

THE LINK

Oklahoma Louis Stokes Alliance for Minority Participation in Science, Technology, Engineering, and Mathematics
 Funded by the National Science Foundation, A. James Hicks, Ph.D., NSF Alliance Program Director

Helping minority students in science, technology, engineering, and mathematics since 1995



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Biannual Newsletter

Fall 2007

Greetings from the Director

On September 25, 2007, Oklahoma State University Interim System CEO, President Marlene Strathe, sent a letter to members of the Alliance informing them of changes regarding the Louis Stokes Alliance grant. The grant returned to central administration due to the retirement of Dr. Earl Mitchell. Interim President Strathe has appointed me to serve as the Principal Investigator, therefore; the Office of the Vice President of Institutional Diversity will now have oversight of the grant.

Kay Porter has joined the OSU team as Program Manager. Kay received her Bachelor's and Master's degrees in Education from Oklahoma State University. She has been employed with OSU for several years, most recently with the NASA Aerospace Education Program. She is a member of the Potawatomi Tribe and the OSU Native American Faculty and Staff Association,

...serving as Chair of the Scholarship Committee.

Fara Williams has been promoted to Program Data Manager which incorporates her previous responsibilities. She received her Bachelor of Science degree in Elementary Education/Middle Level Science from Oklahoma State University. Fara has seven years experience teaching Pre K - 10 (two and a half years in public school systems and four and a half years in a traveling, private school).



We are working hard to get up to speed and move forward to new heights of success for our program. I look forward to meeting each member of the OK-LSAMP staff in the coming days. Please don't hesitate to contact any of us, and we will build new bridges connecting with the Partners of the Oklahoma Alliance as well as Alliances around the nation.

-Cornell Thomas, Ed.D., OSU Vice President for Institutional Diversity (Pictured above)

Amazing People

There are many hard-working people that contribute to the success of our program. These include, but are certainly not limited to: the students for whom this program exists; their mentors who give scholars invaluable guidance; the campus coordinators who help the scholars with information about their campus and opportunities that are available; the administrative and supportive staff who do what is necessary to keep the program going; speakers and presenters at local, regional, and national meetings and conferences who give information and knowledge on a variety of subjects; the staff of other organizations who help to provide support for our scholars and staff; and especially the National Science Foundation for providing the financial support. We want to thank each and every individual.

Thank You!

John Garric

Dr. Garric served as the Campus Coordinator for the University of Central Oklahoma.



John Garric, Ph.D. served as the Campus Coordinator for the University of Central Oklahoma and the Interim Dean for the Jackson College of Graduate Studies and Research. He made many contributions to

the program and will be missed.

Gregory M. Wilson

Dr. Wilson is the new Campus Coordinator for the University of Central Oklahoma.



In the spring, Gregory M. Wilson, Ph.D. joined the Oklahoma Louis Stokes Alliance for Minority Participation in Science, Technology, Engineering, and Mathematics (OK-LSAMP STEM) as the University of Central Oklahoma (UCO)

Campus Coordinator and also became the Interim Associate Dean for the Jackson College of Graduate Studies and Research for UCO. Dr. Wilson earned a BA in Biology from Central College, an MS from Fort Hays State University, and a Ph.D. in Zoology from Oklahoma State University.

Dr. Wilson, an Associate Professor of Biology, has been at UCO since 2001. His research interests include using modern molecular techniques to address a number of questions in molecular popular genetics, molecular ecology, and phylogeography. His projects have included investigating host/parasite interactions of bats and bat flies and how climatic fluctuations which occurred following the Pleistocene and contemporary heterogeneity of landscapes impact the population genetic

structure of several species of mammals in Oklahoma and adjacent states.

Dr. Wilson has been active in undergraduate research at UCO. He received the Hauptman Fellowship Award and the Vaderford Faculty Award in Support of Undergraduate Research, Creative, and Scholarly Activity. Since 2004, he has served as a Faculty Mentor for the Summer Bridge component of the NSF-funded SURE-STEP Program.

We want to offer Dr. Wilson a warm welcome to the Oklahoma Louis Stokes Alliance for Minority Participation.

Valerie Shangreaux

Dr. Shangreaux served as the OK-LSAMP Program Manager.



Valerie Shangreaux, Ph. D. was a part of OK-LSAMP STEM for many years. She served as Campus Coordinator for the Lead Campus, Oklahoma State University, from 1994-1999 and again from 2001-2007. As

Campus Coordinator, she was instrumental in the development of the program's on-line graduate preparation modules. In February of 2007, Valerie accepted the position of Program Manager. In her short term as Program Manager, Valerie hired a new secretary, supervised the spring newsletter and the organization of program files. In both positions, Valerie made the students her main focus and always had time to answer their questions and help them any way that she could.

Accepting the position of Director of Leadership Programs for a private foundation in Minnesota, Valerie resigned her position in OK-LSAMP STEM. Before leaving in August, she worked hard to ensure that the transition would be as smooth as possible. Valerie made many friends while in Oklahoma, and we at OK-LSAMP STEM will miss her.

Andrew S. Arena, Jr.

Dr. Arena is an Oklahoma State University Professor and OK-LSAMP mentor.

Andrew S. Arena, Jr., Ph. D. received his Bachelor's degree in Aerospace Engineering from the University of Arizona. He earned his Master's and his



Doctorate, also in Aerospace Engineering, from the University of Notre Dame.

Dr. Arena is the Senior Member and Faculty Advisor of the American Institute of Aeronautics and

Astronautics (AIAA), the Faculty Advisor and Member of the Sigma Gamma Tau Aerospace Honor Society, and has many other memberships. He has garnered such honors as the NASA-ASEE-Stanford Summer Faculty Fellowship and the SAE International, Ralph R. Teetor Award. Some of his most recent projects include: Computational Aeroelasticity; Freeform Composites Design and Manufacturing; Development of a New Wind Tunnel Facility; Unsteady Aerodynamics; and Limit Cycle Roll Oscillations of Slender Delta Wings. (mae.okstate.edu/Faculty/arena/arena.html) It is our privilege to note that Dr. Arena is also the mentor of one of our OK-LSAMP Scholars (*see Valentin Sanchez, p. 3*).

Oklahoma State University (OSU), under the leadership of Dr. Arena, is working in conjunction with California State University, Los Angeles (CSULA) on "Project Pterosoar." The purpose of this project is to create an unmanned airplane powered by a hydrogen fuel cell that will break multiple world records for flight time and endurance. In September, the *Pterosoar* broke the world record for a point and return range mission by traveling 128 kilometers - more than 40 kilometers further than the previous record set in Estonia in 2006. This flight was considered a "shakedown" test, and the actual range capability of the airplane is over 500 km. We are proud that an OK-LSAMP Scholar has been a part of this project and look forward to more records being broken.



In September, the Pterosoar broke the world record for a point and return range mission by traveling 128 kilometers or more than 40 kilometers than the previous record set in Estonia in 2006. This flight was considered a "shakedown" test, and the actual range capability of the airplane is over 500 km.

Amazing Scholars

Giving students the resources and opportunities needed to succeed is our mission.

Juan Diego Alonso

Spend a few minutes in conversation with Juan Diego Alonso, and you'll witness



unbridled passion about research in this University of Oklahoma Chemical Engineering senior. In his third

year as an LSAMP scholar, Juan Diego has explored and experienced many areas of chemical engineering. He's worked with ChevronTexaco as a processing engineer and more recently as a research assistant at the University of Oklahoma Health Sciences Center. His research topics include the effects of curcumin, from the Indian spice Turmeric, on pancreatic cancer; and the effects of MMP inhibitors on myofibroblasts' alpha smooth muscle actin protein.

Last summer, Juan Diego traveled to Washington, D. C. where he presented his research during Digestive Disease Week. After his graduation in May 2008, he's

planning on graduate school, and is considering a Ph.D./MD program. He's routinely on the Dean's and President's Honor Roll and has volunteered in hospitals and a cancer treatment center. He likes to run, swim and enjoys ballroom dancing. Juan doesn't have to tell you he loves research and values the experiences afforded to him by LSAMP. The enthusiasm shows in his eyes as he introduces a prospective engineering student to the world of biomedical research.

Contessa Majors

Contessa Majors graduated with a Bachelor's in Biology from Langston University in May, 2007.



In the summer of 2006, she was an Oklahoma I D e A (Institutional Development Award) Network of Biomedical Research Excellence (INBRE) intern at the University of Oklahoma

Health Sciences Center's Lab for Genomics and Bioinformatics. Contessa is now an LSAMP Bridge to Doctorate Fellow at the University of Alabama at Tuscaloosa where she is studying biological science.

Cammi Valdez

Cammi Valdez is currently studying mathematics and chemistry at Southwestern



Oklahoma State University. In 2006, she was also an Oklahoma I N B R E intern at the University of Oklahoma Health Science Center's Lab for Genomics and Bioinformatics. This summer, Cammi was accepted to intern at Yale, MIT, CalTech, and many others. However, she chose to intern at Harvard Medical School as part of the Summer Honors Undergraduate Research Program (SHURP). After graduating next year, Cammi

hopes to attend Harvard for a Ph.D. in Chemical Biology.

Valentin Sanchez

Valentin Sanchez is an Aerospace Engineering student at Oklahoma State



University (OSU). He is part of the Oklahoma State University

"Project Pterosoar," consisting of Dr. Arena, Dustin Gamble, Ryan Paul, and Valentin. Collaborating with California State University, Los Angeles (CSULA), OSU has designed and built the plane while CSULA has designed and built the fuel cell. The *Pterosoar* (pictured above) has been designed to run on a hydrocarbon fuel cell, can fly over 16 hours continuously, and weighs less than 11 pounds. In September, it broke a world record during a "test" flight. The *Pterosoar* is expected to break many other world records.

Bridge to the Doctorate

OK-LSAMP strives to encourage and offer opportunities for minority students to get their doctorate degrees in science, technology, engineering, and mathematics. Oklahoma State University has a 2004-2009 Bridge to Doctorate Program and the University of Oklahoma has a 2005-2010 Bridge to Doctorate Program.

Desmond Harvey



Desmond Harvey is a Bridge to Doctorate Fellow majoring in Industrial Engineering at the University of Oklahoma (OU). A graduate of Langston University (LU) and an LSAMP scholar, Desmond says the Bridge to Doctorate program has given him the chance to pursue a Ph.D. and learn more about conducting research and what to pursue as a career. "I would tell all undergraduate students, especially those with STEM majors, to consider going to graduate school," said Harvey.

Desmond's research project identifies and examines the learning styles of students in engineering, physics, chemistry and mathematics. This summer, Desmond attended the 2007 ASEE Annual Conference and Exposition in Honolulu where he attended several sessions on engineering education. In July, he served as assistant director of a new summer bridge program called "Heads Up". This program allowed incoming freshman to move toward calculus readiness and to successfully transition from high school to university life (see *OU Summer Bridge Program*, p. 6).

Desmond is considering teaching after he finishes his education. At OU, Desmond is also the president of Human Factors and Ergonomics Society, and a graduate student advisor of the National Society of Black Engineers.

Dominic Barrett



Dominic Barrett received his Bachelor's degree in Fisheries and Wildlife Conservation from Southeastern Oklahoma State University in December of 2004.

He participated in a variety of research projects including research for the Oklahoma Department of Wildlife Conservation, the King Salmon Resource Office of the U.S. Fish and Wildlife Service, the USDA National Wildlife Research Center, and the USGS Oklahoma Cooperative Fish and Wildlife Research Unit. In the last year, Dominic has made presentations on his river otter thesis research at: the Central Plains Society of Mammalogists Annual Meeting, Edmond, OK; the Oklahoma Academy of Science 95th Annual Technical Meeting, Claremore, OK; the 87th Meeting of the American Society of the Mammalogists, Albuquerque, NM; and the Oklahoma Chapter of the Wildlife Society Annual Meeting, Woodward, OK. He is currently at Oklahoma State University working on a Master's Degree in Wildlife Ecology. Dominic is a member of the American Fisheries Society and the Oklahoma Academy of Science.

Above: Dominic participated in river otter (Lontra canadensis) distribution and current research in Oklahoma.

Marty Heppler



Marty Heppler received her Bachelor's Degree in Entomology and Plant Pathology from Oklahoma State University in December of

2004. Marty has been active in the Southwestern Branch of the American Entomological Society of America, the Sanborn Entomology Club, and the Joint Committee of Women in Plant Pathology and Cultural Diversity for the American Phytopathological Society (APS). This year, Marty finished her Master's Degree in Entomology and Plant Pathology as a Bridge to Doctorate Fellow at Oklahoma State University. During her research on bacteria in squash bug hemolymph (blood), Marty discovered a new species of organism. After polymerase chain reactions (PCR), sequencing, and using a Basic Local Alignment Search Tool (BLAST), she came to the conclusion that the trypanosomatid in the Squash Bug, *Anasa tristis* is in fact a new species. Marty is preparing a paper of her discovery to be published in a scientific journal. She is now in California at the United States Department of Agriculture Agricultural Research Service researching cotton.

Above: Marty poses with E. O. Wilson, Entomologist and author of Pulitzer Prize-winning books.

The University of Oklahoma

From Territorial Vision to Nationally Ranked Institution

In 1890, the Oklahoma territorial legislature made a commitment to create one of the nation's premier learning institutions. The Cleveland County community donated 40 acres of land for the campus and voted to approve \$10,000 in bonds while \$10,000 in cash was raised by the Norman business community.

Classes began at the University of Oklahoma in 1892 with three rented rooms in downtown Norman, four teachers - including the university's first president David Ross Boyd - and 119 students.

Today, OU encompasses campuses in three cities: over 3,500 acres and enrolls 30,000 students in the doctoral degree-granting research university. In addition, OU has a \$1.5 billion annual impact on the state's economy, employing more than 12,000 faculty and staff, including more than 370 endowed faculty. In its 20 colleges, OU offers 152 majors at the baccalaureate level, 160 majors at the master's level, 80 majors at the doctoral level, 38 majors at the first professional level, and 18 graduate certificates.

*OU is number one in the nation per capita among public universities in the number of National Merit Scholars enrolled with more than 600 currently enrolled at OU.

*OU has the largest freshman class at a four-year public university in Oklahoma history. More than 10 percent of the entire freshman class came from high school with a perfect 4.0 grade-point average.

*The Princeton Review ranks OU among the best in the nation in terms of academic excellence and



Amazing Places

Partner campuses of the Oklahoma Louis Stokes Alliance for Minority Participation are featured in this and subsequent issues of *The Link*. Each partner institution is vital to the success of the Alliance, and it is only fitting to highlight the special qualities and characteristics on each campus that contribute to that success.

cost for students, and OU is the highest-ranked public university in the history of Oklahoma according to U.S. News and World Report.

*OU's new 271-acre Research Campus is anchored by the Stephenson Research and Technology Center, where cutting-edge research ranging from robotics to genomic studies is taking place. The National Weather Center which houses OU's academic and research programs in meteorology and the National Oceanic and Atmospheric Administration's Norman-based weather, research and operations programs is also on the Research Campus.

*A diverse student community is a priority at OU. OU ranks number one in the Big 12 in Native American enrollment and continues to be one of the leaders in the enrollment of Latin American, Asian American and African American students. Fall 2007 URM enrollment increased by 3.5%. OU has been recognized as an outstanding university for Hispanic students by Hispanic Outlook in Higher Education magazine.

*OU's expanded K20 Center directly impacts more than 500 schools in Oklahoma in its mission of transforming kindergarten through graduate education into technology-enriched learning communities that motivate, prepare, and support students for careers in technical and scientific fields.

*Since 1994, research and sponsored programs expenditures at OU have more than doubled, and OU continues to set new records for funding for externally sponsored research. OU ended FY 2007 with total expenditures of more than \$250 million which

provides many opportunities for undergraduate and graduate student research.

*OU ranks first in the Big 12 and at the top in the nation in international exchange agreements with 174 student exchange agreements representing universities in 64 countries.

*More than 2,600 students participate in the University's Honors College, one of the largest honors programs among public universities in the United States.

*OU recently passed the \$97 million mark in its Campaign for Scholarship, allowing the university to award hundreds of new scholarships for qualified students.

*The OU Sooners have won 25 national championships in men's and women's sports with the latest coming in 2006 when the men's gymnastics team won its fourth title in five years. OU was the NCAA runner-up in 2001, 2004, and 2007.

-University of Oklahoma, Office of Public Affairs, 2007.



Left-Right: OU Summer Bridge Program Participants, an OU Engineers Club Hamburger Feed, OU BD students attend the National Science Foundation Joint Annual Meeting with Dr. Pulat (second from left).



Amazing Events

Our scholars are active in research and giving presentations.

OU Summer Bridge Program

In the summer of 2007, the University of Oklahoma (OU) College of Engineering

launched the Summer Bridge Program, an intensive, three-week experience designed to help incoming freshmen engineering students review calculus level math, engineering problem solving and case studies, gain a solid understanding of available college resources, and how to access those resources before classes begin in the fall. The program was developed by the OU College of Engineering Multicultural Engineering Program and is funded through a three-year, \$100,000 grant from Dominion, the nation's largest producer of energy (www.dom.com).

"Helping Engineers Achieve and Develop for Successful Undergraduate Persistence" (H.E.A.D.S. U.P.) developed student leadership skills, increased calculus readiness, and provided time for teaming and hands on activities. Seventeen students were selected for the program's first year. They were immersed in college life, living in dorms on the campus, attending classes every day from 8:45 a.m. until 3:30 p.m., and participating in hands-on group projects from 3:30 p.m. until 5:30 p.m. Homework and group projects led into the night with most students finishing around 9 p.m. At the end of the three weeks, all participants showed significant improvement in math skills.



For more information regarding this and other related programs, please contact the Diversity Programs office at the College of Engineering at (405) 325-5361.

National Science Foundation JAM

Held August 12-15, 2007, in Washington, D. C., the Joint Annual Meeting (JAM) of the National Science Foundation's (NSF)



Human Resource Development Division was a great opportunity for Dr. Mitchell to visit with other leaders and scholars of NSF programs from across the nation including other LSAMP programs. Dr. Simin Pulat and the University of Oklahoma Bridge to Doctorate Fellows were also in attendance. While there, Dr. Mitchell met and visited with Dr. Henrietta Mann from Montana State University (pictured with Dr. Hicks on the left and Dr. Mitchell on the right). Dr. Mann is a Native from Oklahoma and was one of the keynote speakers at this year's meeting.

Graduate Student Research Symposium

The 4th Annual Graduate Research in the Biological Sciences Symposium was held September 27-28, 2007, in the Noble Research Center, Oklahoma State University, Stillwater campus. The competition included 12 oral and 11 poster presenters. The turnout was quite diverse with the participants representing five Oklahoma State University (OSU) colleges and 10 different departments across the OSU system. The oral session

was concluded with a seminar from guest speaker, Dr. Carol Webb, Oklahoma Medical Research Foundation. The awards presentation followed the seminar by Dr. Robert Tabita, Ohio State University. This event was made possible by the Biochemistry and Molecular Biology Graduate Student Association (BMBGSA), the Symposium Coordination Committee, the judges and this years participants as well as the generous funding provided by the Vice President of Research and Technology Transfer, the



Oral Competition: 1st Place
Samodha Fernando

Division of Agricultural Science and Natural Resources, the College of Veterinary Medicine, the Graduate and Professional Student Government Association along with the support of the Department of Biochemistry and Molecular Biology faculty and staff. This event will be held at approximately the same time next year. For more information, visit the BMBGSA website: www.orgs.okstate.edu/bmbgsa/. The first place winners are shown with Dr. Robert Tabita.

- Jacob Manjarrez, President of BMBGSA, 2007 and OK-LSAMP Bridge to Doctorate Fellow.



Poster Competition: 1st Place
Shawn Daley



13th Annual Research Symposium

Held on Saturday, September 15, 2007, the Symposium was a great success. We had 19 students register for oral presentations and 19 students register poster presentations.

Opening Session



Earl D. Mitchell, Jr., Ph.D., spoke to the students about Research Integrity. It is important for ethics and integrity to be common practice when conducting research. Dr. Mitchell shared information and some of his research experiences with the scholars and mentors.

Keynote Speaker



Shelley Wear from the Oklahoma Experimental Program to Stimulate Competitive Research (EPSCoR) came to the 13th Annual Research Symposium to speak about the National Conference for Undergraduate Research (NCUR). For years, EPSCoR has partnered with OK-LSAMP to send scholars to NCUR to present their research. This is a wonderful opportunity for our scholars to share their research with other undergraduates as well as faculty and mentors from across the nation.

Oral Presentations



Presentations covered a variety of topics such as: "First Principles Calculations of DNA Dispersal of Carbon Nanotubes" presented by Calvin Hawkins, LU; "Expression, Purification, and Characterization of a Protein from the Insect Lipid Droplets, LSD1" presented by Laticia Rivera, OSU; Learning in On-Line Simulation Environment vs. Lecture Based On-Line Learning: A Comparison" presented by Annette Moulder (pictured), CU; and "Self-Righting Robot" presented by Courtney Palmer, TU.

Poster Presentations



Poster presentations included: "Genotype and Growth Regulator Dependency in Peanut Emergence Shoot Determination" presented by Kariel Ross, LU (pictured); "Direct Write Printing of Dental Appliances" presented by S. Brett Walker, OSU; "Development of a Method to Map Chromatin Architecture in Yeast" presented by Miranda Knight-Brown, NSU; and "Thermodynamics of the Zinc-Oxygen-Hydrogen System" presented by Audrey Myers, ECU.

Graduate School Reps



Tina Marie Franks from the University of Oklahoma (far left) and Mike Heppler from Oklahoma State University (3rd from left) attended the Symposium and set up graduate school recruitment tables. The scholars and other attendants were able to ask questions about the options that OU and OSU have for graduate school programs. Based on current data, 55% of OK-LSAMP students have been admitted to graduate school (*more on page 11*). This is a great success for the Oklahoma Louis Stokes Alliance for Minority Participation.



Above: Thomas Kantowski from TU
Right: Audrey Myers from ECU



Amazing Alumni: Where Are They Now?

OK-LSAMP is proud of our Oklahoma Louis Stokes Alliance for Minority Participation alumni and would like to share some of their successes.

"I'm very thankful for the support of OKAMP during my undergraduate years at the University of Tulsa." - Daniel H. Wilson

Daniel H. Wilson



In 2000, Daniel H. Wilson received his Bachelor's Degree in Computer Science from the University of Tulsa. Daniel went on to earn a Master's Degree in Machine Learning, and a Master's Degree and a Doctorate Degree in Robotics from Carnegie Mellon University. Daniel interned at Microsoft Research, the Xerox Palo Alto Research Center (PARC), Northrop Grumman, & Intel Research, Seattle. Daniel is a contributing editor for *Popular Mechanics* and a successful novelist. His first book, *How to Survive a Robot Uprising*, won a Rave Award as Best Book of 2006, and the movie rights have been optioned by Paramount Pictures. *Where's My Jetpack?* has recently been published, and *How to Build a Robot Army* is scheduled for release this fall. Daniel is currently working on two young adult novels and a screenplay for Nickelodeon Movies.

For more on Daniel, go to: danielhwilson.com

Tambra Stevenson



Tambra Stevenson received her Bachelor's Degree in Human Nutrition from Oklahoma State University. She earned her Master's Degree in Health Communication from Tufts School of Medicine/Emerson College Joint Program. Tambra has also completed coursework in Healthcare Marketing and Entrepreneurial Management at Boston University Graduate School of Management. She has interned at Hill Holiday, CBS Healthwatch, the 2003 Ad Club of Boston Summer Internship Program, and the Boston Black Women's Health Institute. Tambra's Master's Project was the YO! Health Study which is creating a youth-centered, multicultural health career website for the Tufts public health program. Her most recent project is Postcards from Katrina.

For more on Tambra, go to: tambrastevenson.com/bio.html or profiles.takingitglobal.org/pfkcreator

Kara & Levica Chapman

Kara and Levica Chapman (twin sisters) received their Bachelor's Degrees in Physics from East Central University. In 2004, Kara and Levica, were members of the Physics Club that won a Chapter Challenge competition sponsored by the National Society of Physics Students. The project was to create a video about Einstein's Twin Paradox. Currently, Kara and Levica are both working on Ph.D.'s at Texas A & M.

Adrian Casias

Adrian Casias graduated from Oklahoma State University in 2000 with a Bachelor's Degree in Chemical Engineering. In January of 2002, he received a Master's Degree in Chemical Engineering from Stanford University. Adrian held summer internships at Sandia National Laboratories in 1998 and 1999 and continues to work for them. Adrian has worked with weapons packaging such as Low Temperature Cofired Ceramics (LTCC), High Temperature Cofired Ceramics (HTCC), Thick Films (TKN), MEMS, microfluidic and/or optical integration, and other prototype applications.

Mike Hollinger



Mike Hollinger received his Bachelor's Degree in Computer Engineering from the University of Oklahoma (OU) in 2004. Completing the five-year accelerated BS/MS program in 2005, he received his Master's Degree in Electrical & Computer Engineering. Following graduation, Mike joined IBM's Systems & Technology Group, working in IBM's Austin, TX design center. He currently specializes in embedded systems firmware for the IBM System i & p lines of servers. Since joining the company, Mike has several patents pending. In addition to his "day job," Mike is also an officer of IBM Austin's Emerging Technology and Business Innovation group leading periodic invention roundtables and brainstorming sessions. Mike currently serves as a member of the Dean's Advisory Board on Diversity (DABD) at OU and serves as alumni reviewer for the Student Organization Website Competition.

Tiffany Frieze



Tiffany Frieze received her Bachelor's degree in Microbiology from Oklahoma State University in 2003. She received her Master of Public Health in Community Health Education Degree from New Mexico State University in 2006. Tiffany also became a Certified Health Education Specialist in April of 2006. She is currently in Cheney, Washington as Health Education Coordinator for the Health, Wellness, & Prevention Services Team at Eastern Washington University (EWU). In this position, Tiffany is responsible for organizing the health initiatives and programming on campus. She also serves as an advisor for two peer education groups.

For more, you can visit the Eastern Washington University website at ewu.edu/x336.xml

Where Are You Now?

Are you an OK-LSAMP alum? We want to hear about where you are and what you have accomplished since participating in an OKAMP program.

Please fill out this sheet and send it back to us. You may fold and mail it, fax it to 405-744-5576, or email it to fara@okstate.edu. You may also call 405-744-7820. We look forward to hearing from you!

Contact Information:

Name: _____ Home Phone Number: _____ Email Address: _____

Home Address: _____

City: _____ State: _____ Postal Code: _____

Program Participation Date(s) and Institution(s):

Summer Bridge Program (high school or other college/university transition): _____

Scholars Program _____

Summer Research Internship Program _____

Bridge to Doctorate Program _____

Other OK-LSAMP Program _____

Degrees: (Please list even if still in progress - use the projected graduation date.)

Bachelor's Degree: _____

Date: (Semester and Year) _____ Institution: _____

Master's Degree: _____

Date: (Semester and Year) _____ Institution: _____

Graduate Degree: _____

Date: (Semester and Year) _____ Institution: _____

Current Employment Information:

Business Name: _____ Business Title: _____

Business Address: _____

City: _____ State: _____ Postal Code: _____

Business Phone: _____ Work Description: _____

Additional Information and comments: _____

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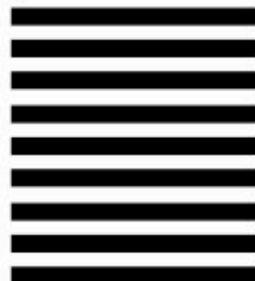
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Retention and Graduate School



Rosemary Hayes, the Center for Institutional Data Exchange and Analysis at the University of Oklahoma, serves as the Program Evaluator for the Oklahoma Alliance for Minority Participation. In a written report for the 2007 Performance Effectiveness Review, Rosemary makes the following observations:

“The most currently available data shows that 55% of participating OK-LSAMP students were identified as having been admitted to graduate school. In addition...the overall

six-year graduation rate (both in any major and specifically in a STEM major) for first-time full-time underrepresented minority freshmen who start off as STEM majors within the LS-OKAMP Alliance is higher than the national average for URM (underrepresented minorities) STEM students.”

“The OK-LSAMP institutions have improved from a low of 49% first year retention of URM students within STEM to 55.6% first-year retention over the course of 1997-2005. This is significant improvement overtime.” (See table at right.)

“The LS-OKAMP Alliance continues to demonstrate success in developing graduate school ready underrepresented minority STEM students (URM STEM). The OK-LSAMP Alliance six year graduation rate for URM STEM majors both in any major and specifically within STEM fields are higher than the national average for URM STEM majors according to the latest 2006-07 CSRDE study on STEM retention and graduation. “

2 nd Year Continuation Rates of URM STEM Majors continuing in STEM fields		
	All STEM Participant Institutions	OK-LSAMP Institutions
1997	65.1%	49.0%
1998	64.8%	54.6%
1999	64.2%	56.7%
2000	64.7%	55.2%
2001	63.0%	57.0%
2002	62.9%	50.5%
2003	63.9%	63.5%
2004	63.5%	57.1%
2005	65.4%	55.6%

Future Amazing Events



★46th American Institute of Aeronautics and Astronautics Aerospace Sciences Meeting and Exhibit, January 7-10, 2008, Reno, Nevada; for more information, go to: aiaa.org/content.cfm?pageid=230&lumeetingid=1065

★American Phytopathological Society Southern Division Meeting, February 2-5, 2008, Dallas, Texas; for more information, go to: cals.ncsu.edu/plantpath/activities/societies/aps/SouthernAPS.html

★National Society of Black Engineers National Convention, March 19-23, 2008, Orlando, Florida; for more information, go to: nsb.org/convention/events.html

★Oklahoma Academy of Science Spring Field Meeting, April, 2008, TBA, Oklahoma; for more information, go to: oas.ucok.edu/page4.html

★National Conference for Undergraduate Research, April 10-12, 2008, Salisbury University, Salisbury, Maryland; for more information, go to: salisbury.edu/ncur22/

★More Graduate Education at Mountain States Alliance (MGE@MSA) & Western Alliance to Expand Student Opportunities (WAESO) Student Research Conference, April 21, 2008, Arizona State University, Tempe, Arizona; for more information, go to: https://mge-p1000.asu.edu/mge_conf/

★ Don't forget to begin searching out and applying for summer 2008 internships.

Pictured above: Miranda Knight-Brown from Northeastern State University presented a poster on “Development of a Method to Map Chromatin Architecture in Yeast.”

Pictured on back cover: Kendra Vann from Langston University is pictured with her poster, “Defining how Calcium Signaling is Perturbed in Early-Onset Alzheimer’s Disease;” Dr. Mitchell poses with Oklahoma State University scholars Aimee Magrath and Spencer Williams; Rosa Madrid from Oklahoma State University and Miranda Knight-Brown answer questions about their posters.

Pictured on front cover: Dr. Simin Pulat from the University of Oklahoma (left) visits with 13th Annual Symposium attendees.

Wayne Steen: Many of you fondly remember Wayne Steen and his commitment to minority students at the University of Oklahoma. Wayne Steen passed away suddenly in March 2007. Through Wayne’s family, former students and the Dean’s Advisory Board on Diversity, a scholarship fund has been established to ensure his life-long legacy of helping minority students continues. If you would like to make a memorial contribution, gifts may be sent to the University of Oklahoma Foundation Inc. (100 Timberdell Road, Norman, OK 73019) Attn: Wayne Steen Memorial Scholarship, Fund 42138.

Our Mission: *The Oklahoma Louis Stokes Alliance for Minority Participation (OK-LSAMP) is a consortium of Oklahoma colleges and universities working together to develop programs aimed at increasing the number of students from under-represented populations who receive degrees in Science, Technology, Engineering, and Mathematics (STEM) disciplines.*

Our Goals: *In 2004, we entered Phase III of the OK-LSAMP Program. In this phase, the primary goals focus on the expansion of undergraduate research experiences, intense graduate school preparation, and entrance into doctoral programs.*



Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

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If you have questions, comments, or suggestions for *The Link*, please call 405-744-7820 or e-mail fara@okstate.edu

If you know of an amazing: person such as an outstanding mentor, excellent presenter/author, new doctorate grad, award winner, former OK-LSAMP student, and/or just an especially dedicated person; place such as a campus, lab/research facility, or locations of conferences and/or symposiums; event such as symposiums, research days, conferences, specific presentations, or other places of interest; please let me know. Be sure to include as many details as possible about the person, place, or event, and contact information for you in case I have questions or need more information. I look forward to creating future issues to keep everyone informed on the Amazing People, Places, and Events of the Oklahoma Louis Stokes Alliance for Minority Participation in Science, Technology, Engineering, and Mathematics. Thank you. Fara Williams

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