Presenter Synopses

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

**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 per day.

**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.

**“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.

**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.

**Girl Power…Energy Engineering!**
Jeannie Sikora - Energy Engineer, CLEAResult

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.

**Exploring the Nuclear & Utility Industry**
Shauna Stoy – Sr. Emergency Preparedness Specialist/Sr. Project Manager, Exelon Generation/PECO

In this session, we’ll explore the journey of a young female making her way from a student interested in Meteorology & Earth Science to her career as an Emergency Preparedness Specialist in the Nuclear Generation and Electric Utility field. We’ll also delve into other opportunities in the industry and the skills to land a job in the industry.
The 21st Century Zoo: Join the Mission to Save the World
Marina Haynes, General Curator, Elmwood Park Zoo

Many people have strong opinions about zoos without understanding how they have evolved and the mission of modern zoos. The 21st Century zoo is so much more than recreation and animal viewing – it is about teaching and inspiring people how to help animals and the natural world. Learn about the surprisingly diverse and unique jobs available in the zoo world and how to break into this highly competitive field. Explore the possibilities of having a career where the goal is to preserve the planet and its animals for future generations!

Adventures in Conservation: Leverage Your Network for Impact
Lydia Y. Martin, Environmental Educator

In a fast-paced changing landscape, sharing a passion for nature and everything we learn in the natural sciences occurs throughout our lives. We motivate all ages to be inquisitive and inspired to make change happen. This ability to engage a diverse audience prompts active stewardship in support of sustainable communities and long term natural resource protection. Be willing to leverage your network of volunteers, partners, and connections to make a broad impact in your community.

College Professor: What to do When You’re Interested in Everything
Erin Moss, Ph.D., Associate Professor of Mathematics, Millersville University

Curiosity and an active mind can make choosing a college major difficult, but 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 exploring new passions.

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.

Is it Me?? Connecting Immunity, Autoimmunity, and Cancer
Jean Labriola Scholz, Ph.D., Senior Research Investigator, University of Pennsylvania

The ability to distinguish self from non-self is a key feature of the immune system. But is a tumor part of the body, or is it foreign? This presentation will provide an overview of the cancer-immunity cycle and emerging immune-therapeutic approaches for treating disease.
SESSION 3 (12:40 to 1:10 p.m.)

All Conference Attendees will gather in the SMC Multipurpose Room (Room 114) for the presentation of Forging Frontiers—Women Leaders in STEM

Kate Campbell Stevenson will present her solo performance, Forging Frontiers—Women Leaders in STEM featuring a portrayal of marine biologist, author, and conservationist, Rachel Carson. See Rachel Carson, whose book Silent Spring and other writings are credited with advancing the global environmental movement, brought to life!

SESSION 4 (1:20 to 1:50 p.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).

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.

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.

You’re a What?...Genetic Counselor
Rachelle Gehr, Licensed and Certified Genetic Counselor, Lancaster General Health Penn Medicine

Never heard of genetic counseling? Do you like to work with people, enjoy math and science, and are you looking for a career to combine all of these? Come to this presentation to learn what we do as genetic counselors and what is required to become a genetic counselor. Hear some sample cases and learn why we love our jobs.

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.
Engineers Are Women, Too!
Joan Greenslade, Manager: Testing & Analysis Laboratory, Armstrong World Industries


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