Take Our Daughters & Sons to Work 2017
“Count on Me”
Thursday, April 27, 2017
Evanston Campus

A Day in the Life of Student Organizations
Tracey Gibson-Jackson
Come and explore the world of clubs and organizations at Northwestern University. The Student Organizations & Activities staff will provide a hands on interactive journey through getting involved in extracurricular activities on college campus. Go ‘Cats!

All in a Day’s Worm
Sue Fox
Be a scientist in Dr. Morimoto’s lab. Hands-on learning about what scientists do all day. Students will get a chance to use real scientific equipment and to see worms that glow under the microscope! Students will also get a tour of a laboratory and see how scientists do experiments.

Art in Motion
Stephanie Lupu
Can artwork move? Roll up your sleeves for some hands-on experiences in the Dittmar Gallery, creating movable art objects.

Be a Hero!
Sharlene Mielke & Joe Frascati
Do you know what to do before, during, and after an emergency? Be a Hero and learn what you can do so that your family is prepared. See NU’s Emergency Operations Center and learn how we monitor events and respond to a crisis on campus.

Be a Radio Star with WNUR
Brock Steussi
Come see how a radio station works! Learn how to speak on-air, work the Wheatstone board, operate the transmitters, look for music in our collection, and get an introduction to the basics of operating turntables and other station equipment.

Because Racecar
Sarah Gorlick
NU has three vehicle teams, all with very specific, unique design goals. You’ll be able to walk through the Ford Autobay and look closely at these vehicles, learning how the different cars and the aspects of the designs make each specialized for the design challenge they work toward. Get an up close look at the real mechanical engineering happening on this campus!

Can You Hear Me Now?
Denise Boggs Eisenhauer
Experience your own senses in a whole new way. Hear what it’s like to listen to hearing aids. See your own ear drum and ear canal. Enter a one of a kind room with 37 speakers and 16 microphones used to replicate a myriad of listening environments. Watch a larynx (voice box) as the vocal cords move!

Chemical Curiosities
Eberhard Zwerge
Chemical curiosities will unfold before your very eyes! Experience fascinating nanotechnology experiments and chemical reactions, some hands-on, some just to enjoy.

Designer Slime Challenge
Ashley Walter
Are you ready to make some slime? In the Designer Slime Challenge, students will make and explore different material properties of polymer slime.

DNA Extraction from Fruits
Weston Kightlinger
Do you expect a banana or a strawberry to have more DNA? What about between a kiwi and a mango? Practice extracting DNA from two different fruits, and observe if different types of fruits have different amounts of DNA.

* For safety reasons, please indicate any fruit allergies at registration
**Electrocute a Pickle: Visualizing Molecules!**
Andrew Ott

Watch light diffracting off of slides, an example of trace metals analysis, and a mass spectrometer identifying an unknown compound. Manipulate molecules on a computer. Electrocute a pickle and have a little fun with liquid nitrogen!

**Engineering Kinetic Sand**
Deanna Stangas & Megana Audipudy

Create kinetic sand (similar to "Moon Sand") using regular play sand and household ingredients. This sand mimics the feeling of wet sand but never dries out! Discuss how this works, using the principles of chemical engineering. Participants will get to take their kinetic sand home.

**Extra, Extra! The Daily Northwestern Newspaper**
Student Editors

Discover how college students produce an award-winning paper 5 days a week and still have fun in college. Then try it out for yourself! Work with student editors to create photo captions and describe news stories.

**Explore Alice Millar Chapel**
Kerby Mickelson & Team

Tour the beautiful, historical Alice Millar Chapel. Visit the immense pipe organ and see how it is played, and more.

**Field Hockey Skills & Drills**
Dominique Masters

Learn the Basics of Field Hockey. Practice various skills – including dribbling, passing, and shooting, and play some games outside!

**Fight Back: Physical Self-Defense and Empowerment**
Commander Kenneth Jones

Start with a discussion of how "you can be crime-prevention savvy." Learn about rape prevention and awareness. Watch Commander Jones demonstrate self-defense moves before he brings out the pads and gives you the opportunity to practice those moves on him!

**Fun with Slimy Polymers**
Shelby Hatch

Tour a real laboratory and examine the fascinating role chemical polymers play in your daily life. You’ll begin by making a sample of polymer and comparing the physical properties of yours with the different types of polymers made by your classmates. Take home your very own sample of "slime" polymer!

**Good Things Come to Those Who Bait**
Laura Dewan

Play “Operation” with a fish! Have you always wondered what’s inside a fish? Well, then this is the “plaece” to be! Don’t “flounder” in any other session. Dissect a fish, “sea” its internal organs, and learn about what makes fish the “bass.” We will also create beautiful works of “carp” using gyotaku (fish printing). You’ll have a “reel” good time!

**If You Build It... They Will Come**
Facilities Management

Tour the Facilities Management headquarters. Visit paint, lock, and carpentry shops and learn about careers in the skilled trades. Participants will also get to assemble and paint a woodcraft to take home!

**Mends and Tears: Fine Arts Conservation**
Basia Stanek

Learn the basic techniques and materials employed by working conservation professionals on day-to-day basis. Get hands-on experience mending torn paper using Japanese tissue and wheat starch paste. See and learn how the fields of science and fine arts inform conservation and preservation practices.

**NUANCE Center, where Nanoscience Happens!**
Raymond Bailey

Experience three different hands-on demonstrations at the Northwestern University Atomic and Nanoscale Characterization Experimental (NUANCE) Center. This is an amazing opportunity to see many of the different microscopes and equipment that are used to analyze the materials we use every day. These microscopes aid in many areas of study, including research into curing illnesses such as cancer and Alzheimer’s, advancing technology, and even improving the taste of food. On
one of our instruments, participants will be able to view actual atoms (and atomic columns) at a magnification of about 10 million!

**NU Power: The Central Utility Plant**  
Jim McKinney and Engineers at CUP  
*Too hot? Too cold? Come see the facility that keeps the University running!* Get a guided tour through the plant that makes steam and central a/c for the entire Evanston Campus. Look at a functioning boiler. Learn how to read the gauges and test water for ph level. Find out how temperatures are calculated.  
*Participants in this track must be able to walk across a metal catwalk, then down 40’ stairs into the plant. For safety reasons, crutches cannot be accommodated.*

**Physics of Color**  
Arthur Schmidt  
*What do “Eye” see?* We will direct the participants through several experiments which will explore the perception of color by the human eye based on the physics of light.

**Power of Advertising**  
Candy Lee  
*Why do companies advertise?* Why do you buy certain products? Think about the last item you purchased. Why did you decide to buy that product? Did you influence someone else to buy a product for you? Get a hands-on learning experience about marketing and advertising and create an advertisement.

**Ready, Aim, Hired!**  
Michael McGandy, Gemma Lopez & Saher Qadri  
*Thinking about joining the work force?* Come meet NU’s Talent Acquisition Team to learn the basics of exploring the job market. Find out how to research prospective companies, dress the part for your interview, and practice cultural sensitivity in all parts of life. You can really hone your skills with an interactive mock interview with NU’s finest. Before you know it, you’ll be landing that first job!

**Robots at Work! Mechanical Engineering & Manufacturing**  
Sarah Wolff & Newell Moser  
*See robots at work with an exciting tour of the Mechanical Engineering & Manufacturing Lab.* Meet the robots that manufacture sheet metal parts, laser machined surfaces, and more!

**Rocking the Rosetta Stone**  
Tasha Seago-Ramaly and Rifka Cook  
*Find out how many words in Spanish and Portuguese you already know...and how easy it is to learn more!* We will use music, games, and hands on activities that you can bring home to make Spanish and Portuguese a part of your life!

**Scrapbooks: Turning the Pages of History**  
Janet Olson  
*Long before glitter and puffy hearts were invented, Northwestern students in the early 1900s were collecting the memories of their college days in scrapbooks.* Both girls and boys pasted photos, invitations, concert and sports programs, ticket stubs, and other mementos into their scrapbooks. These scrapbooks tell stories about life over 100 years ago in a much different way from history books. Session attendees will examine some of the colorful scrapbooks in the University Archives' collection and will report on what they learn about the long-ago students who so carefully put them together.

**Seismic Signals**  
Mitchell Barklage & Suzan Van Der Lee  
*Earthquake!* View live seismic signals. Jump up and down near the seismometer to create seismic signals and discuss the STEM related to obtaining the signals. Seismic sleuthing: match graphs of seismic signals (seismograms) to events that caused them. Use slinkies to demonstrate how seismic waves propagate within the Earth. Pasta Quake: Use spaghetti noodles to explain the earthquake magnitude (Richter) scale and demonstrate how one earthquake can trigger another earthquake.

**Soccer 101**  
Ewan Sharp  
*Get interactive* on field training with Northwestern Men’s Soccer Staff!

**Sustainability: Keeping it Green**  
Stephanie Folk
Learn all about the Office of Sustainability at Northwestern. Explore how you can make a difference and take steps toward a greener future.

**Take a Walk in My Shoes: Assistive Technology**  
Jim Stachowiak  
Learn about technologies created to assist students with disabilities. Observe demonstrations of several pieces of technology including speech recognition software, big key keyboards, a head controlled mouse, and other tools. Participants will have a chance to try the technologies too!

**The Multimedia Multiverse**  
Alexis Lauricella  
Conduct your own multimedia experiments in the Kids’ Media Lab. Learn about television and how young people use media.

**Touch and Movement: How Do You Feel?**  
Mitra Hartmann  
When you touch something, how do you know you touched it? What determines whether an object will feel rough or smooth, hot or cold? Learn about how your brain experiences the sense of touch, and why animals touch things with their whiskers.

**Visualize Your Community**  
Kelly Roark  
Create yummy data models! Learn how to make bar graphs (with chocolate!) and then devise questions to survey the group. After collecting data from fellow participants, groups will visualize their findings and analyze the results.

**Waffles Aren't Just for Breakfast Anymore**  
Chef Chris Studtmann  
Experience demonstrations & hands-on creating of waffle iron recipe hacks with sweet desserts, breakfast items, sandwiches, and fun snacks. We will learn together, create together, cook together, and eat together.

**Women in Leadership**  
Jazminn Williams  
Get involved with learning about the many different faces of women in leadership. Know their achievements and why they are great examples of leaders.