



Aberdeen Area Tribal  
Chairmen's Health Board

**SEPA** SCIENCE EDUCATION  
PARTNERSHIP AWARD  
Supported by the National Center for Research Resources, a part of the National Institutes of Health

UNIVERSITY OF  
**Nebraska**  
Medical Center

# BUILDING BRIDGES

SEPTEMBER 2013, NEWSLETTER

ISSUE 7

## ROLE MODEL POSTER

**PHYSICAL THERAPIST**  
Dreyer Medical Clinic



**Myhra Roper**  
CHEYENNE RIVER  
SIOUX

**WORDS OF WISDOM**  
Work hard in school and any other area of life. Hard work and determination will always allow you to succeed. Don't be afraid to be different and follow your own path.



LEARN MORE ABOUT OUR PROGRAMS:  
Visit our website - [www.unmc/  
sepa.org](http://www.unmc/sepa.org)

**News Letter Committee**  
Maurice Godfrey  
Kim Soper  
Liliana Bronner  
Shrawan (Sam) Kumar

## ROLE MODEL POSTER

**NAVAJO**



**David Wilson**  
Molecular Immunologist | Manuelito, NM

## COMPLETING 9 YEARS & SEPA MEETING IN OMAHA

**DR. MAURICE GODFREY**  
UNMC PROFESSOR & SEPA PROGRAM DIRECTOR

This fall begins the ninth year of our UNMC-SEPA partnership with Nebraska and South Dakota schools that serve Native students. We have all learned a great deal in these years and have made many friends. Our focus remains "to increase the understanding of and appreciation for science" among Native students. We have designed and distributed many curriculum supplements to help accomplish our main goal. Yet, working directly with students has brought the greatest satisfaction. There are some 80 different SEPA programs all across the country. Each year SEPA directors, staff, evaluators, and other interested people gather to discuss the best ways to engage students, teachers, and the public in science. Last May the NIH Science Education conference was hosted by the UNMC-SEPA team in Omaha. The conference was a great success, in spite of the current uncertainty about continued NIH funding for SEPA. The highlight was undoubtedly the fantastic dancing, drumming, and singing exhibition put on by the Winnebago WO-XETE-HIRE ("Loved by All") group. A special thank you to Kay and Christine Earth for organizing the program!

## UNMC-SCIENCE EDUCATION PROGRAM A GREAT SUCCESS STORY

Students and teachers from Todd County High School returned to UNMC and the Omaha Zoo earlier this year. They were able to tour and take part in many educational activities. They visited pathology, gait lab, the new state of the art clinical simulation center, and the college of nursing. The UNMC-SEPA team has been very happy to have these students visit Omaha and to visit the students at Todd County. This program has provided students a wonderful exposure to real science and many eye-opening experiences to different education and professional opportunities. CONGRATULATIONS are in order to Michelle Verrochi the Todd County Teacher of the Year who has led her students to exceptional success. ALL of her Biomedical Sciences students graduated from Todd County High School Class of 2013 and ALL received college scholarships. **Students and Michelle—CONGRATULATIONS FOR 100% SCHOOL GRADUATION AND COLLEGE ENROLLMENT!!**

## STUDENTS AND TEACHER (Ms. MICHELLE VERROCHI) FROM TODD COUNTY HIGH SCHOOL VISIT TO OMAHA 2013 WITH SEPA PROGRAM DIRECTOR DR. GODFREY



This project is funded by the National Center for Research Resources (Grant#RR032178) and is currently supported by the Office of Research Infrastructure Programs (OD011071)



Pictures below—Students from Todd County visited Pathology lab (Dr. Geoffrey Talmon) and College of Nursing. In Pathology lab, students had a first-hand experience to examine different human organs such as liver, lungs, intestine, kidney etc.



Pictures Below 1. Dr. Brent Khan discussing how stress can lead to emotional, psychological, and physical problems, like high blood pressure and heart disease —2. Walking is complex motor task—Dr. Wayne Stuberger demonstrating the role of gait analysis in mobility, fall prevention and different sports activities. 3. Students also visited UNMC library— Ms. Terry Hartman guided tour gave students a great insight of a medical research library. Students also visited new state of the art clinical simulation center. Students were able to practice simulation technique used in surgical procedures.





### SCIENCE OF ARCHITECTURE & ENGINEERING-HANDS ON ACTIVITIES FOR MIDDLE SCHOOLS STUDENTS-2013

This year, we had a great response from eight different schools such as Hillside Elementary, Marty Indian School, Santee Community School, St. Augustine Indian Mission School, St. Francis Indian School, Todd County Middle School, Umoho Nation Public School and Winnebago Public School. More than 40 students participated in a 3 days exciting hands-on educational activities.



Pictures Above: Students visited Air & Space Museum— constructing paper rocket, SPG9 glider etc. Below: Students learned basics of computer programing and robotic engineering using LEGO building kits and software



Pictures Above: Dr. Jennifer Melander and her team provided great platform for biological engineering-hands on activities such as Breaking Bones-design process for stabilizing broken chicken bones. Students were also directly involved in bug biomechanics and application GPS technology. Below: Architectural engineering-Students were involved in constructing 3D model building at the Peter Kiewit Institute and visited Durham Museum. Also, Dr. Eric Hass demonstrated different Chemistry experiments which students enjoyed very much.



## SUMMER SEPA TEACHER WORKSHOP 2013

This summer SEPA held 3 teacher workshops, focusing on notebook foldables®, vocabulary strategies and instructional uses for die cuts as shown in pictures below. These two day workshops were held twice in Sioux City at the Marina Inn and also at the Todd County High School in Mission, SD. We had a great mix of elementary, middle and high school teachers, with 40 teachers attending in all. It was a fun time of learning, looking at ways that we can connect teaching strategies and student outcomes and also a relaxed time for teachers to work on things for their upcoming classes as well as interact with colleagues from other schools.



**ROLE MODEL POSTER:** The Role Model Poster Project features Native Americans in many health and science professions. Each poster includes the name, photograph, and tribal affiliation of the person featured. Additional information for teachers include: education, benefits, motivation, special job skills, and words of wisdom. These posters proved to be a great source of inspiration and motivation to the students and teachers. There are currently seven sets of posters and each set features five tribal members.



**David Wilson**  
Molecular Immunologist | Manuelito, NM

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**WORDS OF WISDOM:**  
"Knowledge breeds confidence and together they open the doors to your future."

**EDUCATION:**  
Ph.D. - Doctorate in Molecular Biology, Arizona State University

**FURTHER INFORMATION:**  
*Dr. Jenner and the Speckled Monster: The Search for the Smallpox Vaccine* by Albert Marrin  
National Institutes of Health  
Office of Science Education - Lifeworks®  
[www.science.education.nih.gov/lifeworks](http://www.science.education.nih.gov/lifeworks)

[www.unmc.edu/sepa](http://www.unmc.edu/sepa)  



**Rosette Mitexi Stabler**  
Occupational Therapist | Walthill, NE

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Occupational Therapist | Walthill, NE

**WORDS OF WISDOM:**  
"Getting an education is so important! My elders have always said that getting an education is the key to helping ourselves and our people. Although it can be tough in today's world, it is worth it!"

**EDUCATION:**  
O.T.D - Doctorate in Occupational Therapy, Creighton University - School of Pharmacy & Health Professions

**FURTHER INFORMATION:**  
American Occupational Therapy Association  
[www.aota.org](http://www.aota.org)  
Occupational Outlook Handbook  
[www.bls.gov/oco](http://www.bls.gov/oco)  
(search "Occupational Therapist")

[www.unmc.edu/sepa](http://www.unmc.edu/sepa)  