

# All Nations Louis Stokes Alliance for Minority Participation

NEWSLETTER

SPRING 2012

### POINTS OF INTEREST:

- 2012 AIHEC Conference
- AMP Sponsored Events
- AMP Awarded New Grant to Continue STEM Effort

### INSIDE THIS ISSUE:

- New ANLSAMP 5-Year Award 1
- 2012 AIHEC Spring Student Conference 2
- 2012 AIHEC Science Bowl Results 2
- 2012 AIHEC STEM Poster Presentation Results 3
- 2012 AIHEC STEM Oral Presentation Results 4
- Upcoming STEM Conferences & Workshops 5
- Partner List 6
- Contact Us 7

## NSF Awards All Nations LSAMP New Grant

March 1, 2012 - August 31, 2016

### Abstract

The All Nations Louis Stokes Alliance for Minority Participation (ANLSAMP) program is the only Alliance focusing on Native American (NA) undergraduate students in the science, technology, engineering, and mathematics (STEM) disciplines. The United States continues to fall short in graduating enough STEM professionals to meet this nation's growing demand, especially NA and other under-represented minorities (URM). To help address this continuing national crisis, the ANLSAMP will continue to improve and grow the pipeline for NA and other URM STEM students through its established network of collaborating partner institutions.

Thirty-eight institutions of higher learning have again come together to continue the effort toward broadening the participation of NA and URM in STEM at the baccalaureate level. The increase in the number of STEM bachelor's degree programs at tribal colleges and universities (TCUs) is a key indicator that the NA community has a wholehearted interest in strengthening the knowledge base in STEM. The number of BS STEM degree programs at partner TCUs has increased from three to eight during the period 2005 - 2010.

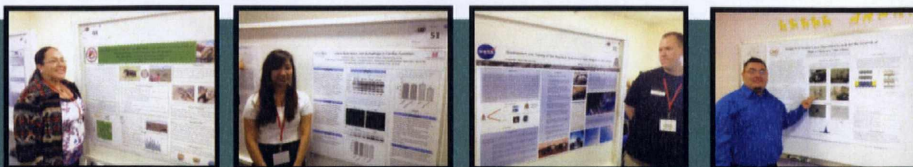
The goal of the ANLSAMP program is again to double the number of Native Americans and other under-represented minorities enrolled in STEM disciplines at partner institutions and assist them in completing a STEM BS degree. In order to achieve this goal and related supporting objectives, the ANLSAMP program has built activities through lessons learned and constructive input from its established cohort of partner institutions. Part of what makes the ANLSAMP program unique is that over the years most the TCUs have been involved in the Alliance at some point. TCUs are spread out over a fourteen states, primarily in the upper Midwest. TCUs are targeted because more NA students are pursuing their higher education at TCUs (IPEDS, 2010). Because many TCUs lack a variety of STEM degrees, especially STEM BS programs, it is still important to have mainstream colleges and institutions within the network to transition students from the associate level to the bachelor level and beyond.

The objectives of ANLSAMP are as follows:

1. Increase by 100%, the enrollment of Native American students in STEM disciplines at Bachelors of Science degree-granting institutions.
2. Increase by 100%, the number of Native American students who receive a BS in STEM.
3. Increase by 100%, the number of ANLSAMP Scholars that transition from a two-year STEM program into a four-year STEM program.
4. Increase by 20%, the retention of Native American students in STEM disciplines at BS degree-granting institutions.
5. To enroll 15% of the ANLSAMP Scholar recipients in STEM graduate programs.

The broader impact of this program reaches beyond expanding the opportunities for NA and other URM in STEM, ANLSAMP will continue to break down barriers and expand horizons for the target population of mostly rural and economically challenged NA students.

The intellectual merit of the ANLSAMP program, through the refinement and process of continual improvement within state activities, is expected to have a transformative effect on how to incorporate proven best practices into STEM research and education.





### AMP Scholar Named American Indian College Fund Student of the Year

Amy Stiffarm, Senior Life Sciences student at Salish Kootenai College, AMP Scholar, and S3 Scholar received the honor of being selected the 2012 American Indian College Fund Student of the Year. Her leadership and course work dedication were keys to her success.



Previous page Photos: (l to r): Michelle LaBeau, Oglala Lakota College, Noelani Villa, from Haskell Indian Nations University, Sean Shriner, Salish Kootenai College, & Philip Medina, Saginaw Chippewa Tribal College.



### Salish Kootenai College wins 2012 AIHEC Science Bowl Competition at Rapid City, SD

(l to r): Matthew Friedlander, Chad Reynolds, & Was'tewin Smiley, all AMP Scholars.

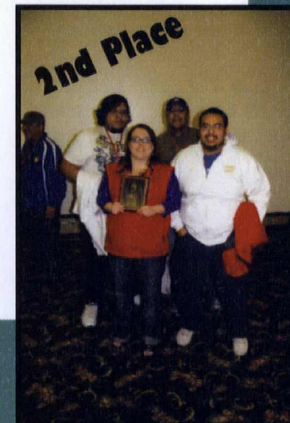
Little Priest Tribal College Science Bowl Team: (l to r): Darryl Fiero, LaVonne Snake, & Isaac Frazier



United Tribes Technical College Science Bowl Team: (l to r): April LittleGhost, Tyson Maxon, & Jason Breiner.



Fort Peck Community College Science Bowl Team: (l to r): Adam Decoteau, Coach Zara Berg, John Crawford, & Jacob First.



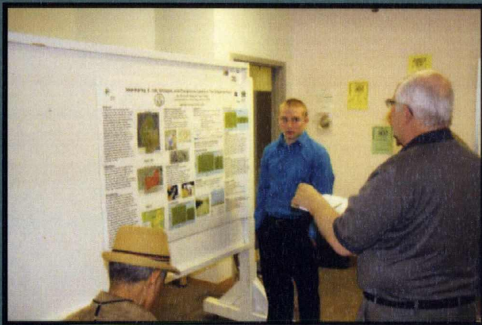


## STEM Research Poster Presentations Award Winners

**1st Place - Noelani Villa**, Haskell Indian Nations University. Presentation: Caloric Restriction and Autophagy in Cardiac Function.

**2nd Place - Christopher Cassandro**, Fond du Lac Tribal College. Presentation: Paenibacillus dendritiformis strain is found in Manoomin sediments possibly recycling nutrients.

**3rd Place - Burdette Birdinground**, Salish Kootenai College. Presentation: Conversion of Primary Forest Residue to Biochar with a Mobile Pyrolysis Blanket.



(left) Forrest Gregg, from Saginaw Chippewa Tribal College discusses his research project with the

(below) Sasha Pietsch Rivers discusses Matthew Friedlander's poster. Both students are from Salish Kootenai College.



(above) Noelani Villa, from Haskell Indian Nations University - 1st Place Winner of STEM Research Poster Presentations. (Mentor on left)

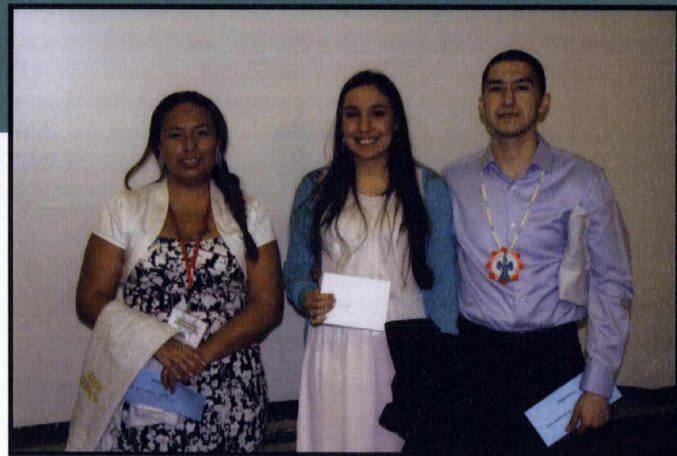


## STEM Research Oral Presentations Award Winners

**1st Place - Amy Stiffarm**, Salish Kootenai College.  
Presentation: Polymerase Chain Reaction to Distinguish Diploid and Triploid Forms of *Butomus umbellatus*.

**2nd Place - Ulrike Werner**, Oglala Lakota College.  
Presentation: Protection from Electromagnetic Radiation through Soil used as Construction Material.

**3rd Place - Loretta Grey Cloud**, Salish Kootenai College. Presentation: Salish Kootenai College Outreach Program Discovers New Virus: Undergrad Research Leads to Proving Lysogeny.



(below) Dr. Elizabeth Rutledge from Salish Kootenai College & Lee Padilla, ANLSAMP Projects Coordinator present awards at AIHEC Conference



(above, l to r) Loretta Grey Cloud and Amy Stiffarm, 3rd place and 1st place winners respectively in the ANLSAMP STEM Oral Presentations, along with Burdette Birdinground, 3rd place winner in the STEM Poster Presentations. All three students are AMP Scholars and from Salish Kootenai College.





American Indian Science and Engineering Society  
National Conference - Anchorage, Alaska - November 1 - 3, 2012

Seeking volunteers and input for 1994 land-grant events at Smithsonian Folklife Festival

This year, the Smithsonian Folklife Festival is commemorating the 150-year anniversary of the Morrill Act that established the land grant system. Northwest Indian College and United Tribes Technical College land grant programs are providing the leadership on this initiative. AIHEC and FALCON are supporting the development of a series of exhibits, demonstrations, and presentations showcasing the 1994 land-grant institutions' work related to food and wellness for the Smithsonian Folklife Festival in Washington, DC, June 27-July 1 and July 4-8, 2012.

If you are interested in helping, please sign-up for your participation in the following activities. Send your name, contact information, and proposed participation to John Phillips, [jphillips@aihec.org](mailto:jphillips@aihec.org), by April 15, 2012.

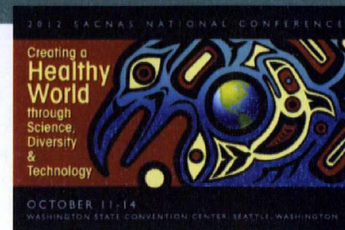


Travel Scholarships are available for travel and/or lodging expenses to attend the SACNAS National Conference.

Spring application period: March 29-April 26, 2012.

Check website for eligibility requirements and application process, [www.sacnas.org](http://www.sacnas.org)

Contact program manager Perla Miranda with questions or for assistance in preparing a travel scholarship application at (toll free) 877-SACNAS-1.



The First Americans Land-grant Consortium (FALCON) is pleased to announce its 8th Annual Conference, scheduled for October 27-30, 2012, at the Hotel Albuquerque in Albuquerque, New Mexico. Please save the dates!

This year, the conference theme will be Building 1994 Land-grant capacity through Innovative Resource Development, and will focus on creative strategies to find the resources that allow us to be successful in our work.

We look forward to joining with you in learning about the programs being conducted within the 1994 land-grant community. Should you have any questions regarding the FALCON Annual Conference, please contact John Phillips at (573)234-2064, and [johnphillips@mchsi.com](mailto:johnphillips@mchsi.com).



## All Nations LSAMP Partner Institutions (updated)

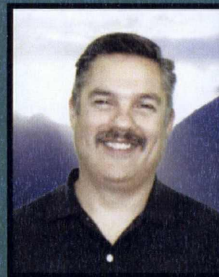
Aaniiih Nakoda College (Fort Belknap)  
 Blackfeet Community College  
 Cankdeska Cikana Community College  
 Central Michigan University  
 Chief Dull Knife College  
 Comanche Nation College  
 Dine College  
 Evergreen State College  
 Fort Berthold Community College  
 Fort Peck Community College  
 Haskell Indian Nations University  
 Heritage University  
 Keweenaw Bay Ojibwa Community College  
 Lac Courte Oreilles Ojibwa Community College  
 Leech Lake Tribal 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  
 Stone Child College  
 Tohono O'odam Community College  
 Turtle Mountain Community College  
 United Tribes Technical College  
 University of Idaho-Moscow  
 University of Montana-Missoula  
 Western Washington University  
 White Earth Tribal & C. C.  
 Wind River Tribal College

Red highlight indicates new partner for 2011-16



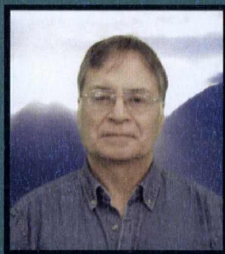
Dr. Luana Ross  
 Principal Investigator  
 (406) 275-4800  
 Luana\_Ross@skc.edu



Steve Dupuis  
 Program Director  
 (406) 275-4996  
 Steve\_Dupuis@skc.edu



Zetra Wheeler  
 Program Manager  
 (406) 275-4998  
 Zetra\_Wheeler@skc.edu



Lee Padilla  
 Project Coordinator  
 (406) 275-4714  
 Lee\_Padilla@skc.edu

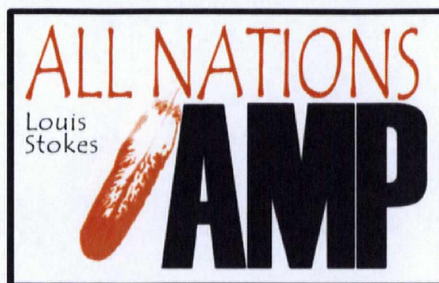


Chuck Harris  
 Data Analyst  
 (406) 275-4999  
 Chuck\_Harris@skc.edu



Alisha Thomas  
 Admin. Assistant  
 (406) 275-5747  
 Alisha\_Thomas@skc.edu





### All Nations LSAMP - Salish Kootenai College

P.O. Box 70, 58138 US HWY 93 - Pablo, MT 59855-0070

Phone: (406) 275-4996, Fax: (406) 275-4807 Email: [Steve\\_Dupuis@skc.edu](mailto:Steve_Dupuis@skc.edu)



#### Program Overview

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

**The All Nations Louis Stokes Alliance for Minority Participation (ANLSAMP)** program 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 11 mainstream colleges and universities and 27 tribal colleges located within 14 states.

**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: [Steve\\_Dupuis@skc.edu](mailto:Steve_Dupuis@skc.edu) 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-1102362.

