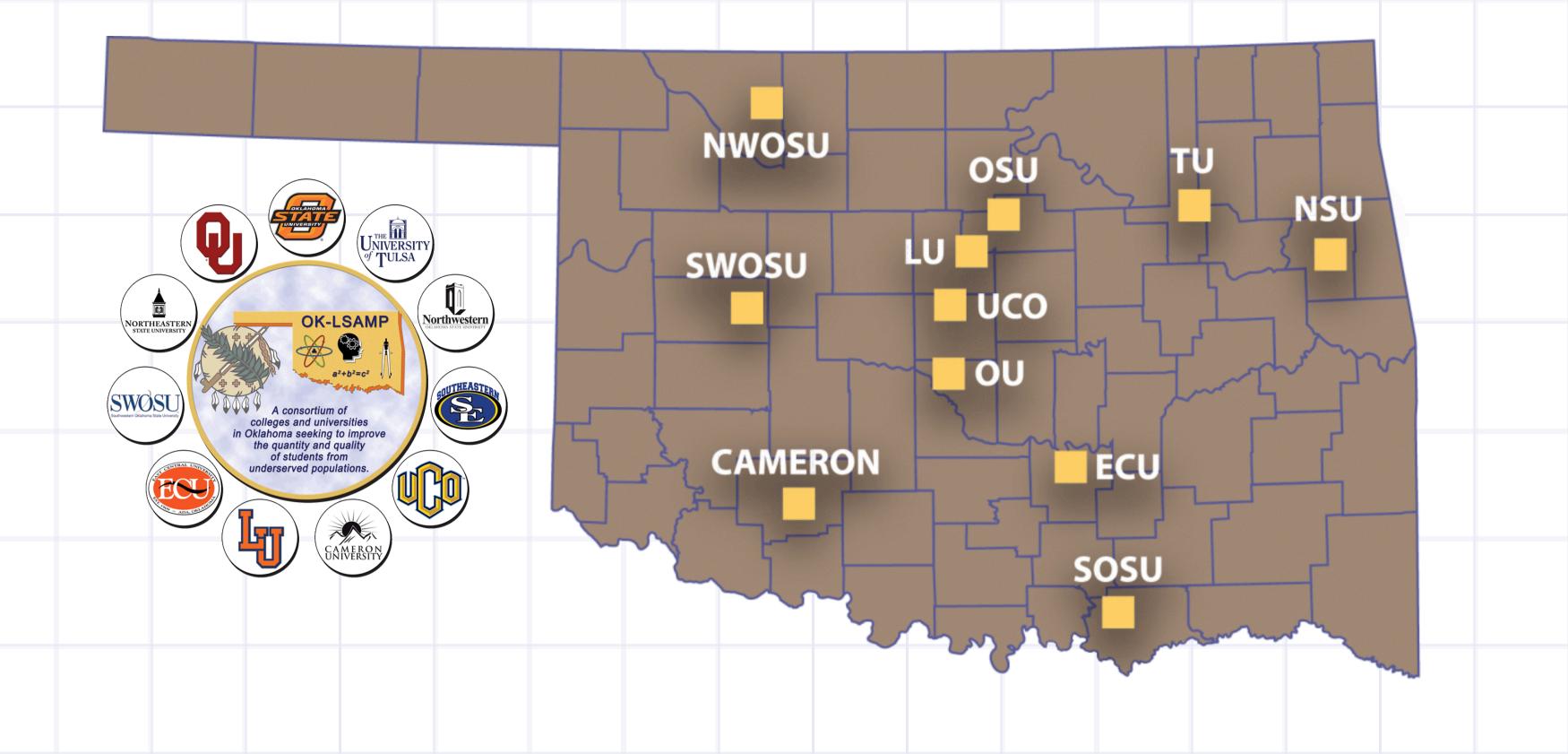
Ayrianna Swanson, Microbiology undergraduate, recipient of the Women of OSU Science scholar.



### ATTENDEES OF THE 2017 SACNAS CONFERENCE



ok-lsamp.okstate.edu



# What is OK-LSAMP?

Funded by the National Science Foundation (NSF), the program is a partnership of Oklahoma colleges and universities.

Together, these schools develop programs aimed at increasing the number of minority students who recive STEM degrees.



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