The Annual OK-LSAMP Newsletter 2016 – 2017

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LETTER FROM OUR PI

Dr. Jason F Kirksey

Greetings from the OK-LSAMP Program

In 1994 the Oklahoma Louis Stokes Alliance for Minority Participation (LSAMP) was established. Our 11-university alliance strives to increase the number of underrepresented minority students (URMS) pursuing baccalaureate degrees in Science, Technology, Engineering, and Mathematics (STEM) and matriculating into graduate programs. This year was another eventful year for the OK-LSAMP program. Currently in its fifth phase of National Science Foundation funding, our students and staff are doing a great job representing the program not only statewide but also internationally. Many scholars have been successfully matriculated to graduate school. We are proud of them and look forward to seeing all they will accomplishing as scientists, engineers, technology professionals, and researchers.

Some OK-LSAMP students have earned post-baccalaureate fellowship support with the NSF LSAMP Bridge to the Doctorate program and received NSF GRFP (Graduate Research Fellowship Program) funding. Our scholars have touched all four corners of the world with their research and diligent work, which makes the great state of Oklahoma proud. The success of the OK-LSAMP program is due not only to the work the scholars have done but also our campus program managers and faculty mentors who ensure that scholars get the best resources available. One of these resources is the undergraduate international research opportunities made available to OK-LSAMP scholars through various collaborations, some of these include Southwestern Oklahoma State University's Dr. Tim Hubin's collaboration with researchers in Hull, England; University of Oklahoma's Dr. Walden and Dr. Bourne research in Exter, England; Dr. Walden and Dr. Bartley's research in Cambridge, England; and Southeastern Oklahoma State University' s Dr. Ludrick's and Dr. Wu's research in Beijing, China.

This year, the staff of OK-LSAMP welcomed Brenda L. Morales as the Program Director. She has worked diligently building relationships with our alliance campus partners and faculty. Brenda demonstrates her support to student success daily by maintaining an open line of communication with all OK-LSAMP scholars. It is not uncommon to catch Brenda at a student-sponsored event even after she spent a full day in the office. Her dedication is noteworthy and we are excited to start a second year with her at the helm. 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.

Numerous success stories are found within this newsletter and it is my privilege to share these scholars' accomplishments over the past year. As principal investigator for OK-LSAMP, I look forward to working with all the campus program managers, faculty, staff, scholars and Bridge to the Doctorate fellows to continue promoting excellence and diversity in science, technology, engineering, and mathematics. We have accomplished much together and I anticipate many great things to come.

Sincerely,

Jason Kirksey, Ph.D.

Vice President for Institutional Diversity

J. I. Kley

Principal Investigator for the Oklahoma Louis Stokes Alliance for Minority Participation

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About OKLSAMP

Funded by the National Science Foundation. OK-LSAMP 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

Activities include:

- Faculty mentoring
- Conference and presentation travel
- Meetings focused on professional development and networking



PROGRAM NEWS

OK-LSAMP mentor Dr. Erika Lutter was honored as an mentor by the David and Molly Boren Mentoring Initiative, during the 11th Annual Oklahoma Mentor Day. Her students won 25 awards this year and 17 the year before!





NWOSU's own Dr. Tim Maharry hosted a Math and Science Academy at Northwestern State University for local elementary school students. The academy gave the students the opportunity to develop math and science skills and concluded with a sailboat race! NWOSU Scholar Paola Ponce-Villalobos also aided Dr. Maharry in this endeavor!



Dr. Susan Walden from the University of Oklahoma was elected to the Academy of Fellows for the American Society for Engineering Education. Susan is the first ASEE awardee from the University of Oklahoma. Dr. Walden also hold the positions of director of the Research Institute for STEM education, associate director of the Sooner Engineering Education Center, core affiliate faculty in the College of Arts and Sciences, Women and Gender Studies program and director of the office of Undergraduate Research.

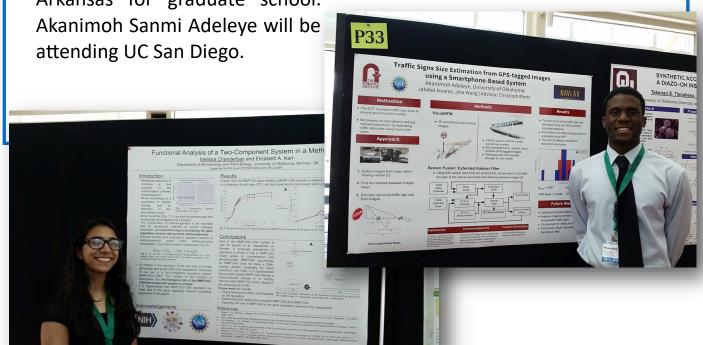




Elizabeth Apala was recognized for an outstanding undergraduate paper in Physical Sciences. Dr. Karen Williams, faculty mentor at ECU is seen presenting this award.



University of Oklahoma OK-LSMAP scholars, Melissa Chanderban and Akanimoh Sanmi Adeleye, received the prestigious NSF Graduate Research Fellowship for 2017-2022! Melissa Chanderban will attend University of Arkansas for graduate school.



SCHOLAR REQUIREMENTS

Eligibility Requirements

- 1. Minimum GPA of 3.0
- 2. US citizen or permanent resident
- Able to participate in and contribute to program activities
- Full time student in an approved STEM field(See campus program major if questions about major)
- 5. Demonstrated intent in pursuing investigative studies and a graduate degree in STEM
- Demonstrated desire to promote the efforts of LSAMP an NSF in underrepresented communities

Requirements for Continued Support

- 1. Minimum GPA of 3.0
- 2. Regular class attendance
- Provide a current class schedule at the beginning of the semester
- Maintain full time status (immediate notification of any change in status is required)
- 5. Remain in eligible STEM major
- 6. Continued active participation in the required program activities. Any scholar whose participation rate is below

Required Activities for all participants

Scholar's meetings—once a month unless otherwise specified

Mentoring Component— Under the guidance of a 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 Five (5) 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 symposium held at OSU.

Occasional research internships, peer mentoring, or other program activities— This will not interfere with your academics .

Acknowledgement of support by OK-LSAMP and NSF- (Cooperative Agreement HRD-0902027) in appropriate publications and public events is required. Display of the OK-LSAMP (and NSF if desired) on posters and on last slide of PowerPoint presentations is required. Logos will be provided by the OK-LSAMP office.

POSTER PRESENTATIONS

SACNAS Long Beach, CA

2016 SACNAS

The National Diversity in STEM Conference

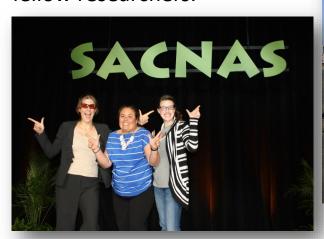
October 13 - 15 | Long Beach, California



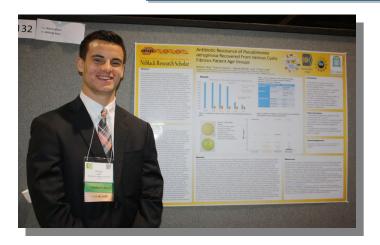
The Society for the Advancement of Chicano and Native Americans in Science commonly known as SACNAS

Our scholars attended the SACNAS conference and spent three days in Long Beach, California presenting their research and networking with fellow researchers.

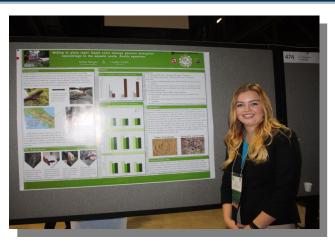
has been the leading multicultural and multidisciplinary STEM organization in the country.



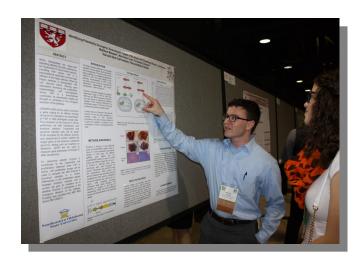




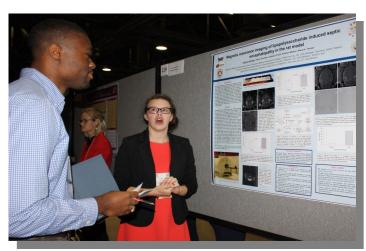
Colby Starr, OSU



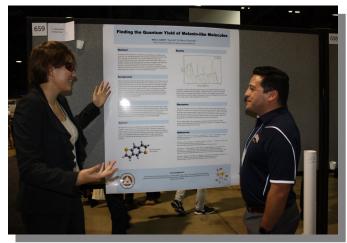
Amber Morgan, OU



Matthew Maxwell , SEOSU



Katelyn Whitaker, OSU



Mary Catlett, OSU



Jesse Velasco, SWOSU

POSTER PRESENTATIONS

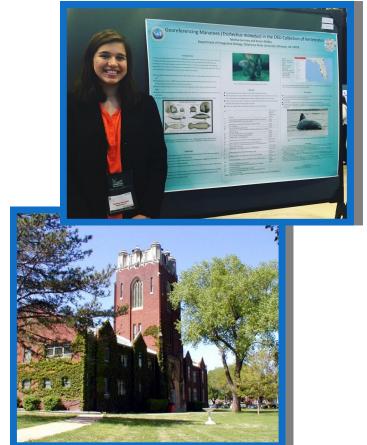
Oklahoma Research Day

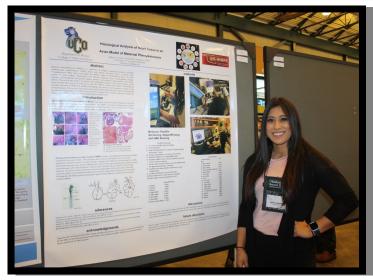


Northwestern Oklahoma State University March 3rd, 2017

Research, Innovation, Imagination: Explore Your Curiosity at ORD

The mission of the Oklahoma Research Day is to promote cross-campus and cross-disciplinary research among all institutions of higher learning in the State of Oklahoma. The 18th annual Oklahoma Research Day is an event that celebrating student and faculty research as well as scholarly activities that enrich anyone who participates. This event followed the trend of previous research days and had over 1000 registered guests and participants. OK-LSAMP had plenty of participants who made our institutions proud.





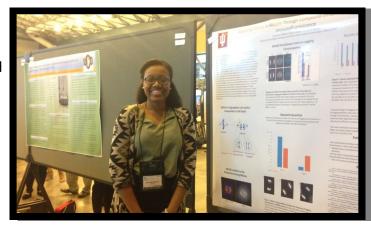
Jailene Canales - UCO presenting her poster at Oklahoma Research day



CheyAnne Youngblood -**NSU** presented at Oklahoma Research day



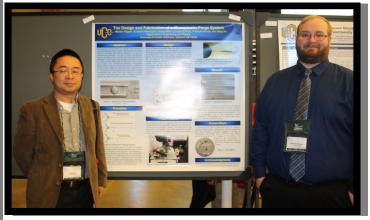
Peyton Joines - SEOSU presenting his poster at Oklahoma Research Day



Gabrielle Williams - LU Presenting her poster at Oklahoma Research day



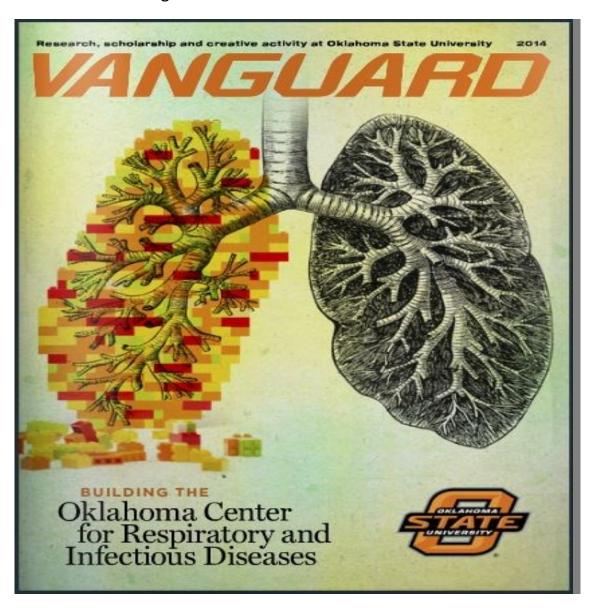
Langston OK-LSAMP Scholars at Oklahoma Research Day



Nicholas Wagner - UCO presented at Oklahoma Research day

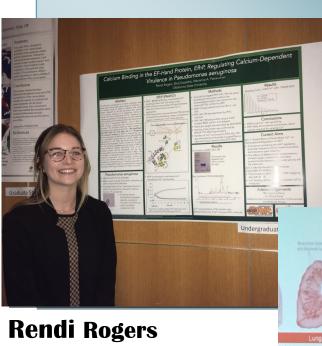
Oklahoma Center for Respiratory and Infectious Diseases

The Oklahoma Center for Respiratory and Infectious diseases was established through a grant from the National Institutes of Health and the Campus of Oklahoma State University is becoming the premier location for cutting edge research. The center is committed to excellence along and our scholars were able to contribute to the wide pool of scientific knowledge.



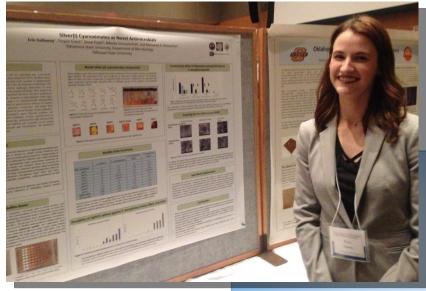
OK-LSAMP Scholars

Oral and Poster presentations





Colby Starr



Erin Gallaway

National Conference on Undergraduate Research



The 31st Annual National Conference on Undergraduate Research was hosted at the University of Memphis April 6th -8th and gave our scholars a chance to present their research right off the mighty Mississippi River.



"It is a great experience to expand your research and share it with the community"

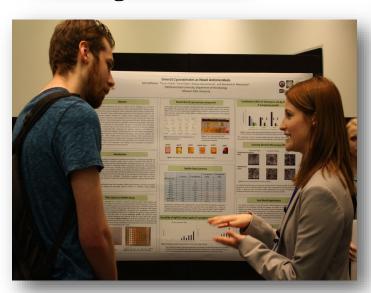
- Daniel Henthorn OSU



Alicia Aguilar - OSU

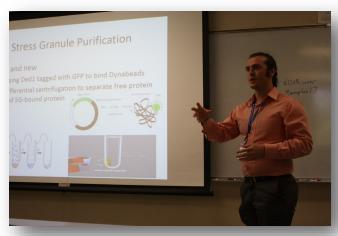


Rendi Rogers - OSU



Charles Bales - TU





Daniel Henthorn - OSU



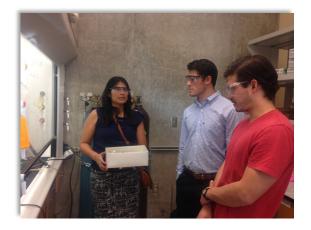
Matheus Barbosa - OSU

EVENTS





OK-LSAMP prepares scholars not only academically but interpersonally as well. There are plenty events held throughout the alliance campuses to promote well rounded scholars. OK-LSAMP Scholars also have the opportunity to attend local, regional and national events to network with fellow researchers, attain professional and academic development





Women of Color Conference

The Women of Color Conference was held in Detroit and Alicia received an award. She is seen pictured with the West Virginia-Kentucky Alliance.





Laboratory Tours



Pictured are Doctors Yolanda Vasquez (right) and Donghua Zhou's lab grad student(above)

During a Scholars meeting at Oklahoma State a few scholars had the chance to tour the labs in the Henry Bellmon Research Center

Will Rogers STEM Fair

Dene Roseburr, Inclusion Leadership program Coordinator, with OSU scholars Taliyah and volunteer, Beatriz Escudero at the Will Rogers STEM Fair



INTERNATIONAL EXPERIENCE



SWOSU Scholars Dustin Davila and Brad Burke enjoying a potpie in England. They are currently at the University of Hull in collaboration with synthesis and in vitro assessment of novel CXCR4 chemokine receptor antagonists

Ayrianna Swanson in front of the Arc De Triomphe while on her study abroad trip to Europe



Catherine White on the way to the airport to participate in a REU located in Costa Rica. The REU (Research Experience for Undergraduates) is a summer program in Costa Rica for U.S. underrepresented minority Students. Students will be living at La Selva Research Station for their nine -week research experience. Features of this program include 1) research skills in the field, 2) enhancing communication skills through training in scientific writing, oral presentations,



science blogging, and videography, and 3) integration of cultural experiences with research development. Students will interact with indigenous and rural communities in Costa Rica to discuss the important environmental and social issues affecting their lives and communities.



Scholars Erika Costain and Briana Cole are spending eight weeks in China. Both students are scholars from SEOSU and will be learning new molecular biology techniques at the Beijing Center for Physical and Chemical Analysis.

SCHOLAR HIGHLIGHTS



Alicia Aguilar - Participated in the Engineering without Borders International conference, NCUR 2017 and received an award at the Women of Color conference.



Mang Chang- Will be conducting research in the Oak Ridge National Library after graduation (December 2016 graduate)



Jordan Fleming - Received a Wentz research grant for the 2016-2017 School Year



Jalen Golphin- Received a graduate assistantship in the College of Architecture, Engineering and Technology for 2017



Jordan (Jay) Moore-Participated in the SACNAS conference and was named a point scholar



Autumn Only A Chief- Was featured in the New York times for her accomplishments as a first generation college student. She was also awarded senior of significance, the Gates Millennium Scholarship and top 10 Senior in **Nutritional Sciences**



William (Colby) Starr- won first place undergraduate poster during Oklahoma State research week. He also received honorable mention for the Barry Goldwater Scholarship in Mathematics, Science and Engineering.



Ayrianana Swanson-Recipient of the Women of OSU Science scholar. She is currently studying in France where she is involved in plant biology research

SCHOLAR HIGHLIGHTS CONTINUED...

Alicia Aguilar – Participated in the Engineering without Borders International conference, NCUR 2017 and received an award at the Women of Color conference. She receive Goldwater Honorable mention and is also a Nick Black scholar.

Caleb Alexander - Participated in the Honors College and Cell and Molecular Biology Symposium

Juilian Allen- Attended the Oklahoma Academy of Science Conference and the 105th Annual Technical meeting Oklahoma Academy of Science

Elizabeth Apala -recognized for outstanding undergraduate paper in Physical Sciences

Hope Askew—Participated in the Women in Science conference held in Tulsa.

Priscilla Avalos – Peoples choice winner for landscape painting called "Shadows of Sunset" at the NWOSU Art Society art show

Micheal Bannon- Received the Cameron University NASA award and SGA senator of the SACNAS conference

Asaph Matheus Barbosa – Participated in NCUR 2017

Brenden Balch - Made presidents honor roll in the Fall of 2016

Wendy Barilla - Made President's Honor roll at Cameron University

Jessica Catlin – Participated in the Society of Women conference

Jailene Canales- Made presidents honor roll in Spring 2017

Tatiana Chapman – Participated in the National society of Black Engineers National Conference

Maranda Clymer - Received first place in Non-Biological Science Presentations at the 2016 OK-Lsamp Symposium

Willow Gahr – Assisted with NWOSU Math and Science Academy and is a tutor with the NWOSU academic success center

Erin Gallaway – Participated in the Great Plains Infectious Disease conference in Kansas, Ok-Center for respiratory and infectious diseases research retreat, and NCUR

Heather Wyrick-Griggs- Participated in a REU in Beijing at the center for Physical and Chemical Analysis

Rachel Grider- Will be attending the Arkansas College of Osteopathic medicine

Jalen Golphin – Participated in the AIAA symposium in Tulsa

Tabitha Gunnars— Participated in the SWAN conference

Marly Fixico-Hardison – Participated in the OSU Soil Biology Symposium

Daniel Henthorn- Participated in SACNAS, NCUR and the LANS conference

SCHOLAR HIGHLIGHTS CONTINUED...

Hezekiah Jones - Cameron University NASA award

Robert Luera - Cameron University Agriculture Program Distinguished Student

Katelyn Locy - Cameron University Agriculture distinguished student

Casey Love — Currently participating in a REU at the Fred Hutchison Cancer Research Center

Kylee O'Dell—Received 3rd place in Non-Biological Science presentations at the 2016 OKLSAMP symposium

Sarah Olson- Made presidents honor roll Fall 2016 and Spring 2017 and participated in the 2017 Transformative Learning Conference for Hispanic Success Initiative

Joana Pantoja – Made presidents honor roll in Spring 2017

Clay Patterson— Participated in the National Association of Engineering Students Councils National Conference 2017

Cameron Patterson- Oklahoma State University Placed first place with the design and build team at the Associated Schools of Construction annual student competition.

Susan Pham- Participated in SACNAS

Sergio Piedra - Participated SHPE National Conference

Paola Ponce- Assisted with NWOSU Math and Science Academy

Rendi Rogers - Participated in NCUR 2017

Sydni Smith — Participated in the GPIDC and HHMI annual conference in Bethesda, Maryland

Alyssa Stewart-Studied abroad in Spain

Mary Thetford— Made presidents honor roll in the Fall of 2016

Nikolas Wagner- Made presidents honor roll Fall of 2016 and Spring of 2017

Amber Ward- Member of the American Chemical Society has attended the Texas/Oklahoma Regional Symposium in Lawton, The Conference, The American Physical Society is currently participating in a REU at Notre Dame

Payton Whitehead- Participated in the American Indian Science and Engineering and American Chemical Society Conference

Catherine White— Accepted a REU in Costa Rica at La Selva research station. This REU focuses on biodiversity conservation and agroecology

Clarissa Wiley— Assisted with NWOSU Math and Science Academy

PRESENTATIONS

Sharing scholarly data is one of the hallmarks of a true scientist and blow are a small selection of the work that have done and are currently working on

Alfa Abame: "Sex and Conflict in Amphipods", Southwestern Oklahoma State University

Elisabeth Allbriton: "1,4,7,10,13-pentaazacyclopentadane: novel transition metal complexes and glyoxal-based cross-bridging",

Bradly Burke: "The Expression and purification of The Recombinant Magnetosome Associated Protein Mad2 From Desulfovibrio magneticus Strain RS-1 in Escherichia coli," Northwestern Oklahoma State University

Dustin Davilla: " "Duel CXCR4/CCR5 Antagonists", Southwestern Oklahoma State University

Ryan Farney: Farney, R. (Author Only), NSU Undergraduate Research Day, "Dispersal of amphibians and reptiles among islands of the Delta Island complex in the Sequoyah National Wildlife Refuge," Northeastern State University.

Terin Fletcher: "H3- and H1Tos2- Cross-bridged pentaazamacrocycles and their transition metal complexes", Southwestern Oklahoma State University

Jana Green: green, J. (Presenter & Author), NSU Undergraduate Research Day, "Dispersal of small mammals among islands of the Delta Island complex in the Sequoyah National Wildlife Refuge," Northeastern State University.

Cable Jacobson: "Alcohol pendant armed cross-bridged tetraazamacrocycles", Southwestern Oklahoma State University

Donnie Jones: ""Synthesis, structural studies, and oxidation catalysis of the late first row transition metal complexes of a 2pyridylmethyl pendant armed ethylene cross-bridged cyclam," Southwestern Oklahoma State University

Lizzie Lightning: Ghost Forest Rising: A Hyperspectral Approach to Assessing Vegetation Health and Tree Die-Off in Response to Saltwater Intrusion in a Coastal Environment (poster)

Kaitlyn Napier: Napier, K. (Presenter & Author), NSU Undergraduate Research Day, "Habitat Preferences of cavity nesting birds in rural areas of Cherokee County Oklahoma," Northeastern State University

Dalton Pannell: "Introductory Bioorganic Study of Firefly Luciferase—An Enzyme to Drive Bioluminescence" Oklahoma Research Day, Northwestern Oklahoma State University

Jesse Velasco: "Characterizing the effects of Sphk1 knockout in mouse neural retina", Southwestern Oklahoma State University

Travis Young: Vibrational Spectroscopic Investigation of Triflate-based Ionic Liquids Containing Inorganic Salts" Northeastern State University.

Cheyenne Youngblood: Youngblood, C. (Presenter & Author), NSU Undergraduate Research Day 2017, "Effect of Caffeine on Tumor Growth in Drosophila," Northeastern State University.

ALUMNI UPDATES



Hope Askew: Oklahoma State University Scholar and Fall 2016 graduate will be attending the Mercer College of

Pharmacy

Mira Bakine- Langston University Scholar was accepted into the Oklahoma State University College of Osteopathic Medicine

Tanya Chapman – Oklahoma State University. Tanya is currently working for the Chickasaw Environmental Division after completing her B.S. In Cartography.

Kristian Castellanos- East Central University Received the National Space Grant College and Fellowship Program

Rachel Grider – SEOSU Will be attending the Arkansas College of Osteopathic medicine

Allison Joines - SEOSU Will be attending the University of Oklahoma Physician's Assistant program

Peyton Joines- Graduated Summa Cum Laude with a degree in Biology from Southeastern OSU and will be attending the University of Oklahoma's Physical Therapy program

Troy King- Oklahoma State University was just accepted into the University of Washington-Madison microbiology doctoral training program and is currently participating in the PREP program at the University of Georgia

Autumn Only A Chief- Oklahoma State University and Spring 2017 Graduate will be attending the University of Southern California's Doctor of Physical Therapy Program

Cameron Patterson – Oklahoma State University Scholar and Spring 2017 graduate has accepted a position as an architectural designer with Overland Partners in San Antonio.

Cari Quick - Langston University is pursing a degree in microbiology at the University of Oklahoma

Patrick Sharp - Accepted to the Oklahoma State University College of Osteopathic Medicine

Kayla Smith— will be attending Physical Therapy school at the University of Oklahoma

Garrett Spradley - will be attending Physical Therapy school at the University of Oklahoma

Megan Stearman - University of Oklahoma Scholar received her MS in Geology and is currently working as an energy exploration geologist for Noble Energy

Lauren White: University of Washington will be joining the University of Washington's Indigenous Wellness Research Institute

Johnny Williams: Oklahoma State University and Spring 2017 graduate will be attending the Colorado School of Public Health

PROGRAM STAFF 2017-2018



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Susan Walden - OU **Program Evaluator** Susan.walden@ou.edu

UPCOMING EVENTS



This year SACNAS will be held in Salt Lake City, Utah from October 19th-21st, 2017



This year National Conference on Undergraduate Research will be held in the great state of Oklahoma April 4-7 at the University of Central Oklahoma in Edmond, Oklahoma.

Oklahoma Research Day 2018 will be held in Enid, Oklahoma at Northwestern Oklahoma State University.





What is OK-LSAMP?

Is funded by the National Science Foundation (NSF)

Is a partnership of Oklahoma colleges and universities

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

OK-LSAMP Contact Information

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Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessary reflect the views of the National Science Foundation or Oklahoma Stat 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 Whitehurst, OSU, Stillwater, OK 74078-1035; Phone 405-744-5371; email: eeo@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.