

**GIRLS FOR STEM – EXPLORE YOUR OPPORTUNITIES  
HANDS-ON STEM CONFERENCE FOR 7<sup>TH</sup> AND 8<sup>TH</sup> GRADE GIRLS**

**REGISTRATION FORM**

Saturday, March 4, 2023

8:30 am – 12:30 pm

PLEASE PRINT CLEARLY

Students and parents must register separately to participate in the Conference.

Mail this registration form and a check for \$15 payable to AAUW Westchester Branch to:

Maria Ellis, AAUW Girls for STEM

450 W. 42<sup>nd</sup> Street, Suite 27D, New York, NY 10036

Registration confirmations will be provided by email. Registration deadline is **March 1, 2023**.

Name \_\_\_\_\_  
Last First

Grade Level (Please check one): 7<sup>th</sup> Grade  8<sup>th</sup> Grade  Parent

Home Mailing Address \_\_\_\_\_

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

Parent's E-mail (required) \_\_\_\_\_ @ \_\_\_\_\_

Parent's Telephone Number \_\_\_\_\_

School & School District \_\_\_\_\_

I certify that I am fully vaccinated for COVID-19 \_\_\_\_\_

Participant Signature – **REQUIRED**

Pictures and video of conference attendees may be taken and may be used on our website or in publications. By registering for the conference, you have given us permission to use your/your child's image and to be contacted for a follow-up study.

I grant permission for my child to attend the "GIRLS FOR STEM – EXPLORE YOUR OPPORTUNITIES" Conference.

Parent/Guardian Name (please print)

Parent/Guardian Signature - **REQUIRED**

***STUDENT WORKSHOP CHOICES***

Each student will be assigned TWO workshops. Write the names of your first FOUR choices.

\_\_\_\_\_ 1<sup>st</sup>

\_\_\_\_\_ 2<sup>nd</sup>

\_\_\_\_\_ 3<sup>rd</sup>

\_\_\_\_\_ 4<sup>th</sup>

We will make every effort to accommodate your choices. If your choices are full, we will place you in another workshop. We think they are all terrific and you may discover some great careers you had not considered before.

## STUDENT WORKSHOPS

### **Let's Take a Cell-fie**

You will never look at the vegetables on your plate the same way. What part of the plant did they come from? Which vegetables are closely related? Plants are composed of cells—what do the cells look like? Be prepared to get up close and personal with vegetables and learn how this information is helping scientists improve farming. We will virtually tour a research laboratory at Cornell that researches plant cells.

### **Slime Therapy**

Making slime is extremely fascinating and stress-relieving for everyone, but you may not be familiar with basic slime science. Slime is all about polymers just like Jell-O or plastic soda bottles. First you will make colorful slime and then squeeze, stretch, fold, or poke your slime. Making slime is a soothing, aromatic, and therapeutic experience

### **Little Organisms, Big Discoveries**

The "Little Organisms, Big Discoveries" workshop will feature the power of tardigrades (eight-legged segmented micro-animals) and how they can be used to study the environment, ecology, evolution, and human biology. Participants will use microscopy and computer science to investigate different aspects of tardigrade research such as their natural habitat, how they walk, and how our understanding of tardigrades can help us understand human diseases such as Parkinson's disease or Muscular Dystrophy.

### **From Idea to Patient's IV to CURE!**

How are elements combined in the right ways to create medicines that actually work to treat diseases? Who volunteers for and performs safety testing? Where does all the "stuff" come from (tubes, needles, pumps) to make sure patients get medicines in the right way? We will quickly explore the roles of the following: Molecular Scientists/chemical studies, Animal Studies (sometimes!), Clinical Researchers: Phases III-IV (from patient scheduler to Principal.

### **Brain Games**

Put on your thinking cap and learn all about brains. Make a model brain cell, look at animal brains, and use a microscope in our study of all the mind-boggling things a brain can do - from recognizing words and colors, to making memories, to controlling your movements.

### **Liquid Candy**

Ever wonder what's the big deal about drinking soda? After all, you only live once, right? Might as well have a little fun! Come learn about added sugars in drinks like soda. We will discuss how added sugars in drinks affect the body, what you might want to think about when choosing a drink for your health, things to consider when deciding policy, how you can make a difference, and how policy can impact larger society.

### **Crafting with Circuits**

Learn the basics of circuits: voltage, current, resistance, and power. Then learn how the design of your circuit can influence these factors. Practice what you've learned by designing your own light-up card that you'll be able to take home with you.

### **Make Your Own Website!**

Girls will learn the basics of making a website: Getting text on a page, styling it, and making it interactive.

### **Grow Fish!**

See how zebrafish grow from embryos to adults. You will learn how human development is similar to fish development and that by studying fish we can learn about ourselves. Due to special optical clarity of zebrafish embryos, you will literally see how dominant and recessive genes shape the fish's future and how scientists make new discoveries.