

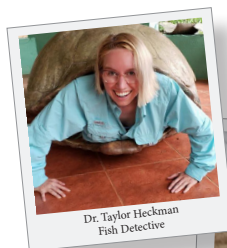
IT'S FREE! GREAT EXPLORATIONS 2023 YOU BELONG HERE

A HANDS-ON SCIENCE, TECHNOLOGY, ENGINEERING, ARTS & MATH ADVENTURE
FOR ALL 5TH - 7TH GRADE GIRLS AND BOYS.

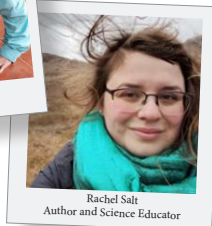
SATURDAY, MARCH 11, 2023

Whitman College Campus • Cordiner Hall Lobby - Corner of Boyer and Park
Student check-in 8:20-8:50 am - Event 9:00 am - 2:40 pm

25+ WORKSHOPS



Dr. Taylor Heckman
Fish Detective



Rachel Salt
Author and Science Educator



You Belong Here
STEAM for All

KEYNOTE ADDRESS



Dr. Taylor Heckman

One of the things I enjoy about my job now is how diverse it is. There is something to interest anyone who cares about the health of the sea and the creatures who live there, both as a natural resource and as a food source.

I grew up in Hawaii so the sea and its inhabitants have always been a part of my life. I turned that interest into a career that lets me travel the world exploring the interactions between marine biology and microbiology. I also branched out into other jobs that focus on fish health and its connection to ocean/planetary health.

I currently work at the University of California researching infectious diseases in aquatic animals. I am focusing on the diversity, causes and effects of fish disease, and development of vaccine and control strategies.

SPECIAL PRESENTER

Rachel Salt is a science communicator who is very curious about plastic pollution. She is the author of two books, *The Plastic Problem* and *Your Plastic Footprint*.



Previously, she worked as the head writer and researcher for *AsapSCIENCE*, a YouTube channel dedicated to science education with over 10 million subscribers.

Currently, Rachel is the Communications Manager for ScienceUpFirst, an initiative of the Canadian Association of Science Centres. She has a Master's degree in Environmental Biology from the University of Guelph in Ontario, Canada.



CONFERENCE GOALS

To provide all 5th through 7th grade students with an informal, hands-on experience with careers that utilize science, technology, engineering, art and math.

To provide an opportunity to meet and form women personal contacts with professionals in these exciting careers.

www.gewallawalla.com • email: gewallawalla@gmail.com

SCHEDULE

Saturday, March 11, 2023

Cordiner Hall Lobby - Whitman Campus

8:20 - 8:50 am	Student Check-in (Cordiner Hall Foyer)	12:30 - 1:30 pm	Workshop B (Science/Olin Hall)
9:00 - 10:15 am	Orientation / Keynote (Cordiner Hall Foyer)	1:40 - 2:40 pm	Workshop C / Evaluations (Science/Olin Hall)
10:30 - 11:30 am	Workshop A (Science/Olin Hall)	2:40-2:55 pm	Students Escorted back to Cordiner Hall for pick-up
11:40 - 12:20 am	Break / Food*		

*A FREE lunch will be provided. Please bring your own lunch if you need special food.
Free beverages for all will be available.

ES GRATIS!

GRANDES EXPLORACIONES 2023

TU PERTENECES AQUI

una aventura práctica de ciencia, tecnología, ingeniería, artes y matemáticas para todas las niñas y estudiantes de 5.º a 7.º grado

SABADO, MARZO 11, 2023

En el Cordiner Hall el campus de Colegio Whitman

La esquina de Park y Boyer, Walla Walla

Registración del estudiante: 8:00 a 8:50 por la mañana • Evento: 8:20 a 2:40



SCAN ME

¿Habla usted español?

¿Necesita ayuda para entender esta forma? Para mas ayuda llame a Delia Gutierrez 509-730-3605

Pregunta cómo puedes asistir:

1. Pregunta a tu maestro.
2. Llama a Carol Morgan al 509-520-9977 email: GEwallawalla@gmail.com
3. Pregunta en la YWCA de WW.
4. Visita el sitio web: www.gewallawalla.com

25+

Talleres que se imparten en laboratorios y salones de clases del colegio
Ven y aprende cuál podría ser tu futuro

IT'S FREE!

**PRE-REGISTRATION IS REQUIRED
SPACE IS LIMITED!**



SCAN ME

Registration is open until March 8 or until all classes are filled.

Visit our **ONLINE REGISTRATION TODAY** to see **ALL the workshops!**

www.gewallawalla.com

Pre-Registration is required and helps us to schedule your classes and order your free lunch.
Photos will be taken during this event to be used in future Great Explorations publicity.

SPONSORS

Great Explorations in Education thanks the following sponsors for their generous support of the 2023 Great Explorations in Science, Technology, Engineering and Math Adventure

Walla Walla Public Schools • Whitman College
YWCA of Walla Walla • American Association of University Women - Walla Walla

GENERAL OPERATING SUPPORT

J.L. Stubblefield Trust • Clara and Art Bald Trust • Mary Garner Esary Trust
George T. Welch Community Grant • Yancey P. Winans Community Grant

- #01 ENVIRONMENTAL SCIENCE**
Lillian Kurzhal, Claire Harrigan
The Dynamic River
 Using a stream table, come explore the dynamic nature of a river within a watershed. See how streams move and change flow over time through different landscapes, weather, and erosion.
- #02 ASTROPHYSICS**
Moirá Gresham
Exploring Gravity: Rhythmic Rolling Marbles & Singing Black Holes
 Gravity and black holes can be mind-bending, (and space-time bending)! We'll do computer simulations of sheep in spaceships and hands-on experiments to de-mystify and learn more about astrophysics.
- #03 ENTOMOLOGY**
Heidi Dobson
Bug Science
 What are insects and what are their cool features? You will study them up-close, recognize main types, and have a chance to do some up close exploration.
- #04 PLANT BIOLOGY**
Brit Moss
Can you think like a plant?
 How are plants able to grow towards the light, send roots down, and decide when to flower all without having a brain? Use computer simulation to become a plant and learn to manage growth & seed production, while carefully balancing your use of water, sunlight, minerals, and sugars.
- #05 ENVIRONMENTAL SCIENCE**
Mary Burt
How "Green" is Your Clean?
 Learn more about the principles of "Green Chemistry" and find out just how "green" your home cleaners are by conducting chemical toxicity tests on Daphnia, a small water crustacean.
- #06 ASTRONOMY**
Andrea Dobson
Star Light, Star Bright
 Enter an extraordinary lab, become an astronomer, and cross into the universe of the stars.
- #07 MICROSCOPY**
Nancy Forsthoefel & Michelle Shafer
The Secret Garden
 Flower pollen can fly through the air and cause us to sneeze. Take a super close look under million dollar microscopes and see why pollen is an amazing grain of life.
- #08 SPACE PHYSICS**
Liz MacDonald
Snap, Crackle, Pop
 Make your hair stand on end, explore what is plasma and uncover the inner workings of static electricity. Discover how tiny particles create "weather" in space and how this affects satellites.
- #09 PHYSICS**
Peggy Willcuts
Click, Crash, Boink!
 You will get to explore the world of simple toys that use "muscle-power" for energy. Design tests, collect data, and take home a toy for further exploration!
- #10 NURSING**
Eileen Seifert
The Telltale Heart
 Lubdub, lubdub, lubdub...That sound is You! Measure pulse, temperature, blood pressure and more. What is your body saying? Understand some basic tests of health. Dissect a REAL sheep heart to see what keeps it ticking!
- #11 ORNITHOLOGY**
Jessica Hernandez
Backyard Bird BnBs
 Learn about birds in your backyard and build your own birdhouse ("BirdBnB").
- #12 3-D PRINTING**
Demetria Perkins & Nathan Paine
 21st CCLC / WWPS
Design It, PRINT It
 Learn the skills needed to design and make your own 3D models.
- #13 DENTISTRY**
Nanette Goyer
Open Wide: A Career in Dentistry
 Torn between a career in science and a career in art? Why not both? A dentist is a scientific artist!
- #14 MATHEMATICS**
Laura Schueller
Hey, That's Not Fair!
 Create ways to make fair decisions. Then put some into action to see if they worked...or was someone left saying "Hey, that's not fair!"
- #15 PLASTICS PROBLEM**
Rachel Salt - Special Guest
Korrie Beemer
Pivoting From Plastics
 Did you know that every year over 400 million tons of plastic are made? We make and waste a lot of plastic and that's a big problem. The good news is there are solutions that can help us all pivot away from plastic.
- #16 SOIL SCIENCE**
Allison Crowley
Amazing Soils-An artistic Twist on Soil Science
 Ever wonder what different types of soils exist? Learn how to identify different types of soils and then use those soils to paint!
- #17 AGRICULTURE SCIENCE**
Annie Byerley
Wonderful Wheat
 Come learn how one of the most popular crops in the Walla Walla Valley is grown and why it is so loved. Take home your own crop of wheat to watch grow!
- #18 BIOLOGY**
Taylor Heckman - KeyNote
A Small Scale Operation
 We will dive into fish form and function through guided dissections, with demonstrations of some techniques used in disease diagnostics.
- #19 GEOLOGY**
Kirsten Nicolaysen
Finding Earth's Fingerprints
 This workshop ROCKS! Read the story of volcanic rocks under a microscope. Find out how synthetic rocks become kitchen countertops. Geologists know we rely on minerals for nearly every aspect of our lives and they care for the environment, create new mineral combinations and assist in switching to green energy sources.
- #20 ART IN SCIENCE**
Amanda Evans
Balancing Act
 Use geometry, physics, and design principles to create an artwork that harnesses the power of gravity! Use gravity, lever, and balance to create a unique mixed-media artwork to take home.
- #21 COMPUTER SCIENCE**
Aylin Contreras & Kara Guizar
 21st CCLC / WWPS
Spheros, Cubelets & littleBits
 Solve everyday problems using programming logic, robotics, and circuits in this hands-on, creative workshop.
- #22 SPIN THE BEATS**
Jenny Montalvo & Sergio Orozco
 21st CCLC / WWPS
The Art or Disk Jockeying
 Learn the fundamentals of mixing music in key and keep the vibe going.
- #23 VIRTUAL REALITY**
Grace Fritzke & Sasha Soto
 21st CCLC / WWPS
Discover the Virtual World
 Experience VR, AR and Mixed Reality using VR computers and headsets, iPads/iPods, and Google Cardboard technology.
- #24 SPACE EXPLORERS**
Itzel Salazar & Alondra Lavariega
 21st CCLC / WWPS
The Space Girls
 Learn how reaching space is easy, even as a middle schooler.
- #25 FORESTRY**
Chelsea Kallery
Up in Flames
 Build a fire resilient landscape. Understand the benefits of trees. Test your skills of forest management by setting it ablaze.

**MORE WORKSHOPS AVAILABLE
 IN ONLINE REGISTRATION**

www.gewallawalla.com

See the web site for more workshops not yet confirmed when this brochure went to print.