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.

**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.

**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!

**Dirt to Disasters: A Unique Career Path from Geology to Emergency Management**
Laura Kratz, Emergency Management Specialist, Tetra Tech, Inc.

I have a dream job. But three years ago, I didn’t even know this job existed. Emergency management is like that – sometimes you don’t know what you don’t know. In this session, I’ll describe how I went from exploring streams to preparing for disasters, and how the unknown can yield the most reward opportunities.

**How Mathematical Models are used in Biology and Ecology**
Baoling Ma, Ph.D., Assistant Professor of Mathematics, Millersville University

In this talk, I will use several examples to demonstrate how mathematics can be used in biological and ecological sciences. I will also briefly introduce my career path to become an applied mathematician and college educator.
**Opportunities for Women in Physics**  
Natalia Dushkina, Ph.D., Professor of Physics, Millersville University

A mother of two and a Ph.D. in Physics with twenty-six articles in professional journals and twenty participations in scientific conferences will share with you her experience of being a woman in Physics, plus a few funny stories from her six-year experience in Japan.

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**Labs! Demos! The Excitement of Teaching Chemistry**  
Theresa Holton and Amy Thompson, Chemistry Teachers, Hempfield High School

We will discuss the education requirements of becoming a teacher, the day-to-day routine of a teacher, the perks and pitfalls of teaching, and why we became teachers. We will also show some video clips of demos.

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**Adventures in Conservation: Leverage Impact through Education & Engagement**  
Lydia Martin, Director of Education and Engagement, Lancaster County Conservancy

Environmental education and outreach combines sharing a passion for nature and everything we learn in the natural sciences to 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. Know when to say yes to leverage your network of partners and community connections to make a broad impact in your work.

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**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.

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**Making Sense of Your Genes: Genetic Counseling**  
Stacy Shoup, Genetic Counselor, Penn Medicine at Lancaster General Health

Learn about the field of genetic counseling – What are genetic counselors and how do they help individual and families navigate the complex world of genetics. An overview of the profession and training requirements will be discussed.
The Green Revolution of Polymer Chemistry: From Solar Cells to Biodegradable Plastics to Biomimetic Adhesives
Kathryn Allen, Ph.D., Assistant Professor of Chemistry, Millersville University

Polymers are amazingly LARGE molecules that have applications in everything from plastics to cement and from glue to solar cells. This talk will feature the fabulous applications of polymers in a green (environmentally friendly) context and will introduce students to the myriad of career options available to a polymer chemist.

Safely Building the Future
Stacey Darrohn, Environmental Health & Safety Director, Turner Construction Company

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

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


“Nuclear” Does Not Have to be a Scary Word
Paula Mancini, Program Director, 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.

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.
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 Associates, 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).

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.

What is Cancer Research?
Heather Lehman, Ph.D., Assistant Professor of Biology, Millersville University

On a career path filled with indecisiveness about which direction to take, cancer research became my passion. In this talk, I will discuss my career path to be a cancer biologist and professor, and what it means to “research cancer.” We will also explore what it means to make a difference in people’s lives through our excitement for STEM. This will be a very open and interactive discussion!

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.

Careers in Immunology
Jean Labriola Scholz, Ph.D., Senior Research Investigator, University of Pennsylvania – Perelman School of Medicine

I will introduce the field of immunology with four words and a graph that you, the audience, will help me build. Then I will outline and provide starting points to explore the many possible careers that involve immunology, ranging from the design and production of vaccines or cancer immunotherapy to clinical occupations such as allergy/immunology nurse, clinical research associate, veterinarian, rheumatologist, and many more. This will be an interactive session, so please bring your questions! Handout provided.

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