

# ES GRATIS!

## GRANDES EXPLORACIONES 2023

### TU PERTENECE ASÍ

Una aventura práctica de ciencia, tecnología, ingeniería, artes y matemáticas para todas las niñas y niños del quinto al séptimo grado

**SABADO, MARZO 11, 2023**

En el Cordiner Hall el campus de Colegio Whitman  
La esquina de Park y Boyer, Walla Walla

Registro del estudiante: 8:20 a 8:50 por la mañana  
Evento: 9:00 a 2:55



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

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[gewallawalla@gmail.com](mailto:gewallawalla@gmail.com)

Se requiere pre registro. Nos ayuda programar sus clases  
y ordenar su lonche gratis.



SCAN ME

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### HORARIO DEL PROGRAMA

#### PATROCINADORES

Grandes Exploraciones en Educación agradece a los siguientes patrocinadores por su generoso apoyo a las Grandes Exploraciones 2019 Conferencia de Ciencia, Tecnología, Ingeniería y Matemáticas. Escuelas Públicas de Walla Walla • Whitman College • YWCA de Walla Walla Asociación Americana de Mujeres Universitarias - Walla Walla

#### APOYO OPERATIVO GENERAL

J.L. Stubblefield Trust • Clara y Art Bald Trust • Mary Garner Esary Trust George T. Welch Subvención comunitaria Yancey P. Winans Subvención comunitaria Blue Mountain Community Foundation

### DISCURSO DE APERTURA



Dra. Taylor Heckman

Actualmente trabajo en la Universidad de California investigando enfermedades infecciosas de animales acuáticos. Me estoy enfocando en la diversidad, las causas, los efectos de las enfermedades de los peces, el desarrollo de vacunas, y estrategias de control.

Una de las cosas que disfruto de mi trabajo ahora es lo diverso que es. Hay algo de interés para cualquiera que se preocupe por la salud del mar y las criaturas que viven allí, tanto como recursos naturales como fuente de alimento.

Crecí en Hawái, por lo que el mar y sus habitantes siempre han sido parte de mi vida. Convertí ese interés en una carrera que me permite viajar por el mundo explorando la interacción entre la biología marina y la microbiología. También incursioné en otros trabajos que se enfocan en la salud de los peces y su conexión con la salud del océano /planeta.

### PRESENTADOR ESPECIAL



Rachel Salt Es una comunicadora científica que tiene mucha curiosidad por la contaminación plástica. Es autora de dos libros The Plastic Problem (el problema del plástico) y Your Plastic Footprint (Tu huella de plástico)

Anteriormente trabajó como redactora principal e investigadora de AsapSCIENCE un canal de YouTube dedicado a la educación científica con más de 10 millones de suscriptores.

Actualmente Rachel es la gerente de comunicaciones de ScienceUpFirst, una iniciativa de la asociación Canadiense de Centros de Ciencia. Tiene una maestría en Biología Ambiental de la Universidad de Guelph en Ontario Canadá.



### METAS DE LA CONFERENCIA

Proporcionar a las Jóvenes de 5º a 7º grado una experiencia informal y práctica con carreras que utilizan la ciencia, la tecnología, la ingeniería y las matemáticas.

Para brindar la oportunidad de conocer y formar contactos personales con mujeres en estas emocionantes carreras.

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**Sábado, 11 de marzo, 2023**

En el Cordiner Hall el campus de Colegio Whitman

8:20 - 8:50 am .....	Registro	12:30 - 1:30 pm .....	Taller B
(Cordiner Hall Foyer)	(Science/Olin Hall)	1:40 - 2:40 pm .....	Taller C / evaluaciones
9:00 - 10:15 am .....	Orientación & Presentadora	(Science/Olin Hall)	(Science/Olin Hall)
(Cordiner Hall Foyer)		2:40 - 2:55 pm .....	estudiantes escoltados de regreso a Cordiner-Hall para que los padres recogen a las jóvenes
10:30 - 11:30 am .....	Taller A		
(Science/Olin Hall)			
11:40 - 12:20 am .....	Almuerzo /Comida*		

\* Almuerzo especiales: No podemos satisfacer necesidades dietéticas especiales. Si necesita comida especial, le recomendamos empacar almuerzo para su hija. Se proveerá agua y frutas frescas.

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SCAN ME

¿Habla usted español?  
¿Necesita ayuda para entender esto? Para más  
ayuda llame a Delia Gutiérrez 509-530-3605

1. Pregunte a tu maestro.
2. Llame a Carol Morgan al 509-520-9977  
email: [Gewallawalla@gmail.com](mailto:Gewallawalla@gmail.com)
3. Pregunte en la YWCA de WW.
4. Visite el sitio web: [www.gewallawalla.com](http://www.gewallawalla.com)

**CHECK OUR WEBSITE - [WWW.GEWALLAWALLA.COM](http://WWW.GEWALLAWALLA.COM) - FOR ANY LAST MINUTE CHANGES ON WORKSHOP OFFERINGS**

- |  |   |  |   |   |   |
|--|---|--|---|---|---|
| #01 <b>ENVIRONMENTAL SCIENCE</b><br>Lillian Kurzhal, Claire Harrigan<br><i>The Dynamic River</i><br>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.                                      | #04 <b>PLANT BIOLOGY</b><br>Brit Moss<br><i>Can you think like a plant?</i><br>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. | #08 <b>SPACE PHYSICS</b><br>Liz MacDonald<br><i>Snap, Crackle, Pop</i><br>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.                         | #13 <b>DENTISTRY</b><br>Nanette Goyer<br><i>Open Wide: A Career in Dentistry</i><br>Torn between a career in science and a career in art? Why not both? A dentist is a scientific artist!   | #18 <b>BIOLOGY</b><br>Taylor Heckman - KeyNote<br><i>A Small Scale Operation</i><br>We will dive into fish form and function through guided dissections, with demonstrations of some techniques used in disease diagnostics.  | #22 <b>SPIN THE BEATS</b><br>Jenny Montalvo & Sergio Orozco<br>21st CCLC / WWPS<br><i>The Art or Disk Jockeying</i><br>Learn the fundamentals of mixing music in key and keep the vibe going.   |
| #02 <b>ASTROPHYSICS</b><br>Moira Gresham<br><i>Exploring Gravity: Rhythmic Rolling Marbles &amp; Singing Black Holes</i><br>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. | #05 <b>ENVIRONMENTAL SCIENCE</b><br>Mary Burt<br><i>How "Green" is Your Clean?</i><br>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.   | #09 <b>PHYSICS</b><br>Peggy Willcuts<br><i>Click, Crash, Boink!</i><br>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!   | #14 <b>MATHEMATICS</b><br>Laura Schueler<br><i>Hey, That's Not Fair!</i><br>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!"  | #19 <b>GEOLGY</b><br>Kirsten Nicolaysen<br><i>Finding Earth's Fingerprints</i><br>This workshop ROCKS! Read the story of volcanic rocks under a microscope. Find out how syncretic 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. | #23 <b>VIRTUAL REALITY</b><br>Grace Fritzke & Sasha Soto<br>21st CCLC / WWPS<br><i>Discover the Virtual World</i><br>Experience VR, AR and Mixed Reality using VR computers and headsets, iPads/iPods, and Google Cardboard technology. |
| #03 <b>ENTOMOLOGY</b><br>Heidi Dobson<br><i>Bug Science</i><br>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.   | #06 <b>ASTRONOMY</b><br>Andrea Dobson<br><i>Star Light, Star Bright</i><br>Enter an extraordinary lab, become an astronomer, and cross into the universe of the stars.  | #10 <b>NURSING</b><br>Eileen Seifert<br><i>The Telltale Heart</i><br>Lububub, lububub, lububub...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! | #15 <b>PLASTICS PROBLEM</b><br>Rachel Salt - Special Guest<br>Korrie Beemer<br><i>Pivoting From Plastics</i><br>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. | #20 <b>ART IN SCIENCE</b><br>Amanda Evans<br><i>Balancing Act</i><br>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.  | #24 <b>SPACE EXPLORERS</b><br>Itzel Salazar & Alondra Lavariega<br>21st CCLC / WWPS<br><i>The Space Girls</i><br>Learn how reaching space is easy, even as a middle schooler.   |
| #07 <b>MICROSCOPY</b><br>Nancy Forstroefel & Michelle Shafer<br><i>The Secret Garden</i><br>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.   | #11 <b>ORNITHOLOGY</b><br>Jessica Hernandez<br><i>Backyard Bird BnBs</i><br>Learn about birds in your backyard and build your own birdhouse ("BirdBnB").  | #12 <b>3-D PRINTING</b><br>Demetria Perkins & Nathan Paine<br>21st CCLC / WWPS<br><i>Design It, PRINT It</i><br>Learn the skills needed to design and make your own 3D models.   | #16 <b>SOIL SCIENCE</b><br>Alison Crowley<br><i>Amazing Soils-An artistic Twist on Soil Science</i><br>Ever wonder what different types of soils exist? Learn how to identify different types of soils and then use those soils to paint!   | #21 <b>COMPUTER SCIENCE</b><br>Aylin Contreras & Kara Guizar<br>21st CCLC / WWPS<br><i>Spheres, Cubelets &amp; littleBits</i><br>Solve everyday problems using programming logic, robotics, and circuits in this hands-on, creative workshop.   | #25 <b>FORESTRY</b><br>Chelsea Kallery<br><i>Up in Flames</i><br>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](http://www.gewallawalla.com)**

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

**IT'S FREE! REGISTRATION FORM**

**ONLINE REGISTRATION PREFERRED - [www.gewallawalla.com](http://www.gewallawalla.com) The only way to see ALL the workshop options.**

**OR Cut out and return this Student Registration Form. Please print clearly!**

Pre-Registration is required and helps us to schedule your classes and order your FREE lunch. Please bring your own lunch if you need special food. FREE beverages for all will be available.

Student's First Name \_\_\_\_\_ Last Name \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Student Phone Number ( ) \_\_\_\_\_ Your favorite E-mail \_\_\_\_\_

School \_\_\_\_\_ Grade \_\_\_\_\_

Parent/Gardian Phone Number \_\_\_\_\_ Parent/Gardian email \_\_\_\_\_

*All contact information, including email, is for registration confirmation only and will be purged after conference. Due to space constraints, parents will NOT be permitted to attend student workshops. Photos will be taken at this event to be used in future Great Explorations publicity.*

**1. Workshops are for Students ONLY.**

2. Please indicate your top six different choices for workshops. Be sure to check the web site to see ALL the workshop options.

3. Put each **WORKSHOP NUMBER (#)** in the space provided below.

4. **Any questions?** Call Carol at 509-520-9977 ¿Necesita ayuda para entender esta forma? Para mas ayuda llame a Delia Gutiérrez 509-730-3605

First choice: # \_\_\_\_\_ Second choice: # \_\_\_\_\_ Third choice: # \_\_\_\_\_ Fourth choice: # \_\_\_\_\_ Fifth choice: # \_\_\_\_\_ Sixth choice: # \_\_\_\_\_



*Watch for an e-mail confirmation of your registration.*

**THREE WAYS TO REGISTER!**

**1. ONLINE REGISTRATION PREFERRED AND THE ONLY WAY TO SEE ALL THE WORKSHOP OPTIONS**

**[www.gewallawalla.com](http://www.gewallawalla.com)**

(Site is **NOT** mobile phone friendly)

**2. MAIL-IN REGISTRATION**

Must be received no later than March 8th.

Mail to: Great Explorations, Carol Morgan, 1765 Gray Lynn Drive, Walla Walla, WA 99362

**3. DROP-OFF REGISTRATION**

Must be received no later than 5:00 pm, Wed., March 8th.

Please turn in your completed form to: YWCA, 213 S. First Avenue, Walla Walla, WA 99362

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