

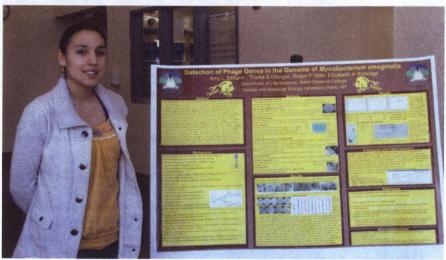
## All Nations Louis Stokes Alliance for Minority Participation

Newsletter

Spring 2010

#### **AIHEC Competition Results**

AIHEC 2010-ANLSAMP Sponsored Competitions



Amy Stiffarm Salish Kootenai College - Pablo, MT placed 1st in Scientific Poster and Scientific Oral Competitions at AIHEC's 2010 National Student Conference in Chandler, Arizona. Photo courtesy of Yolanda Matt.

The All Nations Louis Stokes Alliance for Minority Participation (ANLSAMP) Program sponsored competitions at the American Indian Higher Education Consortium (AIHEC) Annual Conference. This year, the AIHEC Conference took place on the Gila River Indian Reservation in Chandler, Arizona. Thirty-four Scientific Poster and 16 Scientific Oral Research presenters registered, 10 of which were AMP Scholars. ANLSAMP sponsored the competitions allowing Tribal College students a chance to showcase their research, knowledge and expand their professional development abilities.

#### Poster Scientific Research Presentation Winners

1st Place-Amy Stiffarm, Salish Kootenai College - Pablo, Montana poster entitled "Detection of Phage Genes in the Genome of Mycobacterium."

2nd Place-Michael Dunaway, Haskell Indian Nations University Lawrence, Kansas poster entitled "Corn: It's What's Eating You."

3rd Place-Allyson Two Bears, Sitting Bull College - Fort Yates, North Dakota poster entitled "Nesting Responses of Loggerhead Shrike and Brown Thrashers to Annual Precipitation and Temperatures from 1994-2009."

#### Oral Scientific Research Presentation Winners

1st Place-Amy Stiffarm, Salish Kootenai College - Pablo, Montana presentation entitled "Detection of Phage Genes in the Mycobacterium."

2nd Place-Lori Gourneau, Turtle Mountain College - Belcourt, North Dakota presentation entitled "Sample Preparation Comparison and Analysis of VOC's from Soil Matrix y Gas Chromatography."

3rd Place-Allyson Two Bears, Sitting Bull College-Fort Yates, North Dakota presentation entitled "Nesting Responses of Loggerhead Shrike and Brown Thrashers to Annual Precipitations and Temperature from 1994-2009."

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#### AIHEC Competition Results (Continued)



Blackfeet Community College-Browning, Montana-Science Bowl Team proudly accepts the traveling trophy for the second consecutive year at the AIHEC Awards Banquet in Chandler, Arizona. Photo courtesy of Rayne Charette.

In addition to Scientific Poster and Oral competitions, ANLSAMP conducts the annual Undergraduate Science Bowl Competition. New questions for the science bowl are purchased each year and randomly selected before competition. Students prepare for the Science Bowl competition by studying information in the categories of mathematics, zoology, earth science, botany, terminology, and anatomy. The Science Bowl Competition gives students a chance to demonstrate their knowledge of the STEM fields and represent their institution. There were 18 teams registered for the Science Bowl Competition, several of which were composed of AMP Scholars. Blackfeet Community College, defending champions, placed first. This competition also allows students to network with professionals and learn about upcoming research funding and opportunities.

#### **Science Bowl Winners**

1st Place-Blackfeet Community College - Browning, Montana 2nd Place-Stone Child College - Rocky Boy, Montana 3rd Place-Turtle Mountain Community College - Belcourt, North Dakota

#### AMP Scholar Profile-Amy Stiffarm

Amy Stiffarm "Goes With the Bear Spirit" is an enrolled member of the Gros-Ventre Tribe located on the Fort Belknap Indian Reservation in north central Montana. She is currently attending Salish Kootenai College (SKC) as a sophomore in the Life Science Degree Program. Amy has accomplished many great things on her journey to pursue higher education, one of which was to become an AMP Scholar.

Amy's parents, Mother Barbara and Father Loren "Bum" Stiffarm, have been involved in her education from the start. Her father graduated with a Bachelor Degree in Education from Montana State University – Billings and mother attended the University of Montana – Missoula. As a child Amy enjoyed basketball and she could often times be found at the nearby basketball courts. She was in various clubs and sports in high school, but her parents always made sure she put academics first. Amy admits that her academic success stems from the persistence and consistency of her parents.

As a teenager, Amy didn't see herself attending college or leaving her reservation because she was unsure which degree she wanted to pursue. Amy went her entire senior year without



Amy Stiffarm AMP Scholar is recognized at Salish Kootenai College - Pablo, Montana - for placing first in two scientific research competitions at the AIHEC National Student Conference. Photo courtesy of Yolanda Matt.

applying to college until late spring. She was called into her guidance counselor's office and wasn't able to leave until she filled out an application for college. When she graduated from Harlem High School as Salutatorian of her class, she still hadn't made a decision. She noticed her friends leaving one by one to attend college and she realized she needed to be going somewhere also. The fact that her mother lost out on a job because she didn't have a degree made Amy realize how important a college education was. She applied and was accepted to SKC late that summer but began to get anxious about leaving her home of 18 years. Her parents encouraged and reminded her that they would always support her and not to be afraid because as long as she was trying they would be proud of her. Together they packed her things the morning she was scheduled to leave. It was a very difficult yet wonderful time for the entire family.

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#### AMP Scholar Profile-Amy Stiffarm



Above: Amy Stiffarm #22, and SKC Lady Bison Teammates show sportsmanship after a 92-69 victory over Turtle Mountain Community College Belcourt, North Dakota in 2009. Game hosted at Joe McDonald Fitness Center located on Salish Kootenai College Campus in Pablo, Montana. Photo courtesy of Juan Perez

Below: Left, Amy Stiffarm explains scientific poster to right, AMP staffer Misty Hirsch. Photo courtesy of Yolanda Matt.



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Upon Amy's arrival to SKC's campus in Pablo, Montana she felt scared and didn't know what to expect. She wasn't sure what courses to take and felt as if she didn't have a purpose. Shortly after starting school, she joined the basketball team and instantly felt welcome and at home. During her freshman year at SKC, she was required to turn all assignments in before she was able to leave for the AIHEC National Basketball Tournament. In the early hours before the trip, Amy printed her assignments, turned them in and boarded the bus.

Amy was dedicated to her academics and athletics, which posed a difficult challenge. Amy played for a little over a year and decided that basketball was not her highest priority anymore and she needed to take academics more seriously. She wanted to pursue employment because her scholarships had ended. In the spring she began working in the Cellular Molecular Biology Laboratory at SKC. She became more serious about her academics and spent the majority of her time studying, attending lectures and labs.

As a young adult Amy has placed in national competitions such as AIHEC – AMP Scientific Poster and Oral Research Presentations and SACNAS receiving an award in Cellular and Molecular Biology. She was SKC's Support Services Student of the Year, served on SKC's Student Senate and helped SKC win the AIHEC National Basketball Championship in 2009. She is currently working on a study that involves bacterial phages, which are viruses that infect bacteria. She began the research project at SKC Cellular and Molecular Biology Laboratory in November 2009. She plans to graduate with a Bachelor of Science from SKC in 2012 then work on her Master's of Public Health at University of Washington in Seattle, Washington with a focus on Nutritional Sciences. She would like to pursue a PhD, but is still debating on which area of study. Cellular and Molecular Biology is definitely an option.

While on her journey to pursue higher education, Amy had many triumphs and tribulations. The AMP Scholar Program has allowed Amy to travel to professional conferences and present her research findings. She has worked in the Cellular and Molecular Biology Laboratory at SKC with focus on the *Detection of Phage Genes in the Genome of Mycobacterium* and presented her poster at AIHEC. As an AMP Scholar and student at a tribal college Amy felt as if she belonged. She sees herself going places and reaching goals with great strength. It has been difficult for Amy to be away from home and her people, but the program has also provided her with a sense of family.

Amy's advice to students: "There are so many opportunities out there, but you must take a chance and act now! With the right amount of desire you can achieve your goals and dreams. It may seem like a never-ending road and college can be tough at times but don't give up. Our future is our own responsibility"

~Amy Stiffarm

## ALL NATIONS Louis Stokes

# "...I have the opportunity to train our future land managers, a critical area vital to the future of Indian Country."



Above: Left, Bill Swaney right, Shalene Pillideau identify aquatic invertebrates at the Jocco River field site on the Flathead Indian Reservation near Arlee, Montana. Photo courtesy of Bill Swaney.



Above: Bill Swaney and nine-pound Mackinaw on Flathead Lake in Polson, Montana. Photo courtesy of Bill Swaney

#### Meet a Liaison-William Swaney



Above: Bill Swaney, traditional dancer at SKC's 30th Anniversary Pow-Wow hosted by Two Eagle River School in Pablo, Montana. Photo courtesy of Robert Meyers.

Hello, I'm Bill Swaney, member of the Confederated Salish and Kootenai Confederated Tribes (CSKT). I've worked and lived on the Flathead Indian Reservation for my entire life. I am the Natural Resources Department Head at Salish Kootenai College and serve as SKC's Liaison for the All Nations Louis Stokes Alliance for Minority Participation Program.

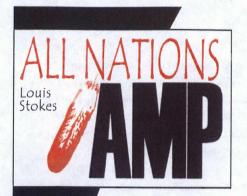
Many hours of my childhood were spent roaming the forests and streams of the reservation, and I developed a strong interest in the outdoors very early on. I was fortunate to be employed while still in high school as a field technician for two wildlife biologists. I became committed to studying this field and making it my career. In 1990 I graduated from the University of Montana-Missoula with a Bachelor's Degree. My thesis focused on the effects of nest predators on ground-nesting bird communities. In 1993 I graduated with a Master's Degree in Wildlife Biology from the University of Montana - Missoula.

In 1994 I made a career change and become manager of the Division of Environmental Protection for the CSKT, a position I held for just over six years. During that period I was privileged to work with very committed people on a

national level. As a group, our accomplishments paved the way for better protection of the environment and human health throughout Indian country. At that time I also began to guest lecture at SKC and teach classes on a part-time basis. The experience of teaching moved me unlike anything I had experienced as a professional and I discovered that teaching was my true passion.

In 2000 I was hired as an instructor in what was known then as the Environmental Science Department at SKC. The department has since expanded and offers two Bachelor of Science Degrees, one in Environmental Science and the other in Forestry. I am extremely proud of SKC developing an accredited degree in Forestry because I have the opportunity to train our future land managers, a critical area vital to the future of Indian Country. Our Natural Resources Department presently includes approximately fifty full-time students in each degree program. It's personally rewarding as an AMP Liaison because I work with students from other departments on campus and learn more about what they aspire to do. As an advisor I help students develop and implement their personal, educational and career goals, a priceless everlasting trade. I particularly enjoy working with students on an individual basis and take an active interest in what they are doing. As an AMP Liaison, I feel a responsibility to each student, helping them to achieve at the highest level possible. It is always enjoyable for me to see these students succeed in their chosen fields of study. AMP scholars themselves are the most effective ambassadors for bringing other students into the program. Seeing growth in our numbers is valuable but it's even more gratifying knowing our AMP scholars are reaching out to each other with encouragement and support. I believe that I have fulfilled my position as a liaison when students from previous years make contact with me just to thank me for their education and experience while in the AMP Scholar Program.

Although work is a priority for me, I still appreciate the good things in life. Hunting, fishing, and embracing the solitude and serenity of the outdoors are all part of what drew me to the environmental science field in the beginning. As a traditional dancer, I attend powwows and on occasion I play stick game. I also like to golf, to bowl and playing poker from time to time.



#### **Upcoming STEM Conferences**

#### Association of Environmental Studies and Science (AESS)

Many Shades of Green reflects Growing Diversity of the Environmental Movement June 17-20, 2010 Lewis and Clark College - Portland, OR <a href="http://www.lclark.edu/college/programs/environmental\_studies/aess2010/index.php">http://www.lclark.edu/college/programs/environmental\_studies/aess2010/index.php</a> Contact Phil Camill pcamill@bowdoin.edu or Jim Proctor jproctor@lclark.edu for questions regarding the conference

#### Society for Advancement of Chicanos/Latinos and Native Americans in Science (SACNAS)

Science, Technology & Diversity for a Sustainable Future September 30 - October 3, 2010 Pre-registration Deadline September 2, 2010 Anaheim, CA www.sacnas.org

#### American Indian Science and Engineering Society (AISES)

National Conference November 11-13, 2010 Albuquerque Convention Center Albuquerque, NM for more information visit www.aises.org

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#### Research & Funding Opportunities

#### 2010 AISES Scholarships

AISES Intel Scholarship, AISES Google Scholarship, A.T. Anderson Memorial Scholarship Deadlines: June 15, 2010

For more information visit www.aises.org

#### **National Nuclear Security Administration Faculty**

The Department of Energy's National Nuclear Security Administration faculty and student teams program (FaST) offers Native American students appointments for the summer semester. Visit www.bnl.gov/education/programs/nnsaFast.asp

#### **Organization for Tropical Studies**

(OTS) has a great opportunity for AMP Scholars Duke University Box 90633 Durham, NC 27708-0633 Telephone: (919) 684-5774 Fax: (919) 684-5661

Email: ots@duke.edu or for more information visit www.ots.duke.edu

#### Research Opportunities At Oak Ridge National Laboratories

Summer Internships for teams of faculty and undergraduates. Become an integral part of a research team. Obtain hands on experience Visit www.scied.science.Doe.gov

#### Student to Academic Professoriate for American Indians (SAPAI)

Aims to increase the rate of degrees completed by American Indians. This six week writing workshop will enhance degree completion by assisting students in writing their senior thesis. For more information visit <a href="http://stepup.dbs.umt.edu">http://stepup.dbs.umt.edu</a>

#### Social Networking

We welcome and encourage all AMP Scholars to join the All Nations Louis Stokes Alliance for Minority Participation (ANLSAMP) Group on Facebook. ANLSAMP actively posts important deadlines, national STEM conferences, competition results, pertinent funding opportunities and some programmatic changes to keep scholars informed of AMP Scholar requirements. Social Networking is a helpful tool for many professionals in STEM fields and we encourage you to join today. This will allow AMP to keep you posted with significant information and opportunities specifically designated for AMP Scholars. Please email your thoughts or ideas about ANL-SAMP's Facebook Group to: Steve\_Dupuis@skc.edu
Or visit http://www.facebook.com/home.php?#!/group.php?gid=115693453328&ref=ts

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www.anamp.org

# Minority Participation (ANLSAMP) is funded by the National Science Foundation, with the goal of increasing the number of Native American students successfully completing degrees in Science, Technology, Engineering and Mathematics (STEM). This goal is accomplished through direct participant support and collaborations with partner institutions. ANLSAMP is designed to serve a geographically diverse alliance of 9 main-

The All Nations Louis Stokes Alliance for

The All Nations AMP Newsletter is a publication designed to keep our partner institutions and others informed of ANLSAMP activities, previous project results and other relevant STEM activities. Send ideas, student success stories, research project findings or

announcements for future newsletters to:

stream colleges and universities and 25 tribal

colleges located within 13 states.

Steve\_Dupuis@skc.edu

#### PROGRAM OVERVIEW

The All Nations LSAMP provides eligible students stipends to assist with educational costs and assists with student research opportunities. These benefits are limited to students enrolled in qualified STEM degree programs at our partner institutions. The ideal AMP Scholar must be enrolled in STEM discipline and seeks research opportunities with a mentor. Opportunities listed are contingent upon approval for funding by the National Science Foundation (NSF).



Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect on the views of the National Science Foundation (NSF). This material is based upon work supported by NSF under Grant No. HRD-0603199.

#### **ANLSAMP Partner Institutions**

Blackfeet Community College

Central Michigan University

Chief Dull Knife College

College of Menominee Nation

Comanche Nation College

Dine College

Fond du Lac Tribal College

Fort Belknap College

Fort Berthold Community College

Fort Peck Community College

Haskell Indian Nations University

Heritage University

Keweenaw Bay Ojibwa Community College

Lac Courte Oreilles Ojibwa Community College

Little Big Horn College

Little Priest Tribal College

Montana State University-Bozeman

Montana State University-Northern

Navajo Technical College

North Dakota State University

Northwest Indian College

Oglala Lakota College

Rocky Mountain College

Saginaw Chippewa Tribal College

Salish Kootenai College

Sisseton Wahpeton College

Sitting Bull College

South Dakota School of Mines & Technology

Southwestern Indian Polytechnic Institute

Stone Child College

United Tribes Technical College

University of Idaho-Moscow

University of Montana-Missoula

Western Washington University