

NDSU INBRE MONTHLY UPDATE

Year 2/ August 2015



AUGUST HIGHLIGHTS

Tribal Air Quality Study Commences

SURP 2016 planning

TCU module modifications

Website – soon to come!

Launching social media

Student feature: INBRE Graduate Assistant

UPCOMING EVENTS

Website updates

Tribal College Engagement

Key informant interviews: Planning and collaboration with AIPHRC

Launching of the modules

Student spotlight: Tribal college student researchers

START OF THE 2015-2016 ACADEMIC YEAR

August marked the beginning of an entirely new school year for the Idea Network of Biomedical Research Excellence at NDSU. This past month included the start of some very exciting adventures for the INBRE program. As this new-year unfolds, we are excited to develop and strengthen the programs which carry out INBRE's vision including gearing up for the Summer Undergraduate Research Program to be held in the summer of 2016, the research training modules developed for North Dakota tribal colleges, the Tribal Air Quality Study, Monthly NDSU INBRE Newsletters, and other research endeavors.

This month marks the first official newsletter to be sent out to North Dakota tribal colleges. The Monthly NDSU INBRE Newsletter was an idea that took root in the core of NDSU INBRE- North Dakota tribal college engagement. The purpose behind the newsletter is to provide continuous updates to key stakeholders at each of the ND tribal colleges on INBRE projects, highlight tribal college students participating in research, and to provide information on research opportunities. The plan for the newsletter is to be sent out at the end of each month to key stakeholders at the tribal colleges in addition to being available on the NDSU INBRE website. As the NDSU INBRE website is under development and our ideas for the newsletter are formed, we would like to welcome suggestions to improve the newsletter such as highlighting research opportunities, stories, challenges, or other relevant information. You can contact the main editor of the newsletter, Pearl Walker-Swaney, INBRE Project Manager, pearl.walker@ndsu.edu for these suggestions.

TRIBAL AIR QUALITY STUDY BEGINS

Earlier this month, NDSU INBRE hosted a particulate matter sampling training for Nueta-Hidatsa-Sahkish College (NHSC) students and faculty involved in the Tribal Air Quality Pilot Study to collect dust samples from Fort Berthold. NDSU INBRE has subcontracted two undergraduate students

from NHSC to conduct the research for the Tribal Air Quality study, James Medeiros and Lee Voigt, both in the Environmental Science degree program at NHSC. On August 7, Dr. Shafi Rahman led a tour of his lab that specializes in air and water quality analysis and provided the space for training the students on calibrating and assembling the particulate matter sampling equipment for PM_{2.5} and PM₁₀. In addition, Dr. Borhan and graduate student, Sumon Datta, both involved in air quality research, provided training to the NHSC students. Dr. Bernhardt Saini-Eidukat also a part of the air quality team, made arrangements for the NHSC students to tour the Scanning Electron Microscope (SEM) facility located in the USDA building on the NDSU campus. The SEM lab will be used in the analysis of the dust samples collected using the particulate matter equipment. NHSC students also toured and were trained on using the lab containing the only microbalance scale in the region. This scale is of particular use for the analysis of their samples due to the controlled environment and conditions of the microbalance lab. Sampling of particulate matter will commence in September 2015.



SURP 2016 PLANNING

In June 2015, NDSU INBRE hosted the first Summer Undergraduate Research Program (SURP) in collaboration with NATURE (Nurturing American Tribal Undergraduate Research Experience). The program provided students with a 2 week research experience on the NDSU campus as well as a short time spent at the University of North Dakota campus. The collaboration was formed to create a two-tiered approach to increasing the involvement and interest of tribal students into research. The program included a variety of research lab tours and presentations, student development sessions, and team building activities. NATURE's program and curriculum is focused on tribal high school students, whereas, SURP is targeted for tribal college students. SURP scholars were required to evaluate the program overall and on a daily basis.

The SURP team met following the conclusion of the program to discuss feedback and student evaluations on the program. The team plans to host next year's program in the month of August as opposed to June to provide tribal college students more of an opportunity to enroll in the program. Other mechanisms to improve the program for 2016 are to include more professional development sessions, research specific trainings and workshops, specialized lab tours that align with each students' academic interest, and facilitated daily training on developing a research proposal. The research proposal will become the scholar's presentation and deliverable at the end of the program. SURP will remain a 2 week program held at the NDSU campus. Students are provided room and board, food, and a stipend for participating in the program. Planning for SURP 2016 will continue throughout Fall 2015 and Spring 2016 semesters.

RESEARCH TRAINING MODULES

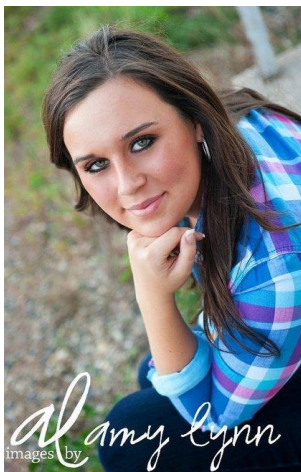
The NDSU INBRE faculty have developed research training modules for ND tribal colleges. These modules contain introductory information on various fields of research, that are formatted to use in classroom settings. The goals of the modules are to broaden the research knowledge of tribal college students and engage them in research through the classroom. This is a free resource available for the ND tribal colleges to use as needed. NDSU INBRE has been meeting with key stakeholders at each tribal college to determine the preferred delivery method for the modules. Moving forward with the development of the modules, INBRE will be creating a website where the modules and additional resources will be easily accessible for tribal college faculty/staff and students.

Some of the topics covered in the modules include: air quality and manure management, social and behavioral science, introduction to public health research, using the scientific method to identify fact from fiction in the use of vaccinations and immunizations, environmental earth science and health, introduction to food basics, and exploring lifestyle medicine. This first set of modules will be ready for some of the tribal colleges to use in their classrooms this Fall 2015. Other topics of research will be developed based on the identified needs of each tribal college. Look out for the announcement on launching the website next month!

SOCIAL MEDIA AND WEBSITE COMING SOON

INBRE plans to develop a website in September to provide a better means of communication between the program and interested stakeholders. The website will feature: NDSU INBRE information, background and goals of INBRE projects, Monthly Newsletter, Research Training Modules, Student Spotlight Section, Scholarship and Research Opportunities, and NDSU INBRE Faculty Researcher biosketches. In addition to the development of a website, INBRE will be using social media to increase the engagement around INBRE projects and research.

INBRE GRADUATE ASSISTANT JOINED THE NDSU INBRE TEAM



Allison Goldenstein, a first-year graduate student in the NDSU Master of Public Health program, became the graduate assistant for NDSU INBRE. Allison joined the team in mid-August and will be assisting the INBRE team to meet program goals and objectives. Some of her duties include assisting with coordination and planning for SURP 2016, the research training modules, and the Tribal Air Quality study in various aspects. She will also be conducting a literature review on successful models of STEM and research curriculum for American Indian students, assisting with INBRE website development and social media, as well as contributing to the monthly newsletters.

Allison graduated with her baccalaureate from NDSU this summer with a dual-degree in Biological Sciences and Business Administration. She is enrolled in the Public Health in Clinical Systems track with the MPH program and is very excited to be a part of the INBRE Team!

THE INFORMATION INCLUDED IN THIS MONTH'S ISSUE IS TO PROVIDE UPDATES ON NDSU INBRE ACTIVITIES. IF YOU WOULD LIKE TO SUBMIT AN OPPORTUNITY, STORY FOR STUDENT SPOTLIGHT, OR HAVE SUGGESTIONS ON WHAT TO INCLUDE IN THE NEXT MONTHLY UPDATE, PLEASE CONTACT US!

WE VALUE YOUR INPUT!

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