Expanding Your Horizons
What's in it for me?

The choices you make in school today will affect your career opportunities for years to come. Come find out about exciting careers from women who work in science, technology, engineering, and math fields in our part of Washington. Let us show you the possibilities!

Schedule

Saturday, March 7, 2015

8:00 a.m.–9:00 a.m.  Registration
9:00 a.m.–9:15 a.m.  Introduction
9:30 a.m.–10:20 a.m. Workshop Session A
10:35 a.m.–11:25 a.m. Workshop Session B
11:40 a.m.–12:30 p.m. Workshop Session C
12:45 a.m.–2:30 p.m.  Closing session, lunch (provided) and giveaways

The Information Expo is a great opportunity to talk with workshop presenters and gather information about STEM opportunities in your area or online.

Central Washington University’s Student Union and Recreation Center (SURC) is located on North Chestnut Street, north of Black Hall. It is the largest and newest building on campus, where the food court and Wildcat Shop are located. The balcony is on the second floor in the SURC. Parking is available in the lots around the SURC and the Science Building. Buses may unload students in the I-15 parking lot located on 11th Ave, a block north of University Way, and then park in any available lot. Look for the EYH bus sign. Transportation is not provided by CWU.

Publicity Release Details: I give my consent for the CWU EYH Conference to use photos, videos, and/or audiotape that may include my child for the purpose of publicizing and promoting Expanding Your Horizons and CWU. I understand that the images or voice recordings may be published in newspapers or magazines, on the World Wide Web, or be broadcast on television or radio.
1. It's Getting Hot in Here! 
Brenda Larsen, Fire Marshal
The flames may be out, but the investigation is far from over. Learn from expert investigators as you participate in interrogations into the truth behind the blaze!

2. A Slice of Plant Life 
Jenny Dechaine, Biologist
Have you ever met a plant with its own camouflage or one that moves when you tickle it? Take a trip to our own tropical rainforest, the CWU greenhouse, to explore the many fascinating ways that plants survive in the wild.

3. Ancient Forests 
Meghan Walsh, Geographer
Ever wonder what the inside of a tree looks like? Want to find out how trees move without looking at it? Come explore the world of Paleoeoclogy and learn all about ancient forests and how they are studied by looking at tree rings and pollen.

4. Draw Spirograph Stars with Computer Programming! 
Kathy Moore, Computer Scientist
Experience the exciting scientific and artistic aspects of computer programming! Learn to draw pictures by typing commands into a computer, instead of drawing the pictures yourself. Draw stars similar to ones you might create with Spirograph! See what other scientific and artistic creations can be drawn, such as a water molecule and a picture of a Mickey Mouse!

5. Probabilities Tour 
Yvonne Chueh, Actuary
CONGRATULATIONS! You’ve been hired to help manage the U.S. tour of a hot new band, The Probabilities. Use your probability smarts and choose your tour cities wisely: Every U.S. tour of a hot new band, The Probabilities. Use your probability knowledge to make smart decisions and avoid losing money. Are you ready to begin?

6. Tsunamis 
Bre MacInnes, Geologist
Can you swim faster than a tsunami? Where do we expect them to occur? How can we predict them? Learn about tsunamis and what you can do if one occurs.

7. Dinosaur's! 
Lisa Ely and Jana Mabry, Geologists
What did dinosaurs eat? Did they waddle or run? Analyze fossil dinosaur tracks to solve a mystery about these ancient creatures.

8. Volcanoes 
Wendy Bohrson, Geologist
What makes volcanoes blow their tops? How fast can lava move? Create your own volcanic eruptions and find out!

9. Earthquakes 
Keegan Fenger, Geologist
Why does the earth shake? Make your own earthquake and figure out which buildings survive the shaking.

10. Fan that Fire or Not? 
Melissa Iotolo, Paramedic/Firefighter
Be prepared to put on firefighter gear and experience the basics of what it takes to become a firefighter/paramedic. We'll be outside so bring your coat!

11. Keeping the Lights On 
Sarah Davis & Carol Luer, Electrical Engineer
Ever wonder what it takes to have electricity available at the exact moment you flip the switch? Come discover the ways electricity is made and how it is delivered to your home or school.

12. Food; Your Body's Fuel 
Emily Shaw, Nutritionist
Cars run on gas, your body runs on Food! Come learn about Nutrition and how the food you eat affects your body in good ways and bad.

13. Twisted in Mathematical Knots 
Brandy Wiegens, Mathematician
Mathematical knots can often be reduced to smaller and easier to work problems. Come explore how the most haunting tangles become trefoils and loops.

14. Engineering it up! 
Alexandra Gramling, Mechanical Engineer
Have you considered a career as an engineer? Come and let me share with you the different opportunities available to us!

15. Let's Talk Science 
Allyson Bogan-Klyve, Chemist
Come join us for activities that help communicate important ideas in science and are designed to help people learn. This workshop will be especially helpful if you are considering being a teacher.

16. Medicine Matters 
Krista Summers, Family Doctor
Have you considered a career in medicine? Come and join me for a hands-on exploration of the medical field which is sure to get your heart pounding.

17. POLICE LINE: YOU COULD CROSS IT! 
Jennifer Maugethe, Ellensburg Police Detective
Join in on learning what it means to be a police woman. Learn how to catch the bad guys with C.S.I. and how to put the cuffs on. You may also find out just how heavy our police gear can be.

18. The Wide World of Pharmacy 
Erika Smith, Pharmacist/Community Health
There is a lot going on behind the scenes at your pharmacy and at the center of it all is the pharmacist.

19. Skins & Skulls Stumper 
Tiffany Bishop, Yakima Basin Environmental Education Program
Learn how biologists gain information about animals based on clues including the shape of the skull and placement of the eyes, then use your finely honed skills to determine information about your mystery animal.

20. Chemistry and Growing Crops: How do they Mix? 
Brittany Holmes, Chemist
Most crops are treated with pesticides and other chemicals at least a few times during a growing season, as well as after harvest. These chemicals how allow farmers and food distributors to produce crops in unsuitable areas, increase crop yields, preserve product quality, and extend shelf life. However, they can also pose a risk to the consumer if used improperly or too often. To ensure consumer safety and reduce exposure to these chemicals, state and federal residue monitoring programs (such as WSDA’s Food Safety or USDA’s Pesticide Data Programs) routinely analyze samples for hundreds of chemical residues. In this session, as a Junior Chemist for the WSDA and USDA you will use your critical thinking skills, the scientific process, and analytical chemistry to extract, separate, and identify different chemical residues in a food sample.

21. Mysteries of the Human Body 
Yvonne Chueh, Actuary
Help solve a crime, sequence DNA, explore how names are used in different cultures, or study monkeys’ and apes’ body postures! Anthropologists study other cultures, learn about extinct and living humans, and help identify human remains.

22. Got Lactase? 
April Binder and Lucinda Carnell, Biologists
People who are lactose intolerant don’t; they are missing an enzyme (lactase) that breaks down lactose sugar because of defects in their DNA. We will show you how scientists study enzymes, genes (DNA) and test for diseases like lactose intolerance.

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24. A Glimpse into the Life of a Veterinarian 
Samantha Taylor, Veterinarian
Come and learn about what it takes to be a vet. With me, get a glimpse into what we do on a daily basis and learn how to check an animal’s vital signs!