

OKLAHOMA NSF EPSCoR WOMEN IN SCIENCE CONFERENCE

TUESDAY, OCTOBER 17, 2017 * MABEE CENTER * TULSA, OK



NSF AWARD NO. OIA-1301789



WWW.OKEPSCOR.ORG



405.744.9964

WELCOME!

To the Women in Science Conference

TODAY > IS ALL ABOUT YOU + STEM

Dear Students:

The Women in Science Conference is all about you and STEM! Today you will have literally hundreds of opportunities to experience science, technology, engineering and math (STEM) first-hand. We encourage you to make the most of your conference experience by asking questions and getting involved.

Some things to keep in mind today:

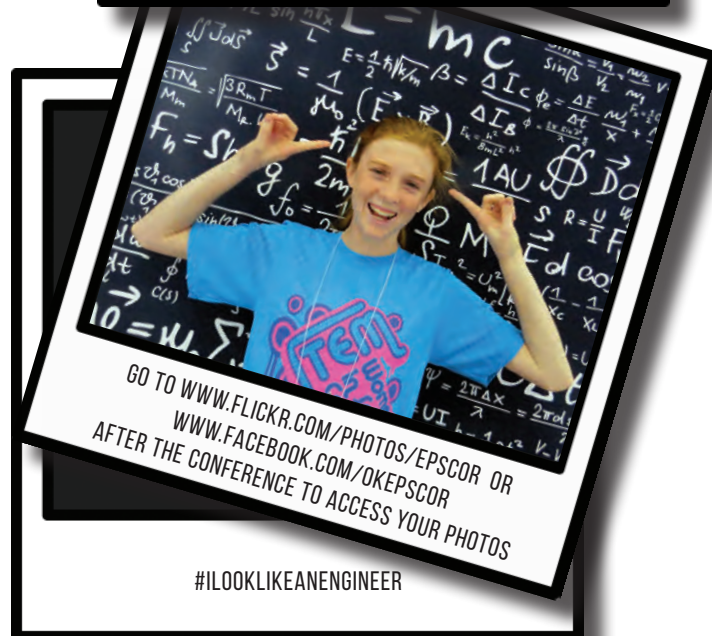
- You must remain with your designated color group and follow your group's agenda. Volunteers with color-coded picket signs will be on-hand to guide you to your sessions. Please listen for announcements.
- Don't just look--touch the hands-on science experiments!
- There are no dumb questions--ask, ask, ask! We have some of the top women in STEM fields, along with outstanding Oklahoma university and business representatives, here today. They want to answer any questions you may have about their areas of expertise. This is a terrific opportunity. Take advantage of it!
- At the end of the day turn in your completed survey form at the EPSCoR table (located in the lobby). We have a special surprise for conference attendees who return their forms!

We're so very glad you're here! Have fun exploring the many possibilities that a future filled with STEM offers!



Need help during the day?

If you need assistance, look for a volunteer wearing a navy Women in Science Conference t-shirt. They are here to help you!





SCHOOL GROUP ASSIGNMENTS PINK GROUP

YOU MUST ATTEND YOUR ASSIGNED SESSIONS THROUGHOUT THE DAY

The following schools are assigned to the
“PINK GROUP”
and will follow the conference schedule indicated for that group.

- Briggs Public Schools
- Clyde Boyd Middle School
 - Holland Hall
- Oneta Ridge Middle School
 - Sapulpa Middle School
- Stillwater Junior High School
- Stillwater Public Schools Indian Education
 - Union 7th Grade Center
 - Union 8th Grade Center
 - Union 9th Grade Center
- Whittier Elementary School
 - Whittier Middle School
- Will Rogers Junior High School

WOMEN IN SCIENCE CONFERENCE PINK GROUP AGENDA

TUESDAY, OCTOBER 17, 2017 * MABEE CENTER * TULSA, OK

- 8:30 - 9:30 AM** **REGISTRATION** (North Lobby, 1st Floor)
- 9:30 - 10:15 AM** **INTERACTIVE PANEL SESSION** (Arena, 2nd Floor)
Moderator: Tanya Lowery, Title IX Officer, Oklahoma State University
Dana Brunson, Data Scientist, Oklahoma State University
Stacey Evans, Research Geologist, Oklahoma Geological Survey
Lynn Leffew, Orthotic & Prosthetic Technologist, OSU Institute of Technology
Ann Money, Marine Biologist, Oklahoma Aquarium
Carol Rollins, Civil Engineer, OGE Energy Corp.
Franca Thompson, Special Agent, Crime Scene Unit,
Oklahoma State Bureau of Investigation
- 10:15 - 11:10 AM** **ENGINEERING DESIGN: THE CAR** (Global Learning Center Annex)
- 11:10 - 12:00 PM** **GEOCACHING: FINDING WOMEN IN SCIENCE** (Arena Floor, 2nd Floor)
- 12:00 - 12:30 PM** **LUNCH**
(Service in Mezzanine, 1st Floor. Everyone is to eat in the Arena, 2nd Floor)
- 12:30 - 2:00 PM** **HANDS-ON SCIENCE & COLLEGE RECRUITMENT FAIR**
(Concourse, 2nd Floor)
- 12:30 - 2:00 PM** **TEACHERS' LOUNGE & SCIENCE EXPERIMENT LEARNING LAB
COME & GO FORMAT** (Adults Only, North Lobby, 1st Floor)
- 2:00 PM** **CONFERENCE ADJOURNS**
- 2:00 - 2:30 PM** **TURN IN YOUR SURVEY FORM & RECEIVE A CONFERENCE ITEM**
(EPSCoR Booth, North Lobby, 1st Floor)
*Teachers' check-in packets included one form for each person in their groups:
Teachers-Blue Form, Students-Yellow Form; lost forms cannot be replaced.*



SCHOOL GROUP ASSIGNMENTS ORANGE GROUP

YOU MUST ATTEND YOUR ASSIGNED SESSIONS THROUGHOUT THE DAY

The following schools are assigned to the
“ORANGE GROUP”
and will follow the conference schedule indicated for that group.

- Checotah Middle School
- Cimarron Public Schools
- Drumright Jr. High School
- Irving Middle School, Norman
 - Jenks East Intermediate
 - Jenks West Intermediate
- Longfellow Middle School
 - Newman Middle School
- Oklahoma Union Public Schools
 - Owasso 6th Grade Center
 - Owasso 7th Grade Center
 - Sequoyah Public Schools
 - Washington Elementary

WOMEN IN SCIENCE CONFERENCE ORANGE GROUP AGENDA

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SCHOOL GROUP ASSIGNMENTS BLUE GROUP

YOU MUST ATTEND YOUR ASSIGNED SESSIONS THROUGHOUT THE DAY

The following schools are assigned to the
“BLUE GROUP”
and will follow the conference schedule indicated for that group.

- Arnett Public Schools
- Central Technology Center
 - Dewey High School
- Edison Preparatory School
- Francis Tuttle Technology Center
 - Haskell High School
 - Haskell Middle School
 - Hilldale High School
 - Lindsay High School
 - Mannford High School
 - Morrison High School
 - Tishomingo High School
 - Verdigris High School

WOMEN IN SCIENCE CONFERENCE BLUE GROUP AGENDA

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- 12:00 - 12:30 PM** **LUNCH**
(Service in Mezzanine, 1st Floor. Everyone is to eat in the Arena, 2nd Floor)
- 12:30 - 1:15 PM** **GEOCACHING: FINDING WOMEN IN SCIENCE** (Arena Floor, 2nd Floor)
- 1:15 - 2:00 PM** **ENGINEERING DESIGN: THE CAR** (Global Learning Center Annex)
- 2:00 PM** **CONFERENCE ADJOURNS**
- 2:00 - 2:30 PM** **TURN IN YOUR SURVEY FORM & RECEIVE A CONFERENCE ITEM**
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SCHOOL GROUP ASSIGNMENTS

PURPLE GROUP

YOU MUST ATTEND YOUR ASSIGNED SESSIONS THROUGHOUT THE DAY

The following schools are assigned to the
“PURPLE GROUP”
and will follow the conference schedule indicated for that group.

- Broken Arrow Freshman Academy
 - Butner Public Schools
- Eagle Point Christian Academy
 - Gore High School
- Gore Upper Elementary School
 - Hefner Middle School
- Hydro-Eakly Public Schools
- Kenneth Cooper Middle School
- Meridian Technology Center
 - Paden High School
- Tulsa Tech - Bixby High School
- Tulsa Tech - Broken Arrow High School



WOMEN IN SCIENCE CONFERENCE PURPLE GROUP AGENDA

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Stacey Evans, Research Geologist, Oklahoma Geological Survey
Lynn Leffew, Orthotic & Prosthetic Technologist, OSU Institute of Technology
Ann Money, Marine Biologist, Oklahoma Aquarium
Carol Rollins, Civil Engineer, OGE Energy Corp.
Franca Thompson, Special Agent, Crime Scene Unit,
Oklahoma State Bureau of Investigation
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GET HANDS-ON Science Teaching TIPS & TOOLS

This come-and-go session provides teachers with the opportunity to experience and learn six fun, engaging, hands-on science projects that can be leveled for a large age range and easily replicated in the classroom. Activities are aligned to the Oklahoma Academic Standards. Teachers who turn in their event surveys at the end of the day will receive a take-home kit that includes activity sheets, materials, and curriculum for all of the presented activities plus others! Surveys must be turned in from 2:00-2:30 p.m. at the EPSCoR table in the north lobby.

Experience These Fun Science Projects First-Hand & Learn How to Implement Them in Your Classroom:

- **Chopper Challenge**
Center of gravity and weight distribution are explored in this aerodynamic problem-solving challenge. Can you build a helicopter that flies at least ten feet in the air and stays up for five seconds while carrying one penny?
- **Cityscape Engineering & Design: Building Magnate**
Using assorted unusual cardboard shapes, build a structure limited only by your imagination. This engineering and design challenge will test whether you can build the biggest, longest, or tallest structure.
- **Creating Weather**
Create weather in a bottle by discovering which ingredients are necessary for the formation of clouds.
- **Electromagnet & Tiny Dancers**
Harness the power of the force (magnetic force, that is!) in this engineering and electricity challenge. Use a battery to make an ordinary nail magnetic. Then combine magnets and a battery to create motion in a wire sculpture you design.
- **Hack-Proof a Box**
Explore circuits in a unique and engaging way in this design challenge. Design a warning system for a box that includes an alarm that activates when the box is opened, but also has an alternate way for you to get inside undetected.
- **M&M Weather Versus Climate**
In this engaging hands-on investigation, we will explore the integral connection between time and atmospheric changes to discover the difference between climate and weather.

The Teachers' Lounge Session is sponsored and presented by Science Museum Oklahoma and the Oklahoma Museum Network.

ALSO IN THE TEACHERS' LOUNGE:

National Science Teachers Association - NSTA

K20 Center - Authentic Research Experiences for Teachers Summer Program Information

Adults are invited to visit the Teachers' Lounge Session during their scheduled time period.

The session is a come-and-go informal format. See your group's designated agenda for your scheduled Teachers' Lounge Session.

PANEL SESSION

Participants' Bios



PICTURE YOURSELF AS A...



COMPUTER SCIENTIST

CRIME SCENE INVESTIGATOR

ENGINEER

GEOLOGIST

MARINE BIOLOGIST

ORTHOTIC & PROSTHETIC TECHNOLOGIST



Want to talk one-on-one with these amazing mentors?
You CAN during your Hands-on Science & Recruitment Fair Session!
They'll each be hosting a booth on the concourse, where they will be available to answer questions one-on-one for conference attendees.



After the Interactive Panel Session...

Visit the panelists during your Hands-on Science & Recruitment Fair Session!

Booth numbers are located at the top of each person's bio.

After the conference go to <https://www.sciencebuddies.org/science-engineering-careers>
to learn about other interesting careers in STEM fields!



WOMEN IN SCIENCE CONFERENCE MODERATOR

TANYA LOWERY

TITLE IX OFFICER

OKLAHOMA STATE UNIVERSITY

Dr. Tanya Lowery serves as the Title IX Officer for Oklahoma State University. Title IX, a portion of the U.S. Education Amendment of 1972, was established to ensure that no person would be discriminated against because of gender by any education program that receives federal funding. In her role as the OSU Title IX Officer, Dr. Lowery ensures that faculty, staff, and students are aware of their legal rights under Title IX and that the university maintains compliance with legal mandates that govern it.

Dr. Lowery has worked in higher education for 14 years, but also has work experience in the private and non-profit sectors. Most recently, she has served as the Dean of Students at a private university in Texas.

Dr. Lowery obtained her Ph.D. in Higher Education Administration from the University of Texas at Austin. Her research interests include: diversity and inclusiveness, developing human capital, employee motivation, faculty compliance and training, and student retention. She also holds a BA in Politics and an MA in Communication.

In her spare time, she enjoys traveling, cooking, reading, learning about other cultures, and motivational speaking.



WOMEN IN SCIENCE CONFERENCE PANELIST (BOOTH #27)

DANA BRUNSON, PH.D.

**HIGH PERFORMANCE COMPUTING CENTER DIRECTOR
ASSISTANT V.P. FOR RESEARCH CYBERINFRASTRUCTURE
OKLAHOMA STATE UNIVERSITY**

Native Oklahoman Dana Brunson was raised just outside of Tulsa in the smaller town of Claremore. Growing up, she loved nature, music, and science, and when her father brought home their first IBM personal computer, she discovered she also loved computing. She always knew she was destined to go to college, even though she hadn't quite figured out what area she wanted to pursue. Once she

got to Oklahoma State University, she knew college was where she was meant to be, and she still feels this way today.

After earning her bachelor's and master's degrees in Mathematics from OSU, Dana went on to receive her Ph.D. in Mathematics from the University of Texas – Austin. In Austin, she loved teaching math classes and even played fiddle in a local band. Dana and her family returned to Oklahoma in 2003, and in 2007, she became the Director of the OSU High Performance Computing Center, where she was able to expand her knowledge of research, computing, and administration. She never thought she'd end up in high performance computing, but she can't imagine a profession she would enjoy more.

Dana's job involves collaborating with researchers at OSU and other institutions throughout the country to make sure people are receiving the high performance computing resources they need to conduct their research. She also helps lead several high performance computing organizations around the country, including Oklahoma's very own OneOklahoma Cyberinfrastructure Initiative (OneOCII). Dana believes you can never get started too early with computing, and, including teaching an undergraduate high performance computing course at OSU, she has also even visited a local preschool to talk about computing.

In her spare time, Dana, her husband, and two children enjoy hanging out on their micro-farm just outside of Stillwater, where they maintain a large permaculture garden and several hives of honeybees, as well as look after a flock of free-range chickens, a few cats, and three Great Pyrenees dogs. Dana also enjoys learning about wild edible and medicinal plants that grow in the area.



Do you want to be a...

Data Scientist?



CAREER OVERVIEW

Many aspects of peoples' daily lives can be summarized using data, from what is the most popular new video game to where people like to go for a summer vacation. Data scientists (sometimes called data analysts) are experts at organizing and analyzing large sets of data (often called "big data"). By doing this, data scientists make conclusions that help other people or companies. For example, data scientists could help a video game company make a more profitable video game based on players' online behaviors, or help a travel agency figure out what destinations they should make vacation packages for.

PERSONALITY TRAITS OF SOMEONE WHO IS SUCCESSFUL IN THE FIELD

A data scientist needs to think logically, pay close attention to detail, be a problem-solver, and enjoy working with numbers and data. They must have patience, persistence, and the ability to perform exacting analytical work. At the same time, a data scientist must be able to see the "bigger picture" and draw large-scale conclusions from looking at lots of small pieces of data. Because they often must show their data-based results to other people in a company or to clients, data scientists must be able to communicate well (both verbally and in writing) with non-technical personnel. Business skills are also important, especially for those wishing to be involved on the commerce side of operations.

SUBJECTS TO STUDY IN HIGH SCHOOL

Biology, physics, geometry, algebra II, pre-calculus, calculus, English; if available: computer science, statistics.

HIGHER EDUCATION

Data scientists must have at least a bachelor's degree with a major that is typically in one of the following areas or a related area: computer science, mathematics (e.g., applied math, data analytics, or statistics), physics, or biology (e.g., genetics). Some data scientists major in economics or behavioral sciences (e.g., psychology or sociology) instead, depending on the type of data they deal with.

PROJECTED INCOME

Minimum Wage Worker (without a degree): \$15,080/yr.

U.S. Mean Annual Wage: \$49,630/yr.

Data Scientist: \$111,840/yr.

PROJECTED JOB GROWTH (2014-2024)

Average (7% to 13%)

Source & credit: Sciencebuddies.org



WOMEN IN SCIENCE CONFERENCE PANELIST (BOOTH #90)

STACEY EVANS

RESEARCH GEOLOGIST

OKLAHOMA GEOLOGICAL SURVEY

Stacey Evans grew up in a small town in western Oklahoma. She started playing the flute in the fifth grade and continued to participate in concert and marching band throughout high school. She was also active in the science and foreign language clubs, student council, and ran cross country. Stacey always enjoyed being outside and would often collect rocks and hunt for arrowheads while visiting family in

Colorado and Wyoming.

After high school, Stacey moved to southwestern Wyoming for a couple years. She took her first geology course while attending college there and loved it! She then returned to Oklahoma, where she earned her B. S. and M. S. in Geology from the University of Oklahoma. While completing her degrees, she traveled to many great locations, including Colorado, Nevada, New Mexico, Scotland, and Brazil, and saw a lot of great rocks.

Stacey worked in the petroleum industry for several years before joining the Oklahoma Geological Survey (OGS) as a Research Geologist. She has been at the OGS for just over three years and has had the opportunity to work on many different topics and areas of geology including petroleum geology, surface mapping, and mineral analysis using the scanning electron microscope. Stacey is currently involved in Oklahoma seismicity research through a project examining how fluids in the past moved through rocks, when those fluids moved, and what that can tell us about how fluids such as injected wastewater from oil and gas operations are moving through the rocks now. She is also collaborating with fellow scientists at the OGS on a complete database of all of the faults and recorded earthquakes in Oklahoma.

In her free time, Stacey loves traveling to new places and eating all the exciting foods she finds there! Her recent trips include a bicycling trip throughout southern Portugal and a road trip down the California coast. She enjoys all different sorts of crafts and hanging out with her cats, Baxter and Apple. Stacey just bought a house in Norman and is looking forward to raising chickens, gardening, and making friends with all the squirrels in her backyard.



Do you want to be a...

Geoscientist?



CAREER OVERVIEW

Geoscientists study the composition, structure, and other physical aspects of Earth. They study Earth's geologic past and present by using sophisticated instruments to analyze the composition of earth, rock, and water. Many geoscientists help to search for natural resources, such as groundwater, metals, and petroleum. Others work closely with environmental and other scientists to preserve and clean up the environment. Seismologists interpret data from seismographs and other geophysical instruments to detect earthquakes and locate earthquake-related faults.

PERSONALITY TRAITS OF SOMEONE WHO IS SUCCESSFUL IN THE FIELD

A Geoscientist must have curiosity, a love for strenuous outdoor work, an ability to visualize things in three dimensions, solve puzzles from just a few clues, and have good interpersonal skills.

SUBJECTS TO STUDY IN HIGH SCHOOL

Chemistry, physics, biology, computer science, algebra, geometry, calculus; if available Earth science, statistics.

HIGHER EDUCATION

A bachelor's degree is adequate for a few entry-level positions, but most geoscientists need a master's degree in geology or earth science. A master's degree is the preferred educational requirement for most entry-level research positions in private industry, federal agencies, and state geological surveys. A Ph.D. is necessary for most high-level research and college teaching positions. Computer skills are essential for prospective geoscientists; students who have experience with computer modeling, data analysis and integration, digital mapping, remote sensing, and Geographic Information Systems (GIS) will be the most prepared entering the job market. Knowledge of the Global Positioning System (GPS)—a locator system that uses satellites—has also become essential. Some employers seek applicants with field experience, so a summer internship is often helpful.

PROJECTED INCOME

Minimum Wage Worker (without a degree): \$15,080/yr.

U.S. Mean Annual Wage: \$49,630/yr.

Geoscientist: \$89,780/yr.

PROJECTED JOB GROWTH (2014-2024)

Average (7% to 13%)

Source & credit: Sciencebuddies.org



WOMEN IN SCIENCE CONFERENCE PANELIST (BOOTH #16)

LYNN LEFFEW

ORTHOTIC & PROSTHETIC TECHNOLOGIST

OKLAHOMA STATE UNIVERSITY INSTITUTE OF TECHNOLOGY (OSUIT), ORTHOTIC & PROSTHETIC TECHNOLOGIES

Lynn Leffew grew up in Copemish, Michigan. As a young girl, Lynn worked on cars, snowmobiles, and other machines with her dad and brother. She knew early on that she enjoyed working with her hands and building things that were useful. When her brother experienced a snowmobile accident that crushed his ankle, the doctors suggested the injury might result in amputation. This event made a powerful impact on Lynn, and she decided to become an orthotic and prosthetic (O&P) technician.

As an orthotic and prosthetic technician, Lynn designs and fabricates prosthetic limbs and orthopedic braces. She works in the lab using plaster, laminates, drill presses, saws, and other equipment to build the orthotic and prosthetic devices. Being an orthotic and prosthetic technician is a hands-on health care profession, where she can be creative and compassionate, and change the lives of others every day. Being an orthotic and prosthetic technician offers everything that she wants in a career: working with her hands, building things, and helping people. Lynn has worked in industry in the past, but is now an Assistant Lab Instructor at the Oklahoma State University Institute of Technology (OSUIT) Orthotic and Prosthetic Technologies program in Okmulgee, Oklahoma, where she works to train future O&P technicians. She is responsible for supervising program interns, assisting students with fabricating the prosthetic and orthotic projects for their courses, and maintaining the lab equipment and facilities. Lynn is a 2014 graduate of the O&P program herself, and she has an Associate in Science in Secondary Pre-Education and an Associate in Applied Science in Orthotic and Prosthetic Technologies.

In her personal life, Lynn enjoys spending time with her children, granddaughter, and animals, including a rabbit, dog, cat, and lizards. She hopes to one day add a sloth to that list of animals. She makes jewelry and works in her green house in her free time. One of her favorite pastimes is walking through the woods around her house looking for berries...that is, as long as she isn't chased up a tree by any wildlife.

Lynn encourages young women to go for what they want in life and to not be afraid to get their hands dirty along the way!



Do you want to be a...

Orthotic & Prosthetic Technologist?



CAREER OVERVIEW

The field of orthotics and prosthetics involves designing and fitting artificial limbs or braces. It is a component of the health care field, and individuals working as either an orthotist or prosthetist usually must be certified and licensed. Although related, the work of an orthotist and prosthetist is not the same. A prosthetist designs, creates, and fits artificial limbs on patients who are missing a part or all of a limb. An orthotist, on the other hand, fits braces and other devices to enhance the movement and function of a patient's limbs or spine. An orthotist/prosthetist can make and fit both prosthetics and orthotics. The American Academy of Orthotists and Prosthetists states that, regardless of whether they work only in one area of the field, most practitioners are referred to as 'O&P Practitioners.'

PERSONALITY TRAITS OF SOMEONE WHO IS SUCCESSFUL IN THE FIELD

A person entering the field of orthotic and prosthetic technology must be interested in helping other people.

HIGHER EDUCATION

To work as an orthotist or prosthetist, an individual must graduate from an accredited O&P program and complete a one-year residency, after which the individual may sit for the American Board for Certification in Orthotics, Prosthetics, and Pedorthics exam. Board certification is available in either or both fields and is required in order to practice as an orthotist or prosthetist. Orthotist and prosthetist practitioner degree programs are available at the bachelor's and master's degree levels.

PROJECTED INCOME

Minimum Wage Worker (without a degree): \$15,080/yr.

U.S. Mean Annual Wage: \$49,630/yr.

Orthotists & Prosthetists: \$64,430/yr.

PROJECTED JOB GROWTH (2014-2024)

Faster than Average (23%)

Source & credit: Study.com



WOMEN IN SCIENCE CONFERENCE PANELIST (BOOTH #98)

ANN MONEY
MARINE BIOLOGIST
OKLAHOMA AQUARIUM

Marine habitats and issues have been Ann's passion since she was a child growing up on the Chesapeake Bay. She has dedicated her life and career to educating on and researching conservation, first with groundfish operations in Alaska, then sea turtles on the Gulf of Mexico, and now public aquaria and coral reef habitats. As Director of Education Programs and Research for the Oklahoma Aquarium, Ann shares her knowledge with half a million visitors annually!

After a 25-year career in marine biology, Ann learned of the mystery of marine bio-fluorescence, and realized that she needed to learn everything that she could about the phenomena. She believes that the state of our coral reefs is one of the most ecologically important issues of the day. Ann explores not only the functionality of bio-fluorescence, but also how it can be utilized to restore these vitality important failing reefs.

Ann is currently earning a Ph.D. in Integrative Biology from Oklahoma State University, where she is studying bio-fluorescence and coral reefs with funding through a National Science Foundation Fellowship. She conducts her research at the Oklahoma Aquarium and utilizes the opportunity to share relevant coral research in action with thousands of school children annually.

In her spare time, Ann is an avid scuba diver. She loves spending time outdoors with her three children and traveling as much as time allows. At home, she and her children raise chicken and guinea fowl...and eat lots of eggs!



Do you want to be a...

Marine Biologist?



CAREER OVERVIEW

Do you enjoy going to the ocean? Do you like examining all of the marine creatures in tide pools? Do you read up on the different kinds of ocean mammals and fish for fun? If this is the case, then you may be the right fit for a career as a marine biologist. Marine biology is the study of ocean aquatic organisms, their behaviors, and their interactions with the environment. Because this field of study is an intersection of zoology, biology, and technology, marine biologists can apply their knowledge in many different ways.

PERSONALITY TRAITS OF SOMEONE WHO IS SUCCESSFUL IN THE FIELD

A person entering the field of marine biology must have a love of nature and the oceans, creativity, persistence, and curiosity.

SUBJECTS TO STUDY IN HIGH SCHOOL

Biology, chemistry, physics, algebra, geometry, calculus; if available, marine biology, and statistics.

HIGHER EDUCATION

A bachelor's or master's degree in marine biology, biology, or zoology usually is required for most entry-level marine biology research jobs, though a Ph.D. usually is required to carry out independent research in biology and to teach at the university level.

PROJECTED INCOME

Minimum Wage Worker (without a degree): \$15,080/yr.

U.S. Mean Annual Wage: \$49,630/yr.

Marine Biologist: \$71,890/yr.

PROJECTED JOB GROWTH (2014-2024)

More Slowly than Average (3% to 6%)

Source & credit: Sciencebuddies.org



WOMEN IN SCIENCE CONFERENCE PANELIST (BOOTH #2)

CAROL ROLLINS, P.E.

CIVIL ENGINEER

MANAGER, ENGINEERING & PLANNING

MUSKOGEE POWER PLANT, OGE ENERGY CORP.

Carol Rollins, a native of Oklahoma, was raised in Mustang and had an early interest in math and mechanics. Growing up, she enjoyed working on and around heavy equipment with her grandfather. Her other grandfather, who was an engineer, also helped foster her interest in the field.

Carol received her degree in Civil Engineering from the University of Oklahoma. She chose this field after seeing how her work could contribute to the betterment of society.

After graduating from college, Carol went to work for a private company, where she engineered thousands of metal buildings over the next 15 years. She then joined OGE as a structural engineer for the company's power plants. In this role, she repairs and replaces structures for power plant machinery, as well as buildings, and addresses numerous environmental issues including water and soil. She now manages the engineers and planning department at the OGE Muskogee Power Plant.

Carol is married and has a teenage son. She has several passions outside of work, including going to the lake to boat, paddle board, or just watch the sunset. She also enjoys cooking and gardening. One of the most rewarding things Carol does is help rescue dogs: she transports Boxer rescues from shelters to foster homes.



Do you want to be a...

Civil Engineer?



CAREER OVERVIEW

If you turned on a faucet, used a bathroom, or visited a public space (like a road, a building, or a bridge) today, then you've used or visited a project that civil engineers helped to design and build. Civil engineers work to improve travel and commerce, provide people with safe drinking water and sanitation, and protect communities from earthquakes and floods. This important and ancient work is combined with a desire to make structures that are as beautiful and environmentally sound, as they are functional and cost-effective.

PERSONALITY TRAITS OF SOMEONE WHO IS SUCCESSFUL IN THE FIELD

A civil engineer should be creative, inquisitive, analytical, and detail oriented. They should be able to work as part of a team and to communicate well, both orally and in writing. Communication abilities are becoming increasingly important as engineers frequently interact with specialists in a wide range of fields outside engineering.

SUBJECTS TO STUDY IN HIGH SCHOOL

Chemistry, physics, computer science, geometry, algebra II, pre-calculus, calculus, English; if available, statistics, environmental science, and applied technology.

HIGHER EDUCATION

A bachelor's degree in engineering is required for almost all entry-level engineering jobs. College graduates with a degree in a natural science or mathematics occasionally may qualify for some engineering jobs, especially in specialties in high demand. Most engineering degrees are granted in electrical, electronics, mechanical, or civil engineering. However, engineers trained in one branch may work in related branches. For example, many aerospace engineers have training in mechanical engineering. This flexibility allows employers to meet staffing needs in new technologies and specialties in which engineers may be in short supply. It also allows engineers to shift to fields with better employment prospects or to those that more closely match their interests.

PROJECTED INCOME

Minimum Wage Worker (without a degree): \$15,080/yr.

U.S. Mean Annual Wage: \$49,630/yr.

Mechanical Engineer: \$83,540/yr.

PROJECTED JOB GROWTH (2014-2024)

Average (7%-13%)

Source & credit: Sciencebuddies.org



WOMEN IN SCIENCE CONFERENCE PANELIST (BOOTH #6)
FRANCIA THOMPSON
SPECIAL AGENT & CRIME SCENE INVESTIGATOR
CRIME SCENE UNIT
OKLAHOMA STATE BUREAU OF INVESTIGATION

Francia Thompson was born in Mexico and came to the United States at the age of eight. She grew up in a small southwest Oklahoma town where she graduated from high school. While in high school she joined the Oklahoma Army National Guard. After graduating from boot camp, Francia began college at the University of Oklahoma, where she was involved in numerous college organizations and held many offices, including president of the Hispanic American Student Association, chairperson of the Miss Hispanic OU Pageant, and others. She graduated with a Bachelors Degree in Sociology and Criminology from the University of Oklahoma.

Francia began her career with the Oklahoma State Bureau of Investigation (OSBI) in 2005; she is currently a Special Agent in the OSBI Crime Scene Unit. During her career, Francia has worked to help solve hundreds of crimes in the state. She has worked with local, state and federal agencies to bring justice to victims and their families. She obtained her Crime Scene Investigator Certification from the International Association of Identification (IAI). She is also certified on the FARO 340 scanner; there are a limited number of these new scanners in the state. Francia assists other law enforcement agencies throughout the state with Spanish interviews and document translations. She has received numerous awards from the OSBI including red feathers, team awards, and in 2010 she was named the Oklahoma State Bureau of Investigation Agent of the Year. She also teaches Crime Scene Investigation Techniques and Beginning Spanish for Law Enforcement courses for law enforcement agencies throughout the state, and enjoys bringing special presentations to students across Oklahoma.

Francia loves spending time with her family, which includes her husband and two daughters. In her spare time, she likes to be with her family, playing games, watching movies, visiting the zoo, and visiting new places. She also likes to bake, eat, and plan events and parties.



Do you want to be a...

Forensic Science Technician?



CAREER OVERVIEW

Guilty or not guilty? The fate of the accused in court lies with the evidence gathered at the crime scene. The job of the forensic science technician is to gather evidence and use scientific principles and techniques to make sense of it. It can be a grueling and graphic job, but very rewarding. If you like the idea of using science to help deliver justice, then you should investigate this career.

PERSONALITY TRAITS OF SOMEONE WHO IS SUCCESSFUL IN THE FIELD

Forensic science technicians should have curiosity, personal integrity, good speaking skills, good reasoning and critical thinking skills, and must enjoy solving puzzles. Communication skills are important because forensic science technicians are often required to report their findings both orally and in writing. In addition, technicians should be able to work well with others. Because computers often are used in research and development laboratories, technicians should also have strong computer skills, especially in computer modeling. Organizational ability, an eye for detail, and skill in interpreting scientific results are important as well, as are a high mechanical aptitude, attention to detail, and analytical thinking.

SUBJECTS TO STUDY IN HIGH SCHOOL

Biology, chemistry, physics, algebra, geometry, algebra II, calculus, English; if available, computer science.

HIGHER EDUCATION

Forensic science positions typically require a bachelor's degree to work in the field. Knowledge and understanding of legal procedures also can be helpful. Degree options: bachelor's degree program in forensic science; bachelor's degree in a natural science with an emphasis on forensic science or criminology; bachelor's degree with an emphasis in a specialty area, such as criminology, pathology, jurisprudence, investigation, odontology, toxicology, or forensic accounting.

PROJECTED INCOME

Minimum Wage Worker (without a degree): \$15,080/yr.

U.S. Mean Annual Wage: \$49,630/yr.

Forensic Science Technician: \$56,750/yr.

PROJECTED JOB GROWTH (2014-2024)

Faster than Average (14% to 20%)

Source & credit: Sciencebuddies.org

HANDS-ON SCIENCE & COLLEGE RECRUITMENT FAIR SESSION

BOOTHS ARE DISTRIBUTED IN A CLOCKWISE PATTERN AROUND THE PERIMETER OF THE CONCOURSE.
THE NUMERICAL ORDER OF BOOTH PLACEMENT MAY VARY SLIGHTLY.

- 1 **OGE ENERGY CORP.**
Positive Energy Together
- 2 **MEET THE PANELIST: CAROL ROLLINS**
Civil Engineer, OGE Energy Corp.
- 3 **NORTHEASTERN STATE UNIVERSITY ROBOTICS ACADEMY OF CRITICAL ENGAGEMENT** Rebel Girls - Empowering Girls in STEAM
- 4 **ROBOTICS EDUCATION AND COMPETITION FOUNDATION**
Interactive Robotics Playground
- 5 **OKLAHOMA STATE BUREAU OF INVESTIGATION**
Forensic and Investigative Techniques
- 6 **MEET THE PANELIST: FRANCIA THOMPSON**
Special Agent and Crime Scene Investigator, OSBI
- 7 **UNIVERSITY OF CENTRAL OKLAHOMA**
UCO CSI Computer Forensics
- 8 **UNIVERSITY OF CENTRAL OKLAHOMA**
CSI Forensics Summer Academy
- 9 **FEDERAL AVIATION ADMINISTRATION**
It Takes PRACTICE to be an Air Traffic Controller
- 10 **NINETY-NINES**
The International Organization of Women Pilots
- 11 **TEAM TINKER SCIENCE & ENGINEERING (AFSC/EN)**
Electricity is Fun * Math Makes the World Go Round * Hazard Waste Clean-Up
- 12 **SKELETONS: MUSEUM OF OSTEOLOGY**
A Story in Bones
- 13 **OKLAHOMA EDUCATORS EVOLVE**
Evolution is OK with us!
- 14 **PHOTO BOOTH**
Picture Yourself in STEM
- 15 **OKLAHOMA STATE UNIVERSITY INSTITUTE OF TECHNOLOGY**
Recruitment

HANDS-ON SCIENCE & COLLEGE RECRUITMENT FAIR SESSION

BOOTHS ARE DISTRIBUTED IN A CLOCKWISE PATTERN AROUND THE PERIMETER OF THE CONCOURSE.
THE NUMERICAL ORDER OF BOOTH PLACEMENT MAY VARY SLIGHTLY.

- 16 MEET THE PANELIST: LYNN LEFFEWE**
Orthotic and Prosthetic Technologist, OSU IT
- 17 OKLAHOMA STATE UNIVERSITY DEPT. OF PSYCHOLOGY**
Psychology as Science
- 18 OSUTEACH**
Launch into STEM with OSU Teach
- 19 OKLAHOMA STATE UNIVERSITY COLLEGE OF ENGINEERING, ARCHITECTURE,
AND TECHNOLOGY** Degree Information
- 20 OKLAHOMA STATE UNIVERSITY BIOSYSTEMS ENGINEERING**
Engineering Your Food - Liquid Nitrogen Ice Cream
- 21 OKLAHOMA STATE UNIVERSITY DEPT. OF PLANT AND SOIL SCIENCES**
Feed the World with Agronomy
- 22 OKLAHOMA STATE UNIVERSITY DEPT. OF HORTICULTURE**
Recruitment
- 23 OKLAHOMA STATE UNIVERSITY DEPT. OF HORTICULTURE**
Water and Brix - Hydroponics and Sugar Content of Fruits
- 24 OKLAHOMA STATE UNIVERSITY SCHOOL OF CHEMICAL ENGINEERING, FORD
VERSYPT LAB** Exploring Chemical & Biomedical Engineering through Math & Computing
- 25 OKLAHOMA STATE UNIVERSITY DEPT. OF STATISTICS**
Fun Statistics
- 26 ONEOKLAHOMA CYBERINFRASTRUCTURE INITIATIVE**
OneOCII - Supercomputing Across Oklahoma
- 27 MEET THE PANELIST: DANA BRUNSON**
High Performance Computing Center Director & Asst. VP for Research Cyberinfrastructure, OSU
- 28 OSU CHEMISTRY TO COMPUTERS**
Exploring Molecular Worlds
- 29 OKLAHOMA STATE UNIVERSITY AMERICAN CHEMICAL SOCIETY CHAPTER**
Chemical Reactions for Your Senses
- 30 OKLAHOMA STATE UNIVERSITY DEPT. OF CHEMISTRY**
Exploring the Colorful World of Metals and Non-Metals

HANDS-ON SCIENCE & COLLEGE RECRUITMENT FAIR SESSION

BOOTHS ARE DISTRIBUTED IN A CLOCKWISE PATTERN AROUND THE PERIMETER OF THE CONCOURSE.
THE NUMERICAL ORDER OF BOOTH PLACEMENT MAY VARY SLIGHTLY.

- 31 OKLAHOMA STATE UNIVERSITY DEPT. OF MICROBIOLOGY AND MOLECULAR GENETICS** Wonderful World of Microbes!
- 32 PHOTO BOOTH**
Picture Yourself in STEM
- 33 OKLAHOMA STATE UNIVERSITY ZOOLOGY GRADUATE STUDENT SOCIETY**
ZoGSS Wildlife Excursion
- 34 OSU INSECT ADVENTURE**
Live Insect Petting Zoo
- 35 OKLAHOMA 4-H YOUTH DEVELOPMENT**
Power of Wind
- 36 BLUESTEM AGRILEARNING CENTER**
We Dig Healthy Soil
- 37 UNIVERSITY OF SCIENCE AND ARTS OF OKLAHOMA**
USAO Admissions
- 38 UNIVERSITY OF SCIENCE AND ARTS OF OKLAHOMA**
The Adventures of Slime
- 39 EINSTEINIUM CHAPTER OF IOTA SIGMA PI, UNIVERSITY OF TULSA**
Create Marbled Paper Using Shaving Cream
- 40 IOTA SIGMA PI, ORAL ROBERTS UNIVERSITY**
What's in this Candy?
- 41 ORAL ROBERTS UNIVERSITY DEPT. OF BIOLOGY AND CHEMISTRY**
Life Magnified
- 42 ORAL ROBERTS UNIVERSITY DEPT. OF ENGINEERING**
Recruitment
- 43 ORAL ROBERTS UNIVERSITY DEPT. OF ENGINEERING**
Build the Eiffel Tower
- 44 SOUTHWESTERN OKLAHOMA STATE UNIVERSITY**
SWOSU Focus on STEM
- 45 PHOTO BOOTH**
Picture Yourself in STEM

HANDS-ON SCIENCE & COLLEGE RECRUITMENT FAIR SESSION

BOOTHS ARE DISTRIBUTED IN A CLOCKWISE PATTERN AROUND THE PERIMETER OF THE CONCOURSE.
THE NUMERICAL ORDER OF BOOTH PLACEMENT MAY VARY SLIGHTLY.

- 46 LANGSTON UNIVERSITY**
Foods Astronauts Eat in Space
- 47 LANGSTON UNIVERSITY DEPT. OF MATHEMATICS**
Pythagoras
- 48 OKLAHOMA CITY UNIVERSITY**
The OKCU Equation
- 49 OKLAHOMA CITY UNIVERSITY**
Mad Science!
- 50 EAST CENTRAL UNIVERSITY SCHOOL OF NURSING**
Calling all Future Nurses!
- 51 EAST CENTRAL UNIVERSITY INSTITUTE FOR MATH AND SCIENCE EDUCATION**
Project ORIGAMI
- 52 EAST CENTRAL UNIVERSITY DEPT. OF BIOLOGY**
DNA Discovery
- 53 EAST CENTRAL UNIVERSITY DEPT. OF PHYSICS**
Do an Ultrasound, See the Spectra - What is Physics?
- 54 KIAMICHI TECHNOLOGY CENTERS PATHS BIOMEDICAL SCIENCE ACADEMY**
"iGirl" Hands-On Activities for the Eyeball
- 55 THICK DESCRIPTIONS**
STEAM - Science, Technology, Engineering, Anthropology and Math
- 56 OKLAHOMA DEPT. OF TRANSPORTATION, WATERWAYS BRANCH**
McClellan-Kerr Arkansas River Navigation System
- 57 CAMERON UNIVERSITY DEPT. OF MATHEMATICAL SCIENCE**
Hands-On Math Activities
- 58 CAMERON UNIVERSITY DEPT. OF MATHEMATICAL SCIENCE**
Recruitment and Summer Academy Information
- 59 CAMERON UNIVERSITY DEPT. OF CHEMISTRY, PHYSICS, AND ENGINEERING**
Recruitment and Summer Academy Information
- 60 CAMERON UNIVERSITY DEPT. OF CHEMISTRY, PHYSICS, AND ENGINEERING**
Hands-On Chemistry - Making Slime!

HANDS-ON SCIENCE & COLLEGE RECRUITMENT FAIR SESSION

BOOTHS ARE DISTRIBUTED IN A CLOCKWISE PATTERN AROUND THE PERIMETER OF THE CONCOURSE.
THE NUMERICAL ORDER OF BOOTH PLACEMENT MAY VARY SLIGHTLY.

- 61 SOUTH CENTRAL CLIMATE SCIENCE CENTER**
Investigating Tree Rings and Ocean Acidification
- 62 STUDENT TEAM ENGAGING MINORITIES IN STEM**
TU STEM² Liquid Nitrogen
- 63 OKLAHOMA LOUIS STOKES ALLIANCE FOR MINORITY PARTICIPATION**
OK-LSAMP
- 64 COLLEGE OF THE MUSCOGEE NATION**
Recruitment
- 65 OKLAHOMA CITY COMMUNITY COLLEGE**
Catapult into a Great STEM Future with OCCC
- 66 FRAN AND EARL ZIEGLER COLLEGE OF NURSING, OU HEALTH SCIENCES CENTER**
OU College of Nursing
- 67 OKLAHOMA CENTER FOR THE ADVANCEMENT OF SCIENCE AND TECHNOLOGY**
OCAST
- 68 PHOTO BOOTH**
Picture Yourself in STEM
- 69 TULSA TECH**
Recruitment and Information
- 70 TULSA TECH**
Prosthetic Arm Design Challenge
- 71 ROSE STATE COLLEGE**
Recruitment
- 72 ROGERS STATE UNIVERSITY**
Recruitment
- 73 NORTHERN OKLAHOMA COLLEGE DEPT. OF AGRICULTURE, SCIENCE & ENGINEERING** Chemistry - It's Life Changing
- 74 GIRL SCOUTS WESTERN OKLAHOMA**
STEM with Girl Scouts - Radioactive Golf Balls
- 75 SOCIETY OF WOMEN ENGINEERS**
Be that Engineer

HANDS-ON SCIENCE & COLLEGE RECRUITMENT FAIR SESSION

BOOTHS ARE DISTRIBUTED IN A CLOCKWISE PATTERN AROUND THE PERIMETER OF THE CONCOURSE.
THE NUMERICAL ORDER OF BOOTH PLACEMENT MAY VARY SLIGHTLY.

- 76 TULSA REGIONAL STEM ALLIANCE**
Weather STEM
- *77 TULSA COMMUNITY COLLEGE** *(See this booth in the arena during your Geocaching session!)*
All Hands-On Science at Tulsa Community College
- *78 TULSA COMMUNITY COLLEGE** *(See this booth in the arena during your Geocaching session!)*
Bring Your Ambition
- 79 CELLULAR AND BEHAVIORAL NEUROBIOLOGY OU-NORMAN**
Hands-On Brain Activities
- 80 LUNAR SOONERS**
Interactive Astronomy Activities
- 81 UNIVERSITY OF OKLAHOMA IT**
Get with IT - Hands on Fun
- 82 UNIVERSITY OF OKLAHOMA IT**
Virtual Reality - It's all Virtual to Me
- 83 UNIVERSITY OF OKLAHOMA GALLOGLY COLLEGE OF ENGINEERING**
Recruitment
- 84 UNIVERSITY OF OKLAHOMA GALLOGLY COLLEGE OF ENGINEERING**
Invisible Ink Reveals Cool Chemistry
- 85 UNIVERSITY OF OKLAHOMA DEPT. OF MATHEMATICS**
Fun and Games with Mathematics
- 86 UNIVERSITY OF OKLAHOMA DEPT. OF MATHEMATICS**
Mathematics at the College Level
- 87 UNIVERSITY OF OKLAHOMA HASKELL AND IRENE LEMON CONSTRUCTION
SCIENCE DIVISION** Visualization in Construction Science
- 88 UNIVERSITY OF OKLAHOMA HASKELL AND IRENE LEMON CONSTRUCTION
SCIENCE DIVISION** Careers in Construction Science
- 89 OKLAHOMA GEOLOGICAL SURVEY**
Making Waves in Geosciences
- 90 MEET THE PANELIST: STACEY EVANS**
Research Geologist, OGS

HANDS-ON SCIENCE & COLLEGE RECRUITMENT FAIR SESSION

BOOTHS ARE DISTRIBUTED IN A CLOCKWISE PATTERN AROUND THE PERIMETER OF THE CONCOURSE.
THE NUMERICAL ORDER OF BOOTH PLACEMENT MAY VARY SLIGHTLY.

- 91 KISS INSTITUTE FOR PRACTICAL ROBOTICS**
Botball! Hands-On Robotics!
- 92 XPLOSAFE**
Explosives Detection, Chemistry, and Nanotechnology
- 93 NORTHEASTERN STATE UNIVERSITY, GREGG WADLEY COLLEGE OF SCIENCE AND HEALTH PROFESSIONS** Recruitment
- 94 UNIVERSITY OF TULSA DEPT. OF CHEMISTRY AND BIOCHEMISTRY**
Recruitment
- 95 OKLAHOMA WOMEN IN STEM**
Recruitment & Information
- 96 FRONTIER ELECTRONIC SYSTEMS**
Electronics for Spacecraft and Defense Applications
- 97 OKLAHOMA AQUARIUM**
What's Happening at the Aquarium
- 98 MEET THE PANELIST: ANN MONEY**
Marine Biologist, Oklahoma Aquarium
- 99 REDLANDS COMMUNITY COLLEGE**
Live Planarians (Flatworms) Respond to Environmental Stimuli
- 100 REDLANDS COMMUNITY COLLEGE**
Optical Illusions

***Special Information for Booths #77 & #78:**

These booths are located on the arena floor. Visit them during your Geocaching Session!

HANDS-ON SCIENCE & COLLEGE RECRUITMENT BOOTHS

- 1 OGE ENERGY CORP.: POSITIVE ENERGY TOGETHER
- 2 MEET THE PANELIST: CAROL ROLLINS, PROFESSIONAL ENGINEER, OGE ENERGY CORP.
- 3 NORTHEASTERN STATE UNIVERSITY ROBOTICS ACADEMY OF CRITICAL ENGAGEMENT
- 4 ROBOTICS EDUCATION AND COMPETITION FOUNDATION: INTERACTIVE ROBOTICS PLAYGROUND
- 5 OKLAHOMA STATE BUREAU OF INVESTIGATION: FORENSIC AND INVESTIGATIVE TECHNIQUES
- 6 MEET THE PANELIST: FRANCIA THOMPSON, SPECIAL AGENT/CRIME SCENE INVESTIGATOR, OSBI
- 7 UNIVERSITY OF CENTRAL OKLAHOMA: UCO CSI COMPUTER FORENSICS
- 8 UNIVERSITY OF CENTRAL OKLAHOMA: CSI FORENSICS SUMMER ACADEMY
- 9 FEDERAL AVIATION ADMINISTRATION: IT TAKES PRACTICE TO BE AN AIR TRAFFIC CONTROLLER
- 10 NINETY-NINES: THE INTERNATIONAL ORGANIZATION OF WOMEN PILOTS
- 11 TEAM TINKER SCIENCE & ENGINEERING (AFSC/EN): ELECTRICITY, MATH, AND HAZARD WASTE CLEAN-UP
- 12 SKELETONS: MUSEUM OF OSTEOLOGY - A STORY IN BONES
- 13 OKLAHOMA EDUCATORS EVOLVE: EVOLUTION IS OK WITH US!
- 14 PHOTO BOOTH: PICTURE YOURSELF IN STEM
- 15 OKLAHOMA STATE UNIVERSITY INSTITUTE OF TECHNOLOGY: RECRUITMENT
- 16 MEET THE PANELIST: LYNN LEFFEW, ORTHOTIC AND PROSTHETIC TECHNOLOGIST, OSU IT
- 17 OKLAHOMA STATE UNIVERSITY DEPT. OF PSYCHOLOGY: PSYCHOLOGY AS SCIENCE
- 18 OSUTEACH: LAUNCH INTO STEM WITH OSUTEACH
- 19 OKLAHOMA STATE UNIVERSITY COLLEGE OF ENGINEERING, ARCHITECTURE, AND TECHNOLOGY: DEGREE INFO.
- 20 OKLAHOMA STATE UNIVERSITY BIOSYSTEMS ENGINEERING: ENGINEERING YOUR FOOD - LIQUID NITROGEN ICE CREAM
- 21 OKLAHOMA STATE UNIVERSITY DEPT. OF PLANT AND SOIL SCIENCES: FEED THE WORLD WITH AGRONOMY
- 22 OKLAHOMA STATE UNIVERSITY DEPT. OF HORTICULTURE: RECRUITMENT
- 23 OKLAHOMA STATE UNIVERSITY DEPT. OF HORTICULTURE: HYDROPONICS AND SUGAR CONTENT OF FRUITS
- 24 OKLAHOMA STATE UNIVERSITY SCHOOL OF CHEMICAL ENGINEERING - FORD VERSYPT LAB
- 25 OKLAHOMA STATE UNIVERSITY DEPT. OF STATISTICS: FUN STATISTICS
- 26 ONEOKLAHOMA CYBERINFRASTRUCTURE INITIATIVE: ONEOCII - SUPERCOMPUTING ACROSS OKLAHOMA
- 27 MEET THE PANELIST: DANA BRUNSON, HIGH PERFORMANCE COMPUTING CENTER DIRECTOR, OSU
- 28 OSU CHEMISTRY TO COMPUTERS: EXPLORING MOLECULAR WORLDS
- 29 OKLAHOMA STATE UNIVERSITY AMERICAN CHEMICAL SOCIETY CHAPTER: CHEMICAL REACTIONS FOR YOUR SENSES
- 30 OKLAHOMA STATE UNIVERSITY DEPT. OF CHEMISTRY: EXPLORING THE COLORFUL WORLD OF METALS/NON-METALS
- 31 OKLAHOMA STATE UNIVERSITY DEPT. OF MICROBIOLOGY & MOLECULAR GENETICS: WONDERFUL WORLD OF MICROBES!
- 32 PHOTO BOOTH: PICTURE YOURSELF IN STEM
- 33 OKLAHOMA STATE UNIVERSITY ZOOLOGY GRADUATE STUDENT SOCIETY: ZOGSS WILDLIFE EXCURSION
- 34 OSU INSECT ADVENTURE: LIVE INSECT PETTING ZOO
- 35 OKLAHOMA 4-H YOUTH DEVELOPMENT: POWER OF WIND
- 36 BLUESTEM AGRILEARNING CENTER: WE DIG HEALTHY SOIL
- 37 UNIVERSITY OF SCIENCE AND ARTS OF OKLAHOMA: USAO ADMISSIONS
- 38 UNIVERSITY OF SCIENCE AND ARTS OF OKLAHOMA: THE ADVENTURES OF SLIME
- 39 EINSTEINIUM CHAPTER OF IOTA SIGMA PI, UNIVERSITY OF TULSA: CREATE MARBLED PAPER USING SHAVING CREAM
- 40 IOTA SIGMA PI, ORAL ROBERTS UNIVERSITY: WHAT'S IN THIS CANDY?
- 41 ORAL ROBERTS UNIVERSITY DEPT. OF BIOLOGY AND CHEMISTRY: LIFE MAGNIFIED
- 42 ORAL ROBERTS UNIVERSITY DEPT. OF ENGINEERING: RECRUITMENT
- 43 ORAL ROBERTS UNIVERSITY DEPT. OF ENGINEERING: BUILD THE EIFFEL TOWER
- 44 SOUTHWESTERN OKLAHOMA STATE UNIVERSITY: SWOSU FOCUS ON STEM
- 45 PHOTO BOOTH: PICTURE YOURSELF IN STEM
- 46 LANGSTON UNIVERSITY: FOODS ASTRONAUTS EAT IN SPACE
- 47 LANGSTON UNIVERSITY DEPT. OF MATHEMATICS: PYTHAGORAS
- 48 OKLAHOMA CITY UNIVERSITY: THE OKCU EQUATION
- 49 OKLAHOMA CITY UNIVERSITY: THE OKCU EQUATION
- 50 EAST CENTRAL UNIVERSITY SCHOOL OF NURSING: CALLING ALL FUTURE NURSES!

HANDS-ON SCIENCE & COLLEGE RECRUITMENT BOOTHS



- 51 EAST CENTRAL UNIVERSITY INSTITUTE FOR MATH AND SCIENCE EDUCATION: PROJECT ORIGAMI
- 52 EAST CENTRAL UNIVERSITY DEPT. OF BIOLOGY: DNA DISCOVERY
- 53 EAST CENTRAL UNIVERSITY DEPT. OF PHYSICS: DO AN ULTRASOUND, SEE THE SPECTRA - WHAT IS PHYSICS?
- 54 KIAMICHI TECHNOLOGY CENTERS PATHS BIOMEDICAL SCIENCE ACADEMY: "IGIRL" HANDS-ON EYEBALL ACTIVITIES
- 55 THICK DESCRIPTIONS: STEAM - SCIENCE, TECHNOLOGY, ENGINEERING, ANTHROPOLOGY AND MATH
- 56 OKLA, DEPT. OF TRANSPORTATION, WATERWAYS BRANCH: MCCLELLAN-KERR ARKANSAS RIVER NAVIGATION SYSTEM
- 57 CAMERON UNIVERSITY DEPT. OF MATHEMATICAL SCIENCE: HANDS-ON MATH ACTIVITIES
- 58 CAMERON UNIVERSITY DEPT. OF MATHEMATICAL SCIENCE: RECRUITMENT AND SUMMER ACADEMY INFO.
- 59 CAMERON UNIVERSITY DEPT. OF CHEMISTRY, PHYSICS, AND ENGINEERING: RECRUITMENT AND SUMMER ACADEMY
- 60 CAMERON UNIVERSITY DEPT. OF CHEMISTRY, PHYSICS, AND ENGINEERING: HANDS-ON CHEMISTRY - MAKING SLIME!
- 61 SOUTH CENTRAL CLIMATE SCIENCE CENTER: INVESTIGATING TREE RINGS AND OCEAN ACIDIFICATION
- 62 STUDENT TEAM ENGAGING MINORITIES IN STEM: TU STEM² LIQUID NITROGEN
- 63 OKLAHOMA LOUIS STOKES ALLIANCE FOR MINORITY PARTICIPATION: OK-LSAMP
- 64 COLLEGE OF THE MUSCOGEE NATION: RECRUITMENT
- 65 OKLAHOMA CITY COMMUNITY COLLEGE: CATAPULT INTO A GREAT STEM FUTURE WITH OCCC
- 66 FRAN AND EARL ZIEGLER COLLEGE OF NURSING, OU HEALTH SCIENCES CENTER: OU COLLEGE OF NURSING
- 67 OKLAHOMA CENTER FOR THE ADVANCEMENT OF SCIENCE AND TECHNOLOGY: OCAST
- 68 PHOTO BOOTH: PICTURE YOURSELF IN STEM
- 69 TULSA TECH: RECRUITMENT AND INFORMATION
- 70 TULSA TECH: PROSTHETIC ARM DESIGN CHALLENGE
- 71 ROSE STATE COLLEGE: RECRUITMENT
- 72 ROGERS STATE UNIVERSITY: RECRUITMENT
- 73 NORTHERN OKLAHOMA COLLEGE DEPT. OF AGRICULTURE, SCIENCE & ENGINEERING: CHEMISTRY - IT'S LIFE CHANGING
- 74 GIRL SCOUTS WESTERN OKLAHOMA: STEM WITH GIRL SCOUTS - RADIOACTIVE GOLF BALLS
- 75 SOCIETY OF WOMEN ENGINEERS: BE THAT ENGINEER
- 76 TULSA REGIONAL STEM ALLIANCE: WEATHER STEM
- 77 TULSA COMMUNITY COLLEGE: ALL HANDS-ON SCIENCE AT TULSA COMMUNITY COLLEGE - ARENA SESSION
- 78 TULSA COMMUNITY COLLEGE: BRING YOUR AMBITION - ARENA SESSION
- 79 CELLULAR AND BEHAVIORAL NEUROBIOLOGY OU-NORMAN: HANDS-ON BRAIN ACTIVITIES
- 80 LUNAR SOONERS: INTERACTIVE ASTRONOMY ACTIVITIES
- 81 UNIVERSITY OF OKLAHOMA IT: GET WITH IT - HANDS-ON FUN
- 82 UNIVERSITY OF OKLAHOMA IT: VIRTUAL REALITY - IT'S ALL VIRTUAL TO ME
- 83 UNIVERSITY OF OKLAHOMA GALLOGLY COLLEGE OF ENGINEERING: RECRUITMENT
- 84 UNIVERSITY OF OKLAHOMA GALLOGLY COLLEGE OF ENGINEERING: INVISIBLE INK REVEALS COOL CHEMISTRY
- 85 UNIVERSITY OF OKLAHOMA DEPT. OF MATHEMATICS: FUN AND GAMES WITH MATHEMATICS
- 86 UNIVERSITY OF OKLAHOMA DEPT. OF MATHEMATICS: MATHEMATICS AT THE COLLEGE LEVEL
- 87 UNIVERSITY OF OKLAHOMA HASKELL AND IRENE LEMON CONSTRUCTION SCIENCE DIVISION: VISUALIZATION IN CS
- 88 UNIVERSITY OF OKLAHOMA HASKELL AND IRENE LEMON CONSTRUCTION SCIENCE DIVISION: CAREERS IN CS
- 89 OKLAHOMA GEOLOGICAL SURVEY: MAKING WAVES IN GEOSCIENCES
- 90 MEET THE PANELIST: STACEY EVANS, RESEARCH GEOLOGIST
- 91 KISS INSTITUTE FOR PRACTICAL ROBOTICS: BOTBALL! HANDS-ON ROBOTICS!
- 92 XPLOSAFE: EXPLOSIVES DETECTION, CHEMISTRY AND NANOTECHNOLOGY
- 93 NORTHEASTERN STATE UNIVERSITY, GREGG WADLEY COLLEGE OF SCIENCE AND HEALTH PROFESSIONS: RECRUITMENT
- 94 UNIVERSITY OF TULSA DEPT. OF CHEMISTRY AND BIOCHEMISTRY: RECRUITMENT
- 95 OKLAHOMA WOMEN IN STEM: RECRUITMENT AND INFORMATION
- 96 FRONTIER ELECTRONIC SYSTEMS: ELECTRONICS FOR SPACECRAFT AND DEFENSE APPLICATIONS
- 97 OKLAHOMA AQUARIUM: WHAT'S HAPPENING AT THE AQUARIUM
- 98 MEET THE PANELIST: ANN MONEY, MARINE BIOLOGIST, OKLAHOMA AQUARIUM
- 99 REDLANDS COMMUNITY COLLEGE: LIVE PLANARIANS (FLATWORMS) RESPOND TO ENVIRONMENTAL STIMULI
- 100 REDLANDS COMMUNITY COLLEGE: OPTICAL ILLUSIONS



MAKE THE GRADES.
STAY OUT OF TROUBLE.
EARN COLLEGE TUITION.



GET MORE INFO

www.okpromise.org

okpromise@osrhe.edu

(800) 858-1840 or (405) 225-9152

Ask your counselor.

Find us on 

**ATTENTION!
8TH, 9TH, 10TH
GRADERS:
TO EARN FREE TUITION
YOUR PARENTS MUST
SIGN YOU UP
NOW!**

WHO MAY APPLY

Applicants must be:

- Oklahoma residents.
- 8th-, 9th- or 10th-grade students (homeschool students must be age 13, 14 or 15).
- Students whose parents' federal adjusted gross income does not exceed \$55,000.*
- Students who promise to meet the requirements of the program.

*Special income provisions may apply to:

- Children adopted from certain court-ordered custody and children in the custody of court-appointed legal guardians.
- Families receiving Social Security benefits based on the disability or death of the student's parents.

Contact the Oklahoma's Promise office for more information.

Additional documentation may be required.

THE PROMISE

Upon completion of the program's requirements, you will earn:

- Tuition at an Oklahoma public two-year college or four-year university.
- OR-
- A portion of tuition at an accredited Oklahoma private college or university.
- OR-
- A portion of tuition for programs that qualify for federal financial aid at public career technology centers.

(The Oklahoma's Promise scholarship amount does not cover fees, books, supplies, or room and board.)

HOW TO APPLY:

Online at www.okpromise.org or get an application from your counselor.

HIGH SCHOOL REQUIREMENTS

- Graduate from an Oklahoma high school or homeschool education program.
- Take the 17 units of college prep high school courses (listed at the right) and achieve at least a 2.50 cumulative GPA in those courses.
- Achieve at least a 2.50 cumulative GPA for all courses in grades 9-12.
- Attend school regularly and do your homework.
- Stay away from drugs and alcohol.
- Don't commit criminal or delinquent acts.
- Provide information when requested.
- Meet with a school official to go over your school work and records on a regular basis.
- Apply for other financial aid during your senior year of high school.
- Take part in Oklahoma's Promise activities that will prepare you for college.

If you don't qualify for this program, see your counselor for information about additional scholarships, grants and student loans, and visit Oklahoma higher education's college planning website at www.OKcollegestart.org.

COLLEGE REQUIREMENTS

- Prior to receiving any program benefit in college, the federal adjusted gross income (AGI) of the student's parents may not exceed \$100,000. Each year in college, Oklahoma's Promise students will be required to complete a Free Application for Federal Student Aid (FAFSA), which will be used to determine whether the federal adjusted gross income exceeds \$100,000. For any year that the income exceeds \$100,000, the student will not be eligible to receive the program benefit.
- You must be an Oklahoma resident.
- You must be a U.S. citizen or lawfully present in the United States.
- You must meet regular admission standards for first-time entering students at the college or university to which you apply.
- You must start taking college courses within three years after you graduate high school.*
- You may not receive funds for more than five consecutive years after enrolling in college.*
- You may not use the award for courses taken after you complete your bachelor's degree requirements. The Oklahoma State Regents will also set a maximum limit on the number of courses or credit hours for which the award will pay.
- You must meet the college's Satisfactory Academic Progress (SAP) policy requirements for eligibility to receive federal financial aid.
- An Oklahoma's Promise college student who is suspended for more than one semester for conduct reasons will lose the scholarship permanently.

*Students on active military duty may be eligible for certain waivers of these requirements.

4 ENGLISH (grammar, composition, literature; courses should include an integrated writing component)

3 LAB SCIENCE (biology, chemistry, physics or any lab science certified by the school district; general science with or without a lab may not be used to meet this requirement)

3 MATHEMATICS (from Algebra I, Algebra II, geometry, trigonometry, math analysis, pre-calculus, statistics and probability [must have completed geometry and Algebra II], calculus, Advanced Placement [AP] statistics)

3 HISTORY AND CITIZENSHIP SKILLS (including 1 unit of American history and 2 additional units from the subjects of history, economics, geography, government, non-Western culture)

2 FOREIGN OR NON-ENGLISH LANGUAGE (two years of the same language)

...OR...

COMPUTER TECHNOLOGY (two units in programming, hardware or business computer applications, such as word processing, databases, spreadsheets and graphics, will qualify; keyboarding or typing classes do NOT qualify)
(1 foreign language and 1 computer course will NOT meet this requirement)

1 ADDITIONAL COURSE (from any of the subjects listed above)

1 FINE ARTS (music, art, drama)

...OR...

SPEECH

17 TOTAL UNITS

**Homeschool students or students graduating from a high school not accredited by the Oklahoma State Board of Education must also achieve a composite score of 22 or higher on the ACT test reported on an official test report issued by ACT. "Residual" ACT test scores do not qualify.



WITHOUT THE HELP OF THESE AMAZING PEOPLE

The Women in Science Conference

WOULD NOT BE POSSIBLE



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2017 Women in Science Conference



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DON'T FORGET... AT THE END OF THE CONFERENCE

STUDENTS:

RETURN YOUR COMPLETED SURVEY FORMS TO THE EPSCoR BOOTH IN THE MAIN LOBBY FROM 2:00-2:30 P.M. AND RECEIVE A SUPER FUN AND SCIENCE-Y CONFERENCE ITEM!

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“Don’t let anyone rob you
of your imagination,
your creativity, or your curiosity.
It’s your place in the world; it’s your life.
Go on and do all you can with it,
and make it the life you want to live.”

--Mae Jemison
Pioneering Astronaut, Scientist, & Physician



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