

Publication of SEPA Educational Calendar

We have published an educational calendar (2016 - 2017—January to December, 2016 and January to July 2017 to keep up with the school year) for distribution to schools and other educational institutions. The calendar features information about our educational materials, role model posters and pictures of different educational activities. It showcases photos from SEPA health & science fun camp, teacher workshops, hands-on-activities and other programs.

Contact us at sepa@unmc.edu if you need a copy of the calendar for your classrooms or office.

SEPA Publication - *The Power of Role Models*

Information about the Native American Role Model Poster sets is available on the web at: <https://sites.google.com/a/education.ne.gov/power-of-role-models/>

THE NEW ROLE MODEL POSTER—SET 9 WHICH INCLUDES SOUTH DAKOTA HEALTH PROFESSIONALS — IN PROCESS

ANNOUNCEMENT/UPCOMING EVENTS

1. **BOARD MEETING:** : [Marina Inn and Conference Center in South Sioux City, Nebraska](#)

Date: Friday—April 7, 2017
Time: 10:00 am – 2:00 pm

2. **Science Camp and Workshops 2017**
Contact Sepa@unmc.edu for participating in those events

Role Model Posters



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. Set # 8 features: a dental assistant, pharmacy technician, biologist, nurse practitioner, and health scientist.

Yvonne Bavari

Nurse | Omaha, NE

WORDS OF WISDOM:

"Treat and care for people the way you would want to be treated. Enjoy all the ups, downs, and possibilities of the Alphabet. Even though it may be hard and long to get from A to Z, the most important thing is that you get to Z."

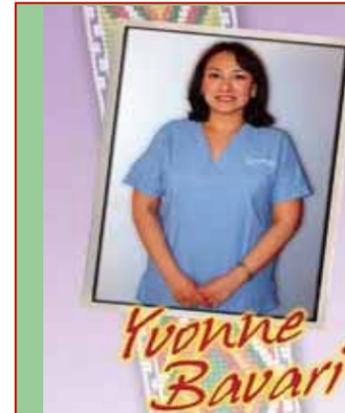
EDUCATION:

B.S.N. - Bachelor of Science in Nursing,
Nebraska Methodist College

FURTHER INFORMATION:

Heart and Soul: The Story of Florence Nightingale by Gena K. Gorrell
American Nurses Association
www.nursingworld.org
Occupational Outlook Handbook
www.bls.gov/oco (search "Nurse")

APRIL 2017 NEWSLETTER



Learn more about our programs:
Visit our website - www.unmc.edu/sepa

Newsletter Committee

Shrawan (Sam) Kumar
Maurice Godfrey
Kim Soper
Liliana Bronner

BUILDING BRIDGES

!! SEPA 2017: FORTHCOMING EVENTS !!

Dr. Maurice Godfrey, Professor and SEPA Program Director

As another school year begins to enter its final weeks, we are happy to announce our roster of summer programs. Our twelfth SEPA Health and Science Fun Camp for middle school students will be held June 4 to 7 on the campus of the University of Nebraska, Kearney (UNK). This will be the first time that we have held our camp on their campus. We have an excellent working relationship with UNK and their faculty. Among the highlights will be ecological studies of the Plains and a visit to the Great Platte River Road Archway.

This year we will have a unique program for high school students or recent graduates. These students (at least high school juniors) will join the UNMC Summer Health Professions Education Program (SHPEP) from June 4 to 10 at the University of Nebraska Medical Center (Housing is at the UN Omaha campus). The SHPEP program is designed for college students interested in careers in medicine, dentistry, nursing, public health, or physician assistant. The high school students will join SHPEP Scholars from all over the country.

Finally, we are planning a teacher professional development program (June 13 and 14) to promote and reinforce good teaching strategies utilizing neuroscience research that help stimulate children's brains and aid learning. The workshop will use math as a main vehicle to spur student learning. Ideas ranging from pets in the class room to brain breaks that include physical activity, cultural inclusion, and strategies for the teaching about the upcoming Solar Eclipse will be included.

SEPA SCIENCE PROGRAMS 2016-17: DNA DAY, 3D PRINTING, STRESS TEST AND NOISE- INDUCED HEARING LOSS AT DIFFERENT SCHOOLS (SANTEE, SISSETON, ROSEBUD, MARTY, ETC.)

SEPA PROGRAM: We have held annual workshops, science camps, family science nights, and visits to schools for science education for Native American communities. Since SEPA started about a decade ago to stimulate interest in science, a significant difference has been noticed amongst students from our Partner schools:



1. Students appear to be very excited when we visit schools and eager to learn 2. Participate in discussions and ask questions 3. Students are now more focused on their future goals and 4. Almost all students raise their hands if asked about attending college compared to few many years ago. This is welcome news and we hope the SEPA program has contributed to this change. We offer skills and science knowledge as a short term goal where as the long term goal is to build a track for future education and careers. PICTURE: Students are involved in DNA extraction at Marty Indian Middle School—



STUDENTS OBSERVATION: My observations from my experiment were that the strawberries DNA was the quickest to form when the alcohol was added and it was easy to see it as it stuck to the skewer and was easy to observe. Strawberry DNA was long, clear colored and string like seen in the picture above.



SEPA — ACTIVITIES—2016 –17

PICTURES: DNA DAY (organized by SEPA) at Omaha ZOO was a great success. More than 250 students attended this program. Students were directly involved in DNA extraction and were amazed to see DNA.



LEARNING BY MAKING—3D PRINTING: 3D Printing Solutions go hand-in-hand with teaching strategies that develop the most in-demand skills for science, technology, engineering, art, and math (STEAM) fields. 3D Printing bring students' work to life, building excitement and momentum behind any design project.



A quick turn from idea to prototype keeps students engaged. It gives them time to explore more ideas, analyze problems in-depth, and develop the persistence they'll need to excel in today's fastest-growing and most rewarding fields. Pictures below :



low : SEPA team (Partnered with UNL Dr. Steve Morin and his team) at NICE (Native Indian Centered Education) family science night and Santee Community School—showing them how to design 3D object, and print them.



SEPA ACTIVITIES—2016 –17

SEPA SCIENCE PROGRAM—STRESS AWARENESS: A 2014 study by the American Psychological Association found that U.S. teens are even more stressed out than adults. Specifically, 30 percent of teens reported feeling sad or depressed because of stress, and 31 percent felt overwhelmed. Another 36 per-



cent said that stress made them tired and 23 percent said they have skipped meals because of it. Awareness of the problem has moved to the forefront. Pictures below : Students are involved in stress test and direct involvement with SEPA team (Dr. Godfrey and Dr. Kumar) to discuss stress management and work together to reduce it so that they can perform better in their day-to-day life.

NOISE-INDUCED HEARING LOSS AND OTHER ACTIVITIES: About 20 percent of Americans



(48 Million) have some degree of hearing loss. SEPA team (Dr. Godfrey, Dr. Kumar, Ms. Soper) provide awareness and healthy hearing habits which can protect kids from hearing loss caused by loud noises. Pictures below— students are exposed to different noise levels and focused on : **1. Lower the volume, 2. Move away from the noise, and 3. Wear hearing protectors, such as earplugs or earmuffs.** Primary school students enjoyed viewing different biological specimen under microscope. Students' exposure to our program provided them with a very positive hands-on experience as

