

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

REGISTRATION FORM

Saturday, April 13, 2024

8:30 am – 1:30 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:

Lorrin Johnson, AAUW Girls for STEM
640 East 230 St,
Bronx, NY 10466

Registration confirmations will be provided by email. Registration deadline is **April 5, 2024**.

Name _____
Last First

Grade Level (Please check one): 7th Grade 8th Grade Parent Educator

Home Mailing Address _____

City _____ State _____ Zip _____

Parent's E-mail (required) _____ @ _____

Parent's Telephone Number _____

School & School District _____

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.

_____ 1st _____ 2nd

_____ 3rd _____ 4th

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

Bio-Inspired Design

How do plants and animals grow from a single cell to create complex shapes and structures? How might buildings be designed and constructed to behave more like organisms by responding and adapting to their environments? In this workshop, we will explore the intersections between design and science. We will look to nature for inspiration, uncovering the simple rules the plant uses to create complex and beautiful patterns. Then we create designs in paper based on these patterns.

Adrienne Roeder, PhD, Associate Professor and Bella Burda, PhD candidate, the Weill Institute for Cell and Molecular Biology, and the Section of Plant Biology, School of Integrative Plant Science, Cornell University

Brain Games

Put on your thinking cap and learn to make a model brain cell while learning about all the mind-boggling things a brain can do from recognizing words and colors, to making memories, to controlling your movements. At the end of the session, students will learn to dissect a brain

Siobhán Lawless, B.S., M.S., PhD Candidate, Molly Leitner, PhD Candidate, and Riley Morrone, PhD Candidate, Neural and Behavioral Science, SUNY Downstate Health Sciences University

Design Thinking 101: How to build products people really want

In this interactive workshop, girls will learn the engineering design process by designing and prototyping the perfect backpack. Participants will pair up for insightful interviews to understand each other's needs and preferences. Using this information, they'll craft problem statements, explore various design solutions, build prototypes out of craft supplies, and test their prototypes to get quick feedback to iterate on your ideas. The activity emphasizes the importance of human-centred design and will teach participants how to build products or services that people really want to use.

Sarah Mostowich, Partner and Head of Innovation at NorthGuide

DNA LAB

DNA is what makes you – you! DNA is the basic building block of life. Extract DNA and see what it looks like and learn about genes and genetics in the process.

Paola Bardetti, PhD, Postdoctoral Scholar, Biophysics, NYU

Grow Fish

See how zebrafish grow from embryos to adults. You will learn about 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.

Rena Orman, PhD, Research Associate Professor of Physiology and Pharmacology, SUNY Downstate Health Sciences University

Hands-on Cosmetic Chemistry

Step into the laboratory and make your own potion!

Anna Czarnota, Associate Fellow R&D, Advanced Technologies, Estee Lauder Companies

How popular is your name?

Using real data on all children born in the US we will explore your name, how popular it is today and whether it was more or less popular in the past. We will compare your name to others and explore whether celebrity names and names from movies become more or less popular.

Elin Waring, PhD, Professor of Sociology, Lehman College

Make your own website!

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

Sammi Caby, BSE, Senior Software Engineer

Medical Laboratory Science

Come and learn some of the science behind medical diagnosis. Medical Laboratory Scientists perform tests on blood and other patient samples that help determine whether someone is healthy or sick. Learn about how these scientists identify diseases like cancer, heart disease, and infection.

Eloise Aita, PhD, President New York State Clinical Lab Association, and Camille McKay, Regional Pathology Manager, Memorial Sloan Kettering Cancer Center