

# STEM

**STEM EDUCATION** VOL. 2, SPRING ISSUE

Our Centers

**Central GYSTC** Mercer University

**Chattahoochee-Flint GYSTC** Georgia Southwestern State University

**Etowah GYSTC** Georgia Highlands College

Gordon GYSTC Gordon State College

Magnolia Midlands GYSTC East Georgia State College

Oconee River GYSTC Northeast Georgia RESA

Southwest GYSTC ABAC at Bainbridge

West GYSTC University of West Georgia

**GYSTC @ Augusta** Georgia Cancer Center – Augusta University

GYSTC @ Gainesville Lanier Technical College

GYSTC@ South Georgia ABAC at Tifton

**GYSTC State Office** Kennesaw State University



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7t's Springtime, Georgia Educators

Spring is one of my favorite times of the year. It is a time when the natural world revives after the colder winter months. It is a time to replace the gray barren landscape with light and color—and life! This is a great time to get students outside to observe, to wonder, and to learn. What signs in nature alert us that spring is here? Pollen on the cars, trees budding, flowers blooming, birds building nests, longer days, and so much more.

If you are looking for ways to get your students outside, we hope you will view the recording of **STEM in Wild Places Community Science Panel** and make plans now to participate in the Great SE Pollinators Census this August.

Springtime also means testing, end-of-the-year planning, and sprinting to get to the finish line. From the bottom of our hearts, we want to thank you for all you have done for Georgia's students, and we also want to thank you for allowing us to be a partner with you. As we transition out of this school year and into summer, GYSTC is fully engaged in continued efforts to offer students and teachers flexible and adaptable STEM exercises and programs. As your students make plans for the summer and educators make plans for the next school year, GYSTC is always available. As always, you can visit our website at *www.gystc.org* for access to all the activities in this issue and many more.



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# GYSTC at Work



## **Don Cargill STEM Scholar Award Recognition**

The first cohort of Don Cargill STEM Scholars, announced in November, included 23 educators from across the state of Georgia. The Scholars, along with Mr. Cargill, were recognized at the Georgia State Capitol Tuesday, January 31, 2023. Speaker of the House Jon Burns and Representative Gerald Greene commended Mr. Cargill for his dedication and service to the students, teachers, and citizens of Georgia. Resolutions recognizing the work of GYSTC and the Don Cargill STEM Scholars were adopted and read in both the House of Representatives and the Senate. We are so proud of our 2023 Scholars and all the work they have done in their communities! If you, or someone you know would like to represent your community, applications for the 2024 cohort will be released later this year.

# STEM in Wild Places

In February, GYSTC took teachers to the Harris Neck National Wildlife Refuge for the STEM in Wild Places professional learning workshop. These teachers had an exciting day of exploring both land and water. Participants discussed the marsh ecosystem, tides, and the importance of marshes.

In March, GYSTC hosted a virtual community science panel to exchange ideas and learn how to involve and engage K-12 students with community science. We heard from three incredible panelists who detailed practical ways to engage students in community-based science projects. Click on the link to access all the STEM in Wild Places Resources



# GYSTC receives GOLD Grant

Earlier this month, GYSTC was selected by the Georgia Board of Education to receive a \$5,000 Georgia Outdoor Learning Demonstration (GOLD) Grant. These grants are intended to increase opportunities for students to benefit from outdoor learning. As part of this grant, GYSTC will offer a professional learning opportunity to teachers that will integrate literacy and science. Teachers will identify an area on their campus conducive to outdoor learning that demonstrates a scientific phenomenon and develop a lesson to be shared statewide.

# GYSTC Spotlight



Ms. Kim Cook-Boyd Global Practice Manager for AIOps IBM

to find this lesson and more

**Click Here** 

This month, we are shining a light on one of our newest State GYSTC Board Members, Ms. Kim Cook-Boyd. Ms. Cook-Boyd describes herself as "truly a 'Girl Geek', an engineer, and a computer scientist who is passionate about technology, science, tech gadgets, artificial intelligence, gaming, and her community. In the early 80s, she was part of the first data processing "coding" graduating class at Norman Thomas High School in New York City. After attending New York Institute of Technology, she was the first women from her campus to receive a bachelor's degree in electrical/mechanical engineering. Ms. Cook-Boyd's passion and education in STEM led her to a career opportunity within IBM. Her first job was an IBM Customer Engineer. She was the first woman hired in this dept to fix large system computers in New York City which later positioned her to gain a new job opportunity within IBM in Atlanta in the early 1990s. Today, she is the Global Practice Delivery Manager for Artificial Intelligence and Business Automation for IT operations at IBM. She has 30+ years of IT experience. Kim is actively involved in the community and schools promoting STEM/STEAM by coaching, advising and engaging k-12 students on how technology is exciting and help build confidence in students' problem-solving skills through STEM workshops/hands-on activities. Kim participated in the IBM Corporate Service Corp program, helping students and the Social Institute with upgrading their computer systems in Nagpur, India. Currently, Kim serves on the board as the VP of Outreach for Society of Women Engineers (SWE), SWE collegiate advisor for Spelman college, a member of the Principal Council at a local elementary school in Cobb County and is the committee lead for the IBM Employee Engagement and Business Resource Groups (diversity groups).

We are excited to share the **Be a Computer Scientist** lesson with your students so that they can explore working in the computer science field just like Ms. Cook-Boyd!

Spring Simple Science Activity

Our Spring Simple Science Activity, **<u>Bright Blooms</u>**, showcases physical changes by manipulating, separating, and mixing materials.

Marker ink is made by mixing different pigments together. These pigments are made of different chemicals that are heavier or lighter than each other. Paper chromatography is a technique used to separate mixtures. In this case, as the water moves through the ink, we can see the different speeds that the different pigments travel. Heavier pigments move slowly and will separate out first. Lighter pigments move faster and will move further up the coffee filter. This difference allows us to see the separation of the different pigments in one marker.

Visit *gystc.org/free-simple-science-activities/* for access to this activity and many more. While there you can also find a short demonstration video that you can watch.



Upcoming at GYSTC

### **Summer Programs**

#### STEM Discovery Camp

GYSTC's STEM Discovery Camp is an exciting four-day learning experience for bright-forward thinking elementary school (grades 3-5) students.

- Monday, June 13, 2022 Thursday, June 16, 2022 Kennesaw State University - 9:00 a.m. - 12:00 p.m.
  - (Registration is limited to the first 30 students)

#### **Regional GYSTC Camps**

Each of GYSTC's Regional Center's offer their own slates of programs. Please reach out to your regional center to see what activities they might have available.

### **Teacher and Student Programs**

#### Professional Learning Workshops

Looking for specific topics? Please contact GYSTC at <u>gystc@kennesaw.edu</u> to put together a workshop that meets your needs. Pricing for on-site professional learning may vary.

#### In-Class Field Trip/Embedded Professional Learning

On-site In-Class Field Trip/Embedded Professional Learning sessions are \$10 per student (travel fees may apply). Virtual In-Class Field Trip/Embedded Professional Learning sessions are \$5 per student. This includes the activity and materials.

#### Visit: gystc.org/in-class-field-trips/ to view our offering catalog

#### <u>STEM Day / Family STEM Night</u>

These are community – school-based activity that allows students, parents, teachers, and caregivers an opportunity to participate together in the excitement of STEM activities. STEM Days/Family STEM Nights are \$1,500 per event. This includes activities and professional development for the teachers.

#### Visit: gystc.org/stem-day/ to view our offering catalog









