

#### Alysha Branch <alysha@networkforyouthsuccess.org>

## Mid Month STEAM news update!

2 messages

**Alysha Branch** <alysha@networkforyouthsuccess.org> To: alysha@networkforyouthsuccess.org

Fri, Aug 18, 2023 at 12:10 PM

# Here's your mid month STEAM news update!

#### **Editor's Note:**

There is so much happening in STEAM education that we couldn't fit it in just one email. For this month we are adding a mid-month newsletter to compliment our previously sent August newsletter. If you have events, celebrations, or resources to share, read to the end to learn how you can submit content for future newsletters.





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## **National Girls Collaborative Podcast**



Women continue to be underrepresented in the STEM workforce specifically in engineering and computer science disciplines. Gender gaps in education pathways persist which limit access and preparation for career opportunities. The impacts of the intersectional inequalities of gender, race, ethnicity, and class can also hinder identification with and long-term participation in STEM for women and girls. The National Girls Collaborative Project developed a special podcast series which aims to shed light on the challenges faced by women and girls in STEM fields and explore actionable steps to foster gender equality and inclusivity.

Listen to the first episode here.

# **Optics**

Optics is a branch of technology and science that shows up anywhere a laser or camera is being used. That means every visit to a grocery store and everyone's camera phone depends on optics! Explore the science of optics with online games and curricular ideas at <a href="https://thefutureisoptics.com/resource-center/#fun">https://thefutureisoptics.com/resource-center/#fun</a>



# **ACRES Training**

**Register for the NY Cohorts** 



#### **NY Cohorts**

Are you ready to bring meaningful STEM learning into your program? The ACRES module offers educators who are new to facilitating STEM, the opportunity to build supportive relationships with other educators, while exploring the principles of STEM learning. This module combines an introduction to STEM facilitation with the skill of Asking Purposeful Questions.

Series valued at \$250, is offered at **no cost** to participants, for a limited time (Fall 2023 only) thanks to funding from the National Science Foundation grant #2115229 and #1713134.

Here's how to register:

- 1. First, enroll in ACRES.
- 2. Once you are logged in, <u>sign up for this opportunity</u> using one of the following codes:

- **NY361PQ**: Coach Natalie S, meets Wednesdays 9:30 AM—11:30 AM on September 12, 26, and October 3, 2023\*
- NY301PQ: Coach Sara K, meets Wednesdays 10 AM-Noon on September 13, 27, and October 4, 2023\*
- NY341PQ: Coach Roberto, meets Saturdays 10 AM-Noon on October 21, 28, and November 4, 2023\*

\*The expectation is that you will be live at all three sessions and active member of this coaching cohort.

Not sure if this is the right opportunity for you? Check out this testimonial about ACRES training: https://youtu.be/ZUp7DVOuhEY

## **IF/THEN Collection**

These assets feature IF/THEN® Ambassadors. Listen to stories and read the bios of these amazing women in the field of STEAM.





#### Jocelyn Bosley

Jocelyn Bosley has made a career of being interested in everything. During college, she worked with lasers in a physics lab, fruit flies in a genetics lab, studied English, history, math, and science, until at last she discovered a field that combined all of these diverse interests the history of science. While pursuing a Ph.D. in the history of science at the University of Wisconsin, Jocelyn realized she wanted to apply her historical knowledge to improve the way science is taught and practiced today. She now creates educational STEM programs to show students that science is an exciting, dynamic process they can participate in, not something that lives only in textbooks. She curates the website Funsize Physics and hosts the weekly podcast Science! With Friends, combining her knowledge of science with her love of storytelling to help scientists and students alike better understand the

content of science by reflecting on its human context. Jocelyn has been honored as a Raytheon Math Hero for her work with K-12 students and is now based at the University of Nebraska in Lincoln.

#### **Raychelle Burks**

After a few years working in a crime lab, Dr. Raychelle Burks returned to academia. An analytical chemist, Raychelle is a chemistry detective. She and her team design new ways to detect a variety of drugs, explosives, and chemical weapons. Raychelle's team pairs color-changing sensors with smartphones to produce portable and easy-to-use detection devices. Beyond the bench, Raychelle is a prize-winning science communicator. She is the co-creator of the popular speaker series SciPop Talks!, was a regular on the Science Channel's Outrageous Acts of Science, and routinely appears in media to discuss science and pop culture. Raychelle writes the popular forensic science column "Trace Analysis" and was recently in the first season of "The Curious Life and Death Of...", a show on the Smithsonian Channel. A dynamic public speaker, Raychelle is often a featured speaker at genre conventions like DragonCon and created the DIY Science Zone at GeekGirlCon.

Raychelle holds a Bachelor of Science degree in Chemistry from the University of Northern Iowa, a Master of Forensic Science degree from Nebraska Wesleyan University, and a Doctor of Philosophy degree from the University of Nebraska – Lincoln. She lives in the District of Columbia.

You can find even more information and resources on these IF/THEN Ambassadors here.



## **Mizzen by Mott**

**Featured Activities and Playlists** 

Supported by the Mott Foundation, Mizzen is available at no cost to afterschool professionals! Encourage partners to download the Mizzen By Mott app to access STEM activities at your fingertouch! You'll find it in Mizzen here.



- Playlist: STEAM Activities for Middle School at Home
- Playlist: STEM Activities for K-5th Grade
- Balloon Rockets Challenge



## **More STEAM Events**

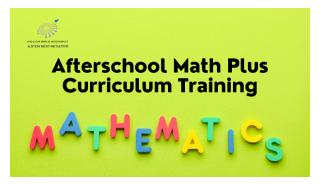
#### Science Near me

Are you interested in finding Summer Learning opportunities close to you? Great news! The Connectory has joined forces with NGCP partner, Science near me. You can now discover fantastic opportunities to explore science both in-person and online by visiting sciencenearme.org.



#### **Afterschool Math Plus Curriculum Training**

Tuesdays: September 19, October 17, 1:00 - 2:00 PM



Click below to register for one or more of the webinars and learn how to use Afterschool Math Plus activities in your afterschool time program.

# September 19th | MusicMath: Unexpected Math, Creating Rhythms, and Making Rhythm Patterns

Create musical patterns, then repeat the patterns and think about how to represent the patterns using words, pictures, and symbols.

#### October 17th | MusicMath: Composing Music (with Math!)

Experiment with repeating patterns and create new arrangements using similar sounds in different sequences.

Note: Each webinar will include strategies to support a positive Math Identity (e.g., role models, career connections, family connections, literacy connections).

#### REGISTER FOR EACH INDIVIDUAL TRAINING SESSION HERE

View previous recordings below:

**April** 

May

<u>June</u>

#### Sept. 20: You're a Computational Thinker (12:00–1:00 PM)

Learn what computational thinking means and reflect on the ways in which you are already a computational thinker. Leanr how you can help youth develop as computational thinkers and leave with strategies you put into use right away.

#### **Click here** to register.

# Oct. 6, 10, 17: Scientific Adventures for Girls Math Curriculum Training (12:00-1:00PM)



#### Harnessing the Magic of Math

Join this dynamic, three-part virtual training series designed to breathe life into math through games; meaningful, kid-friendly data analysis; and nature exploration. Sessions focus on strategies that accommodate multiple grade levels and ability levels, helping you meet each student where they are. Prepare to turn your after-school program into a vibrant and engaging mathematical journey!

#### Oct. 3: Let's Play

Delve into the world where play meets mathematics. In this session, explore how common game pieces, such as dominoes and dice, can be transformed into effective math teaching and exploration tools. You'll learn strategies for presenting math concepts in a playful, engaging manner, catering to different grade levels and ability levels. Also discuss how games can enhance critical thinking, problem-solving, and cooperative learning among students.

#### · Oct. 10: Data Detectives

In the second session, focus on strategies to collect and analyze data in fun and meaningful ways. From measuring the bounce of different balls and exploring exponential decay by eating M&M's, you'll learn to demonstrate how students can become active participants in the world of gathering and interpreting data.

#### • Oct. 17: Nature's Numbers: Exploring Shapes & Patterns

Explore the geometric patterns and 3-D shapes that exist in the natural world, demonstrating how these can be used to enrich math learning. This session will equip you with strategies to engage all students, from the youngest to the oldest, and from beginner to advanced levels.

#### REGISTER FOR EACH INDIVIDUAL SESSION HERE

# Want even MORE news and updates?

#### Follow us on social media!

Keep up with news, views, and events through our social media. The STEAM Girls' Collaborative Leadership Team contributes to our feeds, giving you even more content about STEAM learning and equity.

Like us on Facebook, search for @NYGCP.

## Follow us on <u>Twitter</u>, @NYSTEAM4girls

Interested in other work with youth? Stay tuned to the Network for Youth Success' channels!

Like us on <u>Facebook</u>, search for @NetworkforYouthSuccess Follow us on <u>Twitter</u>, @NYSYouthSuccess

# Submit your news, events, trainings, and resources

Do you have STEAM related events, workshops, conferences, resources, or celebrations you would like to share with the NY STEAM Girls' Collaborative network? We would like to help you share! Each month, we send out an e-newsletter, and we need your content and contributions to make it a truly collaborative effort!

Our reach includes formal and informal educators, as well as others who are interested in girls' access to opportunities.

Please send your July submissions to NYSTEAM4girls@gmail.com by 1 PM on Friday, July 28th. We will try our best to include all inputs received! Email us at the same address if you have questions.

Any material submitted may also be promoted via the NY STEAM GC Twitter feed, Facebook page, or LinkedIn page, increasing the range of promotion!



New York State Network for Youth Success, Inc. 415 River Street
Trov. NY 12180

Unsubscribe

**Alysha Branch** <alysha@networkforyouthsuccess.org>
To: Timothy Fowler <timothy@networkforyouthsuccess.org>

Fri, Aug 18, 2023 at 12:11 PM

#### Hi Timothy,

Below is the draft for the mid month STEAM news. Let me know if you see any edits and I'll edit them and get this sent

#### -Alysha

[Quoted text hidden]



#### Alysha Branch (she/her/hers)

Capacity Building Coordinator

New York State Network for Youth Success

The Network for Youth Success is committed to supporting justice, equity, diversity, and inclusion.

### (518) 694-0660

alysha@networkforyouthsuccess.org

https://www.networkforyouthsuccess.org /

415 River Street, 2nd Floor, Troy, NY 12180