

Registration Information

How to select workshops

Choose three workshops from each column: A, B and C, for a total of nine choices for workshops. We will do our best to honor your request but since this is not always possible, you may have a totally unexpected opportunity.

Parents in Classrooms

During the conference, parents should plan to attend the parent workshop (or the time could be used to explore local shopping and restaurants). We aim to minimize all distractions in the classrooms; we also ensure that all adults in the workshops have gone through background checks. If a parent needs to accompany their daughter in the workshops, we ask that they receive advanced permission from the organizers.

Parent pickup

Please pick up your student at 2:10 p.m. in the Gym, Bldg. 31.

Fees

The conference fee is \$15. This includes all materials, conference T-shirt, and a light lunch (students may wish to bring additional food with them). Parent Workshop is an additional \$15. All fees are non-refundable. Scholarships are readily available thanks to funding from our sponsors.

How to register

Pre-registration is required for both students and parents. There will be no on-site registration. Register online at www.thurstonEYH.org with payment via Paypal or credit card. Or register via mail, sending this completed registration form along with your check to *Expanding Your Horizons*, P.O. Box 4254 Tumwater, WA 98501. Register as soon as possible; student and parent workshops fill up on a first come, first serve basis. The deadline to register is March 3. Confirmation will be made by e-mail only.

Additional conference materials

An information packet will be given to each student on the day of the conference.

Special Accommodation

To request special accommodations call Joy Ramstack Hobbs 651-895-7673 or Kelly Green 360-338-8020.

Student Registration Form

Check box if scholarship is requested

Check box if you are a returning EYH participant

Name: _____

Phone: _____

Address: _____

City: _____ Zip Code: _____

School: _____ Grade: _____

Indicate your first nine choices for workshops by putting the workshop letter and number in the blanks provided.

Column A #1 _____ #2 _____ #3 _____

Column B #1 _____ #2 _____ #3 _____

Column C #1 _____ #2 _____ #3 _____

Parent's E-mail: _____

(for registration confirmation)

Parent Workshop Registration Form

Check box to request a scholarship

Check here if special assistance is needed

Name: _____

E-mail: _____

We need your help. Let us know if you are interested in joining EYH to help plan future conferences by printing your name and contact information here:

Register online at www.thurstonEYH.org

Photos and video will be taken during the conference. These materials may be used for promotional purposes. Please contact Kelly at chair@thurstonEYH.org if you have any concerns.

South Puget Sound Community College

2011 Mottman Rd. SW, Olympia, WA 98512

Campus map: www.spscc.edu/map-and-directions

Day of event contact number: **651-895-7673** or **360-338-8020**

Directions to Main Campus

From I-5

- North or South
- Take Exit 104
- Take first exit on RIGHT - Cooper Point Rd. Crosby Blvd.
- From exit ramp turn LEFT
- At second light, turn RIGHT onto Mottman Rd.

From Highway 101 from Shelton/Aberdeen

- Take Cooper Point Rd. Crosby Blvd. Exit
- From exit ramp turn RIGHT
- At light turn RIGHT onto Mottman Rd.

Main entrance is the first left off Mottman Rd. Conference signs will guide you to parking and the Gym Building (Bldg. 31). Please pick up your student at 2:10 p.m. in the Gym.

2018 Conference Program

SCIENCE, TECHNOLOGY, ENGINEERING & MATH CONFERENCE FOR GIRLS IN 6TH, 7TH & 8TH GRADE

SATURDAY MARCH 10, 2018

AT SOUTH PUGET SOUND COMMUNITY COLLEGE

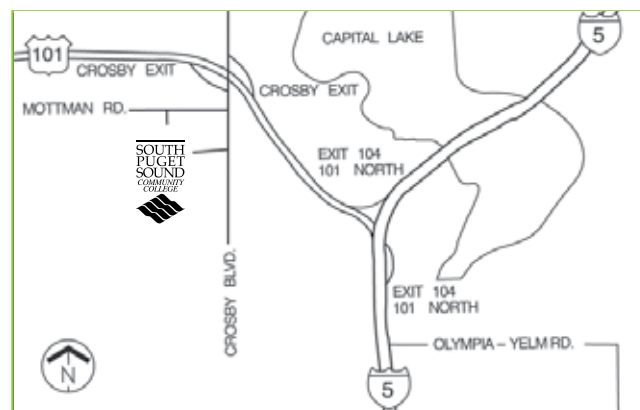


Phone: Joy Ramstack Hobbs 651-895-7673
or Kelly Green 360-338-8020

Web: www.thurstonEYH.org. Watch for updates!

E-mail: info@thurstonEYH.org

Find us on Facebook: [Expanding Your Horizons Thurston County](https://www.facebook.com/ThurstonEYH)
www.facebook.com/ThurstonEYH



Organizing Committee:

Susie Bautista
Sarah Clarke
Leatta Dahlhoff
Nancy Deakins
Mary de Jesus

Kelly Green, Co-chair
Christine Hoffmann
Alexandra Johnson
Theresa Kimball
Katya Miltimore

Gwen Morris
Kelsea Overman
Kylie Phillips
Joy Ramstack Hobbs,
Co-chair

Lauren Rodriguez
Roshawna Sloan
Samantha Soto

The school district is not a sponsor of this event and assumes no responsibility for it.

Conference Presenting Sponsor:



Conference Silver Sponsors:

STUDENT WORKSHOP CHOICES

COLUMN A

A-1 Balance. It’s not about standing still... it’s about not falling off!

Experience how your brain and body work together to create balance in this highly interactive session led by a dynamic mother-daughter duo. Kim Bennett, Professor & Physical Therapist, University of WA Dept of Rehabilitation Medicine and Owner, Liberty PT; Thomasina Cooper, Executive Assistant, Thurston County Auditor

A-2 Hairs, Fibers, and Pajamas?

Let’s use microscopes to get a look up close, and flame tests to explore properties of several different types of fibers and hairs as we ponder the role of science in pajama fabric choice. Rebecca Sunderman, Ph.D., Member of the Faculty in Chemistry, The Evergreen State College

A-3 A Breath of Fresh Air - Weather, Air Quality and You

What is air pollution and where does it comes from? Think you know? You might be surprised. Also learn how weather affects air quality and what you can do right now to keep your air clean. Odelle Hadley, Senior Air Monitoring Specialist, and Lauren Whybrew, Engineer 1, Olympic Region Clean Air Agency

A-4 Robots Can Line Dance

Become a creator of technology not just a user. Learn how to use simple computer programming to make domobots synchronize their movements into a wave or dance routine. Jessica Wade, 8th Grade JAMS & Robotics Teacher, Jefferson Middle School

A-5 The Amazing World of Polymer Chemistry

What do slime, nylon, rubber, and Styrofoam have in common? They are all polymers! Here you can learn about, and make all different kinds of polymers. Dr. Gal Aviram-Keren, Professor of Chemistry & Undergrad. Research Students, South Puget Sound Community College

A-6 It’s Gotta Taste Good

Flavor Chemists use their knowledge of chemistry & botanicals, (and their imagination), to create flavors that make our foods taste good. We’ll work together to make flavors and dream up new food products. Susie Bautista, Flavor Chemist, FlavorScientist, and Ellen Nelson, Manager Food & Product Safety, Callisons

A-7 Visualizing DNA

DNA extraction is an essential step in many molecular biology lab workflows. In this program, everyone will have the chance to perform their own DNA extraction. We will also be discussing different methods commonly used for DNA extraction, and some background regarding the molecule itself.

Telissa Wilson, Biologist, WA State Dept. of Agriculture

A-8 Chocolate Asphalt

How is a road made? What properties are important? Learn about road-building and blacktop paving by simulating the process with chocolate pavement. Warning: nuts will be used and eaten during the course of this workshop.

Nanette Graham, P.E., Director, Capital Planning & Development at WA State Dept. of Corrections, Lindsey Handel, Urban Transportation Engineer and Tonya Price, Finance Specialist, Federal Highway Administration

A-9 Truth, Justice, and the Forensic Way

You will learn about crime scene investigation, DNA, evidence collection, and fingerprints. Participants will have the opportunity to take their own fingerprints and utilize some of the equipment that forensic scientists use to help solve crime. Angela Hilliard, MFS, CLPE, Forensic Scientist 3/Latent Print Examiner, WSP

A-10 Our Smallest Workers

Join us for a fun workshop about how the LOTT Clean Water Alliance cleans and recycles wastewater. Women working at the treatment plant will talk about their clean water jobs and how they got started in their career. Then put on your lab coat and gloves for a hands-on microscope lab to see some cool microorganisms up close!

Amber Smith, Education Program Manager, Laurie Pierce, Operations & Facilities Director, Michelle Barnett, Engineering Tech/Construction Manager, Terri Prather, Process Control/Environmental Compliance Supervisor, Meghan Feuk, Water Quality Analyst All with LOTT Clean Water Alliance

A-11 Beat the Heat!

The concept of heat transfer is crucial in engineering design. Come learn about the three modes of heat transfer, conduction, convection, and radiation and why they are so important!

Shelbie Davis, M.M.E., Mechanical Engineering Adjunct Faculty, Saint Martin’s University

A-12 Disease Detectives

Do you like a good mystery? Well, an epidemiologist’s job is all about solving mysteries, but instead of figuring out “who did it” like a police detective would, they figure out “what caused it.” Come use your critical thinking and logic to investigate what it takes to protect the public’s health and track down an outbreak. Elisabeth Long, Epidemiologist, WA State Dept of Health

A-13 The Sky is Falling

This workshop is really out of this world—learn about asteroids, comets and meteors. Where do they come from? What are they made of? What happens when they reach planet Earth? You will see sublimation in action and check out a piece of a meteorite.

Kathleen Ensenat, Professor of Physics and Astronomy, South Puget Sound Community College

COLUMN B

B-1 Acids, Bases and Shell Building Races

Join PSI biologists as they break down the complexities of ocean acidification. Act out changes in ocean chemistry that can leave oysters racing to snatch up valuable shell building components. Play the pH guessing game, change water pH with dry ice, and test what happens to shells in an acidic environment. Katie Houle, Research Biologist, Pacific Shellfish Institute

B-2 Forage Fish and their Importance to the Puget Sound Ecosystem

During this session we will talk about forage fish as an important piece of the marine food web and students will learn sampling and lab techniques used to identify forage fish eggs.

Raquel Crosier, Legislative Liaison and Hannah Faulkner, Nearshore Biologist, WA Dept. of Fish & Wildlife

B-3 Show Me the Money

Spend a fun and interactive workshop learning how to manage your money.

Suzanne Klenk, Community Relations Coordinator & VAULT Instructor, WA State Employees Credit Union

B-4 Eyes Under Puget Sound

Ever wonder what types of creepy crawlies lurk in the mud beneath the waters of Puget Sound? Learn how marine scientists identify theses fascinating marine invertebrates. Use a microscope and get up close and personal with worms, sea stars, clams, crabs and more!

Dany Burgess & Angela Eagleston, Marine Taxonomists, WA State Dept. of Ecology

B-5 Psst... did you know that cavities are contagious?

Did you know that a “clean” tooth has between 1,000 to 100,000 bacteria living on each tooth surface. Explore the fascinating world of dentistry and oral health. Learn some dental anatomy and how dentists find and treat a variety of oral health issues.

Caitlin Gomez, DDS, & Khealynn Harris, DDS, Dentists, Sea Mar Community Health Centers

B-6 Chemistry in Art

Come explore the connection between chemistry and art. We will investigate the chemistry behind photography, color, and how pigments interact with different media. You will make a piece of art to take home. Marie Dunn, Professor of Chemistry & Undergraduate Research Students, SPSCC

B-7 Ecology to the Rescue!

Learn how science is used to make decisions in the world of conservation. Explore the relationships between plants, animals, and humans and practice your restoration design skills!

Mary Birchem, AmeriCorps Restoration Coordinator, Capitol Land Trust

B-8 Pick Your Poison- Intro to Forensic Toxicology

Have you ever wondered what a forensic toxicologist actually does? Or what discoveries you can make as a forensic toxicologist? Come find out about what we do at the WSP Toxicology Lab and learn about one of the oldest drugs: alcohol!

Lindsey Knoy, Forensic Scientist, WA State Patrol Toxicology Laboratory

B-9 A Day in the Life of a Veterinarian – Scruffy the Dog

Gown up and scrub in for surgery! Learn to draw blood, review X-rays and diagnose real patients. Take a whirlwind experience through the life of a Veterinarian.

Dr. Amy Joynt, Veterinarian - Hawks Prairie Veterinary Hospital

B-10 Telling your Story... with Data!

You’ve learned all the science, now you want to share it, teach it, present it, or show your results. Microsoft Word and Excel can get you there! This is not your boring typing class; Enter, calculate, and format data in Excel and format text as well as insert graphics and clip art for flyers in Word!

Karen Hall, Projects and Facility Manager, Building Industry Association of WA

B-11 Get Out of My Hair – Toxins in Personal Care

Did you know that what we put ON our bodies gets INSIDE of our bodies? Learn about the health and safety concerns of common ingredients in personal care products like soap, shampoo, lotion, and makeup and how to find products that use safer ingredients. We will make an all natural lip balm and everyone gets to take one home! Elisa Sparkman and Kaysha Fry, Education & Outreach Specialists - Thurston County Public Health and Social Services

B-12 Rescuing and Rehabbing Wild Birds

What happens when someone finds an injured or orphaned bird? Learn how wildlife rehabilitators capture and restrain birds, perform physical exams, administer fluids, apply splints and bandages, review x-rays, run diagnostic tests, and condition birds for release. Warning: Bird carcasses will be used during this workshop.

Stephanie Estrella, Wildlife Rehabilitator, Raindancer Wild Bird Rescue

B-13 Fun with Microbes

Come join me in swabbing everyday surfaces to identify and watch their growth on petri dishes!

Marjorie Howerton, Assistant Lab Technician, Biology/Microbiology Dept.,South Puget Sound Community College

COLUMN C

C-8 Spark the Heart!

Can you revive a dead heart? Use CPR and the latest emergency medical tools to treat a cardiac arrest. See a demonstration of an Automatic External Defibrulator (AED).

Cori Spotts, Firefighter/Paramedic and Jessica Johnson, Firefighter/EMT - Lacey Fire District 3

C-9 Money Talks!

Is your money always saying “Goodbye?” In this interactive workshop, you will learn the basics of budgeting, as well as helpful tips on saving money. Start saving now and your wallet will thank you! Amanda Stevens, Community Development Manager - TwinStar Credit Union

C-10 Chemistry in Your World: Redox Reactions

Redox reactions are occurring everywhere in the world around us, and power everything from our bodies to our phones. Students in this session will learn the about the fundamentals of redox chemistry, and the importance of this chemistry to our everyday lives. This will include an exploration of some of the many applications of this chemistry, including electroplating of jewelry and other materials. Brandy Fox, PhD, Assistant Professor & Chemistry Students, Saint Martin’s University

C-11 You Just Won \$10,000!!!

What if you just now won \$10,000? What would you do with it? What could you do with it? What is \$10,000 really worth anyway? No matter how much money you make or how old you are, it is important to understand how to manage your finances. Come join us as we engage in interactive, hands-on discussions about money and budgeting!

Crystal Flaten, Financial Examiner, WA Dept. of Financial Institutions

C-12 Girl Power Rocks!

We will share in art, an opening circle with ice breaker, meditation and breathing exercises with sound healing, gentle yoga, positive affirmations and share about empowerment, self-care tools and end with a closing circle. Girl Power Rocks! Kristen Rubis, Executive Director, Empowerment 4 Girls

C-13 Anyone can be a video game designer!

At this interactive workshop, you’ll work in teams to learn how to conceptualize and create your very own video game using the Bloxels Gameboard and app. Sara White, Timberland Regional Library

C-14 Real Life Nursing

They talk, they blink, they do everything but walk. Explore the use of simulation in healthcare education. Talk to our life like models and see just how real they are.

Madigan Army Medical Center

C-1 The Teen Super Brain

Learn how YOUR brain works, practice brain tricks to remember to increase focus and strengthen memory. Super fun interactive workshop!

Linda Terry, Brain Trainer/STEP Founder, STEP (Sharing Teens and Elders Project)

C-2 Radiation Myth Busters

In 1898 Marie Curie, a scientist, discovered a new mysterious highly radioactive element which glowed in the dark. They named it Radium. See the glow. Find out what inspires modern mythology like “Spiderman” The “Teenage Mutant Ninja Turtles,” and the “Hulk.”

Morgan Munera, Radiation Health Physicist, WA State Dept. of Health

C-3 Give Yourself a Hand

What happens when you injure your hand? How does the hand work? How to check on whether or not a tendon has ruptured. The human body is amazing. Laurel Neff, Family Physician, US Army

C-4 Dental Assisting - The Art of Teeth

Explore taking dental x-rays, molding dental composite filling material into sculptures, and making thumb molds with dental impression material.

Dr. Dana Larson, DDS, Dental Assisting Program Director and Evelyn Harry, EFDA, CDA, AAS, Clinic Dental Assistant and Student Supervisor - South Puget Sound Community College

C-5 Your Body’s Wall of Protection

Did you know that hair and nails are classified as appendages of the skin? Explore the various functions of the skin and how it provides protection for the body by making natural remedies to prevent and/or treat acne and pimples.

Gwen Morris, Clinical Compliance Auditor, Cas Of Cary, Inc. & Donna Arnold, Consultant

C-6 Computer Guts

Have you ever wondered what is inside your computer? Or how the systems inside your computer work together to make everything your computer does possible? We’ll be taking apart some desktop computers and exploring their guts.

Paula Yost, CTE Teacher – Computer Science, Tacoma Public Schools

C-7 What’s Your Carbon Footprint?

How much of your personal greenhouse gas emissions are due to where you live?

How much are due to what you eat, or what you buy? Measure your own carbon footprint, and find out how to make it smaller.

Donna Albert, P.E., Energy Engineer & LEED Accredited Professional - WA State Dept. of Enterprise Services

PARENT WORKSHOP: ADVICE TO HELP IGNITE YOUR DAUGHTER'S FUTURE

Our 2018 conference offers a workshop that gives practical advice for parents as they guide their daughters on the journey from middle school to high school to college & career. These are critical and exciting times so we highly encourage your participation in the parent workshop!

Please register early – this workshop fills to capacity quickly!

The Agenda:

College Planning with SPSCC

South Puget Sound Community College staff will share free community resources on campus, academic and non-academic ways to prepare your child for higher education, college funding source options, and dual enrollment opportunities in high school.

Brains, Bodies & Behavior: how to help our daughters grow during middle school.

Bombarded by peer expectations about grades, clothes and choices, girls often feel compared and confined in middle school. Come hear parent coach Emily McMason talk about how we can support girls’ growth during these formative years.

2018 Workshop Schedule		
TIME	STUDENTS	PARENTS
9:00 – 9:30	Check-in/Registration (Gym, Bldg. 31)	
9:30 – 9:50	Opening Ceremonies (Gym, Bldg. 31)	
10:00 – 10:50	Workshop 1 (Various)	College Planning, Part 1
11:00 – 11:50	Workshop 2 (Various)	College Planning, Part 2
12:00 – 12:30	Break and Light Snack (Gym, Bldg. 31)	
12:40 – 1:30	Workshop 3 (Various)	Workshop with Emily McMason
1:40 – 2:10	Keynote Presentation by Dr. Erika Nelson, Wrap Up and Prizes (Gym, Bldg. 31)	
2:10	Please pick up your student (Gym, Bldg. 31)	