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|  **Session** **M Morning-9:45-10:45 Afternoon 11:45-12:45** | **Location** | **Presenter** |
| **Hands-on with TINY TITAN,** a mini supercomputer built for the classroom! In this interactive session, you'll explore how real supercomputers like **Frontier** at Oak Ridge National Lab solve big problems fast using **parallel computing**. A quick intro to cutting edge science, then it’s your turn to experiment like a supercomputer scientist! |  | **Dr. Bronson Messer II** is a Distinguished Staff Scientist and Director of Science for the Oak Ridge Leadership Computing Facility (OLCF) at ORNL. As Director of Science As Director of Science, he helps make sure OLCF’s supercomputing resources are used for impactful research and the results are shared with scientists, stakeholders and the public. Interesting side note: Dr. Messer graduated from Swain High School and is renowned for his innovative computing. Dr. Messer holds undergraduate and graduate degrees from the University of Tennessee, earning his PhD in physics in 2000 |
| **Build a Business (Solve a Problem) in 60 Minutes!**In this fun, hands-on session, you’ll become a problem identifier and solver! You’ll think of a problem, come up with a cool way to solve it, test it with your friends, and make it better. By the end, you’ll have your very own mini business idea ready to share with the world! Let’s create together!   |  | **Dr.Lane Perry, PhD, Assistant Professor College of Business WCU.** Dr. Perry is focused on innovation, creativity, and entrepreneurship. He is keenly focused on work that is dedicated to improving the lot of others and tapping into their deepest wells of energy, passion, and knowledge. His ultimate goal is to guide students to develop the tools to discover their personal answer to the question, "What do you care enough about, to do something about in this world?" |
| **Immunoassay Investigation -ES/MS**Ever wondered what it’s like to work in a lab?  Learn micropipetting techniques for measuring and dispensing liquids. Use your new skills to conduct an immunoassay test to identify unknown proteins. Engage in hands-on lab science while learning about the equipment and testing done by professionals in the field.Create a pipet "painting" activity where students learn and use micropipetting techniques to make some colorful patterns on filter paper.  |  | **Lily Dancy-Jones, M.S.  *(she/her/hers)******Western STEM Outreach Coordinator***office: (828)782-2322  cell: (252)258-0541ldancy-jones@ncbionetwork.org | [www.ncbionetwork.org/stem-outreach](https://www.ncbionetwork.org/stem-outreach) |
| **NC ARBORETUM-Biomicry**Ever wondered how scientists keep track of the animals that live all around us? Join educators from The North Carolina Arboretum and step into the role of a wildlife scientist! Meet a live animal ambassador up close, then head outdoors to explore and make your own discoveries. By the end, you’ll know how to spot, observe, and share your findings with scientists to help protect your local wildlife! |  | NC arboretum logo**Trudie Henninger, M.S.***Education Outreach Manager*thenninger@ncarboretum.org |
| **Atsila Anotasgi (Fire Builders), *Museum of the Cherokee People, Cultural Specialists***  *Rotate through 3 -4 stations to learn more about Cherokee Culture games and history.* **Location: Outdoor Session – School Track** |  | Museum of the Cherokee People in Cherokee, NC rebrands |
| **Tree and Plant ID Adventure!**Join biologists from the Eastern Band of Cherokee Indians for a fun, hands-on workshop! Explore the forest, learn how to identify local trees and plants, and discover their important role in the ecosystem. Find out how they help wildlife, clean the air, and keep nature healthy. Get ready to become a nature detective!  |  | **Josh Parris***Natural Resources Director**Eastern Band of Cherokee Indians**Office: (828) 359-6113* |
| **Haywood Waterways**Join us for a fun exploration of creek life! Using nets, magnifying lenses, and special trays, you’ll collect and examine cool bugs and creatures from the stream. With ID cards and viewing boxes, you’ll learn about the important role these creatures play in keeping our water healthy. Get ready to discover the hidden world beneath the surface! |  | **Dr. Christene O’Brien****Haywood Waterways****Project Assistant**christine@haywoodwaterways.org |
| **Discover the WCU College of Engineering & Technology** and put your design skills to the test in our Popsicle Bridge Competition! Participants will work in teams to design and build a bridge using popsicle sticks and tape, learning about structural engineering, load distribution, and creative problem-solving. Once completed, bridges will be tested for strength and durability—how much weight can your bridge hold? |  |  **Gretchen A. Dietz, Ph.D.,****Director and Assistant Professor**Engineering Discovery Program | College of Engineering and Technology gdietz@wcu.edu |



 **FALL STEM-E Conference Schedule Thursday September 25**

 **Elem/MS**

**8:45 am - 9:30**: Schools Arrive & Check-In Gather in MS Auditorium (CAC)

**9:45 am – 10:45** am-Workshop I

**11:05 am**: **Lunch** meets at the Auditorium or

Outside Bleachers @Track

**11:30-*Transition to 2nd Workshop (ROTC)***

**11:45-12:45 pm-Workshop II 12:55pm - 1:00**: Dismiss Load Buses

**Wi-Fi: STEM-E**

**Password**

Please ***refrain*** from taking photos in the CCS hallways.

STEM-E gratefully acknowledges the following organizations and dedicated volunteers who provide an engaging learning experience for our students:

* Cherokee Preservation Foundation for their vision and belief in the power of student engagement
* Duke Energy Foundation
* Harrah’s Scholarship Fund
* Smoky Mtn STEM Collaborative NASA
* Cherokee High School JROTC Cadets
* All presenters for designing and leading our workshops
* *A* ***Special Thank You*** *to CCS Superintendent Consuela Girty, Dr. Beverly Payne, Carmen Davis, Technology Director, Debora Foerst, Joel Creasman, Paula Coker, Nathan Barker, Heath Robertson, Kenitra Corbin, Shawn Crowe, Carmen Davis, Daphne Driver, Brett Robertson, Dr. Emily Darling, Dr. Jan Webster, WRESA, Duke Energy Foundation, TELUS. All school district STEM-E Leaders whose organizational skills and technical knowledge made the conference happen!*



