

**2021 Women in Mathematics, Science and Technology Virtual Conference
April 6, 2021**

Role Model Synopses

SESSION 1 (10:15-10:50 a.m.)

Safely Building the Future

Stacey Darrohn, Sr. Project Environmental Health & Safety Manager, Turner Construction Company

In this presentation, I will be discussing my company, what we build, and my role and responsibilities as a Project Safety Manager.

Behind the Scenes at WGAL; My Adventures as a Broadcast Meteorologist

Christine Ferreira, Meteorologist, WGAL-TV

Come travel with me as I explain how I learned to forecast the weather in four states. I'll detail the preparation and planning that go into crafting a forecast for hundreds of thousands of viewers every day.

"Nuclear" Does Not Have to be a Scary Word

Paula Mancini, Clinical Coordinator, Nuclear Medicine Technology, PA College of Health Sciences

My presentation will be an overview of the career of nuclear medicine technology. It will include a general description of the field and the educational requirements (both at a high school and college level) needed to prepare for a job as a nuclear medicine technologist. We will also look at actual case studies to gain a better understanding of the role of a nuclear medicine technologist.

Engaging Diverse Voices in Green Infrastructure: Go Behind the Scenes "Luces, Cámara, Acción"

Lydia Y. Martin, Pennsylvania Green Infrastructure Coordinator, Alliance for the Chesapeake Bay

Tree plantings, rain gardens, and restoration of parks and streams are all forms of green infrastructure that restore the natural environment to benefit people and wildlife. Let's go behind the scenes to look closely at engaging diverse voices in green infrastructure. Learn what it takes to leverage impact by working with conservation partners, community leaders, and volunteers across the Chesapeake Bay watershed.

Getting to know our ABCs (age-associated B cells)

Jean L. Scholz, PhD, Staff Scientist, University of Pennsylvania

Age-associated B cells, originally discovered in mice, have a dual nature: they appear to be required for protective immunity in viral infection, yet are also associated with autoimmune pathology. Come hear about the latest research on ABCs -- and mysteries yet to be solved about their roles in immune responses!

SESSION 2 (11:00 to 11:50 a.m.)

What?? You Find Dead Bodies and Sinkholes for Your Job??

Felicia Kegel Bechtel, Director of Geophysics, RETTEW Field Services, Inc.

Geophysics is the science of detecting and mapping underground, underwater, or otherwise hidden objects without digging or drilling. Just as medical radiology is used to non-intrusively diagnose medical problems and make invasive surgery safer, geophysics is used to detect targets like utilities, sinkholes, rock depths, contaminant plumes, graves, drums prior to digging (which can often make future drilling or digging safer, and minimize or eliminate costly mid-project surprises).

Building a Laser Hammer: The 2018 Nobel Prize in Physics

Amy Lytle, Ph.D., Associate Professor of Physics, Franklin and Marshall College

The 2018 Nobel Prize in Physics was awarded in part to Donna Strickland, for her invention of a method to create high-intensity, ultrashort laser pulses. My own research is based on this groundbreaking invention, so in this presentation, I'll explain what this method is, and why Donna and her work are so important.

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

Vinitha Moopen, M.D., Pediatrician, WellSpan Rothsville Family & Pediatric Medicine

I would like to give the attendees a look into the world of pediatrics, the best job in the world. We will be talking about the educational process needed to get here and what a typical pediatric practice looks like.

A Slice of Science: Gluten and the Biochemistry of Breadmaking

Melissa Mullen Davis, Ph.D., Assistant Professor of Chemistry, Millersville University

We will discuss the biochemistry of making bread, including what gluten is and why some people can't eat it! I will also share my pathway to being a biochemist and about the time I spend being an advocate for women in STEM. We will also talk about the different career paths people interested in biochemistry can follow.

Girl Power...Energy Engineering!

Jeannie Leggett Sikora – Senior Energy Engineer, CLEARResult

This presentation will give an overview of the energy engineering profession, including career preparation and typical roles and responsibilities of an energy engineer. The program will introduce what energy engineers do, and why energy engineering is an interesting, challenging, and rewarding career choice.

SESSION 3 (1:00 to 1:50 p.m.)

Celebrate Women! IT Can Be a Women's World!

Lisa Frye, Ph.D., Professor, Department Chair, Department of Computer Science and Information Technology, Kutztown University

I am a pioneer who is still on a journey. I will share my career in Information Technology, and how I was able to excel and be promoted in a profession with so few women. I will also discuss my transition from industry to academia, and the challenges I encountered obtaining a computer science doctorate and leading as department chair in a predominately male world. I am an advocate for all students in computer science; however, I am especially passionate about inspiring women to pursue a rewarding profession in computer science or information technology.

A Day in the Life of a Dietitian: Nutrition Nazi or Model of Moderation?

Janelle Glick, Wellness Dietitian, Lancaster General Health

Attendees will have a basic understanding of a dietitian's career options, what colleges offer dietetics degrees, what my typical work includes, the differences between nutritionists and dietitians, and why nutrition is important for everyone's health.

From Cockroaches to Elephants: Veterinary Medicine in the Captive-managed Setting

Donna Ialeggio DVM, Staff Veterinarian, Philadelphia Zoo

Veterinary medicine as a career option, and the multiple avenues of professional practice that a veterinarian may pursue. Preparation for a career in veterinary medicine, including course work guidance, majors, etc. -- it may not be what you think. Career paths and opportunities in veterinary medicine. Costs, benefits and "ROEI"/return on educational investment.

How to Effectively Communicate Risk During a Global Pandemic

Amber Liggett, Public Information Officer, Pennsylvania Department of Health

The COVID-19 pandemic turned our worlds around since March 2020. With no end in sight, COVID-19 fatigue has set in, but the high risks of this virus must still be conveyed as the novel coronavirus pandemic evolves. Learn the tips and tricks to constantly communicate risk during an ongoing global pandemic.

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

Erin Moss, Ph.D., Professor of Mathematics, Millersville University

Curiosity and an active mind can make choosing a college major difficult, but they are actually great assets for establishing an interesting and meaningful career. As a professor of mathematics education, I'm more than just a teacher--I get to be a writer, a designer, a performer, and an advocate. The diverse experiences I gathered on my way prepared me to take full advantage of the opportunities this career provides to continue learning and explore new passions.

Transportation Engineering: Connecting People from A to B

Jennifer Warner Hayman, P.E., Civil Engineer – Traffic, Michael Baker International

Don't believe the hype! Transportation engineering is about so much more than just designing for cars. Transportation engineering is all about designing for people... and people use many different ways to travel and transport their good from A to B: cars, buses, planes, trains, walking, biking, and more. Come learn about the exciting career of a Transportation/Traffic Engineer - both what it's like to work in the field and how to get into this rewarding career.