Northeastern Oklahoma Mathematics and Science Teacher Association (NOMSTA) Annual Fall Meeting

"Engaging Students in Mathematics and Science"

October 4, 2014

9:00 am - 12 noon

Broken Arrow Campus of

Northeastern State University

NOMSTA Program "Engaging Students in Mathematics and Science" October 4, 2014 9:00 am – 12 noon

NSU Broken Arrow Campus

	Location
Registration	BALA 212
Introductions and Business Meeting Dr. Pamela Christol (President) Dr. April Adams (President –Elect), Dr. Soma Datta (Secretary), Dr. Martha Parrott (Mathematics Division Director), and Dr. Sophia Sweeney (Science Division Director)	BALA 212
Keynote: "Engaging Students in Biotechnology." <i>Dr. Kevin Wang and NSU Students</i>	BALA 212
Session I	
 "Using Children's Books to Guide Inquiry." This hands- on session highlights resources that use children's books to support inquiry-based science. Dr. Pamela Christol, Northeastern State University. (Elementary / Middle School) 	BASC 219
 "Teaching Problem Solving with Picture Books." In this session, members will learn a fun and simple way to teach problem solving while using their favorite picture books to increase student engagement. Robert Dumas, Jenks Public Schools (Elementary / Middle School) 	BASC 248
 "DNA Isolation from Strawberry or Banana." This is a simple, effective protocol for spooling DNA. Ripe strawberries are an excellent source for extracting DNA because they are easy to pulverize and contain enzymes that help to break down cell walls. Dr. Kevin Wang, Northeastern State University. (All Levels) 	BASC 250
	 Introductions and Business Meeting Dr. Pamela Christol (President) Dr. April Adams (President –Elect), Dr. Soma Datta (Secretary), Dr. Martha Parrott (Mathematics Division Director), and Dr. Sophia Sweeney (Science Division Director) Keynote: "Engaging Students in Biotechnology." Dr. Kevin Wang and NSU Students "Using Children's Books to Guide Inquiry." This handson session highlights resources that use children's books to support inquiry-based science. Dr. Pamela Christol, Northeastern State University. (Elementary / Middle School) "Teaching Problem Solving with Picture Books." In this session, members will learn a fun and simple way to teach problem solving while using their favorite picture books to increase student engagement. Robert Dumas, Jenks Public Schools (Elementary / Middle School) "DNA Isolation from Strawberry or Banana." This is a simple, effective protocol for spooling DNA. Ripe strawberries are an excellent source for extracting DNA because they are easy to pulverize and contain enzymes that help to break down cell walls. Dr. Kevin

10:40-11:10am Session II

 "CO₂ Bubbles." Demonstration of frozen CO₂ in water to produce CO₂ / water vapor bubbles using dish soap to reinforce phase changes, physical properties, and making observations. Elizabeth Ludinich, Northeastern State University. (High School) **BASC 219**

 "Using What Is at Hand: Teaching Students about Their Immune System and Proper Hand Washing Technique Using Bread Mold Cultures." Teachers will learn how to make bread mold cultures, how to interpret data, and ways to incorporate data analysis in math and writing. Dr. Kyeorda Kemp, Northeastern State University. (Elementary School) **BASC 248**

 "Measuring the Viscosity of Liquids – Go with the Flow." Viscosity, the resistance to flow, has many applications ranging from biomedical engineers studying blood low to aerospace engineers designing propulsion systems. Herein, we begin to measure viscosity of a variety of household fluids for science pedagogy. Dr. Carl Aronson, Northeastern State University. (All Levels) **BASC 250**

11:20-11:50 Session III

 "Let's Make UV Bracelets." We will use Ultraviolet detecting beads in an inquiry that helps to develop Scientific Practices. Dr. April Adams, Northeastern State University. (Elementary / Middle School)

BASC 219

"Yeast: An Ideal Model System to Study Human Diseases." Humans have cultivated yeast to make beer, bread, and wine. In this session, we will learn how the life-cycle of yeast has advanced our understanding of cancer. Dr. Sapna Das-Bradoo, Northeastern State University. (All Levels) **BASC 248**

 "Physics Quest Comic Book Labs" Physics Quest comic books labs in the science classroom. Jory Snyder, Prue Public Schools (Middle School / High School) **BASC 250**

All are welcome! Please join us!

11:50-noon

Join us March 7, 2015 for the NOMSTA Annual Spring Meeting!

NSU Tahlequah Campus

Science Building

9:00 am - 12 noon

Free Professional Development for

Mathematics and Science Teachers

Web site:

academics.nsuok.edu/naturalsciences/NOMSTA.aspx

Officers:

President: Dr. Pamela Christol: christol@nsuok.edu

President-Elect: Dr. April Adams: adams001@nsuok.edu

Secretary: Dr. Soma Datta: datta@nsuok.edu

Mathematics Division Director: Dr. Martha Parrot: parrott@nsuok.edu

Science Division Director: Dr. Sophia Sweeney: sweeney@nsuok.edu

Thanks for Coming!