

**2026 Women in Mathematics, Science and Technology Conference
April 7, 2026**

Presentation Information

SESSION 1 (10:15-10:45 a.m.)

What is That Smell? Is my Nail Salon Making Me Sick?

Lisa D. Bolin, Manager of Environmental Health & Hygiene, High Environmental Health & Safety Consulting Ltd.

Biography: Lisa earned two Bachelors degrees from Millersville University -- Occupational Safety & Health Management and Biology. Lisa holds the designations of Certified Industrial Hygienist (CIH) from the American Board of Industrial Hygiene, Certified Safety Professional (CSP) from the Board of Certified Safety Professionals and Certified Indoor Air Quality Professional (CIAQP) from the Association of Energy Engineers.

Areas of Expertise: Conducting assessments and providing recommendations to minimize personal and environmental exposures to various airborne and surface biological and non-biological hazards in the workplace, as well as in homes and public venues.

Presentation Synopsis: *What is that odor in a nail salon? Is this odor an indicator that I may be over-exposed and may have health impacts? We will use a nail salon scenario, and participants will have the chance to do a hands-on activity using industrial hygiene tools to determine concentrations of airborne hazards and the likelihood of health impacts.*

From Mice to Microbes: One Woman Scientist's Tale

Dr. Gail E. Gasparich, Provost and Senior Vice President for Academic Affairs, Millersville University

Biography: Dr. Gasparich earned her B.S. in Biology from The College of William and Mary in 1984 and completed her Ph.D. in Microbiology at The Pennsylvania State University in 1989. Prior to joining Millersville University as the Provost and Senior Vice President for Academic Affairs in 2021, Dr. Gasparich served as the Dean of the College of Arts and Sciences at Salem State University from 2016-2021, and as the Associate Dean of the Fisher College of Science and Mathematics at Towson University from 2010 to 2016. Prior to that she was a Professor in the Biology Department at Towson University from 1996 to 2016. Her research focuses on the taxonomic and phylogenetic characterization of Spiroplasma microorganisms.

Area of Expertise: Microbial Taxonomy and Phylogeny

Presentation Synopsis: *Dr. Gasparich will share her career path from high school to her current position at Millersville University as Provost and Senior Vice President of Academic Affairs. She will discuss her research on the interesting group of microorganisms called Spiroplasma and provide some insights about what she has learned along her career path.*

Girl Power: Careers in Energy Engineering

Jeannie Leggett Sikora, Senior Energy Engineer, CLEAResult

Biography: Jeannie Leggett Sikora's career in energy efficiency spans the agricultural, residential, commercial, and industrial sectors. Her main responsibilities at CLEAResult include leading the company's agricultural subject matter expert group, mentoring engineers to measure and verify savings for utility energy efficiency programs, and consulting on innovation for utility incentive program design. Prior to joining CLEAResult, she worked in university cooperative extension on various farm and food processing energy issues, conducted research and outreach for the home building industry, and operated a consulting business. Ms. Sikora holds an M.S. in Agricultural and Biological Engineering from Penn State, is an author of two home building books, and resides in Lancaster County, Pennsylvania.

Areas of Expertise: Energy Efficiency, Agricultural Energy Efficiency, Controlled Environment Agricultural, On-farm Biogas Production, Utility Demand-Side Management Program Design

Presentation Synopsis: *This presentation will provide an overview of the energy engineering profession, including career preparation and typical roles and responsibilities. The program will introduce what energy engineers do and why energy engineering can be an interesting, challenging, and rewarding career choice.*

SESSION 1 (10:15-10:45 a.m.) - CONTINUED

Saving Nature through Ecological Design for People, Wildlife & Our Planet

Lydia Martin, Director of Community Engagement, Let's Go 1-2-3/Owner, Hidden Valley EDC

Biography: Lydia serves as the Director of Community Engagement for Let's Go 1-2-3, a local nonprofit committed to alleviating barriers to outdoor experiences in Lancaster and Philadelphia. She also works as an Ecological Design Consultant teaching private and public landowners how to restore and manage their properties for the benefit of people and wildlife. She manages 10 acres of woodlands, wetlands, pond, and meadow habitats at "Hidden Valley" with her family in southern Lancaster County. She serves on the PA Dept. of Conservation & Natural Resources SCORP Work Group, on the PA Fish and Boat Commission Women's Committee, with Pennsylvania Master Naturalist as an Ecology Instructor, on the McCaskey Occupational Advisory Committee - Agricultural & Environmental Science Program, and with Donegal Trout Unlimited. Lydia is passionate about promoting access and education to Lancaster's diverse community about parks, trails, green space, and waterways in central Pennsylvania..

Areas of Expertise:

- Adaptability
- Administrative Skills
- Communications & Engagement
- Creativity & Design
- Grant Writing
- Natural Resource & Watershed Management
- Plant Community Knowledge
- Project Management
- Teamwork

Presentation Synopsis: *Journey with me and learn how to save nature by using ecological design practices integrating lessons learned, creative abilities, and knowledge in the natural sciences. In a fast-paced world people of all ages and abilities need opportunities to learn and explore nature. Together we can save nature through ecological design for people, wildlife, and our planet.*

A Successful Adulthood Starts with a Healthy Childhood – You Can be a Part of That!

Vinitha Moopen, MD, Pediatrician, WellSpan Family and Pediatric Medicine at Rothsville

Biography: I am Pediatrician. I completed my Pediatric residency at Brookdale Hospital in Brooklyn NY. I have been at this practice for 12 years.

Area of Expertise: Pediatrics

Presentation Synopsis: *I will go over the steps taken through high school, undergraduate education and medical school and beyond. Prerequisites for each step will be discussed, and questions will be answered.*

SESSION 2 (10:55 to 11:25 a.m.)

Empowered by Elements: My Radical Journey in Chemistry

Dr. Kristen Baker, Assistant Professor of Chemistry, Millersville University

Biography: Dr. Baker received her B.S. in Chemistry in 2016 from Gettysburg College. Her passion for teaching began when she became a teaching assistant for organic chemistry laboratory during college and confirmed her decision to pursue her Ph.D. in order to become a college professor. Dr. Baker worked with Mary Watson at the University of Delaware and earned her Ph.D. in Chemistry in 2021. Her work in graduate school focused on synthetic organic chemistry and she enjoyed mentoring other students in the research lab. After her graduate studies, Dr. Baker was a postdoctoral teaching and research fellow at Providence College where she mentored undergraduate students in the Mulcahy research group while also teaching both general chemistry and organic chemistry. After her postdoc, Dr. Baker joined the Chemistry Department at Millersville University as an Assistant Professor. She teaches Organic Chemistry and enjoys working with the multiple undergraduates that are currently in her research laboratory.

Areas of Expertise: Organic Chemistry, Methodology Development

Presentation Synopsis: *I'll be sharing how my passion for chemistry was ignited in high school and how that inspired my journey to becoming an organic chemistry professor. Join me as I discuss my personal career path and the various chemistry projects that shaped my journey.*

Weather Around the World

Dr. Ellie Casas, Assistant Professor of Meteorology, Millersville University

Biography: Ellie is originally from Lansdale, PA, but found her lifelong passion for meteorology when she moved to Indiana in middle school and joined her eighth grade Science Olympiad team. Sold on pursuing a career as an atmospheric scientist as she started high school, Ellie took extra math and science courses in high school, earned her BS in Meteorology from Valparaiso University where she first experienced lake-effect snow, started graduate school at University of Hawaii at Manoa where she first experienced tropical weather, transferred with her graduate advisor to Colorado State University where she earned her MS and PhD in Atmospheric Science as she studied hurricanes (and first saw lenticular clouds in person!), completed her postdoctoral studies at the Naval Postgraduate School in Monterey, CA where she managed interdisciplinary machine learning projects (and experienced atmospheric rivers!), and has finally returned to her original homeland of PA as an Assistant Professor of Meteorology here at Millersville University. Dr. Ellie Casas has traveled all over the country as she pursued her scientific passion, and she currently enjoys sharing what she has learned along the way and encouraging future meteorologists to follow their own dream.

Area of Expertise: Tropical meteorology and coding (including machine learning), but teach all sorts of meteorology courses

Presentation Synopsis: *What does a career in meteorology look like? It looks like traveling around the world and making friends, blending math, coding, and science with art, and helping others! Join Dr. Ellie Casas as she shares her weather and career stories and bring your curiosity about how the weather works!*

College Professor: What to do When You're Interested in Everything

Dr. Erin Moss, Professor of Mathematics, Millersville University

Biography: I double-majored in Mathematics and Theatre at UNC-Asheville, interning at a small actuarial firm in downtown Asheville. As a result of that experience, I decided to pursue a Master's Degree in Actuarial Science at the University of Connecticut. Comparing my graduate internship at The Hartford to my experiences as a Teaching Assistant at UConn helped me realize that becoming a college math professor was a path that aligned better with my interests. I pursued a PhD at Purdue University in Mathematics Education and began my career in higher education in 2009 at Millersville University.

Area of Expertise: Mathematics Education

Presentation Synopsis: *Curiosity and an active mind can make choosing a college major difficult, but they are great assets for establishing an interesting and meaningful career. As a professor of mathematics education, I am more than just a teacher—I get to be a writer, a designer, a performer, and an advocate. The diverse experiences I engaged in along the way prepared me to take full advantage of the opportunities this career provides to continue learning and exploring new passions.*

Engineering Her Path

Lindy Rabinovitz, Embedded Firmware Engineer II & AI Manager, Phoenix Contact

Biography: Lindy Rabinovitz is an accomplished embedded firmware engineer and AI manager at Phoenix Contact, with a degree in Electrical Engineering from Purdue University. Her career spans the industrial and automotive sectors, where she has designed and integrated advanced software systems for organizations such as General Dynamics, Cummins, Stanley Security Solutions, General Motors, and Allison Transmission. Lindy's expertise lies in optimizing hardware-level performance and functionality, and she has been at the forefront of digital transformation initiatives throughout her career.

In her current role as USA Artificial Intelligence Manager, Lindy acts as the primary point of contact for corporate AI governance, collaborating with other managers to oversee AI use cases, infrastructure, and training in the USA. She provides expertise and leadership in generative AI activities, analyzes and prioritizes AI projects, coordinates with global headquarters on new tools, and participates in the international AI Council to contribute feedback on global AI policies.

Lindy is passionate about mentoring future engineers and actively supports STEM outreach programs. Her journey began with coding games on a Commodore 64, and her enthusiasm for technology continues to inspire her work and her message to aspiring STEM professionals: "Dream big, work hard, and make your mark in the extraordinary world of science, technology, engineering, and mathematics. You have the power to shape the future!"

Areas of Expertise: Embedded firmware development, AI management and governance, generative AI, system integration for industrial and automotive applications, performance optimization, team leadership, and STEM mentorship.

Presentation Synopsis: *Join Lindy Rabinovitz as she shares her journey from coding on a Commodore 64 to leading engineering and AI projects. Students will discover how scientific curiosity, hands-on problem-solving, and real-world experiences—from electric vehicles to Artificial Intelligence—shaped her career. Expect engaging stories that connect science, creativity, and resilience, inspiring you to pursue your own path in STEM.*

SESSION 2 (10:55 to 11:25 a.m.) - CONTINUED

Don't Have it all Figured Out? You Don't Have to Know What You Want to be When You Grow Up (EdTech & Educator Edition)

Emmali Wertz, Director of Product Development and Adjunct Professor, The Social Institute and Millersville University

Biography: An alumnus of Millersville University, she has returned this school year as an Adjunct Professor! Her undergraduate degree was in Computer Science, and she has recently earned a Master's in Engineering Management. Both degrees have unlocked the roles that she has today and enable her to be a great teammate that builds up others. She is also a certified Scrum Master and has spent the last 9 years coding across consulting, product, BevAlc, and EdTech industries. For 3 years, she has served on the Board of Directors for Local Area Networks, a non-profit that backs a local tech conference held every year that reaches 220+ engineers for networking, knowledge sharing, and some pretty good coffee. Recently recognized as a runner up for the Next Gen award by TCCP's Women in Tech, and a Marvelous Marauder, Emma continues to seek ways to grow her skills and share her knowledge with the technical community.

Areas of Expertise: Software engineering, product vs. consulting, EdTech, K-12 and collegiate education, e-Commerce, ex-Uber, project management, people management, React, Typescript, JavaScript, Express, MongoDB, Ruby, Python, Java, JIRA, GIT and source control, training engineers, and more.

Presentation Synopsis: Throughout the course of your life, your interests and values are going to change. This presentation will tour the changing career path of a software engineer (who still codes) and even show some code while driving home the fact that you will change over time. And your career can, too.

SESSION 3 (12:40 to 1:40 p.m.)

Student Panel **All Conference Attendees will meet in SMC 114**

Join a panel of Millersville University students as they discuss their studies, research, and discoveries as women looking to enter the fields of science and technology.

SESSION 4 – SCIENCE & TECHNOLOGY DEMONSTRATIONS (1:50 to 2:50 p.m.)

1. Science Demonstrations - Roddy and Caputo Halls

- a) **Scanning Electron Microscopy**
Mr. Calvin Montgomery, SEM Technician, Millersville University
- b) **Weather Center Tour**
Meteorology students, Emily Werley and Lauren Tushar
- c) **From the Clinic to the Lab: The Untold Side of Vet Med**
Brent Horton, Ph.D., Department of Biology and Biology student, Dayana Gonzalez Bravo

2. Technology Demonstrations – Osburn Hall

- a) **Occupational Safety & Environmental Health-Fire Extinguisher Simulator Demonstration** Betty-Jo Bowers, Ph.D., MBA, CSP and the American Society of Safety Professionals (ASSP) Student Section, Department of Applied Engineering, Safety & Technology
- b) **Collaborating with Robotics: Human-Robot Interactions**
John Haughery, Ph.D., CSCE, Department of Applied Engineering, Safety & Technology
- c) **From Idea to App: What Websites Students Can Build in One Semester**
Jingnan Xie, Ph.D., Department of Computer Science