LSTA
Newsletter





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### LOUISIANA SCIENCE TEACHERS ASSOCIATION

Louisiana science educators dedicated to the advancement of scientific literacy at all levels, and encouraging lifelong learning.



April 2023 | Louisiana Science Teachers Association

# LSTA Board and Regional Representatives

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#### LOUISIANA SCIENCE TEACHERS ASSOCIATION

Louisiana science educators dedicated to the advancement of scientific literacy at all levels, and encouraging lifelong learning.

# President's Message from Pierre LaCaze

Members of Louisiana Science Teachers Association,

I am excited to announce that the LSTA / LATM Joint Conference will return this November 2-3. Join us at the Raising Cane's River Center in Baton Rouge as we offer two days of science and math professional development sessions that are sure to enhance your teaching. This will be our first major conference since COVID, so please mark your calendars. Registration will soon be open with the early-bird registration price of only \$100. We hope to see you there!

On behalf of the full LSTA Board I extend congratulations to the LSTA Award winners and the Presidential Award State Finalists in Mathematics. It is never too early to consider nominating colleagues for the awards programs in 2023-34. You will find this year's awardees named in this issue of our newsletter. Be sure to watch future issues for information on not only awards opportunities but also programs like Quality Science and Mathematics grants.





Do you love science? Do you advocate for science to be in the forefront of education, for the future of your students? If so, you could play an important role in the Louisiana Science Teachers Association. LSTA is looking for a few individuals to serve on the board. We are looking for nominations for regional representatives, as well as executive committee positions. If you, or someone you know, is interested in serving on the LSTA board please apply. Application details are located inside this edition of the LASER.

As testing and the school year come to a conclusion, I wish everyone a safe, happy and healthy summer.

Thank You.

J. Pierre LaCaze



# **Complimentary LSTA Membership**

LSTA understands how difficult these times are for science educators. We want you to know we are with you by doing our part to provide information about a variety of resources and opportunities to alleviate some of the strain you may be feeling. Please click the link below to fill out an online form to register for your complimentary membership to LSTA. Please share this offer with colleagues. <u>LSTA Complimentary Membership Form</u>

### **LSTA Needs You!**

Do you want to become more involved in science education in Louisiana? Do you enjoy sharing your expertise with others? Are you ready to take a step into a leadership role? The Louisiana Science Teachers Association (LSTA) needs you! Nominations are now open for the next two-year term of office, November 2023-December 2025, for the following positions:

- President
- Vice-President
- Secretary
- · Region 1 Representative
- · Region 2 Representative
- Region 3 Representative
- · Region 4 Representative
- Region 5 Representative
- Region 6 Representative
- Region 7 Representative
- Region 8 Representative

The LSTA Board typically meets four times each year either face-to-face or virtually. Duties of officers and regional representatives include attending board meetings, participating in various board projects including regional workshops, nominating and supporting colleagues for awards, and working at the annual conference. Regional representatives have the opportunity to serve their regions by informing members about opportunities in science education, sharing local science news for publication in each issue of the LASER, and facilitating regional workshops. Persons applying for the office of LSTA President are required to have previous Board experience.

Nomination packets should include the following:

- letter with a statement from the nominee accepting the nomination, the reason the nominee is interested in serving as an LSTA officer, what experience and knowledge the nominee would bring to the office, and how the nominee envisions the role of LSTA in science education.
- resume which includes but is not limited to teaching experience and current position; and
- maximum of three letters of support (not to exceed one page each).

President, Vice President, Secretary positions only:

- brief bio (100 words or less) explaining how they can benefit science educators as a leader of LSTA
- photograph is preferred LASER April 2021 Louisiana Science Teachers Association Newsletter

Cover page Nomination packets should be sent to: Shauna LeBlanc 106 Appomatox Pkwy. Carencro, LA 70520

Electronic copies should be sent to: <a href="mailto:tkbleblanc@gmail.com">tkbleblanc@gmail.com</a>.

All nomination packets must be postmarked on or before Sunday, August 27, 2023. All electronic packets must be received by midnight Sunday, August 27, 2023. Nominees will receive acknowledgment of receipt of their nomination. The nominating committee, chaired by LSTA Past President, Shauna LeBlanc, will select two nominees per office for the final ballot. Ballots will be distributed to active LSTA members in October via electronic message. Election results will be announced at the 2023 Fall LSTA/LATM Conference: LSTA Awards Event and officers will immediately assume their positions.

#### **LSTA Awards**

LSTA has named five outstanding educators for its 2022 awards program. These individuals have made dynamic contributions to science education for our teachers and students. Among this year's winners are three classroom teachers and two educators who work outside the traditional classroom setting. Congratulations to these amazing educators.

LSTA Outstanding Science Teachers of the Year



Barry Guillot Harry Hurst Middle School Destrehan, LA



Regena Landry

Louisiana Science Teachers Association Newsletter (<a href="www.lsta.info">www.lsta.info</a>)

Copper Mill Elementary School
Zachary, LA



Rebecca Svensson University Laboratory School Baton Rouge, LA

LSTA William Craig Outstanding University Educator Award



Dr. Chadwick Young Nicholls State University Thibodaux, LA

LSTA Claudia Fowler Distinguished Service to Science Education Award



Nathan Cotten Terrebonne Parish School District Houma, LA

# Presidential Awards for Excellence in Mathematics and Science Teaching

Louisiana will be represented by three science educators in the 2023 Presidential Awards for Excellence in Mathematics and Science Teaching program. These educators represent the most outstanding teachers Louisiana has to offer and serve as both a model and an inspiration to students and fellow teachers. The Presidential Awards are the nation's highest honors for K-12 science, technology, engineering, mathematics and/or computer science teachers. The program is administered by the National Science Foundation (NSF) on behalf of The White House. Application packets of State Finalists have been submitted for national review. Teachers who are selected as PAEMST awardees will travel to Washington, D.C., where they attend a series of recognition events and professional development opportunities. They will also receive a \$10,000 award from NSF and a Presidential certificate.



The 2023 Louisiana State Finalists in science are



Amy Douglas Captain Shreve High School Shreveport, LA



Angela Lacey Hoosier
Buckeye High School
Deville, LA



Dr. Katherine Schilling Holy Cross School New Orleans, LA

# **LATM/LSTA Confrence**

Click here for all the latest Confrence information



# **LSTA Congratulates the 2023 Louisiana Envirothon Winners**

The first-place team from Baton Rouge Magnet High School has qualified to represent Louisiana in the national competition -- NCF Envirothon, held in Canada on July 23-29, 2023. This will be our first appearance in 10 years! The team has continued training and will be working with professionals in study areas this summer to prepare. https://m.facebook.com/Louisiana-Envirothon-143476735949/

2023 First Place Winners: Baton Rouge Magnet High School-The Tree Huggers



2023 Second Place Winners: Caddo Parish Magnet High School-The Hue Manatees



# **Regional News**





#### ♦ Region I ♦

#### School and Summer Field Trip Opportunities at Sankofa Wetland Park

Sankofa Wetland Park is a restored wetland in the Lower 9th Ward that offers K-12 outdoor STEM learning opportunities aligned with Louisiana State Standards. The Wetland Park programs offer topics including: wetland ecology, water quality testing, wetland habitats, wildlife studies, and the importance of wetland ecosystems. In addition, our staff can work with you to tailor activities to fit your classroom lessons. Field trips are \$4.00 per student. School year and summer camp field trip options available.

For more information or to receive a program brochure, please email us at <a href="wetlandpark@sankofanola.org">wetlandpark@sankofanola.org</a>. If you'd like to make a reservation, please complete the google form in the link provided <a href="https://docs.google.com/forms/d/e/1FAIpQLSfWubBE6-auyaM0VuHqEHWv">https://docs.google.com/forms/d/e/1FAIpQLSfWubBE6-auyaM0VuHqEHWv</a> 5uxbygEFTJQ7NkylmuCqmk7Pg/viewform

The Greater New Orleans STEM Initiative (GNO STEM) partnered with the New Orleans Saints and Pelicans for STEM Fest, sponsored by Chevron on Saturday, March 4 at the Ochsner Sports Performance Center. Students in grade K-12, parents, and teachers attended this hands-on event on the Saints practice field featuring live performances, interactive STEM demonstrations, and hands-on STEM explorations stations hosted by community STEM organizations and businesses.



Participants at STEM Fest

GNO STEM partnered with the Lieutenant Governors' Association to deliver 100 STEM gifts to the students at Lake Forest Elementary Charter School on March 8. Students were excited to receive the interactive, hands-on gifts.



Lake Forest Students Receiving Lt. Governors' Association STEM Gifts

#### GNO STEM & GIS PROFESSIONAL DEVELOPMENT FOR 3RD - 12TH GRADE EDUCATORS

Tuesday, June 6 - Wednesday, June 7, 2023 | 8 AM - 4 PM

#### University of New Orleans

Geographic Information Systems (GIS) is a cloud-based geospatial platform enabling individuals to create and share maps, apps, and map services with 200 inquiry-based lesson plans in 3-12 math, science, social science, English, coding, and computer science. This 2-day workshop is designed to train educators in cutting-edge technology for STEM project-based learning to engage their students inside and outside of the classroom. Stipends are available. Space is limited! REGISTER HERE.

#### GNO STEM & LIGO PROFESSIONAL DEVELOPMENT FOR MIDDLE & HIGH SCHOOL TEACHERS

Monday, June 26 - Friday, June 30, 2023 | 8:30 AM - 4 PM

#### University of New Orleans & LIGO, Livingston, LA

Join LIGO (Laser Interferometer Gravitational-Wave Observatory) instructors as we learn about, Light, Color, Sound and Waves through experimentation. Delve into what the standards say about Light, and learn how color is dependent on the frequencies of the light, as well as your own perception. This week-long workshop will include 2 days at UNO and 3 days at the Livingston facility. Plus, participating teachers will be eligible to receive subsidized field trip opportunities for their students to visit the LIGO facility in the 2023-24 school year. **Please note:** As per LIGO policies, teachers must either provide proof of COVID-19 vaccination OR have a negative COVID test within 72 hours of the workshop. **Also note:** This is an in-person version of the 2021 virtual teacher workshop, so many of the activities will overlap. Stipends are available. Space is limited! **REGISTER HERE.** 

#### GNO STEM ENGINEERING, CIRCUITRY, CODING AND GRANT WRITING PROFESSIONAL DEVELOPMENT

#### FOR MIDDLE SCHOOL TEACHERS

Tuesday, July 11 - Wednesday, July 12, 2023 | 9 AM - 3 PM

#### University of New Orleans

During this 2-day PD, teachers will be trained to use various STEM tools such as Makey Makey, Sphero BOLT, littleBits coding, LED projects, and will complete an unplugged design project. The session will also focus on grant writing identifying available funding opportunities and best practices for writing grants. Stipends are available. Space is limited! REGISTER HERE.

#### **GNO STEM & CODE.ORG PROFESSIONAL DEVELOPMENT**

#### FOR K-5 TEACHERS

July 2023 (Date TBA Soon!) 8 AM - 3:30 PM

#### University of New Orleans

Designed to be fun and engaging, Code.org's **Computer Science Fundamentals** workshop shows K-5 teachers how to blend online and "unplugged" non-computer activities into their lessons to teach students computational thinking, programming concepts and digital citizenship. It also teaches critical thinking and problem solving, fostering collaboration, curiosity and creativity. Stipends are available. Space is limited! **REGISTER HERE**.

For more information regarding teacher PD, contact: cathie.smith@gnostem.org.

**STEM Teachers** are invited to participate in **Tulane's** teacher professional development this summer!! Thanks to the generosity of **Shell and The Joe W. and Dorothy Dorsett Brown Foundation**, we are offering **three robotics and computer science-focused workshops this summer**.





# June 13-14: Explore Coding and Robotics with LEGO® Spike Prime Essential (Day 1 In-Person at Tulane's Uptown Campus and Day 2 Virtual!) – Grades 1<sup>st</sup>-4<sup>th</sup>

Join the Center for K-12 STEM Education team as we learn and play with the Lego® Spike Prime Essential robots! Expand your coding skills as you learn to use the Spike Prime app and program the Spike Prime Essential robots. You will also learn about the **free** LEGO® curriculum available and how to start a FIRST LEGO League Explore team at your school. The two-day (day 1 in-person and day 2 virtual) professional development workshop will total 9 hours. The 9-hour PD will be for rookie coaches who want to learn more about FIRST LEGO League Explore, whereas the 6-hour PD is for teachers who want to learn how to use Spike Prime Essential but have coached a FIRST LEGO League Explore team before. Teachers will receive a \$100 (6 hours) or \$150 (9 hours) stipend upon completion of the PD.

Link to sign-up: https://applyprecollege.tulane.edu/register/spike-essential-pd-june-2023

# June 15: Integrating Programming Language into Your Curriculum – Scratch (In-Person at Tulane's Uptown Campus!) – Grades 3<sup>rd</sup>-8<sup>th</sup>

Incorporate computer programming into your science, mathematics, or language arts curriculum as you learn Scratch, a block-based coding language, where you will develop engaging projects to take back to your students this fall. The **one-day in-person professional development workshop will total 6 hours**. Teachers will receive a \$100 stipend upon completion of the PD.

Link to sign up: https://applyprecollege.tulane.edu/register/scratch-teacher-pd-june-2023

# June 21-22: Explore Coding and Robotics with LEGO® Spike Prime (In-Person at Tulane's Uptown Campus!) – Grades 4<sup>th</sup>-8<sup>th</sup>

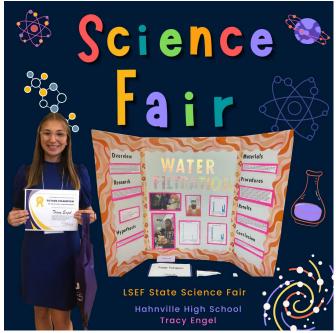
Join the Center for K-12 STÉM Education team as we learn and play with the Lego® Spike Prime robots! Expand your coding skills as you learn to use the Spike Prime app and program the Spike Prime robots. You will also learn about the **free** LEGO® curriculum available and how to start a First Lego League team at your school. The two-day **in-person** professional development workshop will total 9-12 hours. **The 12-hour PD will be for rookie coaches** who want to learn more about the FIRST LEGO League Challenge, whereas the 9-hour PD is for teachers who want to learn how to use Spike Prime but have coached a FIRST

**LEGO League Challenge team before.** Teachers will receive a \$150 (9 hours) or \$200 (12 hours) stipend upon completion of the PD.

Link to sign-up: https://applyprecollege.tulane.edu/register/spike-prime-teacher-pd-june2023

Center for K-12 STEM Education
Tulane University | School of Science and Engineering
201 Lindy Boggs | New Orleans, LA 70118
K12STEM.tulane.edu | k12stem@tulane.edu | (504) 314-2932

Hahnville High School Student Tracy Engel made it to the Louisiana Science and Engineering Fair that took place on April 5, 2023. Tracy did not place; however, she received an award for being a Future Champion of the Gulf Coast and Environment. This student is passionate about bringing more awareness to environmental issues that are plaguing Louisiana and the global community. Mrs. Cecelia Gillam served as her mentor as she went through the engineering design process.



Shell Urban Science Educators Development Award provides support to outstanding diverse educators in pursuit of professional development, active participation at the NSTA National Conference on Science Education and committees that transitions into leadership roles, and serves to increase the science educator talent pool of minority educators to meet the education work force challenge of the future. The recipients of the Award will be honored during the Shell Reception at the NSTA Conference. Our very own Region I Representative Cecelia Gillam was among the winners. Join me in congratulating Cecelia and all the winners.





Cecelia Gillam was named the High School Grand Prize winner for the Shell Science Lab Regional Challenge. The Shell Science Lab Regional Challenge Competition recognizes exceptional and innovative science educators, to recognize outstanding K–12 school programs for their exemplary approaches to science lab instruction utilizing limited school and laboratory resources and raise awareness and exposure of the outstanding work being done in the science education field in the targeted areas near Shell USA Inc. assets.





Please submit news for Region 1 to Cecilia Gillam at cgillam@stcharles.k12.la.us.

## ♦ Region II ◆

#### Awards:

I am excited to announce that Lai T. Cao, AP Physics Teacher at Baton Rouge Magnet High School, Baton Rouge, recently received the NSTA Yager Award.

She is a Presidential Awardee for Science. She received the Robert E. Yager Exemplary Teaching Award which annually recognizes six full-time K–12 teachers of science who successfully use innovation and excellence in their classroom. Lai was selected as the District VII teacher to represent Arkansas, Louisiana and Mississippi.



Covington High Robotics won at the University of Southern Mississippi's Regional Sea Perch Competition on March 18 that was held in Biloxi. They are now moving on to the International Challenge that will be held at the University of Maryland.



Hammond High Magnet School's Torbotics Team was named the 2023 Impact Award Winner when the competed in Illinois FIRST Robotics. They earned the ability to compete at the FIRST World Championship in Houston April 19-22.



### School News from Region 2

William Pitcher Jr High in Covington recently participated in St. Tammany's Adopt-a-Pond Project. Students went to a parish pond to perform water quality test and learn about how the pond helps the local ecosystem.

- Picture 1: Water Testing Station: Students working with agents from LSU-Ag/SEAGRANT and the Parish Government performed several water quality tests, including measuring dissolved oxygen, pH and water clarity.
- Picture 2: Identifying Aquatic Invertebrates Station: Students collected pond water samples and used dichotomous keys to identify the aquatic invertebrates. A representative from the parish mosquito abatement program helped students to understand healthy pond ecosystems help to reduce the mosquito population.
- Picture 3: Build a Water Filter Station: Faculty from Northshore Technical Community College (NTCC) in Lacombe helped students to build water filters where students learned which materials work the best to filter out sediments and other substances in the pond water.



Students at Bayou Lacombe Middle School engaged in the discovery of noncontact forces. They were further challenged to create vehicles to race using noncontact forces.



Noncontact vehicle: they had to make it go forward, in reverse, turn and go uphill prior to racing.



In addition to classroom science explorations, Bayou Lacombe's Ag club is growing vegetables and will have a chicken coop. They are currently waiting for their chicken eggs to hatch.



Louisiana Science Teachers Association Newsletter (<u>www.lsta.info</u>) Past and Upcoming events:

Northshore STEM Coalition was at Pine Jr/Sr High School for the Franklinton Community STEM Café on March 18 with engaging activities for prek-12<sup>th</sup> grade. They will be in Amite on April 22.



For more information to attend or to sign up as a volunteer, here is their website: <a href="www.northshorestem.org/stemcafes">www.northshorestem.org/stemcafes</a> Saturday, April 22 at the LSU College of Engineering a Girls ONLY STEM Challenge Competition will be held. This is a free event for 8<sup>th</sup> grade girls.

Here is a link for more information:

 $\underline{\text{https://capitalareastem.org/calendar/event/2023/04/22/girls-design-for-good-girls-only-stem-challenge-competition-at-lsu/425476}$ 

April 28-29 at Bogalusa YMCA the 2023 SeaPerch Northshore Regional Underwater Robotics Competition will be held.

Contact George Corken at <a href="mailto:ymca22georgec@gmail.com">ymca22georgec@gmail.com</a> for more information

Please submit news for Region 2 to **Tricia Trinco** at <a href="mailto:tricia.trinco@stpsb.org">tricia.trinco@stpsb.org</a>.

## ♦ Region III ♦

Dr. Chasity Wilson, Katrice Antoine, and Wendy Delgado attended the Southern University and A & M College "Culturally Relevant Practices in STEM Classrooms," sponsored by Shell Global.



Students from **Terrebonne Parish** (pics attached) recently competed in the Louisiana Science and Engineering Fair held at LSU, April 3-5. The following students placed in their respective categories:

Junior Division

- Noah Naquin, Montegut Middle (2nd Place Materials Science)
- Amari Griffin, Houma Jr. High (Honorable Mention Microbiology)



#### Senior Division

- Cody LeBoeuf, South Terrebonne High School (3rd place Chemistry, US Air Force Special Award)
- Rosalyn Hubbell, H.L. Bourgeois High School (2nd place Environmental Engineering)
- Felicity Messina and Brea Pellegrin, H.L. Bourgeois High School (4th place Physics and Astronomy)



The following two students will compete at the International Science and Engineering Fair held in Dallas this May:

- Cody LeBoeuf, South Terrebonne High School
- Rosalyn Hubbell, H.L. Bourgeois High School

Please submit news for Region 3 to Wendy Delgado at wendy delgado@houmachristianschool.com.

#### ♦ Region IV ♦

#### Click her to view the latest news from the Region 4 STEM STEM Center.

FIRST Robotics TEAM 3616 Phenomena received the FIRST Impact Award at the Bayou Regional Robotics Tournament in Kenner, LA held from March 30 to April 1, 2023 in Kenner, Louisiana. Teams were from Louisiana, Mississippi, Arkansas, Florida, Missouri, California, and Mexico which qualified the team to attend the FIRST Championship World Competition to not only compete with the robot, but to present and compete for the Impact Award at an International Level. Team 3616 is composed of students from Comeaux High School, Lafayette High School, Early College Academy, and Iron Will Enterprises. The *FIRST Championship - FIRST Robotics Competition* event is taking place from April 19 to April 22, 2023 in Houston, Texas. This award is the most prestigious award at the tournament that honors a team that best represents a model for other teams to emulate and best embodies the mission of FIRST. It was created to keep the central focus of FIRST Robotics Competition on the ultimate goal of transforming the culture in ways that will inspire greater levels of respect and honor for science and technology, as well as encouraging more of today's youth to become science and technology leaders. This is truly an honor and speaks very highly of our Lafayette Parish School System and the designated schools.



Please submit news for Region 4 to Kellie Boquet at khboquet@lpssonline.com.

# ♦ Region V ♦

A lot of exciting activities have been taking place in the Science/STEM world in Region 5.

The 2023 Louisiana VEX Robotics State Championship was held on February 25<sup>th</sup> at the Burton Coliseum in Lake Charles. The competition was a prelude for the VEX World competition. Several Region 5 teams competed, including: Iowa High School, Barbe High School, and E.K Key Elementary, FK White Middle School, Vinton Elementary, Western Heights Elementary, Pearl Watson Elementary, T.S. Cooley Elementary, Frasch Elementary, and W.W. Lewis

Elementary. FK White Middle School's Robotics team won the VEX Robotics State Championship; Iowa High School, T.S. Cooley Elementary, Maplewood Elementary, and Vinton Elementary will also compete at the Worlds competition in May. Calcasieu Parish School System received the Models of Excellence award from the Louisiana State Department of Education for their work and creation of the Virtual Instruction Program. Many of the virtual programs included science and STEM related courses. State Superintendent **Dr. Cade Brumley** presented Calcasieu's Superintendent, **Dr. Shannon LaFargue** with the honor at a presentation attended by stakeholders from across the state. Educators of the virtual program showcased the programs capabilities and invited questions and answer sessions.

An S.J. Welsh middleschooler won the Student of Spaceflight Experiment Program patch design contest. The patch designed by the student will fly on the International Space Station.

Pelican State Starbase will be hosting Emerging Technology Summer Academy for students in grades 4<sup>th</sup> to 6<sup>th</sup> at Esler Field Regional Airport on June 12-15 and June 26-29. For more information or to sign up, please visit <a href="https://forms.gle/KvpCbDtqAUCrDii9A">https://forms.gle/KvpCbDtqAUCrDii9A</a>.

VEX Robotics Educators Conference will be held in Dallas on April 27-29. To register, please visit conference.vex.com. Region 5 2023 Summer Camp STEMpede is open for registration. Some of the summer camps include NASA Astro (July 24-28 for grades K-12), Al Energy (June 19-23 for grades 6-12), Vex Robotics (July 17-21 for grades K-12), Engineering (June 19-23 for grades 1-5; June 26-30 for grades 6-12), and Seapearch (July 10-14 for grades 6-12). You can register at <a href="https://forms.office.com/r/SR87ihryft">https://forms.office.com/r/SR87ihryft</a>. For more information, contact <a href="mailto:reg5stem.center@cpsb.org">reg5stem.center@cpsb.org</a>.

The city of Lake Charles Recreation and Parks Department is hosting Summer Exploration Adventures from June 5 – July 28 for ages 5-11. Each of these 8 weeks are themed and are from 7:30 AM to 5 PM. Lunch will be provided and space is limited. Registration is from April 3-6 and will open again on April 10<sup>th</sup>. The cost is \$40 per week. For more information, please call 337-491-1280.

Region 5 STEM Center is hosting their first Cardboard Canoe Competition on Saturday, May 6<sup>th</sup> from 10 AM to 2 PM at North Beach in Lake Charles. To register, please visit <a href="https://forms.office.com/r/Jbknz4phre">https://forms.office.com/r/Jbknz4phre</a>. I look forward to hearing about more amazing science projects, activities, and programs happening in Region 5. Please reach out to me at <a href="mailto:cammie\_benoit@camsch.org">cammie\_benoit@camsch.org</a> to share the exciting work being done and any news you would like to share.

Please submit news for Region 5 to Cammie Benoit at cammie benoit@camsch.org.

**♦Region VI** 

Please submit news for Region 6 to Dr. Ladale Bernard at ladale.bernard@rpsb.us.



**♦Region VII** 





#### What is Be The Astronaut?

Scientifically verified by experts at NASA for accuracy and feasibility, the exhibit teaches visitors about the concepts, challenges, and excitement of spaceflight, through the use of touchscreen stations, artifacts, and interactive simulator pods built to look like space capsules.

#### **Exhibit Activities**

Learn STEM subjects that help you explore space.

Blast off seated in your very own space capsule.

Meet a real robot.

Visit the Moon, Mars, and Jupiter.

And much more!

Be The Astronaut is a temporary exhibit that is only open for a limited time! February 4, 2023 – June 4, 2023





The 4<sup>th</sup> grade students at **Donnie Bickham Elem/Middle School** created castles during their 4th grade Medieval Feast. The cross cutting concepts of the Engineering Process allowed the students to use their imagination, tools, and materials from home to construct their castles. Thank you Mrs. Tanya Avery for sharing these awesome photos.







2023 Louisiana Science and Engineering State Fair				
Junior Division Winners for Caddo Parish Schools				
Earth and Environmental Sciences	3 <sup>rd</sup> Place - Varsha Manikandan - Caddo Middle Magnet			
Embedded Systems	1st Place - Anya Trutschl - Caddo Middle Magnet			
Senior Division Winners for Caddo Parish Schools				
Behavioral and Social Sciences	1st Place - Shrivats Manikandan - Caddo Magnet High 3rd Place - Katherine Michael - Caddo Magnet High			
Biochemistry	3 <sup>rd</sup> Place - Kasen Wright - Southwood High School 4th Place - Michael Kirkpatrick - Southwood High School			
Biomedical and Health Sciences	1st Place - Raj Letchuman - Caddo Magnet High			
Biomedical Engineering	Lexi Livingston - Southwood High School			
Cellular and Molecular Biology	1st Place - Chloe Miller - C.E. Byrd High School 3rd Place - Whitney Jones - Southwood High School			
Chemistry	Ruby Knoebel - Caddo Magnet High			
Computational Biology and Bioinformatics	1st Place - Aashni Shah - Caddo Magnet High 2nd Place - Anjali Veerareddy - Caddo Magnet High			
Earth and Environmental Sciences	2 <sup>nd</sup> Place - Arjun Desai - Caddo Magnet High			

Engineering Technology: Statics and Dynamics	4 <sup>th</sup> Place - Omar Benites - Captain Shreve High School 4 <sup>th</sup> Place - Korde Carter - Captain Shreve High School
Environmental Engineering	4 <sup>th</sup> Place - Jack Randall - Caddo Magnet High
Mathematics	1st Place - Nhi Dao - Caddo Magnet High
Microbiology	. 1st Place - Gabrielle Miller - Caddo Magnet High 2nd Place - Elizabeth Klotzbach - C.E. Byrd High School
Physics and Astronomy	Honorable Mention - Micalee Wrightson - Caddo Magnet High
Plant Sciences	2 <sup>nd</sup> Place - Alexa Yurochko - Caddo Magnet High Honorable Mention - Sivamayuri Saikolappan - Caddo Magnet High
Robotics and Intelligent Machines	1st Place - Sophie Chen - Caddo Magnet High 2nd Place - Maya Trutschl - Caddo Magnet High
Louisiana Section of the Air and Waste Management Association Special Award	Alexa Yurochko - Caddo Magnet High
Aerospace Medical Association Special Award	1st Place - Aashni Shah - Caddo Magnet High 2 <sup>nd</sup> Place - Maya Trutschl - Caddo Magnet High

Light It Up is an educational residency for students designed to introduce the concept of storytelling through light, computer programming, and public art. The program is led by members of the Shreveport Regional Arts Council and Sci-Port Discovery Venter. Students created LED light shows using the Pharos Designer 2 software that were displayed directly onto the Bakowski Bridge of Lights. The program aims to raise awareness throughout Shreveport and Caddo Parish that public art and STEAM are valuable tools for promoting community engagement. Here are students from University Elementary School:









Please submit news for Region 7 to Rosie Cash-Loftis at <a href="mailto:rbcash@caddoschools.org">rbcash@caddoschools.org</a>

# ♦ Region VIII ♦

Cathi Cox-Boniol and Missy Wooley (both SCILS Region 8 LaSTEM Center at Louisiana Tech University) wrapped up the 2022-23 CS4U program by hosting middle grades girls from Choudrant High School, Neville Junior High School, Martin Luther King Jr Junior High School, Start Elementary School and Forest High School. Collaborating with Chris Campbell (Louisiana Tech University UTeach Tech) Diane Madden (SciTEC at Louisiana Tech University) and Dr. Lisa Dick (Louisiana Tech University College of Education), Cathi and Missy met and surpassed the commitment goal made with CSforAll that CS4U would reach a minimum of 200 middle grades girls. SCILS celebrated the accomplishment with a social media campaign prize give-away. As part of its DOE Interest and Opportunities initiative. Cathi, Missy and Chris spent a day at Bastrop High School working with middle grades girls on robotics and engineering design. Cathi did a presentation on creativity for the LIVE2LEAD leadership summit and served on a panel for the "Code a Career" event at Bossier Parish Community College. Cathi and Missy attended NSTA in Atlanta, presenting at the NSELA Leadership Summit, the Informal Science Share-a-Thon and during the breakout sessions. The SCILS team also hosted DOE Zearn Math Training and a day of Code.org training for elementary teachers at Louisiana Tech. Cathi and Missy hosted the second SCILS STEMINIST Fest and teamed up with Region 3 and 6 to co-host the RECIPE for Rural STEM event at the Mega Shelter in Alexandria and were joined by partners from Louisiana Delta Community College and the Northeast Louisiana Children's Museum. SCILS hosted its first You Be the Chemist Regional Challenge since before the pandemic with Ruston Junior High School's 8th grade team taking top honors. Congratulations also to Melissa Le, a Ruston High School freshman and SCILS STEM Leader, who was named to the National Girls Collaborative Youth Advisory Board.







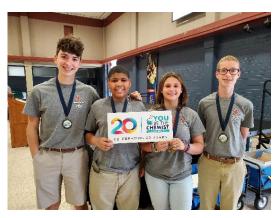
CS4U





Morehouse Parish Interest and Opportunities





You Be the Chemist







RECIPE for Rural STEM







STEMINIST Fest







Code.org Training







Zearn Math Training







NSTA Atlanta

Please submit news for Region 8 to Marci Bryant at marcibryant@opsb.net.



# Professional Development Opportunities and Resources

#### Louisiana Association of Science Leaders' Corner

Are you a district science supervisor, science content specialist, science master teacher, Teacher Leader or science coach? If so, consider becoming a member of LASL, the affiliate of the National Science Education Leadership Association (NSELA).

Sharing the slides from a presentation made during the annual Council of State Science Supervisors in Atlanta last week. "Report: K-12 Science Education in the United States: A Landscape Study for Improving the Field"? Several of the resources shown in Table 2 are from the National Academies Press and available for FREE download. They can easily be added to an individual's professional library.

#### CSSS Landscape Report slides.pdf

Are you a science coordinator?

Are you interested in learning more about how your role impacts teacher retention? Are you interested in learning about how your professional learning choices impact teacher effectiveness and retention? If so, this study is for you! We are looking for current District Science Coordinators to participate in a research study. Your participation would include interviews, focus groups, and reflections about your professional learning experiences (for more information, click <a href="here">here</a>). Compensation (\$500) will be provided for participants who complete the study.

If you are interested, click <a href="here">here</a> to complete an interest survey.

The SPLENDIT Research Team



## **ULL GEOSERVICE Summer Camp**





GEOSERVICE Summer Workshop

July 17th - 21st, 2023

# WHAT IS GEOSERVICE?

GEOscience Students Excelling in Real, Vital Investigations with Community Engagement.

#### WHAT WILL YOU DO?

- Learn how satellite imagery/monitoring is used for management of resources and environment.
- Fly NASA AEROKATS kites, drones, and other instruments to gather real time data. The "Birds-Eye" view allows for similar observations to those used on NASA spacecraft and aircraft.
- Interpret real time data using earth observation topics covered during the program and create communication tools to share within the community.

#### DETAILS

- Workshop is from 9:00am-3:30pm, Monday through Friday.
- · Lunch will be provided.
- · Provide own transportation.
- · It is FREE!

#### WHO CAN APPLY?

- Applicants should be between 16 and 19 years old and be in good standing with their high school.
- Preference will be given to students in 11th and 12th grade.

#### CONTACT

For more information, contact the RAC at <a href="mailto:geoservice@louisiana.edu">geoservice@louisiana.edu</a>,

#### LOCATION

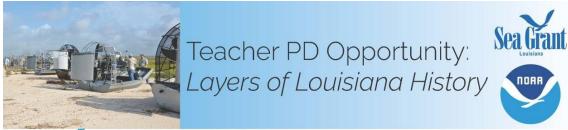
Regional Application Center 635 Cajundome Blvd. Lafayette, LA 70504





WEBSITE: http://louisianaview.org/risingwater/

#### **Sea Grant**





Uncover layers of Louisiana natural history during this two-year workshop that combines hands-on field work and guided curriculum development. Teachers will collect samples alongside researchers to better understand our changing coast and how past, present and future engineering projects impact ecosystems. In addition to the summer workshop, teachers participate in two (compensated) virtual trainings—one in the spring and one in the fall. Additional support is provided for teachers that want to attend the Louisiana Science Teacher Association conference.

2022 - Southeastern Louisiana June 13 - 17, 2022

2023 - Southwestern Louisiana Dates TBD

# Program Highlights

- Work alongside university researchers to better understand coastal challenges
- > Explore different coastal habitats
- Receive a toolkit of environmental samples for use in class
- > Have facilitated, guided lesson plan development
- Continuing education credits
- > All lodging, meals and activities are included at no cost to the participant
- \$300 in participant stipends (per year)
- > Travel awards to Louisiana Science Teacher Association conference

For more information: www.laseagrant.org/education/pd/bwet

To register: https://lsu.qualtrics.com/jfe/form/SV\_3OFdRvqRbcbDmv4 Program contact: Dani Dilullo, ddiiullo@lsu.edu







### **Hurricane graphics from NOAA**

National Hurricane Preparedness Week is April 30 - May 6. Check out the brand new infographics and daily messaging. https://www.noaa.gov/hurricane-prep



# Calling All Teachers! Coming Up at The National WWII Museum

Click here to view the upcoming events at the National WWII Museum

### **Climate Education Now!**

Partnership Specialist Blake Touchet featured on Operation Climate Podcast

Operation Climate is an environmental education non-profit organization that hosts a podcast made by high school and college students from all over the nation. Duke University recently interviewed NCSE's Partnership Specialist Blake Touchet and Katie Worth, the author of Miseducation, about the obstacles to providing today's students with a comprehensive environmental education.



Listen to the postcast

### **Department of Wildlife and Fisheries**



# LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES FISHERIES OUTREACH TEAM



#### How Can Our Team Serve You?

We offer a variety of programs and workshops that focus on different topics related to fisheries education. These programs are available to formal and non-formal educators statewide.

## Aquatic Volunteer Instructor Program (VIP)

- Hands-on workshop that trains educators and volunteer instructors how to teach aquatic education activities such as knot tying, basic tackle, casting techniques, fish identification, fish anatomy, invasive species, fisheries management, pond ecology, and fishing safety
- Borrow equipment from LDWF to use in the classroom while teaching the lesson plans provided by LDWF
- Volunteer at LDWF events or create your own fishing clinic, aquatic education program, or fishing tournament
- For more information, contact Erin Olson at <a href="mailto:eolson@wlf.la.gov">eolson@wlf.la.gov</a> or 504-286-4165

#### Native Fish in the Classroom (NFC)

- Hands-on, classroom based aquaculture stewardship project for grades 6-12 to learn about fisheries management, fish biology, and aquatic natural resources by growing native Louisiana fish (paddlefish) from eggs to fingerlings
- Attend a summer and winter workshop as well as a field trip for the spawning event
- For more information, contact Heather David at <a href="mailto:hdavid@wlf.la.gov">hdavid@wlf.la.gov</a> or 225-763-5415

#### Wetland Education Teacher workshop (WETshop)

- Week-long coastal awareness workshop that is hosted in Grand Isle every summer
- Teachers work with scientists and educators from various organizations to learn about Louisiana's coastal wetlands and become wetland stewards
- For more information, contact Heather David at hdavid@wlf.la.gov or 225-763-5415

#### Fisheries Mobile Museum (FMM)—COMING SOON!

- A concession style trailer with five door openings that focus on fish identification, fisheries management, invasive species, Sport Fish Restoration Program, and sampling methods
- Schools/events will be able to request this interactive trailer which will include a booklet that follows along with each topic
- For more information, contact Lindsay Seely at <a href="mailto:lseely@wlf.la.gov">lseely@wlf.la.gov</a> or 225-765-2375

**Hosting an Event and Need Vendors?** We can help with that too! We are happy to assist you in your classroom, on school grounds, or in local community parks with various activities. Scan the QR code to request assistance at your next event from either our LDWF Staff or Certified Aquatic Volunteers.



## Appalachian Mountain Club (AMC)'s Dark Sky Classroom Program

We are excited to announce the release of the Appalachian Mountain Club(AMC)'s <u>Dark Sky Classroom Program</u> for students in grades five through eight. This is a free, easy-to-implement, three-day mini-unit designed to help students learn about light pollution and the benefit of dark skies. Our program was created by educators as part of AMC's <u>See The Dark</u> public awareness project and is aligned with NGSS standards.

You can download our educator guide here and the student notebook here. You can also visit www.SeeTheDark.org.

AMC is also announcing a companion digital photo essay contest in which students can submit their work and be entered to win prizes. One lucky teacher and their class will win a two-night stargazing experience at the Appalachian Mountain Club's <u>Little Lyford Lodge</u> in Maine's Moosehead Lake region. Contest details may be found <u>here</u>.

For more information, please visit www.seethedark.org or email info@seethedark.org.

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#### Careers for Engineers

New from EiE, Museum of Science, check out Careers for Engineers, an online experience for kids to explore STEM careers. Designed for students ages 7-12, Careers for Engineers offers a personality-style quiz that shows kids how their interests connect to a career in an engineering field. After taking the quiz, children are presented with fun, colorful infographics packed with key facts about their engineer career match. Each infographic also includes links to other EiE and Museum of Science resources. Parents, caregivers, and educators can skip the quiz and download all five infographics directly. All resources (webpage, quiz and infographics) are available in both English and Spanish. Try it for yourself and share with a friend! What kind of engineer are you?

#### **Discover EIF**

#### Discover EiE® Lessons Powered by Pear Deck™

As part of a new collaboration, EiE with Pear Deck has transformed 10 climate change lessons into engaging, interactive, slide-show style lessons that support educators in introducing the critical topic of climate change to students in grades 3-8. Each presentation includes standards-aligned lesson plans, formative assessments, real-world examples and videos, enhanced with the interactive features of Pear Deck. Get Started for Free Today!

#### Climate Emergency: Feedback Loops Documentary Series

#### Climate Emergency: Feedback Loops Documentary Series

Teach climate change with the following free resources: Climate Emergency: Feedback Loops, a series of five short films narrated by Richard Gere, featuring twelve renown climate scientists, and endorsed by the Dalai Lama and Greta Thunberg. The resources also include an accompanying science standards-based curriculum for grades 6 -12 and discussion guides suitable for university level and community groups. The materials are freely available for use by teachers and students at <a href="https://www.feedbackloopsclimate.com">www.feedbackloopsclimate.com</a>. Ranging in length from 8 – 14 minutes, the films are ideal for classroom use. The broadcast version, Earth Emergency, aired on PBS and is now appearing on television globally. It was presented at the 2021 United Nations Climate Change Conference (COP26), showcased to the U.K. House of Commons, and featured in a series of webinars by the Smithsonian National Museum of Natural History.

# **Planet Stewards 2023/24 Funding Opportunity**

NOAA Planet Stewards supports formal and informal educators in carrying out hands-on stewardship projects with elementary through college age students, as well as the general public. Stewardship projects must make a substantive, and quantitatively measurable impact on an environmental issue related to the educator's community. Awards are up to \$5,000.

Details & information

Deadline: Midnight PT June 4

NOAA Planet Stewards Education Project: NOAA's National Ocean Service

## **Explorer Classroom Returns for 2023**

Ignite an Explorer Mindset in your students with a <u>live interactive session</u> that connects young people with real National Geographic Explorers.

Our live interactive YouTube show will connect your students with scientists and storytellers to hear behind-the-scenes stories about their work and ask questions in real time. Upcoming topics include geography, biology, oceans, history, and more. All sessions are free and include an instructional guide to help your class get the most out of the experience. We provide the following schedule for grades K-8:

- Every Monday, 11 AM ET Ages 4-8 | Grade K-2 | 30 minutes
- Every Thursday, 10 AM & 2 PM ET Ages 9-14 | Grade 3-8 | 45 minutes

Explore upcoming sessions and register today. We are excited to see you there!

## Opportunity: Help Identify High-Quality Instructional Materials with EdReports

EdReports is a non-profit organization with a mission to empower educators with independent, credible, evidence-rich information about instructional materials to ensure students have what they need to be college and career-ready. EdPeports launched a review of HS science materials and is gearing up for a second round of K-12 reviews in late April. EdReports is now accepting applications for reviewers for reviews of K-12 science instructional materials starting in April 2023. Apply now to engage in deep professional learning on the Next Generation Science Standards with a national network of skilled educators. Learn more about how to apply to become a reviewer here. Become a Reviewer

#### Digital Field Book Activity from the Smithsonian

https://naturalhistory.si.edu/education/teaching-resources/life-science/field-book-activity-making-and-recording-observations?utm\_medium=email&utm\_source=GovDelivery
This activity from the Smithsonian's National Museum of Natural History helps K–8 students practice the skill of recording observations. The activity includes a digital field book template to use or copy, as well as additional information about the evolution of the use of field books in science and tips for maximizing students' observation skills in the field. For example, teachers can jump start students' thinking with the activity's provided Guiding Questions to Encourage Observations and Discussion.



#### **Children & Nature Network Vitamin N Challenge**

The Vitamin N Challenge was inspired by Richard Louv's book on Vitamin N that includes 500 practical ideas to leading a nature-rich life. Join the challenge to help youth on summer break spend time outdoors.

NASA Citizen Science Projects: Calling learners of all ages to engage with NASA science!

Want to work on some real NASA science? NASA's citizen science projects are collaborations between scientists and interested members of the public. Through these collaborations, volunteers (known as citizen scientists) have helped make thousands of important scientific discoveries. There are more than 25 ongoing projects that need your help! NASA citizen science projects are open to everyone around the world, not limited to U.S. citizens or residents. Find a project! <a href="https://science.nasa.gov/citizenscience?fbclid=lwAR0nLySqaKaZHha78lbE6Z8PnOAaCxArQIKVNxnYykRUO5Hy9f2AIWwZ\_7Y">https://science.nasa.gov/citizenscience?fbclid=lwAR0nLySqaKaZHha78lbE6Z8PnOAaCxArQIKVNxnYykRUO5Hy9f2AIWwZ\_7Y</a>

# **EcoRise Opportunities, Events, and Resources**

All Louisiana K-12 teachers have access to our leading-edge <u>Sustainable Intelligence Program</u>, which includes sustainability and design curriculum, as well as grant funds (**up to \$700 per project**) for green student projects, and year-round training and support.

#### **Green Guardians Environmental Literacy Curriculum**

https://www.greenguardians.com/?utm\_medium=email&utm\_source=GovDelivery\_Green\_Guardians, a California-based educational technology company, has developed an environmental literacy curriculum for grades K–5. The curriculum consists of a series of multimedia lessons and games exploring topics such as pollution, climate change, sustainability, energy, watersheds, waste management, and environmental justice. The lessons use a story base to engage students in learning about their environment, and through inquiry and problem-solving, devise solutions to the problems they study



## **OurEcho Challenge**

Teams of middle school students (grades 5-9) will develop projects to preserve biodiversity in their own backyards and compete for prizes of up to \$5,000.

Entries must be received by 11:59 p.m. ET on March 3, 2023

### Lessons on Climate Change, Evolution and Nature of Science

The National Center for Science Education is celebrating its 40th anniversary of providing <u>classroom resources</u> created and tested by teachers from around the United States. View this comprehensive teacher tested set of lessons on Climate Change, Evolution and Nature of Science.

#### **NSTA Awards and Grants**

The National Science Teachers Association has many awards with a variety of categories. Many include incentives to support educators attending the National Conference or the National Congress in the summer. For more information go to: <a href="http://www.nsta.org/about/awards.aspx">http://www.nsta.org/about/awards.aspx</a>



#### Kenner Planetarium



# Join Us For An Experience That's OUT OF THIS WORLD!

**MAY 2023** 

# One World, One Sky: Big Bird's Adventure

Presented by:

Entergy<sub>.</sub>

Join Big Bird, Elmo, and their friend from China, Hu Hu Zhu as they locate the Big Dipper, the North Star, and the Moon in the night sky. Take an imaginary trip to the moon and discover how different it is from Earth. Audiences will see that even though friends may live in different countries, we all share the same sky!

Running time: 27 minutes



#### Perfect Little Planet

Join a family from another star system as they search for the perfect vacation spot. Walk on Pluto's frozen surface. Fly the ice cliffs of Miranda. Feel the power of Jupiter's storm clouds. A fun show for the whole family with awesome vistas and fun exploration. Which destination would you choose, and where will our family of aliens end up?

Running time: 35 minutes

# INTO THE DEEP

#### Into the Deep

Dive into the fascinating worlds of marine biology, underwater geology, and the history of deep-sea exploration. Journey from the RMS Titanic to the famed Galapagos "black smokers" and observe bioluminescent life forms.

Running time: 32 minutes



#### Voyage to Distant Worlds

Take a tour of the planets in our Solar System and discover facts you never knew about our neighboring worlds. Voyage to Distant Worlds is a production of the Casper Planetarium.

Running time: 38 minutes

In the late 1950's, Berry Gordy Jr. formed a small Detroit-based record company called Motown Recirds. Their slogan was "The Sound of Young America". Over 40 years laster, this laser show captured the spirit of the Motown sound with recordings from The Temptations, The Four Tops, Jackson 5 and Stevie Wonder among others.

Running time: 45 minutes



#### Admission:

E-mail hglorioso@kenner.la.us or call 504-468-7231 for information and group rates.

Adults \$6.00 per show Children/Seniors \$5.00 per show

Multi-show packages available

\*Children 2-12 years \*Seniors 60 and over

SHOW SCHEDULE SUBJECT TO CHANGE!

#### Schedule:

Appointment Only: Tues-Fri Schools/Camps/Groups Call 504-468-7231 for reservations.

General Public: Saturdays Only
Box Office opens at 10:45 am

One World, One Sky: 11:00 am
Perfect Little Planet: 12:00 pm
Into the Deep: 1:00 pm
Voyage to Distant Worlds: 2:00 pm
Laser Motown: 3:00 pm

Kenner Planetarium 2020 Fourth Street Kenner, Louisiana 70062 www.kenner.la.us 504-468-7231

#### **GNO STEM AND GIS**

# **GNO STEM AND GIS**

# PROFESSIONAL DEVELOPMENT FOR GRADES 3-12 EDUCATORS

June 6 & 7, 2023 - 8:00am-4:00pm - UNO Campus

GEOGRAPHIC INFORMATION SYSTEMS (GIS) -A CLOUD-BASED GEOSPATIAL PLATFORM ENABLING INDIVIDUALS TO CREATE AND SHARE MAPS, APPS, AND MAP SERVICES

>200 INQUIRY-BASED LESSON PLANS IN 3-12 MATH, SCIENCE, SOCIAL SCIENCE, ENGLISH, CODING & COMPUTER SCIENCE



# **EDUCATORS WILL:**

- Learn to tap into your students' spatial reasoning to strengthen their problem-solving skills
- Obtain Lesson Plans and Exercises that enrich your current curriculum
- Leave with new project-based, cross-curricular teaching tools that have wide applications

#### STUDENTS WILL:

- Become active learners and engaged in their own learning
- Develop spatial and geographic reasoning
- Learn to identify and analyze issues impacting their local communities

# TWO-DAY WORKSHOP AND FOLLOW-UP CLASSROOM SUPPORT

Workshop is designed to train educators in cutting-edge technology for STEM project-based learning to engage their students inside and outside of the classroom.

Teacher stipends available



esri | Energy Fran Harvey GISP ESRI Trained T3G Instructor



SPACE IS LIMITED
REGISTER AT WWW.GNOSTEM.ORG
OR WITH OR CODE

For More Information:
Cathie.Smith@gnostem.org



SCAN ME

# **Safety for Science Teachers**

#### **Courses for Science Teachers from the Laboratory Safety Institute:**

For all courses, exclusively K-12 teachers get scholarships for a 50-65% reduced tuition!

#### One-Day Virtual Workshop: Safety in Secondary School Science Labs

April 25, May 23 or June 15, 2023

Drawing on 40 years of experience, the course opens eyes with safety "fail" stories you won't forget. We quickly move beyond regulatory compliance and dig deep into what makes a truly effective laboratory safety program. Help create a culture of safety in your school science lab!

## Science Teacher Leader Advisor Applications

#### Coming soon: Science Teacher Leader Advisor Application Re-opening

The Louisiana Department of Education's science content team is seeking high school science teachers to join our 2022-2023 <u>Teacher Leader Advisor</u> cohort. Teachers of all high school science courses are needed to develop resources for use by Louisiana educators. Additional information and an updated application will appear on the Department's Teacher Leader <u>Teacher Leader Newsletter</u>. page by August 23rd and will close on September 16th. Sign up to receive the newsletter by completing this form.

Please contact STEM@la.gov with questions.

# Learning Blade®

**Learning Blade**®, a STEM, Computer Science, and CTE resource is available **FREE** statewide in Louisiana through a joint venture of the Louisiana Board of Regents, LaSTEM, the Boeing Company, the Louisiana Dept. of Education and the Foundation for East Baton Rouge School System.

Learning Blade's over 400 online interactive lessons include **over 100 science-related** lessons that are aligned to state science academic standards for grades 5-9. Students are exposed to hundreds of unique STEM/CS/CTE-related careers and technologies while reviewing academics. See Mission Outlines.

Learning Blade also recently added the **New Introduction to Coding** course which includes over 20 hours of coursework aimed at 7th-8th graders but can also be used for other grade levels.

Sign up for your free Louisiana Learning Blade account today by filling out the form at www.LearningBlade.com/LA.\*

Email us at info@learningblade.com to set up training or to learn more.

\*Note: Learning Blade is free to all Parishes/Districts upon the signing at the Parish/District level of the <u>Student Data</u> Sharing Agreement.

#### **Audubon Zoo**

This school year is rapidly approaching and Audubon Nature Institute's School Programs team would love to give your students a *wild* start to the year with our 45-minute programs featuring live animals from the Zoo. <u>Click here</u> to request your virtual school program, FREE for Title One Schools, today!

Audubon's virtual programs are highly interactive and connect your students to nature and science over Zoom. Our lessons are aligned with Louisiana state science standards for grades K through 12<sup>th</sup> and are offered Monday through

Friday from 9:00am – 3:00pm. We have availability starting August 29<sup>th</sup>. Reservations will be made on a first-come and first-served basis, so don't delay in securing this fun and unique opportunity to enrich your curriculum!

Audubon's virtual school programs are free for all Louisiana Title 1 schools\*, while Title 1 Targeted Assistance Programs receive a 10% discount from the \$100 per program rate. (\*Limit one free program per classroom per school year.)

#### Audubon's Virtual School Program themes include:

- K-2<sup>nd</sup> Creature Coverings: Explore the world of animal coverings, coats, skins, and more!
- 3rd-5th Oh, the Things They Eat: Learn about the different roles animals play in a food chain!
- **6**<sup>th</sup>**-8**<sup>th</sup> **Bayou Diversity**: Discover the rich ecosystem of Louisiana and learn about the interdependence of native plants, animals, and humans!
- 9<sup>th</sup>-12<sup>th</sup> Mississippi River Story: Learn how the Mississippi River shapes the land and the impacts it has on our ecosystem and daily lives.
- 9<sup>th</sup>- 12<sup>th</sup> impacting Wetlands: Learn how wetland ecosystems impact coastal communities and discover local conservation groups and their efforts.

You can find more information at <a href="https://audubonnatureinstitute.org/virtual-education">https://audubonnatureinstitute.org/virtual-education</a> or feel free to reach out directly to this email (<a href="mailto:schoolprograms@auduboninstitute.org">schoolprograms@auduboninstitute.org</a>).

#### Arctic Ocean Curriculum Unit

The Arctic Research Consortium of the U.S. (ARCUS) announces a new resource, a curriculum unit focused on the Arctic Ocean.

The Arctic Ocean Curriculum Unit was created by ARCUS with funding from the North Pacific Research Board. The unit updates lessons originally created by PolarTREC alumni teachers to create a unit that uses recent data, aligns with Next Generation Science Standards (NGSS), polar, and ocean literacy principles, and encourages cultural relevancy. The format used lends itself to the changes in education - providing student-facing slide decks that allow them to move through the lessons with more independence.

The unit traces the movement of energy throughout the Arctic Ocean environment. There is a total of 18 lessons broken into two main components. The entire unit can be downloaded through the resources section of the PolarTREC website (<a href="https://www.polartrec.com/resources">https://www.polartrec.com/resources</a>).

For more information and to download the unit, go to: Arctic Ocean Curriculum Unit webpage: https://www.polartrec.com/resources/lesson/the-arctic-ocean-curriculum-unit?amp%3Bqid=6854120

For questions, contact: Janet Warburton, warburton@arcus.org



# **Unique Learning Opportunities Await You at Cane River Creole NHP**

Cane River Creole National Historical Park is proud to partner with teachers and educators to provide curriculum-based, hands-on Science, Arts, Environmental Science, and History education experiences in the park, virtually, and in your classrooms. We are excited to connect both educators and learners with the unique resources of the Cane River area. Bring your class to visit Cane River Creole National Historical Park to explore a range of subjects including science, history, and the arts on one of our curriculum-based field trips. For schools nearby, Rangers will bring the park to your classroom though our In-Classroom Visit Programs. These programs include a wide range of topics such as Environmental Science and Reading, all building on curriculum standards. For schools further away, educators can

schedule a program from anywhere in the world via a Distance Learning Program. Enhance your student's in the classroom learning with our lesson plans and other learning materials

available to you online at <a href="https://www.nps.gov/cari/learn/education">www.nps.gov/cari/learn/education</a>.



The park is pleased to offer a range of professional development. Join us for one of our single day Education workshops and return to your classroom with new tools and materials. For a more in-depth experience – become a Teacher-Ranger-Teacher (TRT). TRT is a program that offer teachers a unique opportunity to enhance their teaching resources with National Park Service-based Science,

Technology, Engineering and Mathematics (STEM) education, use primary sources, and experience place-based learning. All while earning graduate credit through partnership with the University of Colorado Denver

National Park Service staff are available to help educators infuse their learning with National Park Service and STEM resources. To reach the park's education team visit us at www.nps.gov/cari/learn/education, email cari\_interp@nps.gov, or call 318-352-0383 x316 and leave a voicemail. The Park Rangers at Cane River Creole NHP cannot wait to connect you with these tools and resources!



# **LASM Announces Return of Free First Sundays**



# FIRST SUNDAYS ARE BACK!

Every First Sunday of the Month 1 PM - 5 PM

Free museum and Irene W. Pennington Planetarium admission!

Sponsored by

Madison Lamar

# **Youth Wetlands Program Online Learning Platform**

Youth Wetlands Program online learning platform was now available. Teachers can sign up for free to gain access to lesson, activities, and other distance-learning resources. I'm including a link to the press release that went out from LSU AgCenter about the site. (https://www.lsuagcenter.com/profiles/jmorgan/articles/page1611327199513)

# **NEEF Watershed Sleuth Challenge**

#### The Watershed Sleuth Challenge

With NEEF's Watershed Sleuth Challenge, students will learn more about their local watershed—what it is, why it's important, and what they can do to help protect it—as they earn badges at each level of this three-part course

#### New and Updated Resources for OpenSciEd Middle School Pilot

To assist teachers, schools, and systems with piloting OpenSciEd for middle school, the Department has updated existing resources and released new pacing documents.

These resources include

- Grade 6 and Grade 7 pilot guides updated with pacing guidance for the first three units in each grade;
- Grade 7 and Grade 8 pilot guides updated with links to newly released public units;
- OpenSciEd Distance Learning guidance updated to include Grade 8 Natural Selection; and
- OpenSciEd Purchasing and Professional Development updated kit purchasing information for revised units.

Additionally, ten units are now available in the <u>National Instructional Materials Access Center (NiMAC) Inventory</u> with more coming soon.

Please contact STEM@la.govwith questions.

# **STEM Resources from the US Department of Education**

The US Department of Education has recently shared two resources that may be useful supporting STEM learning.

- <u>Data.gov</u> is a database with over 335,221 real-world datasets from a variety of sources updated weekly and connected to free resources to help show how data shapes our lives.
- <u>STEM Rising</u> from the US Department of Energy features a monthly newsletter, social media connections, virtual learning resources, college workshops, and online career resources.

Please contact <a href="mailto:STEM@la.gov">STEM@la.gov</a> with questions.

# New Self-Paced Science Professional Learning Modules Available Now

To assist teachers, schools, and systems with implementation of <a href="high-quality science curricula">high-quality science curricula</a>, the Department has released three <a href="self-paced learning modules">self-paced learning modules</a>. These resources are designed to fit flexibly in a variety of professional learning formats. Modules may be accessed individually for an "at your own pace" style of PD or delivered by Content Leaders or other science leaders to drive professional learning and facilitate collaborative conversations. Learning modules are focused on the topics below and are available now.

- Science Instructional Model and Planning Guide
- Productive Science Talk and Planning for Discussion
- Leveraging Student Resources in Science

Each module includes a brief description, video, slide deck, and associated handouts.

Please contact <a href="mailto:STEM@la.gov">STEM@la.gov</a> with questions.

#### Interact with PC's New Education Videos!

Join Pontchartrain Conservancy's <u>Education Department</u> in a series of videos that encourage participants to learn more about their local environment. These videos are interactive, with places for viewers to pause and answer questions, make predictions, or design and test their own experiments. Students and anyone interested are invited to participate in fun interactive ways, from writing down answers to building models!

There are currently four videos in the series that cover an array of environmental topics. The Coastal Land Loss Video Survey explains what the primary causes of land loss are and what can be done about it. The Ecosystems of the Pontchartrain Basin Survey covers what an ecosystem is and the animals and plants that live in ecosystems near the Pontchartrain Basin. The Hydrological Modifications Video Survey explains what hydrological modifications are and their main functions. The MLODS Video Survey teaches the Multiple Line of Defense strategy and its impacts on coastal communities. <a href="https://scienceforourcoast.org/pc-programs/education/interactive-videos/">https://scienceforourcoast.org/pc-programs/education/interactive-videos/</a>

#### NASA EXPRESS



NASA EXPRESS features updates from NASA and STEM associates about workshops, internships, and fellowships; applications for grants or collaborations; promotions for student and educator opportunities; online professional development; and other announcements.

# LaSPACE Research Enhancement Award (REA) Program Now Open

### Research Enhancement Award (REA) Program

The LaSPACE Research Enhancement Awards (REA) Program is intended to provide support for faculty (and students) at LaSPACE member institutions, particularly aimed at the emerging researcher or an established researcher who wishes to pursue new research directions, for the development of projects, contacts, and collaborations that will bring Louisiana scientists into the mainstream of NASA related research activity, thereby increasing their chances to successfully compete in the aerospace R&D marketplace. As with all LaSPACE Programs, minority participation is strongly encouraged. The REA Program is funded by state matching funds, through the Louisiana Board of Regents Support Fund. The awards are intended to develop expertise and to contribute to research competitiveness. However, awards are not intended purely to support faculty salaries or student stipends. It is anticipated (and advised) that students will be involved in REA projects, but the overriding goal is the development of research capabilities and infrastructure in support of the country's space/aerospace endeavors. In that regard, contacts/collaborations/ties to NASA centers and NASA researchers are strongly encouraged.

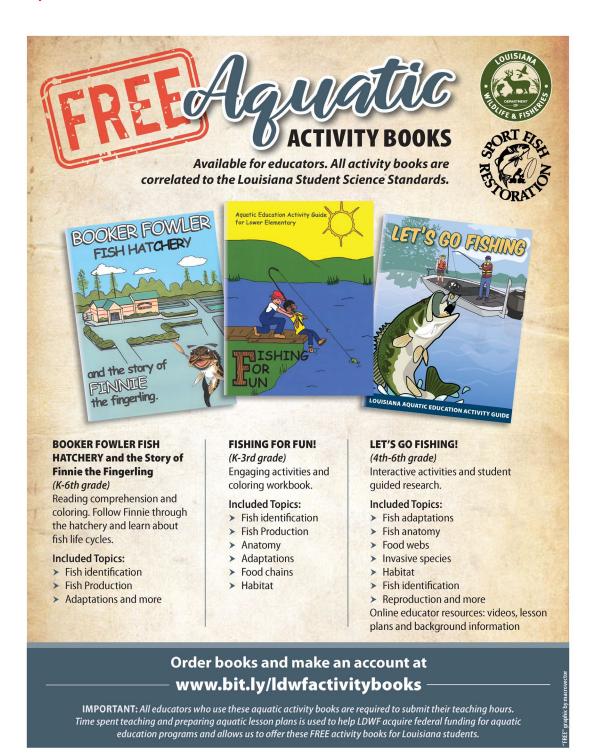
#### **Program Summary**

- A Notice of Intent (NOI) to propose is required for the REA program. NOIs do not need to be routed for institutional approvals/signature the way the final proposal needs to be.
- The overall goal for this Program is to effectively utilize the resources available through LaSPACE as incentive for faculty and students: 1) to develop research competitiveness, 2) to develop new research projects or directions, and 3) to foster collaborations with NASA researchers, federal laboratories, and with the business/industry community.
- Tenured, tenure-track, or research faculty at the level of Assistant/Research Professor or higher affiliated with LaSPACE campuses are eligible to apply. On ALL proposals, only one PI can be proposed. Additional personnel should be listed as key personnel / researchers.
- Pls may only submit one proposal per competition cycle.
- The final invoices and a final technical report must be submitted to the LaSPACE office within 30 days of the project end date. Photographs and copies of all papers, presentations, and posters generated should be shared with LaSPACE as they occur and collected/referenced in the final report. Final Report guidelines can be downloaded from the LaSPACE website's document center.

#### **Proposal Submissions**

- Submit all properly executed proposals via email as fully searchable pdf documents to <a href="mailto:laspace@lsu.edu">laspace@lsu.edu</a> by 11:59 pm on Monday, May 8, 2023.
- Important Dates:
  - oProposal Release Date: Monday, February 6, 2023
  - NOI Due Date: Monday, April 3, 2023
  - o Proposal Due Date: Monday, May 8, 2023
  - Anticipated Award Announcements: June 2023
  - Award Period of Performance: 09/15/2023 09/14/2024

# **Louisiana Department of Wildlife and Fisheries**



# Chemistry Shorts<sup>™</sup> Releases New Video and Lesson Plan on Directed Evolution Technology

The materials are available free of charge via chemistryshorts.org

Like demolition derby cars continually upgrading to face greater and greater challenges, enzymes can undergo modifications in the test tube that make them better and better at solving problems in our everyday lives. But can we evolve them fast enough to clear some of our biggest obstacles?

Our world faces climate, economic, and sustainability challenges that we don't yet have the tools to fix. "<u>Driving Reactions</u>," a nine-minute short film from *Chemistry Shorts*, explores how directed evolution and the chemical sciences are creating some of these new tools.

"Driving Reactions" explores the power of harnessing nature's own innovations to solve problems. Featured scientists <a href="Professor Hal Alper">Professor Hal Alper</a> of the University of Texas at Austin and Nobel Laureate <a href="Professor Frances">Professor Frances</a> <a href="Arnold">Arnold</a> of the California Institute of Technology use directed evolution to design enzymes that work as molecular machines, helping create a more sustainable world using the power of chemistry. These new enzymes open the door of scientific progress, creating solutions for recycling waste, creating sustainable fuels, and more efficiently producing materials we use in our everyday lives. "Driving Reactions" focuses on Dr. Alper's innovative work to design an enzyme that can efficiently degrade PET, or polyethylene terephthalate, one of the most common plastics found in water bottles and other everyday objects, into infinitely recyclable and reusable products.

"We have the ability to use the power of chemistry to find sustainable solutions for the future." - Hal Alper, "Driving Reactions"

"Driving Reactions" is aimed at high school and college students and can be used as a starting point for discussions around polymer chemistry, enzyme reactions, directed evolution, DNA, and plastic recycling.

The film is available for immediate viewing and use in teaching free of charge on the <u>Chemistry Shorts YouTube channel</u>. A full lesson plan to accompany the film is available on the <u>Chemistry Shorts website</u>.



# Inquiry: Free STEM Professional Development for K-12 Teachers - University of New Orleans

# JOIN US! FREE STEM PROFESSIONAL DEVELOPMENT FOR TEACHERS

# UNIVERSITY OF NEW ORLEANS NEW ORLEANS, LA | JUNE 26-30,2023

#### **OUR PROGRAM**

ASM Materials Camp®-Teachers is a free, week-long, idea-generating workshop introducing teachers to methods that make math and core science principles more enticing and relevant to their middle and high school students. Materials topics are great motivators in any engineering, technology or science course as students learn concepts that are reflected in their everyday lives.



#### WHAT MAKES US DIFFERENT

Teachers leave our camps able to engage students using simple, low-cost experiments that integrate into existing lesson plans. Participants are eligible to receive four (4) Continuing Education Units (CEUs) and can opt for two (2) graduate level credits.



#### REGISTER TODAY

For more information and to view the 2023 ASM Materials Camp®-Teachers Summer Schedule, please visit asmfoundation.org





SCAN ME! Watch a video about ASM Materials Camp® Teachers!

"I couldn't help but say many times 'I can't believe this camp is free!' I knew that this camp had a sterling reputation based on blogs read from other teachers, but my expectations were exceeded between the physical materials used for labs, freebies, wealth of information, and lessons provided by master instructors. This was the best professional development camp I have ever attended."

—Amanda S.

#### QUESTIONS?

Jeane Deatherage, Administrator of Foundation Programs jeane.deatherage@asminternational.org | 440.671.3831

